Study supporting the mid-term Evaluation of the Recovery and Resilience Facility

Final Report

Prepared by ECORYS, CEPS, CSIL, NIESR, and Wavestone for the European Commission, Directorate-General for Economic and Financial Affairs

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List of acronyms:

A&C	Audit and control
ALMP	Active labour market policy
BRG	Better Regulation Guidelines
CSR	Country-Specific Recommendations
CP	Cohesion Policy
CoR	Committee of the Regions
CSR	Country-specific recommendations
DNSH	Do No Significant Harm
EC	European Commission
ECA	European Court of Auditors
EESC	European Economic and Social Committee
EFC	Economic and Financial Committee
EIGE	European Institute for Gender Equality
EP	European Parliament
EPC	Economic Policy Committee
EC	European Commission
EU	European Union
EQ	Evaluation question
FTE	Full-time equivalent
ICT	Information and communication technologies
IMF	International Monetary Fund
IPCEI	Important Projects of Common European Interest
GDP	Gross domestic product
GNI	Gross national income
LTRS	Long-term renovation strategy
M&T	Milestones and targets
MFF	Multiannual Financial Framework
MS	Member State
MW	megawatt
NECP	National Energy and Climate Plan
NEET	Not in employment, education or training
NGO	Non-governmental organisation
NGEU	NextGenerationEU
NRRP	National Recovery and Resilience Plans

PES	Public employment services
RDI	Research, development, innovation
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plans
SME	Small and medium-size enterprises
TSI	Technical Support Instrument
VAT	Value added tax

Glossary of key terms:

Term	Definition
Milestones and targets	Measures of progress towards the achievement of a reform or an investment, with milestones being qualitative achievements and targets being quantitative achievements - Art.2 of the Recovery and Resilience Facility (RRF) Regulation
European Semester	The European Semester is a yearly exercise to coordinate economic, fiscal, employment and social policy within the European Union. The European Semester is part of the European Union's economic governance framework. During the European Semester, member states align their budgetary and economic policies with the rules agreed at EU level.
Country-specific recommendations	Individual recommendations provided to EU Member States in the context of the European Semester
Grant	Non-repayable financial support under the RRF
Loan	Support under the RRF, as defined in Art.14-15 of the RRF Regulation
‘Do no significant harm’ (DNSH) principle	The principle of not supporting or carrying out economic activities that do significant harm to any environmental objective, where relevant, within the meaning of Article 17 of Regulation (EU) 2020/852

Abstract

The "Study supporting the Mid-term Evaluation of the Recovery and Resilience Facility" was performed in the period from March to October 2023 by a consortium that includes Ecorys, CEPS, NIESR, CSIL, and Wavestone, following a contract with the European Commission (Directorate General Economic and Financial Affairs). The purpose of the study is *to provide an objective and independent study supporting the assessment of the RRF against the criteria of effectiveness, efficiency, relevance, coherence, and EU added value*. The supporting study will feed into the EC's mid-term evaluation report. Moreover, the study also provides useful background evidence and lessons learned for discussions on possible future performance-based instruments in the post-2027 Multiannual Financial Framework (MFF). The general conclusion of the study is that the Recovery and Resilience Facility (RRF) provided a macro-relevant common and synchronised EU response to support Member States' recovery after the Covid-19 pandemic and the energy crisis. The evaluation findings show that the RRF has triggered the implementation of major and long-awaited reforms across a wide range of policy areas, it increased EU GDP and lowered EU unemployment, and helped avoid financial fragmentation.

Executive Summary

Introduction

The "Study supporting the Mid-term Evaluation of the Recovery and Resilience Facility" was **performed in the period from March to October 2023** by a consortium that includes Ecorys, CEPS, NIESR, CSIL, and Wavestone, following a contract under the Multiple Framework Contracts for Evaluations and Evaluation related services signed with the European Commission's (EC) Directorate General Economic and Financial Affairs.

The **purpose** of the study set by the Recovery and Resilience Facility (RRF) Regulation is to: *provide an objective and independent study supporting the assessment of the RRF against the criteria of effectiveness, efficiency, relevance, coherence, and EU added value*. The supporting study will feed into the EC's mid-term evaluation report. Moreover, the study also provides useful background evidence and **lessons learned for discussions on possible future performance-based instruments** in the post-2027 Multiannual Financial Framework (MFF). The general **cut-off date** for the study is 31 July 2023, but it relies on **data as recent as possible** (information on REPowerEU chapters, plans' modifications, disbursement and RRF loans planning as of 15 October 2023).

Methodology

The evaluation was performed in the four classical stages: structuring, data gathering, analysis, and reporting. In particular, the following methods were applied:

- An extensive literature review (e.g. Council Implementing Decisions, RRPs, Operational arrangements, RRF annual reports, ECA opinions and reports, academic literature).
- Elaboration of two databases that were developed for the purposes of the study: 1) Primary database, using Commission data; and 2) Secondary database, which incorporates interview input and data on results gathered at national level.
- A survey with key national stakeholders involved in the RRPs' implementation - launched at the end of May 2023 and closed on the 7th of July, with 40 responses.
- Targeted interviews - 156 semi-structured interviews (of which 88 in the context of case studies) with national coordination bodies, the European Commission, the European Parliament, the EFC and EPC chairs, the EU social partners, the EESC, the CoR, NGOs and policy experts.
- Eight case studies - Six focused on specific policy areas related to the RRF's six pillars: (a) Energy efficiency in buildings; (b) digitalisation of healthcare; (c) support to SMEs; (d) active labour market policies; (e) rule of law reforms; and (f) early childhood education and care. Two specific case studies have been added, one on cross-border projects and one on the interaction between EU Cohesion Policy and the RRF. The findings of six case studies have been validated in ad hoc workshops with representatives of national governments responsible for implementing the measures and national policy experts.
- Analysis of costs and benefits - cost mapping; assessing costs; assessing benefits; concluding on the benefit/cost ratio.
- A macroeconomic analysis - using the National Institute Global Econometric Model (NiGEM), which has been developed and maintained since 1987.
- A public consultation - conducted from 16 March 2023 to 8 June 2023 with a total of 172 responses received.

Overall assessment

The Recovery and Resilience Facility is the cornerstone of the EU's plan to emerge stronger and more resilient from the Covid-19 crisis (Next Generation EU) and address the socio-economic challenges caused by Russia's invasion of Ukraine (via the implementation of the REPowerEU plan). To address these broad and challenging objectives, the RRF provides significant financing on a scale that could not be attained at MS level only - up to €723.8 billion in total, comprising €385.8 billion in loans and €338 billion in grants, and REPowerEU additional resources (€20 billion in new grants and €2.1 billion of funds from the Brexit Adjustment Reserve). Thus, **the RRF provided a common and synchronised EU response to common challenges such as the COVID-19 socio-economic crisis and the energy crisis**. **It has also supported the EU's green transition** (in particular through climate mitigation measures and application of the do-no-significant-harm principle) **and has contributed to the digital transformation.**

As of mid-2023, more than €150 billion have been disbursed under the RRF, which represented 31% of the overall amount of planned grants and loans[1]. **The planned[2] and disbursed financing in the first two years of operation of the RRF (2021-2022) are almost aligned**. The pace of the financial progress in 2023 poses a **significant risk of delays as compared to the indicative planning**. While **MS largely adhered to the planning of the first payments requested in 2021 and 2022, most have pushed back the indicative timing of the payment requests in 2023 due to a combination of different factors** such as: the need to revise the plans following the update of the max allocation of grants (in 2022), to plan the loans and to include REPowerEU chapters (in 2023); difficulties in fulfilling the milestones/targets; changes of governments and governmental priorities; the administrative capacity; and various external factors – Russia's war of aggression against Ukraine, energy crisis, inflation, supply and labour shortages. The **disbursement of payments within less than 4 months on average after the requests for payments can be considered timely**, but the timelines for the payments performed in 2023 are longer than the averages for all years of implementation. This phenomenon can be explained by various factors, such as the parallel revisions of the RRPs, the more complex application of the 'payment suspension' procedure[3], the growing number of payment requests submitted in parallel, including by MS that submit their first requests. It is difficult to draw conclusions based on data, which does not cover the full 2023 year. There is always the possibility of increased speed of payments by the end of 2023, but nonetheless, the partial data points to **increased risks of delays in the financial implementation of the RRF**. As of end-July 2023, 11.3% of all planned targets/milestones have been fulfilled. So far 639 milestones (19.3% of the total number) and 66 targets (2.3% of the total number) were fulfilled[4]. Despite this progress, the fulfilment of the milestones/targets is behind the indicative schedule provided in the Council implementing decisions on the RRF plans - the number of milestones/targets planned until Q1 2023 is 2,205, i.e., the fulfilled targets/milestones stand at 32% of this indicative planning.

External factors had a **significant impact on the RRF implementation**. Factors such as Russia's aggression against Ukraine, an energy crisis, inflation, and supply and labour shortages **affected the speed and cost of implementation of the RRF measures**. Internal factors, such as low administrative capacity, political instability, low awareness of end recipients of the opportunities

[1] These numbers represent the situation as of the end of August 2023. It has to be acknowledged that the overall RRF envelop is larger and it can disburse up to €723.8 billion (in current prices) in grants and loans to EU Member States. After the cut-off date of the evaluation, the RRF envelop grew to approximately €650 billion.

[2] Planned financing in the form of grants and/or loans, which is included in the Recovery and Resilience plans as of 31 July 2023.

[3] For example, applied in the case of the second Romanian payment request. For more information, see: https://ec.europa.eu/commission/presscorner/detail/en/mex_23_4695

[4] The analysis only considers milestones/targets covered in payment requests submitted to and assessed by the Commission, not the progress made in completing milestones/targets covered in subsequent payment requests. As it becomes clear in the bi-annual reporting from MS, progress on milestones and targets covered in subsequent payment requests is being made in parallel (for example, the RRF Annual Report 2023 shows 1,155 completed milestones and targets in the period Q12020-Q12023, as self-reported by the Member States).

offered under the RRF, and insufficient communication/coordination, also negatively affected the implementation of the RRF measures.

Effectiveness

The results of the application of the NiGEM model show that as a result of the RRF disbursements, EU **GDP was 0.4 per cent higher in 2022 than it would have been in the absence of RRF spending**. RRF disbursements had stronger effects in the Southern and Eastern Member States than in the Northern and Western countries with relatively higher levels of GDP. The **initial disbursements lowered unemployment in the European Union by around 0.2 percentage points relative to what it would have been in the absence of the RRF**. We found this overall fall in unemployment to be driven by large falls in the southern European MSs of Greece, Italy, Portugal, and Spain.

The **issuance of common debt by the Commission on behalf of the EU** - a key feature of the RRF - to provide fiscal support and liquidity to Member States contributed to ensuring full coordination of the (public) investment impulse and avoiding major frictions in the Single Market (with some MS providing massive subsidies to their industries and others not) and allowed substantial benefits in terms of spill-overs, which immediately materialised – at its announcement - in a **reduction in spreads** of between 50 and 100 basis points for those MSs in Southern and Eastern Europe where borrowing costs are typically high. **The 13% pre-financing – a key feature of the RRF – effectively** provided quick disbursements in support of public finances and boosted the overall financial progress (measured in payments) of the instrument.

The **fulfilled milestones/targets cover all six pillars of the RRF.** The pillars of Smart, sustainable and inclusive growth and Health, and economic, social and institutional resilience have the highest percentages of fulfilled milestones/targets (above 12%) out of the planned milestones/targets linked to these pillars. The highest number of fulfilled targets is under the pillar of Green transition, but the overall percentage of fulfilled milestones/targets out of all milestones/targets linked to the pillar (10.1%) is behind the growth and health resilience pillars. The Digital pillar has the lowest percentage fulfilled out of all milestones and targets linked to the pillar (8%). The **"Do no significant harm" principle** - introduced with the RRF – is indicated as one of the most effective tools to achieve the green objectives defined in the RRF.

The **RRF has progressed along all fourteen common indicators**[5]. Noteworthy achievements include: 22 million MWh/year savings in annual primary energy consumption, 18 million additional dwellings with internet access, close to 1.5 million enterprises supported, close to 7 million supported participants in education or training, 4 million young people (aged 15-29) receiving support. For some of the common indicators (e.g., additional operational capacity installed for renewable energy and additional dwellings with internet access) only 5-7 MSs have reported achievements so far, but it has to be acknowledged that investments in infrastructure usually require time until they become operational and can be reported.

The reforms indicated by MSs address all or a significant subset of challenges identified in the European Semester's country-specific challenges (CSRs). **Most interviewees both at national and EU level confirm that the RRF contributed to putting on the agenda long-awaited reforms.** Reforms also benefitted from being packaged with supporting investments. The strength of the link between CSRs implementation and financial support decreases in the case of MSs that

[5] The RRF Scoreboard includes a set of common indicators related to the objectives of the RRF. The common indicators show the progress of the implementation of the recovery and resilience plans towards common objectives and the overall performance of the RRF. Member States collect the common indicators data and report their numbers to the European Commission twice a year, by the end of February and the end of August. In total, the Commission, the Member States and the European Parliament have identified 14 common indicators across all six policy pillars in the Delegated Regulation EU 2021/2106 (2021).

receive a proportionally smaller financial envelope, and which are less incentivised to commit to structural reforms.

The **implementation of the RRF reforms has led to tangible results across a wide range of policy areas**: labour market, social protection and pensions, education and training, civil and criminal justice, public administration, including digitalisation of the PA, spending review and public finance governance, anti-money laundering, licensing simplification reforms to boost the investments in renewables, roll-out of renewable energy and sustainable transport, introduction of 5G and broadband, structural reform of the education system, anti-corruption and tax planning. By contrast, only a few investments have completed the first steps and have already produced tangible results.

In terms of impact of the RRF measures on **territorial cohesion**, this varies across countries. Some RRPs include territorial rebalancing, especially as a transversal priority in all policies, others dedicate *ad hoc* resources to support the most disadvantaged areas, others instead lack a strategy to enhance territorial cohesion. With respect to **social inclusion**, we observe that criteria to benefit most disadvantaged groups are included in some measures in some Member States, while in others the distributional impact of the investments is not considered. In most Member States, the impact can be measured only indirectly, as disadvantaged groups may benefit from (social) reforms with a lasting effect as well as investments, without the measures targeting them directly or explicitly.

The RRF is also **expected to contribute to cushioning the impact of the Covid-19 crisis on women**, yet with **variation across MSs**. The effectiveness of RRPs is expected to be **influenced by various factors,** including the share, topic areas and quality of gender-related measures, the extent of gender mainstreaming and the possibility of a male employment bias, and the actions that are taken in implementation, monitoring and evaluation. While some specific ex-ante evaluations and voices are critical about the RRF's gendered impact, others indicate relevant progress and expected positive results. The Scoreboard reports so far that more women than men are supported by the RRF regarding, e.g. participation in education or training opportunities and employment or engaged in job-searching[6]. A degree of progress has also been attributed to all relevant CSRs and measures looked at are expected to have relevant outcomes and impacts but depend on further implementation.

The REPowerEU chapters of the RRPs, submitted as of 4 October 2023, **are expected to contribute to the six objectives specified in the amended RRF regulation**, **which are in line with the three goals of the REPowerEU plan**. Most of the proposed measures contribute to introducing energy efficiency measures and accelerating the deployment of renewable energy responding to the first two goals of the REPowerEU Plan. Only two countries so far have also included measures related to fossil fuel investments, which are linked to the objective of diversification of energy supplies.

As of today, several factors (internal and external) can be identified that might negatively affect the implementation of the RRPs. As for the external factors, these include the **increasing pressure on energy, food and other commodity prices, the disruption in supply chains and logistics, the tightening of financial conditions and the overall worsening macroeconomic environment, as well as labour shortages**. As for the internal factors, **administrative capacity** - especially in those MSs with pre-existing low absorption rates of EU funds – and political instability remain the main concerns for the implementation of investments and reforms.

In addition to the above-mentioned factors, specific obstacles emerged for policy measures. For instance, in the case of cross-border projects, **investment bottlenecks** emerge linked to a long time for the award **notification process**, the **lack of clarity** (in terms of processes, timeline, and responsibilities, the requirement criteria for project selection, the definition of additional benefits or

[6] This is based upon common indicators which are disaggregated by gender, with data as of 20 October 2023 stemming from the RRF Scoreboard.

spillovers) and the **difficult communication** between member states in particular in the phase of project design. Concerning investment involving local authorities, three types of problems negatively affect the implementation of the measures: lack of resources to cover the **recurrent costs**, the **tight timeline** and the **lack of technical capacity** of municipalities to present projects, and the lack of **qualified personnel** to run the new (or requalified) infrastructures. Additional challenges emerge due to the **complexity of the governance structure** and the **public procurement procedures.** In the case of measures to support SMEs, **complexity of programmes** discourages SME participation. **Awareness** among SMEs is a crucial factor for uptake and therefore poor communication has been identified as another factor negatively affecting the implementation of the measures. Similarly, in the case of active labour market policies, where measure design is simple, and measures are easily accessible, implementation is more successful. In contrast, **lack of clarity in design or insufficient communication/awareness-raising** can hinder take-up. Moreover, the take-up of measures can be influenced by the **changing labour market context**, which may influence demand, and external factors, such as emigration. The **capacity of regional actors** also plays a key role.

To cushion the negative effects of both external and internal factors, **MSs adopted different strategies,** including increasing the RRF budget with national resources or other **additional financing**, **reducing the ambition of the milestones and targets (proportionally to reduced financing)**, **removing investment projects that are no longer feasible**, and **postponing the initially foreseen timeline** of milestones and targets. The revision of plans has been subject to specific rules, ensuring that the proposed amendments are based on objective circumstances (Art.21 of the RRF Regulation) and that the overall ambition of the plans is not lowered. To address the low administrative capacity, MSs took action to mitigate the risk via training, reforms and investments that aim at modernising the public administration and the use of the Technical Support Instrument (TSI). Yet, the results linked to such measures are expected to materialize only in the medium to long term. In the short term, MSs put in place ***ad hoc* measures to directly support the administration to implement the plans**. Still, some major concerns remain - especially for the measures included in the REPowerEU chapters - with the final RRF deadline (2026) approaching.

Efficiency

Under the QUEST scenario (i.e., 100% additionality for grants and 50% additionality on loans), our analysis using NiGEM suggests that **the cumulative impact on EU GDP by 2041 of the RRF funds disbursed up to the end of July 2023 is almost twice as large as the value of these disbursed funds.** Further, our analysis suggests that **the cumulative impact on EU GDP by 2041 of the entire RRF package of grants and loans is expected to exceed twice the total RRF funds**. Indeed, both the non-discounted and discounted values of the benefit-cost ratios calculated at the EU level and considering all the planned RRF funds are a little over 2. However, if different assumptions on additionality are considered the benefit-to-cost ratio will change. Under a scenario where 60% of RRF funds are used for additional public investment within the poorer Southern and Eastern MSs but only 25% of RRF funds are used for additional public investment in the richer Northern and Western MSs, the benefit-cost ratio falls below one; that is the cumulative effect on EU GDP becomes lower than the total RRF funds disbursed. However, this does not account for the long-run GDP effects of the structural reforms within MSs RRPs, which are hard to measure, particularly given the length of time over which the benefits will come to fruition, but which potentially could be substantial.

There are **significant variations** in administrative costs across countries in full-time equivalents (FTE) declared by coordination bodies both for one-off activities and recurrent activities and **no clear trends emerge**. According to most respondents (72%) in the survey**, the costs linked to the RFF implementation have increased over time** - due to the more stringent application of requirements (particularly in reporting, control, and audit) as the process evolved.

The **administrative burden** and complexity of the RRF refer to several factors, *in primis*, related to the lack of clarity concerning the role of **control and audits** and the **interpretation** of milestones and targets, the disbursement procedures and the change of the plan. With respect to the former, the complexity of the audit and control procedures for the new performance-based instrument and the overlap between national, Commission and ECA audits created uncertainty in MSs and an overload of administrative procedures. Concerning the latter, MSs raised concerns about the **M&T's assessment framework** used by the Commission, the **payment suspension methodology**, and the **plan's modification procedures**, which remain – despite the EC Communication - unclear (especially for reforms) and excessively demanding in terms of information reporting. However, it is worth noting that the payment suspension methodology has only been applied for the first time in 2023, and there is a learning curve for MS. **Additional administrative burden** has been identified by Member states with respect to the **reporting requirements**, in particular the **common indicators**, and – to a lesser extent - the informal dialogue[7] process with the EC. Member States also identified margins for simplification. In particular, there is room for **simplifying control and audit** procedures, ensuring better coordination among actors and avoiding multiple checks. Many stakeholders also highlighted the **need for flexibility** with respect to the interpretation of milestones and targets, which is perceived as overly strict by some respondents. Concerning the reporting, Member States propose to make the bi-annual reporting not mandatory when a Member State already submits two payment requests per year. Finally, simplification of the informal dialogue process with the EC can come from accelerating the time to provide feedback to MSs and reducing the rounds of comments from the EC to MSs on the documentation submitted for payment requests.

The efficiency of the RRF is also affected by its **governance** setting at national level and in particular the degree of centralisation of the decision-making process and the reporting/performance management system. While the RRF comes with a centralisation in all MSs, differences emerge in the governance setting of national RRPs, which affect the efficiency of the RRF. The first difference regards the involvement of the Prime Minister's office. In those countries where the governance has not involved the Prime Minister's office or even excluded the Ministry of Finance, this translated into a more difficult and slower implementation path of reforms. The second difference regards the involvement of social partners, especially when it comes to labour market or social policy reforms, where their involvement played a key role in speeding up the adoption process. Third, the different degree of involvement of sub-national authorities in the drafting and implementation of the plans affects the efficiency of the plans, in particular investments.

The **cost/burden associated with RRF compliance tends to be more demanding than other national investment programmes**. While the RRF, especially through its performance-based approach, could in principle be expected to lead to a reduced administrative burden compared to cohesion policy funds, there is currently no conclusive evidence supporting this claim. Overall, the administrative costs/burden of the RRF are considered to be **comparable to those of cohesion policy**. However, this perception varies from country to country.

Finally, since 2021, the EU's Technical Support Instrument has been supporting the public administrations to enhance their internal governance and capacity to manage and implement RRPs efficiently, by offering general support for the implementation of national RRPs, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures (general support across RRP components), and also policy-specific interventions (thematic support for thematic RRP measures).

[7] The informal dialogue is a process in which Member States can ask for clarifications and timely guidance from the European Commission, for example before submitting a request for payment.

Coherence

The RRF Regulation highlights the need for effective coordination between reforms and investments included in the plans to safeguard the consistency, coherence, complementarity, and synergy among sources of funding. What we observe is that reforms and investments in the plans have to some extent been complementary and coherent, without significant differences across policy areas but with differences across countries. In some cases, the investments in the RRP are coherent with already existing measures put in place before the RRF at national level.

Looking at the coherence between national and RRP measures, this **has been largely ensured by three factors:** 1) in MSs that had already put in place a post-pandemic recovery plan, the RRP built on the already planned measures and either replaced or further expanded them; 2) in countries that had not yet a recovery plan, the RRPs became the national government strategic plans for the recovery after the pandemic; 3) in both cases, the short time for the plans' drafting and implementation pushed national authorities to develop a plan coherent with the already existing or planned investments and reforms.

In terms of coherence between the RRF and other EU initiatives, the RRF has been **well-integrated in the European Semester,** which has been used (in particular the National Reform Programmes) by all MSs – with few exceptions – to report on the implementation of the RRPs. Concerning the coherence with **Cohesion policy**, MSs have put in place **four approaches to demarcation** between RRF and Cohesion policy: a thematic demarcation; a territorial demarcation; a demarcation based on the typologies of beneficiaries; a temporal demarcation. The most frequently adopted approach has been of thematic nature, but MSs have *de facto* adopted a mix of demarcation approaches. While demarcation strategies are key to avoiding overlaps between the two instruments, **they do not necessarily ensure synergies**. In this regard, obstacles consist, among other things, of the thematic overlap increasing the risk of competition between the instruments; NRRPs being prioritised over Cohesion policy due to pressure on delivering rapid absorption; and, in some cases, different governance systems.

There is **a high level of coherence between the RRF and the Technical Support Instrument** (TSI). The TSI offers both general and thematic support, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures, and also policy-specific interventions. The strategic decision to incorporate TSI support right from the inception of the RRF's development along with the flexibility provided by Article 7 of the RRF Regulation, has strengthened the coherence between these two instruments and has empowered MSs to effectively leverage the TSI support to better implement their RRPs. As of the end of October 2023, more than 400 projects approved under the TSI support the preparation or implementation of Member States' RRPs.

Finally, with respect to other **EU policies and the related priorities**, we observe that **the reforms and investments explicitly refer to EU initiatives only to some extent, with significant variation across policy areas and across countries.** In some policy areas, the reforms and investments only marginally refer to EU initiatives (e.g. ALMP), in others, the link between RRP measures and other EU initiatives is identified only ex-post (e.g. ECEC). In yet other cases, there is a high degree of alignment and coordination (e.g. energy efficiency). This notwithstanding, it is worth stressing that the lack of an explicit reference to other EU initiatives in the RRPs' measures does not imply a lack of coherence with EU priorities, which is instead guaranteed by the requirement for the plans to align with a significant subset of CSRs, which already reflect the priorities identified in EU initiatives.

EU added value

The **RRF macroeconomic effects** of increasing GDP, lowering unemployment, and reducing spreads in the context of severe external shocks (the COVID-19 pandemic and the war in Ukraine)

represent a part of the EU added value of the instrument. At the same time, **more than 20% (155) of the 705 milestones/targets fulfilled as of 31.07.2023 have been implemented before the date of the official endorsement of the RRPs. This does not necessarily mean that** the related measures would have taken place without the RRF. Indeed, the drafting of the plans started already in September 2020 and several countries started implementing measures that would have then been included in the RRPs. The **general assessment of stakeholders on RRF additionality has been positive**, but about **a quarter of the participants in both the national coordinator survey and the public consultation expressed a negative opinion** on the extent to which the RRF supported measures that would not have been implemented by MSs. Similar mixed sentiments were expressed during the performed interviews.

Overall, the EU added value is largely recognised in the case of **structural reforms, which – based on the consultation with national coordination bodies - would have likely not taken place without the RRF**. When it comes to **investments**, the **added value varies across countries**. As emerged from the case studies, the added value of the RRF in some countries is particularly high, namely without the RRF these investments would not have taken place. In others, the RRF funds are additional and top up already existing national funding or are complementary to EU funding. The availability of RRF funding allowed existing programs to substantially expand their capacity or MSs to accelerate their implementation. Without the RRF, these programs might have continued but at a much smaller scale. Finally, in some cases, the RRF funds are used to substitute national spending.

The EU added value of the RRF also emerges in two other aspects: the advantageous borrowing conditions and the impact on reducing spreads and the contribution to the implementation and further development of multi-country projects. Concerning the interplay between the RRF and CP, evidence of substitution effects generated by the RRF to the detriment of Cohesion Policy was not found with regard to 2014-20 programmes, as they were already well underway at the time the RRF was launched. **Interviewees, however, highlighted substitution effects for 2021-27 programmes**. In countries with substantial investment gaps in traditional sectors, there is no risk of displacement between the two instruments, and RRF resources add to CP to tackle existing needs.

Finally, concerning the contribution to maintaining the level-playing field and strengthening the Single Market, the RRPs include key reforms that are expected to address regulatory differences in product market regulation thus smoothing the functioning of the Single Market. In terms of investments, a cohesive approach in the NRRPs that aligns with Single Market principles safeguards equal opportunities for businesses throughout the EU. The analysis of the alignment of the SME-related measures with the Single Market principles shows significant variation across member states in terms of accessibility of companies to other Member States' funding opportunities.

Relevance

The **relevance of the RRPs is widely acknowledged** and is ensured by the following factors: the reforms and investments are linked to the CSRs, which are typically linked to strategic reforms that take time to implement; the twin transformation (green and digital), which is an overarching EU-wide policy for years to come, is at the heart of the RRF and consequently the RRPs; the RRF has envisioned a mechanism for adaptation of the RRPs, which is currently being implemented.

As concerns the **allocation key**, this remains still relevant today. Yet, the countries - who experienced a revision downwards - complained about the fact that the update by 30 June 2022 of the maximum financial contribution for non-repayable financial support stipulated by Art 11.2 of the RRF Regulation and the substantial revision of the 30% of the amount available caused internal delays in the plans' implementation due to the need to either revise the plans or compensate with national resources the loss of EU financing.

While the reasons behind the 2026 deadline are well understood**, it has led to limitations in selecting investments, particularly in the renewable energy sector**. As concerns feasibility, national authorities have already **flagged that not all the milestones and targets can be completed by August 2026, in particular those related to infrastructure investments. For this reason, several member states decided to propose an amendment to their plans, and in particular those measures where the timeline is considered to have become unrealistic.**

The modification of the plans is a natural necessity since plans are conceived over a 6-year time frame, but **most national authorities think that the RRF is either not at all flexible or only to a limited extent**. The most cited reasons for this opinion are: the plan modification procedures do not distinguish between small and major adjustments, even if targeted revisions were processed faster; lengthy procedures and the significant time lag - up to almost one year between the decision to modify the plans and the final approval of the modification by the Council; rigidity in the modification of the timeline for milestones and targets.

Finally, the decision to apply for loans under the RRF is driven by a complex interplay of **financial** (lower interest rates compared to market rates) and **non-financial considerations** (amplify the ambition of their recovery and resilience plans, seeking additional funds beyond what grants provide).

Note de Synthèse

Introduction

« L'étude à l'appui de l'évaluation à mi-parcours de la facilité pour la reprise et la résilience » **a été réalisée entre mars et octobre 2023** par un consortium comprenant Ecorys, CEPS, NIESR, CSIL et Wavestone, à la suite d'un contrat au titre des contrats-cadres multiples des services liés à l'évaluation et à l'évaluation signés avec la direction générale des affaires économiques et financières de la Commission européenne. L'étude a été coordonnée par Francesco Corti (CEPS) et Daniel Nigohosyan (Ecorys).

L' **objectif** de l'étude est défini par le règlement établissant la facilité pour la reprise et la résilience (FRR). Il s'agit de « *fournir une étude objective et indépendante à l'appui de l'évaluation de la FRR au regard des critères d'efficacité, d'efficience, de pertinence, de cohérence et de valeur ajoutée de l'UE* ». L'étude d'appui alimentera le rapport d'évaluation à mi-parcours de la Commission européenne. De plus, l'étude fournit également des éléments de référence utiles et **des leçons tirées pour les discussions sur d'éventuels futurs instruments fondés sur les performances** dans le cadre financier pluriannuel (CFP) post-2027. La **date limite** générale pour l'étude est le 31 juillet 2023, mais elle s'appuie sur des **données aussi récentes que possible** (informations sur les chapitres REPowerEU, les changements de plans, les décaissements et la planification des prêts au titre de la FRR au 15 octobre 2023).

Méthodologie

L'évaluation a été réalisée en quatre étapes classiques: structuration, collecte de données, analyse et établissement de rapports. En particulier, les méthodes suivantes ont été appliquées:

- Un examen approfondi de la littérature existante (par exemple, les décisions d'exécution du Conseil, les PRR, les arrangements opérationnels, les rapports annuels sur la FRR, les avis et rapports de la Cour des comptes européenne, la littérature universitaire).
- L'élaboration de deux bases de données qui ont été développées pour les besoins de l'étude : 1) une base de données primaire, en utilisant les données de la Commission; et 2) une base de données secondaire, qui intègre les contributions des entretiens et des données à l'échelle nationale sur les résultats recueillis.
- Une enquête auprès des principales parties prenantes nationales associées à la mise en œuvre des PRR, lancée à la fin du mois de mai 2023 et clôturée le 7 juillet, avec 40 réponses.
- Des Entretiens ciblés — 156 entretiens semi-structurés (dont 88 pour des études de cas) avec des organismes nationaux de coordination, la Commission européenne, le Parlement européen, les présidents du CEF et du CPE, les partenaires sociaux de l'UE, le CESE, le CdR, des ONG et des experts politiques.
- Huit études de cas — six se sont concentrées sur des domaines d'action spécifiques liés aux six piliers de la FRR: (a) l'efficacité énergétique des bâtiments; (b) la numérisation des soins de santé; (c) soutien aux PME; (d) les politiques actives du marché du travail; (e) les réformes de l'état de droit; et f) l'éducation et l'accueil de la petite enfance. Deux études de cas spécifiques ont été ajoutées, l'une sur les projets transfrontaliers et l'autre sur l'interaction entre la politique de cohésion de l'UE et la FRR. Les conclusions de six études de cas ont été validées lors d'ateliers ad hoc avec des représentants des gouvernements nationaux chargés de la mise en œuvre des mesures et des experts politiques nationaux.
- Une analyse des coûts et avantages — la cartographie des coûts; l'évaluation des coûts; l'évaluation des prestations; une conclusion sur le rapport coûts/avantages.

- Une analyse macroéconomique fondée sur le modèle économétrique mondial de l'Institut national (NiGEM), développé et maintenu depuis 1987.
- Une consultation publique, menée du 16 mars 2023 au 8 juin 2023, avec un total de 172 réponses reçues.

Évaluation globale

La facilité pour la reprise et la résilience est la pierre angulaire du plan de l'UE visant à sortir plus forte et plus résiliente de la crise de la COVID-19 (Next Generation EU) et à relever les défis socio-économiques causés par l'invasion de l'Ukraine par la Russie (par la mise en œuvre du plan REPowerEU). Pour atteindre ces objectifs généraux et ambitieux, la FRR fournit des financements importants à une échelle inatteignable uniquement au niveau des États membres— jusqu'à 723.8 milliards d'euros de prêts (385.8 milliards d'EUR) et de subventions (338 milliards d'EUR), et des ressources supplémentaires REPowerEU (20 milliards d'euros sous forme de nouvelles subventions et 2.1 milliards d'euros de fonds provenant de la réserve d'ajustement au Brexit). Ainsi, **la FRR a fourni une réponse commune et synchronisée de l'UE à des défis communs tels que la crise socio-économique de la COVID-19 et la crise énergétique**. **Elle a également soutenu la transition écologique de l'UE** (en particulier par des mesures d'atténuation du changement climatique et l'application du principe consistant à ne pas causer de préjudice important) **et a contribué à la transformation numérique.**

À la mi-2023, plus de 150 milliards d'euros avaient été décaissés au titre de la FRR, ce qui représentait 31 % du montant total des subventions et prêts prévus[8]. **Les financements prévus[9] et décaissés au cours des deux premières années de fonctionnement de la FRR (2021-2022) sont presque alignés**. Le rythme des progrès financiers en 2023 présente un **risque important de retards par rapport à la planification indicative**. Si **les États membres ont largement respecté la planification des premiers paiements demandés en 2021 et 2022, la plupart d'entre eux ont repoussé le calendrier indicatif des demandes de paiement en 2023 en raison d'une combinaison de différents facteurs** tels que: la nécessité de réviser les plans à la suite de la mise à jour de l'allocation maximale des subventions (en 2022), la planification des prêts et l'inclusion des chapitres REPowerEU (en 2023); des difficultés à atteindre les jalons/cibles; les changements de gouvernements et de priorités gouvernementales; la capacité administrative; et divers facteurs externes: la guerre d'agression menée par la Russie contre l'Ukraine, la crise énergétique, l'inflation, l'offre et les pénuries de main-d'œuvre. Le **décaissement des paiements dans les moins de 4 mois en moyenne après les demandes de paiement peut être considéré comme ponctuel**, mais les délais des paiements effectués en 2023 sont plus longs que les moyennes de toutes les années de mise en œuvre. Ce phénomène peut s'expliquer par divers facteurs, tels que les révisions parallèles des PRR, l'application plus complexe de la procédure de « suspension des paiements »[10], le nombre croissant de demandes de paiement soumises en parallèle, y compris par les États membres qui soumettent leurs premières demandes. Il est difficile de tirer des conclusions sur la base de données, qui ne couvrent pas la totalité de l'année 2023. Il est toujours possible d'accélérer les paiements d'ici la fin de 2023, mais les données partielles font néanmoins apparaître des **risques accrus de retards dans la mise en œuvre financière de la FRR**. À la fin du mois de juillet 2023, 11,3 % de l'ensemble des cibles/jalons

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[8] Ces chiffres représentent la situation à la fin du mois d'août 2023. Il convient de reconnaître que l'enveloppe globale de la FRR est plus importante et qu'elle peut décaisser jusqu'à 723.8 milliards d'euros (en prix courants) sous forme de subventions et de prêts aux États membres de l'UE. Après la date butoir de l'évaluation, l'enveloppe de la FRR a augmenté pour atteindre environ 650 milliards d'euros.

[9] Financement prévu sous la forme de subventions et/ou de prêts, qui est inclus dans les plans pour la reprise et la résilience à partir du 31 juillet 2023.

[10] Par exemple, appliqué dans le cas de la deuxième demande de paiement roumaine. Pour plus d'informations, voir: https://ec.europa.eu/commission/presscorner/detail/fr/mex_23_4695

prévus avaient été atteints. À ce jour, 639 jalons (19,3 % du nombre total) et 66 cibles (2,3 % du nombre total) ont été atteints[11]. Malgré ces progrès, la réalisation des jalons/cibles accuse un retard par rapport au calendrier indicatif prévu dans les décisions d'exécution du Conseil relatives aux plans de la FRR — le nombre de jalons/cibles prévus jusqu'au premier trimestre de 2023 est de 2,205, c'est-à-dire que les valeurs cibles/jalons atteints s'élèvent à 32 % de cette planification indicative.

Les facteurs externes ont eu une **incidence significative sur la mise en œuvre de la FRR**. Des facteurs tels que l'agression de la Russie contre l'Ukraine, la crise énergétique, l'inflation et les pénuries d'approvisionnement et de main-d'œuvre **ont eu une incidence sur la rapidité et le coût de la mise en œuvre des mesures de la FRR**. Des facteurs internes, tels que la faible capacité administrative, l'instabilité politique, la faible sensibilisation des bénéficiaires finaux aux possibilités offertes par la FRR et l'insuffisance de la communication/coordination, ont également eu un impact négatif sur la mise en œuvre des mesures de la FRR.

Efficacité

Les résultats de l'application du modèle NiGEM montrent qu'en raison des décaissements au titre de la FRR, le **PIB de l'UE était supérieur de 0,4 % en 2022 à ce qu'il aurait été en l'absence de dépenses au titre de la FRR**. Les décaissements au titre de la FRR ont eu des effets plus importants dans les États membres de l'Est et du Sud que dans les pays du Nord et de l'Ouest, avec des niveaux de PIB relativement plus élevés. **Les décaissements initiaux ont réduit le chômage dans l'Union européenne d'environ 0.2 points de pourcentage par rapport à ce qu'elle aurait été en l'absence de la FRR.** Nous avons constaté que cette baisse globale du chômage était due à des réductions importantes dans les États membres du Sud de l'Europe, à savoir la Grèce, l'Italie, le Portugal et l'Espagne.

L' émission de dette commune par la Commission au nom de l'UE — une caractéristique essentielle de la FRR — visant à fournir un soutien budgétaire et des liquidités aux États membres a contribué à assurer la pleine coordination de l'impulsion à l'investissement (public) et à éviter des frictions majeures au sein du marché unique (certains États membres accordant des subventions importantes à leurs industries et d'autres non) et a permis des avantages substantiels en termes de retombées, qui se sont immédiatement concrétisées — lors de son annonce — par une **réduction des écarts** de 50 à 100 points de base pour les États membres du Sud et de l'Est d'Europe où les coûts d'emprunt sont généralement élevés. **Le préfinancement de 13 % — une caractéristique essentielle de la FRR** — a effectivement permis des décaissements rapides en faveur des finances publiques et a stimulé les progrès financiers globaux (mesurés en paiements) de l'instrument.

Les jalons/cibles atteints couvrent l'ensemble des six piliers de la FRR. Les piliers de la croissance intelligente, durable et inclusive et de la santé, ainsi que de la résilience économique, sociale et institutionnelle présentent les pourcentages les plus élevés de jalons/cibles atteints (plus de 12 %) sur ceux prévus liés à ces piliers. Le plus grand nombre d'objectifs atteints relève du pilier de la transition écologique, mais le pourcentage global de jalons/cibles atteints sur l'ensemble de ceux liés au pilier (10,1 %) est derrière les piliers de la croissance et de la résilience sanitaire. Le pilier numérique affiche le pourcentage le plus faible atteint sur l'ensemble des jalons et cibles liés au pilier (8 %). **Le principe consistant à «ne pasnuire de manière significative »**, introduit avec la FRR, est indiqué comme l'un des outils les plus efficaces pour atteindre les objectifs écologiques définis dans la FRR.

[11] L'analyse ne porte que sur les jalons/cibles couverts dans les demandes de paiement soumises à la Commission et évaluées par celle-ci, et non sur les progrès accomplis dans la réalisation des jalons/cibles couverts dans les demandes de paiement ultérieures. Comme il apparaît clairement dans les rapports semestriels des États membres, les progrès en ce qui concerne les jalons et cibles couverts par les demandes de paiement ultérieures sont réalisés en parallèle (par exemple, le rapport annuel 2023 sur la FRR indique que 1,155 jalons et cibles ont été atteints au cours de la période T12020-T12023, tel que déclaré par les États membres).

La FRR a progressé en fonction des quatorze indicateurs communs[12]. Parmi les réalisations les plus notables, citons : 22 millions de MWh/an d'économies d'énergie primaire annuelles, 18 millions de logements supplémentaires disposant d'un accès à l'internet, près de 1.5 millions d'entreprises soutenues, près de 7 millions de participants à l'éducation ou à la formation, et 4 millions de jeunes (âgés de 15 à 29 ans) bénéficiant d'une aide. Pour certains indicateurs communs (par exemple, la capacité opérationnelle supplémentaire installée pour les énergies renouvelables et les logements supplémentaires disposant d'un accès à l'internet), seuls 5 à 7 États membres ont fait état de résultats jusqu'à présent, mais il convient de reconnaître que les investissements dans les infrastructures nécessitent généralement du temps jusqu'à ce qu'ils deviennent opérationnels et puissent être déclarés.

Les réformes indiquées par les États membres répondent à l'ensemble ou à une partie non négligeable des défis recensés dans les recommandations par pays du Semestre européen. **La plupart des personnes interrogées, tant au niveau national qu'au niveau de l'UE, confirment que la facilité pour la reprise et la résilience a contribué à mettre à l'ordre du jour des réformes attendues de longue date**. La force du lien entre la mise en œuvre des recommandations par pays et le soutien financier diminue dans le cas des États membres qui reçoivent une enveloppe financière proportionnellement plus faible et qui sont moins incités à s'engager en faveur de réformes structurelles.

La mise en œuvre des réformes de la FRR a donné des résultats tangibles dans un large éventail de domaines d'action : le marché du travail, la protection sociale et les retraites, l'éducation et la formation, la justice civile et pénale, l'administration publique, y compris la numérisation des administrations publiques (AP), le réexamen des dépenses et la gouvernance des finances publiques, la lutte contre le blanchiment de capitaux, les réformes en matière de simplification des autorisations pour stimuler les investissements dans les énergies renouvelables, le déploiement des énergies renouvelables et des transports durables, l'introduction de la 5G et du haut débit, la réforme structurelle du système éducatif, la lutte contre la corruption et la planification fiscale. En revanche, seuls quelques investissements ont franchi les premières étapes et ont déjà produit des résultats tangibles.

En ce qui concerne l'impact des mesures de la FRR sur la **cohésion territoriale**, cela varie d'un pays à l'autre. Certains PRR prévoient un rééquilibrage territorial, en particulier en tant que priorité transversale dans tous les secteurs politiques, tandis que d'autres consacrent des ressources *ad hoc* au soutien des zones les plus défavorisées. En outre, certains PRR = ne disposent pas d'une stratégie visant à renforcer la cohésion territoriale. En ce qui concerne **l'inclusion sociale**, nous observons que des critères permettant de bénéficier à la plupart des groupes défavorisés sont inclus dans certaines mesures au sein de certains États membres, tandis que dans d'autres, l'impact distributif des investissements n'est pas pris en considération. Dans la plupart des États membres, l'impact ne peut être mesuré qu'indirectement, étant donné que les groupes défavorisés peuvent bénéficier de réformes (sociales) ayant un effet durable ainsi que d'investissements, sans que les mesures les ciblent directement ou explicitement.

La FRR **devrait également contribuer à atténuer les effets de la crise de la COVID-19 sur les femmes**, mais avec des **variations d'un État membre à l'autre**. L'efficacité des PRR devrait être **influencée par divers facteurs,** notamment la proportion, les domaines thématiques et la qualité des mesures liées à l'égalité entre les hommes et les femmes, l'ampleur de l'intégration de

[12] Le tableau de bord de la FRR comprend un ensemble d'indicateurs communs liés aux objectifs de la FRR. Les indicateurs communs montrent les progrès accomplis dans la mise en œuvre des plans pour la reprise et la résilience en vue de la réalisation d'objectifs communs et la performance globale de la FRR. Les États membres collectent les données relatives aux indicateurs communs et communiquent leur numéro à la Commission européenne deux fois par an, avant la fin du mois de février et la fin du mois d'août. Au total, la Commission, les États membres et le Parlement européen ont défini 14 indicateurs communs pour les six piliers politiques du règlement délégué (UE) 2021/2106 (2021).

la dimension de genre et la possibilité de préjugés masculins en matière d'emploi, ainsi que les mesures prises dans le cadre de la mise en œuvre, du suivi et de l'évaluation. Si certaines évaluations ex ante et voix spécifiques sont critiques quant à l'incidence sexospécifique de la FRR, d'autres font état de progrès pertinents et de résultats positifs escomptés. Le tableau de bord indique que jusqu'à présent, davantage de femmes que d'hommes sont soutenues par la FRR en ce qui concerne, par exemple, la participation à des possibilités d'éducation ou de formation et l'emploi ou la recherche d'un emploi[13]. Un certain nombre de progrès ont également été attribué à toutes les recommandations par pays importants et les mesures examinées devraient avoir des résultats et des effets pertinents, mais dépendent de la poursuite de la mise en œuvre.

Les chapitres REPowerEU des PRR, présentés à partir du 4 octobre 2023, **devraient contribuer aux six objectifs précisés dans le règlement FRR modifié**, **qui sont conformes aux trois objectifs du plan REPowerEU**. La plupart des mesures proposées contribuent à introduire des mesures d'efficacité énergétique et à accélérer le déploiement des énergies renouvelables en réponse aux deux premiers objectifs du plan REPowerEU. À ce jour, seuls deux pays ont également inclus des mesures liées aux investissements dans les combustibles fossiles, qui sont liées à l'objectif de diversification de l'approvisionnement énergétique.

À ce jour, plusieurs facteurs (internes et externes) peuvent être identifiés comme pouvant avoir un impact négatif sur la mise en œuvre des PRR. En ce qui concerne les facteurs externes, ils comprennent la **pression croissante sur les prix de l'énergie, des denrées alimentaires et des autres matières premières, la perturbation des chaînes d'approvisionnement et de la logistique, le durcissement des conditions financières et la détérioration générale de l'environnement macroéconomique, ainsi que les pénuries de main-d'œuvre**. En ce qui concerne les facteurs internes, la **capacité administrative** — en particulier dans les États membres dont les taux d'absorption des fonds de l'UE étaient déjà faibles — et l'instabilité politique demeurent les principales préoccupations pour la mise en œuvre des investissements et des réformes.

En addition des facteurs susmentionnés, des obstacles spécifiques sont apparus pour les mesures politiques. Par exemple, dans le cas de projets transfrontaliers, des **goulets d'étranglement en matière d'investissement** apparaissent, liés à la longueur du **processus de notification** de l'attribution, au **manque de clarté** (en termes de processus, de calendrier et de responsabilités, aux critères requis pour la sélection des projets, à la définition d'avantages ou de retombées supplémentaires) et à la **difficile communication** entre les États membres, en particulier au cours de la phase de conception des projets. En ce qui concerne les investissements impliquant les autorités locales, trois types de problèmes ont un impact négatif sur la mise en œuvre des mesures : le manque de ressources pour couvrir les **coûts récurrents**, le **calendrier strict** et le **manque de capacité technique** des municipalités à présenter des projets, et le manque de **personnel qualifié** pour gérer les nouvelles infrastructures (ou requalifiées). D'autres défis apparaissent en raison de la **complexité de la structure de gouvernance** et des **procédures de passation des marchés publics.** Dans le cas des mesures de soutien aux PME, la **complexité des programmes** décourage la participation de celles-ci. **La sensibilisation** des PME est un facteur essentiel d'adoption, de sorte que la mauvaise communication a été identifiée comme un autre facteur ayant une incidence négative sur la mise en œuvre des mesures. De même, dans le cas des politiques actives du marché du travail, où la conception des mesures est simple et où les mesures sont facilement accessibles, la mise en œuvre est plus efficace. En revanche, le **manque de clarté dans la conception ou l'insuffisance de la communication/sensibilisation** peuvent entraver l'adoption. En outre, l'adoption de mesures peut être influencée par l'**évolution du contexte du marché du travail**, qui peut influencer la demande, et par des facteurs externes, tels que l'émigration. La **capacité des acteurs régionaux** joue également un rôle essentiel.

[13] Elle repose sur des indicateurs communs qui sont ventilés par sexe, et les données à partir du 20 octobre 2023 proviennent du tableau de bord de la FRR.

Afin d'atténuer les effets négatifs des facteurs externes et internes, les **États membres ont adopté différentes stratégies,** notamment en augmentant le budget de la FRR avec des ressources nationales ou d'autres **financements supplémentaires**, en **réduisant l'ambition des jalons et cibles (proportionnellement à une réduction du financement)**, en **supprimant les projets d'investissement qui ne sont plus réalisables** et en **reportant le calendrier initialement prévu** des jalons et cibles. La révision des plans a été soumise à des règles spécifiques, garantissant que les modifications proposées sont fondées sur des circonstances objectives (article 21 du règlement FRR) et que l'ambition globale des plans n'est pas abaissée. Pour remédier à la faiblesse des capacités administratives, les États membres ont pris des mesures pour atténuer les risques au moyen de formations, de réformes et d'investissements visant à moderniser l'administration publique et à l'utilisation de l'instrument d'appui technique (STI). Toutefois, les résultats liés à ces mesures ne devraient se concrétiser qu'à moyen et à long terme. À court terme, les États membres ont mis en place des **mesures *ad hoc* pour aider directement l'administration à mettre en œuvre les plans**. Néanmoins, certaines préoccupations majeures subsistent, en particulier en ce qui concerne les mesures incluses dans les chapitres REPowerEU, avec l'approche du délai final de la FRR (2026).

Effficience

Dans le scénario QUEST (à savoir 100 % de plus pour les subventions et une additionnalité de 50 % pour les prêts), notre analyse utilisant le NiGEM suggère que **l'impact cumulé sur le PIB de l'UE d'ici à 2041 des fonds de la FRR décaissés jusqu'à la fin du mois de juillet 2023 est presque deux fois plus important que la valeur de ces fonds déboursés.** De plus, notre analyse suggère que **l'impact cumulé sur le PIB de l'UE d'ici à 2041 de l'ensemble de subventions et de prêts au titre de la FRR devrait dépasser le double du total des fonds de la FRR**. En effet, les valeurs non actualisées et actualisées des ratios coûts-avantages calculés au niveau de l'UE et compte tenu de tous les fonds prévus au titre de la FRR sont un peu plus de 2. Toutefois, si l'on considère des hypothèses différentes sur l'additionnalité, le rapport coût-avantage changera. Dans un scénario où 60 % des fonds de la FRR sont utilisés pour des investissements publics supplémentaires dans les États membres du Sud et de l'Est les plus pauvres, mais où seuls 25 % des fonds de la FRR sont utilisés pour des investissements publics supplémentaires dans les États membres du Nord et de l'Ouest les plus riches, le rapport coûts-avantages est inférieur à un ; l'impact cumulé sur le PIB de l'UE devient inférieur au total des fonds versés au titre de la FRR. Toutefois, cela ne tient pas compte des effets à long terme sur le PIB des réformes structurelles dans les PRR des États membres, qui sont difficiles à mesurer, en particulier compte tenu de la durée pendant laquelle les avantages se produiront, mais qui pourraient être considérables.

Les coûts administratifs **varient considérablement** d'un pays à l'autre en équivalents temps plein (ETP) déclarés par les organismes de coordination, tant pour les activités ponctuelles que pour les activités récurrentes, et **aucune tendance nette ne se dégage**. Selon la plupart des répondants (72 %) à l'enquête, **les coûts liés à la mise en œuvre du FRR ont augmenté au fil du temps** — en raison de l'application plus stricte des exigences (notamment en matière de rapports, de contrôle et d'audit) au fur et à mesure que le processus a évolué.

En premier lie, la **charge administrative** et la complexité de la FRR font référence à plusieurs facteurs liés au manque de clarté en ce qui concerne le rôle du **contrôle et des audits** et l'**interprétation** des jalons et cibles, les procédures de décaissement et la modification du plan. En ce qui concerne le premier, la complexité des procédures d'audit et de contrôle pour le nouvel instrument fondé sur les performances et le chevauchement entre les audits nationaux, de la Commission et la CCE ont créé une incertitude dans les États membres et une surcharge des procédures administratives. En ce qui concerne ce dernier point, les États membres ont fait part de leurs préoccupations quant au **cadre d'évaluation des jalons et cibles** utilisé par la Commission, la **méthode de suspension des paiements** et aux **procédures de modification du plan**, qui restent — malgré la communication de la Commission — peu claires (notamment en ce qui concerne les réformes) et excessivement exigeantes en matière de communication d’informations. Toutefois, il convient de noter que la méthode de suspension des paiements n’a été appliquée pour la première fois qu’en 2023 et qu’il existe une courbe d’apprentissage pour les États membres. Une **charge administrative supplémentaire** a été identifiée par les États membres en ce qui concerne les **exigences en matière de rapports**, en particulier les **indicateurs communs**, et, dans une moindre mesure, le processus de dialogue informel avec la CE.[14] Les États membres ont également relevé des marges de simplification. En particulier, il est possible de **simplifier les procédures de contrôle et d’audit**, d’assurer une meilleure coordination entre les acteurs et d’éviter les contrôles multiples. De nombreuses parties prenantes ont également souligné la **nécessité d’une certaine souplesse** en ce qui concerne l’interprétation des jalons et des cibles, qui est perçue comme trop stricte par certains répondants. En ce qui concerne les rapports, les États membres proposent de ne pas rendre obligatoire le rapport semestriel lorsqu’un État membre présente déjà deux demandes de paiement par an. Enfin, la simplification du processus de dialogue informel avec la Commission européenne peut résulter de l’accélération du temps nécessaire pour fournir un retour d’information aux États membres et de la réduction des séries de commentaires de la Commission aux États membres sur la documentation soumise pour les demandes de paiement.

L’efficacité de la FRR est également affectée par son cadre de **gouvernance** au niveau national et, en particulier, par le degré de centralisation du processus décisionnel et du système d’établissement de rapports/de gestion des performances. Si la FRR s’accompagne d’une centralisation dans tous les États membres, des différences apparaissent dans la structure de gouvernance des PRR nationaux, ce qui a un impact sur l’efficacité de la FRR. La première différence concerne l’implication du cabinet du Premier ministre. Dans les pays où la gouvernance n’a pas impliqué le cabinet du Premier ministre, ni même exclu le ministère des finances, cela s’est traduit par une mise en œuvre plus difficile et plus lente des réformes. La deuxième différence concerne la participation des partenaires sociaux, en particulier en ce qui concerne les réformes du marché du travail ou de la politique sociale, où leur participation a joué un rôle clé dans l’accélération du processus d’adoption. Troisièmement, le degré différent de participation des autorités infranationales à l’élaboration et à la mise en œuvre des plans nuit à l’efficacité des plans, en particulier aux investissements.

Les coûts/charges associés à la mise en conformité avec la FRR tendent à être plus exigeants que les autres programmes d’investissement nationaux. Si la FRR, en particulier grâce à son approche fondée sur les performances, pourrait en principe entraîner une réduction de la charge administrative par rapport aux fonds de la politique de cohésion, il n’existe actuellement aucun élément probant à l’appui de cette affirmation. Dans l’ensemble, les coûts/charges administratifs de la FRR sont considérés comme **comparables à ceux de la politique de cohésion**. Toutefois, cette perception varie d’un pays à l’autre.

Enfin, depuis 2021, l’instrument d’appui technique de l’UE aide les administrations publiques à améliorer leur gouvernance interne et leur capacité à gérer et à mettre en œuvre de manière efficiente les PRR, en offrant un soutien général à la mise en œuvre des PRR nationaux, couvrant des domaines transversaux importants pour la mise en œuvre des PRR, tels que la gestion de projets, l’établissement de rapports, les structures de gouvernance (soutien général entre les composantes du PRR), ainsi que des interventions spécifiques (soutien thématique aux mesures thématiques des PRR).

[14] Le dialogue informel est un processus au cours duquel les États membres peuvent demander des éclaircissements et des orientations en temps utile à la Commission européenne, par exemple avant de soumettre une demande de paiement.

Cohérence

Le règlement FRR souligne la nécessité d'une coordination efficace entre les réformes et les investissements inclus dans les plans afin de préserver l'homogénéité, la cohérence, la complémentarité et la synergie entre les sources de financement. Nous observons que les réformes et les investissements prévus dans les plans ont été, dans une certaine mesure, complémentaires et cohérents, sans différences significatives entre les domaines d'action, mais avec des différences entre les pays. Dans certains cas, les investissements prévus dans le PRR sont cohérents avec les mesures existantes mises en place avant la FRR au niveau national.

Si l'on examine la cohérence entre les mesures nationales et celles relevant du PRR, **elle a été largement assurée par trois facteurs :** 1) dans les États membres qui avaient déjà mis en place un plan de relance après la pandémie, le PRR s'appuyait sur les mesures déjà prévues et les a remplacées ou élargies ; 2) dans les pays qui n'avaient pas encore de plan de relance, les PRR sont devenus les plans stratégiques du gouvernement national pour la reprise après la pandémie ; 3) dans les deux cas, le peu de temps nécessaire à l'élaboration et à la mise en œuvre des plans a poussé les autorités nationales à élaborer un plan cohérent avec les investissements et les réformes déjà existants ou prévus.

En ce qui concerne la cohérence entre la FRR et d'autres initiatives de l'UE, la FRR a été **bien intégrée dans le Semestre européen,** qui a été utilisé (en particulier les programmes nationaux de réforme) par tous les États membres — à quelques exceptions près — pour rendre compte de la mise en œuvre des PRR. En ce qui concerne la cohérence avec la **politique de cohésion**, les États membres ont mis en place **quatre approches de démarcation** entre la FRR et la politique de cohésion : une délimitation thématique ; une délimitation territoriale ; une délimitation fondée sur la typologie des bénéficiaires; une délimitation temporelle. L'approche la plus fréquemment adoptée est de nature thématique, mais les États membres ont *de facto* adopté une combinaison d'approches de démarcation. Si les stratégies de démarcation sont essentielles pour éviter les chevauchements entre les deux instruments, **elles ne garantissent pas nécessairement des synergies**. À cet égard, les obstacles consistent, entre autres, du chevauchement thématique qui accroît le risque de concurrence entre les instruments; des PRR nationaux prioritaires par rapport à la politique de cohésion en raison de la pression exercée sur une absorption rapide et, dans certains cas, de différents systèmes de gouvernance.

Il existe **un niveau élevé de cohérence entre la FRR et l'instrument d'appui technique** (TSI). Le TSI offre un soutien à la fois général et thématique, couvrant des domaines horizontaux importants pour la mise en œuvre du PRR, tels que la gestion de projets, l'établissement de rapports, les structures de gouvernance, ainsi que des interventions spécifiques. La décision stratégique d'intégrer le TSI dès le début du développement de la FRR, ainsi que la flexibilité prévue à l'article 7 du règlement FRR, a renforcé la cohérence entre ces deux instruments et a permis aux États membres de mobiliser efficacement le soutien TSI pour mieux mettre en œuvre leurs PRR. À la fin du mois d'octobre 2023, plus de 400 projets approuvés sous le TSI soutiennent la préparation ou la mise en œuvre des PRR des États membres.

Enfin, en ce qui concerne les autres **politiques de l'UE et les priorités qui y sont liées**, nous observons que les **réformes et les investissements ne font explicitement référence aux initiatives de l'UE que dans une certaine mesure, avec des variations importantes d'un domaine d'action à l'autre et d'un pays à l'autre.** Dans certains domaines d'action, les réformes et les investissements ne font que marginalement référence à des initiatives de l'UE (par exemple, les PAMT); dans d'autres, le lien entre les mesures du PRR et d'autres initiatives de l'UE n'est identifié qu'a posteriori (par exemple, l'EAJE). Dans d'autres situations encore, il existe un degré élevé d'alignement et de coordination (par exemple, l'efficacité énergétique). Néanmoins, il convient de souligner que l'absence de référence explicite à d'autres initiatives de l'UE dans les mesures des PRR n'implique pas un manque de cohérence avec les priorités de l'UE, ce qui est garanti par l'obligation pour les plans de s'aligner sur un sous-ensemble important de recommandations par pays, qui reflètent déjà les priorités recensées dans les initiatives de l'UE.

Valeur ajoutée européenne

Les effets macroéconomiques de la FRR liés à l'augmentation du PIB, à la baisse du chômage et à la réduction des écarts de rendement dans le contexte de chocs extérieurs graves (la pandémie de COVID-19 et la guerre en Ukraine) **représentent une partie de la valeur ajoutée de l'UE de l'instrument**. Dans un même temps, **plus de 20 % (155) des 705 jalons/cibles atteints à partir de 31.7.2023 ont été mis en œuvre avant la date d'approbation officielle des PRR. Cela ne signifie pas nécessairement que** les mesures connexes auraient eu lieu sans la FRR.

En effet, l'élaboration des plans a commencé dès septembre 2020 et plusieurs pays ont commencé à mettre en œuvre des mesures qui auraient ensuite été incluses dans les PRR. **L'évaluation générale des parties prenantes sur l'impact de la FRR a été positive**, mais environ **un quart des participants à l'enquête des coordinateurs nationaux et à la consultation publique ont exprimé un avis négatif** sur la mesure dans laquelle la FRR soutenait des mesures qui n'auraient pas été mises en œuvre par les États membres. Des sentiments mitigés similaires ont été exprimés au cours des entretiens réalisés.

Dans l'ensemble, la valeur ajoutée de l'UE est largement reconnue dans le cas des **réformes structurelles qui, sur la base de la consultation des organismes nationaux de coordination, n'auraient probablement pas eu lieu sans la FRR**. En ce qui concerne les **investissements**, la **valeur ajoutée varie d'un pays à l'autre**. Comme il ressort des études de cas, la valeur ajoutée de la FRR dans certains pays est particulièrement élevée, à savoir que sans la FRR, ces investissements n'auraient pas eu lieu. Dans d'autres, les fonds de la FRR sont une addition et complètent les financements nationaux existants ou comblent les financements de l'UE. La disponibilité de financements au titre de la FRR a permis aux programmes existants d'accroître considérablement leur capacité ou les États membres afin d'accélérer leur mise en œuvre. Sans la FRR, ces programmes auraient pu se poursuivre, mais à une échelle beaucoup plus réduite. Enfin, dans certains cas, les fonds de la FRR sont utilisés pour remplacer les dépenses nationales.

La valeur ajoutée européenne de la FRR apparaît également sous deux autres aspects: les conditions d'emprunt avantageuses et l'incidence sur la réduction des écarts de rendement et la contribution à la mise en œuvre et au développement de projets multinationaux. En ce qui concerne l'interaction entre la FRR et la politique de cohésion, il n'a pas été démontré que la FRR produisait des effets de substitution au détriment de la politique de cohésion en ce qui concerne les programmes de la période 2014-20, étant donné qu'ils étaient déjà bien avancés au moment du lancement de la FRR. Les **personnes interrogées ont toutefois mis en évidence des effets de substitution pour les programmes 2021-27**. Dans les pays présentant d'importants déficits d'investissement dans les secteurs traditionnels, il existe aucun risque de déplacement entre les deux instruments, et les ressources de la FRR viennent s'ajouter à la politique de cohésion pour répondre aux besoins existants.

Enfin, en ce qui concerne la contribution au maintien de conditions de concurrence équitables et au renforcement du marché unique, les PRR comprennent des réformes clés qui devraient remédier aux différences réglementaires dans la régulation des marchés de produits, facilitant ainsi le fonctionnement du marché unique. En ce qui concerne les investissements, une approche cohérente dans les PRR nationaux qui s'aligne sur les principes du marché unique garantit l'égalité des chances pour les entreprises dans l'ensemble de l'UE. L'analyse de l'alignement des mesures relatives aux PME sur les principes du marché unique révèle des variations importantes d'un État membre à l'autre en ce qui concerne l'accessibilité des entreprises aux possibilités de financement d'autres États membres.

Pertinence

La **pertinence des PRR est largement reconnue** et est garantie par les facteurs suivants : les réformes et les investissements sont liés aux recommandations par pays, qui sont généralement liées à des réformes stratégiques dont la mise en œuvre prend du temps ; la double transformation (écologique et numérique), qui est une politique globale à l'échelle de l'UE pour les années à venir, est au cœur de la FRR et, par conséquent, des PRR ; la FRR a envisagé un mécanisme d'adaptation des PRR, qui est actuellement mis en œuvre.

En ce qui concerne la **clé d'allocation**, elle reste d'actualité. Toutefois, les pays — qui ont subi une révision à la baisse — se sont plaints du fait que la mise à jour, au plus tard le 30 juin 2022, de la contribution financière maximale pour le soutien financier non remboursable prévue à l'article 11.2 du règlement FRR et la révision substantielle des 30 % du montant disponible ont entraîné des retards internes dans la mise en œuvre des plans en raison de la nécessité soit de réviser les plans, soit de compenser par des ressources nationales la perte de financement de l'UE.

Si le raisonnements de l'échéance de 2026 est bien comprise, **cela a entraîné des restrictions dans la sélection des investissements, en particulier dans le secteur des énergies renouvelables**. En ce qui concerne la faisabilité, les autorités nationales ont déjà **signalé que tous les jalons et cibles ne pouvaient pas être atteints d'ici août 2026, en particulier ceux liés aux investissements dans les infrastructures. C'est pourquoi plusieurs États membres ont décidé de proposer une modification de leurs planset en particulier les mesures pour lesquelles le calendrier est jugé irréaliste.**

La modification des plans est une nécessité naturelle étant donné que les plans sont conçus sur une période de 6 ans, mais la **plupart des autorités nationales estiment que la FRR n'est pas du tout flexible, ou seulement dans une mesure limitée**. Les raisons les plus citées pour cet avis sont les suivantes : les procédures de modification du plan ne font pas de distinction entre les petits ajustements et les ajustements majeurs, même si les révisions ciblées ont été traitées plus rapidement ; la longueur des procédures et le décalage important — jusqu'à près d'un an entre la décision de modifier les plans et l'approbation finale de la modification par le Conseil ; rigidité dans la modification du calendrier des jalons et cibles.

Enfin, en ce qui concerne la décision de demander des prêts au titre de la FRR, celles-ci sont motivées par une interaction complexe de **considérations financières** (taux d'intérêt inférieurs aux taux du marché) et autres (amplifier l'ambition de leurs plans pour la reprise et la résilience, en recherchant des fonds supplémentaires au-delà de ce que les subventions fournissent).

Kurzfassung

Einleitung

Die „Studie zur Unterstützung der Halbzeitbewertung der Aufbau- und Resilienzfazilität" wurde **zwischen März und Oktober 2023** von einem aus Ecorys, CEPS, NIESR, CSIL und Wavestone bestehenden Konsortium im Rahmen eines mit der Generaldirektion Wirtschaft und Finanzen der Europäischen Kommission als Teil der Mehrfach-Rahmenverträge für Evaluierungen und evaluierungsbezogene Dienstleistungen abgeschlossenen Vertrages durchgeführt.

Zweck der Studie, wie in der Verordnung zur Einrichtung der Aufbau- und Resilienzfazilität (ARF) festgelegt, ist die *Bereitstellung einer objektiven und unabhängigen Studie zur Unterstützung der Bewertung der Aufbau- und Resilienzfazilität anhand der Kriterien Wirksamkeit, Effizienz, Relevanz, Kohärenz und EU-Mehrwert*. Die unterstützende Studie wird in den Halbzeitbewertungsbericht der Europäischen Kommission einfließen. Darüber hinaus liefert die Studie auch nützliche Hintergrundinformationen und **Erkenntnisse für Diskussionen über mögliche künftige leistungsbasierte Instrumente** im MFR für die Zeit nach 2027. **Stichtag für das Ende der Datenerhebung ist grundsätzlich der 31. Juli 2023, die Studie stützt sich jedoch auf möglichst aktuelle Daten** (Informationen zu REPowerEU- Kapiteln, Änderungen der Pläne, Auszahlungen und Planung von Darlehen aus der Aufbau- und Resilienzfazilität Stand 15. Oktober 2023).

Methodik

Die Bewertung erfolgte in den vier klassischen Phasen: Planung, Datenerhebung, Analyse und Berichterstattung. Dabei wurden insbesondere folgende Methoden angewandt:

- Eine umfassende Literaturrecherche (z. B. Durchführungsbeschlüsse des Rates, Aufbau- und Resilienzpläne, operative Vereinbarungen, Jahresberichte zur Aufbau- und Resilienzfazilität, Stellungnahmen und Berichte des Europäischen Rechnungshofs, wissenschaftliche Literatur).
- Erstellung von zwei Datenbanken, die für die Studie entwickelt wurden: 1) Primäre Datenbank mit Daten der Kommission; und 2) Sekundäre Datenbank, die Informationen aus Interviews und gesammelte Daten zu Ergebnissen auf nationaler Ebene enthält.
- Eine Umfrage unter den wichtigsten nationalen Interessenträgern, die an der Umsetzung der Aufbau- und Resilienzpläne beteiligt waren. Die Umfrage wurde Ende Mai 2023 eingeleitet und endete am 7. Juli, mit 40 Antworten.
- Gezielte Interviews – 156 halbstrukturierte Interviews (davon 88 im Rahmen von Fallstudien) mit nationalen Koordinierungsstellen, der Europäischen Kommission, dem Europäischen Parlament, den Vorsitzenden des EFC und EPC, den Sozialpartnern auf EU-Ebene, dem EWSA, dem AdR, NRO und politischen Sachverständigen.
- Acht Fallstudien – sechs konzentrierten sich auf spezifische Politikbereiche im Zusammenhang mit den sechs Säulen Aufbau- und Resilienzfazilität: (a) Energieeffizienz von Gebäuden; (b) Digitalisierung der Gesundheitsversorgung; (c) Unterstützung von KMU; (d) aktive Arbeitsmarktpolitik; (e) Reformen zur Rechtsstaatlichkeit; und (f) frühkindliche Betreuung, Bildung und Erziehung. Es wurden zwei spezifische Fallstudien hinzugefügt, eine zu grenzüberschreitenden Projekten und eine zur Wechselwirkung zwischen der EU-Kohäsionspolitik und der ARF. Die Ergebnisse von sechs Fallstudien wurden in Ad-hoc-Workshops mit Vertretern der nationalen Regierungen, die für die Umsetzung der Maßnahmen zuständig sind, und nationalen Politikexperten validiert.
- Kosten-Nutzen-Analyse – Kostenermittlung; Bewertung der Kosten; Bewertung des Nutzens; Schlussfolgerungen zum Kosten-Nutzen-Verhältnis.

- Eine makroökonomische Analyse unter Verwendung des National Institute Global Econometric Model (NiGEM), das seit 1987 entwickelt und aufrechterhalten wird.
- Eine öffentliche Konsultation, die vom 16. März 2023 bis zum 8. Juni 2023 durchgeführt wurde und zu der insgesamt 172 Antworten eingegangen sind.

Gesamtbewertung

Die Aufbau- und Resilienzfazilität ist der Eckpfeiler des Plans der EU, gestärkt und widerstandsfähiger aus der COVID-19-Krise (Next Generation EU) hervorzugehen und die sozioökonomischen Herausforderungen zu bewältigen, die durch die russische Invasion in der Ukraine (durch die Umsetzung des REPowerEU-Plans) entstanden sind. Um diese breit angelegten und anspruchsvollen Ziele zu erreichen, werden im Rahmen der ARF erhebliche finanzielle Mittel in einem Umfang bereitgestellt, der von den Mitgliedstaaten allein nicht aufgebracht werden konnte – bis zu 723,8 Mrd. EUR in Form von Darlehen (35,8 Mrd. EUR) und Finanzhilfen (338 Mrd. EUR) sowie zusätzliche REPowerEU-Mittel (20 Mrd. EUR an neuen Finanzhilfen und 2,1 Mrd. EUR an Mitteln aus der Reserve für die Anpassung an den Brexit). So **stellt die ARF eine gemeinsame und synchronisierte Reaktion der EU auf gemeinsame Herausforderungen wie die mit Covid-19 verbundene sozioökonomische Krise und die Energiekrise dar**. **Sie hat auch den ökologischen Wandel innerhalb der EU unterstützt** (insbesondere durch Klimaschutzmaßnahmen und die Anwendung des Grundsatzes der Vermeidung erheblicher Beeinträchtigungen) **und zum digitalen Wandel beigetragen.**

Stand Mitte 2023 wurden im Rahmen der ARF mehr als 150 Mrd. EUR ausgezahlt, was 31 % des Gesamtbetrags der geplanten Finanzhilfen und Darlehen entspricht[15]. **Die für die ersten beiden Jahre der ARF (2021-2022) geplanten und ausgezahlten Finanzmittel sind nahezu identisch**. Das Tempo des finanziellen Fortschritts im Jahr 2023 birgt im **Vergleich zur indikativen Planung ein erhebliches Risiko von Verzögerungen**. Während **sich die Mitgliedstaaten weitgehend an die Planung für die ersten beantragten Zahlungen in den Jahren 2021 und 2022 hielten, haben die meisten Mitgliedstaaten den vorläufigen Zeitplan für die Zahlungsanträge im Jahr 2023 verschoben**, **was auf eine Kombination verschiedener Faktoren zurückzuführen ist**, wie z. B.: die Notwendigkeit, die Pläne nach der Aktualisierung der maximalen Zuweisung von Finanzhilfen (im Jahr 2022) zu überarbeiten, um Darlehen zu planen und REPowerEU-Kapitel mitaufzunehmen (2023); Schwierigkeiten bei der Erreichung der Etappenziele/Zielwerte; neue Regierungen und Änderungen der Prioritäten der Regierung; die Verwaltungskapazität; und verschiedene externe Faktoren – Russlands Angriffskrieg gegen die Ukraine, die Energiekrise, Inflation, Lieferengpässe und Arbeitskräftemangel. Die **Auszahlung der Mittel innerhalb von durchschnittlich weniger als vier Monaten nach der Einreichung der Zahlungsanträge kann als fristgerecht angesehen werden**, aber die Fristen für die im Jahr 2023 geleisteten Zahlungen sind länger als der Gesamtdurchschnitt über alle Jahre. Dieses Phänomen lässt sich durch verschiedene Faktoren erklären, wie die parallele Überarbeitung der Aufbau- und Resilienzpläne, die komplexere Anwendung des Verfahrens der „Aussetzung von Zahlungen" und[16]die wachsende Zahl von parallel eingereichten Zahlungsanträgen, auch von Mitgliedstaaten, die zum ersten Mal einen Antrag einreichen. Es ist schwierig, Schlussfolgerungen auf der Grundlage von Daten zu ziehen, die nicht das gesamte Jahr 2023 abdecken. Es besteht immer noch die Möglichkeit, dass die Zahlungen bis Ende 2023 beschleunigt werden, dennoch deuten die unvollständigen Daten auf ein **erhöhtes Risiko von Verzögerungen bei der finanziellen Umsetzung der ARF** hin. Bis Ende Juli 2023 wurden 11,3 % aller geplanten

[15] Diese Zahlen entsprechen der Situation bis Ende August 2023. Es muss anerkannt werden, dass der Finanzrahmen der Aufbau- und Resilienzfazilität insgesamt größer ist und bis zu 723,8 Mrd. EUR (zu jeweiligen Preisen) in Form von Finanzhilfen und Darlehen an EU-Mitgliedstaaten auszahlen kann. Nach dem Stichtag der Halbzeitbewertung stiegen die Gesamtmittel der Aufbau- und Resilienzfazilität auf rund 650 Mrd. EUR.

[16] Dies gilt beispielsweise für den zweiten rumänischen Zahlungsantrag. Für weitere Informationen siehe: https://ec.europa.eu/commission/presscorner/detail/en/mex_23_4695

Etappenziele/Zielwerte erreicht. Bislang wurden 639 Etappenziele (19,3 % der Gesamtzahl) und 66 Zielwerte (2,3 % der Gesamtzahl) erreicht[17]. Trotz dieser Fortschritte liegt die Erreichung der Etappenziele/Zielwerte hinter dem indikativen Zeitplan, der in den Durchführungsbeschlüssen des Rates zu den ARF-Plänen vorgesehen ist – die Zahl der bis zum ersten Quartal 2023 geplanten Etappenziele/Zielwerte beträgt 2205, d. h. die erreichten Etappenziele/Zielwerte belaufen sich auf 32 % dieses indikativen Zeitplans.

Externe Faktoren hatten **erhebliche Auswirkungen auf die Umsetzung der ARF**. Faktoren wie die Aggression Russlands gegen die Ukraine, die Energiekrise, die Inflation sowie Lieferengpässe und Arbeitskräftemangel **wirkten sich auf die Geschwindigkeit und die Kosten der Umsetzung der in der ARF enthaltenen Maßnahmen aus**. Interne Faktoren wie geringe Verwaltungskapazität, politische Instabilität, geringes Bewusstsein der Endempfänger für die im Rahmen der ARF gebotenen Möglichkeiten und unzureichende Kommunikation/Koordinierung wirkten sich ebenfalls negativ auf die Umsetzung der ARF-Maßnahmen aus.

Wirksamkeit

Die Ergebnisse des NiGEM-Modells zeigen, dass das **BIP der EU infolge der Auszahlungen aus der Aufbau- und Resilienzfazilität 2022 um 0,4 % höher war, als es ohne ARF-Ausgaben gewesen wäre**. Auszahlungen aus der ARF wirkten sich in den südlichen und östlichen Mitgliedstaaten stärker aus als in den nördlichen und westlichen Ländern mit einem relativ höheren BIP. Durch **die ersten Auszahlungen verringerte sich die Arbeitslosigkeit in der Europäischen Union um rund 0,2 Prozentpunkte im Vergleich zu dem Niveau, was ohne die Aufbau- und Resilienzfazilität erreicht wäre**. Die Studie stellte fest, dass dieser allgemeine Rückgang der Arbeitslosigkeit auf einen starken Rückgang in den südeuropäischen Mitgliedstaaten Griechenland, Italien, Portugal und Spanien zurückzuführen ist.

Die **Aufnahme gemeinsamer Schulden im Namen der EU durch die Kommission** – ein wesentliches Merkmal der ARF – zur Bereitstellung von fiskalischer Unterstützung und Liquidität für die Mitgliedstaaten trug dazu bei, die vollständige Koordinierung (öffentlicher) Investitionsimpulse sicherzustellen und größere Spannungen im Binnenmarkt zu vermeiden (wobei einige Mitgliedstaaten ihre Industrie massiv subventionierten und andere nicht), und ermöglichte erhebliche Vorteile in Form von Spillover-Effekten, die sich sofort nach der Ankündigung in einer **Verringerung der Spreads** zwischen 50 und 100 Basispunkten für diejenigen Mitgliedstaaten in Süd- und Osteuropa niederschlugen, in denen die Kreditaufnahmekosten typischerweise hoch sind. **Die Vorfinanzierung in Höhe von 13 %** – ein zentrales Merkmal der Aufbau- und Resilienzfazilität – ermöglichte effektiv rasche Auszahlungen zur Unterstützung der öffentlichen Finanzen und förderte den (in Zahlungen gemessenen) finanziellen Fortschritt des Instruments insgesamt.

Die **erreichten Etappenziele/Zielwerte decken alle sechs Säulen der Aufbau- und Resilienzfazilität ab.** Die Säulen *intelligentes, nachhaltiges und integratives Wachstum* und *Gesundheit und wirtschaftliche, soziale und institutionelle Resilienz* weisen in Bezug auf die erreichten Etappenziele/Zielwerte, die mit diesen Säulen verknüpft sind, die höchsten Prozentsätze auf (über 12 %). Die höchste Zahl der erreichten Zielwerte erreicht die Säule zum grünen Wandel, aber der Gesamtprozentsatz der mit dieser Säule verbundenen erreichten Etappenziele/Zielwerte (10,1 %) liegt hinter den Säulen Wachstum und Gesundheit und Resilienz zurück. Die digitale Säule hat unter allen Säulen den niedrigsten Prozentsatz an erreichten Etappenzielen und Zielwerten

[17] In der Analyse werden nur Etappenziele/Zielwerte berücksichtigt, die in Zahlungsanträgen enthalten sind, die bei der Kommission eingereicht und von ihr bewertet wurden, und nicht die Fortschritte beim Erreichen der Etappenziele/Zielvorgaben, die in späteren Zahlungsanträgen berücksichtigt werden. Wie aus der halbjährlichen Berichterstattung der Mitgliedstaaten hervorgeht, werden parallel Fortschritte bei den Etappenzielen und Zielwerten erzielt, die in den nachfolgenden Zahlungsanträgen abgedeckt sind (so werden im Jahresbericht 2023 über die Aufbau- und Resilienzfazilität für 2023 1155 Etappenziele und Zielwerte für den Zeitraum Q12020-Q12023 ausgewiesen, wie dies von den Mitgliedstaaten selbst gemeldet wurde).

(8 %). Der mit der Aufbau- und Resilienzfazilität eingeführte **Grundsatz „Vermeidung erheblicher Beeinträchtigungen"** wird als eines der wirksamsten Instrumente zur Verwirklichung der in der ARF festgelegten grünen Ziele genannt.

Die ARF hat **in Bezug auf alle 14 gemeinsame Indikatoren Fortschritte erzielt**[18]. Bemerkenswerte Errungenschaften sind u. a.: 22 Mio. MWh/Jahr Einsparungen beim jährlichen Primärenergieverbrauch, 18 Mio. zusätzliche Wohnungen mit Internetzugang, fast 1,5 Mio. unterstützte Unternehmen, fast 7 Millionen unterstützte Teilnehmende an allgemeiner oder beruflicher Bildung und 4 Millionen junge Menschen (15-29 Jahre), die Unterstützung erhalten. Bei einigen der gemeinsamen Indikatoren (z. B. zusätzliche operative Kapazität für erneuerbare Energien und zusätzliche Wohnungen mit Internetzugang) haben bisher nur 5-7 Mitgliedstaaten Erfolge gemeldet, doch ist anzuerkennen, dass Investitionen in die Infrastruktur in der Regel Zeit benötigen, bis sie in Betrieb genommen werden und gemeldet werden können.

Die von den Mitgliedstaaten genannten Reformen betreffen alle oder einen wesentlichen Teil der Herausforderungen, die in den länderspezifischen Empfehlungen des Europäischen Semesters enthalten sind. **Sowohl auf nationaler als auch auf EU-Ebene bestätigen die meisten Befragten, dass die ARF dazu beigetragen hat, seit langem erwartete Reformen auf die Tagesordnung** zu setzen. Die Stärke des Zusammenhangs zwischen der Umsetzung der länderspezifischen Empfehlungen und der finanziellen Unterstützung nimmt bei denjenigen Mitgliedstaaten ab, die proportional weniger Mittel erhalten und die weniger Anreize haben, sich zu Strukturreformen zu verpflichten.

Die **Umsetzung der in der ARF enthaltenen Reformen hat in einer Vielzahl von Politikbereichen zu greifbaren Ergebnissen geführt**: Arbeitsmarkt, Soziale Sicherung und Renten, allgemeine und berufliche Bildung, Zivil- und Strafjustiz, öffentliche Verwaltung, einschließlich deren Digitalisierung, Ausgabenüberprüfung und Verwaltung der öffentlichen Finanzen, Bekämpfung von Geldwäsche, Reformen zur Vereinfachung der Genehmigungsverfahren zur Förderung von Investitionen in erneuerbare Energien, Einführung erneuerbarer Energien und von nachhaltigem Verkehr, Einführung von 5G und Breitband, strukturelle Reform des Bildungssystems, Bekämpfung von Korruption und Steuerplanung. Dagegen sind nur bei wenigen Investitionen die ersten Schritte abgeschlossen und haben bereits zu greifbaren Ergebnissen geführt.

Die Auswirkungen der Maßnahmen der ARF auf den **territorialen Zusammenhalt** sind von Land zu Land unterschiedlich. In einigen ARPs ist der Abbau territorialer Ungleichheiten als Querschnittspriorität in allen Politikbereichen vorgesehen, während andere *Ad-hoc-* Mittel zur Unterstützung der am stärksten benachteiligten Gebiete bereitstellen. Anderen fehlt es stattdessen an einer Strategie zur Stärkung des territorialen Zusammenhalts. In Bezug auf die **soziale Inklusion** stellt die Studie fest, dass in einigen Mitgliedstaaten Kriterien zugunsten der am stärksten benachteiligten Gruppen in einigen Maßnahmen enthalten sind, während in anderen die Wirkung von Investitionen auf Ungleichheiten nicht berücksichtigt wird. In den meisten Mitgliedstaaten lassen sich diese Auswirkungen nur indirekt messen, da benachteiligte Gruppen von (sozialen) Reformen mit dauerhafter Wirkung sowie von Investitionen profitieren könnten, ohne dass die Maßnahmen direkt oder explizit auf sie ausgerichtet sind.

Die ARF **sollte auch dazu beitragen, die Auswirkungen der COVID-19-Krise auf Frauen abzufedern**, **wobei jedoch Unterschiede zwischen den Mitgliedstaaten bestehen**. Die

[18] Das ARF-Scoreboard enthält eine Reihe gemeinsamer Indikatoren im Zusammenhang mit den Zielen der ARF. Die gemeinsamen Indikatoren zeigen die Fortschritte bei der Umsetzung der ARF im Hinblick auf gemeinsame Ziele und die Gesamtleistung der ARF an. Die Mitgliedstaaten erheben Daten zu den gemeinsamen Indikatoren und melden der Europäischen Kommission ihre Zahlen zweimal jährlich, bis Ende Februar und Ende August. Insgesamt haben die Kommission, die Mitgliedstaaten und das Europäische Parlament in der Delegierten Verordnung (EU) 2021/2106 (2021) 14 gemeinsame Indikatoren für alle sechs politischen Säulen identifiziert.

Wirksamkeit der ARPs wird voraussichtlich **durch verschiedene Faktoren beeinflusst,** darunter der Anteil, die Themenbereiche und die Qualität geschlechtsspezifischer Maßnahmen, das Ausmaß des Gender Mainstreaming und die Möglichkeit einer Bevorzugung von männlicher Beschäftigung sowie die Maßnahmen, die im Rahmen der Umsetzung, Überwachung und Bewertung ergriffen werden. Während einige spezifische Ex-ante-Bewertungen und Stimmen in Bezug auf die geschlechtsspezifischen Auswirkungen der ARF Kritik ausüben, weisen andere auf relevante Fortschritte und erwartete positive Ergebnisse hin. Aus dem ARF Scoreboard geht hervor, dass bislang mehr Frauen als Männer durch die Aufbau- und Resilienzfazilität unterstützt werden, z. B. in Bezug auf die Teilnahme an Bildungs- oder Ausbildungsmöglichkeiten oder auf Beschäftigung und Arbeitssuche[19]. Ein gewisser Fortschritt wurde auch allen relevanten länderspezifischen Empfehlungen zugeschrieben, und es wird erwartet, dass die untersuchten Maßnahmen relevante Ergebnisse und Auswirkungen haben, dies wird aber von der weiteren Umsetzung abhängen.

Die REPowerEU-Kapitel der Aufbau- und Resilienzpläne, die ab dem 4. Oktober 2023 vorgelegt wurden, **dürften zu den sechs in der geänderten Verordnung über die Aufbau- und Resilienzfazilität festgelegten Zielen beitragen, die mit den drei Zielen des REPowerEU-Plans im Einklang stehen**. Die meisten der vorgeschlagenen Maßnahmen tragen zur Einführung von Energieeffizienzmaßnahmen und zur Beschleunigung des Einsatzes erneuerbarer Energien bei, die den ersten beiden Zielen des REPowerEU-Plans entsprechen. Bislang haben nur zwei Länder auch Maßnahmen im Zusammenhang mit Investitionen in fossile Brennstoffe vorgesehen, die mit dem Ziel der Diversifizierung der Energieversorgung zusammenhängen.

Bis heute konnten mehrere (interne und externe) Faktoren ermittelt werden, die sich negativ auf die Umsetzung der Aufbau- und Resilienzpläne auswirken könnten. Zu den externen Faktoren zählen der **zunehmende Druck auf die Energie-, Nahrungsmittel- und sonstigen Rohstoffpreise, die Unterbrechung von Lieferketten und logistischer Prozesse, die Verschärfung der finanziellen Situation und die allgemeine Verschlechterung des makroökonomischen Umfelds sowie der Arbeitskräftemangel**. Was die internen Faktoren betrifft, so stellen die Verwaltungskapazität – insbesondere in den Mitgliedstaaten mit einer bereits niedrigen Aufnahmekapazität von EU-Mitteln – und die politische Instabilität nach wie vor das Hauptproblem bei der Umsetzung von Investitionen und Reformen dar.

Zusätzlich zu den oben genannten Faktoren traten spezifische Hindernisse für gewisse Maßnahmen auf. So **treten bei grenzüberschreitenden Projekten Investitionsengpässe auf**, die mit einem langen Zeitraum für das Vergabeverfahren, dem **Mangel an Klarheit** (in Bezug auf Verfahren, Zeitplan und Zuständigkeiten, die Kriterien für die Projektauswahl, die Definition von zusätzlichen Vorteilen oder Spillover-Effekten) und die **schwierige Kommunikation** zwischen den Mitgliedstaaten, insbesondere in der Phase der Projektgestaltung, zusammenhängen. Bei Investitionen, an denen lokale Behörden beteiligt sind, wirken sich drei Arten von Problemen negativ auf die Umsetzung der Maßnahmen aus: Mangel an Ressourcen zur Deckung der **wiederkehrenden Kosten**, der **knappe Zeitplan** und der **Mangel an technischen Kapazitäten** der Gemeinden für die Einreichung von Projekten sowie der Mangel an **qualifiziertem Personal** für den Betrieb der neuen (oder sanierten) Infrastrukturen. Zusätzliche Herausforderungen ergeben sich aufgrund der **Komplexität der Verwaltungsstruktur** und der Verfahren für die Vergabe **öffentlicher Aufträge.** Bei Maßnahmen zur Unterstützung von KMU hält die **Komplexität der Programme KMU von der** Teilnahme ab. **Die Kenntnis der Maßnahmen** ist für die Teilnahme von KMU ein entscheidender Faktor, weshalb eine unzureichende Kommunikation als weiterer Faktor ermittelt wurde, der sich negativ auf die Umsetzung der Maßnahmen auswirkt. Auch bei aktiven arbeitsmarktpolitischen Maßnahmen, ist die Umsetzung erfolgreicher, wenn die Maßnahmen einfach

[19] Dies beruht auf gemeinsamen Indikatoren, die nach Geschlecht aufgeschlüsselt sind, wobei die Daten zum 20. Oktober 2023 aus dem ARF-Scoreboard stammen.

gestaltet und leicht zugänglich sind,. Im Gegensatz dazu können **mangelnde Klarheit in der Gestaltung oder unzureichende Kommunikation/Sensibilisierung** die Umsetzung behindern. Darüber hinaus kann die Einführung von Maßnahmen durch den **sich wandelnden Arbeitsmarktkontext**, der die Nachfrage beeinflussen kann, und externe Faktoren, wie z. B. Auswanderung, beeinflusst werden. Die **Kapazitäten der regionalen Akteure** spielen ebenfalls eine Schlüsselrolle.

Um die negativen Auswirkungen sowohl externer als auch interner Faktoren abzufedern, **haben die Mitgliedstaaten verschiedene Strategien verfolgt,** darunter die Aufstockung der ARF-Gelder mit nationalen Mitteln oder anderen **zusätzlichen Finanzmitteln**, **die Verringerung des Ambitionsniveaus der Etappenziele und Zielwerte (im Verhältnis zu einer geringeren Finanzierung)**, die **Streichung von Investitionsprojekten, die nicht mehr durchführbar sind**, und **die Verschiebung des ursprünglich vorgesehenen Zeitplans für** Etappenziele und Zielwerte. Für die Überarbeitung der Pläne gelten spezifische Vorschriften, mit denen sichergestellt wurde, dass die vorgeschlagenen Änderungen auf objektiven Umständen beruhen (Artikel 21 der ARF-Verordnung) und dass das Gesamtziel der Pläne nicht verändert wird. Um die geringe Verwaltungskapazität anzugehen, haben die Mitgliedstaaten Maßnahmen ergriffen, um das Risiko zu vermindern, darunter Schulungen, Reformen und Investitionen, die auf die Modernisierung der öffentlichen Verwaltung abzielen, und der Einsatz des Instruments für technische Unterstützung (TSI). Die Ergebnisse dieser Maßnahmen dürften jedoch nur mittel- bis langfristig zum Tragen kommen. Kurzfristig haben die Mitgliedstaaten ***Ad-hoc-* Maßnahmen ergriffen, um die Verwaltung bei der Umsetzung der Pläne direkt zu unterstützen**. Dennoch bestehen nach wie vor einige große Bedenken – insbesondere in Bezug auf die in den REPowerEU-Kapiteln enthaltenen Maßnahmen – und die endgültige Frist für die Aufbau- und Resilienzfazilität (2026) rückt näher.

Effizienz

Im Fall des QUEST-Szenarios (d. h.100 % Zusätzlichkeit bei Finanzhilfen und 50 % Zusätzlichkeit bei Darlehen) deutet unsere Analyse mithilfe von NiGEM darauf hin, dass die **kumulierten Auswirkungen der bis Ende Juli 2023 ausgezahlten ARF-Mittel auf das BIP der EU bis 2041 fast doppelt so hoch sein werden wie der Wert dieser ausgezahlten Mittel.** Darüber hinaus deutet unsere Analyse **darauf hin, dass die kumulativen Auswirkungen des gesamten Pakets von Finanzhilfen und Darlehen auf das BIP der EU bis 2041 voraussichtlich das Doppelte der gesamten ARF-Mittel übersteigen werden**. Tatsächlich liegen sowohl die nicht abgezinsten als auch die abgezinsten Werte der auf EU-Ebene berechneten Kosten-Nutzen-Verhältnisse unter Berücksichtigung aller geplanten ARF-Mittel bei etwas über 2. Wenn jedoch andere Annahmen in Bezug auf die Additionalität berücksichtigt werden, ändert sich das Kosten-Nutzen-Verhältnis. In einem Szenario, in dem 60 % der Mittel aus der ARF für zusätzliche öffentliche Investitionen in den ärmeren südlichen und östlichen Mitgliedstaaten verwendet werden, aber nur 25 % der ARF-Mittel für zusätzliche öffentliche Investitionen in den reicheren nördlichen und westlichen Mitgliedstaaten, fällt das Kosten-Nutzen-Verhältnis unter eins; dies bedeutet, dass die kumulative Wirkung auf das BIP der EU geringer ist als die insgesamt ausgezahlten Mittel aus der ARF. Dies berücksichtigt jedoch nicht die langfristigen BIP-Effekte der Strukturreformen im Rahmen der Aufbau- und Resilienzpläne der Mitgliedstaaten, die insbesondere angesichts der langen Zeitspanne, in der Vorteile zum Tragen kommen, schwer zu quantifizieren sind, die aber möglicherweise erheblich sein könnten.

Es gibt **erhebliche Unterschiede bei** den Verwaltungskosten in Vollzeitäquivalenten (VZÄ), die von den nationalen Koordinierungsstellen sowohl für einmalige als auch für wiederkehrende Tätigkeiten angegeben werden, und **es gibt keine eindeutigen Trends**. IN unserer Umfrage gaben die meisten Befragten (72 %) an, dass die **Kosten im Zusammenhang mit der Umsetzung der ARF im Laufe der Zeit gestiegen sind**, was auf die mit der Zeit strengere

Anwendung der Anforderungen (insbesondere in den Bereichen Berichterstattung, Kontrolle und Audit).

Der **Verwaltungsaufwand** und die Komplexität der Aufbau- und Resilienzfazilität beziehen sich auf mehrere Faktoren insbesondere die mangelnde Klarheit in Bezug auf die Rolle von **Kontrollen und Prüfungen** und die **Auslegung** von Etappenzielen und Zielwerten, die Auszahlungsverfahren und die Änderung des Plans. In Bezug auf Ersteres führten die Komplexität der Prüfungs- und Kontrollverfahren für das neue leistungsbasierte Instrument und die Überschneidungen zwischen nationalen Prüfungen, Prüfungen der Kommission und des EuRH zu Unsicherheit in den Mitgliedstaaten und zu einer Überlastung der Verwaltungsverfahren. In Bezug auf zweiteres äußerten die Mitgliedstaaten Bedenken hinsichtlich des von der Kommission verwendeten **Bewertungsrahmens für** Etappenziele und Zielwerte, der **Methode** für **Zahlungsaussetzungen** und der **Verfahren zur Änderung des Plans**, die – trotz der Mitteilung der Kommission – nach wie vor unklar (insbesondere in Bezug auf Reformen) und übermäßig anspruchsvoll in Bezug auf die Berichterstattung sind. Es sollte aber darauf hingewiesen werden, dass die Methode der Zahlungsaussetzung erst 2023 erstmals angewandt wurde und es diesbezüglich eine Lernkurve für die Mitgliedstaaten gibt. Nach den Mitgliedstaaten besteht im Zusammenhang mit den **Berichterstattungsanforderungen** ein **zusätzlicher Verwaltungsaufwand** , insbesondere in Bezug auf die **gemeinsamen Indikatoren**, und – in geringerem Maße – den informellen Dialog mit[20] der Kommission. Die Mitgliedstaaten haben auch Spielraum für Vereinfachungen identifiziert. Insbesondere besteht Spielraum für die **Vereinfachung der Kontroll- und Auditverfahren**, um eine bessere Koordinierung zwischen den Akteuren und die Vermeidung von Mehrfachkontrollen zu ermöglichen. Viele Interessenträger betonten auch die **Notwendigkeit von Flexibilität bei** der Auslegung von Etappenzielen und Zielwerten, die von einigen Befragten als zu streng empfunden wird. In Bezug auf die Berichterstattung schlagen die Mitgliedstaaten vor, dass die halbjährliche Berichterstattung nicht obligatorisch sein sollte, wenn ein Mitgliedstaat bereits zwei Zahlungsanträge pro Jahr einreicht. Schließlich kann der informelle Dialog mit der Kommission vereinfacht werden, indem die Rückmeldungen an die Mitgliedstaaten beschleunigt werden und die Zahl der Runden verringert wird, in denen die Kommission den Mitgliedstaaten ihre Anmerkungen zu den für die Zahlungsanträge eingereichten Unterlagen übermittelt.

Die Effizienz der ARF wird auch durch ihre **Steuerung** auf nationaler Ebene und insbesondere durch den Grad der Zentralisierung der Entscheidungsprozesse und des Berichterstattungs-/Leistungsmanagementsystems beeinträchtigt. Während die ARF mit einer Zentralisierung in allen Mitgliedstaaten einhergeht, treten bei der Steuerung der nationalen Aufbau- und Resilienzpläne Unterschiede auf, die sich auf die Effizienz der ARF auswirken. Der erste Unterschied betrifft die Beteiligung des Kabinetts des Regierungschefs. In den Ländern, in denen die Steurung der ARF nicht das Kanzleramt einbezogen oder sogar das Finanzministerium ausgeschlossen hat, führte dies zu einer schwierigeren und langsameren Umsetzung der Reformen. Der zweite Unterschied betrifft die Einbeziehung der Sozialpartner, insbesondere bei Arbeitsmarkt- oder sozialpolitischen Reformen, bei denen ihre Einbeziehung eine Schlüsselrolle bei der Beschleunigung Einführung spielte. Drittens beeinträchtigt der unterschiedliche Grad der Beteiligung subnationaler Behörden an der Ausarbeitung und Umsetzung der Pläne ihre Effizienz, insbesondere in Bezug auf Investitionen.

Die mit der **Einhaltung der ARF verbundenen Kosten/Belastungen sind tendenziell anspruchsvoller als die anderer nationaler Investitionsprogramme**. Auch wenn von ARF, insbesondere durch ihren leistungsbasierten Ansatz, grundsätzlich erwartet werden könnte, dass sie im Vergleich zu den Fonds der Kohäsionspolitik zu einem geringeren Verwaltungsaufwand führen

[20] Der informelle Dialog ist ein Prozess, bei dem die Mitgliedstaaten die Europäische Kommission um Klarstellungen und zeitnahe Orientierungshilfen ersuchen können, z. B. vor der Einreichung eines Zahlungsantrags.

wird, gibt es derzeit keine schlüssigen Beweise für diese Behauptung. Insgesamt wird davon ausgegangen, dass die Verwaltungskosten/der Verwaltungsaufwand, die mit der ARF verbunden sind, **mit denen der Kohäsionspolitik vergleichbar** sind. Diese Wahrnehmung variiert jedoch von Land zu Land.

Schließlich unterstützt das EU-Instrument für technische Unterstützung seit 2021 die öffentlichen Verwaltungen bei der Verbesserung ihrer internen Steuerungsmechanismen und ihrer Fähigkeit zur effizienten Verwaltung und Umsetzung der Aufbau- und Resilienzpläne, indem es allgemeine Unterstützung für die Umsetzung der nationalen Aufbau- und Resilienzpläne bietet und horizontale Bereiche abdeckt, die für die Durchführung der Aufbau- und Resilienzpläne wichtig sind, wie beispielsweise Projektmanagement, Berichterstattung, Governance-Strukturen (allgemeine Unterstützung aller Komponenten des Aufbau- und Resilienzplans) sowie politikspezifische Interventionen (thematische Unterstützung für thematische ARP-Maßnahmen).

Kohärenz

In der Verordnung über die Aufbau- und Resilienzfazilität wird betont, dass die in den Plänen enthaltenen Reformen und Investitionen wirksam koordiniert werden müssen, um die Konsistenz, Kohärenz, Komplementarität und Synergie zwischen verschiedenen Finanzierungsquellen zu gewährleisten. Wir stellen fest, dass die in den Plänen vorgesehenen Reformen und Investitionen bis zu einem gewissen Grad komplementär und kohärent waren. Hierbei bestehen keine erheblichen Unterschiede zwischen den unterschiedlichen Politikbereichen, aber Unterschiede zwischen den einzelnen Ländern. In einigen Fällen stehen die Investitionen im Aufbau- und Resilienzplan im Einklang mit bereits bestehenden Maßnahmen, die vor der ARF auf nationaler Ebene eingeführt worden waren.

Kohärenz zwischen nationalen Maßnahmen und den Maßnahmen in den Aufbau- und Resilienzplänen **wurde weitgehend durch drei Faktoren sichergestellt**: 1) in Mitgliedstaaten, die bereits einen Aufbauplan für die Zeit nach der Pandemie eingeführt hatten, baute der Aufbau- und Resilienzplan auf den bereits geplanten Maßnahmen auf und ersetzte oder erweiterte diese; 2) in Ländern, die noch keinen Aufbauplan hatten, wurden die Aufbau- und Resilienzpläne zu den nationalen Strategieplänen der Regierung für den Wiederaufbau nach der Pandemie; 3) in beiden Fällen veranlasste die kurze Zeit für die Ausarbeitung und Umsetzung der Pläne die nationalen Behörden, einen Plan auszuarbeiten, der mit den bereits bestehenden oder geplanten Investitionen und Reformen im Einklang stand.

Was die **Kohärenz zwischen der Aufbau- und Resilienzfazilität und anderen EU -Initiativen anbelangt**, so wurde die Aufbau- und Resilienzfazilität gut in das Europäische Semester integriert, welches von allen Mitgliedstaaten – mit wenigen Ausnahmen – genutzt wurde, um über die Umsetzung der Aufbau- und Resilienzpläne Bericht zu erstatten (insbesondere die nationalen Reformprogramme). Was die Kohärenz mit der **Kohäsionspolitik** betrifft, so haben die Mitgliedstaaten **vier Ansätze für die Abgrenzung** zwischen der Aufbau- und Resilienzfazilität und der Kohäsionspolitik eingeführt: eine thematische Abgrenzung; eine territoriale Abgrenzung; eine Abgrenzung auf Grundlage der Arten von Begünstigten; eine zeitliche Abgrenzung. Der am häufigsten gewählte Ansatz war thematischer Natur, doch haben die Mitgliedstaaten *de facto* eine Mischung aus Abgrenzungskonzepten adoptiert. Abgrenzungsstrategien sind zwar von entscheidender Bedeutung, um Überschneidungen zwischen den beiden Instrumenten zu vermeiden, doch **gewährleisten sie nicht unbedingt Synergien**. In dieser Hinsicht gehören zu den Hindernissen thematische Überschneidungen, die das Risiko eines Wettbewerbs zwischen den Instrumenten erhöhen sowie die Bevorzugung der nationalen Entwicklungspläne und der Pläne zur Stärkung der Widerstandsfähigkeit gegenüber der Kohäsionspolitik aufgrund des Drucks, die Mittel rasch zu verwenden, und in einigen Fällen die unterschiedlichen Verwaltungssysteme.

Zwischen **der ARF und dem Instrument für technische Unterstützung besteht ein hohes Maß an Kohärenz**. Das Instrument bietet sowohl allgemeine Unterstützung, die horizontale Bereiche abdeckt, die für die Umsetzung der Aufbau- und Resilienzpläne von Bedeutung sind, wie Projektmanagement, Berichterstattung, Governance-Strukturen, als auch thematische Unterstützung in Bezug auf politikspezifische Maßnahmen. Die strategische Entscheidung, die Unterstützung für das TSI bereits ab Beginn der Entwicklung der ARF in Verbindung mit der in Artikel 7 der ARF-Verordnung vorgesehenen Flexibilität einzubeziehen, hat die Kohärenz zwischen diesen beiden Instrumenten gestärkt und die Mitgliedstaaten in die Lage versetzt, die Unterstützung aus dem Instrument wirksam zu nutzen, um ihre Aufbau- und Resilienzpläne besser umzusetzen. Bis Ende Oktober 2023 unterstützten mehr als 400 im Rahmen des TSI genehmigte Projekte die Ausarbeitung oder Umsetzung der Aufbau- und Resilienzpläne der Mitgliedstaaten.

Schließlich stellen wir fest, dass sich **die Reformen und Investitionen in Bezug auf andere politische Initiativen der EU und die damit verbundenen Prioritäten nur bis zu einem gewissen Grad ausdrücklich auf EU-Initiativen beziehen, wobei erhebliche Unterschiede zwischen den einzelnen Politikbereichen und Ländern bestehen.** In einigen Politikbereichen beziehen sich die Reformen und Investitionen nur geringfügig auf EU-Initiativen (z. B. aktive arbeitsmarktpolitische Maßnahmen), in anderen wird der Zusammenhang zwischen den Maßnahmen des Aufbau- und Resilienzplans und anderen EU-Initiativen nur ex post festgestellt (z. B. FBBE). In anderen Fällen besteht ein hohes Maß an Angleichung und Koordinierung (z. B. Energieeffizienz). Dennoch ist hervorzuheben, dass das Fehlen eines ausdrücklichen Verweises auf andere EU-Initiativen in den Maßnahmen der Aufbau- und Resilienzpläne keine mangelnde Kohärenz mit den EU-Prioritäten bedeutet, die vielmehr durch die Anforderung gewährleistet wird, dass die Pläne an einen wesentlichen Teil der länderspezifischen Empfehlungen angepasst werden müssen, die bereits den in den EU-Initiativen festgelegten Prioritäten entsprechen.

EU-Mehrwert

Die **makroökonomischen Auswirkungen der ARF, inklusive** der Erhöhung des BIP, der Senkung der Arbeitslosigkeit und der Verringerung der Spreads im Zusammenhang mit schweren externen Schocks (COVID-19-Pandemie und Krieg in der Ukraine), **stellen einen Teil des EU-Mehrwerts des Instruments** dar. Gleichzeitig wurden **mehr als 20 % (155) der 705 Etappenziele/Zielwerte, die bis zum 31.7.2023 erreicht wurden, vor dem Datum der offiziellen Verabschiedung der Aufbau- und Resilienzpläne umgesetzt.** Dies bedeutet nicht unbedingt, dass die entsprechenden Maßnahmen ohne die Aufbau- und Resilienzfazilität durchgeführt worden wären. Tatsächlich begann die Ausarbeitung der Pläne bereits im September 2020, und mehrere Länder begannen mit der Umsetzung von Maßnahmen, die dann in die Aufbau- und Resilienzpläne aufgenommen wurden. Die **allgemeine Bewertung der Additionalität der Aufbau- und Resilienzfazilität durch die Interessenträger war positiv**, aber etwa **ein Viertel der Teilnehmenden sowohl an der Umfrage unter nationalen Koordinatoren als auch an der öffentlichen Konsultation äußerten sich negativ** dazu, inwieweit aus der Aufbau- und Resilienzfazilität Maßnahmen unterstützt wurden, die von den Mitgliedstaaten nicht umgesetzt worden wären. Ähnliche gemischte Einschätzungen wurden in den durchgeführten Interviews zum Ausdruck gebracht.

Insgesamt wird der EU-Mehrwert bei **Strukturreformen weitgehend anerkannt, die – auf der Grundlage der Konsultation der nationalen Koordinierungsstellen – ohne die ARF wahrscheinlich nicht stattgefunden hätten**. Bei **Investitionen** ist der **Mehrwert von Land zu Land unterschiedlich**. Wie aus den Fallstudien hervorgeht, ist der Mehrwert der ARF in einigen Ländern besonders hoch, d. h. ohne die ARF wären diese Investitionen nicht getätigt worden. In anderen sind die ARF-Gelder zusätzliche Mittel und ergänzen bereits bestehende nationale Mittel oder EU-Mittel. Dank der Verfügbarkeit von Mitteln aus der ARF konnten bestehende Programme ihre Kapazitäten erheblich ausbauen oder die Mitgliedstaaten ihre Umsetzung beschleunigen. Ohne die ARF hätten diese Programme möglicherweise weiter bestanden, aber in viel geringerem Umfang. Schließlich werden die Mittel aus der ARF in einigen Fällen als Ersatz für nationale Ausgaben verwendet.

Der EU-Mehrwert der ARF zeigt sich auch in zwei anderen Aspekten: günstige Kreditaufnahmebedingungen und Auswirkungen auf die Verringerung der Spreads sowie der Beitrag zur Durchführung und Weiterentwicklung von Mehrländerprojekten. Was das Zusammenspiel zwischen der ARF und der Kohäsionspolitik betrifft, so wurden in Bezug auf die Programme 2014-2020 keine Belege für Substitutionseffekte gefunden, die durch die ARF zum Nachteil der Kohäsionspolitik verursacht wurden, da sie zum Zeitpunkt der Einführung der ARF bereits angelaufen waren. **In Interviews hoben die Befragten jedoch Substitutionseffekte für die Programme 2021-27 hervor**. In Ländern mit erheblichen Investitionslücken in traditionellen Branchen besteht kein Verdrängungsrisiko zwischen den beiden Instrumenten, und die Mittel aus der ARF ergänzen die Kohäsionspolitik, um den bestehenden Bedarf zu decken.

Was schließlich den Beitrag zur Aufrechterhaltung gleicher Wettbewerbsbedingungen und zur Stärkung des Binnenmarkts betrifft, so enthalten die Aufbau- und Resilienzpläne wichtige Reformen, mit denen die regulatorischen Unterschiede in der Regulierung von Produktmärkten angegangen werden sollen, um so das Funktionieren des Binnenmarkts reibungsloser zu gestalten. In Bezug auf Investitionen gewährleistet ein kohärenter Ansatz in den nationalen Aufbau- und Resilienzplänen, der mit den Grundsätzen des Binnenmarkts in Einklang steht, die Chancengleichheit für Unternehmen in der gesamten EU. Die Analyse der Übereinstimmung der KMU-bezogenen Maßnahmen mit den Grundsätze des Binnenmarkts zeigt erhebliche Unterschiede zwischen den Mitgliedstaaten in Bezug auf den Zugang von Unternehmen zu Finanzierungsmöglichkeiten anderer Mitgliedstaaten auf.

Relevanz

Die **Relevanz der ARF wird weithin anerkannt** und wird durch folgende Faktoren gewährleistet: die Reformen und Investitionen stehen im Zusammenhang mit den länderspezifischen Empfehlungen, die in der Regel mit strategischen Reformen verbunden sind, deren Umsetzung Zeit in Anspruch nimmt; der grüne und digitale Wandel, bei dem es sich um eine übergreifende EU-weite politische Priorität für die kommenden Jahre handelt, steht im Mittelpunkt der ARF und folglich der Aufbau- und Resilienzpläne; die ARF sieht einen Mechanismus für die Anpassung der Aufbau- und Resilienzpläne vor, der derzeit umgesetzt wird.

Was den **Verteilungsschlüssel** betrifft, so ist dies auch heute nach wie vor relevant. Die Länder, deren zugeteilte Mittel nach unten korrigiert wurden beklagten jedoch, dass die Aktualisierung des Höchstbeitrags für nicht rückzahlbare finanzielle Unterstützung gemäß Artikel 11 Absatz 2 der ARF-Verordnung bis zum 30. Juni 2022 und die erhebliche Überarbeitung der 30 % des verfügbaren Betrags interne Verzögerungen bei der Umsetzung der Pläne verursacht hätten, da entweder die Pläne überarbeitet oder der Verlust von EU-Mitteln durch nationale Mittel ausgeglichen werden müsse.

Die Gründe für die für 2026 festgelegte Frist sind zwar gut nachvollziehbar**, dies hat jedoch zu Einschränkungen bei der Auswahl von Investitionen geführt, insbesondere im Bereich der erneuerbaren Energien**. Was die Durchführbarkeit betrifft, so haben die nationalen Behörden bereits darauf **hingewiesen, dass nicht alle Etappenziele und Zielwerte bis August 2026 erreicht werden können, insbesondere diejenigen, die sich auf Infrastrukturinvestitionen beziehen. Aus diesem Grund haben mehrere Mitgliedstaaten beschlossen, eine Änderung ihrer Pläne vorzuschlagen, insbesondere der Maßnahmen, bei denen der Zeitplan als unrealistisch angesehen wird.**

Die Änderung der Pläne ist eine natürliche Notwendigkeit, da die Pläne über einen Zeitraum von sechs Jahren erstellt werden, die **meisten nationalen Behörden jedoch der Ansicht sind, dass**

die ARF entweder überhaupt nicht oder nur in begrenztem Umfang flexibel ist. Die am häufigsten genannten Gründe für diese Stellungnahme sind: bei den Verfahren zur Änderung des Plans wird nicht zwischen kleinen und größeren Anpassungen unterschieden, auch wenn gezielte Überarbeitungen schneller bearbeitet wurden; langwierige Verfahren und die erhebliche zeitliche Verzögerung – bis zu fast einem Jahr zwischen dem Beschluss über die Änderung der Pläne und der endgültigen Verabschiedung der Änderung durch den Rat; starre Änderung des Zeitplans für Etappenziele und Zielwerte.

Was schließlich die Entscheidung über die Beantragung von Darlehen im Rahmen der ARF betrifft, so sind diese durch ein komplexes Zusammenspiel von **finanziellen** (im Vergleich zu den marktüblichen Zinssätzen niedrigeren Zinssätzen) und **nichtfinanziellen Erwägungen** (die Ambitionen ihrer Aufbau- und Resilienzpläne zu untermauern und zusätzliche Mittel über die vorgesehenen Finanzhilfen hinaus zu beschaffen) bestimmt.

1. Introduction

This final report has been prepared as a part of the "Study supporting the Mid-term Evaluation of the Recovery and Resilience Facility". The study started on 15th March 2023 and has been implemented by a consortium that includes Ecorys, CEPS, NIESR, CSIL, and Wavestone. This report takes into consideration the received comments on previous versions of the report and provides findings and conclusions in line with the purposes and scope of the evaluation (presented below).

Purpose

The RRF Regulation (recital 68) requires **an independent evaluation** looking at the achievement of the objectives of the Facility (i.e. **effectiveness**), the **efficiency** of the use of its resources and its **added value**, including potentially a proposal for amendments to the Regulation. Also, in line with the RRF Regulation (Art.32), by 20 February 2024, the European Commission (EC) shall provide the European Parliament (EP), the Council, the European Economic and Social Committee and the Committee of the Regions with an independent evaluation report on the implementation of the Facility. The article also mentions that the evaluation should assess the continued **relevance** of all objectives and actions. Furthermore, according to Art.28 of the Regulation, the EC and the Member States (MS) concerned shall, in a manner commensurate to their respective responsibilities, foster synergies and ensure effective coordination (in other words – ensure **coherence**) between the Facility and other Union programmes and instruments, including the Technical Support Instrument.

Thus, the **purpose** of the study set by the RRF Regulation is to: *provide an objective and independent study supporting the assessment of the RRF against the criteria of effectiveness, efficiency, relevance, coherence, and EU added value*. The supporting study will feed into the EC's mid-term evaluation report. Moreover, the study also provides useful background evidence and **lessons learned for discussions on possible future performance-based instruments** in the post-2027 MFF.

Scope

The scope of the evaluation study is largely defined by the evaluation requirements set in the RRF Regulation and further supplemented in the Tender Specifications. For clarity, the scope is presented in the table below:

Table 1: Evaluation scope

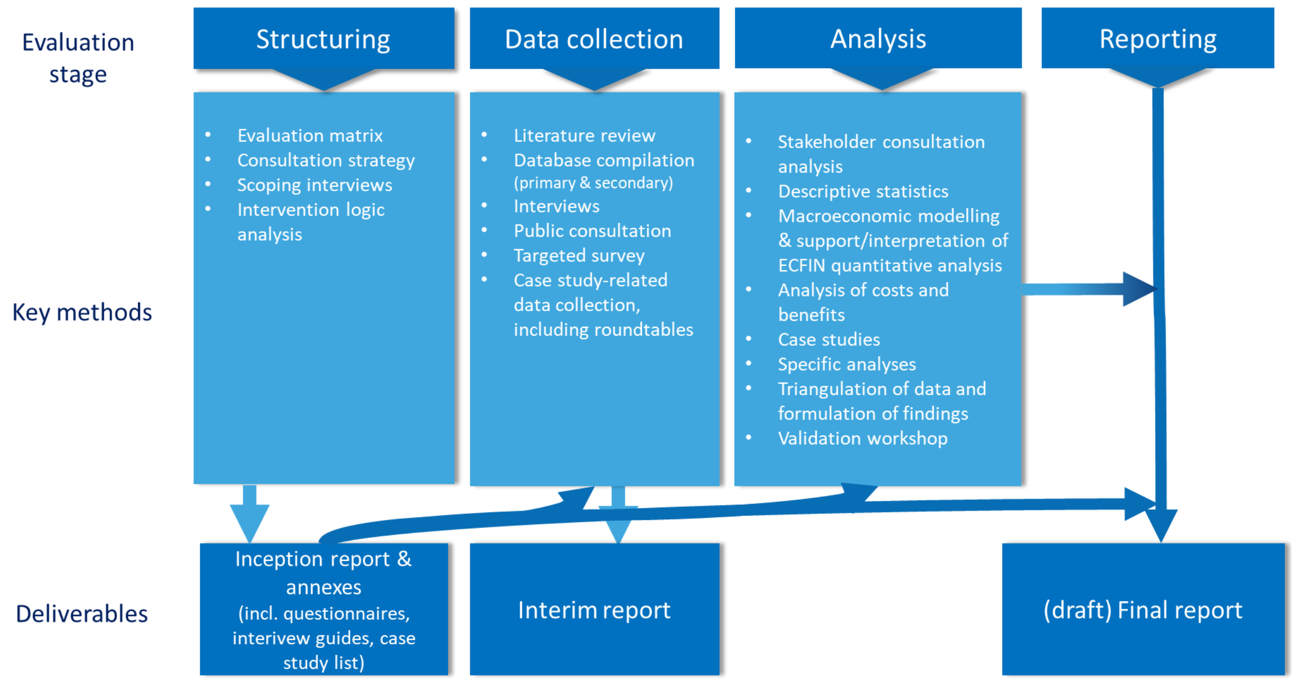
Element of the scope	Short description
Type of evaluation	Mid-term
Cut-off date	July 2023 (overall cut-off date) September 2023 for the case studies
Geographical coverage	EU27
Evaluation criteria	The five main evaluation criteria in line with the Better Regulation Guidelines (BRG) / Toolbox: • Effectiveness • Efficiency • Relevance • Coherence • EU added value
Themes in focus	Beyond the classical evaluation criteria, the evaluation study will pay particular attention to the following: • The extent to which the RRF has been providing financial support to MSs against the implementation of pre-agreed reforms and investments, i.e. the **performance-based approach** • Comparison with the **expenditure-based approach** (e.g. under the Cohesion policy instruments) • How the reforms and investments supported by the Facility contribute to the Facility's **general objective** to promote the Union's economic, social and territorial cohesion, looking notably at the quantitative contribution of the Facility to the **six pillars** defining the

Element of the scope	Short description
	scope of the instrument and the impact on youth and women. The implementation of the available REPowerEU chapters and their contributions to the **REPowerEU** objectives

A brief overview of the methodology and its robustness

The evaluation was performed in the four classical stages: structuring, data gathering, analysis, and reporting. In Figure 1, we present the key methods and deliverables.

Figure 1: Methodological overview



Details on the methodology are provided in Annex I, which is why, in the table below, we provide an overview of the key applied methods and their limitations.

Table 2: Methods applied and limitations - an overview

Method	Overview	Input into the evaluation study	Limitations
Literature review	The literature review is presented in Annex III, while Annex IV lists the literature reviewed.	All evaluation criteria	While the literature review contributed to answering the evaluation questions, most of the available literature to date presents the expectations for the RRF, rather than offering a review of its implementation. This is natural considering the stage of implementation of the RRF but diminished the usefulness of the available literature.
Databases	Two main databases were developed for the purposes of the study: - Primary database, using EC data - Secondary database, which incorporates interview input and data on results gathered at national level. In	Primary database – Effectiveness criterion. All evaluation criteria for the secondary database	The **primary database** has proved very useful in identifying the status of disbursements, milestones/targets, and common indicators. A limitation of this data is that it does not go beyond available monitoring data. Another limitation is that considering the current status of implementation of the RRF, it is not possible to reach conclusions on the effectiveness along the six RRF pillars (as noted in the Effectiveness section, the state of implementation of the milestones/targets per pillar ranges from 8% to 13%). Furthermore, the common indicators themselves offer specific challenges: they cover very broad aspects of the RRP measures

	view of protecting the anonymity of the interviewees, in Annex V, we only provide the data on results.		(making disentangling their specific origin and contribution to RRF objectives difficult); given the stage of RRP implementation, for some of them there have been limited reporting by MS; and they do not have target values, which reduces their usefulness in determining the RRF effectiveness. Considering these limitations, the evaluation team also established the **secondary database**, trying to go beyond the available data and cover broader results of RRF reforms and investments and qualitative information. However, there are also limitations to the secondary database: 1) large heterogeneity of information retrieved across MSs, in part also due to the different status of implementation of the national plans; 2) particularly for investments, it still presents largely expectations rather than actual effects, but this is due to the status of RRF implementation; 3) heterogeneity of available information at national level on the implementation of RRF measures (for some countries the availability of academic and grey literature on the RRF related measures is very high, while in others much less).
Public consultation	The public consultation was conducted from 16 March 2023 to 8 June 2023. A total of 172 responses were received	All evaluation criteria	A major limitation of the public consultation is the relatively limited number of responses received and the large share received from one country – Portugal. Another limitation is that some questions require knowledge of the instrument, which can be difficult to ascertain for respondents, such as citizens. This is why the consultation results have been used with particular care, also triangulating with other consultation tools, and no findings were based solely on public consultation input.
Surveys	Two targeted surveys were launched at the end of May 2023 and closed on the 7th of July. The first survey addresses key national stakeholders involved in the programmes' implementation, the projects' selection, and the monitoring and reporting procedures. The second survey targets national parliaments involved in committees linked to areas of reform identified in the national Recovery and Resilience Plans.	Effectiveness, Efficiency, Coherence, EU added value (for the national stakeholder survey)	The **survey with national RRF stakeholders** was filled in by 40, out of 60 invited, which is a very good response rate. While the survey provided useful input across most evaluation criteria, some limitations emerged: - Since the survey had to cover a wide range of evaluation questions, it could not delve deeply into certain aspects that would have required more detailed ad hoc inquiries, such as the collection of administrative costs. Thus, for administrative costs of MS, we requested additional information from RRF expert group members (5 MS provided responses); - As most respondents were national coordination bodies, they could not provide the same level of detail for all questions. For example, gathering details on implementation costs was challenging because implementation is often delegated to line ministries. - Due to the short evaluation timeframe, the survey and interview program ran concurrently, limiting the potential for synergies and a thorough assessment of information gaps Despite the large number of invitations sent (1,800) and the translation of the questionnaire in all official EU languages (except Gaelic and Maltese) the **survey with national parliaments** received only 5 responses. Thus, its results were not incorporated into the study.
Interviews	Targeted interviews were a cornerstone of our stakeholder consultation and allowed us to gather particularly qualitative and in-depth information on the RRF. In total, we conducted 156 semi-structured interviews (of which 88 in the context of case studies) with national coordination bodies, the EC, the EP, the EFC and EPC chairs,	All evaluation criteria	Overall, the response rate for the semi-structured interviews has been very high. The inherent limitation of this methodology is linked to the specific knowledge of the interviewee. This limitation has been largely compensated by the large consultation carried out with different stakeholders with whom we have investigated different aspects of the evaluation questions.

	the EU social partners, the EESC, the CoR, NGOs and policy experts.		
Case studies	Eight case studies have been conducted. Six focused on specific policy areas related to the RRF's six pillars: (a) Energy efficiency buildings; (b) digitalisation of healthcare; (c) support to SMEs; (d) active labour market policies; (e) rule of law reforms; and (f) early childhood education and care. Two specific case studies have been added, one on cross-border projects and one on the interaction between other EU Cohesion Policy and the RRF.	All evaluation criteria	The main limitation of the case study approach is related to the different levels of depth of the analysis related to the two main factors: 1) availability of data on results due to different stages in the measures' implementation and different types of measures (reforms or investments); 2) difficulties encountered especially in the consultation with stakeholders in different case studies.
Analysis of costs and benefits	In agreement with the client, the analysis of costs and benefits has been structured into the following steps: cost mapping; assessing costs; assessing benefits; and concluding on the benefit/cost ratio.	Efficiency	The scope of the analysis of costs and benefits has been discussed with the EC. The two major limitations are: i) the reliance on a survey of national stakeholders to collect cost data. While it was the best available option in this context, collecting administrative costs typically requires multiple rounds of interactions with various entities involved in the governance and implementation of an investment programme; ii) the limited and heterogeneous evidence of generated benefits (especially those extending beyond the common output indicators). This led to the decision to calculate the benefit-cost ratio of the RRF as the ratio between the absolute cumulative change in real GDP predicted by the macroeconomic model and the funding (both grants and loans).
Macroeconomic model	The macroeconomic analysis reported in the main body of this report was carried out using the National Institute Global Econometric Model (NiGEM), which has been developed and maintained since 1987.	Effectiveness and Efficiency	The limitations and assumptions of the model have been discussed at several meetings with the EC within the study. These are clearly presented in the evaluation questions where it was used and include: i) GDP per capita data was only available up to 2022; ii) NiGEM model limitations[21]; iii) the general difficulty of quantifying the effects of reforms, their sheer number and the detail of the reforms under the RRF (as a result, we chose to limit ourselves to some reforms in specific countries).

Based on the above use and limitations of the methodology, we can conclude that the applied methods, both in terms of data gathering/analysis and stakeholder consultations, have ensured robust evaluation findings:

[21] Three countries – Cyprus, Luxembourg and Malta – are not modelled separately in NiGEM, so we were unable to obtain results for these countries. For a number of other countries, specifically Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia, all government spending is treated as 'consumption' and so does not add to the economy's capital stock, which is the main way that government investment raises GDP in the long run. As a result, the multipliers for these countries calculated by NiGEM were much smaller than we would have expected. Finally, even for those countries in NiGEM where public investment is modelled separately to consumption and does add to the nation's capital stock, raising long-run GDP, NiGEM assumes constant returns to scale, perfect substitutability between private and public capital and no productivity spillovers from public capital to private capital. As a result, the multipliers on public investment calculated using NiGEM are at the low end of estimates for these spillovers in the literature. Dealing with these limitations would require constructing what would essentially be a new macroeconomic model. In a way, QUEST is already that model; so, we can think of NiGEM as providing an independent 'sanity check' for the QUEST results. On the data side, we made assumptions about interest payments, disbursements and the timing, extent and additionality of RRF spending that may turn out to be incorrect.

- **Data gathering/analysis** – considering the current state of implementation of the RRF (see the analysis on Effectiveness in section 3.1), the **results/impacts of the instrument cannot be fully observed and assessed**. This is not surprising for mid-term evaluations and is a fact acknowledged by many interviewed stakeholders at the national and EU levels. Nevertheless, the evaluation study relies on **data as recent as possible** (Recovery and Resilience Scoreboard data as of 31 August 2023, and information on REPowerEU chapters and RRF loans planning as of 31 August 2023). Furthermore, only official and verified sources of data have been used: 1) Scoreboard data on milestones, targets, and common indicators; and 2) data on administrative costs from the MS administrations. In terms of data analysis, the application and assumptions of the analysis of costs and benefits and the macroeconomic model have been discussed with the EC on several occasions.
- **Stakeholder consultations** – the evaluation study relies on several distinct stakeholder consultation methods, including public consultation, surveys, and interviews. The consultation methods complemented each other and did not offer significant divergence in viewpoints within and across stakeholder groups. Furthermore, the consultation methods offered views at different levels: public consultation – (mostly) EU level; interviews – EU and national level; surveys – national and SME level. The case study interviews offered the opportunity to gather insights into specific topics covered by the RRF (see Annex I and Annex VII).

Finally, based on the applied methodology and its limitations, we would like to highlight **a few lessons learned from a methodological perspective**:

- The effects of **reforms** take time and are very difficult to quantify. Early assessments of the effects of reforms come with simplification in the assumptions and generalisations that risk leading to misleading conclusions. For these reasons, we preferred not quantifying the expected results of the adopted reforms. By contrast, the ex-post evaluation of the RRF should have a specific focus on measuring the results of reforms. In this respect, a sample of the most relevant reforms in selected member states can be selected while we would discourage having a broader sample of reforms.
- Assessing the progress/effects of **investments** is challenging for a mid-term evaluation. Still what one can learn from the investments' implementation at this stage is about the administrative obstacles linked to the implementation of investment projects. The ex-post evaluation will have to deep dive into the results linked to the investments' implementation. Again an analysis on a selection of measures in a number of member states would be helpful in identifying key results.
- The RRF has a very broad scope and a multitude of objectives, thus **having case studies in the evaluation methodology proved to be a useful tool** for diving into (possible/expected) effects, challenges, lessons learned in a particular policy area and in a selected sample of countries;
- Data availability was a key limit of this mid-term evaluation. Except for the information on milestones and targets, we could not rely on other systematic sources of data collected on the reforms and investments included in the plans. In this respect, we faced significant variation across countries in accessing information about the RRF measures' implementation. This limited our capacity not to trace the implementation progress of the measures (largely covered by M&Ts) but rather to dive into results linked to the reforms and – especially – investments.
- Further **thematic analyses/studies/evaluations could cover specific topics** such as, for example: general awareness and public opinion on the RRF and its achievements, the application and monitoring of the DNSH principle across Member States, gender mainstreaming and effects on gender equality, specific synergies between Cohesion Policy Funds and the RRF. All these elements were covered in this evaluation study, but obviously within the limits of time, available data, and resources.

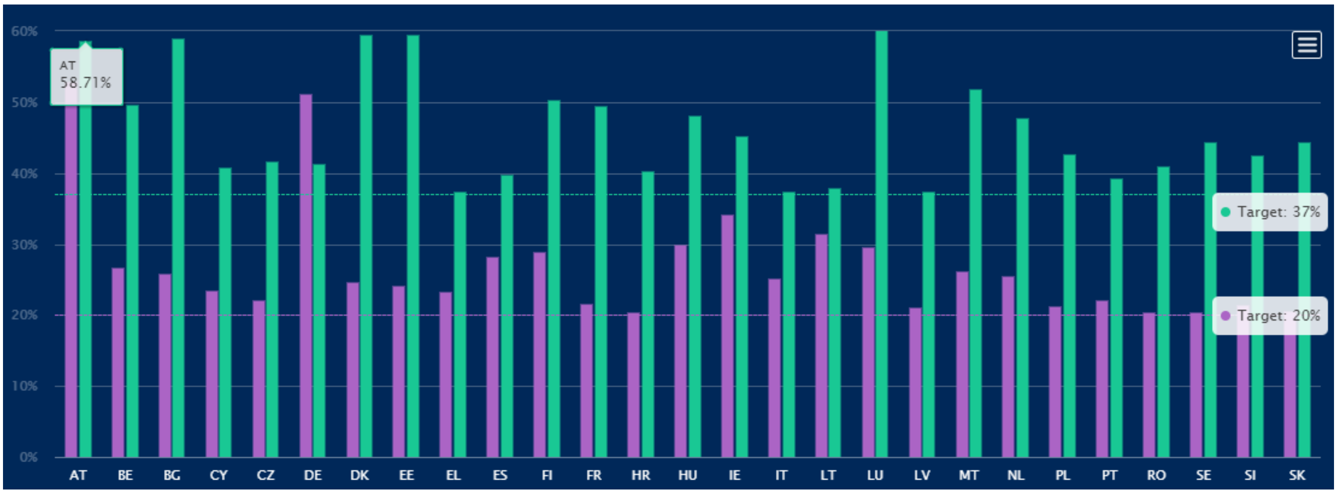
2. Background and intervention logic

2.1. Rationale and key novelties of the RRF

The Recovery and Resilience Facility – formally published as Council Regulation (EU) 2021/241 on 12 February 2021 (2021) - is the cornerstone of the Next Generation EU (NGEU) Funds. It consists of up to €723.8 billion (in current prices) in loans (€385.8 billion) and grants (€338 billion). The total amount of grants given to each MS is determined by an allocation key, whereby the financial support is distributed across countries based on their pre-pandemic vulnerabilities (measured in terms of gross domestic product (GDP) per capita and unemployment), the population, and to a minor extent the depth of the economic crisis (updated in June 2022). The total amount of loans given to each MS is determined by the assessment of its loan request and cannot exceed 6.8% of its 2019 gross national income (GNI).

The objective of the Recovery and Resilience Facility – as defined in Article 4 of the Regulation – **is to promote the Union's economic, social and territorial cohesion** by – *inter alia* - improving the resilience, crisis preparedness, adjustment capacity and growth potential of the MSs, by mitigating the social and economic impact of that crisis, by contributing to the implementation of the European Pillar of Social Rights, by supporting the green transition and by complying with the objective of the digital transformation. About 40% of the total allocation of the plans contributes to climate objectives (climate mitigation and adaptation), and about 26% to digital objectives, contributing to the digital transformation of the European society and economy (see Recovery and Resilience scoreboard[22]). As shown in Figure 2 below, the reforms and investments proposed by MSs have exceeded the RRP climate and digital targets, which are respectively: 37% and 20%. The RRF's contribution to the green transition is further reflected in the mandatory respect of the "do no significant harm" principle, which is essential to ensure the compatibility of the Facility with the EU's environmental objectives.

Figure 2: Share of RRPs estimated expenditure towards climate (green bars) and digital objectives (purple bars)



Source: Recovery and Resilience Scoreboard

Further to the ambitious objectives outlined above, **the Facility is also an innovative instrument** that incorporates several novelties. Firstly, **the RRF is a performance-based instrument** where payments are made to MSs, as beneficiaries, upon delivering reforms and investments, notably

[22] Available at: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html

fulfilling milestones and targets pre-agreed in Recovery and Resilience Plans (RRPs)**.** A second main novelty of the RRF is the **inclusion of both reforms and investments** in the plans, which aims to help MSs capitalise on structural reforms, ensuring their sustainability and practical implementations thanks to investments**.** Thirdly, **the RRF has leveraged country-specific recommendations (CSRs)**[23], by pushing MSs to address long-standing structural issues. Further to these key novelties, it is noteworthy that MSs have flexibility in designing and implementing the measures in a way that suits their national conditions, which increases their **ownership** of the plans. The RRPs were assessed by the EC ex-ante and endorsed by the Council. Following their adoption, the RRPs have undergone a revision process to adjust to the update of the grant allocation (as set out in the Regulation) and to integrate **REPowerEU** chapters, the latter being another unique feature of the instrument. To monitor the implementation of the plans, composed of reforms and investments, the EC assesses MSs' fulfilment of **milestones and targets** (M&Ts), which is also a particular feature of the RRF. In contrast with most EU programmes, the RRF is characterised by the absence of co-financing requirements, thereby alleviating national budgets in times of economic strain.

Fourthly, the RRF is the first macro-scale fiscal support instrument with issuance of common debt. The agreement of the European Council on Next Generation EU (NGEU) of July 2020 has been welcomed by some commentators as a potential path-breaking innovation (de la Porte and Jensen, 2021; Schelkle, 2021) and a clear break with the precedent in terms of **instruments** (use of issuance of common debt on the part of the EC), the **institutional mechanism** (return of the community method) and in terms of the sheer **magnitude** of the **underlying fiscal effort and liquidity provision** (Buti and Papaconstantinou, 2021). From an economic point of view, the size of the RRF is clearly macro-relevant. In addition, the RRF ensures full coordination of the investment impulse, adding to its effectiveness. With a focus on public investments, the RRF is expected to stimulate aggregate demand. Last, but not least, the allocation key of the RRF grants is solidaristic, i.e. the funds go to the MS most in need. As observed by Langedijck et al. (2020), after the pandemic, economically weaker countries could have faced lower rates of investment and growth, higher and more persistent unemployment, and less favourable debt dynamics. This poses a risk not only for citizens and businesses of those countries but also threatens to jeopardise competition, trade and investment across the Single Market. By providing a coordinated EU-level macro-scale fiscal stimulus, the RRF thus contributed to counterbalance the post-pandemic centrifugal powers, while giving at the same time a strong boost to the recovery in all MSs.

2.2. Intervention logic

The Intervention logic of the RRF, which frames the purpose, actions, and expected outcomes of the Facility, is presented in Figure 3. It stems from the RRF (Regulation (EU) 2021/241, recital 9, 2021) and European Union Recovery Instrument (EURI) (Council Regulation (EU) 2020/2094, recital 3, 2020) regulations, and comprises the following main elements:

- **Needs:** the needs are broadly described in the RRF Regulation (e.g. recital 6). The extent to which the RRF in addressing the needs is assessed under the **Relevance** criterion.
- **Objectives:** we have broken down the objectives as stated in the RRF Regulation (Article 4) – considering the needs, they are also wide-ranging. The extent of the RRF contribution to these objectives is assessed under the **Effectiveness,** while the relation of RRF and NRRPs

[23] One of the criteria used by the EC to assess the plan upon their formal submission, is the contribution to effectively addressing all or a significant subset of challenges identified in the relevant country-specific recommendations (CSRs). In this regard, the 2014-20 European Structural and Investment Funds' (ESIF) Common Provision Regulation (CPR) already required to take 'relevant' CSRs into account in the preparation of Partnership Agreements and Operational Programmes (OPs). Some analyses like Ciffolilli et al., 2018 (see here: https://op.europa.eu/en/publication-detail/-/publication/de79c16e-6eb4-11e8-9483-01aa75ed71a1/language-en); Vita, 2018 (here: https://www.europarl.europa.eu/RegData/etudes/STUD/2018/617498/IPOL_STU(2018)617498_EN.pdf) have highlighted that the CSRs have been taken up in the strategic choices set out in OPs of the ESIF. In practice, however, the absence of clear incentives or sanctions has limited the influence of the CSRs, as the incentives for the RRF are stronger and the consequences clearer.

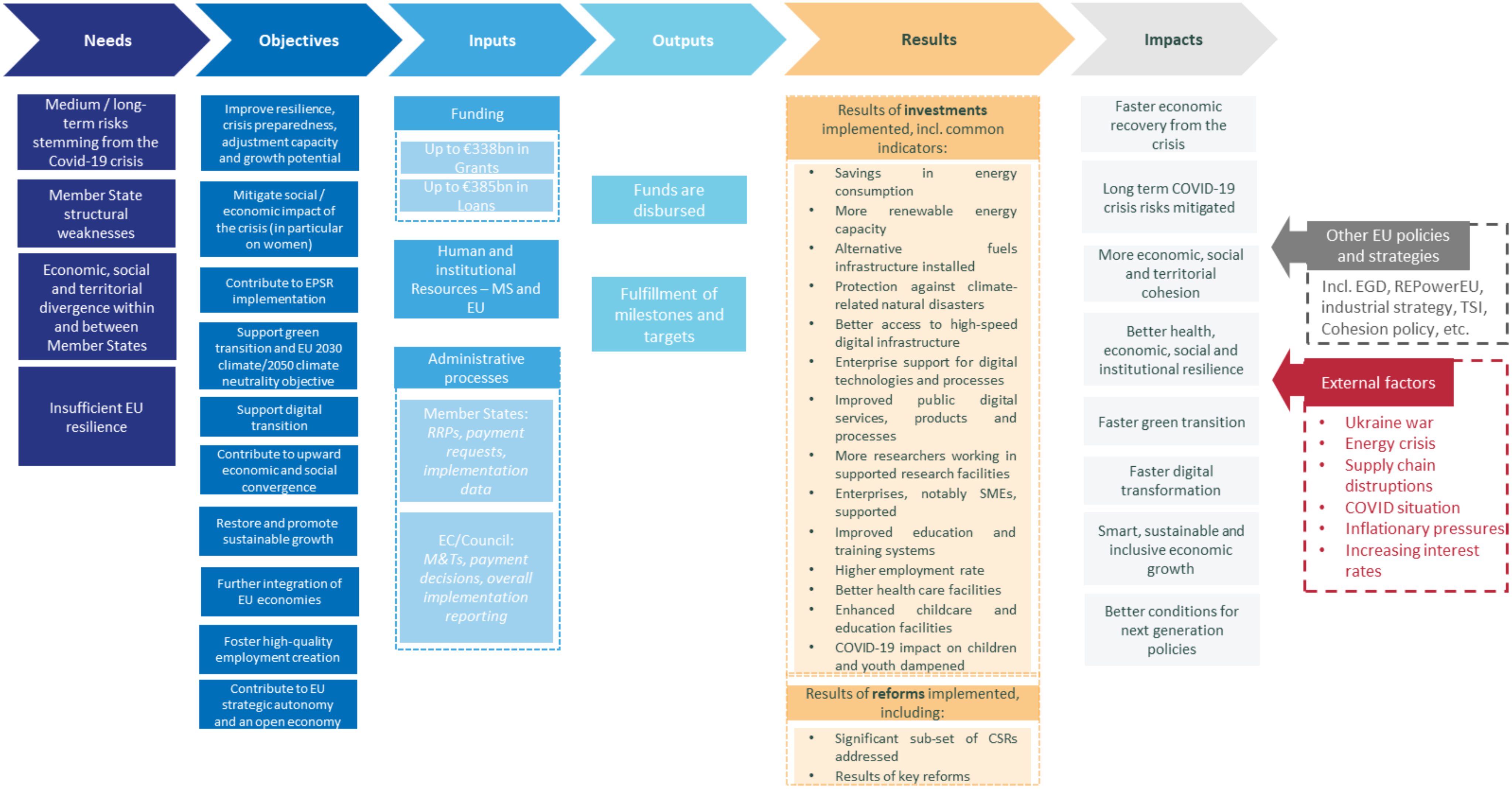
objectives/measures to other instruments (e.g. Cohesion policy financing and national instruments) is reviewed under the **Coherence** criterion.

- **Inputs:** these refer to the financial inputs (grants and loans) and the human resources needed to manage/implement the RRF. Issues related to the disbursements are included in the **Effectiveness** analysis, while cost issues are covered in the **Efficiency** analysis.
- **Outputs:** the outputs are defined as the disbursements performed and the achievements of milestones and targets – these are the first elements that are assessed under Effectiveness.
- **Results:** there are two broad groups of measures whose outcomes we are aiming to capture – reforms and investments. For **investments** – beyond common indicators, which, however, have significant limitations, specified in Table 2 above - we provide examples of results linked to key measures implemented by MSs (see the provided Secondary database in Annex V). Regarding **reforms**, throughout the interviews, the country-specific analysis and case studies, we have explored the broad effects of the reforms (examples are also included in the Secondary database). The results are also presented in the analysis of **Effectiveness** and **Coherence** (e.g. on the reinforcement of investments and reforms).
- **Impacts:** The expected impacts of the RRF are as wide as the identified objectives and needs. Furthermore, at the time of the performance of this mid-term evaluation, they cannot be expected to have materialised. Nevertheless, the analysis on **Effectiveness** includes considerations on the contribution of the RRF to the expected impacts/objectives, and some assessments on GDP/(female) employment/(long-term) unemployment.
- **External factors:** the influence of external factors on the implementation of the RRF is also a part of the Effectiveness analysis.
- **Other EU policies and strategies:** given the centrality of the RRF to many policy areas, we have also included a reference to them in the draft intervention logic. Their interlinkages are explored under the **Coherence** criterion.

Based on the assessment of the above elements of the intervention logic, the evaluation also provides a general conclusion on the **EU added value** of the RRF.

The intervention logic, described above and presented in the following figure, serves the purpose of the study in providing answers to the evaluation questions along the evaluation criteria. However, as noted in Chapter 1, one of the objectives of this study is to provide lessons learned for discussions on possible future performance-based instruments in the post-2027 MFF. Thus, on top of the intervention logic, **the study also pays particular attention to the key novelties of the RRF**, outlined in the previous section: the performance-based approach, the linking of reforms and investments, the contribution to the CSRs, the integration of the REPowerEU and the macroeconomic relevance of the intervention.

Figure 3: Draft intervention logic of the Recovery and Resilience Facility



Source: Own elaboration based on Annex 1 of the Tender Specifications, the RRF and EURI Regulations

3. Evaluation findings

The sections below contain evaluation findings and answers to the evaluation questions. They are grouped into three sub-sections:

- 3.1. To what extent was the RRF successful and why? [Related criteria to assess: effectiveness, efficiency, coherence]
- 3.2. How does the RRF make a difference? [Related criterion to assess: EU added value]
- 3.3. How relevant is the RRF? [Related criterion to assess: relevance]

3.1. To what extent was the RRF successful and why?

Effectiveness

The analysis of effectiveness in this section covers various specific issues such as the RRF's financial progress, the progress on milestones/targets common indicators, and the contribution of the RRF to high-level objectives such as the twin (green and digital) transition. Beyond presenting the results of this analysis, it is worth noting that **the RRF provided a common and synchronised EU response to common shocks such as the COVID-19 socio-economic crisis and the energy crisis** as a result of the war in Ukraine. From a macroeconomic point of view, the RRF increased the EU GDP and lowered EU unemployment (see EQ4.2) and led to a reduction in spreads (see EQ4.9). In addition to the macro-relevance, the RRF has triggered the successful implementation of major and long-awaited reforms across a wide range of policy areas (see EQ2.2-2.3). The inclusion of the green targets as well as the use of the coefficients from the Green Taxonomy, the DNSH principle and the introduction of the REPowerEU chapters are expected to contribute to accelerating the green transition, notably by introducing energy efficiency measures, increasing the deployment of renewable energy, and ultimately diversifying energy supplies (see EQ4.10).

EQ1: To what extent has the RRF been effective in providing financial support to MSs (cf. pre-financing, speed of disbursements)?

Key findings:

More than €150 billion (€56.7 billion in the form of pre-financing) have been disbursed under the RRF, which represents 31% of the overall amount of planned grants and loans. **The planned and the disbursed financing in the first two years of operation of the RRF (2021-2022) are almost aligned**.

However, the pace of the financial progress in 2023 poses a **significant risk of delays as compared to the indicative planning**. While **MSs largely adhered to the indicative planning of the first payments requested in 2021 and 2022, most payment requests expected in 2023** were postponed by National authorities due to reasons such as: difficulties in fulfilling the milestones/targets; the ambition to fulfil all milestones/targets that are envisioned for the specific payment request; and the amendments of NRRPs in 2023.

The **disbursement of payments, within less than 4 months on average after the requests for payments, can be considered timely**. However, the timelines for the payments performed in 2023 are longer than the averages for all years of implementation, which hints at a **slowing speed of disbursement decisions**. SME survey participants and some interviewees raised the issue of slow RRF disbursement to the final recipients.

Even if it is not linked to performance, **pre-financing is an effective feature of the RRF**, which provides quick disbursements in support of public finances and boosts the financial progress of the instrument. At the same time, the lack of it, may create some challenges for public finances and administrations, particularly in countries where the RRF support is significant.

The financing strategy adopted in April 2021 for NGEU differs from back-to-back funding used for instance for other instruments like SURE/EFSM. Such "diversified funding strategy" decouples the timing, volume and maturity of the borrowing transactions from the timing of the disbursements of these funds. The funding method is a mixture of bond syndications, auctions and private placements, while the instruments include both long-term EU bonds and short-term EU bills. The time and amount of disbursement is not linked to a single borrowing transaction. Proceeds are pooled together and held in a centralised bank account until disbursement. As for the calculation of the borrowing costs, this is based on the costs of all borrowing transactions within a 6-month period. As a guarantee to the borrowing, NGEU has the EU budget and the commitment of MSs to provide – if necessary - additional funds up to 0.6 % of their gross national income (GNI) until the end of 2058.

According to the ECA Special Report 16/2023 (2023a), the **new structure and competences allowed NGEU funding to begin quickly**. According to the report, the EC's rapidly established debt management capacities and borrowed on time the funds, communicated its borrowing needs well and complied with key regulatory requirements for NGEU debt. The ECA further stresses that the borrowing costs mirror the market conditions and the objective of providing sufficient funding on time.

In terms of disbursements, as of 31st August 2023, **€153.38 billion have been disbursed under the RRF, i.e. 31% of the overall amount of planned grants and loans** (see the Table below) [24]. More than **€106 billion in grants** - approx. **32% of the initial allocation**, and **more than €47 billion in loans** - **approx. 28% of the initial allocation**, have been disbursed under the RRF. At the same time, **not all MSs have received payments -** 5 countries (Hungary, Ireland, the Netherlands, Poland, and Sweden) have not yet submitted payment requests[25]. Eighteen countries have asked for and received the first payment (€51 billion)[26]. The second payment was disbursed to six countries: Italy, Portugal, Spain, Slovakia, Croatia, and Greece (close to €40 billion). Spain is the only country that already received a third payment (€6 billion) as of 31 August 2023.

[24] These numbers represent the situation as of the end of August 2023. It has to be acknowledged that the overall RRF envelop is larger and it can disburse up to €723.8 billion (in current prices) in grants and loans to EU Member States. After the cut-off date of the evaluation, the RRF envelop grew to approximately €650 billion.

[25] Ireland submitted a payment request in September 2023.

[26] Estonia has submitted a payment request in June 2023, but it has not been assessed yet.

Table 3: RRF - progress of payments

Country	Planned Grants	Paid Grants	Planned Loans	Paid loans	Total planned grants and loans	Total paid grants and loans
Austria	3,461,398,824	1,149,981,847			3,461,398,824	1,149,981,847
Belgium	5,923,953,327	770,113,932			5,923,953,327	770,113,932
Bulgaria	6,267,312,124	1,368,912,911			6,267,312,124	1,368,912,911
Croatia	6,295,431,146	2,218,406,049			6,295,431,146	2,218,406,049
Cyprus	1,005,946,047	215,772,986	200,320,000	26,041,600	1,206,266,047	241,814,586
Czechia	7,035,697,550	1,842,833,731			7,035,697,550	1,842,833,731
Denmark	1,551,401,104	503,140,436			1,551,401,104	503,140,436
Estonia	953,184,800	126,008,898			953,184,800	126,008,898
Finland	1,822,051,146	271,094,341			1,822,051,146	271,094,341
France	40,269,973,177	12,517,881,402			40,269,973,177	12,517,881,402
Germany	26,359,833,613	2,250,000,000			26,359,833,613	2,250,000,000
Greece	17,769,942,602	5,745,614,774	12,727,538,920	5,345,566,348	30,497,481,522	11,091,181,122
Hungary	5,811,147,717				5,811,147,717	
Ireland	914,368,617				914,368,617	
Italy	68,880,513,748	28,954,466,787	122,601,810,400	37,938,235,352	191,482,324,148	66,892,702,139
Latvia	1,826,000,000	438,350,000			1,826,000,000	438,350,000
Lithuania	2,197,993,868	831,453,302			2,197,993,868	831,453,302
Luxembourg	82,670,643	32,374,175			82,670,643	32,374,175
Malta	316,403,495	93,433,952			316,403,495	93,433,952
Netherlands	4,707,063,471				4,707,063,471	
Poland	23,851,681,925		11,506,500,001		35,358,181,926	
Portugal	13,907,294,284	4,072,997,257	2,699,000,000	1,068,620,000	16,606,294,284	5,141,617,257
Romania	14,239,689,752	3,623,477,048	14,942,153,000	2,732,152,350	29,181,842,752	6,355,629,398
Slovakia	6,408,465,010	1,930,219,267			6,408,465,010	1,930,219,267

Country	Planned Grants	Paid Grants	Planned Loans	Paid loans	Total planned grants and loans	Total paid grants and loans
Slovenia	1,776,927,281	280,646,492	705,370,000		2,482,297,281	280,646,492
Spain	69,512,589,611	37,036,636,649			69,512,589,611	37,036,636,649
Sweden	3,288,516,389				3,288,516,389	
Total	**336,437,451,271**	**106,273,816,236**	**165,382,692,321**	**47,110,615,650**	**501,820,143,592**	**153,384,431,886**

Source: European Commission data

The planned payments for the period 2021-2022 under the RRF are 28% of the whole RRF budget. When compared to the actual payments (including the pre-financing), for 2021-2022, they are 27% of the RRF budget, i.e. **the planned and the disbursed financing in the first two years of operation of the RRF are almost aligned**. If the value of the pending payment requests (7 as of 31.08.2023) is considered (approx. €35 billion), this would lead to a combined value of the disbursed and pending requests to €188.31 billion, which would increase the disbursements by 7 percentage points to 37.5% of all planned grants/loan. It should be noted that the **highest value of payments is envisaged in 2023**, so the progress this year is crucial for the RRF, and as of 31.07.2023, only €14.69 billion have been disbursed, which represents 12.6% of the value of planned requests for 2023[27]. Out of 44 planned payments for 2023, so far only 5[28] have been submitted. The number of payments performed until end-July 2023 is 25, which represents 12% of the total planned requests (207). Based on these numbers, it can be concluded that the **pace of the financial progress in 2023 poses a significant risk of delays as compared to the indicative planning.**

[27] It should be acknowledged that the processing of payment requests requires time, so it cannot be expected that all planned requests can be processed in the same year as their submission.

[28] Estonia combined the first and second payment request into one. Several payment requests were submitted after the cut-off date of the evaluation in September-October (Bulgaria, Portugal, Belgium, Germany, Slovakia, Slovenia).

Table 4: EU level - Planned and disbursed payments – Grants and Loans

	2021	2022	2023[29]	2024	2025	2026	Total
Sum of Planned grants and loans	48,233,625,589	87,926,544,744	116,134,976,562	115,052,981,339	69,709,081,367	64,762,933,991	501,820,143,592
% planned / all planned	9.6%	17.5%	23.1%	22.9%	13.9%	12.9%	100.0%
Sum of disbursed grants and loans	62,491,869,805	76,206,002,902	14,686,559,179				153,384,431,886
% disbursed / all planned	12.5%	15.2%	2.9%				30.6%
Pre-financing requests	19	2					21
Pre-financing value	52,491,869,805	4,064,733,899					56,556,603,704
Number of payments planned	4	23	44	51	40	45	207
Number of payments performed (excl. pre-financing)	1	13	11				25
% performed payments / all planned payments	0.5%	6.3%	5.3%				12.1%
Value of payments performed (excl. pre-financing)	10,000,000,000	72,141,269,003	14,686,559,179				96,827,828,182
Pending payments number		2	5				7
Pending payments value (approx.)		22,220,000,000	12,706,000,000				34,926,000,000

Source: EC data and Recovery and Resilience Scoreboard[30]

[29] As of end-August 2023.
[30] The RRF Scoreboard was used to gather data on the requests being processed.

The extent of the risk cannot be fully assessed as the timing of payment requests has always had an indicative character. A review of the original indicative timetables of instalments suggests that while **MSs largely adhered to the planning of the first payments requested in 2021 and 2022, most have pushed back the indicative timing of the payment requests in 2023**. According to EC data, with the exception of Luxembourg and Denmark that have planned instalments in Q4 2023, all other MSs[31] have changed the indicative planning for 2023 and pushed back the timing - in some cases, the revision concerns just one quarter, but in most cases the revision involves 2-3 quarters. Some reasons for the observed deviations from the original planning of payment request submissions are presented below, based on input from interviewees (both at national and EU level):

- **Difficulties in fulfilling the milestones/targets** were mentioned as one of the main reasons by interviewees, especially for second payments and onwards (the first payments in most cases have been considered smooth). Yet, some authorities also mentioned that the requirements and related milestones on audit and control led to divergence from the original planning for the first payment. The reasons for the challenges in fulfilling milestones/targets are further explored in this evaluation report (Effectiveness section) and include internal (e.g. absorption capacity) and external (e.g. inflation, supply chain problems) factors;
- **The ambition to fulfil all milestones/targets** that are envisioned for the specific payment request – another often-cited reason, which was accompanied by an identified need for more flexibility in grouping milestones/targets for a specific payment request. At the same time, it also must be noted that in February 2023, the EC published a methodology for partial suspension of payments, which allows for an additional six-month period for MSs to deliver on the milestones and/or targets not yet achieved;
- The **amendments of NRRPs in 2023**, including the inclusion of REPowerEU chapters;
- **Changes of governments and governmental priorities** - several MSs have changed Governments in the last two years, and interviewees reported that such changes often led to shifts of political priorities at national level, which consequently had an impact on the smooth adoption and implementation of RRF reforms and investments;
- (expected) **backlog in payment requests due to the large number of payments in 2023** – a sentiment shared by a few national authorities.

Concerning the speed of disbursement, **the difference between the payment request date and the payment date is approximately 117 calendar days** both for the first (18 requests) and the second (6 requests) payment requests. According to Art.24 of the RRF Regulation, the EC shall assess the requests without undue delay and at the latest within two months of receiving them. After that period, the EC has to provide its findings to the Economic and Financial Committee and in case of a positive assessment, it shall adopt without undue delay a decision authorising the disbursement of the financial contribution. Considering this procedure and timelines, **the disbursement of payments within less than 4 months on average after the requests can be considered timely**. At the same time, input from the interviews with national authorities shows that **the actual submission of a payment request is often preceded by informal communication between the MS and the EC**, which is a part of the constant dialogue at technical level to support each MS implementing their plans.

The timelines for the payments performed in 2023 are longer than the averages for all years of implementation – 135 days, while in 2022 the average time from request to disbursement decision was 108 days. This hints at a **slowing speed of disbursement decisions in 2023.** This can be illustrated by two requests that were submitted in December 2022 by Romania (submitted on 16/12/2022 and partially disbursed[32] on 29/09/2023) and Italy (submitted on 30/12/2022 and

[31] 22 countries for which the Operational arrangements are published on the RRF scoreboard timelines.

[32] For more information: https://ec.europa.eu/commission/presscorner/detail/en/mex_23_4695

disbursed[33] on 09/10/2023), which took respectively 287 and 254 days between the payment requests and disbursements, i.e. more than twice the average 4-month period[34]. This phenomenon can be explained by various factors, such as the parallel revisions of the RRPs, the more complex application of the 'payment suspension' procedure (as is the case in the above-mentioned disbursement to Romania), the growing number of payment requests submitted in parallel, including by MSs that submit their first requests. It is difficult to draw conclusions based on data, which does not cover the full 2023 year. There is always the possibility of increased speed of payments by the end of 2023, but nonetheless, the partial data points to **increased risks of delays in the financial implementation of the RRF**.

The mixed findings based on the data are confirmed by the survey with national coordination bodies. Most national bodies (17)[35] expressed satisfaction with the average time between payment request submission and disbursement of payment, while 6 expressed concerns regarding the lengthy procedures and the excessive request from the EC in terms of justification. As illustrated more in detail in question 8.2, the concerns about the excessive demand for justifications and the literal interpretation of milestones and targets are emerging as an increasing problem among MSs, especially in 2023. This has also been confirmed by some of the interviewed national authorities. The results of the public consultation show that for most participants (77 "to a large extent", 44 "to some extent" out of 164 respondents)[36] the speed of payments from the EC to MSs is a "valuable and important" feature of the RRF. Yet, even if speed is a valuable and important feature of payments, thorough scrutiny of payment requests is also needed. The obligation by the EC to preserve the financial interests of the Union is the main reason for the rigorous processing of payments.

Going a step further in the disbursement process, the SME survey provided insight into the speed of disbursement by National authorities to the final beneficiaries. Out of 33 respondents[37] to the question on disbursement, most (20) categorised the disbursement process as slow (14) or very slow (6), with only 5 considering it timely (4) or very timely (1). The issue of slower payments to the ultimate recipients of RRF support was also raised by a few interviewees as an important challenge at national level. Unfortunately, there is no data available to confirm the issue of disbursements to final beneficiaries, beyond some anecdotal evidence provided by interviewees (e.g. 12% paid to final implementation entities in one MS).

The pre-financing to 21 MS that requested it was €56,56 billion, i.e. close to €100 billion have been disbursed as a part of regular payments to the MS. It has a significant contribution to the financing disbursed so far, as it amounts to 11.3% of the RRF total budget and 36.9% of the total value disbursed. It is indicated as effective by several MSs and EC-level interviewees, which observe that pre-financing provided fast direct support, playing a stabilising role in the aftermath of the unprecedented economic and social shock caused by the COVID-19 pandemic, thereby also helping to kick-start the recovery. For the countries that received it, the pre-financing under the RRF (Art. 13 of the RRF Regulation), also supported coherence/complementarity with non-EU-supported national measures, because in this way the COVID-induced budget deficits did not grow larger due to RRP-related measures. The recipients of pre-financing included the countries with very large crisis response packages – Germany, Italy, Lithuania, France, and Spain (see EQ18 for more information). On the other hand, as mentioned above, not all MSs received pre-financing. In line with Art.13 of the RRF Regulation pre-financing was subject to the adoption by 31 December 2021 by the Council

[33] For more information: https://ec.europa.eu/commission/presscorner/detail/en/mex_23_4842

[34] In the case of Italy, the government submitted a modification of the fourth instalment (30/06/2023) on the 11th July 2023, which was accepted by the Commission on the 28th July 2023. The proposed changes are linked to the impossibility, due to objective circumstances, including inflation and supply-chain disruptions caused by Russia's war of aggression against Ukraine, to carry out the concerned measures as originally foreseen.

[35] 15 respondents marked this question as "Not applicable".

[36] 21 respondents answered "To a limited extent", 14 "Not at all", and 8 respondents "Do not know".

[37] 8 respondents gave an answer "I do not know / Neutral".

of the implementing decision on the RRP assessments and when requested by an MS together with the submission of its recovery and resilience plan. Thus, effectively only one country - Ireland (Council Implementing Decision from 2021), chose not to receive pre-financing, while the Council Implementing Decisions of the other five countries that did not receive pre-financing were from 2022 (Bulgaria, Hungary, the Netherlands, Poland, and Sweden). Ireland's decision was due largely to the relatively good status of public finances at the time, but national authorities from that country confirmed the potential usefulness of pre-financing. This is confirmed by the very fact that 21 out of 22 eligible countries applied for it and received it. On the other hand, as confirmed by a few interviewees from MS that could not apply for pre-financing, the lack of receipt of any RRF payments may play a disincentivising role on the public administrations and/or burdens to the national budgets, and as a result, administrations tend to shift their resources to EU Cohesion Policy financing, because of the uncertainty of timing and availability of RRF financing. Considering the crisis-addressing nature of the RRF, pre-financing is one of its effective features, as it supports public finances and boosts the financial progress of the instrument. At the same time, the lack of it, may create some challenges for public finances and administrations, particularly in countries where the RRF support is significant.

EQ2.1: Given the current state of play of the Facility's implementation, which outputs (milestones/targets) and results (incl. common indicators) have already been achieved?

Key findings:

As of end-July 2023, 11.3% of all planned targets/milestones have been fulfilled. So far 639 milestones (19.3% of the total number) and 66 targets (2.3% of the total number) were fulfilled. Despite this progress, the fulfilment of the milestones/targets is behind the indicative schedule provided in the Council implementing decisions on the RRF plans - the number of milestones/targets planned until Q1 2023 is 2,205, i.e. the fulfilled targets/milestones stand at 32% of this indicative planning. Thus, there are **increased risks of delays (as compared to the indicative planning) in 2023 and the following years**.

The **fulfilled milestones/targets cover all six pillars of the RRF.** The pillars of Smart, sustainable and inclusive growth and Health, and economic, social and institutional resilience have the highest percentages of fulfilled milestones/targets (above 12%) out of the planned milestones/targets linked to these pillars. The highest number of fulfilled targets is under the pillar of Green transition, but the overall percentage of fulfilled milestones/targets out of all milestones/targets linked to the pillar (10.1%) is behind the growth and health resilience pillars. The digital pillar has the lowest percentage fulfilled out of all milestones and targets linked to the pillar (8%).

The RRF has **progressed along all fourteen common indicators.** Noteworthy achievements include: 22 million MWh/year savings in annual primary energy consumption, 18 million additional dwellings with internet access, close to 1.5 million enterprises supported, close to 7 million supported participants in education or training, 4 million young people (aged 15-29) receiving support. **For some common indicators** (e.g. additional operational capacity installed for renewable energy and additional dwellings with internet access) **only 5-7 MSs have reported achievements so far**. But it must be acknowledged that investments in infrastructure are usually more long-term and require time until they become operational and can be reported. This section provides a factual response to the evaluation question on the achievement of outputs (measured in milestones/targets) and results (measured here with the achievement of common indicators). Further analysis of the RRF results is presented in the responses to EQ2.2 and EQ2.3. The analysis only considers milestones/targets covered in payment requests submitted to and assessed by the Commission, not the progress made in completing milestones/targets covered in subsequent payment requests. As it becomes clear in the bi-annual reporting from MSs, progress on milestones and targets covered in subsequent payment requests is being made in parallel (for example, the RRF Annual Report 2023 (EC, 2023h) shows 1,155 completed milestones and targets in the period Q12020-Q12023, as self-reported by the Member States).

Progress on milestones and targets

The number of all milestones and targets under the RRF is 6,234[38], out of which **705 have already been fulfilled, i.e., 11.3% of all planned targets/milestones[39]**. As expected, milestones comprise most of the achievements – **639 fulfilled milestones (19.3% of the total number) and 66 fulfilled targets (2.3% of the total number)**. As shown in the table below, they have been reported by 18 MSs, while for 9 countries there have been no disbursements and consequently – no milestones/targets can be considered fulfilled. For the MSs that submitted and received payment requests, the percentage of fulfilled milestones/targets as compared to the overall number of milestones/targets varies from 4.1 to 43.3%. Overall, **the progress on milestones/targets is behind the indicative planning**. The number of **milestones/targets planned until Q1 2023[40] is 2,205, while the fulfilled targets/milestones stand at 32% of this number**. This conclusion comes with important caveats: (1) these numbers present only fulfilled milestones/targets, whereas there are also milestones/targets that have been completed, but not yet included in requests for payments; and (2) linked to the first point, some MSs have not yet requested disbursements, i.e. technically no targets/milestones can be considered fulfilled. Yet, since the percentage of fulfilled milestones/targets is lower than the indicatively planned until Q1 2023 for all MSs (for some as low as 13%), **the status of fulfilment shows an increased risk of delays in 2023 and beyond**.

Table 5: Fulfilment of milestones and targets - as of 31.07.2023

Country	2021	2022	2023	Total fulfilled	Indicatively planned until Q1 2023	Total planned	Percentage fulfilled by 07.2023 out of all	Percentage fulfilled vs planned until Q1 2023
Austria			44	44	84	171	25.7%	52%
Belgium				N/A	79	210	N/A	N/A
Bulgaria		22		22	112	346	6.4%	20%
Croatia		59		59	112	372	15.9%	53%
Cyprus		14		14	73	271	5.2%	19%
Czechia			37	37	67	244	15.2%	55%
Denmark			25	25	43	77	32.5%	58%
Estonia				N/A	43	133	N/A	N/A
Finland				N/A	49	131	N/A	N/A
France		38		38	110	175	21.7%	35%
Germany				N/A	65	129	N/A	N/A
Greece		15	28	43	90	331	13%	48%
Hungary				N/A	81	270	N/A	N/A
Ireland				N/A	56	109	N/A	N/A
Italy		96		96	163	527	18.2%	59%
Latvia		9		9	63	214	4.2%	14%
Lithuania			31	31	64	191	16.2%	48%
Luxembourg			26	26	40	60	43.3%	65%

[38] Based on Commission data.

[39] Commission data as of 31.07.2023.

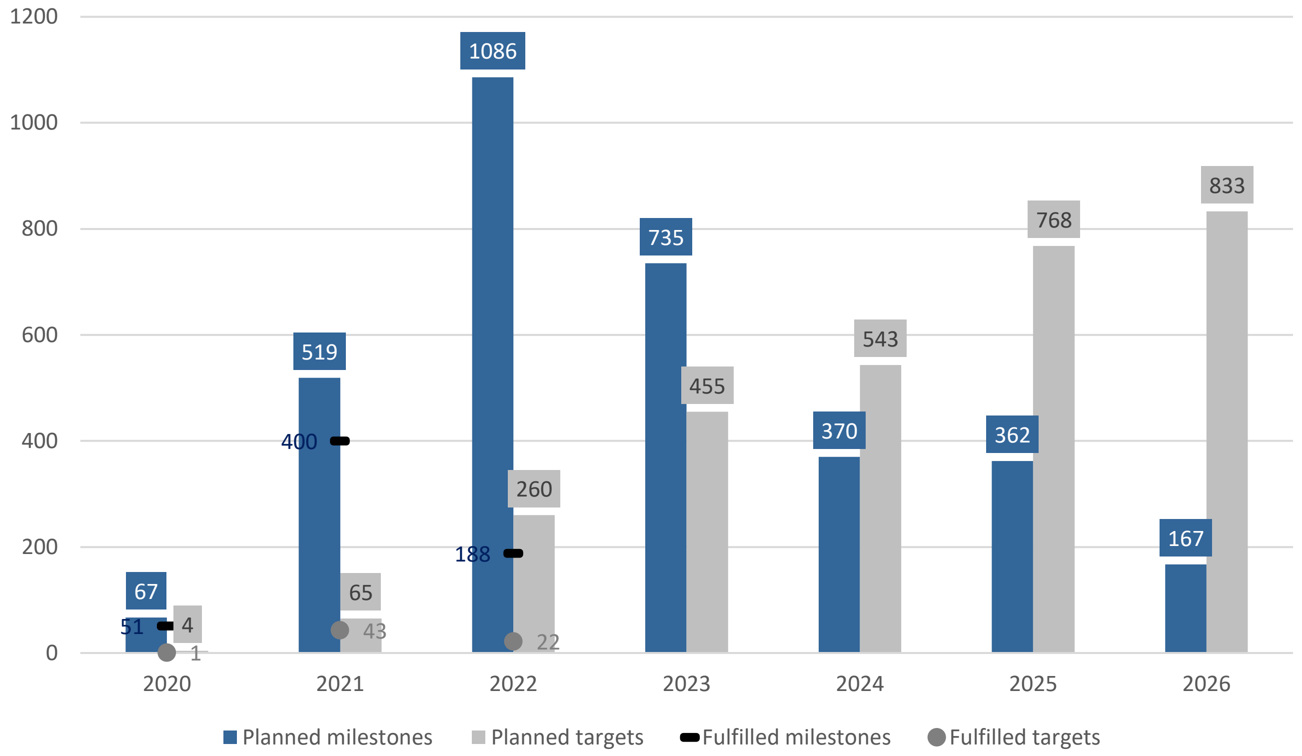
[40] Q1 2023 is used instead of Q2 2023 to factor in the time for the Commission's assessment.

Country	2021	2022	2023	Total fulfilled	Indicatively planned until Q1 2023	Total planned	Percentage fulfilled by 07.2023 out of all	Percentage fulfilled vs planned until Q1 2023
Malta			19	19	61	138	13.8%	31%
The Netherlands				N/A	35	127	N/A	N/A
Poland				N/A	87	283	N/A	N/A
Portugal		38	20	58	103	341	17%	56%
Romania		21		21	164	507	4.1%	13%
Slovakia		14	16	30	74	196	15.3%	41%
Slovenia			12	12	72	209	5.7%	17%
Spain	52	40	29	121	183	416	29.1%	66%
Sweden				N/A	32	56	N/A	N/A
Total	**52**	**366**	**287**	**705**	**2205**	**6,234**	**11.3%**	**32%**

Source: EC data, 31.07.2023

The highest number of milestones have been planned for 2022, while the highest number of targets are envisaged for 2026. The figure also shows that the fulfilment of milestones and targets is lagging behind the planning. This is particularly visible for 2022 as only 17% of the envisaged milestones and 8% of the targets have been deemed to be fulfilled. Taken together, the percentage of planned milestones/targets in the period 2020-2022 is 32%. When compared to the fulfilled milestones/targets (11.3%), **the current progress of fulfilment of the milestones/targets is behind the indicative schedule provided in the national RRPs**. Risks for delays have also been reported in some of the country reports, which form the annual European Semester Spring Package, published on 24 May 2023, for example: Bulgaria (EC, 2023a), Czechia (EC, 2023b), Hungary (EC, 2023c), Ireland (EC, 2023d), Poland (EC, 2023e), Romania (EC, 2023f). However, as shown in Table 5 above, the risks for delays are not limited only to a few countries.

Figure 4: Planned and achieved milestones and targets per year



Source: EC data

The **fulfilled milestones/targets cover all six pillars of the RRF** (see Table 6)[41]. So far, the pillar on **Smart, sustainable and inclusive growth** has the highest number of fulfilled milestones (2,768), followed by **Health and Institutional Resilience**-related measures (2,584). These two pillars (Smart, sustainable and inclusive growth and Health, and economic, social and institutional resilience) also have the highest percentages of fulfilled milestones/targets (above 12%) out of all milestones/targets linked to them.

The highest number of fulfilled **targets** is under the pillar of **Green transition,** but the overall percentage of fulfilled milestones/targets out of all milestones/targets linked to the pillar (10.1%) is behind the growth and health resilience pillars**.** The **Digital transformation** pillar has a somewhat lower number of fulfilled milestones/targets, despite the overall EU-policy ambitions on digitalisation – 184 milestones/targets, while it **has the lowest percentage fulfilled out of all milestones and targets linked to the pillar (8%)**. The **Social and territorial cohesion** pillar has average values for the percentage of the fulfilled milestones/targets out of all milestones and targets linked to the pillar (9.8%).

The lowest numbers of fulfilled milestones/targets are exhibited for the pillar on **Policies for the next generation**, children and youth, which also has a somewhat narrower scope than measures related to smart, sustainable, and inclusive growth. However, when only the relevant milestones/targets are considered for this pillar, the fulfilled values are the same as the values for the Green transition pillar – 10.1%.

[41] The data comes with the important caveat that many milestones, targets, measures, reforms, and investments contribute to several RRF pillars and it is not easy to disentangle the specific link and contribution.

Table 6: Fulfilled milestones and targets per RRF pillar

RRF pillar	Milestones fulfilled	Targets fulfilled	Total fulfilled milestones and targets	Total milestones and targets linked to the pillar	Percentage fulfilled out of all milestones and targets linked to the pillar
Green transition	234	27	261	2,577	**10.1%**
Digital transformation	163	21	184	2,298	**8.0%**
Smart, sustainable, and inclusive growth	326	24	350	2,768	**12.6%**
Social and territorial cohesion	227	26	253	2,584	**9.8%**
Health, and economic, social and institutional resilience	275	21	296	2,311	**12.8%**
Policies for the next generation	56	8	64	633	**10.1%**

Source: RRF Scoreboard, 31.07.2023, own calculations

Progress on common Indicators

The RRF has **progressed along all fourteen indicators** (see Table 7). For some of the common indicators presented below (e.g., additional operational capacity installed for renewable energy and additional dwellings with internet access) only 5-7 MSs have reported achievements so far. Yet, it has to be acknowledged that investments (e.g., in additional operational capacity installed for renewable energy) are usually more long-term and require time until they become operational (and therefore, until MSs can report on them).

Where feasible (i.e., where the indicators overlap or there is available data), we also provide for context some planned/implemented values of Cohesion policy indicators. However, this **exercise serves only exploratory purposes, and it does not represent a comparison between the achievements of the RRF and Cohesion policy financing**. As noted further in the evaluation study, such a comparison has severe limitations in terms of the approach of the instruments, the comparability between the indicators, and the way the measurements are performed.

Starting the first common indicator, as of December 2022, RRF measures at EU level have led to more than **22 million MWh/year savings in annual primary energy consumption**, which represents a significant increase compared to 06/2022, while in the first Semester of 2022, 14.6 million MWh of energy savings were already achieved. So far 16 MSs have reported values for this indicator. These savings account for **0.14% of the total primary energy consumption in the EU** (in 2019).

The **additional operational capacity installed for renewable energy already amounts to 1 thousand MW**. So far only seven countries have reported upon this indicator. This represents 0.24% of the total electricity production capacities for renewables of MSs (in 2019). For the 2021-2027 period, under the Cohesion policy funds, at EU level it is envisaged to increase the renewable energy capacity by more than 20 thousand MW (Cohesion Open Data, 2023a). For the 2014-2020 period, 3,640 MW of additional energy capacity have been implemented, while the planned value was close to 8 thousand MW (Cohesion Open Data, 2023b).

The **number of Alternative fuels infrastructure (refuelling/recharging points) shows a sizeable increase (more than twofold) as a result of RRF measures in 12 MSs - from**

245,281 (2019) to 512,543. The target values for RCO59 Alternative fuels infrastructure under the Cohesion policy funds 2021-2027 is 29,468 (envisaged for 19 countries).

Close to 6 million people are benefiting from protection measures against floods, wildfires, and other climate-related natural disasters, as a result of RRF measures. This number represents 1.4% of the EU MS population. Notably, only five countries have so far reported values for this indicator. When compared to the Cohesion 2021-2027 plans, the value of the indicator population covered from natural disasters is expected to be more than 120 million (RCR37) (Cohesion Open Data, 2023a). For the 2014-2020 period, the population already covered by flood and forest protection measures is around 85 million (Cohesion Open Data, 2023b).

One of the achievements of the RRF is close to **18 million additional dwellings with internet access** provided via very high-capacity networks, which is around 10% of the overall number of private households in the MSs (in 2019). So far only five MSs have reported on this indicator. The Cohesion policy financing targets for 2021-2027 envisage for indicator "RCO41 Digital: Additional dwellings with broadband of very high capacity" more than 3 million dwellings (Cohesion Open Data, 2023a).

So far, in 10 MSs, **close to 380 thousand enterprises have been supported to develop or adopt digital products, services and processes** – the large majority for adoption 360 thousand, but also around 20 thousand enterprises were supported for the development of digital products, services, and processes. Overall, close to 2% of the enterprises in the total business economy in MSs in 2019 have already been supported via the RRF.

Approximately 250 million users of new and upgraded public digital services, products and processes have been reported under RRF measures in 19 MSs, or more than 66% of the population aged 15 and over (in 2019) (Cohesion Open Data, 2023a). When compared to the Cohesion policy funds for 2021-2027, the envisaged value of the indicators is close to 1 billion (for 24 MSs) users of new and upgraded public digital services (RCR11) and users of digital services by enterprises (RCR12) (Cohesion Open Data, 2023a).

More than 5 thousand researchers working in supported research facilities have been supported under the RRF in 7 MSs. This represents 0.2% of all researchers working in research facilities in EU MSs (in 2019). As a comparison, the 2021-2027 Cohesion policy financing target for the indicator researchers with improved infrastructure (RCO06) is more than 83 thousand (for 21 countries) (Cohesion Open Data, 2023a). For the 2014-2020 period, the implemented value of the same indicator is 57 thousand (Cohesion Open Data, 2023b).

Overall, **close to 1.5 million enterprises have been supported under RRF measures** in 18 MSs, which amounts to 6.2% of the total number of enterprises in EU economies (in 2019).

The **number of supported participants in education or training is close to 7 million** (in 20 MSs). The number of participants in education/training upon leaving Cohesion policy financing schemes for the 2014-2020 period is 2.6 million (implemented values) in 26 MSs (excluding Luxembourg) (Cohesion Open Data, 2023b).

The number of supported people in employment or engaged in job-searching activities is close to 700 thousand (in 13 MSs). For the EU as a whole, the supported people in employment or engaged in job-searching activities as a share of the total active population of working age in EU MSs (in 2019) is 0.3%. For the 2014-2020 period, the number of employed upon leaving Cohesion policy financing schemes is close to 6.5 million (implemented values) (Cohesion Open Data, 2023b).

The supported **capacity of new or modernised healthcare facilities under RRF measures is already more than 18.6 million people.** This value represents about 4% of the EU population (in 2019), but only 6 MSs have reported upon this indicator. Under the Cohesion policy financing, for the 2021-2027 period, the planned supported capacity of new or modernised health care facilities amounts to approx. 60 million people (in 15 MSs, with Spain contributing 15 million) (Cohesion Open Data, 2023a). A similar number - 59 million people are covered by improved health services as a result of 2014-2020 Cohesion policy financing measures (Cohesion Open Data, 2023b).

The **classroom capacity of new or modernised childcare and education facilities under the RRF covers more than 555 thousand pupils/students**. This value represents 0.6% of the total number of pupils and students enrolled in education in 2019 in MSs. Notably, only 5 MSs have reported values for this indicator. The capacity of supported childcare or education infrastructure under the 2014-2020 period is 23 million persons (implemented value in 15 countries and Interreg projects) (Cohesion Open Data, 2023b), while for the 2021-2027 period, the planned values of childcare facilities (RCO66, in 12 MSs) and education facilities (RCO67, in 21 MSs) are 517 thousand and 3.6 million, respectively (Cohesion Open Data, 2023b).

The number of **young people aged 15-29 receiving support under the RRF is more than 4 million**, i.e. 5.8% of the total population aged 15-29 in the EU (in 2019). So far 16 MSs have reported values for this indicator. In the 2021-2027 period, under the Cohesion policy financing, the planned value of supported young people between 18 and 29 years of age is 843 thousand (16 MSs, including France) (Cohesion Open Data, 2023b).

Table 7: Common indicators – progress as of 06/2022, EU level

Common indicator	Stock [42] or flow[43]	Contribution to RRF pillars	Measurement unit	Value as of 12/2021	Accumulated value as of 06/2022	Accumulated value as of 12/2022	Reporting MSs	Context
1: Evolution of savings in annual primary energy consumption	Stock	Pillar 1 (green transition) and pillar 3 (smart, sustainable and inclusive growth)	MWh/Year	816,431	14,602,036	22,132,138	15	Savings in annual primary energy consumption, expressed as a percentage of the total primary energy consumption in 2019 in EU MSs: **0.141%**
2: Additional operational capacity installed for renewable energy	Stock	Pillar 1 (green transition) and pillar 3 (smart, sustainable and inclusive growth)	MW	renewable energy: 194	renewable energy: 718	renewable energy: 1,061	4	Additional operational capacity installed for renewable energy production as a percentage of the total electricity production capacities for renewables of MSs in 2019: **0.24%**
3: Evolution of Alternative fuels infrastructure (refuelling/recharging points)	Stock	Pillar 1 (green transition) and pillar 3 (smart, sustainable and inclusive growth)	Refuelling/ recharging points	254,559	477,153	512,540	12	Percentage increase in the number of alternative fuels infrastructure in EU MSs in 2019: **209%**
4: Population benefiting from protection measures against floods, wildfires, and other climate-related natural disasters	Stock	Pillar 1 (green transition) and pillar 4 (social and territorial cohesion)	Population	805,574	3,033,887	5,875,129	4	Population benefitting from protection measures against climate-related disasters expressed as a percentage of the population of MSs in 2019: **1.4%**
5: Additional dwellings with internet access provided via very high-capacity networks	Stock	Pillar 2 (digital transformation) and pillar 4 (social and territorial cohesion)	Dwellings	2,300,000	9,244,178	17,787,329	4	Percentage of Additional dwellings with internet access provided via very high-capacity networks in EU MSs in 2019: **9.6%**

[42] A stock indicator, which means that numbers are added cumulatively, and its values can only increase over time.
[43] This indicator is a flow indicator, which means that reported numbers represent the current situation in the reporting round and its values can fluctuate over time.

6: Enterprises supported to develop or adopt digital products, services and processes	Flow	Pillar 2 (digital transformation) and pillar 3 (smart, sustainable and inclusive growth)	Enterprises	160,532	200,803 k	379,435 Digital adoption: 360,137 Digital development: 19,298	10	Percentage of Enterprises supported to develop or adopt digital products, services and processes in EU MSs in 2019 (Large, Medium, and Micro & Small in Total) as a share of the enterprises in the total business economy in MSs in 2019: **1.7%**
7: Users of new and upgraded public digital services, products and processes	Flow	Pillar 2 (digital transformation) and pillar 5 (health, and economic, social and institutional resilience)	Users	37.9 million	85.6 million	248 million	19	Users of new and upgraded public digital services, products and processes in EU MSs, as a share of the population aged 15 and over in 2019[44]: **66.4%**
8: Researchers working in supported research facilities	Flow	Pillar 3 (smart, sustainable and inclusive growth)	Researchers (in FTEs)	462	1009	5.211	7	Percentage of researchers working in research facilities in EU MSs in 2019 (Male, Female, and Non-binary in Total): **0.2%**
9: Enterprises supported (of which: small – including micro, medium, large)	Flow	Pillar 3 (smart growth, sustainable and inclusive growth)	enterprises	102,661	336,407	1,429,820	18	Enterprises supported (Small & Micro, Medium, and Large) as a share of the total number of enterprises in the total business economy in 2019 in EU MSs: **6.2%**
10: Number of participants in education or training	Flow	Pillar 2 (digital transformation), pillar 4 (social and territorial cohesion) and pillar 6 (policies for the next generation)	Participants	1,714,335	2,724,806	6,888,121	20	Percentage of the Number of participants in education or training in EU MSs in 2019 (Male, Female, and Non-binary in Total): **153.8%**
11: Number of people in employment or engaged in job-searching activities	Flow	Pillar 3 (smart, sustainable and inclusive growth) and pillar 4 (social and territorial cohesion)	People	66.913	242,131	688,091	13	People in employment or engaged in job searching activities as a share of the total active population of working age in EU MSs in 2019 (Male, Female, and Non-binary in Total): **0.3%**

[44] This percentage can go beyond 100% because the same person can use the service multiple times, in which case they would be counted multiple times.

12: Capacity of new or modernised healthcare facilities	Stock	Pillar 4 (social and territorial cohesion) and pillar 5 (health, and economic, social and institutional resilience)	Capacity	344	8,553,643	18,646,974	6	Capacity of new or modernised healthcare facilities in EU MSs as a percentage of the total population in 2019: **4.3%**
13: Classroom capacity of new or modernised childcare and education facilities	Stock	Pillar 4 (social and territorial cohesion) and pillar 6 (policies for the next generation)	Capacity	207,204	356,754	555,062	5	Capacity[45] of new or modernised childcare facilities expressed as a percentage of the total number of pupils and students enrolled in education in 2019 in MSs: **0.6%**
14: Number of young people aged 15-29 receiving support	Flow	Pillar 6 (policies for the next generation)	Young people	2,011,164	2,734,951	4,115,196	16	Young people aged 15-29 receiving support expressed as a share of the total population aged 15-29 in 2019 in each MS: **5.8%**

Source: Recovery and Resilience Scoreboard (as of 31/07/2023), own calculations

[45] Capacity means the maximum number of pupils and students that can use the classrooms in the facility per year.

EQ2.2: To what extent did the achievement of milestones and targets translate into the successful implementation of reforms and investments?

Key findings:

Even though milestones and targets largely measure input and output indicators, we observe that their implementation has translated into results linked to the RRPs measures. As of today, the RRF has in particular triggered the implementation of major reforms across a wide range of policy areas: labour market (Spain), social protection and pensions (Croatia, Latvia, Lithuania, Spain), civil and criminal justice (Italy, Spain, Croatia) public administration, including digitalisation (Italy, Slovakia, Germany), spending review and public finance governance (Belgium, France), anti-money laundering framework (Ireland, Sweden, Luxembourg), licensing simplification reforms to boost the investments in renewables (Greece, Portugal, Spain), the roll-out of renewable energy and sustainable transport (Croatia, Romania), the introduction of 5G (Belgium), structural reform of the education system (Spain, Croatia) as well as research and innovation (Spain). By contrast, only a few investments have completed the first steps and have already produced tangible results.

The link between milestones and targets fulfilment and the successful implementation of the related reforms and investments included in the RRF plans has been the object of an extensive debate. Such debate has largely revolved around the **actual capacity of milestones and targets to measure the results and the impacts** of the related investments and reforms.

The RRF Regulation (article 2) defines milestones and targets as "*measures of progress towards the achievement of a reform or an investment*". The EC's guidelines for preparing recovery plans specify that M&T indicators should remain within the control of the MSs and should not be conditional on external factors such as the macroeconomic outlook or the evolution of the labour market. As such, the Guidance suggests the use of **input indicators or preferably output indicators**, while it discourages impact indicators since they are not under the control of the MSs. It follows that, since fulfilling previously agreed M&Ts is the only criterion to justify disbursing an RRF payment request, milestones and targets are likely to remain limited to tracking outputs[46] rather than results[47] or impacts[48].

Zooming in on six countries (Germany, Greece, Spain, France, Croatia and Italy), for instance, the ECA (2022a) observes that **most milestones and targets are output-oriented** (e.g. number of buildings renovated/kilometres of railways renovated/charging stations installed) and at least half of the sampled RRPs included measures with **input indicators**, generally referring to spending of a certain amount of funds (e.g. Germany, Spain and France). Darvas and Welslau (2023) instead analysed the targets set out by the five largest EU countries and Romania, and put them into three categories (inputs, outputs and results). Like the ECA, they observe that there is still **heterogeneity across MSs in the types of indicators used** to track the targets. The results show that France, Germany and the Netherlands adopted very few results indicators (respectively 3%, 7% and 6%), Italy, Finland and Romania have a larger share of result indicators (19%, 17% and 15% respectively) while Spain is somewhere halfway (10%).

The choice of output indicators for milestones and targets was – as stressed above – an intentional consequence of **holding governments responsible for the implementation** of the measures in the plans and the link between milestones and targets' fulfilment and payment requests' assessment. As stressed by national coordination bodies, who are responsible for the design of M&T, the choice of input and output indicators was easier than results indicators for which they are less accountable. Also, national interviewees further stressed that while the milestones and targets rely

[46] Something produced or achieved by a project, such as the delivery of a training course or the construction of a road.
[47] The immediate effect of a project or programme on its completion, such as the improved employability of course participants or improved mobility following the construction of a new road.
[48] The wider long-term consequences of a completed project or programme, such as socio-economic benefits for the population as a whole.

on output indicators, given the involvement of the EC in the development of national recovery plans, this reduced the risk of inappropriate project selection in the first place.

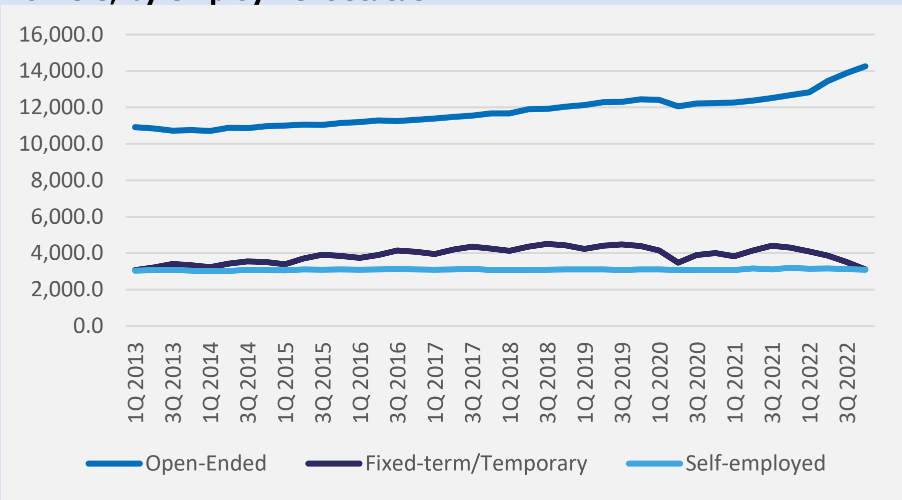
With this caveat in mind, it follows that **the implementation of the milestones and targets does not automatically translate into the successful implementation of reforms and investments**. Yet this does not mean that the implemented milestones and targets have not subsequently translated into successful results linked to reforms and investments. On the contrary, based on the country-specific analysis of national recovery and resilience plans, it is possible to identify already **key successful results of reforms and investments** and trace how the fulfilment of milestones and targets has translated into tangible results. An overview of some key results already achieved is provided in Annex V (the secondary database), while the boxes below present examples of key results linked to relevant reforms and investments implemented under the Spanish, Croatian, German, Belgian and Italian RRPs.

Box 1. The labour market reform in Spain

On 28 December 2021, Spain adopted Royal Decree Law 32/2021 on urgent measures for labour reform, the guarantee of stability in employment and the transformation of the labour market., following agreement within the social dialogue between the main trade unions and employers' associations. The adoption of the Law was foreseen by the milestone '*Amendment of the Worker's Statute to support the reduction of temporary employment by streamlining the number of contract types*', foreseen by 4Q2021 and timely fulfilled. This introduces, among others: (i) a reduction in the types of contracts to three (open-ended, fixed-term/temporary and training/internship), with the aim of limiting the use of the temporary contracts to cases where the causal link that led to its creation is present(production circumstances or substitution of workers); (ii) a revision of the training or internship contracts to support the integration young workers into the labour market; (iii) a new regulation to foster the use of a special type of open-ended contract for seasonal activities (*fijo discontinuo*); and (iv) strengthening the fight against labour fraud, including updating the sanctioning system. The reform also introduces the presumption of an indefinite duration of contracts (18 months of employment in a 24-month period will be sufficient to convert temporary contracts into permanent ones) with the burden of proof on the company to demonstrate that the employment relationship falls within one of the cases of temporary employment provided for in the law. Finally, the labour market reform included an amendment of Article 42 of the Workers' Statute, which regulates the subcontracting of works and services, and stipulates that contractors and subcontractors must comply with the corresponding sectoral collective agreement applicable to the activity they carry out.

Overall, the new labour market reform has been widely welcomed. Particularly welcome is the abolition of fixed-term contracts for works and services, used mainly in the construction sector. Another important element was the introduction of two types of training contracts, alternating between work and study as well as professional practice contracts (Aranguiz, 2022). Another positive aspect is the reform of sub-contracting and the introduction of the prevalence of sectorial agreements, which should be able to deter subcontracting by multi-service companies (Rodríguez-Piñero Royo, 2021). Recent data from the Bank of Spain (2023) have confirmed the positive results linked to the labour market reform and dispelled any doubts about the effectiveness of the measures adopted. The analysis shows very clearly that the two main objectives of the labour market reform (i.e., increasing the number of open-ended contracts and reducing the number of temporary/fixed-term contracts) have been achieved so far.

Workers, by employment status



Source: Bank of Spain (2023)
Note: Data are presented in thousands of workers.

***Box 2.* The Justice reform in Croatia**

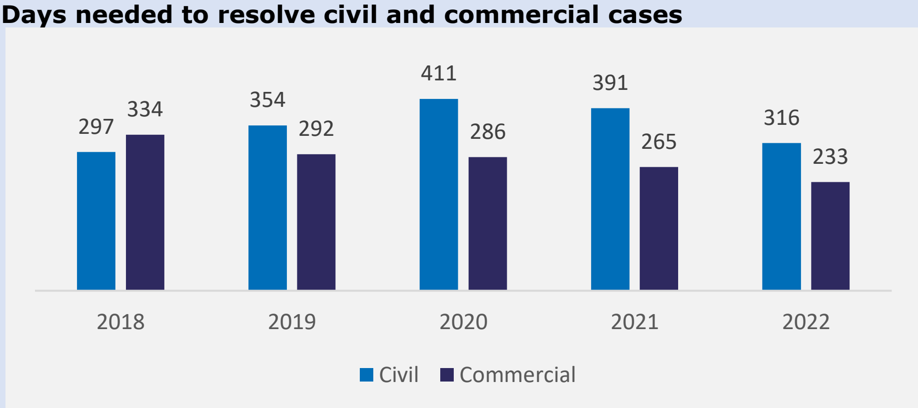
The justice reform in Croatia consists in a package of various legislative measures that aim to establish a legal, organisational, and technological framework that shall contribute to reducing backlogs and shortening court proceedings and focusing on the transparent and efficient administration of the justice system. Among the measures implemented as of the second quarter 2023, there are: i) the introduction of electronic tools and adequate administrative capacities for the State Judicial Council and the State Attorney's Council (milestone foreseen by 1Q2022 and timely fulfilled) the amendments to the Bankruptcy Act and the Consumer Insolvency Act (milestone foreseen by 2Q2022 and timely fulfilled), amendments to the Code of Criminal Procedure (milestone foreseen by 1Q2023 and timely fulfilled), amendments to the legislative framework in the area of justice the new Non-contentious Procedure Act and the start of six new training programmes introduced in the framework of the judicial training programme (milestone foreseen by 1Q2023 and timely fulfilled).

The combination of these measures is expected to lead to three key results by 2Q2026:

- Reduction of the duration of litigation and commercial cases by at least 200 days compared to 2020
- Reduction of the total number of pending cases of at least 35% compared to 2020
- Reduction of the share of cases over 3 years old in total backlog to at most 8% compared to 2020

Despite the short time after the adoption of the measures, it is already possible to track some results.
First of all, the reduction of the duration of litigation and commercial cases. While the target included in this reform aims at reducing the duration of litigation and commercial cases by at least 200 days compared to 2020 by the 2nd quarter of 2026, the graph below shows the evolution of the disposition time for civil and commercial cases at the end of 2022. As can be seen, the time taken to resolve a civil case has been reduced by almost 100 days compared to 2020 figures. Moreover, the time needed to resolve a commercial case has been reduced by more than 50 days, which shows the positive results of the measures adopted.

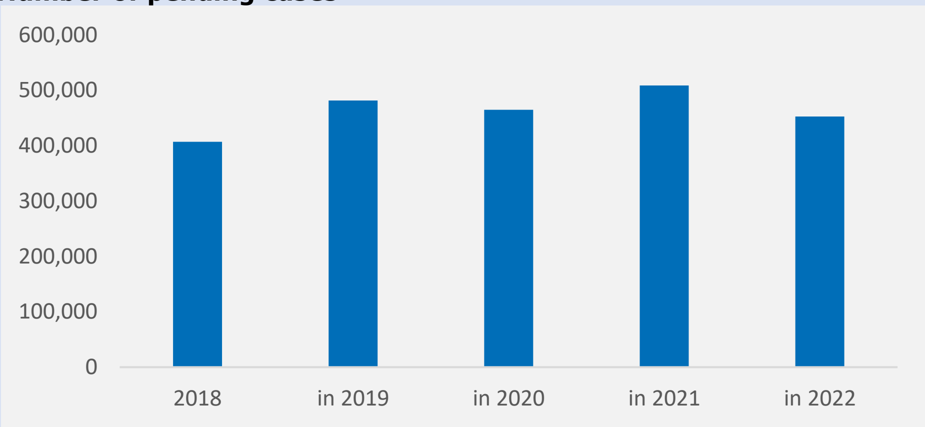
Days needed to resolve civil and commercial cases



Source: Statistical overview of the work of the Croatian courts for 2022

Another interesting element is the total number of pending cases. The target agreed with the EC is to reduce the total number of pending cases by at least 35% compared to 2020 figures (a maximum of 302,100 pending cases by Q2 2026). According to the judicial statistical overview for 2022, a limited reduction of 3% has already taken place (452,850 pending cases at the end of 2022), which suggests further effort is needed to reach the agreed target.

Number of pending cases



Source: Statistical overview of the work of the Croatian courts for 2022

Finally, the measure aims at reducing the share of cases over 3 years old in total backlog to at most 8% compared to 2020 data. As can be seen from the table below, there is an overall reduction of 2.13% in the share of cases over 3 years old in the total backlog compared to 2020 figures, with the category of cases from 3 to 7 years old being the most problematic as they have increased the backlog instead of reducing it.

Unresolved old cases (over 3 years old) in 2020, 2021, and 2022

All courts				
Unsolved old cases at the end of the year	**in 2020**	**in 2021**	**in 2022**	**+/- % 2022 to 2020**
Items up to 3 years old	242.151	282,694	225,546	-6.86%
Items from 3 to 7 years old	51,433	53.144	65,253	26.87%
Items older than 7 years	21,556	19,064	17,643	-18.15%
IN TOTAL	**315.14**	**354.902**	**308.442**	**-2.13%**

Source: Statistical overview of the work of the Croatian courts for 2022

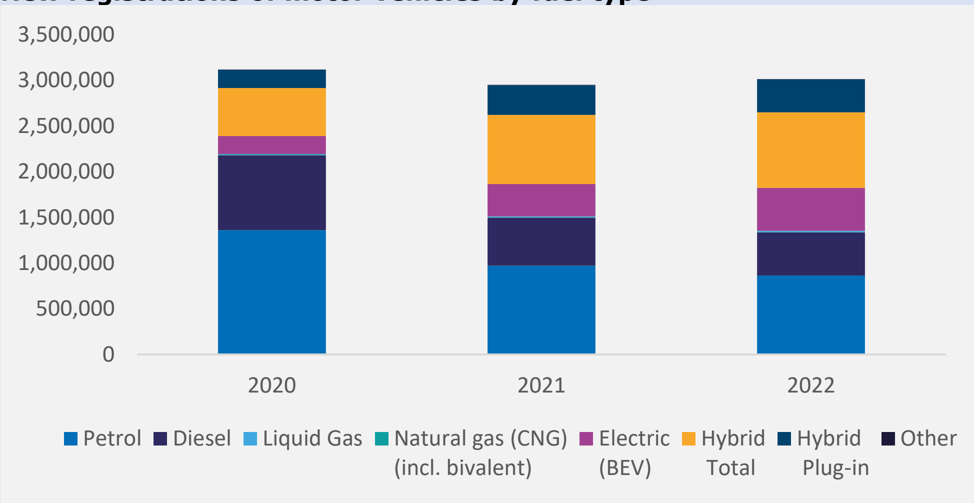
Box 3. German reform on ten-year tax exemption for purely electric vehicles

The measure consists of a ten-year tax exemption starting from the registration of an electric vehicle. It shall be limited to purely electric vehicles. The exemption shall apply to all natural and legal persons. It aims at the promotion of electro-mobility.

With the aim of developing clean mobility solutions to decarbonise the transport sector, a ten-year exemption from the registration of an electric vehicle was included in the Seventh Motor Vehicle Tax Amendment Act (Bundesgesetzblatt, 2020), which was passed even before the approval of the German NRRP (milestone foreseen by 4Q2020 and not yet assessed in a payment request). This amendment extended the duration of the exemption, which existed in Germany before. According to the 3rd section of the abovementioned Act, electric cars receive a complete tax exemption for a maximum period of ten years, which takes from the first registration. The exemption only includes cars that are first registered before 31st December 2025.

Bearing in mind the existence of complementary measures by the German government to promote the use of electric mobility, such as the Ecobonus and a premium of up to €4,500 for purchasing a Battery Electric Vehicle (BEV), there seem to be positive results. Using the number of new registrations of motor vehicles data from The Federal Motor Transport Authority (KBA), there has been a steady growth of pure electric vehicles over the last few years (see figure below), comparing the figures for 2020, 2021 and 2022. This suggests that the measure is bringing good results in this sector in Germany.

New registrations of motor vehicles by fuel type



Source: KBA (2023)

Box 4 Introduction of 5G reform in Belgium

This reform is fully implemented according to the dedicated RRF website of the Federal government. The Federal Government launched – as foreseen by the first milestone foreseen by 2Q2021 - on 30 April 2021 a national plan for fixed and mobile broadband, which builds on the actions of this reform and attempts to achieve the European connectivity targets by 2025. The plan, as stated on the Belgian RRP dedicated website[49], is also based on different projects that are being held under the coordination of the Minister of Telecommunications.

The plan revolves around 5 different axes: i) Map network coverage and identify dead zones; ii) Facilitate the deployment of broadband by creating a temporary national BCO which will coordinate cooperation between public authorities and operators and investors more broadly, as well as the implementation of EU recommendations for connectivity; iii) Encourage investment in white areas without fast internet; iv) Create support for fibre and 5G deployment through the 5G website; v) Set up a broadband unit within the FPS economy.

The plan was designed to support the European targets for connectivity, to be reached by 2025. They include: i) Access to a 100 Mbps internet connection for every household, with the possibility of upgrading those networks to reach much higher speeds; ii) Access to gigabit connectivity for all major socio-economic drivers (e.g. schools, universities, research centres, …) which rely on digital technologies; iii) Availability of uninterrupted 5G coverage in all urban areas and on all major roads.

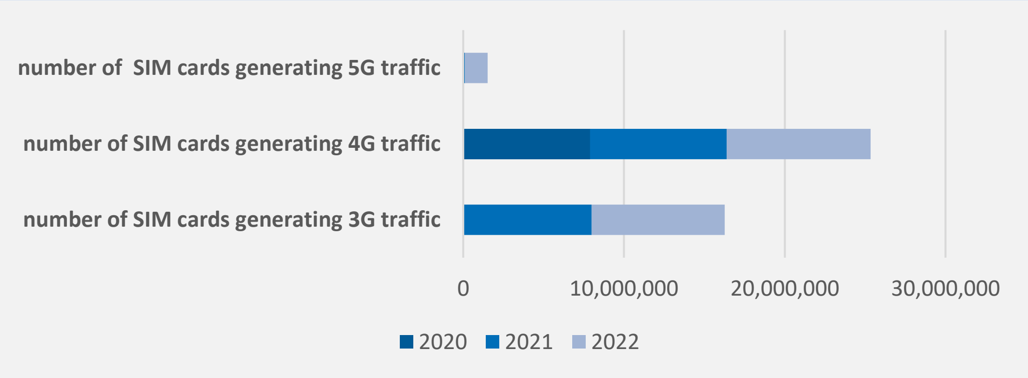
To properly implement the plan, the Belgian Government originally identified best practices of the EU Connectivity Toolbox and adopted a roadmap to simplify licensing and authorisation procedures functional to broaden 5G and very high-capacity networks such as fibre. In October 2021, as foreseen by the second milestone of the reform, planned by 4Q2021 - the publication of the 5G law and the royal decrees for the allocation of the EU pioneer radio spectrum bands defined by the Radio Spectrum Policy Group for 5G established the legislative framework for 5G spectrum allocation. In April 2022, the Minister of Telecommunications – in line with the milestone foreseen in 2Q2022 - published a report outlining the status of the implementation process of the Connectivity Toolbox, as foreseen by the roadmap. Moreover, the Belgian Institute for Postal Services and Telecommunications completed the 5G auction under investor-friendly conditions, as foreseen by the third milestone for 2Q2022. In July 2022, the legislative frameworks regarding radiation standards of the Flemish Region, the Brussels-Capital Region and the Walloon Region were revised, as foreseen by the fourth milestone linked to the reform (3Q2022), on the basis of the

[49] Source: https://nextgenbelgium.be/

recommendations provided by the competent committees and ECs, to guarantee an effective deployment of the 5G spectrum, both for private and industrial use.

Although it is too early to talk about results and considering that the plan also includes a complementary investment in the area of 5G, the data from the Belgian Institute for Postal Services and Telecommunications confirms a slight improvement in the area of 5G. This can be seen from the number of SIM cards by the type of traffic they generate (see graph below). While there were no SIM cards generating 5G traffic in the year 2020, a very small number of SIM cards were available in 2021, and a significant increase occurred in 2022.

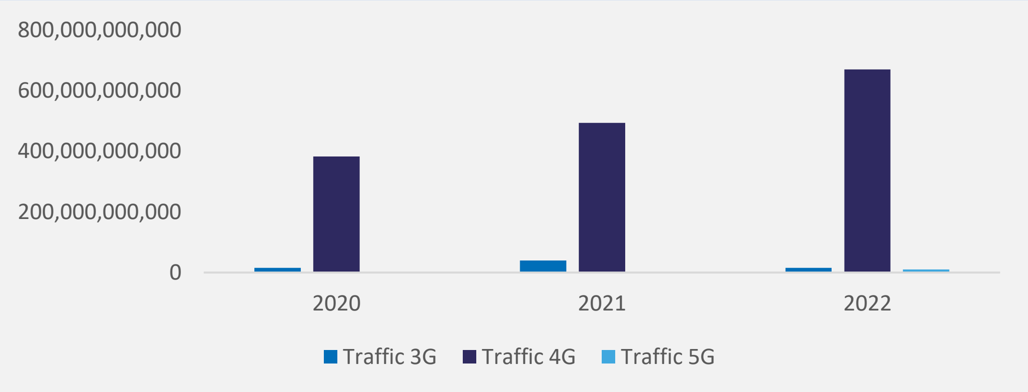
Number of SIM Cards generating 3G, 4G and 5G traffic



Source: Belgian Institute for Postal Services and Telecommunications

This was accompanied by an increase in 5G megabyte traffic in 2022. This confirms the growing use of 5G in Belgium.

3G, 4G and 5G traffic in Belgium for the years 2020, 2021 and 2022



Source: Belgian Institute for Postal Services and Telecommunications

***Box 5.* The public administration reform in Italy**

The reform of the Public Administration is one of the first tangible results of the RRP. It revolves around three axes:

- Access: the simplification and digitisation of recruitment procedures to streamline recruitment procedures, attract the best skills and encourage rapid generational turnover that brings the Italian PA in line with the most advanced experiences of other European countries.

- Good administration: simplification policies and interventions to reduce the times of administrative procedures and the burdens borne by citizens and businesses in accessing services; a line of intervention that for the first time accompanies regulatory interventions with investments in people, technologies and the digitisation of procedures.

- Human capital: training, development, organisation of work to align knowledge and organisational skills with the needs of a modern and effective administration.

Among the measures adopted so far, of particular relevance is the activation in the autumn of 2021 of the 'Recruitment Portal', the single platform, established by Law 56/2019 on the basis of an indication contained in Law Decree 80/2021, where administrations, employees and those interested in entering the civil service will have to find and enter all the fundamental data concerning job opportunities in the public sector, access procedures and their implementation. Law Decree 80/2021 also foresees the creation of a prospect of young people joining public structures: administrations are given the possibility of activating specific training and work projects for the acquisition, through apprenticeship contracts, of basic and transversal skills, as well as for vocational guidance by graduates and university students. To reduce the time of competition procedures, simplified arrangements for holding the tests are introduced through Article 10 of Law Decree 44/2021, converted by Law 76 of 28 May 2021, for all public administrations.

Action was also taken on what were defined as the 'bottlenecks' that would have slowed down or prevented the implementation of the projects envisaged by the NRRP). The measure introduced, in particular, important changes to the structure of procedures on environmental impact assessments, digital infrastructures, renewable energy sources and public contracts. These interventions were deemed necessary to remove the main bureaucratic constraints and speed up, through the simplification of procedures, the energy transition and the green economy. Particularly important is also Law Decree 80/2022, which foresees the adoption for all administrations of the 'Integrated Activity and Organisation Plan', of three-year duration but updated annually, in which the various instruments currently used for planning the activities of public structures (performance plan, plan for the prevention of corruption and transparency, staff requirements plan, activity plans for smart-working management, for respecting gender equality, for simplification and reengineering) are brought together.

By the first half of 2023, all implementing measures of the civil service reform were expected to come into force. The adoption of some of them was anticipated with the implementation of milestone M1C1-56 (fulfilled at the end of the first half of 2022). Further measures have already been fulfilled in the second half of 2022. In particular, the Interdepartmental Decree of the Department of the Civil Service, in agreement with the Department of Equal Opportunities, containing the Guidelines on 'Gender Equality in the Organisation and Management of Labour Relations with the public administrations'. The draft decree of the President of the Republic concerning the update of the Code of Conduct for public employees, approved by the Council of Ministers on 1 December 2022, was approved. Similarly, after preliminary examination by the Council of Ministers, the Council of State and the Parliamentary Committees, the draft decree of the President of the Republic amending the discipline of public competitions has entered into force.

The combined adoption of these measures is expected to have important effects on the macroeconomic aggregates. According to D'Andrea et al. (2023), the public administration reform triggers a significant impact on GDP, aggregate investment and consumption, improves labour productivity and is associated with an increase in the capital/profit share (also) at the expense of the wage share. The observed dynamics are not due to a decrease in wages - which improve in absolute terms - but to the higher growth of capital and profits to wages in absolute terms (D'Andrea et al., 2023). These findings can be better explained by looking at the public sector reform simulation channels: i) the increase of total factor productivity, ii) the reduction in the bureaucratic costs faced by firms, and iii) the labour force upskilling. The first tends to impact labour and capital income via increased factor productivity positively. The second one positively affects profits but negatively impacts wage income because of the reduced employment devoted to overhead labour. Finally, the third channel has a weak positive effect on wage income. The combined effects of the analysed shocks favour a more substantial increase in the income from capital and profits to wages, resulting in a reduction in the latter's share (D'Andrea et al., 2023).

***Box 6.* The Italian investment in the Ecobonus, the Sismabonus and the Superbonus**

To assess the results of the RRP investment in the Ecobonus, the Sismabonus and the Superbonus (€13.95 billion originally allocated by the NRRP), it is impossible to disentangle it from the entire envelope allocated by the Italian government for this measure (€68.7 billion). The RRF investment part has entered into force by the end of 4Q2021 as foreseen by the investment-related milestone. In what follows, we then focus on the Superbonus results. As of June 2023, the first milestone has been achieved, while the first target is in progress.

The economic impact: The effect of the 110% Superbonus on economic activity and the public budget has proved to be sizeable by a large strand of recent literature. According to Galli et al. (2023), who provide their estimates based on the sum of sectoral value added minus net indirect taxes and production subsidies, this measure contributed to a 0.5 per cent GDP growth in 2021 followed by a 0.9 per cent increase in 2022. The study conducted by CRESME (2022), which instead used input/output tables – otherwise called tables of structural interdependencies - to measure the overall production value and derive from it the relative economic added value, highlighted an even stronger impact of the Superbonus investments: such interventions generated 8.9 per cent of GDP growth in 2021, which increased by 22 per cent in 2022. In absolute values, the contribution to GDP of the works carried out through the Superbonus measure is estimated by the CNI Study Centre to be around €73 billion over the period 2021-2022 (Censis, 2022).

Obviously, a significant component of GDP growth was led by the construction sector. Only in 2021, the sector contributed by more than 10 per cent of the total growth, resulting in an additional production value of €90.5 billion and in raised government revenues of €12.2 billion (Di Nardo et al., 2022). In the same year the value added in the construction sector (estimated in €32 billion) increased by 21.6 per cent compared to 2020 and by 14.7 per cent compared to 2019 (ibid).

However, according to a preliminary study by the Bank of Italy (Alpino et al., 2022), only half of the €55 billion of Superbonus-related investments certified by ENEA would have an additional nature. The Bank of Italy’s analysis evaluates the contribution of the NRRP as an investment concentrated in the first year, but the State's expenditure is spread over several tax periods. The investment is paid for by the private individual, who then profits within five years through tax deductions. It should be remembered that, in addition to the so-called driving interventions (such as, for example, the thermal coat), the bonus also allows the financing of other types of interventions (such as the replacement of boilers or fixtures and installation of solar panels) which, in general, are carried out in the ordinary way.

The environmental impact: The Superbonus measure triggered a sensible environmental impact. According to Nomisma (2023) the Superbonus measure activated 1.42 million tons the total reduction of CO_2 emissions released into the atmosphere, responsible on average for 40% of the total, with peaks of up to 70% in large cities. CRESME’s study (2022) estimates an even higher impact: from November 2021 to October 2022 the invested public resources generated a total energy saving of 0.72 Mtoe/year, equal to an annual reduction of 2.47 million tonnes of CO_2. This means that, as a result of the introduction of this measure, the annual target foreseen for the residential sector by the Integrated National Energy and Climate Plan (0.33 Mtoe/year) has been exceeded 2.2 times in the given time frame. Similar findings are confirmed by Censis report (2022): based on ENEA data, the study estimates in two years Superbonus-related investments produced energy savings of about 11,700 GWh/year. Together with the approximately 150 GW/year of new renewable power installed, the authors estimated a lower gas consumption for residential buildings of 1.1 billion cubic metres of gas per year. A tangible effect of lower levels of consumption can be inferred by considering household budgets, with aggregate savings of around €29 billion: this is equal, on average, to €964 saved by each consumer per year (Nomisma, 2023).

Conversely, the paper by the Bank of Italy (Alpino et al., 2022) states that “the Superbonus is not a cost-effective way of tackling climate change”. The authors’ analysis suggests that the Superbonus could only be worth pursuing in its current form if the substantial non-climate-related benefits resulting from politics are taken into account or a minimal discount rate is adopted.

The employment and social impact: The introduction of the investment measure positively impacted sectoral employment levels. While Nomisma’s study (2023) quantifies the impact in a considerable increase of 641,000 employed in the construction sector and 351,000 employed in related sectors, the report from Censis (2022) estimates that, in the period from January to October 2022 alone, the Superbonus has activated 636,000 jobs, of which 411,000 in the construction, technical services and related sectors. From a social perspective, 25% of those who have already taken advantage of the measure have a higher-than-average family income (over €3,000 per month), and in 23% of cases own a second home (Nomisma, 2023). The average increase in the property value of housing units that have benefited from energy upgrading is estimated at between 3 and 5 per cent, following a jump in the energy class of the property (Censis, 2022).

EQ2.3: How effective has the RRF been in supporting reforms that address the CSRs (as the support for implementing reforms is a key feature/novelty of the instrument)?

Key findings:

The reforms indicated by MSs address all or a significant subset of challenges identified in the Semester's CSRs. **Most interviewees, both at national and EU level confirm that the RRF contributed to putting on the agenda long-awaited reforms**, as reforms benefit from being complemented by investments. The strength of the link between CSRs implementation and financial support decreases in the case of MSs that receive a proportionally smaller financial envelope, as they are less incentivised to commit to structural reforms.

Since the creation of the RRF, several studies have highlighted the **potential positive interaction between the European Semester and the Recovery and Resilience Facility**, considered as mutually beneficial (Moschella, 2020). The EU Semester offers important informational advantages for the preparation of recovery and resilience plans. The RRF, in turn, offers important implementation benefits for the policy advice issued under the European Semester, which acquires new prominence (Vanhercke and Verdun, 2021). The RRF offers financial incentives in return for a coherent package of public investments and reforms, thereby giving European governments additional means to overcome domestic institutional resistance in the face of Semester tools and recommendations.

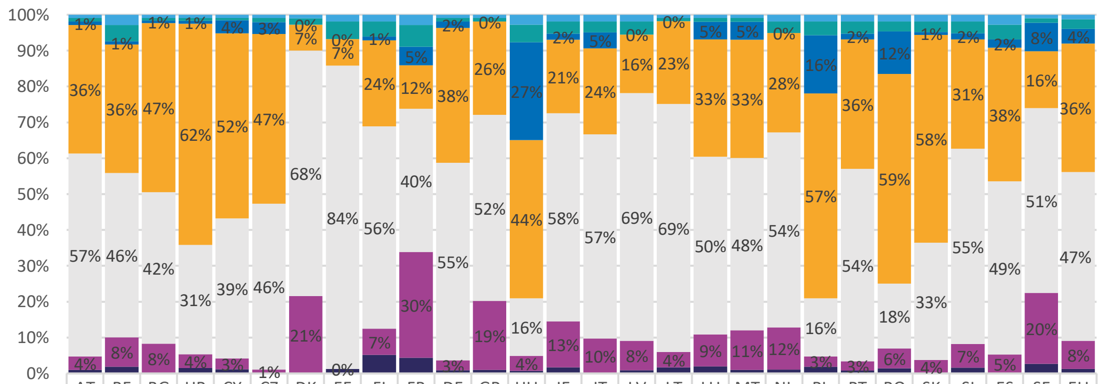
Before the adoption of the RRF, the Semester support for the implementation of reforms was broadly considered weak. In the (ECA, 2020a), the ECA found that over the 2011-2017 period, only 1.6 % of CSRs were deemed to have been 'fully implemented' within a year of being issued. 'Substantial progress' was achieved in only 4.6 % of the CSRs. The multi-annual assessment showed a better but still not very positive picture: MSs implemented 26 % of the CSRs substantially or fully over the 2011-2018 period. Such assessment has been shared also by the EC in its reply to the report. The EC at the same time observes that "*the fact that since the outset of the European Semester in 2011, more than two-thirds of CSRs have been implemented with at least 'some progress' confirms that important reforms are being carried out, though they may take longer. Some reforms face strong political and societal opposition even when the government demonstrates its commitment*" (ECA, 2020a).

In its recommendations to the EC, the ECA recommended further strengthening the link between EU funds and the CSRs. In its reply, the EC partially accepted this recommendation for the MFF 2021-2027 but also indicated that the at the time proposed RRF Regulation would have provided large-scale financial support to reforms and investments undertaken by MSs, helping MSs to address the challenges identified in the European Semester. With hindsight, we can say that the RRF indeed contributed to strengthening the link between EU funds and CSRs and accelerating the implementation of the latter. Based on the EC's assessment in the Staff Working Documents accompanying the proposal for the Council Implementing decision on the national plans, **the reforms indicated by MSs address all or a significant subset of challenges identified in the Semester's CSRs** (EC, 2022a). In the Special Report 21/2022 (ECA, 2022a), the **ECA recognizes that the NRRPs contribute to addressing a significant subset of CSRs**. In its reply to the ECA report, the EC stressed that indeed the RRF Regulation foresees that MSs should address all or a significant subset of CSRs, also taking into account the financial contribution (and where relevant the loans requested). Accordingly, the EC stressed that MSs could decide to address all or a significant subset of CSRs. Overall, as illustrated more in detail in the previous answers, thanks to the RRF, important reforms have been included in the RRPs in the domain of justice (e.g. Bulgaria, Poland, Romania, Italy and Hungary), labour market and pension (e.g. Spain, Belgium, Slovakia), social protection policies (Croatia), taxation (Cyprus) public administration (Germany, Italy, Greece), liberalisation of closed professions (Portugal) and spending review (France, Belgium) to address key challenges identified in the CSRs.

Most of our interviewees both at national and EU level confirm that the RRF contributed to putting on the agenda long-awaited reforms linked to the CSRs that would have

otherwise very likely not been discussed. In particular, interviewees note that reforms benefit from being complemented by investments, as "putting a price tag" on reforms acts as an incentive. The link between the financial support is unanimously recognised as the most relevant factor explaining the RRF's success in introducing reforms addressing the Semester's CSRs. Furthermore, the RRF serves as an incentive to internally steer the political debate and overcome resistance against long-awaited reforms. In this respect, the RRF's capacity to support reforms addressing the CSRs' implementation depends on the degree of ownership of the national government. When the ownership is high, the RRF has been presented as a '*vincolo esterno*' that pushes MSs to stick to the measures indicated in the recovery and resilience plans. **Among respondents of the public consultation, there is also a strong sentiment that reliance on one instrument for reforms and investments has been beneficial.** More than four out of five respondents to the public consultation agree with this statement at least to a limited extent, while a plurality agrees to a large extent. The **effectiveness of the RRF in supporting reforms addressing CSRs is confirmed in the figure below**, which shows the implementation progress of 2019-2020 CSRs based on MS's policy actions to address the challenges identified in CSRs. As of today, 47% of the CSRs have some progress, 36% have limited progress, 8% have substantial progress, and 1% are fully implemented.

Figure 5: CSRs' state of Implementation by MSs over 2019-2020



	AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	GR	HU	IE	IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	EU
CSR No Longer Relevant	1%	3%	1%	1%	1%	1%	1%	2%	2%	3%	1%	1%	3%	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	3%	1%	1%
Not Assessed / No Input to Add	1%	5%	1%	1%	1%	1%	2%	5%	4%	6%	1%	1%	5%	3%	3%	4%	1%	1%	1%	3%	4%	3%	3%	3%	3%	4%	1%	3%
No Progress	1%	1%	1%	1%	4%	3%	0%	0%	1%	5%	2%	0%	27%	2%	5%	0%	0%	5%	5%	0%	16%	2%	12%	1%	2%	2%	8%	4%
Limited Progress	36%	36%	47%	62%	52%	47%	7%	7%	24%	12%	38%	26%	44%	21%	24%	16%	23%	33%	33%	28%	57%	36%	59%	58%	31%	38%	16%	36%
Some Progress	57%	46%	42%	31%	39%	46%	68%	84%	56%	40%	55%	52%	16%	58%	57%	69%	69%	50%	48%	54%	16%	54%	18%	33%	55%	49%	51%	47%
Substantial Progress	4%	8%	8%	4%	3%	1%	21%	0%	7%	30%	3%	19%	4%	13%	10%	8%	4%	9%	11%	12%	3%	3%	6%	4%	7%	5%	20%	8%
Full Implementation	1%	2%	0%	2%	1%	0%	0%	1%	5%	4%	1%	1%	1%	2%	0%	1%	2%	2%	1%	1%	2%	1%	1%	0%	2%	0%	3%	1%

Source: Authors' elaboration based on the ECs database (EC, 2023)
Notes: Data are broken down by state of implementation state and are expressed as a percentage of the total CSRs in 2019 and 2020. CSRs *No Longer Relevant* and *Not Assessed/No Input to Add* are included for completeness. Percentages are displayed for *Some Progress, Limited Progress, Substantial Progress* and *Full Implementation.*

The effectiveness of the RRF in supporting reforms varies across countries. The **strength of the link between CSRs implementation and financial support decreases in the case of MSs that receive a proportionally smaller financial envelope, which are less incentivised to commit to structural reforms**. Zooming in on social and employment reforms in six MSs (Italy, Germany, Spain, Croatia, Belgium and Austria), Corti and Vesan (2023) notice – similarly - that the number of reforms adopted to address the challenges identified in the CSRs varies across countries and largely depends on the size of the financial envelope whereas **the level of commitment is higher in highly RRF beneficiary countries**, which are also the ones most in need for reforms.

By contrast, in countries like Germany and Austria, the ambition of the social reforms included in the plan is more limited (if investments in social matters are not taken into account).

Overall, we notice that **in countries with comparatively low financial envelope, MSs include reforms that only partially or relatively address the challenges identified in the CSRs**. In other cases, they include reforms that would have been nonetheless implemented and were already included in the government's agenda, like in the cases of Austria, Finland, Germany, Ireland or the Netherlands. The inclusion of reforms that would be implemented regardless of the RRF, is also the case of those countries that had a change of government at the time of the drafting of the RRPs, like Lithuania or Belgium.

Finally, some **interviewees with national coordination bodies expressed concern that the wide range of reforms and the depth required by CSRs is too ambitious when confronted with the test of practical implementation.** National representatives shared that some reforms might be fully blamed on the EU and considered external policies.

EQ3: Was the EC's communication (including information discussions preceding the formal submission of RRPs/payment requests, timing and availability of guidance) effective in supporting the timely implementation of the RRF?

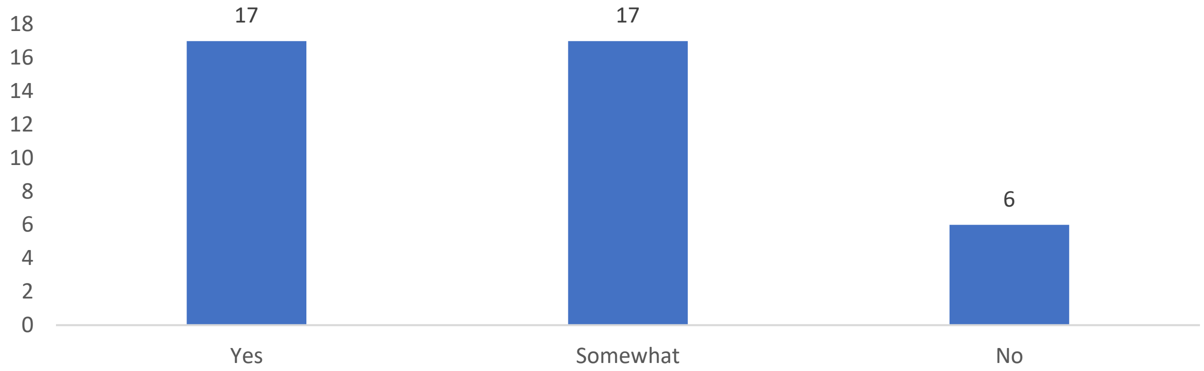
Key findings:

The EC's communication in **the drafting phase of the RRPs is considered timely and clear by the majority of the MSs**. Still, two aspects that could be improved have been indicated by MSs. The first regards the **DNSH guidance**, which arrived – also due to the ongoing negotiations on the Green Taxonomy - late in the drafting phase of the RRPs, thus creating some additional burden for administrations. The second regards **the perceived low interaction among MSs, especially on cross-border projects**, which – according to MSs themselves – could have been better coordinated by the EC.

More **concerns have been raised about the EC's communication in the implementation of the RRPs**. In particular, MSs complain about the unclarity of the role of control and audits and the lack of sufficient flexibility in the interpretation of milestones and targets. Concerning the latter, MSs raised concerns with respect to the **M&T's assessment and the payment suspension methodology**. The EC Communication of February 2023 has been broadly welcomed as a positive step to clarify the assessment criteria for the payment requests or (partial) suspension and the milestones and targets' satisfactory fulfilment. The framework is considered to be somewhat satisfactory by all national coordination bodies when it comes to investments, while some discretion and unclarity are still associated with **reforms**.

With respect to the EC's communication, a distinction should be made between the drafting phase of the plans and the implementation phase. Moving from the former, the EC was responsible for providing MSs with the needed operational guidance for the preparation of the plans. Due to time constraints, however, the EC had to develop such guidance in September 2020 before the legal text on the RRF was finalised. This notwithstanding, **the majority of the MSs consider that the communication was timely and clear** (see figure below).

Figure 6: Timeliness and clarity of the EC's communication with respect to guidelines and support documentation for preparation of the RRPs (N=40)



Source: own elaboration, based on the survey with national coordination bodies

Only two concerns have been highlighted by the majority of the national coordination bodies.

The first regards the publication of the **'do no significant harm' (DNSH) guidance** that was adopted at the same time as the RRF Regulation. While such delay in the publication of the guidance was due to the ongoing debate on the Green Taxonomy, several MSs complained about the fact that it came **too late**, and they had to change their draft plans. Again in its Special Report 21/2022, the ECA noted (paragraph 59) that '*the EC's assessment documentation of the DNSH checklists was spread across multiple working papers and lacked a summary list showing all DNSH assessments for every measure to back up its overall conclusion in the SWD and its final assessment' (*ECA, 2022a). The Court further observed (paragraph 60) that '*the nature and scale of the impact of potentially harmful measures was not quantified in the checklist or in any other form. This made it difficult to assess whether the explanations provided, and the mitigating measures suggested were sufficient to ensure compliance with the DNSH principle'*. In its reply to the ECA Special Report, the EC observed that '*a quantification of potential impact in the DNSH checklists is neither required, nor would it always be meaningful or even possible for MSs* and further explained that it '*does not believe that a lack of quantification made it difficult to assess compliance with DNSH'*, and it sees *'no reasoning or evidence why such a quantification would bring significant added value over the current largely qualitative descriptions and explanations'* (EC, 2022b).

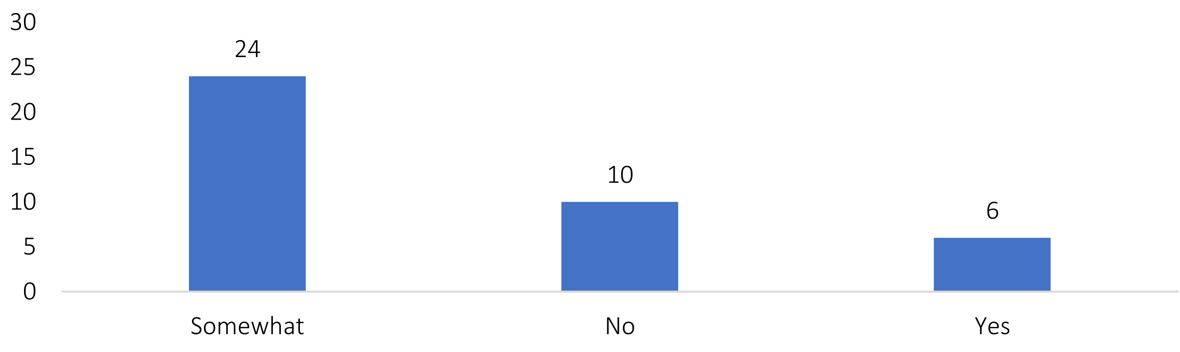
The second aspect that MSs indicated could be improved is the **communication with other countries**. Several countries in fact stress that they would have benefitted from a **more regular exchange of best practices** not only with the EC but also with other MSs, this has been especially highlighted for the identification of cross-border projects (Corti et al., 2022a; ECA, 2022b). With respect to cross-border projects, even though in its guidance to MSs on how to prepare their plans, the EC recommended investing in these kinds of projects, as suggested in Art. 15(3)(cc) of the RRF regulation. Interviewees observe that a more active role of the EC in the **coordination process between MSs** might have helped MSs to identify (and agree on) common cross-border projects.

While the guidance on drafting the plans was broadly welcomed positively by all MSs, more concerns have instead been raised with respect to the **implementation of the RRF**. Climent del Castillo (ECA, 2022b), for instance, highlights that the EC, unlike in the case of the Structural Funds, has provided no specific guidance for implementing the RRF, besides the 'Technical guidance on the application of DNSH under the Recovery and Resilience Facility Regulation', which focuses on the programming phase rather than the implementing phase. Based on the consultation with national coordination bodies, concerns were raised for two aspects of the RRF: 1) unclarity with respect to the **control and audit requirements** and 2) **interpretation of flexibility** (i.e. whether deviation is accepted) with regards to assessing M&T fulfilment, the criteria used for the payment requests and the criteria for the plans' modification.

With respect to the **controls and audits' requirements**, the majority of the MSs consider that the information was only somewhat clear and timely (see figure below). Such unclarity is due – according to MSs - to the **confusion on the audit responsibilities** at the European and national levels, which require for the RRF – as a performance-based instrument - innovation in the audit approach. In principle, audit responsibilities in the RRF are mostly delegated to MSs. This does not mean that the EC does not check the national audit and controls systems – as this is one of the assessment criteria that the EC checked before approving the NRRPs. Neither it means that the EC does not have sufficient mechanisms to act in case of misuse of funds. Overall, the novelty of the audit and control requirements for the new performance-based instrument created – according to many MSs – uncertainty and an overload of audits and controls. This affected the efficient implementation of the plans.

A different perspective emerges instead from the ECA. In the Special Report 07/2023 (ECA, 2023b), the Court assessed the adequacy of the design of the EC's control system for the RRF, by looking at how the system was set up to ensure the fulfilment of milestones and targets and the protection of the financial interests of the Union. The Court concluded that '*the EC has designed a control system that provides for an **extensive process** for verifying the fulfilment of milestones and targets.* At the same time, the Court observed that '*the control system provides **only limited verified information** at EU level that RRF-funded investment projects comply with EU and national rules. The lack of such verified information impacts the assurance the EC can provide and results in an EU-level accountability gap*'. In its response to the ECA report, the EC (2023g) argued that '*the RRF control framework is tailored to the legal design of the RRF, which attributes a clear responsibility for the assessment of milestones and targets to the EC and a clear **responsibility to Member States** – as beneficiaries – to take all the appropriate measures to protect the financial interest of the Union*'. This said, the EC further adds that it is still '*very actively engaged in **ensuring an adequate protection** of the financial interest of the Union*'. Notably, the EC argues it has made a '*thorough **assessment of the adequacy of national control systems** in the context of the assessment of the recovery and resilience plans, [and, second], it has insisted with Member States on additional and timebound improvements to those systems, as a pre-condition for future disbursements'.*

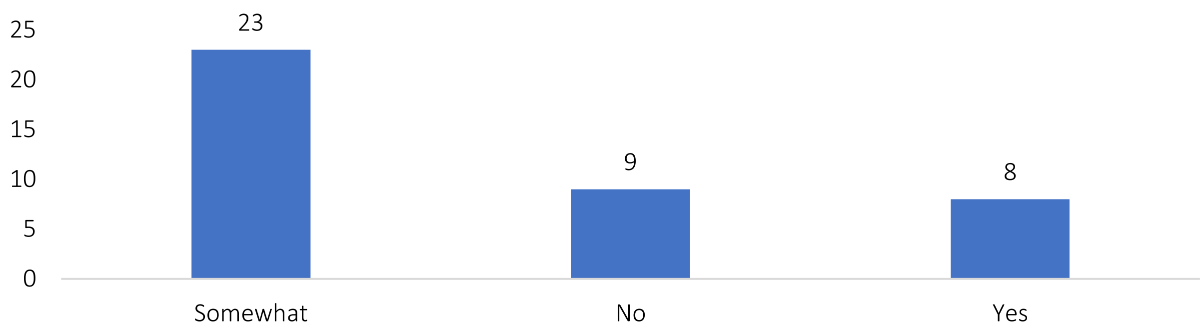
Figure 7: Timeliness and clarity of the EC's communication with respect to the audit and control requirements (N=40)



Source: own elaboration, based on the survey with national coordination bodies

The second aspect that has been mentioned by national coordination bodies among the less effective aspects of the EC communication during the implementation of the plans regards the **interpretation of milestones of targets' fulfilment**, the criteria used for the payment requests and the criteria for the plans' modification. Concerning the M&Ts assessment and the payment suspension methodology, as visualised in the figure below, several MSs observed that the communication on flexibility and the payment suspension methodology came **too late and still remained (somewhat) unclear** (Hungary, Portugal, Estonia, Greece, Austria, Slovakia, Romania, Spain, Italy, Czechia, Latvia, Poland, Netherlands, Lithuania, Sweden and Ireland). Some national coordination bodies lamented the lack of transparency and equal treatment among MSs, and a significant number of MSs lamented the excessively **literal interpretation** of milestones and targets in the EC assessment (Estonia, Spain, Lithuania). In this respect, the EC Communication of February 2023 has been broadly **welcomed** by all actors as a positive step to clarify the assessment criteria for the payment requests or (partial) suspension and the milestones and targets' satisfactory fulfilment. The framework is considered to be somewhat satisfactory by all national coordination bodies when it comes to investments while some **discretion and unclarity are still associated with reforms**.

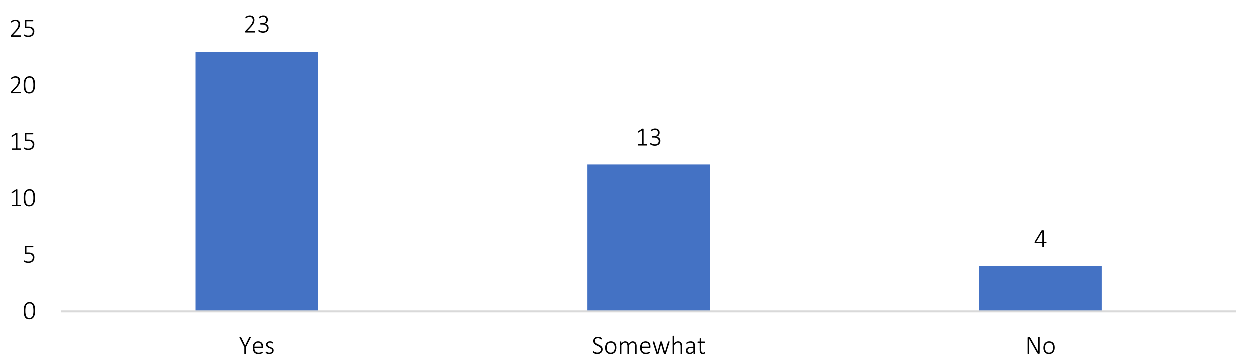
Figure 8: Timeliness and clarity of the EC's communication with respect to the assessment criteria used for the payment request (N=40)



Source: own elaboration, based on the survey with national coordination bodies

Finally, MSs are **largely positive** about the communication of the EC on **REPowerEU guidelines** (see figure below).

Figure 9: Timeliness and clarity of the EC's communication with respect to guidelines on REPowerEU (N=40)



Source: own elaboration, based on the survey with national coordination bodies

EQ4.1: To what extent has the RRF been effective in cushioning the social and economic impact of the crisis, in particular on women?

Key findings:

The effectiveness of the RRF in cushioning the impacts of the crisis on women is expected to **vary among MSs and depends on various factors**, including the share, topic areas and quality of gender-related measures, the extent of gender mainstreaming and male employment bias, and the actions that have been and will be taken during the RRF's implementation, monitoring, and evaluation. Overall, some have a **more critical stance** on the performance of the RRF regarding gender equality, while others **underline the strengths and many efforts** taken to ensure an inclusive recovery and mitigate the effects of the crisis on women in a challenging context.

Looking at the effectiveness overall, three of the four common indicators which have been disaggregated by gender show that **more women than men were supported** by the RRF so far. Many relevant **gender-related CSRs** have also been reported to have **at least a degree of progress**. On the other hand, three ex-ante national gender impact evaluations on the RRF investments are **rather critical** about the gendered impact of some RRPs**.** Analysed gender-flagged measures indicate that relevant **outputs have been achieved already, and relevant results and impacts are expected**. Many results and impacts have, however, not yet materialised, depend on further implementation and are generally (especially reforms) difficult to measure.

Since all evaluation questions (4.1-4.10) deal with addressing the socio-economic impacts of the crisis, this evaluation question focuses on the (expected) effects on women only. **This evaluation question summarises the specific analysis of gender equality in Section 4.2, which includes a more in-depth analysis with more examples and elaborations on the findings.**

Generally, some interviewees and literature (e.g. EIGE, 2023; Badalassi, 2022; Pimminger, 2022; Farré, 2022) tend to have a **more critical stance** on the performance of the RRF, while others instead tend to **underline the strengths and many efforts** taken to ensure an inclusive recovery and mitigate the effects of the crisis on women in a challenging context (e.g. EC, 2022a; EC, 2023h). When looking at the **RRF plans overall**, MSs have been encouraged to include **gender equality considerations** (by e.g. requiring an explanation of how the measures in the RRP will contribute to gender equality) and they needed to address all or a significant subset of the CSRs (related gender equality). There are, however, also **general limitations**, including the late inclusion of gender equality in the RRF and the absence of a gender-related assessment criterion (Sapała, 2022; EIGE, 2023; EC, 2022a; EC, 2023h).

Various factors are expected to influence the effectiveness of MSs. When looking at the measures in the RRPs, some MSs have a higher **share of gender-flagged measures**[50] (e.g. ES, IT, CY, and CZ) than others (e.g. DK and LU) (EC, 2022a; EC, 2023h). Also, some **topic areas** have more measures (incl. women's participation in the labour market and early childhood education) than others (e.g. addressing gender-based violence and the gender pension gap) (EIGE, 2023). In addition, most interviewees highlighted that other **quality-related factors** might also influence the effectiveness (e.g. explicit linkages to gender-related CSRs, effective intervention areas, or other reforms and investments).

The extent of gender mainstreaming in the plans has also been highlighted by literature and several interviewees to influence the effectiveness. Some MSs (e.g. ES and IT) have initially **mainstreamed gender (reasonably) well**. Gender equality seems, however, **not to be fully treated as a horizontal principle** in many RRPs (EIGE, 2023; Farré, 2022). Several studies have expected that a lack of gender mainstreaming in the green and digital transformation pillars will be linked to the possibility of a **male employment bias**. Measures in these pillars have been expected to lead to an increase in male employment and benefit employment-wise men over women, especially in the short term, since the workforce of these related sectors is traditionally male-dominated (Farré, 2022; Klatzer and Rinaldi, 2020; EIGE, 2023; Badalassi, 2022; Pimminger, 2022; De Luca, 2023; Clancy et al., 2023). On the other hand, some interviewees and literature (EC, 2022a) have underlined that measures in the **green and digital pillar are expected to positively impact gender equality** through measures which will benefit women as final beneficiaries (in employment and other topic areas). For example, by stimulating access to remote education, health services and affordable social housing. Common indicators, as will be discussed below, do also not yet underpin this male employment bias (the unclarities about the data used need to be noted here however).

[50] In line with the methodology set out in the Delegated Regulation (EU) 2021/2105 (2021), the EC, in consultation with Member States, assigned in its assessment tools a flag to measures with a focus on gender equality. It should, however, be noted that the EC applied this methodology not only to measures of a social nature, but also to all other measures included in adopted RRPs which focus on gender equality. In addition, measures which are not gender-flagged may, however, also still have a positive impact on gender equality (EC, 2023h).

The **implementation** has and will have a critical influence on the effectiveness of the RRF in cushioning the impact of the crisis on women. Most milestones and targets (243) linked to gender-flagged measures **still need to be fulfilled, and the EC and MSs have taken several actions** in the implementation, which might address some limitations. The EC has encouraged MSs to include more gender equality considerations in the context of the REPowerEU; it has organised informal exchange sessions on gender mainstreaming considerations (including in the implementation of measures, for instance, through equality-sensitive procurement); and provides gender expertise within the Technical Support Instrument (TSI) (EC, 2023i; EIGE, 2023; EC, 2023j).

Exploring the common indicators disaggregated by gender, three out of four indicate that **the RRF has supported more women than men**. Especially, more women than men (almost twofold) were supported by the RRF in employment or engagement in job-searching activities (409,036 compared to 279,054) and education and training on digital skills (628,376 compared to 334,254). Other disaggregated indicators show **variances among MSs** (e.g. young people who have received support) **or have overall supported** more men (e.g., more male researchers have been supported). **Progress on common indicators 12** (increased annual capacity of health care facilities) **and 13** (increased new or modernised childcare and education facilities) (EC, 2023k) might also contribute to cushioning the negative impacts of the crisis on women. Conclusions on the disaggregated data should, however, be **treated with caution** since quite some MSs have not reported any data yet for one or more of the four gender-disaggregated indicators (EC, 2023k). There are also concerns from interviewees and reports (ECA, 2023c) about the significance and the quality of the data used for the common indicators (for which MSs are responsible) and the extent to which the numbers can exclusively be attributed to the RRF intervention.

Looking at the CSR database (EC, 2023l), all **the gender-related CSRs report at least a degree of progress**. There are MSs with gender-relevant CSRs reported so far to have limited progress (AT, CY, PL, SI and SK), some progress (AT, CY, CZ, EE, ES, FR, IE and IT) and substantial progress (FR, IE, SI and SK). The contribution of the fulfilment of milestones and targets on gender-related measures to CSR progress can, in some cases, be more clearly made (e.g. Spain has fulfilled milestones and targets in the same area as its CSRs on improving income schemes and family support, which has reported to have some progress) than in others (e.g. France has some and substantial progress on gender-related CSRs, but no fulfilled milestones and targets on gender-flagged measures yet).

Three national ex-ante gender impact evaluations commissioned by the EP are **rather critical about the impact of the RRP investments on gender equality, but they also have limitations**. In the case of Germany, a possible **continuation or exacerbation** of gender-related imbalances was expected due to the limited focus on gender in the RRP's measures. In the case of Spain, a **moderate effect** on gender equality was expected, while in the case of Italy, the RRP's investments were expected to likely **not provide a turning point**. The Italian and Spanish evaluations expected a **varied effect**, with a predominantly positive impact on male employment in the short-term and still limited, but comparatively more benefits for women in the medium- and long-term (Farré, 2022; Badalassi, 2022; Pimminger, 2022). These studies have, however, the **limitation** that they mainly focus on investments and not reforms. The real impact can also not be directly derived from the plans themselves due to methodological constraints, the ex-ante nature of the assessment, the performance-based nature of the RRF and additional work that has been and will be done to further include gender equality considerations (EC, 2022a).

Lastly, an analysis of some fulfilled milestones and targets of gender-flagged measures indicates that relevant **outputs are achieved** (e.g. training to women has been given and Framework Laws have entered into force). **Relevant results and impacts are mostly expected** (e.g. a reduced burden of unpaid caregiving and an increase in participation of women in the labour market) **but have mainly not yet materialised**. The actual results and impacts of measures are (yet) also difficult to capture since it is often too early to tell, and they largely depend on further implementation. This is the case especially for reforms, which can be expected to have a substantial impact but need more time to materialise and are generally difficult to measure (see also Section 1 on limitations).

To further understand and maximise the RRF's effectiveness in cushioning the crisis' impact on women, interviewees and literature (EIGE, 2023; Farré, 2022) provided various suggestions. They encouraged (1) continuing to **integrate gender equality considerations** in implementation and monitoring and (2) continuing **evaluations and reporting from a gender perspective**. Focus points could be to have ex-post evaluations in MSs, which have integrated gender equality to a different extent and in different ways and analyse (in more depth) the changes in specific employment sectors due to the RRF and the impacts of reforms.

EQ4.2: To what extent has the RRF been effective in supporting the economic recovery?

Key findings:

The results of the application of the NiGEM model show that the **RRF disbursements that have already been made have raised EU GDP between late 2021, when the first pre-payments were made, until 2023**. The RRF disbursements have raised EU GDP in 2022 by 0.4 per cent. That is, **GDP was 0.4 per cent higher in 2022 than it would have been in the absence of RRF spending**. RRF disbursements had stronger effects in the Southern and Eastern countries than in countries that contribute more to the EU GDP.

Our NiGEM simulations also suggest that the **initial disbursements lowered unemployment in the European Union by around 0.2 percentage points relative to what it would have been in the absence of the RRF**. We found this overall fall in unemployment to be driven by large falls in the southern European MSs of Greece, Italy, Portugal, and Spain.

The COVID-19 pandemic, aside from causing large loss of life across the world, had devastating economic impacts. The lockdowns imposed in many countries led to substantial falls in output, consumption, investment and employment, except to the extent that publicly funded 'short-time working' schemes (e.g., Kurzarbeit in Germany) were able to stem this[51]. The falls in income experienced by many households across the European Union necessitated large fiscal interventions to support them through this exceptional period. But, as noted in ECA (2020b), the ability of MSs governments to respond to the pandemic depended largely on their relative wealth. Given that, an EU-wide approach is crucial to supporting the economic recovery in the relatively poorer MSs. Although the RRF is aimed at financing public investments and reforms that improve the longer-term resilience of the MS economies, such investment will also increase demand and aid the recovery of their economies in the short run. In particular, the pre-financing of the RRF ensured that MSs were able to get support quickly and respond quickly to the COVID-19 shock, thereby also helping to kick-start the recovery.

Many authors have looked at the effects of the RRF on economic recovery since then, and a brief overview of their findings is presented below.

Watt and Watzka (2020) found that, first, if the funds are used to finance additional public investment, public capital stocks throughout the EU will increase markedly during the time of the RRF. Second, in some especially hard-hit southern European countries, the RRF was expected to offset a significant share of the output lost during the pandemic. Third, as gains in GDP due to the

[51] In this respect it worth mentioning the key importance of the EU 'Support to mitigate Unemployment Risks in and Emergency' (SURE) scheme in cushioning the impact of the Covid-19 crisis. Overall, a total of 98.4 billion Euros of SURE financial assistance was disbursed to 19 Member States, close to the maximum amount of 100 billion. The remaining 1.6 billion Euros cannot be requested for future use as the instrument has ended on 31st December 2023. Financial assistance was granted to Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Spain. Overall, SURE helped preventing – according to the Commission estimates – 1.5 million people from becoming unemployed. Furthermore, SURE allowed beneficiary countries saving up to 9 billion Euros in interest payments, including 3.8 billion for Italy alone. Finally, as stressed in the Final Report published by the European Commission (2023), *SURE specifically added value by fostering confidence in the economy and effectively encouraging Member States to set up wide-ranging and ambitious short-time work schemes at national level*.

RRF will be much stronger in (poorer) southern and eastern European countries, the RRF has the potential to reduce economic divergence. Finally, and in a direct consequence of the increased GDP, the RRF is expected to lead to lower public debt ratios; between 2.0 and 4.4 percentage points below baseline for southern European countries in 2023.

Using a dynamic-stochastic general equilibrium (DSGE) model, Bankowski et al. (2022) concluded that NGEU may increase gross domestic product (GDP) in the euro area by up to 1.5% by 2026, with the impact expected to be significantly larger in the main beneficiary countries. In Italy and Spain, two of the main beneficiaries, the public debt-to-GDP ratio may be more than 10 percentage points lower by 2031. At the same time, all euro-area countries are expected to benefit from NGEU through positive spillovers, greater economic resilience and convergence across countries.

Pfeiffer et al. (2022) find that the NGEU program is expected to increase aggregate euro area GDP by about 1.1 percentage points by 2024. They show that one-third of the effect can be explained by spillover effects from trade between EU MSs (intra-EU trade). A simple aggregation of national effects would, therefore, underestimate the assessment of the effects of the NGEU.

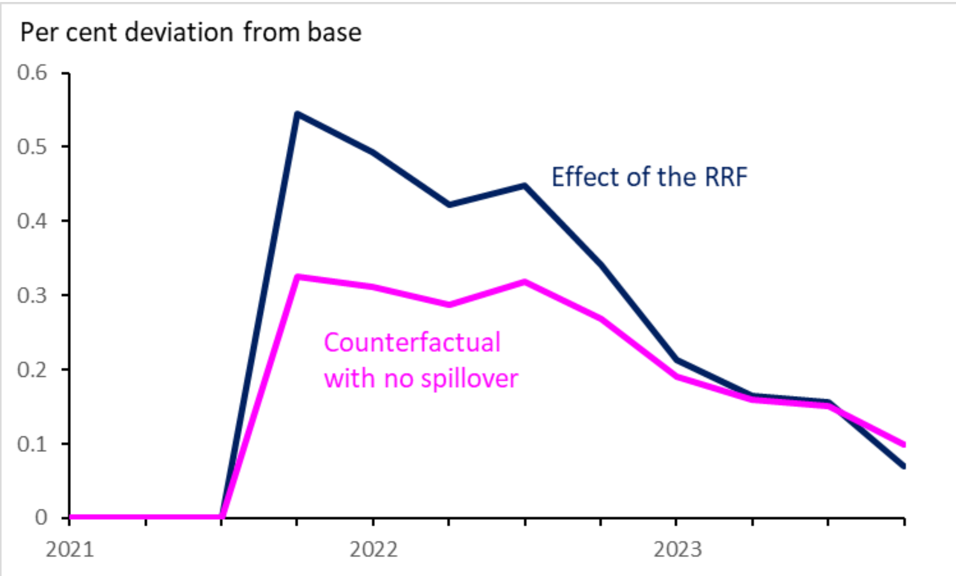
Bozou and Creel (2022) with a (two-country) DSGE model, find strong fiscal multipliers from the use of grants from NGEU. A fiscal shock on the core generates an additional rise in the GDP of the periphery of one percentage point, via trade effects. Furthermore, a fiscal shock on the periphery also generates an additional rise in the GDP of the core of 0.5 percentage points, which accounts for the larger size of the core versus the periphery in the euro area. To sum up, NGEU grants provide additional fiscal multiplier effects and additional spillovers for both the core and the periphery of the euro area. These authors also investigate the impact of NGEU loans, i.e., not only grants, and fiscal shocks on public consumption, i.e., not only public investment. They show that, based on the hypothesis that risk premiums on long-term interest rates in the periphery would not be too sensitive to higher debt, NGEU loans perform relatively well in comparison with NGEU grants: they notably boost GDP more immediately because of wealth effects from the holding of public bonds. As for shocks on public consumption, their effects on GDP are much lower than those after a public investment shock; grants make a difference only in the country that implements the public consumption policy and spillover effects are negative.

Considering the above studies and expectations, in our work, **we used the National Institute of Economic and Social Research's Global Econometric Model, NiGEM**, to analyse the effects of the RRF funds that had already been disbursed as of 31 July 2023 on the GDP of MSs and of the European Union as a whole. We assumed that RRF funds were spent on public investment over the year following their disbursement. Following Pfeiffer et al. (2022), we assumed that 100% of grants were spent on additional investment that would not have happened absent the RRF whereas only 50% of loans were spent on additional investment. Given our findings on EU added value reported in response to Evaluation Question 22, this seems an optimistic assumption, especially for countries such as Austria, Germany, and the Netherlands. In particular, we found that the degree of additionality for investments was challenged by the short implementation period covered by the RRF and the fact that many projects could have also been financed by the Cohesion policy financing instruments. That said, for countries with less fiscal space, this assumption is more likely to be valid as the RRF would certainly have led to greater public investment. Given that, we also report the results of a sensitivity analysis where we assumed that for the core Northern European and Scandinavian countries (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands and Sweden) 25% of grants and loans were spent on additional investment, and that for the remaining countries 60% of grants and loans were spent on additional investment.

Since EU borrowing must be financed out of the EU budget, we assume that MSs cover the interest payments on EU borrowing in proportion to their 2021 share of total EU GDP. In practice, the EU budget relates interest payments to relative gross national income (GNI) shares rather than GDP shares, but we went with GDP shares given the lack of availability of GNI data for Romania and Greece. This assumption is likely to not make a significant difference to our results except in the case of the Republic of Ireland, where GDP is significantly higher than GNI. Finally, we assumed that grants are paid back between 2027 and 2058 and loans from 2031 to 2050. Again, since these repayments are coming from the EU budget, we assume that the MSs will pay them back in line with their 2021 GDP shares.

We found that **the RRF disbursements that have already been made have raised EU GDP between late 2021, when the first pre-payments were made, until 2023.** As shown by the blue line in (Figure 10), the RRF disbursements have raised EU GDP in 2022 by 0.4 per cent. That is, **GDP was 0.4 per cent higher in 2022 than it would have been in the absence of RRF spending**. When we ran our sensitivity analysis, which assumed much lower additionality for government spending resulting from the RRF payments, we found the effect was reduced by a little over a quarter. Specifically, EU GDP was only 0.3 per cent higher in 2022 than it would have been absent the RRF. Like Pfeiffer et al. (2022), we also found that spillover effects were important. To show that, we followed those authors and ran a series of counterfactuals where we calculated the effects on individual MS's GDP of only the RRF spending within that country and then constructed the overall EU effect as the weighted average of the individual country effects. This is shown in the pink line in Figure 10. To summarise, **the overall effect on EU GDP is larger than would be predicted simply by summing up the direct effects of RRF spending** in each MS on their own GDP.

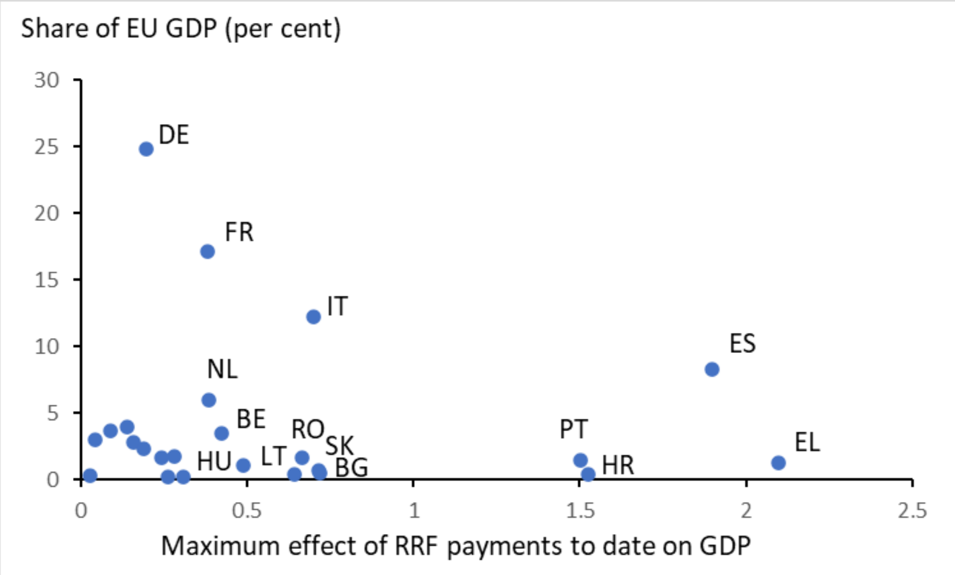
Figure 10: Effect of RRF disbursements on EU GDP



Source: NiGEM model

In terms of individual MSs, we also found that the **RRF disbursements had stronger effects in the Southern and Eastern countries than in the core countries** (see the following figure). More specifically, we found that the GDP in Greece was 2.1 per cent, and in Spain 1.9 per cent, and in Croatia and Portugal 1.5 per cent, higher in 2022 than they would have been absent the RRF, and the GDP in Bulgaria, Italy, Lithuania, Romania and Slovakia were all between 0.5 per cent and 1 per cent higher in 2022 than they would have been absent the RRF. The largest effects in the core countries were in France, Belgium and the Netherlands where we found that GDP in 2022 was 0.4 per cent higher than it would have been absent the RRF. This result, in line with that of Watt and Watzka (2020), suggests that the RRF has, at least initially, gone in the direction of supporting convergence between MSs.

Figure 11: Relationship between the size of MS's and the maximum GDP impact of the RRF



Source: NiGEM model

The countries our results suggest have been least affected by RRF payments to date are Ireland and Sweden, which are both yet to receive any RRF disbursements, together with Denmark and Germany, whose RRF payments to date represent a very small fraction of those countries' GDP. Our results suggest that all other EU countries saw an effect of at least 0.1 per cent of GDP in 2022, including Hungary, the Netherlands and Poland, which are yet to receive any RRF payments. These countries will have benefited from spillovers resulting from increased trade with neighbouring EU countries that have received RRF payments.

We also found that the **initial disbursements lowered unemployment in the European Union by around 0.2 percentage points relative to what it would have been in the absence of the RRF**. (Again, when we ran our sensitivity analysis, which assumed much lower additionality for government spending resulting from the RRF payments, we found the effect was reduced by roughly a quarter. Specifically, the EU unemployment rate was 0.14 percentage points lower in 2022 than it would have been absent the RRF.) We found this overall fall in unemployment to be driven by large falls in the southern European MSs of Greece, Italy, Portugal and Spain, where our results suggest that the unemployment rate was lower in 2022 than it would have been without the RRF by 0.96, 0.36, 0.50 and 0.66 percentage points, respectively.

Effectiveness along the six RRF pillars (EQ4.3-EQ4.8)

The following sections provide a review of how the RRF measures contribute towards the **six pillars of the RRF**:

- Social & territorial cohesion
- Health, economic, social and institutional resilience
- The green transition
- The digital transformation
- Fostering smart, sustainable and inclusive - economic growth and employment potential within the Union
- Policies for the next generation

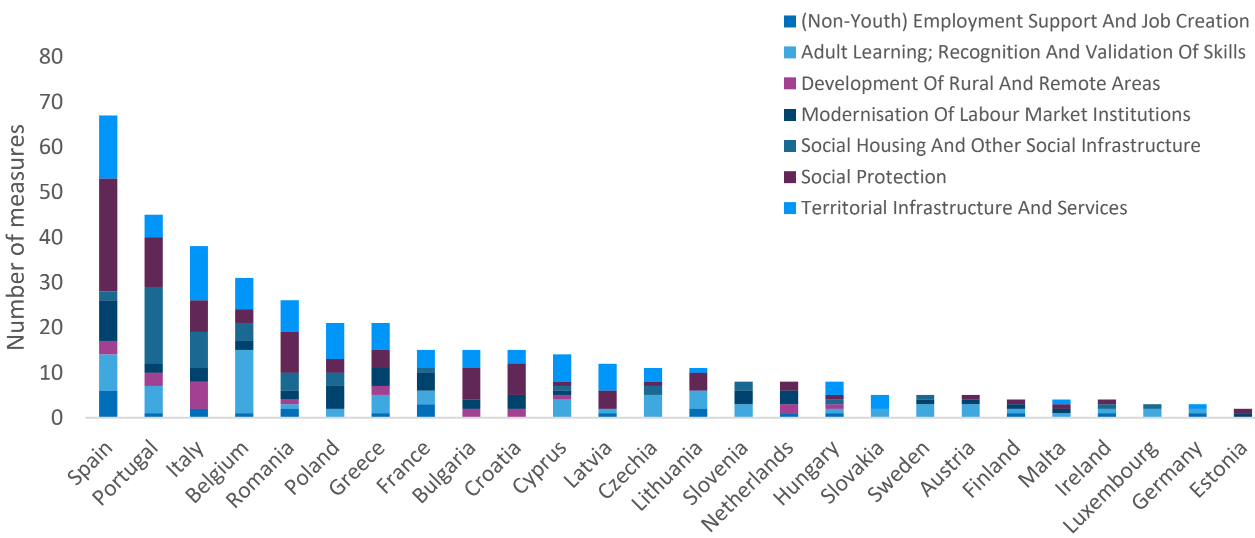
As mentioned earlier, considering the current status of the implementation of the RRF, **no definitive conclusions can be drawn on the effectiveness of the NRRP measures towards the six**

pillars. Instead, the analysis below provides examples of measures across different countries and a preliminary assessment of their effectiveness.

EQ4.3: To what extent has the RRF been effective in enhancing social and territorial cohesion?

There are **more than 1,300 measures (including sub-measures) related to the Social and territorial cohesion pillar** (both as a primary and as a secondary pillar). With the aim of providing a more detailed analysis, the figure below provides an overview of the measures (reforms and investments combined), which have this pillar as a primary one. Out of 401 such measures, the largest number is dedicated to social protection (94) and territorial infrastructure and services (94). A significant number of measures target adult learning and skills validation (70), the modernisation of labour market institutions (48) and social housing and other social infrastructure (48). The rest of the measures focus on employment support and job creation (24) and the development of rural and remote areas (23). Looking at the distribution across countries, **significant variation in the number of measures in the social and territorial cohesion pillar is observed**. The country with the highest number of measures is Spain.

Figure 12: Overview of measures in the social and territorial cohesion pillar



Note: The graph presents measures for which the social and territorial cohesion is the primary pillar.
Source: Authors' elaboration, based on EC data. Measure allocation based on the primary policy area.

The contribution of the RRF to the social and territorial cohesion pillar has been the object of a broad debate. This is also due to the fact that in most Member States, the impact on territorial and social cohesion can often be measured only indirectly, as disadvantaged groups and regions may benefit from reforms with a lasting effect as well as investments, without the measures targeting them directly or explicitly. Social and territorial cohesion figures in the several RRPs, yet with different approaches across MSs. The **Italian plan**, for instance, includes territorial rebalancing especially via the relaunch of the South of the country as a transversal priority. The strategic axis of social inclusion aims to overcome profound inequalities (often worsened by the pandemic) and to overcome the structural weakness of the productive system of the South. To this end, Italy allocates ad hoc resources for special interventions in support of territorial cohesion in the most disadvantaged areas of the countries. In addition, territorial cohesion is streamlined across all the other components of the Italian RRP. Similarly, in **Spain**, both territorial cohesion and social cohesion figure among the four axes on which the plan is built, and in each of the 10 driving policy areas of the plan, they are systematically addressed. In contrast to the Italian RRP, which includes specific projects dedicated to less developed regions, the Spanish plan adopts a more horizontal approach whereas territorial criteria are attached to the different projects' funds' distribution. In the case of the **Croatian** plan, territorial convergence is not pursued systematically, but the plan includes measures targeted at disadvantaged groups in society. By contrast, the **German** plan does not include a strategy to enhance social and territorial cohesion.

The case study on the modernisation of labour market institutions, specifically active labour market policies, provides more detailed insights into the effectiveness of the RRF in supporting social and territorial cohesion in four MSs: France, Italy, Spain and Croatia. What emerges is that **social and territorial cohesion is targeted by ALMP measures to varying extents**. The majority of countries – Italy, Spain and Croatia – incorporate explicit design elements to strengthen the labour market situation of disadvantaged groups or address regional inequality in service provision, which should in principle enhance social and territorial cohesion. In Croatia, measures to develop new active labour market policies and introduce a voucher system explicitly include targets for take-up among vulnerable groups, including the long-term unemployed, inactive individuals and NEET youth, while a third measure aims to improve public employment services by targeting vulnerable groups more effectively. However, territorial cohesion is less focused on in the Croatian measures, with a lack of regional targets for measures. In Italy, too, the GOL programme explicitly includes targets for different vulnerable groups. A measure on strengthening public employment services (PES), on the other hand, targets territorial cohesion by seeking to increase the capacity of regions to provide high-quality employment services. Spanish reform measures on ALMPs also explicitly focus on vulnerable groups, and also focus on territorial convergence, though accompanying investments to strengthen activation policies could be more explicitly targeted at the most disadvantaged regions.

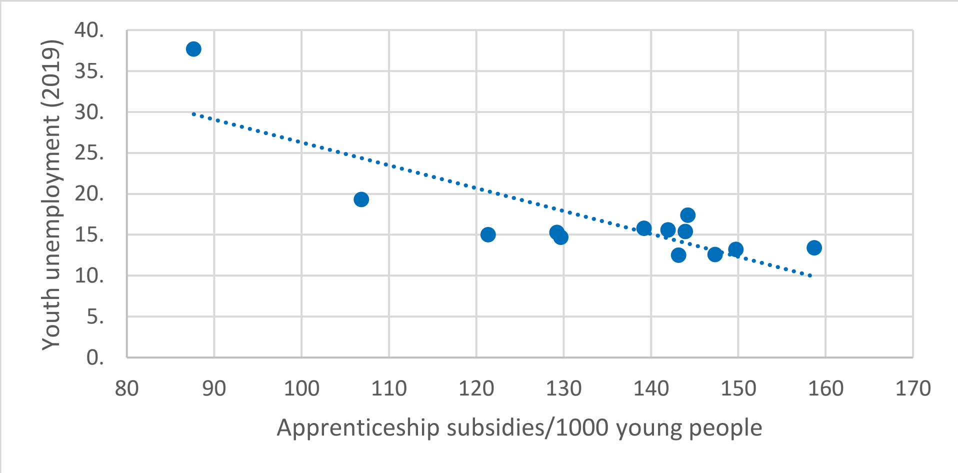
The French case is slightly different. By far the most significant measures – in terms of budget allocated – are hiring subsidies targeted at a general population, with the general objective of supporting youth employment. However, the unrestricted scope of these schemes creates a risk of them ultimately being benefitted by groups that would have had little trouble entering the labour market anyway. As such, the most prominent measures are likely to have little effect on furthering social and territorial cohesion. The box below provides a more detailed look at French hiring subsidy measures and their impact on social and territorial cohesion. Some other ALMP measures in the French RRP do focus on the labour market inclusion of vulnerable and marginalised groups, with locally differentiated objectives and funding, which should have more positive effects on social and territorial cohesion. However, the French plan placed a strong emphasis on increasing the number of individuals entering specific measures. This may have reduced the capacity of measures – even those focused on vulnerable young people, such as the Youth Guarantee – to provide the most effective support and reduced levels of targeting the most marginalised.

Box 7. **Hiring subsidies in the French RRP**

The French RRP includes a significant number of hiring subsidies. The majority of these – including subsidies for apprenticeships, professionalisation contracts and young people under 26 - were conceived for young people, but not specifically targeting vulnerable young people or disadvantaged regions (though some other measures in the plan target vulnerable young people). The only hiring subsidy specifically targeted at vulnerable groups is a measure to support employers in hiring persons with disabilities (C8-115). Focusing on the measures for young people, the broad targeting of the hiring subsidy measures has changed the profile of beneficiaries. For instance, there has been a strong increase in the number of highly educated young people taking up apprenticeships, and higher-educated individuals were also more likely to benefit from the youth hiring subsidy. This increased take-up among the higher educated was an intentional design feature of the policy, as the main aim was to boost overall youth employment as well as to increase the image of apprenticeships in France. At the same time, the policy risks not furthering or even undermining social and territorial cohesion, by having large windfall effects on individuals who do not need assistance entering the labour market and potentially driving out more disadvantaged youth.

To illustrate this point, the figure below plots the take-up of apprenticeship subsidies by region (standardised by population size) against regional youth unemployment. A substantively large (and statistically significant) correlation between the indicators is found. That is, the take-up of the apprenticeship subsidy is higher in regions with lower youth unemployment. As such, the hiring subsidy measure appears to have disproportionately benefitted regions with structurally lower challenges with respect to the integration of young people into the labour market. This is consistent with the argument that the subsidy likely largely benefitted young people who would not have struggled to enter the labour market in the first place. Overall, the impact of these hiring subsidies – with no targeting towards specific groups - on strengthening regional or social cohesion is likely limited.

Apprenticeship subsidy uptake compared to youth unemployment rates by region



Note: Authors' elaboration based on data from Eurostat (2023) and Ministere de l'Economie (2023). Data on regional apprenticeship subsidy uptake is standardised by population size. Correlation coefficient r -0.82, t = -4.8.

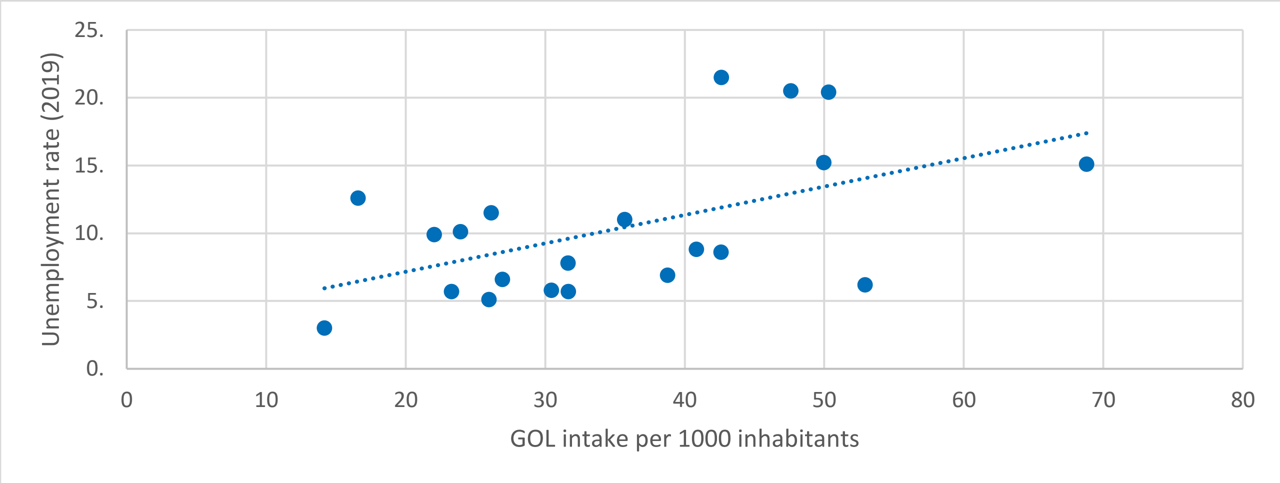
Shifting the focus from the measures' design to their implementation and the impact on the social and territorial cohesion objective, a **mixed picture emerges from the case study**. In Croatia, the measure that has seen by far the highest take-up so far, the voucher system, has in fact reached a much lower share of vulnerable groups than envisioned. Measures to improve outreach towards and awareness among vulnerable groups to increase participation appear crucial if the measures are to effectively enhance social cohesion. In Italy, in contrast, the take-up of the GOL programme among vulnerable groups has been high, in alignment with the measure's objectives. However, with respect to territorial cohesion, the picture appears less positive, as the most disadvantaged regions are not those who benefit most significantly from GOL. Difficulties in successfully implementing measures can be related to underlying issues with the capacity and resources of PES, which constitute a significant facilitating factor or barrier in several countries. The box below examines the Italian case in more detail.

***Box 8.* The impact of Italian ALMP measures on social and territorial cohesion**

The GOL programme explicitly sets out targets for take-up among vulnerable groups, including women, youth, older workers, the long-term unemployed and people with a disability. Data on measure take-up so far (ANPAL, 2023) showcases that 85.7% of GOL participants to date belong to at least one vulnerable group, suggesting that the measure could indeed have positive effects on enhancing social cohesion. The case study analysis also shows that the share of women and the long-term unemployed participating in GOL is higher in regions with higher female and long-term unemployment, which suggests that the programme is effectively targeting the groups which are most vulnerable in a region. However, the relationship is weaker for young people, implying that some groups are being targeted more effectively than others. This could be related to the fact that the target for vulnerable groups specified in GOL amalgamates different groups.

While the picture is positive with regard to social cohesion, the effectiveness of GOL in supporting territorial cohesion appears more limited. Data on GOL take-up clearly shows that some regions contributed significantly more than others to reaching the regional target. Moreover, the regions benefitting most significantly from GOL do not appear to be the ones most structurally disadvantaged. The following figure shows data on the take-up of GOL by region relative to regional unemployment. The relationship, while positive, is quite weak. In particular, some regions with very high unemployment or long-term unemployment show only very limited take-up of GOL in the population. As such, the GOL programme, to date, appears to show only limited effectiveness in targeting the regions with the highest structural need for employment support, and, as such, only limited effectiveness in supporting territorial cohesion.

GOL intake and unemployment by region



Source: Authors' elaboration based on ANPAL (2023) and Eurostat (2023). Correlation coefficients: r= 0.52, t = 2.71.

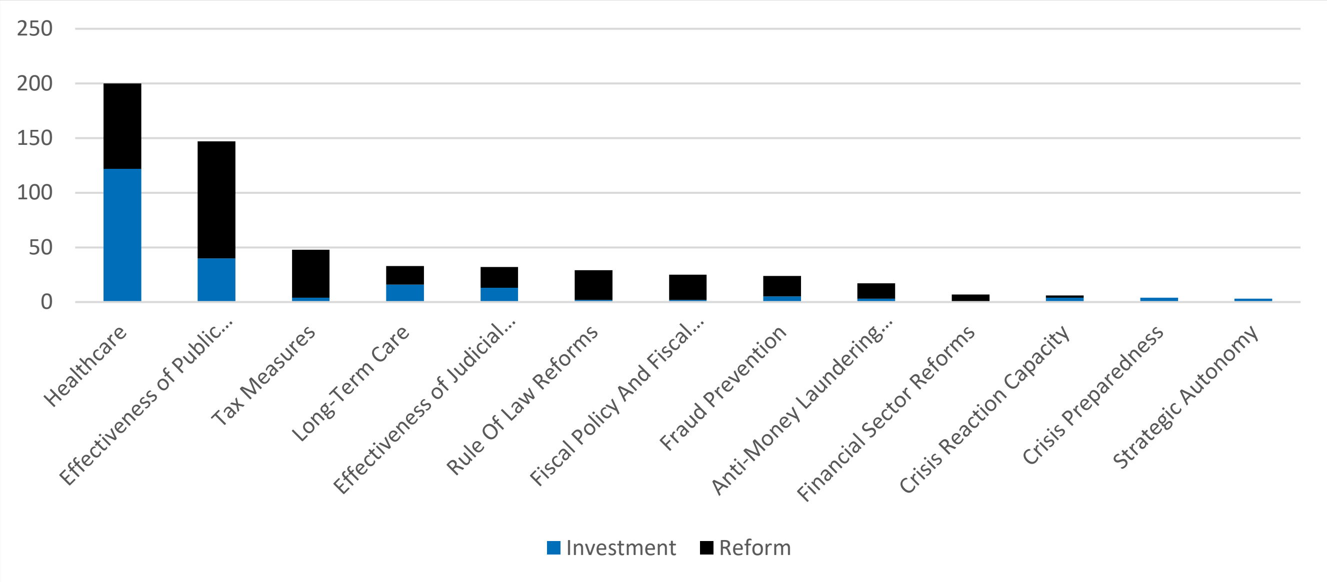
The insufficient standardisation and quality of services across Italian regions, related to a lack of financial resources and staff, has been a longstanding policy concern, which is reflected in the significant heterogeneity in GOL take-up across regions. In principle, the investment in PES is designed to address this issue. Yet actual data on hiring processes associated with the investment across regions show that there is significant heterogeneity across regions to date, and regions with higher (long-term) unemployment do not tend to be the ones seeing the most significant increases in capacity. As such, in its actual implementation, the investment has so far only addressed regional heterogeneity in service provision – and as such, territorial cohesion – to a limited extent.

EQ4.4: To what extent has the RRF been effective in increasing health, economic, social and institutional resilience?

The RRF Regulation defines resilience as 'the ability to face economic, social and environmental shocks and/or structural changes in a fair, sustainable and inclusive way' (Art 2.5). Resilience-related measures (that is, measures categorised under the 'Health and Institutional resilience' pillar) amount to **more than 1,100 measures** (incl. sub-measures) **that have it as a primary or secondary pillar**. The measures (and sub-measures) that have it as a primary pillar are 575 (see the following figure), and roughly 60% of these measures are devoted to strengthening healthcare **systems (35.08%) and improving the effectiveness of public administrations (25.31%). Other important sub-areas of intervention are taxation (8.38%), 'long-term care' (5.76%), efficiency of the judicial systems (5.58%) and rule of law reforms (5.08%).**

The balance between investments and reforms varies significantly across policy areas (see the following figure). Investments are more important among actions aimed at strengthening the country's strategic autonomy, improving its crisis preparedness or modernising and strengthening health care. In contrast, the reform component is more important in areas such as fiscal policy, taxation, rule of law reforms and fraud prevention or interventions to improve the effectiveness of public administrations, including those targeting the judicial system.

Figure 13: Number of reforms and investments per policy area under the Resilience pillar



Note: The graph presents measures for which the Resilience pillar is the primary pillar.
Source: Authors' elaboration, based on EC data. Measure allocation based on the primary policy area.

As pointed out in EQ2.1, only **12.8% of the milestones and targets related to resilience have been fulfilled as of the end of July 2023**. It is too early to reach final conclusions as regards the effectiveness of these interventions, but there is some evidence of results achieved so far. If we look at the common indicators, two are related to pillar 5 (resilience): the number of users of new and upgraded public digital services, products and processes and the capacity of new or modernised healthcare facilities supported by RRF measures. With respect to the first, 19 MSs have reported approximately 250 million users of new or upgraded public digital services resulting from RRF measures (see EQ2.1). This can be considered a significant achievement as it represents more than 66% of the population aged 15 and over in 2019. As regards the increase in healthcare capacity, additional capacity for a total of 18.6 million has been reported. However, only 6 MSs have reported upon this indicator.

At the MS level, there are **examples of RRF resilience-related measures already implemented and having results**. In the area of health, for instance, one can mention the examples of the Spanish's investment plan in high-tech healthcare equipment or the Estonian's reform to strengthen primary care (see box 9).

Box 9. Examples of results from reforms and investments in the field of health

Spain: Investment in high-tech healthcare equipment in the National Health Service

Spain has a level of obsolescence of high-tech medical equipment above the European average. The geographic distribution of equipment is also imbalanced. To address this problem, the Spanish RRP includes a commitment to renew and expand the stock of high-tech medical equipment with a particular focus on areas of Spanish territory which are underserved per inhabitant compared to the national average. In line with milestone 278 of the Spanish RRP, in June 2021 the Health Interterritorial Council (composed of representatives of the central government and the regional governments) adopted the investment plan for high-tech equipment (Plan de Inversión en Equipos de Alta Tecnología - INVEAT), which sets out the criteria for the distribution of €800m of grants to regions. According to target 279, Spain should have put into operation at least 750 new equipment devices through renewals, extensions or new installations by Q4 2023. According to the third Spanish RRP's implementation report, published in February 2024, all funds have been transferred to the regional government. 847 pieces of new equipment have been purchased, of which 119 are installed and 78 are in operation.

Estonia: Reform to strengthen primary health care

In 2020, Estonia received a CSR to improve the accessibility and resilience of the health system, including by strengthening primary health care. In response to this CSR, the Estonian RRP includes a reform to ensure access to general medical care, improve the continuity of treatment and make the provision of primary health care more flexible and human-centred. In line with milestone 107, the first step of this reform was the adoption of a legislative amendment in March 2020 extending the list of medical specialisations accessible through e-consultation, allowing patients to be advised by a specialist without having to consult them face-to-face. The second step was the adoption of a regulation in March 2021 expanding the list of healthcare services and pharmaceutical products reimbursed by the Estonian Health Insurance Fund. In particular, the new regulation increases the allocation of resources to primary medical services for general practitioners outside metropolitan areas, especially in remote areas, and the financing of diagnostic and screening services by around 8% with the aim of improving patients' access to these services. The regulation entered into force on 1 April 2023. In addition to that, a reserve of €6.2 million has been planned in the budgeting for healthcare services to finance the changes introduced by the reform.

An aspect to consider when discussing the potential contribution of the RRF to improve the countries' resilience is the need for a sustainable and comprehensive effort over time. In the case of Estonia's healthcare reform, for instance, the sustainability of the reform will depend on the adoption of more structural changes to secure the long-term financing of the health system. The adoption and full implementation of reforms in areas related to the modernisation of public administrations or aimed at strengthening the rule of law principles may also be compromised in the absence of strong trans-partisan support. The difficulties in adopting the French programming law of public finances for 2023-2027 illustrate this point (see box 10).

Box 10. France and the reform of the governance of public finances

In response to CSRs received in 2019 and 2020, the French RRP includes various measures aimed at supporting the consolidation of public finances in the medium and long term. The most important reform has been the adoption of the Organic Law no. 2021-1836 of 28 December 2021 on the modernisation of public finance management. The law extends some prerogatives of the 'Haut Conseil des Finances Publiques' (HCFP, which is the national independent Fiscal Board). It also establishes a multi-year expenditure ceiling, which shall set out a target for public spending in volume (and a forecast in value in billion) to be defined in multi-annual public finance programming laws, starting as of 2023. In application to the Organic Law, France should have adopted its first multiannual programming law for 2023-27. The text was presented to the National Assembly (lower parliamentary chamber) in September 2022 but was rejected on first reading while it was adopted by the Senate with some amendments. After a failure to find an agreement at the Joint Parliamentary Committee, in September 2023 the French government decided to use article 49.3 of the Constitution to have this bill adopted in the first reading in the National Assembly. This article allows the text to be adopted by the National Assembly without a vote, unless a motion of censure against the government succeeds in being adopted. The bill hasn't yet been adopted at the time of writing as, after a vote with amendments in the Senate in mid-October, it came back to the National Assembly for final reading.

Finally, Fromont and Van Waeyenberge (2021) highlight another potential risk related to RRF actions to boost institutional resilience. Being the RRF and the European Semester strongly focused on economic and budgetary issues, the authors fear that RRPs may be biased in their approach to public sector reforms, narrowly focusing on reforms having an impact on the business environment, investment, economic growth and jobs and neglecting reforms aimed at guaranteeing the protection of European values and the rule of law principles. Yet, it is worth stressing that under the European Semester and the CSRs, the RoL issues are considered relevant from the business environment perspective. As the RRPs are built around the CSRs, the RoL issues are also addressed, as illustrated broadly in the case study on justice reform. Justice measures included in the Hungarian, Romanian and Polish RRPs include measures aimed at strengthening and guaranteeing the rule of law principles and the principle of judicial independence. All countries have adopted legislative reforms aimed at strengthening judicial independence. It is still too early to judge the results of these legal reforms. Besides, the content of these reforms hasn't yet been notified to or assessed by the EC. However, according to the experts, the mere fact of having adopted them constitutes a success. In the case of Romania, the RRP requires to revise the amendments introduced in the so-called "Justice Laws" during 2017-2019. These amendments seriously endangered the independence of the justice system, introducing changes in fundamental aspects such as the civil and disciplinary regimes applied to magistrates, the procedures for the appointment of high-level prosecutors or the creation of a special regime for the investigation and prosecution of corruption in the judiciary.

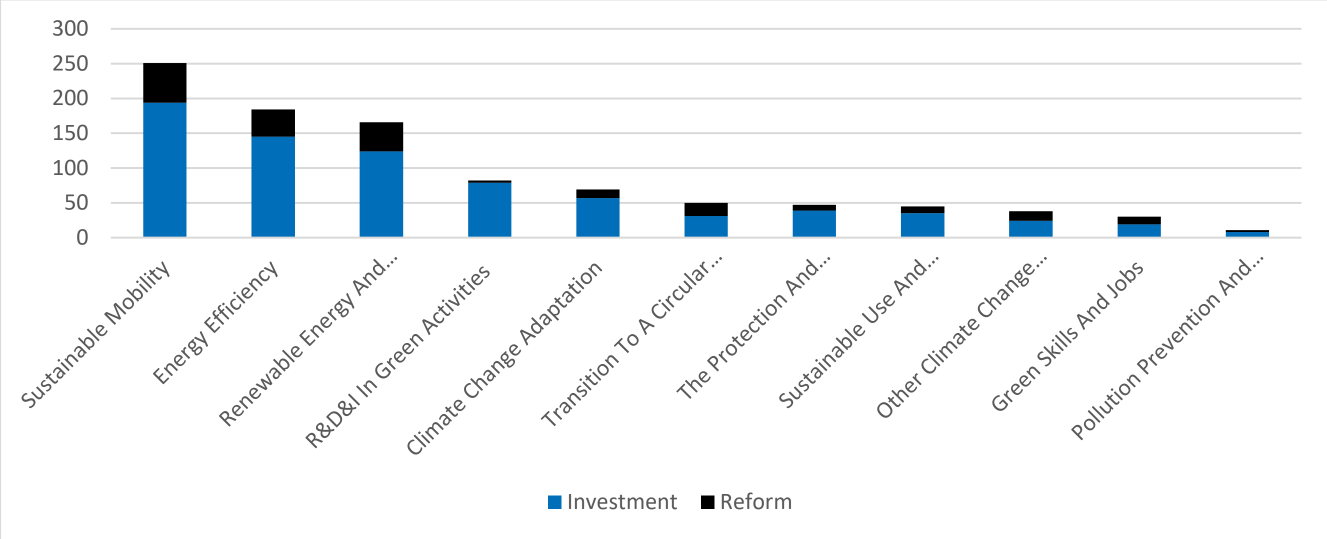
EQ4.5: To what extent has the RRF been effective in supporting the green transition?

The RRF Regulation (2021/241) states that the national RRPs should support the green transition through reforms and investments in green technologies and capacities, including biodiversity, energy efficiency, building renovation and the circular economy while contributing to the Union's climate targets, fostering sustainable growth, creating jobs and preserving energy security. The measures should contribute to the green transition, including biodiversity, or to addressing the challenges resulting therefrom, accounting for an amount representing at least 37 % of the RRP's total allocation.

In addition, the REPowerEU Plan was adopted in 2022 and MSs are in the process of revising their plans accordingly. Most MSs have already submitted their additional REPowerEU chapters fully devoted to measures supporting green transition (see EQ4.10).

As one of the main focus areas in RRF, **the topic is well covered in the NRRPs**. The total number of measures contributing to the green transition is more than **1,300 measures** (incl. sub-measures), including over **2,500 milestones and targets**. The biggest expenditure supporting the green transition has been allocated to **sustainable mobility** (31%) in all the NRRPs, followed by **energy efficiency** (29%) and **renewable energy and networks** (14%). As shown in the following figure, which illustrates the measures for which the green transition is the primary pillar (973 measures), the same policy areas are the most popular also in terms of the number of measures. Most of the measures are still being implemented, which is why **only 10% of the milestones/targets have been fulfilled out of all milestones and targets linked to the pillar** as of the end of July 2023 (see EQ 2.1).

Figure 14: Number of measures in the green transition pillar



Note: The graph presents measures for which the green pillar is the primary pillar.
Source: Authors' elaboration, based on EC data. Measure allocation based on the primary policy area.

Four common indicators fall under the scope of green transition: C1. Savings in annual primary energy consumption; C2. Additional operational capacity installed for renewable energy; C3. Alternative fuels infrastructure; and C4. Population benefiting from protection measures against floods, wildfires, and other climate-related natural disasters (see EQ 2.1). However, not all the MSs have reported their values yet, which is noteworthy particularly for indicators 2 and 4, as the number of MSs is relatively low. Based on the most recent values, the RRF has led to savings in primary energy consumption. The highest savings were reported for France and Poland, accounting for 0.3% and 0.7% as a percentage of the consumption in 2019.

In general, the RRF has been **successful in emphasising the need to introduce reforms and invest in fostering the green transition**. It is too early to assess the overall impacts of the RRF as most measures are still under implementation and the final effects will only materialise in the longer term. Also, as mentioned above, certain policy areas are significantly allocated more RRF funding than others. **Sustainable mobility and energy efficiency investments account for 60% of the funding** within the green transition pillar. Meanwhile, other areas get less attention, such as climate adaptation (5%), biodiversity (2%), pollution (2%), circular economy (…), and green skills and jobs (1%), as reported by the EC RRF Scoreboard (2023m). The lack of attention to certain policy areas in the RRF was also mentioned by some of the interviewed stakeholders. Biodiversity is not sufficiently addressed in the RRF and in RRPs, especially when taking into account new obligations with COP15 and the Post-2020 Global Biodiversity Framework. MSs may have preferred sustainable mobility, energy efficiency and renewables in their RRPs as they were more likely to be tagged with a 100% climate coefficient. The RRF regulation does not include any hard targets in terms of biodiversity or environment.

The vast majority of respondents to the public consultation think that the RRF has contributed or will contribute to the green transition (62%) and the **European Green Deal** (64%) to some or large extent. However, **fewer respondents are confident about the role of the RRF in contributing to the EU Biodiversity Strategy,** with less than half of them thinking the RRF contributes to the Strategy to some or large extent.

The contribution of the RRF in supporting the green transition has been broadly debated and been the subject of in-depth scrutiny. The Green Recovery Tracker (2023) is one of the first projects that was set up to assess the contribution of the NRRPs to the green transition and was in place until the end of 2021. To assess the RRF measures contribution to the green transition, the Green Tracker assesses the effect of any given measure on climate mitigation, i.e., emissions reductions, in the context of the transition to climate neutrality. In doing so, the Green Tracker methodology builds on the EU taxonomy as well as, with regards to climate mitigation, on the climate tracking methodology outlined in Annex VI of the RRF Regulation. Measures are classified based on their very positive, positive, not significant, negative and very negative climate effect. According to the final report published in early 2022, Mölter et al. (2022) observe that **a large share of the recovery budget may have a substantial climate impact, but it is still unclear if that impact is always positive.** The report indicates that the uncertainty is due to the RRPs' lack of alignment with the EU's new climate targets, RRPs relying on outdated national energy and climate plans and following a bottom-up approach, thus making it unclear whether the investments will contribute positively or negatively to climate goals. CEE Bankwatch and Climate Action Network (2022) and Mölter et al. (2022) further state that the investments covering green transition seem to lack ambition as the measures are often based on the targets and identified investment needs of the NECPs which are no longer aligned with the EU's 2030 targets.

***Box 11.* Examples of results of investments in the green transition sector**

Finland: Investments in new energy technologies
The aim of the scheme is to commercialise new energy technologies (e.g., offshore wind power, renewable fuels in transport, non-combustion-based heat production, other renewables) and to create a basis for the further development of technologies. In addition, the support program can accelerate project development and thus increase the number of projects, some of which can be implemented later even without support. 14 projects have been granted support, with a total of €153.6 million. Most of the projects cover solar electricity: 8 projects and **95% of the total funding have been granted to solar electricity investments**. In terms of granted amount of aid, solar electricity is followed by offshore wind power, biogas and energy efficiency projects. Based on the estimations, the projects will have the following impact (Ministry of Employment and Economic Affairs):

- **CO2 emission reduction of 199,400 tons**.
- A total of 1,416 man-years are required during the construction phases.
- After the construction phases, projects create approximately **114 additional jobs**.

Austria: Replacement of oil and gas heating systems
The funding scheme is open to private individuals, building owners and companies and other entrepreneurial organisations. So far, more than 80,000 registrations and applications have been made as part of the restructuring offensive (2021/2022). More than 3,000 registrations and applications have already been submitted for the additional social support of Clean Heating for All.
So far, 6 360 projects of replacement of heating systems have been implemented and audited. These projects lead to **total average energy savings of 96 057 474 kWh per year**.

Italy: Strengthening of the Ecobonus and Sismabonus for energy efficiency and building safety.
The investment measure has had an impact in climate and economic terms. The following results related to energy savings and GHG emissions have been achieved:

- **A total energy saving of 0.72 Mtoe/year in 2021-2030**, calculated on the basis of MISE-ENEA parameters. This is equivalent to 78% of the overall annual energy savings target (0.927 Mtoe/year). Transforming the Mtoe savings into an annual reduction of CO2 emissions indicates that from November 2021 to October 2022 an **annual reduction of 2.47 million tonnes of CO2 emissions** was produced thanks to the certified interventions.
- According to (Censis, 2022) and based on ENEA data, in two years, investments activated with Superbonus produced **energy savings of about 11,700 GWh/year**. Together with the approximately 150 GW/year of new renewable power installed, the authors estimated a lower gas consumption for residential buildings of 1.1 billion cubic metres of gas per year, i.e., more than one-third of the overall 2.7 billion cubic metres of gas expected to be saved annually in Italy.

Energy efficiency is the most popular policy area in terms of the number of RRP measures and has been allocated a significant amount of RRF funding. The energy efficiency of the European buildings stock, in particular, plays a crucial role in achieving the EU 2030 and 2050 climate targets.

The RRF allocation of all measures in the NRRPs linked to the policy area energy efficiency is €72.8 billion. For the measures linked with the green objective intervention codes related to energy efficiency in buildings [52], the total cost is somewhat less, €65.7 billion.

Regarding the role of the RRF in contributing to the energy transition on a general level, D'Alfonso (2022) indicates that while the RRF supports energy efficiency through a wide range of measures to achieve the EU GHG reduction targets, **a significant amount of financing from other sources will be needed**. The NRRPs alone are not sufficient to bring the building stock in line with the targets. Thus, it is crucial that the plans go hand in hand with other national funding programmes and are able to attract and leverage private financing. To create safe markets for the sector, the investments should be linked with reforms and/or with other enabling measures, such as capacity building, awareness raising and support to beneficiaries. However, the Renovate2Recover (2021) report concludes that many of the plans do not link the investments related to renovation to other enabling measures, present clear provisions on how to attract private finance nor combine the measures with other EU or national funding schemes.

Zooming in on some specific examples of RRP measures addressing the energy efficiency of buildings, the case study that we conducted with a sample of four MSs (Bulgaria, France, Latvia and Romania), shows that France and Romania are making good progress toward their milestones and targets for energy efficiency in buildings. Latvia is somewhat behind, and Bulgaria is lagging. It is too early to draw conclusions about the energy savings impacts of the implemented measures and investments due to the long-term nature of construction projects. However various outputs have been achieved, which are mostly presented in terms of published calls, number of applications and granted projects, as well as type of projects that have been granted support. Nonetheless, the availability of information on results, particularly quantitative results, of different measures differs significantly between countries. The funding in France, Romania, and Bulgaria is considered ambitious and contributes significantly to the identified investment needs, while Latvia's funding falls short of its renovation needs. However, Latvia has allocated significant funding to similar measures under other EU structural funds.

Common challenges in all countries include rising material prices and a lack of skilled workforce, which can impact the implementation of the measures. The unexpected rise in construction cost due to rising material prices has a negative impact as higher prices can lead to the down-scale of quantitative targets, as the same budget covers fewer renovations. In contrast, energy prices have also risen, which has a positive impact on the incentives to improve energy efficiency to reduce energy bills. Furthermore, the construction industry has been grappling with a shortage of skilled workers. To meet the goals of the Green Deal, there is a pressing need for a greater number of skilled labourers in both the construction and renewable energy sectors to carry out renovation projects. This challenge is particularly prominent in Central and Eastern European countries, where the workforce is increasingly migrating to Western Europe, drawn by better job opportunities and higher pay scales. The box below presents some more details on the results linked to energy efficiency measures in France and Romania.

[52] In the case on energy efficiency of buildings, we have selected relevant measures by using the following green objective intervention codes: 025 - Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures; 025bis - Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures compliant with energy efficiency criteria; 025ter - Construction of new energy-efficient buildings; 026 - Energy efficiency renovation or energy efficiency measures regarding public infrastructure, demonstration projects and supporting measures; or 026bis - Energy efficiency renovation or energy efficiency measures regarding public infrastructure, demonstration projects and supporting measures compliant with energy efficiency criteria.

Box 12. Examples of measures targeting energy efficiency in buildings

France: Energy renovation of private housing (MaPrimeRenov')

The objective of the investment is to fund the 'MaPrimeRénov' grant scheme in France. It supports insulation, heating, ventilation, and energy audit projects for single-family homes and apartments. A total of €1.4 billion of initial RRF funding, and an additional €1.6 billion in the REPowerEU chapter, are allocated in the measure. In total, the programme has a budget of €8.5 billion between 2020 and 2024. The scheme is part of the broader France Relance program and has gained popularity, prompting the government to increase annual requests and the budget to €4 billion in 2024.
Originally for low-income households, it expanded to cover all households in 2021, with aid levels varying based on income and energy savings. As of mid-2023, MPR has provided more than a million households with renovation support53. The program aims for at least 30% energy savings on average, with additional incentives for deeper renovations. The following results have been materialised after the launch of the program (note: it was launched before the submission of the French RRP):

- For the projects completed by the end of 2022, the total energy savings reached were 3.0 TWh. For all the projects granted support by 2022, estimated energy savings are 5.3 TWh.
- The renovations supported by the scheme mainly concern heating and domestic hot water: in 2022, they accounted for 82% of energy savings for 72% of actions (respectively 85% and 76% in 2021). Heat pumps alone represent 57-59% of total energy savings for only 21% of actions. The insulation of walls, roofs, attics and windows represents nearly a quarter of actions for 16% of energy savings in 2022.
- The scheme was extended from low-income households to all households from 2021 which led to the redistribution of the income groups: the 3rd, 4th and 5th income deciles represent only 40% of applications in 2022, compared to 36 % for the 6th, 7th and 8th deciles.

Romania: The Renovation Wave Fund
The main measure in the Romanian RRP focusing on energy efficiency in buildings is the Renovation Wave fund. The fund aims to renovate 2.3 million square meters of public buildings and 4.3 million square meters of residential multi-family buildings, resulting in CO2 savings of at least 0.225 million tonnes and primary energy savings of at least 0.17 Mtoe. The fund will issue calls for moderate and deep renovations, with a special focus on vulnerable communities. It also includes seismic consolidation where necessary. This initiative primarily targets buildings that struggle to secure financing from commercial institutions, with 100% grant funding requiring substantial public resources. Two rounds of calls have been launched by September 2023, with the following results:

- The first round of calls: 970 granted projects; and the second round: 603 granted projects.
- The total value of these projects: €2.67 billion.
- The biggest share of financing has been granted in moderate energy renovations of public (€892.8 million) and residential buildings (€797.8 million). €292.2 million was granted for deep renovations of public and residential buildings.
- €230.1 million was granted in projects of moderate energy renovations of multi-apartment buildings at risk of poverty and social exclusion.

The DNSH principle

The RRF Regulation provides that no measure included in a Recovery and Resilience Plan (RRP) should lead to significant harm to environmental objectives within the meaning of Article 17 of the Taxonomy Regulation (Regulation (EU) 2020/852, 2020). In this line, as noted in the EC Technical Guidance (EC Notice 2021/C 58/01, 2021), the assessment of the RRPs should ensure that each and every measure (i.e. each reform and each investment) within the plan complies with the 'do no significant harm' (DNSH) principle.

[53] Ministry of Ecological Transition and Territorial Cohesion of France. Retrieved 4 July 2023.

The large majority of the respondents to the public consultation declared awareness of the DNSH principle (133 out of 165 responses). The **perception** of the extent to which respecting the principle contributed (or will contribute) to the green transition is mixed, but **mostly on the positive scale** – 71 responses ("To a large extent" and "To some extent") and 48 responses in the negative scale ("To a limited extent" and "Not at all").[54] Interviewees at EU and national level expressed their satisfaction with the novelty of the principle and its potential to shape investments in line with the European Green Deal objectives. Yet, in both interviews and the public consultation, some **raised concerns about the extent to which the DNSH is properly applied**. Some interviewed DGs shared that they do not possess the necessary tools/resources to apply detailed oversight on the way the principle is implemented at country level.

More insights into the reasons behind the somewhat mixed perception of the principle are provided by the survey results. According to several national authorities that took part in the survey, the DNSH principle **is a new feature of the RRF, which has added value by improving the quality of MS measures** (even for those countries that already had existing pipelines of projects that could be financed under different mechanisms). Some authorities mentioned that the principle could have "spillover effects" and improve public financing at national level. At the same time, the novelty of the principle **requires clear guidance** which, according to the respondents, was not always provided in a timely fashion. As noted in EQ3, several MSs considered that the publication of the **Commission's DNSH guidance** came too late. In this respect, it is worth stressing that the DNSH guidance was published in February 2021, before any submission. Yet, while no RRP had to be changed formally, several MSs point to the fact that they did have to change initial drafts. A few MS authorities also mentioned the complexity of the tool, particularly in terms of explaining it to final beneficiaries (e.g., at municipal level). The Technical Support Instrument (TSI) was used to reduce this complexity. As noted in EQ14, DG REFORM has been providing capacity-building support to 12 MSs AT, BE, BG, CZ, FI, HU, IT, LV, PL, SK, SI, and ES), to apply the DNSH principle in the RRF but also in other Union funds.

EQ4.6: To what extent has the RRF been effective in supporting the digital transformation?

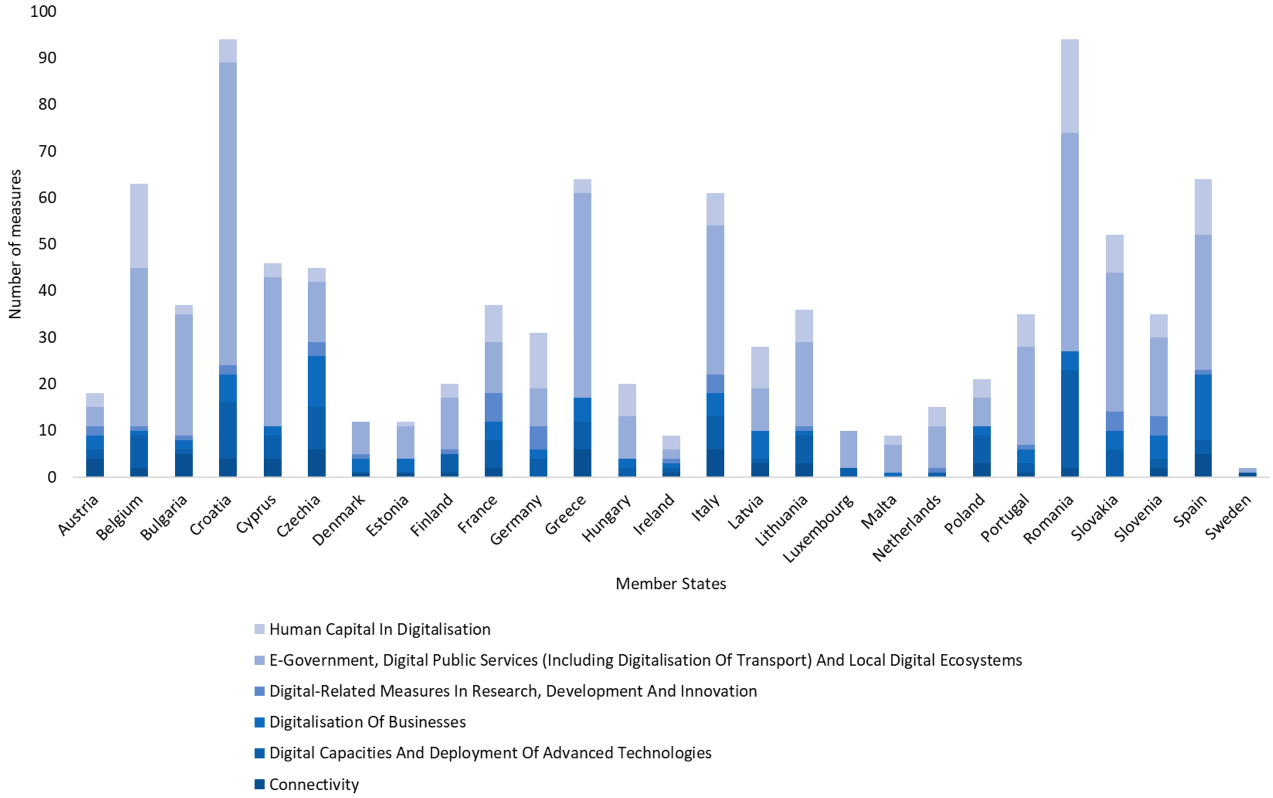
The regulation requires MSs to reserve at least 20% of the total allocation of their Recovery and Resilience Plans for the digital transformation. MSs showed their commitment to transitioning towards a digital economy, going beyond such a target, with an average of 26% of the total allocation of their Recovery and Resilience Plan being dedicated to digital objectives. Austria, Germany and Ireland represent the top countries in terms of relative expenditure (i.e., 53%, 53%, and 32% respectively). Overall, **more than €130 billion are expected to contribute to the digital** transformation **across EU MSs**.

More than 1,100 measures (including sub-measures) have as a primary or a secondary pillar the digital transformation pillar. The figure below provides a breakdown of the MSs' measures (both reforms and investments) that are classified as 'digital transformation' as primary pillar. Out of 970 measures, for which digital transformation is the primary policy area, the largest number is dedicated to E-Government, Digital Public Services (Including Digitalisation of Transport) and Local Digital Ecosystems (506). These measures account for over one-third of the digital funding, equivalent to €53 billion or 37% of the pillar (EC, 2023h). A significant number of measures target Human Capital in Digitalisation (156), Digital Capacities and Deployment of Advanced Technologies (116), and Digitalisation of Businesses (90). The rest of the measures focus on Connectivity (63) and Digital-Related Measures in Research, Development and Innovation (39). A high variation can be observed among the countries regarding the number of measures put forward as part of the

[54] Twelve respondents answered "Do not know".

digital transformation pillar. The countries with the highest number of measures in the digital transformation pillar are Croatia and Romania (94 each).

Figure 15: Overview of measures in the Digital transformation pillar

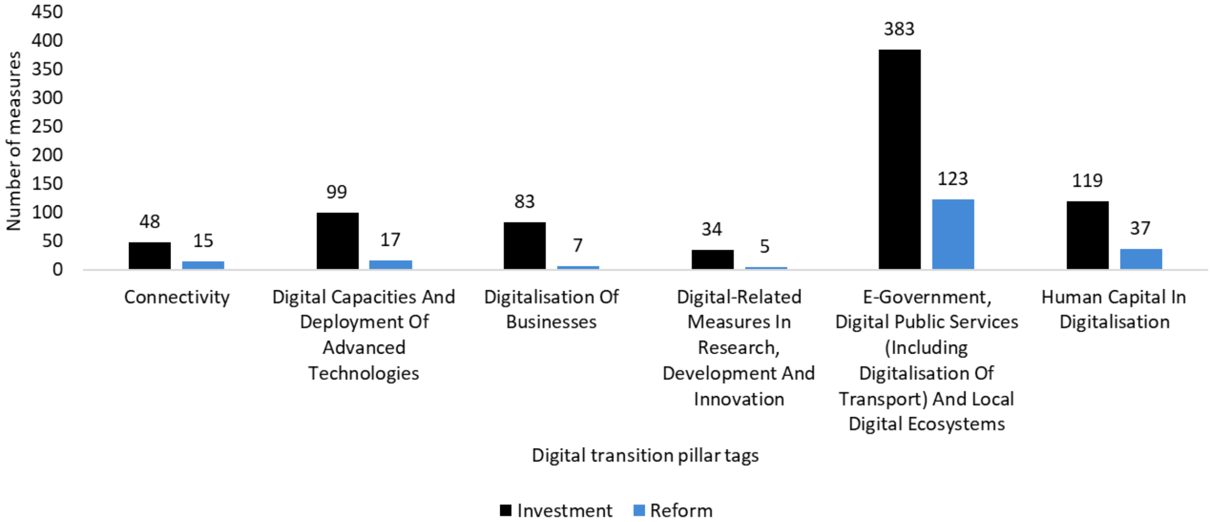


Note: The graph presents measures for which the digital pillar is the primary pillar.
Source: Authors' elaboration, based on EC data. Measure allocation based on the primary policy area.

Clearly, different investment efforts differ across MSs also due to the variation of MSs' performance in digital performance (EC, 2022c). As reported by Lilyanova (2022), MSs have included measures in the RRP that are tailored to their specific weaknesses. For example, Italy's standing in terms of human capital and connectivity (DESI indicators) is low. Its RRP therefore places significant emphasis on digital transformation, dedicating 25.1% of the funds toward this objective. The RRPs of the Visegrád countries (Czechia, Slovakia, Hungary, and Poland) primarily focus on enhancing public services and digital skills, with less emphasis on prioritising cutting-edge technologies. The DESI also tracks the progress of digitalisation within SMEs, which also shows that there are gaps throughout the EU. In 2021, only 55% of SMEs reached at least a basic level in the adoption of digital technologies, and 69% in 2022 (EC, 2022c). In its RRP, Denmark has dedicated 64% of the national digital budget to the digitalisation of businesses (Godlovitch and Bodin, 2022) (see further details of the country's digital strategy below). On the other hand, despite a lagging performance in DESI indicators related to SME digitisation, Romania and Bulgaria have dedicated only a small portion of their digital budget, accounting for less than 10%, to the 'digitalisation of businesses' within the pillar (Godlovitch and Bodin, 2022).

As for the types of measures that MSs implement under the digital transformation pillar (as a primary pillar), the balance between investments and reforms varies significantly across policy areas (Figure 16).

Figure 16: Number of reforms and investments per policy area under the Digital transformation pillar



Note: The graph presents measures for which the digital pillar is the primary pillar.
Source: Authors' elaboration, based on EC data. Measure allocation based on the primary policy area.

Under the *Connectivity* label, investments focus on improving and expanding digital communication networks to enhance connectivity. These projects aim to develop, upgrade, or expand various types of communication infrastructure to provide faster, more reliable, and widespread access to digital services and data transmission. Reforms aim to improve and advance digital connectivity, especially in the context of broadband and high-speed internet access. With respect to *Digital Capacities and Deployment of Advanced Technologies*, investments focus on advancing digital technologies and infrastructure, while reforms aim to modernise infrastructure, enhance cybersecurity, improve data management, foster innovation, and create a conducive environment for the deployment of advanced technologies to drive economic growth and efficiency. The investments indicated under 'Digitalisation of Business' aim to support various sectors of the economy, with a particular focus on SMEs, innovation, and the use of financial instruments to support businesses in their digital journey, while reforms intend to promote digitalisation within the business environment. When it comes to RDI, investments and reforms aim at advancing digital research, development, and innovation, with a focus on collaboration, financial support, specific sectors, and the promotion of research infrastructure and talent development. E-government investments aim to leverage digital technologies to improve public services, enhance efficiency, promote economic growth, and ensure inclusivity and accessibility for citizens and businesses, while reforms intend to harness digital technologies and strategies to enhance government services, improve governance, and promote digital innovation and accessibility. Human capital investments in digitalisation focus on addressing the challenges and opportunities posed by the digital age by promoting digital skills development, education, and inclusion, with a focus on various segments of the population and partnerships between different organisations and sectors. Finally, multi-country projects, with high relevance to the 'Path to the Digital Decade' policy programme[55] which aims to help the EU achieve digital objectives including resilience, digital sovereignty, and competitiveness, were introduced to the Member States during the RRF negotiations. This allowed the Member States to include these in their RRPs. Examples of such projects are based around: Security Operation Centres, MediaInvest, European Blockchain Services Infrastructure, EuroQCI, 5G Corridors, Common European Data Infrastructure, Processors and Semiconductor chips, Connected Public Administration, Genome of Europe, Digital Skills. Slovakia, for example, has set two investments for the Development and

[55] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

construction of the supercomputer for the national supercomputing centre; and for the establishment of European Digital Innovation Hubs. Slovenia has put forward investments towards European common data infrastructure and services; and Low-Power Processors and Semiconductor Chips. Finally, Romania is to implement investments related to Low Power Processors and Semiconductor Chips.

The respondents to the open public consultation find that the RRF's contribution to supporting the digital transformation can be valued mostly to some extent (32%). It is indeed still early to make final statements about the RRF's effectiveness towards the digital transformation, especially since only 8% of the milestones and targets related to the digital transformation pillar have been fulfilled thus far (see EQ 2.1).[56] Most investments are also spread over the years of the RRF and are planned to be completed in 2025/2026. Nevertheless, the four common indicators relating to this pillar show positive progress:

- Additional dwellings with internet access provided via very high-capacity networks: Growth of the number of additional dwellings with internet access provided via very high-capacity networks from 2.3 million until 12/2021 to 17.8 million in 2022-S2 (representing a ca. 673% increase). The data relies on four countries: France, Italy, Spain, and Sweden, which all saw growth.
- Enterprises supported to develop or adopt digital products, services and processes: In general, a slight decrease in the number of enterprises supported to develop or adopt digital products, services and processes from 166.9K until 12/2021 to 166.1k in 2022-S2 (representing a ca. 0.48% decrease). The findings per country vary though. There is an increase in supported enterprises in Belgium, Denmark, Finland, and Spain, whereas there is a decrease in Austria, France, Italy, and Slovenia.
- Users of new and upgraded public digital services, products and processes: Evolution of users per year of new and upgraded public digital services, products and processes from 37.9 million until 12/2021 to 124.3 million in 2022-S2 (representing a ca. 227% increase). The upward trend is true for Austria, Belgium, Croatia, Cyprus, Czechia, Finland, France, Greece, Italy, Luxembourg, Malta, and Slovenia, whereas Portugal and Spain have seen decreases.
- Number of participants in education or training: Increase of the number of participants in digital skills training from 241.88K until 12/2021 to 414.43K in 2022-S2 (representing a ca. 71% increase).

To further exemplify the RRF's effectiveness towards the digital transformation, two examples of measures are presented in the box below, which support the digital transformation in Czechia and Denmark.

Box 13. Examples of results of a reform and investment in digital transformation

The example of **Denmark's Digital Strategy reform** showcases that digitalisation touches various sectors. The objective of this reform is to promote a just and inclusive digital transformation that will support the development of better welfare services, job creation and growth, as well as the green transition. To promote this digital reform agenda, Denmark intends to formulate and implement a new digital strategy covering all sectors of society.

It consists of five sub-reforms which cover all sectors of society:

1. Digital Public Sector: Continuously modernise digital infrastructure to meet the needs of citizens and businesses while improving connectivity.
2. Future Digital Jobs: Strengthen digitisation in businesses and industries to secure digital professions and promote growth and export of goods and services.
3. Co-creation and Innovation: Utilise modern technologies and public-private partnerships to streamline public services, accelerate digital transformation in businesses, and support climate change mitigation.

[56] https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/digital.html

4. Data-Driven Society: Improve access to data, establish secure and interoperable data infrastructures, and develop digital-ready regulations to enhance digitalisation in SMEs, health systems, and digital services.
5. Framework for a Digital Future: Enhance cyber and information security, foster digital skills and competencies, benefiting all citizens, businesses, and employees while preserving the best aspects of our society.

In June 2022, Denmark's central, regional and local governments have agreed upon a new Joint Government Digital Strategy for the period 2022-2025. Amongst other things, a 10-year plan supports the use of new technologies, e.g., robots or artificial intelligence that can perform administrative tasks and free hands for welfare close to home. Furthermore, a number of initiatives will contribute to climate change mitigation by e.g., ensuring that more waste is reused and that the public sector purchases more climate-friendly data storage and data processing. As part of the Joint Government Digital Strategy 2022-2025 two new solutions were introduced. First, a new infrastructure component will allow users to grant and rescind permissions for authorities to use their personalised data. Second, digital powers of attorney will pave the way for allowing people to let their relatives manage their digital contact with the public sector. Overall, the Danish Government is set to invest 2 billion DKK in the digital society over the next 5 years, with the ambition of strengthening common Danish welfare, accelerating the green transition and increasing growth, talent and exports through digitisation.

Additionally, in December 2021, the Danish Government's National Strategy for Cyber and Information Security 2022-2024 was adopted to help enhance technological resilience; secure the protection of critical government ICT systems; and improve the knowledge and skills of residents, businesses, and authorities. To implement the strategy, the government has allocated a total of DKK 270 million (€36 million) to 34 initiatives running from 2022 until 2024 to equip Denmark to keep cyber threats at bay.

In **Czechia, an investment in the Digital equipment of schools** was fulfilled in 2020. The investment includes an activity from the fall of 2020 when primary schools and lower secondary schools were provided with funds amounting to 1.3 billion CZK including VAT (1.027 billion CZK excluding VAT) for ICT equipment for distance learning.

This investment includes a total of 4 milestones and targets. The one fulfilled in 2020 relates to the purchase of 74,000 digital devices (tablets, laptops, mobile phones, etc.) by schools for distance learning, and for 4,102 primary and secondary schools to receive funding for IT equipment for distance learning.

The overall goal is for 80% of schools to create a fund for mobile digital devices for disadvantaged students, ensuring that all students have access to mobile digital devices for regular and distance learning by the 4th quarter of 2025. Schools will create the fund through financial support provided by a new institution under the education law called "ad hoc normative." The funds will be allocated to schools in three waves - 2022, 2023, and 2024.

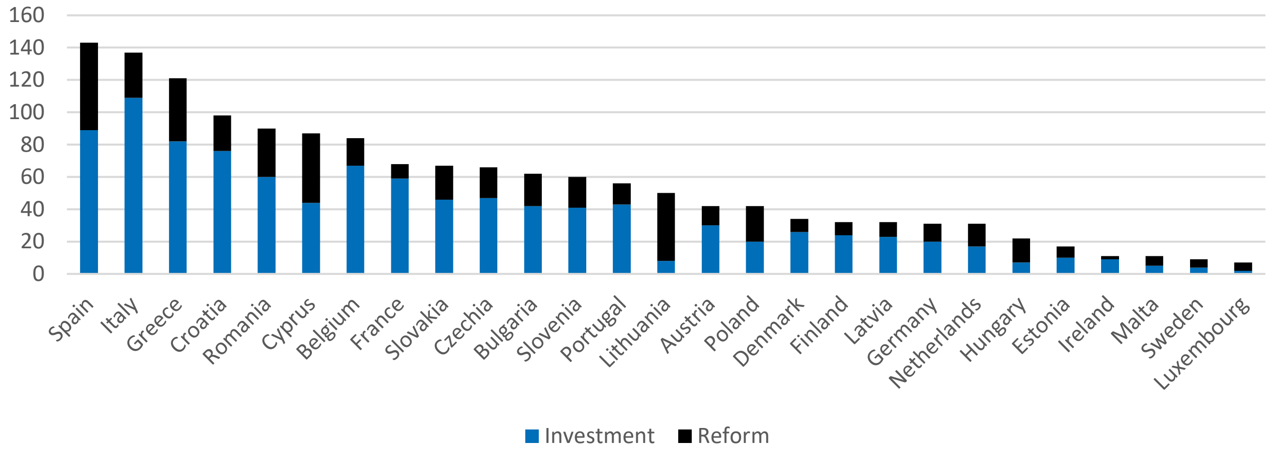
Czechia has duly achieved this investment, by having purchased 61,969 laptops, 11,844 tablets, 217 mobile phones, and 1,060 graphic tablets and visualizers, which amounts to a total of 75,090 devices. As for schools' funding, 4,106 schools received funding for IT equipment for distance learning.

The decision by the Ministry of Education, Youth and Sports on the dedicated funding for basic schools Bulletin No. LXXVI, Book 6 of September 2020 and the decision on the dedicated funding for the lower secondary stage of grammar schools Bulletin No. LXXVI, Book 7 of October 2020 provide a breakdown of funds per Czech region, which may be used by schools for purchasing teaching aids that can be used to implement distance online teaching.

EQ4.7: To what extent has the RRF been effective in fostering smart, sustainable and inclusive - economic growth and employment potential within the Union?

The review of the measures included in the RRF indicates that they **contribute to fostering smart, sustainable, and inclusive economic growth and employment potential within the EU**. These measures align with the objectives stated in Article 29(3) of the RRF Regulation, encompassing economic cohesion, jobs, productivity, competitiveness, research, development, innovation, and a well-functioning internal market with strong SMEs. More than **1,500 measures** under this pillar have been identified, including sub-measures (see the following figure).

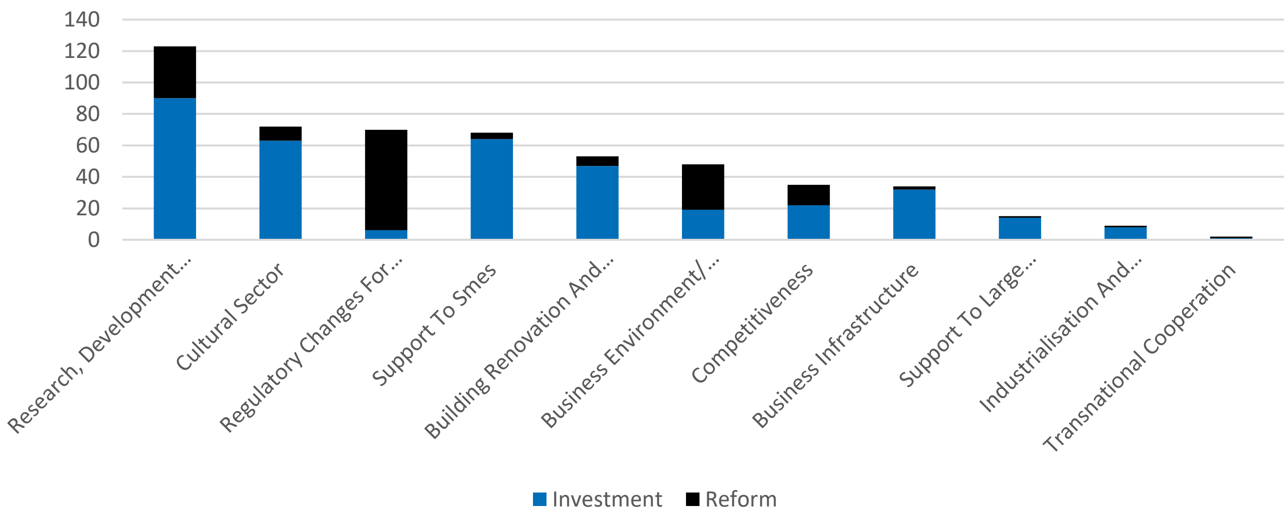
Figure 17: Overview of the number of reform and investment (sub)measures per country under the Smart, sustainable and inclusive growth pillar



Note: The graph presents measures for which the Smart, sustainable and inclusive growth pillar is the primary or secondary pillar. Measures for which the pillar is marked both as a primary and as a secondary pillar have been counted only once.
Source: Authors' elaboration, based on EC data.

Since the number of primary policy areas is rather high, we focus only on the measures that have the pillar assigned as a primary one, i.e. 529 measures (including sub-measures). Regarding the policy areas under the Smart, sustainable and inclusive growth pillar, measures categorised under the Research, development and innovation (RDI) and Regulatory Changes are among the most common ones. This is well in line with recommendations made by the EU MonitorEurope 2020 Strategy in 2020 on the need to reform and fund national (and regional) RDI systems to strengthen collaboration among universities, research institutions, and enterprises, facilitate coordinated initiatives, and promote increased cross-border partnerships in areas that contribute EU-wide value (EU Monitor, 2020). Measures in the cultural sector and SME support are also common.

Figure 18: Overview of the number of measures included in MS' NRRPs under the Smart, sustainable and inclusive growth pillar per policy pillar.



Note: The graph presents measures for which the Smart, sustainable and inclusive growth pillar is the primary pillar.
Source: Authors' elaboration, based on EC data.

Furthermore, the measures also **support the green and digital transitions**, crucial elements for achieving sustainable growth. Beyond the need for regulatory changes in MSs to promote and enhance economic growth and employment, a considerable amount of the measures included under the Smart, sustainable and inclusive growth pillar target the twin transition. As regulations play an imperative role in driving the green and digital transition in MSs (EC, 2022d), it is unsurprisingly reflected in the NRRP of MSs.

As outlined for evaluation question 2.1, the pillar on smart, sustainable, and inclusive growth has one of the highest percentage of fulfilled milestones/targets (above 12%) out of the planned milestones/targets linked to the pillars. In total 350 milestones and targets linked to the pillar have been implemented. Thus, the implementation of the pillar seems to be advancing comparatively well.

Going beyond milestones and targets, the common indicators report that in terms of results regarding Pillar 3, the following have been achieved: 1) close to 1.5 million enterprises have been supported based on numbers reported by18 MSs (about 1 million are SMEs); 2) specifically, close to 380,000 SMEs were supported across 10 MSs in mainly adopting and to some extend developing digital products, services and processes; 3) over five thousand researchers have been supported under the RRF across 7 MSs; and 4) over 680,000 people have been supported in employment or job searching activities based on numbers reported by 13 MSs. In general, if compared to similar result indicators from other EU programmes, e.g., numbers of researchers supported by Cohesion policy financing, the presented results of the common indicators may not appear to be substantial However, they are also only mid-term results and based on numbers from a limited set of MSs. Moreover, the 1.5 million enterprises supported can be considered promising as this amounts to 6.2% of all EU enterprises (in 2019).

***Box 14.* Examples of measures providing a supporting framework for smart and sustainable growth**

A good example of a measure enabling smart and sustainable growth is the **establishment of the Portuguese National Promotional Bank (BPF)**. The BPF addresses one of Portugal's CSRs and was established in Q4 2020 through the merger of financial entities geared toward capitalisation and investment support. With a focus on tailored financing solutions, BPF's mission supports innovation, entrepreneurship, and investment, offering accessibility to financing for Portuguese SMEs. Furthermore, it has been established as a "Green Bank" to empower SMEs to secure funding for initiatives related to carbon neutrality and the circular economy, facilitating sustainable and environmentally conscious investments. Since its establishment, the BPF issued a wide range of funds and guarantee lines to support companies in vulnerable sectors, as well as to address the issue of undercapitalisation of the Portuguese corporate sector. For example, in January 2022, the BPF launched two programmes to support capitalisation financed by the Capitalisation and Resilience Fund:

- the Strategic Recapitalisation programme, a programme of direct investment end beneficiaries, with a budget of €400 million; and
- the Consolidar programme, an investment programme through financial intermediaries, with intermediaries, with an initial budget of €250 million, subsequently €250 million, later doubled due to high demand.

The data available indicate a total of 68 applications received by the BPF, corresponding to an investment of € 417.3 million. The 39 eligible applications correspond to €167.5 million 42% of the planned budgetary allocation. There are 29 applications under evaluation corresponding to an investment of around €116.8 million.

Another good combination of measures supporting smart and sustainable growth can be found in the **Danish investment** measures '**Incentives to boost R&D in companies'** and the '**Investment window'**. Both support the twin transition for companies, the first by boosting R&D and the second by supporting investments. Both also deliver on the recommendations for Denmark in the CSRs to frontload investments in a green and digital transition, also by ensuring a just transition for the most affected companies. After agreement by the Danish Parliament on the green tax reform including the investment window and adoption of the bill, the Investment Window has become effective as of 23 November 2020. The target is 1,000 companies that have used the tax deduction provided by the investment window. Regarding the R&D incentive, the bill on deductions for R&D work has been adopted by the Danish Parliament and entered into force. It extends the basis for depreciation and the basis for deduction for all private sector R&D expenses by 130% in the financial year of 2022. The target is that 500 enterprises make use of the deductions. Compared to the close to 330,000 enterprises in Denmark (2021), these are low target numbers, but like the establishment of the Portuguese National Promotional Bank, they provide the right incentives and framework to support smart and sustainable growth also beyond the RRF.

In general, measures are found to be tailored to the specific needs of an individual EU MS, particularly in their efforts to recover from the economic and social impacts of the COVID-19 pandemic (Agostinelli et al., 2023). According to the survey conducted by BusinessEurope (2022), 63% of their member federations view the EU's overall economic response to the pandemic as 'very good' or 'excellent.' This suggests that, at least in the eyes of a majority of these business organisations, the EU's efforts in addressing the economic challenges posed by the pandemic have been positively evaluated. In the public consultations, a majority of the respondents (54%) further expressed the view that the RRF fosters the growth potential of the EU to some or a large extent. It is noteworthy that some measures are a continuation of pre-existing activities or projects, while others provide additional funding to expand the scope of ongoing initiatives.

Many of the analysed measures adopt a project-based approach, which fosters open competition for funding and enhances monitoring and quality control of the interventions undertaken. This approach is expected to contribute to better outcomes and more effective use of resources and also allows for the participation of SMEs (Agostinelli et al. 2023). On the latter, various measures have implemented thresholds of SME participation. This means that, for example, at least 40% of the measure’s allocated budget should be reserved for projects implemented by SMEs.

While the analysed measures demonstrate positive potential in fostering smart, sustainable, and inclusive economic growth and employment, it is important to assess the overall role of RRF within the broader reform landscape of the EU MSs. Some measures are already planned or ongoing initiatives that existed prior to the pandemic, with RRF funds providing additional financial support. Clarification is needed regarding the extent to which RRF funding complements or overlaps with existing reform efforts. Nevertheless, its contribution to support SMEs in the majority of the MSs is considered to be satisfactory. In a recent survey, 11% of members of the EU SME organisation SMEunited responded by saying that the perceptions of the NRRPs’ measures were to a large extent focused on achieving SME impact and 56% to some extent (Internal survey conducted by SMEunited, 2023). Moreover, a survey disseminated with enterprises and associations across MSs for the purpose of this evaluation has shown that over one-third of the respondents agreed that the measures included in the country's NRRP of the respondent have positively impacted businesses and SMEs in particular. Conversely, twenty per cent (out of the thirty respondents) stated that the NRRP of their respective country did not have a positive impact on businesses and SMEs, while forty per cent stated to be neutral or to no hold a particular view on the matter.

For the case study on smart and sustainable growth: supporting SMEs, the measures relevant to the Smart, sustainable and inclusive growth Pillar, and in particular, SMEs have been assessed and evaluated for their effectiveness in four countries; Greece, Finland, Ireland and Portugal. In the assessment, **both favourable factors and obstacles have been identified**. Key contributors to successful implementation, as voiced by consulted Greek SME stakeholders, are rooted in precise targeting and audience identification. Crafting measures tailored to distinct requirements and well-defined target groups ensures enhanced participation and benefits for intended recipients.

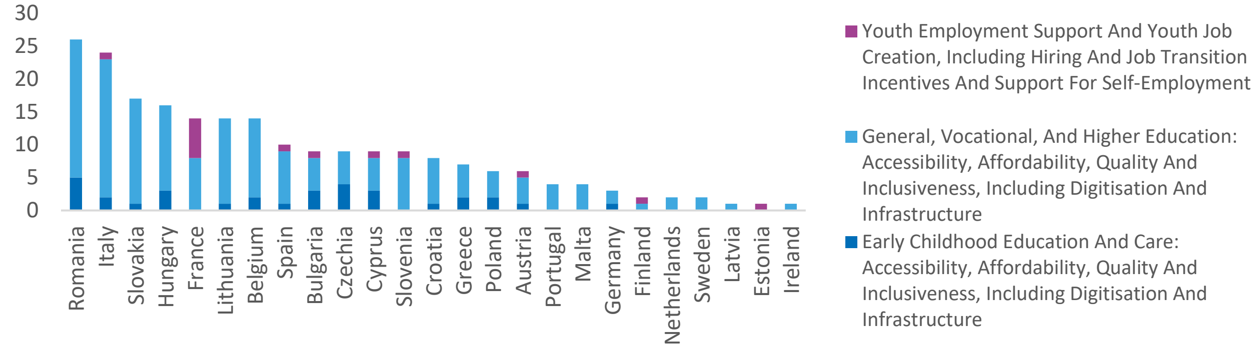
Effective communication holds pivotal significance in building awareness and interest among stakeholders, with streamlined administrative procedures facilitating seamless access to the measures. For example, by actively engaging in dissemination efforts through official platforms, awareness is heightened, fostering higher participation levels, this has for example been the case for the 'Digital Transition of Enterprises' investment measure in Portugal, resulting in considerable participation by SMEs which otherwise would not have participated due to the general low understanding of knowledge of digitalisation opportunities which can enhance their operations. This need for effective communication is also highlighted in the position paper by Eurochambers (2023) as 33% of their members indicate a lack of information on available funding as an issue. In general, the use of intermediary organisations such as chambers of commerce, enterprise agencies, business associations or Digital innovation Hubs both in the development and implementation of measures can ensure better targeting and reach of the measures. In this context, Eurochambers reported that two-thirds of surveyed chambers are actively involved in the implementation of RRPs.

Conversely, certain hurdles and unintended consequences have emerged during SME-related measure implementation. Consulted stakeholders shared their perception of cumbersome and intricate national programs deterring SME involvement, underscoring the value of maintaining measures that are straightforward and accessible. This is also reported by Eurochambers, in which 44% of chambers indicated that excessive red tape and burdensome legislation hinder an efficient allocation of funding. In Finland, challenges surrounding SME measure implementation have been experienced due to this issue, where, engaging SMEs with these measures proved difficult, and even after their involvement, sourcing adequate services for project execution remained a barrier. This highlights the need for streamlined access to relevant support services, enhancing the measures' effectiveness for beneficiaries. Consulted stakeholders have emphasised that excessively detailed and complex programs deter participation, stressing the importance of measures tailored to their unique needs. Simplified application processes and flexible options can amplify engagement herein. The importance of this has come forward in previous EU support programmes to enhance business participation, such as the Cohesion Policy (EC, 2018a).

EQ4.8: To what extent has the RRF been effective in supporting policies for the next generation?

More than 370 RRF measures (primary and secondary pillar relevance) fall within the scope of the pillar Policies for the next generation, children, and the youth. To focus the analysis, if we consider the Primary pillar relevance of the measures, then 218 measures are part of the pillar (see below). Of these, the **large majority belong to the category of general, vocational and higher education** (172), while a smaller number of measures are allocated to the primary policy areas of early childhood education and care (32) and youth employment support and youth job creation (14). Looking at the distribution by country, the largest number of measures is found in Romania (26), followed by Italy (24), Hungary (17) and France (16). There is a large country variation in the number of measures by country, with a number of countries with only one measure (Latvia, Estonia, Ireland).

Figure 19: Measures within the pillar on policies for the next generation



Note: The graph focuses on measures where policies for the next generation are the primary pillar.
Source: EC data, own elaboration

The analysis conducted for the case study on policies for the next generation, which focuses on early childhood education and care, provides more detailed insights into the effectiveness of the RRF in supporting policies for the next generation. The analysis shows that the RRF investments are expected to significantly increase the coverage of childcare services in all five MSs selected for the case study (Germany, Italy, Poland, Spain, and Belgium). More than 370 RRF measures (primary and secondary pillar relevance) fall within the scope of the pillar Policies for the next generation, children, and the youth. To focus the analysis, if we consider the Primary pillar relevance of the measures, then 218 measures are part of the pillar (see below). Of these, the large majority belong to the category of general, vocational and higher education (172), while a smaller number of measures are allocated to the primary policy areas of early childhood education and care (32) and youth employment support and youth job creation (14). Looking at the distribution by country, the largest number of measures is found in Romania (26), followed by Italy (24), Hungary (17) and France (16). There is a large country variation in the number of measures by country, with a number of countries with only one measure (Latvia, Estonia, Ireland).

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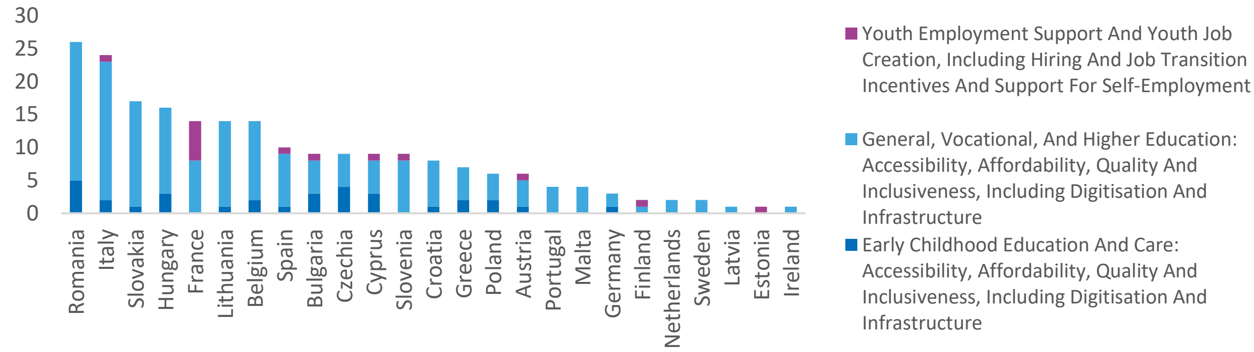


Note: The graph focuses on measures where policies for the next generation are the primary pillar.
Source: EC data, own elaboration

Among the countries analysed, Italy stands out as having a very limited availability of public or subsidised – i.e., more affordable and accessible - services (13.3%) As a result of the RRF investment, Italy will create an estimated 237,500 to 244,300 new places in both childcare and pre-primary schools, 185,629 of which will be for children below age 3. This will increase overall coverage (public and private provision) from 27.2% to 41.6%, possibly increasing participation to close to the EU target of 45%. Availability of accessible places will increase from 13.3% to 27.6%.

Similarly, Spain has used the RRF funds to strengthen its supply of public/subsidised services. The creation of 65,382 new places is estimated to result in an increase in coverage of public/subsidised places, currently at 20.9%, to 26.5%, and an increase in total coverage to 45.7%. In Belgium (Wallonia), where public or subsidised childcare is provided to 28.6% of children below age 3, the RRF, in combination with regional funds, will create approximately 3,200 new places. This should increase coverage of public/subsidised places to 32.5% and total coverage to 41.9%. Poland will create - through a combination of RRF and ESF+ investments - 102,577 new childcare places, increasing total coverage from 20.2% to 29.9%. Finally, in Germany, total coverage will increase from 34.4% to 38.1% (30.3% will be sponsored/subsidised) through the creation of 90,000 additional places.

Table 8: Summary statistics of the increase of available childcare places after RRF intervention

Country	Public coverage (%)	Number of public places	Investment RRF (EUR mln)	Estimated total number of public places created with RRF	Estimated public coverage after RRF (%)	Estimated public and private coverage after RRF (%)
Germany	26.6	626.121	1,000*	716.121	30,3	38,1%
Italy	13.3	172.201	2,519	357.830	27,6	41,6%
Poland	20,2**	212.377	1,703*	314.954	29,9	29,9%
Spain	20.9	244.319	667	309.033	26,5	45,7%
Belgium (Wallonia)	28,6	26.160	61,4*	29.728	32,5	41,9%

Source: Own elaboration.
** National funds and/or ESF+ have been added to RRF investments*
*** In Poland, disaggregated statistics about public vs. private are not available. However, the RRF will create only subsidized, accessible places.*

Significantly, **the measures included in the NRRPs will also contribute to the reduction of existing territorial gaps in the offer of affordable childcare services**. This is particularly the case in Poland, where coverage will increase to a larger extent in provinces and municipalities that are currently lagging behind. Specifically, municipalities with coverage below the national average (20%) will see a growth in coverage of 61%, compared to 39% for the provinces where coverage is above the national average. In Italy, according to our estimates, the distribution of new childcare places will largely benefit a number of provinces where coverage of public or publicly funded childcare services is low or basically not existing (between 1% and 5%). This is mostly the case in Southern regions and should enable the closing of the gap with Northern provinces in some cases. However, the increase is not equally distributed between Southern provinces. For instance, the provinces of Reggio Calabria (2%), Napoli (3,2%), Palermo (4,9%), Catania (5,2%) or Caltanissetta (5,7%) will increase their coverage of public or subsidised services by a limited amount, to reach approximately 10-15%. Similarly, in Belgium (Wallonia), the variance in coverage between municipalities will only partially decrease. This is because around 20% of communes selected to receive RRF funding or regional financing already had a coverage well above 33%, while 61 municipalities with an actual coverage of public or subsidised services below 30% (23% of the total number of municipalities in Wallonia) were not selected to receive any funding[57]. This also includes medium-size municipalities. In Germany, the expansion of childcare services will be larger in the Western Länder, such as Saarland, Schleswig-Holstein, Bavaria, Hesse, Lower Saxony. Baden-Württemberg, Bremen and North Rhine-Westphalia, which are typically lagging behind, and will increase the number of places between 15% and 21.5%. In comparison, in Eastern regions, which have the highest coverage rates, growth in places will not exceed 10%. Nevertheless, regional gaps will remain significant. Finally, in Spain, gaps among regions will be moderately reduced. The plan,

[57] This is because the selection criteria for municipalities to receive RRF funds have been made based on data on coverage of 2019. Since - in the meantime - some municipalities have increased their offer, and increased their coverage above the 33%, they no longer needed the RRF funding.

according to estimates, is expected to benefit regions that currently have the lowest public coverage, such as Murcia, the Canary Islands, Ceuta, Castilla y Leon, and the Balearic Islands, to a larger extent. There will be an estimated increase in new public places between 40% and 85%. In contrast, regions such as Galicia, Catalonia, Madrid Community and Basque Country, which already have a high presence of childcare services, will see a limited expansion (no more than 25%).

Table 9: Correlation table of current and projected new ECEC places and other social variables, by country and NUTS level

	Belgium	Spain	Poland	Germany	Italy
Correlation old coverage vs. Increase % (new places) (subid.)	-0.39	-0.84	-0.94	-0.96	-0.54
Correlation old coverage (subsid.) vs. AVG income	0.07	0.52	0.15	N/A	N/A
Correlation new coverage (subsid.) vs. AVG income	0.08	0.36	0.033	N/A	N/A
Correlation old coverage (subsid.) vs. Female unempl.	-0.11	-0.47	-0.55	0.06	-0.52
Correlation new coverage (subsid.) vs. Female unempl.	-0.07	-0.44	-0.46	0.06	-0.10
NUTS level	Municipalities	Regions	Municipal. (1) Provinces (2)	Regions	Provinces

Source: Authors' elaboration.

Another important effect of the expansion of childcare services is the increase in access to employment opportunities for women. In some MSs, stronger growth in public/subsidised places will happen in territories where female unemployment is higher, potentially contributing to reduced gender disparities in the labour market. In Poland, for instance, there is an existing negative correlation between coverage and female unemployment, which will be reduced due to RRF interventions. As an example, the 4 provinces with female unemployment rates above 8% (Warmian-Masuriam, Subcarpathian, Lublin and Świętokrzyskie) will see an increase in the number of childcare places of 75% on average. In contrast, for those with unemployment rates below 5%, growth will be equivalent to 45%. Equally, in Italy, major growth in the offer of childcare services will be observed in provinces where female unemployment is higher. As an example, the provinces Vibo Valencia, Cosenza and Crotone are characterised by coverage rates below 5%, while female unemployment rates are among the highest in Italy (between 24% and 37% while the national average is 18%). These regions will reach new coverage rates between 25% and 40% as a result of RRF funding. In Belgium, Spain and Germany, public coverage will remain substantially higher in those territories where the share of working women is also higher. For Germany, this is mainly due to the fact that Eastern Länder, although they are socio-economically disadvantaged have, historically, more developed ECEC systems.

Despite progress in the expansion of childcare services in the countries selected, **several potential barriers have emerged throughout the implementation of measures**. The tight timetable for developing projects has discouraged a number of local authorities, which are usually responsible for applying for funding. This is particularly the case in Italy, where the deadline to award all contracts for infrastructure works by June 2023 was not met due to delays in the award procedures (see case study for more details). In addition, a lack of prioritisation towards the most disadvantaged territories in the assignment of funds – exceptions being Belgium and Poland - together with the impetus to advance funding to start infrastructural work, might have also stopped municipalities with limited financial means from applying for funding. Increasing costs for infrastructural works due to inflation have increased the financial burden on municipalities, leading to a need for government intervention to fill financial gaps and provoking delays in implementation (e.g., Italy, Spain, Germany). Furthermore, some procedures have been considered too complex, such as the **DNSH** (in Spain). Technical assistance from the government to local authorities, in particular municipalities, has been lacking notably in Italy. Complexity has also been increased by limited coordination among ministries, multiplying different procedures for applications and implementation of funding. Finally, uncertainty about how to sustain the running costs of new services (which are particularly high, especially when quality is enforced) is the main source of preoccupation for municipalities across MSs. The budget for childcare has increased in all MSs in recent years, and some countries (Italy, Spain, Poland) have used parts of the RRF to temporarily finance the running costs of new services. However, the allocation is still insufficient to cover all costs, and information about how to apply for funds is not clear. There is also uncertainty about how governments will replace funds once the RRF is phased out. In addition, there are no fiscal equalisation mechanisms (apart from Poland and limitedly Belgium) to provide higher resources to more socio-economically disadvantaged municipalities, which have fewer financial resources from parental contributions or local taxation. Uncertainty and/or limited transfers might have stopped a number of municipalities from applying for funds (e.g., in Italy and Spain). This may also force some municipalities to privatise services in the future, reducing affordability or quality.

Box 1516. Examples of a Polish reform related to policies for the next generation

Poland faces an issue of inequality in access to affordable, quality childcare services across provinces and municipalities, which is correlated with the socio-economic characteristics of territories. The Polish government has decided to use the RRF funds to undertake an overall reform of the sector. The funds will be distributed to municipalities, using an algorithm to allocate available resources, which takes into account:

- the share of children up to three years of age not covered by childcare over the total number of children not covered in the country.
- the inverse of the ratio between income per capita in a given commune and the average local government unit income per capita in Poland.
- a minimum allocation of 10 places to each municipality without any care places

This, together with other aspects of the reform (establishing minimum quality and education standards) aims to address the issue of overall lack of coverage, while also redistributing the offer of places, and quality, more equally among territories, prioritising the most socio-economically disadvantaged areas. According to estimates - considering all new places as 'sponsored' and therefore accessible to all children, due to the subsidies received by all providers to cover part of the running costs and by parents to cover fees – the distribution of new places among the provinces will likely increase coverage to a larger extent in areas that are currently lagging behind. Investments will also substantially reduce inequalities among provinces as well as municipalities. In addition, since the allocation of resources also took into account the socio-economic asymmetries among municipalities, the pre-existing positive correlation between coverage and average income per capita (i.e., higher offer in municipalities where average income is also higher) will be neutralised.

EQ4.9: To what extent has the RRF been effective in mitigating the long-term risks stemming from the Covid-19 crisis?

Key findings:

The announcements of a recovery fund – specifically, the initial Franco-German proposal on 18 May 2020 and the EC proposal on 27 May that became the RRF – led to a reduction in spreads of between 50 and 100 basis points for those MSs in Southern and Eastern Europe where borrowing costs are typically high. **Greece and Italy were major beneficiaries, gaining an extra 1.60 and 0.97 percentage points of GDP in fiscal space.**

For a small number of countries, the RRF has a particularly noticeable long-run effect, either because the RRF payments represent a significant fraction of their GDP, or the elasticity of output with respect to capital is particularly large, or both. T**his effect is larger for the relatively poorer southern European countries**, which were also particularly badly affected by the COVID-19 pandemic. This suggests that the RRF is **expected to aid convergence between EU countries** over the next few years.

The question of how to address long-term risks stemming from the Covid-19 crisis has been explored by Bankowski et al. (2022), which point to three key channels through which the RRF can impact the macroeconomy in the long run:

- By reducing spreads and country risk premia, the facility can improve the sustainability of public finances in EU countries and also improve financing conditions for the household and corporate sectors, leading to increased investment and, hence, higher GDP in the long run.
- The increased public-sector spending resulting from the RRF, if used for productive public investment purposes, will lead to increased GDP in the long run.
- The structural reforms approved and/or implemented under the RRF will lead to long-run increases in the level of actual and potential GDP.

Bankowski et al. (2022) also make the point that the RRF has been effective in mitigating the long-term risk of unsustainable public finances that resulted from the large interventions made during the COVID-19 crisis. In particular, they argue that the reduction in spreads and country risk premia was sizeable. In addition, by stimulating GDP growth, RRF spending and structural reforms would also improve the public finances in European countries. Using the ESCB's Debt Sustainability Analysis (DSA) tool, they found that NGEU led to a moderate reduction in public debt in euro-area countries but a significantly larger reduction in public debt in high-debt countries. More specifically, they found that although NGEU only reduced the average euro-area government debt-to-GDP ratio by four percentage points, it could potentially reduce it by up to 14 percentage points in Spain and 12 percentage points in Italy by 2031.

Bellia et al. (2021) zoom in on the effects of the large-scale EU bond issuance and the ECB asset purchases in the context of a hypothetical financial crisis that would have been induced by the COVID-19 downturn. They show that the crisis response policies of the EU have strongly mitigated the risks associated with sovereign-bank loops in euro area countries. Notably, they find that the combination of monetary policy action and the introduction of a common debt instrument can more than halve potential losses to public finances from a hypothetical banking crisis. Moreover, these positive effects accrue to all Member States, even after accounting for costs linked to the extension of joint guarantees.

In our work, we found that **the announcement, made on 18 May 2020, of the initial Franco-German proposal for a recovery fund' (given that this morphed into NGEU) led to a reduction in spreads** of between 50 and 100 basis points for those MSs in Southern and Eastern Europe where borrowing costs are typically high. It should be noted, however, that as with Bankowski et al. (2022), we assumed that the post-Covid increase in spreads would have continued had it not been for NGEU and that all the reduction in spreads over the three-week period resulted from the announcement of a Recovery Fund. The ECB began to implement its Pandemic Emergency Purchase programme (PEPP) in March 2020, announcing an increase in its size on 4 June 2020, and had, also in March, increased the amount their counterparties could borrow in the ECB's Targeted Long-Term Repo Operations (TLTROs) and, in April, had eased the conditions for borrowing in these operations. In addition, the European Union also started its Support to mitigate Unemployment Risks in an Emergency (SURE) scheme in April 2020. These initiatives would certainly have acted to reduce bond yields in the Euro Area with probably some effect on bond spreads.

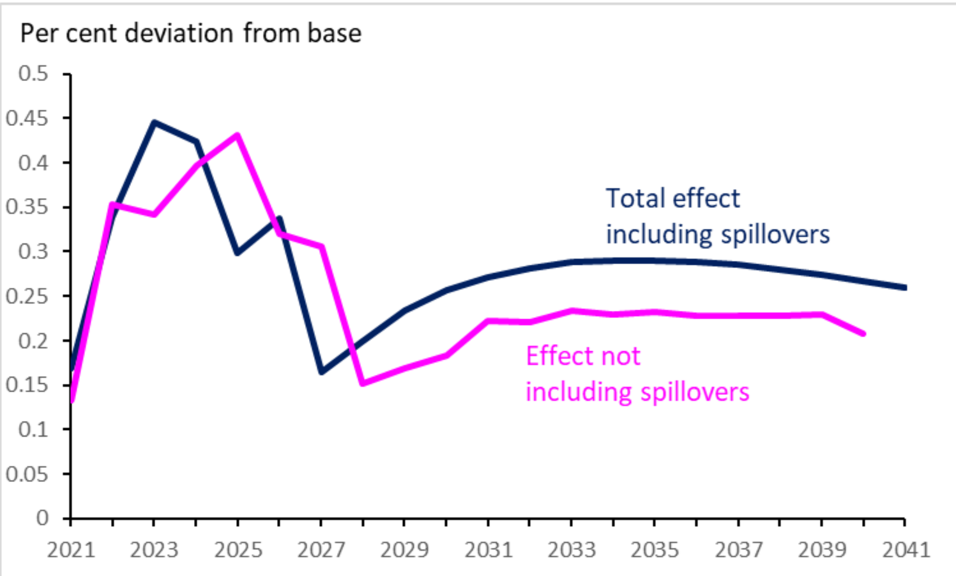
Further, under the assumptions of inflation being two per cent in the long run and GDP growth at one per cent and that the reduction in spreads is permanent, we found that **Greece and Italy were major beneficiaries, gaining an extra 1.60 and 0.97 percentage points of GDP in fiscal space**, respectively, measured as the equivalent reduction in the primary surpluses that their governments need to run to ensure that their debt to GDP ratio does not explode. Cyprus, Portugal and Spain also gain more than half a percentage point of GDP in fiscal space by this measure. Of course, it is unlikely that the RRF will have led to a permanent reduction in spreads given its temporary nature, though it could be taken as a signal that the EU will offer fiscal support of this magnitude to its MSs in the future. But it is clear that the announcement of the RRF, by reversing the rise in spreads seen at the start of the COVID pandemic, acted to mitigate the long-term risks associated with that rise in spreads.

Turning to the 'public investment' channel, Bozou and Creel (2022) found that an increase in public investment by one percentage point of GDP would increase GDP by eight percentage points after 20 years. They also find that funding via the NGEU programme would add 0.8 and one percentage points of GDP to the core and the periphery of the euro area, respectively, in comparison with a similar increase of public investment funded domestically. They also show that the lower debt and lower interest rate induced by a European-funded fiscal shock, in contrast with domestic funding, contribute to accelerating growth in the country implementing the fiscal impetus, which has, in return, a positive impact on the partner country.

Pfeiffer et al. (2022) found that **EU-wide GDP would be around 0.6 per cent higher in 2035 than it would have been without the RRF**. These results suggest that the RRF would lead to increased productivity and GDP in the longer run, thus mitigating any long-run risks resulting from the COVID-19 pandemic. Importantly, they found that spillovers meant that the effects of the RRF on EU-wide GDP were around one-third larger than those calculated by adding up the effects from individual country measures and that this was particularly important for small open economies with smaller NGEU allocations.

We carried out a similar exercise to that of Pfeiffer et al. (2022) using NiGEM. Following Pfeiffer et al., we assumed that 100% of grants were spent on additional investment that would not have happened absent the RRF whereas only 50% of loans were spent on additional investment (see the caveats presented in EQ4.2). Importantly, though, we assume that the timing of payments from the European Union to the MSs reflects their current Recovery Plans; that is, for some countries, we are assuming that the investment precedes receipt of grants and loans, whereas for others, the investment takes place after they receive their grants and/or loans. MSs cover the interest payments on EU borrowing in proportion to their 2021 share of total EU GDP. Finally, we assumed that grants are paid back between 2027 and 2058 and loans from 2031 to 2050, again in line with MSs' 2021 GDP shares. The results are shown in the following figure.

Figure 20: Long-run effects of RRF on EU GDP



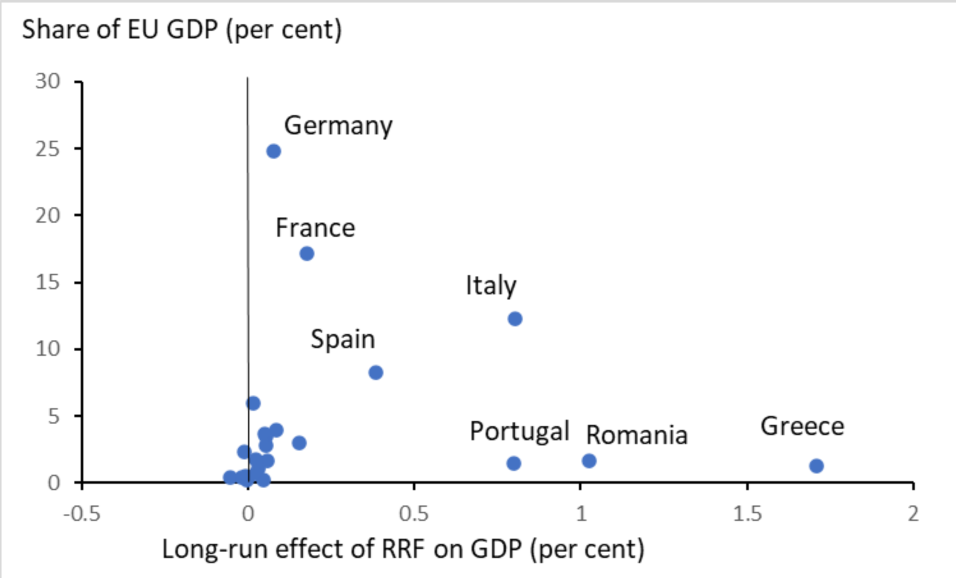
Source: NiGEM model

As can be seen, the public investment resulting from the RRF raises demand in the short run, with EU GDP in 2023 0.45 per cent higher than it would have been absent the RRF. The lack of smoothness in the GDP response results from the lack of smoothness in RRF disbursements as 'crowding out' resulting from the increased government spending in each country will be smaller or larger depending on whether this increase in spending is financed initially by domestic borrowing or by an RRF transfer. These 'timing effects' also explain why there can be negative 'spillover effects' in the short run. Where grants are made to MSs using funds raised in the financial markets by the European Union, other MSs will need to cover part of the interest payment on this funding. For those MSs yet to receive RRF payments, these interest payments act as a 'negative spillover', which could potentially outweigh the positive spillovers coming through trade effects, at least in the short run.

In the long run, where these 'timing effects' no longer matter, the public investment spending leads to a rise in supply, and so potential output and GDP. Specifically, our results suggest that the RRF raises long-run EU GDP by a little over 0.25 per cent. The difference between our results and those of Pfeiffer et al. (2022) can be explained by the lack of spillover effects from public capital to private capital in the production functions underlying NiGEM. In NiGEM, public and private capital are perfectly substitutable – whereas in the QUEST model used by Pfeiffer et al., the elasticity of substitution is unity – and the aggregate production function has constant returns to scale. Indeed, our long-run results are more or less in line with the 'low productivity' case considered in Pfeiffer et al.

Figure 21 shows the long-run effects of the RRF on individual EU MSs (specifically, the difference between the GDP projection in 2040 accounting for the RRF and a baseline projection with no RRF). The effects on most MSs are small, clustering in the zero to 0.15 per cent region. For a number of countries, this results from the way they are modelled within NiGEM. Specifically, for Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia, all government spending is treated as 'consumption' and so does not add to the economy's capital stock, which is the main way that government investment raises GDP in the long run. But even for those countries where this channel is present, the effect is small, given the assumption of constant returns to scale in production and a unit elasticity of substitution between public and private capital. For the small number of countries where the RRF has a particularly noticeable long-run effect, either because the RRF payments represent a significant fraction of their GDP, or the elasticity of output with respect to capital is particularly large, or both, **this effect is larger for the relatively poorer southern European countries**, which were also particularly badly affected by the Covid pandemic. Again, this suggests that the RRF is expected to aid convergence between EU countries over the next few years.

Figure 21: Long-run effects of the RRF on individual MSs



Source: NiGEM model

Finally, perhaps the most important element of mitigating any long-run risks resulting from the COVID-19 pandemic will be the structural reforms that the MSs put in place as part of their Recovery and Resilience Plans. These structural reforms have been put in place specifically to address six pillars: the green transition; digital transformation; smart, sustainable and inclusive growth; social and territorial cohesion; health and economic, social and institutional resilience; and policies for next generation. The extent to which the structural reforms put in place to date have begun to address these pillars is discussed extensively elsewhere in this report. Unfortunately, though, we cannot explicitly quantify the impacts of these reforms, either in the short run or the long run. Instead, we use NiGEM to consider the macroeconomic channels through which these reforms have effects on GDP in both the reforming MSs and the European Union as a whole.

Varga et al. (2013) examined the effects of structural reforms in the southern European countries of Greece, Italy, Spain and Portugal. They modelled reforms in product markets, e.g., reforms aimed at increasing competition in these markets, as a reduction in the mark-up of prices over marginal costs. They also examined the effects of lowering the costs of entering product markets as many reforms were aimed at reducing the barriers to entry experienced by potential new firms, as well as tax reforms that shifted the burden of taxation from labour to consumption and fiscal incentives encouraging investment in research and development and human capital. Varga and in't Veld (2014) used a similar approach considering the same product market and fiscal reforms as well as examining the effects of unemployment benefit reforms and policies aimed at raising the labour force participation rate and improving matching between vacant jobs and unemployed workers. In both papers, given the difficulties associated with calibrating the effects of reforms, the authors used a 'benchmarking' approach. They calculated the gaps in some structural indicators between the countries in which they were interested and the three best-performing countries in the Euro Area. They then quantified the potential effects of reforms as to what would happen if the reforming countries closed these gaps.

Unfortunately, the structure of NiGEM does not allow to carry out exactly the same exercises as Varga et al. (2013) and Varga and in't Veld (2014). Instead, we use NiGEM to illustrate the effects of a subset of reforms. Specifically, we consider reforms to the labour market, education, investment incentives and the legal system. We should note at this point that this stylised approach cannot be taken as an assessment of the quantitative effects of the RRF reforms we consider; rather it simply gives us an idea of the channels through which these reforms can work.

We first consider labour market reforms. The Spanish Government has instituted several labour market reforms, including simplifying contracts, restricting the use of temporary and short-term contracts, generalising open-ended contracts (making it harder to 'fire' workers), and setting up training/apprenticeship contracts to encourage greater labour supply. They also established a permanent 'short time working scheme' to adjust to cyclical and structural shocks, including a system that provides internal flexibility to companies and stability to workers. Such reforms act to make employment more stable, but possibly at the expense of a higher average unemployment rate, given that firms would then have a disincentive to hire since it would be harder to lay off workers in a downturn. Indeed, Millard and Mortensen (1997) show that increased costs of laying off workers – which would be implied by the Spanish reforms – lead to a higher unemployment rate. The Croatian Government also instituted new active labour market policies to boost employment and self-employment with a particular focus on the activation of the long-term unemployed. Such a policy is likely to bring down the natural rate of unemployment by increasing job creation as well as increasing labour market participation.

Within NiGEM, we can examine the effects of reforms aimed at increasing labour force participation. We find that **a rise in participation leads to greater GDP over time as the increased labour force is gradually assimilated into employment**. The size of this effect depends on the elasticity of potential output with respect to the size of the labour force but is somewhere between roughly 0.5 and 1.0 per cent of GDP per percentage point increase in the participation rate.

Education reforms have been introduced in a number of MSs, including Bulgaria and Croatia. In addition, the Spanish reforms mentioned earlier include the introduction of new training/apprenticeship contracts, which should lead to upskilling within the existing labour force. In all three cases, **these reforms will raise labour productivity in the long run, in turn raising potential output and GDP**. The size of this effect will again depend on the elasticity of potential output with respect to labour productivity but is somewhere between roughly 0.5 and 1.0 per cent of GDP for a one per cent increase in labour augmenting technical progress. But it will take time – possibly more than a decade – for the education reforms to lead to a significantly better educated and more productive workforce. Our results using NiGEM also suggest that employment falls, and the unemployment rate increases, in the short run, as less labour is needed to produce the same amount of GDP. But as the rise in labour productivity continues, firms start hiring more labour until the unemployment rate has returned to its 'natural rate', which is unaffected by the reforms. The extent to which this might happen in reality would depend on how fast relatively higher productivity jobs are created relative to the speed with which the educational reforms lead to a more productive workforce.

Various MS governments, including Bulgaria and Germany, have adopted reforms that should make investment more attractive. More specifically, Germany has introduced a joint programme at national and regional levels to tackle investment bottlenecks, while the Bulgarian parliament passed the Industrial Parks Act, which created a legal framework to attract industrial investment and develop industrial ecosystems. To the extent these policies are successful, we would expect them to lead to higher business investment, increasing demand in the short run and supply (i.e., potential output and GDP) in the long run. Within NiGEM, the effects are of a similar magnitude to the increases in public investment that we have already discussed; that is, we would expect each additional euro of investment resulting from the reforms to result roughly in an additional two euros of GDP (i.e., a multiplier of around two).

Our final example involves reforms to the justice systems. In Italy, for example, reforms have been mainly focused on reducing the length of civil and criminal proceedings by identifying a wide range of actions to reduce the number of incoming cases in courts, by simplifying existing procedures, by reducing the backlogs and by increasing the productivity of courts. Similarly, the Croatia government is seeking to establish a legal, organisational, and technological framework that shall contribute to reducing backlogs and shortening court proceedings and focusing on the transparent and efficient administration of the justice system. In both cases, we might expect such reforms to reduce various risk premia in financial transactions. At the national level, this would act to lower the government bond spread, with knock-on effects on domestic borrowing rates as discussed above; at a sub-national level, increased certainty would act to lower the investment premium (i.e., the spread of private sector borrowing for investment over the risk-free rate). Both effects would lead to an increase in private investment and, so, domestic demand in the short run and potential output and GDP in the long run. Again, we would expect each additional euro of investment resulting from the reforms to result roughly in an additional two euros of GDP (i.e., a multiplier of around two).

What all these examples show is that the structural reforms that have been associated with the Recovery and Resilience Plans in the countries we have examined should all **help to mitigate any long-term risks stemming from the COVID-19 pandemic.**

EQ.4.10: To what extent has the RRF been effective in contributing to REPowerEU objectives?

Key findings:

The REPowerEU chapters of the RRPs, submitted so far, are **expected to contribute to the six objectives (a-f)** specified in the amended RRF regulation, which are in line with the three goals of the REPowerEU plan. **The majority of the proposed measures contribute to the objective b) aiming to introduce energy efficiency measures and accelerate the deployment of renewable energy sources** responding to the first two goals of REPowerEU Plan – save energy and produce clean energy. Only two countries so far have also included measures related to fossil fuel investments, which are linked to objective a) of meeting immediate security of supply needs for gas to enable diversification and responding to the third goal of REPowerEU Plan – diversification of the energy supplies.

The timeliness and clarity of the REPowerEU chapter guidance have been assessed positively by MSs. Nevertheless, the following **factors may negatively affect the RRF's effectiveness** in contributing to the objectives of the REPowerEU plan: 1) despite the recommended deadlines, **so far only four amended RRPs with REPowerEU chapters have been endorsed by the Council**; and 2) the **limited timeframe of the RRF** (due to end in 2026) restricts the selection of investments, especially in clean tech, which typically require longer timeframes. Those two factors, the limited timeframe of the RRF and the fact that the later the measures are approved, the more difficult it will be to effectively implement them, are issues applicable also to other RRF measures, not exclusively to REPowerEU measures.

As of 4 October 2023, **22 MSs have submitted their REPowerEU chapters to the EC**. To date, 46.8 billion euros of the available 264.1 billion[58] was requested, i.e., 17.7%. The 22 REPowerEU chapters submitted thus far amount to 17 billion in grants (**85% of the available 20 billion grant funding**) and 28.3 billion in loans (**13% of the available 225 billion loan funding**). Not all MSs decided to request additional loans to fund measures under REPowerEU chapter, some countries (e.g., Italy) decided to shift part of their already allocated loans to the REPowerEU measures. Moreover, some MSs revised their RRPs to request additional loans but submitted separately their REPowerEU chapters (e.g., Spain).

As in the case of the RRF Regulation, the EC produced a **Guidance** (EC, 2023i) in February 2023 and a template to support MSs in the preparation and modifications of their plans, including the REPowerEU chapters, which **most MSs have assessed positively in terms of timeliness and clarity** (see Figure 6, in EQ3). Despite the positive assessment of the guidelines, **most of the MSs submitted their REPowerEU chapters after the recommended deadline by the EC - 30**

[58] €264.1 billion are broken down to €20 billion in new grants; €2.1 billion and €17 billion in possible voluntary grant transfers, respectively from the Brexit Adjustment Reserve (BAR) and cohesion policy funds; and €225 billion in sums still available for RRF loans. To date, the Commission has not received transfer request from a Member States to transfer up to 5% of their initial allocation under cohesion policy funds to the RRF.

April. As of 4 October 2023, only four amended RRPs with REPowerEU chapters have approved by the Council, additional five were endorsed by the EC, and the remaining 13 are awaiting the EC's assessment.

The RRF governance framework proved flexible by allowing fast integration of the REPowerEU plan. The REPowerEU plan, with its three main goals - 1) save energy; 2) produce clean energy; and 3) diversify the energy supplies, has been **seamlessly integrated into the legal framework of NGEU, strengthening some of its goals and objectives, notably those related to green transition**. Famà (2023) argues that with the adoption of REPowerEU and the mobilisation of European resources through the RRF, the EU has the potential to drive the transition towards sustainability and secure funding for the implementation of its European Green Deal. As noted in section 4.1, **the majority of the proposed measures respond to objective b)** specified in the RRF Regulation (Art. 21c(3)c (namely: most countries have included energy efficiency measures and measures aiming at faster deployment of renewable energy. In the Council implementing decisions for the four amended RRPs with REPowerEU chapters, which were approved to date, the assessment of the plans considered the degree of alignment of the proposed measures with the six objectives of the REPowerEU outlined in the amended RRF Regulation and their cross-border or multi-country dimension, which most of the measures had.

Regarding **objective a)** of meeting immediate security of supply needs for gas to enable diversification, there have been concerns by NGOs that REPowerEU might undermine the RRF's DNSH principle. To allow for possible investments in oil and gas infrastructure, that are excluded in the RRF Regulation but may in certain cases be deemed necessary for energy security in the context of the energy crisis provoked by Russian aggression on Ukraine, a targeted derogation for energy infrastructure and facilities needed to meet immediate security of supply needs was included in the amended RRF Regulation[59]. Some NGOs (CAN and CEE Bankwatch Network, 2022) highlighted that this might deepen the EU's reliance on imported fossil fuels, notably gas, and therefore contradict the green transition objective of the RRF. However, a**s of August 2023, only two countries included measures related to investments in fossil fuels, which are linked to energy supply diversification:** the draft Polish and Croatian REPowerEU chapters submitted on 31 August 2023, and not yet endorsed by the EC, contain a measure which foresees the construction of natural gas infrastructure.

In July 2022, the ECA published its opinion 04/2022 (ECA, 2022c) in which the Court questioned the RRF's capacity to achieve the REPowerEU objectives. The Court in particular argued that **the limited timeframe of the RRF (due to end in 2026) restricts the achievement of the REPowerEU objectives, especially its long-term objectives**. The Court also pointed to the uncertainties related to the availability of sufficient RRF funds to achieve such objectives, indicating especially the Cohesion and Rural Development Policy transfer component and the RRF remaining loans. The lack of a binding cut-off date to submit the REPoweEU chapters is indicated by the Court as an obstacle to a coordinated answer and the inclusion of strategic cross-border projects which instead would be desirable to achieve the REPowerEU objectives.

Similarly to ECA's assessment, **some interviewees questioned the effectiveness of the RRF in contributing to REPowerEU objectives when it comes to the production of clean energy as some of the investments in clean tech would require 5-10 years**, which is not in line with the RRF spending rules. Other interviewees questioned the timing of enactment of reforms and investments as part of the REPowerEU chapters to replace Russian fossil fuels and provide clean, affordable and secure energy in the EU, given that the impact of the reforms/investments will be

[59] Subject to: a positive assessment by the EC that those measures using the DNSH derogation are strictly necessary , that the MS concerned has undertaken satisfactory efforts to limit the potential harm to environmental objectives, where feasible, and to mitigate the harm through other measures, that the measure in question does not jeopardise the achievement of the Union's 2030 climate targets and the objective of EU climate neutrality by 2050, and that the measure is planned to be in operation by 31 December 2026.

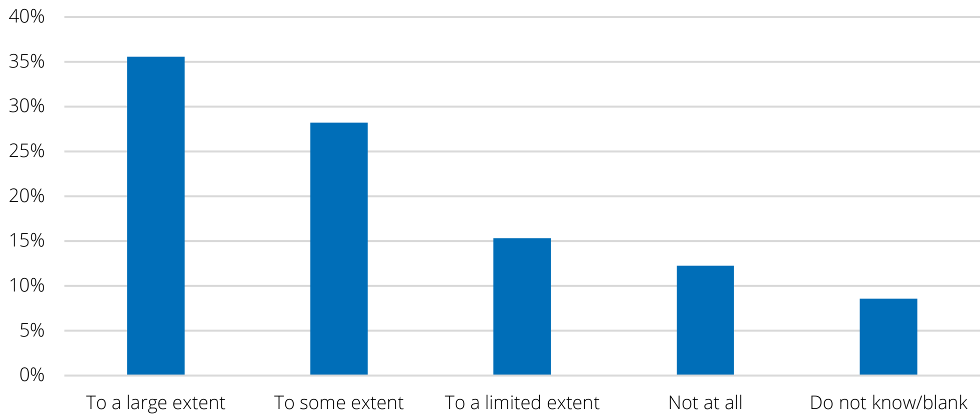
felt as of 2024-2025, long after most of the MSs will have dealt with the energy crisis caused by the Russian invasion in Ukraine and the situation in the energy markets will have stabilised.

Schmidt et al. (2023) instead criticise the REPowerEU regulation that lacks consideration of the European Emission Trading Scheme (ETS) and its impact on hydrogen production and consumption. Furthermore, the proposed "additionality" rules, which require the use of renewable electricity for hydrogen production, are insufficient in ensuring carbon neutrality, especially in non-EU exporting countries. As a consequence, they argue that the EU's hydrogen targets may inadvertently increase short-term global CO2 emissions.

Stoykova and Martin (2022) instead stress that the introduction of the REPowerEU chapter, along with the requirements for prior consultation and achieving an 'A' score to pass the EC's assessment, increases the administrative burden on MSs already dealing with the implementation of the Recovery and Resilience Facility.

On the other hand, in the public consultation most respondents have positively assessed the appropriateness of the RRF to support MSs in the achievement of REPowerEU objectives.

Figure 22: In your view, to what extent is the RRF appropriate to support MSs in increasing the resilience, security and sustainability of the EU's energy system (REPowerEU objectives)? N=163



Source: public consultation

EQ5.1: To what extent did external factors have an impact on the RRF roll-out? How this may have had an impact on the Facility's effectiveness in reaching its objectives?

Key findings:

External factors had a **significant impact on the RRF implementation**. Factors such as the war in Ukraine, energy crisis, inflation, supply and labour shortages **affected the speed and price of implementation of the RRF measures**. In response to the external challenges, MSs reacted by increasing the RRF budget with national resources or other additional financing; reducing the ambition of the milestones and targets; removing investment projects that are no longer feasible; and postponing the initially foreseen timeline of milestones and targets.

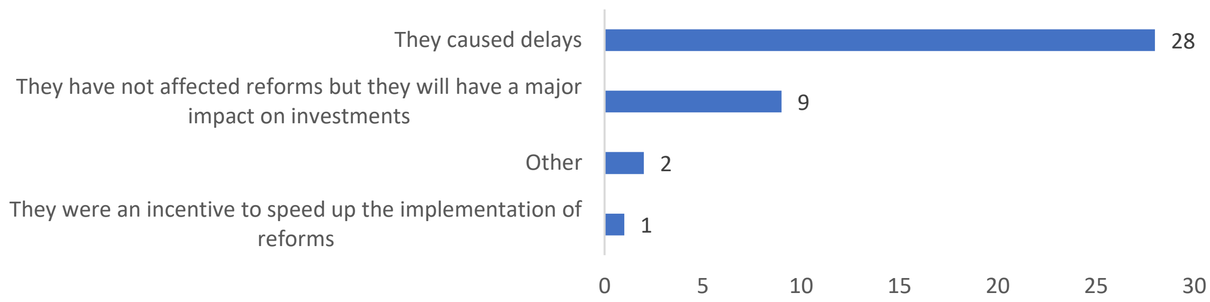
The impact of external factors on the deployment of the RRF becomes evident after the invasion of Ukraine by Russia and the inflationary pressures. The shocks unleashed by the Russian invasion of Ukraine are reverberating deeply and widely across the EU and the entire globe (Orsini et al., 2022):

- Increasing pressure on energy, food and other commodity prices due to shortage of raw materials, intermediate products and/or equipment.
- bringing renewed disruptions in global supply chains and logistics.

- contributing to the tightening of financial conditions.
- deteriorating the macroeconomic environment and aggregating labour shortages.

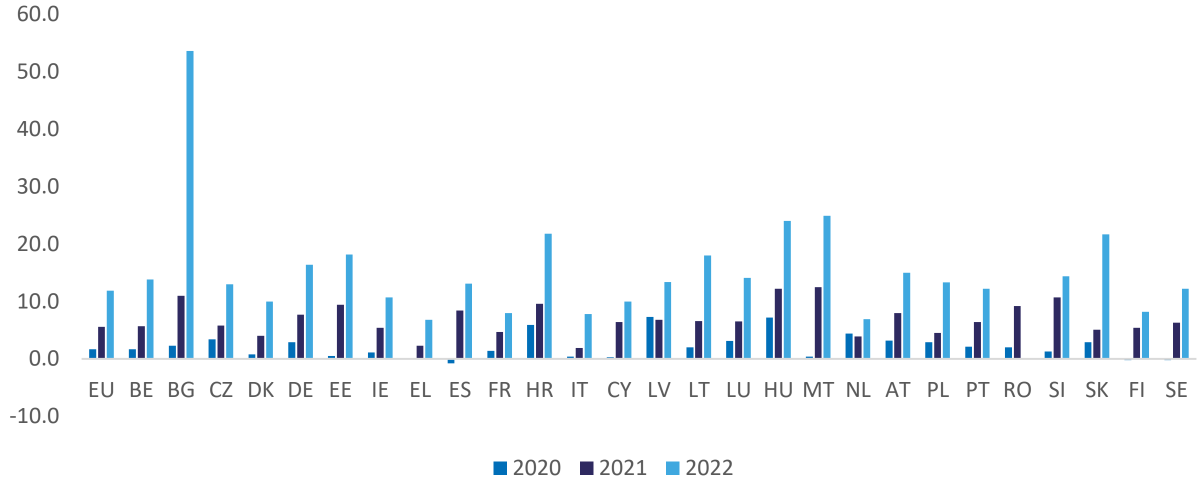
As recognised by the national authorities approached via the targeted survey, the **consequences of the war and the inflationary pressures caused significant delays in the roll-out of the plans** (see figure below). Most respondents explained that external factors such as the war in Ukraine, the energy crisis, inflation, supply and labour shortages led to delays in public procurements, which include construction or complicated deliveries; increase in the price of achieving milestones and targets; need for modifications of some measures; change of priorities and planning of milestones/targets; and even change in the feasibility of achieving some milestones/targets. The effects of these external factors were also recognised by the **interviewees, with many agreeing that inflation has had a very significant negative effect on the prices of milestones and targets in all sectors**, particularly the ones related to construction activities.

Figure 23: Impact of external factors (war in Ukraine, inflation, supply shortages, labour shortages, energy crisis, other) on the RRF roll-out (N=40)



As illustrated in the table below, which shows the construction cost developments over the past decade, in 2021, **prices increased quite strongly in the majority of countries** with double-digit growth rates in Bulgaria (11.0 %), Hungary (12.2 %), Malta (12.5 %), and Slovenia (10.7 %). In 2022, this development was accelerated, particularly driven by the costs for input materials. In a large majority of countries, prices increased at double-digit rates, and there was no country, for which data are available, where prices dropped. Yet, we can still observe larger impacts in some countries, like Bulgaria (53.6%), Malta (24.4%), Hungary (24%) and Croatia (21.8%)

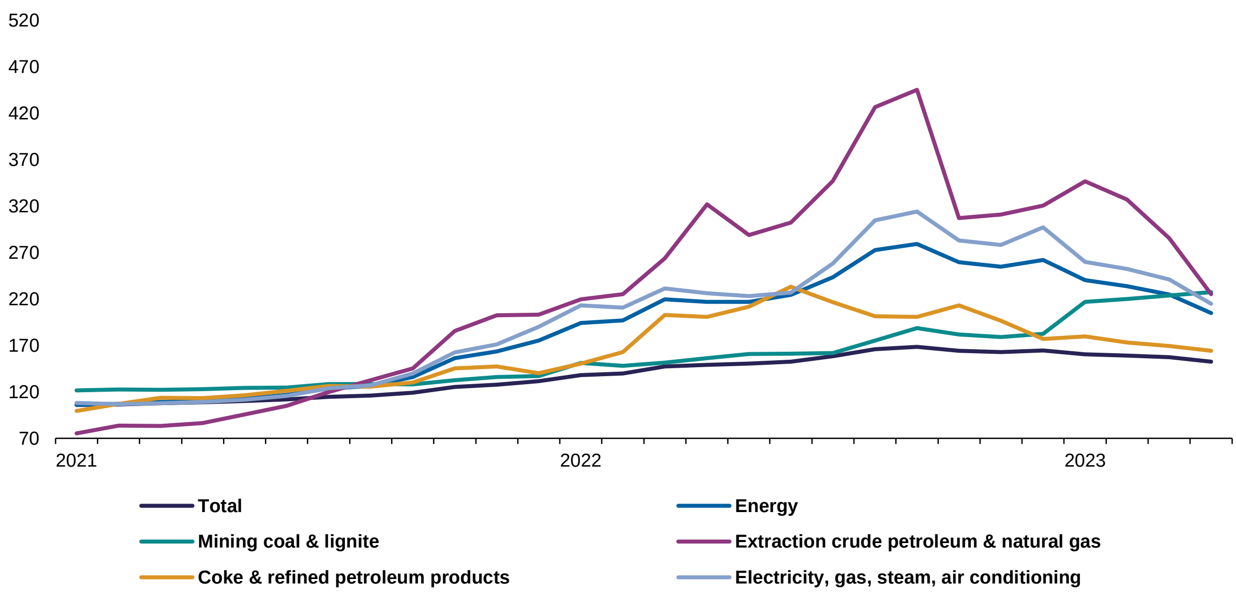
Figure 24: Annual growth rates, construction producer prices for new residential buildings, 2020 - 2022



Source: Eurostat (online data code: sts_copi_a)

The figure below shows in greater detail how the recent developments of producer prices were influenced by **energy prices**. Between January 2021 and September 2022 (the peak of the price development), domestic industrial producer prices increased by 59.1 %, averaging around 2 % per month. During the same period, producer prices for energy increased by an average of 5 % per month, which amounted to a total increase of 163.0 %. Particularly strong were the variations for the extraction of crude petroleum and natural gas (9 % on average per month between January 2021 and September 2022 and -9 % on average per month between September 2022 and April 2023) and the manufacturing of electricity, gas, steam and air conditioning (almost 6 % average per month between January 2021 and September 2022 and -5 % on average per month between September 2022 and April 2023).

Figure 25: EU, Domestic output prices for energy 2021, 2022, and 2023 unadjusted data (2015 = 100)



Source: Eurostat (online data code: sts_inppd_m)

The box below illustrates in more detail the impact of external factors on the implementation of the Italian RRP.

Box 17. External factor impact on the Italian plan implementation

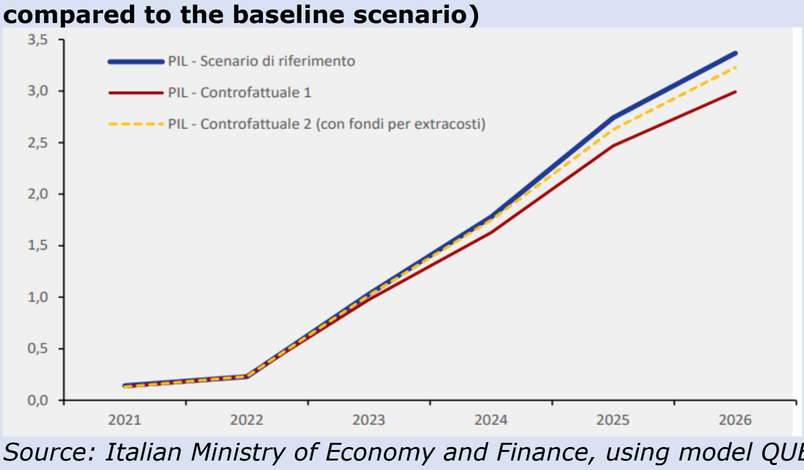
An initial estimate of the effect of price increases on the costs of the Italian NRRP investments is performed in Appendix 1 of the 2023 Economic and Financial Document (Ministero dell'Economia e delle Finanze, 2023). The results indicate that the increase in costs for investments to be made in the 2021-2026 period would amount to about **€26 billion, or 11.4 per cent of the planned resources**. More specifically, on RRF resources, inflation would affect by about €23.5 billion, i.e., 12.3 per cent of the planned envelope. Only considering the additional projects, the loss of purchasing power would amount to about €16.6 billion. The most impacted areas of intervention are expected to comprise the measures related to green transition and sustainable mobility, heavily influenced by rising energy prices, as well as those connected to labour market policies, social policies, inclusion and cohesion.

Zooming in on the specific projects that are affected by external factors, 23 investments suffer delays due to the increased costs and/or material shortages, while 40 investments are affected by supply/demand imbalance, unattractive investments, and unpreparedness of the productive fabric. The largest share of these projects concern infrastructures for the green and digital transition, including sustainable mobility. Increases in prices affected for instance investments in flood management and hydrogeological risk, sewage and purification systems, development of biomethane, railways and metro lines, energy efficiency buildings, social housing and childcare and long-term care facilities. Supply and demand mismatch, labour shortages and unpreparedness of productive tissue negatively affected investments in urban regeneration plans, broadband and 5G, efficient district heating network, eco-bonus and sisma-bonus for energy efficiency and building safety, hydrogen in hard-to-abate sectors as well as the development of electric charging infrastructure.

In order to evaluate the combined impact of the unexpected rise in prices and the resources already disbursed to deal with it, the Italian Ministry of Finance ran a stylised exercise in which, with the help of the QUEST model, the impact on GDP (relatively to RRP measures) is assessed under three different scenarios. These are: i) a reference scenario, based on the assumption of full implementation of all the NRRP projects, which conceptually implies that any unexpected increase in prices finds adequate compensation with additional resources; ii) the second scenario, which reports the impact of the NRP under the assumption that price increases are not replenished (counterfactual); iii) the third scenario, termed 'counterfactual with extra cost funds', which reports, finally, the impact of the NRRP on GDP in the event that price increases are matched by an additional allocation of resources for NRRP projects equal to the allocations approved in 2022. The impact on real GDP of the NRRP is naturally scaled down in the second scenario (counterfactual) since higher prices are not matched by higher allocations.

As an example, at the end of the horizon considered, GDP would grow by 0.4 per cent less than in the reference scenario: 3.0 per cent in the counterfactual versus 3.4 per cent in the reference scenario. In the counterfactual scenario with extra-cost funds, however, this gap is minimal. In this case, higher prices correspond to higher allocations, and the impacts on GDP over the Plan horizon are closer to what was identified in the reference scenario (3.2 per cent against 3.4 per cent in the reference scenario).

Impact on GDP (relative to NRRP measures) in three different scenarios (percentage deviations compared to the baseline scenario)



Source: Italian Ministry of Economy and Finance, using model QUEST-III R&D

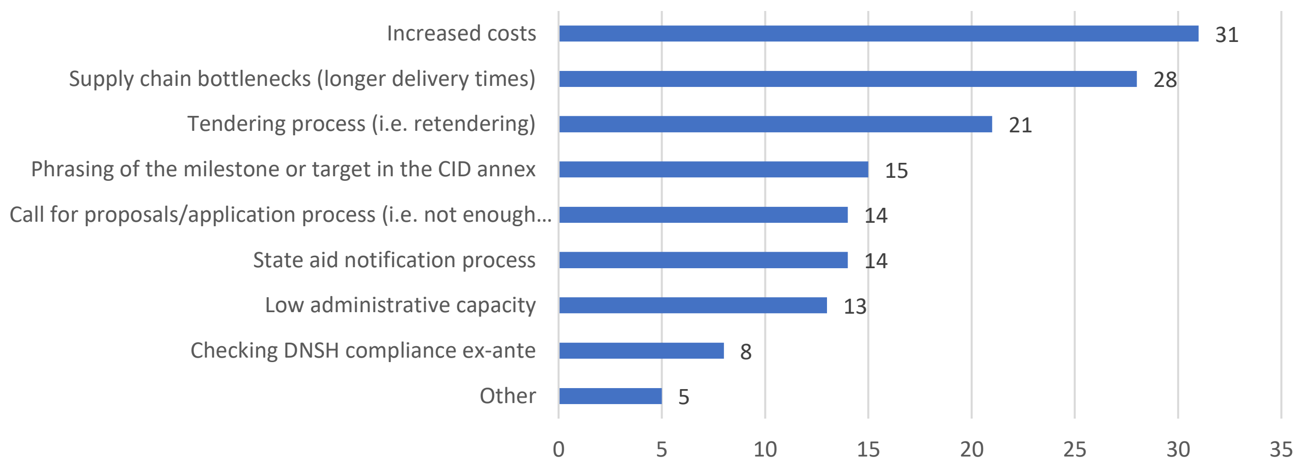
However, the disruptions created by the inflation and the disruption of the supply chain do not fully explain the delays in the roll-out of the plans and should be added to internal factors concerning regulatory, administrative and management difficulties. As a result of the combination of these factors, as confirmed by surveyed and interviewed national authorities and the examples provided below, MSs adopted different strategies to cushion the effects, including:

- increasing the RRF budget with national resources or other additional financing
- reducing the ambition of the milestones and targets
- removing investment projects that are no longer feasible.
- postponing the initially foreseen timeline of milestones and targets.

It has to be mentioned that the revision of plans has been subject to specific rules, ensuring that the proposed amendments are based on objective circumstances (Art. 21 of the RRF Regulation) and that the overall ambition of the plans is not lowered.

Examples of such objective circumstances are provided in the results of the survey with national authorities, which pointed out both internal and external reasons for delays in milestone and target implementation with respect to investments (see the Figure below). Clearly, **increased costs and supply chain bottlenecks are the most frequently cited reasons for delays**. But **internal reasons** (such as tendering processes, calls for proposals, state aid notification, etc.) **also play their part**.

Figure 26: Main reasons for delays in milestones and targets (N=40)



Source: Survey[60]

As a matter of example, with the most recent proposed modification of the RRP, the **Italian** government proposed to increase the financing of some projects with additional resources to achieve the targets (e.g. childcare, electric charging infrastructure), other infrastructural projects have been removed (e.g. urban regeneration projects), and some targets are postponed or revisited due to the delays in contracting procedures due to the increased costs and disruption in supply chain affecting specific investments[61]. Since Italy already requested the maximum amount of loans in 2021, no additional funding has been requested from the RRF. Yet, already in 2022, national

[60] By 'Phrasing of the milestones and target in the CID annex', we refer to unclear wording in the milestones and targets' description.

[61] Formal changes related to the description of the measures and especially the verification mechanisms have also been included to ease the reporting of individual objectives.

resources have been allocated to supplement the projects for more than €17 billion in total over the period 2022-2026.

In the case of **Spain**, the proposed amendment to the plan includes correcting typographical errors and inconsistencies in wording between the different parts of the Council Implementing Decision in 13 cases; the adaptation of the wording of the milestones to the new circumstances in 13 cases and; the adjustment of the calendar to the new context in 44 cases. In addition, 5 new milestones have been added to the plan. The proposal for the plan modification came with the request for loan support of €84 billion. Part of this funding will be used to finance investment projects, the targets of which were no longer feasible.

Similar guiding principles also preside over the amended **Portuguese** PRR, which include – beyond new reforms and measures with an increased ambition focused on the digital and climate transition, including strengthening energy resilience, not neglecting the social response in areas such as education, housing and health – ad hoc measures to address the challenges posed by external factors on the RRP implementation. These include adjustments to milestones and targets that do not imply a decrease in ambition as well as financial reinforcement, which should also be ensured using loans under the PRR or, when necessary, national funding, to meet new needs related to projects already foreseen in the plan or in execution, maintaining its ambition.

EQ5.2: To what extent did the absorption capacity of MSs affect the RRF effectiveness?

Key findings:

The risk of negative impact of MS absorption capacity on the RRF effectiveness has been recognised right from the start of the instrument.

Thus, MSs took action to mitigate the risk via training, reforms and investments that aim at modernising the public administration. They also made extensive use of the Technical Support Instrument which helped them build the administrative capacity needed for the preparation and implementation of the RRPs. Yet the results linked to such measures are expected to materialize only in the medium to long term.

In the short term, MSs put in place ad hoc measures to directly support the administration to implement the plans. This notwithstanding, in a number of MSs, notably those with pre-existing low absorption rates of EU funds, preliminary findings show that **administrative capacity remains a significant factor** affecting the effectiveness of the NRRPs.

Upon the launch of the RRF in 2020, several observers pointed to the risk of absorption capacity of the new funding, which came on top of the still remaining portions of the 2014-2020 MFF funds, and the new 2021-2027 MFF funds (Darvas, 2020; Alcidi et al., 2020). More recently, the European Central Bank (Dorrucci and Freier, 2023) has also raised the concern that the delays over the past two years will put countries' abilities to fully absorb RRF funds by the program's end in 2026 to the test. Previous experiences with the absorption of EU funds by countries serve as a cautionary example. According to the European Central Bank, as of the conclusion of 2020, the four largest eurozone countries (Germany, France, Italy and Spain) had only absorbed up to 60% of the EU funds allocated within the 2014-2020 Multiannual Financial Framework. In the prior 2007-2013 period, an additional three years were required before a more substantial share of funds, nearing 100%, could be absorbed.

Increasing the quality of public administration is among the objectives of the RRF, and several national plans include ad hoc measures to strengthen their administrative capacity. Such interventions include **reforms and investments that aim at modernising the public administration**, including improving the transparency and effectiveness of tendering procedures and their compliance with EU legislation. The purpose is to increase the participation and competition in procurement, improve efficiency and aggregated procurement and increase the professionalisation of public buyers. Examples include **Cyprus, Italy, Latvia**, **Romania,** and **Croatia** (EC, 2023n). Administrative capacity is also linked to the competences of public officials.

In this respect, several plans include investments with a focus on the training and development of skills of civil servants. Examples in this case include **Slovenia**, **Italy**, **Lithuania**, **Slovakia** and **Latvia**.

While reforms to strengthen the administrative capacity are expected to have a positive impact on the medium- and long-term, some countries also include ad hoc interventions to directly support the administration in implementing the plans. In this respect, contrary to the Cohesion Policy, the RRF has not encompassed an allocation of resources for technical assistance, which involves support for various aspects of programme management (such as preparation, implementation, monitoring, communication, training and evaluation). While the usage of technical assistance under Cohesion Policy carries a potential risk of excessive dependence on external expertise it plays a crucial role in managing Cohesion Policy programmes, especially in situations where administrative capacity is limited, turnover rates are high, and hiring new staff within the public sector is constrained. On the contrary, **the RRF** can only leverage the Technical Support Instrument (see EQ 14). Yet, the possibility to recur to the TSI differs from the technical assistance foreseen under Cohesion Policy programmes because:

- the TSI is activated only upon specific request by the MS, and subject to an assessment of DG REFORM (which manages the TSI), while Cohesion Policy programmes foresee an allocation for technical assistance from the outset;
- the TSI is activated to conduct well-defined tasks requested by Member States in relation to the design and implementation of structural reforms (see EQ 14), while the technical assistance under Cohesion Policy programmes typically covers a broad range of tasks linked to day-to-day programme management and implementation.

The availability of technical support under the TSI was explicitly envisaged in both the RRF and TSI Regulations. Member States could request support both for preparing and implementing their RPPs. They benefited from a dedicated TSI call during the first year of the RRF, there was the possibility to embed TSI support in their RRPs, and after the adoption of the RRPs, they could request support under the subsequent TSI annual cycles or could decide to transfer national or other funds to DG REFORM to finance additional technical support. In that respect, the TSI made an important contribution, acknowledged by Member States, in helping build the necessary capacity to design and deliver the plans.

Outside of the TSI, some MSs decided to include ad hoc interventions to support their administration in implementing the plans. For instance, in Italy, central administrations, regions and local authorities can benefit from actions to strengthen administrative capacity in two main ways: the hiring of experienced staff on a fixed-term basis, specifically intended for the entities responsible for implementing the NRRP initiatives, from design to actual implementation; and support from external experts, in order to ensure the correct and effective implementation of the projects, and the achievement of the predetermined results (see the box below for more details). Romania and France are two additional examples as they plan to hire additional staff to implement their RRPs.

Box 18. The measures put in place by Italy to support local authorities

In order to support the administrative capacity to absorb the RRF funding, the Italian government put two main channels:

- **Cassa Depositi e Presiti**, Italian development bank, provides technical-administrative consultancy to Ministries, local administrations, national and local public bodies that oversee the implementation of the RRP. To date, the activity concerns support for the implementation of 62 measures for a value of around 73 billion in investments.
- **Invitalia**, the National Development Agency, supports the Central Administrations and the implementing bodies in the phases of definition and implementation of the investments.

In addition, to support the Municipalities in strengthening their ability to plan and implement the initiatives of interest, further forms of technical-operational support and to strengthen administrative capacity – in part also financed via Cohesion policy funds - are envisaged:

- **Fondi di progettazione**: To relaunch and accelerate the planning process in the municipalities of the Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardinia, Sicily regions and in the territories included in the mapping of internal areas, the «Fund for competitions for designs and ideas for territorial cohesion» provides technical and operational support to strengthen the planning capacity of the Municipalities (up to 30,000 inhabitants) and encourage their participation to the calls implementing the RRP. The Management Authority of the Fund is the Agency for Territorial Cohesion (ACT). Overall endowment is €123,515,175. The resources are committed through the announcement of prizes for the acquisition of project proposals.

- **P.I.C.C.O.L.I.**: The Department of Public Function finances, under the PON "Governance and Institutional Capacity" 2014-2020, financed by cohesion policy funds launched the initiative "Intervention Plans for Skills, Organisational Capacity and Local Innovation" (P.I.C.C.O.L.I.), aimed at "small municipalities". The intervention is based on actions for the strengthening of organisational and personnel skills for adaptation to the dynamics of innovation and digital transformation, and for the growth of planning and management of the territory administration and local development. The Municipality concerned presents an expression of interest in single or aggregate form, indicating one or more areas of intervention. Subsequently, the public function department assesses the events received and, in the event of a positive outcome, the recipient is admitted to the subsequent participatory planning phase of the intervention plan. The Notice closed on 30 September 2021, making €22 million available for the various activities until 30 June 2023.

- **TFES (Task Force for School Building):** The Task Force includes groups of expert engineers and architects, selected with a public tender procedure, with particular expertise in public procurement, building design, including school building, and post-earthquake reconstruction. Through meetings at the offices of local authorities and inspections of school buildings, Task Force provides operational support to those responsible for implementation in order to detect potential challenges, identify solutions and facilitate inter-institutional dialogue.

Despite the support to strengthen the administrative capacity, this remains a significant factor affecting the effectiveness of **the NRRPs**. In an Opinion on the Implementation of the RRF adopted in December 2021, **the Committee of the Regions stressed that many MSs did not pay enough attention to strengthening administrative capacity at local and regional levels, which is a precondition to ensure proper implementation of the NRRP** and an adequate take-up of the RRF funds. Similarly, the ECA in the annual report for 2020 (ECA, 2020c) already noted that the level of administrative resources needed to manage the substantial increase in funds might not be sufficient. Specific concern was raised by the Court for those MSs where a high share of public investments is already financed by the EU, which may not be able to spend the funding available to them and deliver value for money. More recently, also the European Central Bank (Dorrucci and Freier, 2023) has listed the limitations in administrative capacity as one of the main RRF implementation risks common to virtually all euro area countries.

The lack of administrative capacity is indicated as one of the main obstacles to effective implementation of the RRF investments in a number of MSs, in particular those who were already facing low absorption rates of EU funding. Thirteen out of 40 national authorities that responded to the survey flagged low administrative capacity as one of the reasons for delays in milestones/targets with respect to investments. **The interviewed national authorities tended to emphasise a significant burden arising from the parallel implementation of the NRRPs and Cohesion policy**. Indeed, it inevitably creates parallel processes for data collection, monitoring and reporting, which adds to the difficulties emerging from the novelty of the RRF per se as a new instrument. This situation poses a risk of worsening capacity gaps, particularly within local administrations, and more broadly within external experts and private actors. For instance, in **Bulgaria**, the lack of administrative capacity – together with political instability - translated into a **slowdown in the implementation work on several important energy and transport investments** and to the questioning of key aspects of the plan, namely on decarbonisation of the energy sector. In **Italy**, the lack of administrative capacity risks reinforcing the pre-existing territorial asymmetries whereby local authorities in disadvantaged territories do not have access to RRF funding. In this respect, the Department of Cohesion Policies stressed that – due to a lack of administrative capacity - 30% of the resources so far awarded through competitive procedures in the South of Italy are subject to a medium to high risk of reallocation outside the South (Presidenza del Consiglio dei Ministri, 2022). In **Spain**, the lack of support and technical assistance to providers or local authorities to accurately develop projects' proposals and the lack of time to present projects which is linked to the lack of enough personnel are indicated as well as two key concerns hampering the effectiveness of the RRF in childcare. In the **Czech Republic,** absorption of funds still faces challenges in the areas of digitalisation of the economy and public administration as well as energy efficiency. **Slovakia**'s absorption capacity of EU funds is among the lowest in the EU, and negatively affects the implementation of the RRF, in particular green and digital investments. Risks of delays in the implementation of the RRP are also identified in **Portugal**, **Romania** and **Slovenia** due to inadequate administrative capacity.

Among the **problems related to the low administrative capacity** affecting the absorption of the RRF funding, the following can be identified:

- The inefficient management of resources and processes by the administrations in charge of the interventions;
- The complexity of the paperwork for accessing RRF funds;
- The cumulative delays in the expression of opinions and the granting of authorisations by national and local public authorities;
- The lack of coordination between several implementing bodies.

EQ5.3: Have any positive/or negative unexpected effects been identified?

Based on the information provided through surveys and interviews with national and EU authorities, both negative and positive specific unexpected effects have been identified. Most SME survey respondents did not provide an answer to the question if they encountered any unexpected (negative or positive) effects from the implementation of SME/business-focused measures from their country's NRRP[62].

1. Negative unexpected effects

The first negative unexpected effect regards **the relation between the RRF and Cohesion Policy (CP) funds**. While one may argue that several CP experts pointed already to the risk of displacement or substitution effect at the same moment of the proposal to create the RRF, this was a negative effect that was only partially considered by MSs at the phase of drafting the RRPs. As we argue more in detail in the evaluation questions dedicated to RRF and CP, not all MSs adopted ex-ante strategies to create synergies between the two EU funds. It followed that for some MSs, the prioritisation of the RRF has triggered displacement effects, whereas mature projects expected to be implemented under 2021-27 cohesion policy programmes were shifted into the NRRPs (for instance, in Spain, Greece, Italy and Romania – see EQ 20.1). This has also happened for projects originally intended to be certified under 2014-2020 CP programmes and then shifted to React-EU (e.g., Spain). In addition, some countries (e.g., Slovenia) have redirected staff previously dealing with cohesion policy to the RRP coordination and implementation bodies, further delaying the implementation of Cohesion Policy. In on Member State, unexpected results relate to challenges in

[62] Four responded "Yes", and four "No" without specifying further. Seven responded "I do not know", while 18 skipped the question.

complying with RRF requirements associated with protecting the financial interests of the Union (PFIU) and accountability demands. Contrary to their expectations, they couldn't use existing national systems, resulting in a high administrative burden.

The second one has to do with **administrative and bureaucratic burden**. According to national coordination bodies, the RRF was initially expected to be a more flexible and agile instrument compared to cohesion policy funds, especially due to the new performance-based approach. By contrast, the majority of national stakeholders observe that the influx of RRF funds has generated a widespread surge in the workload of administrations at both national and local levels. Despite efforts to strengthen administrative capacity, this increased workload has not always been fully mitigated. Despite the considerable number of resources made available through the RRF, there is widespread concern that there is too much focus on bureaucratic and administrative aspects, requiring the production of a significant amount of documentation to demonstrate the status of milestones and targets It is worth considering whether this focus on administrative aspects has inadvertently caused implementation delays, particularly in those countries facing administrative and staff shortages.

2. **Positive unexpected effects**

In terms of unexpected positive effects, the results of our survey show that the RRF has contributed (partially or to a large extent) to **improving inter-institutional coordination in the design of national reforms** (72% of respondents) as well as in the **design/quality of investments** (84%). For instance, in Slovenia, the RRP implementation led to unforeseen benefits, such as **heightened stakeholder focus on performance and efficient implementation within tight timeframes**. In Austria, the RRP set a benchmark for national initiatives, particularly with respect to performance-based funding, serving as a valuable case study for the country's initiatives. In addition, relying on national implementing bodies with experience in EU funds proved more useful than expected in dealing with changing requirements from the EC.

EQ6: How does the effectiveness of the RRF compare with that of other EU programme and instruments, notably cohesion funds?

Key findings:

The current early stage of implementation of the RRF **limits the possibility of drawing strong conclusions about its effectiveness in comparison to other EU programmes and instruments, notably cohesion policy funds**. A comparison of early data on common indicators and levels of disbursement under the RRF and cohesion policy offers some insights, showing **a mixed picture concerning the two instruments' effectiveness**. However, a more complete assessment inevitably requires evidence deriving from the effects generated over time by the RRF.

At the same time, it is possible to identify factors that influence the RRF's effectiveness in a different and more marked way than cohesion policy. These are: a stronger link with reforms; a generally higher prioritisation from the political level (although not in all MSs); and a deeper scrutiny by the media.

Cohesion policy is the EU investment tool that lends itself best to an analysis in relation to the RRF. As the EU's main investment policy, covering about a third of the EU budget, cohesion policy is the most suitable term of comparison based on its size[63] and the similar breadth of investment types covered.

A comparison of data on common indicators under the RRF and cohesion policy (see EQ 2.1) suggests that:

[63] The amount of resources mobilised by Cohesion policy is the one that, among EU funds and instruments, gets closest to the financial weight of the RRF, €723.8 billion in 2021-2026 (€385.8 billion in loans, €338 billion in grants). Taken together, the set of four funds that make up Cohesion policy in 2021-2027 (ERDF, CF, ESF+, JTF) have a size of about €543 billion, including the national co-financing.

- The RRF appears to deliver strongly on several elements of its green pillar. For instance, until the end of 2022 the RRF has already covered the installation of an additional capacity of renewable energy (in just four MSs) that corresponds to 27% of what has so far been implemented in the 2014-2020 period under cohesion policy across all MSs[64]. Concerning alternative fuel infrastructure, the RRF has led to an increase of more refuelling/recharging points than the target under 2021-27 cohesion policy (29,468 points envisaged for 19 countries vs about 267 thousand as a result of RRF measures in 12 MSs). Under the RRF's digital pillar, close to 18 million additional dwellings with internet access have been provided via very high-capacity networks (almost entirely in France), compared to a target for 2021-27 cohesion policy of about 3 million.
- Cohesion policy appears to have a larger impact than RRF in the protection against floods, wildfires, and other climate-related natural disasters, as its measures in this field benefit significantly more people than under the RRF. Under Cohesion policy, in the 2014-2020 period the population already covered by flood and forest protection measures is around 85 million[65]. In 2021-2027, the population expected to be covered by measures on protection against natural disasters (RCR37) amounts to more than 120 million[66]. Also, in the field of support to research facilities, the number of researchers working in supported facilities is significantly higher under Cohesion policy than under the RRF. In 2014-2020, cohesion policy implemented measures leading to 57 thousand researchers having an improved infrastructure[67]. In 2021-2027, the target (RCO06) is more than 83 thousand (for 21 MSs) [68]. In the health sector (not an area cohesion policy has traditionally focused on), the annual capacity of new or modernised healthcare facilities supported under RRF measures (common indicator 12) is already more than 18.6 million people. Under the cohesion policy financing, for the 2021-2027 period, the planned supported capacity of new or modernised healthcare facilities amounts to approx. 60 million people, in line with the number of people who benefitted from improved health services as a result of the 2014-2020 cohesion policy (59 million people).

This comparison, however, needs to be taken with caution. The list of 14 common indicators under the RRF is not directly comparable with the much wider battery of common result and output indicators under the cohesion policy, characterised in addition by a consolidated practice in its use[69]. The financial resources contributing to the various indicators also differ in terms of magnitude between the two instruments. Moreover, the purpose of RRF and cohesion policy indicators is partly different, as under the RRF performance is mainly measured through milestones and targets and the purpose of the common indicators is to monitor the progress of the Facility as a whole (not of single national plans or single measures) towards its general and specific objectives[70].

The extent to which data on RRF common indicators are reliable cannot yet be assessed. Nonetheless, what can already be noted is that MSs are responsible for the quality of the data on common indicators and the RRF Regulation does not provide for requirements regarding data quality

[64] This can be partly explained by the fact that green investments have become more of a priority after the adoption of the European Green Deal, and they were less central in 2014-20 cohesion policy compared to 2021-27.

[65] Source: https://cohesiondata.ec.europa.eu/cohesion_overview/14-20

[66] Source: https://cohesiondata.ec.europa.eu/2021-2027-Indicators/2021-2027-Achievement-Details-multi-funds-/xi3a-zddk (ERDF/CF/JTF)

[67] Source: https://cohesiondata.ec.europa.eu/cohesion_overview/14-20

[68] Source: https://cohesiondata.ec.europa.eu/2021-2027-Indicators/2021-2027-Achievement-Details-multi-funds-/xi3a-zddk (ERDF/Interreg)

[69] Cohesion policy's extensive experience with monitoring has evolved over time. Significant efforts have been made towards ensuring data quality and overcoming issues identified in the past for a limited number of indicators, such as different understandings among MSs or double counting issues. See for instance European Commission (2018), Development of a system of common indicators for European Regional Development Fund and Cohesion Fund interventions after 2020, and European Commission (2022), Study on the monitoring data on ERDF and Cohesion Fund operations, and on the monitoring systems operated in the 2014-2020 period. Final report.

[70] See definition of common indicators in RRF Regulation and Delegated Act.

checks. More broadly, data on indicators as they are defined under the RRF (without baseline nor targets) are not necessarily a clear source of information on effectiveness[71].

In terms of level of disbursements, as stated under EQ1, under the RRF 31% of the planned grants and loans have been disbursed (€153.38 billion, pre-financing represents 36.9% of the total value disbursed). Under the 2014-20 Cohesion policy, according to data from the EC Cohesion Data platform retrieved in early October 2023, 84% of the total allocation has been disbursed. Under the four funds of 2021-27 Cohesion policy (ERDF, ESF+, Cohesion Fund and JTF), about 2%[72] of the total EU allocation has been disbursed (€9.4 billion out of 376.2, of which 9.2 in net pre-financing and 0.2 in net interim payments). Net interim payments have so far been disbursed under the Cohesion Fund, the ERDF and the ESF+ only, while net pre-financing has been disbursed under the JTF as well. Beyond Cohesion policy, net interim payments have been disbursed also under the AMIF, BMVI and EMFAF funds, net pre-financing under AMIF, BMVI, EMFAF, IPA III, ISF and NDICI. Even though data point to the RRF being more rapid in terms of disbursement, such a comparison with cohesion policy has only a limited meaning, as pre-financing has considerably different weight over the total allocation under the two instruments and the initial phase of RRF implementation has focused mainly on reforms, and is therefore hardly comparable with cohesion policy.

Owing to the early phase of RRF implementation, conclusive judgments regarding its effectiveness in comparison with cohesion policy remain limited, as evidence of the outcomes produced by the RRF over time would be needed for that purpose, currently not yet available. However, it is possible to identify elements that drive RRF effectiveness compared to the existing set of EU funds and notably in comparison with Cohesion policy (see case study on RRF and Cohesion policy). The RRF model introduces significant innovations in the design and execution of EU-funded investment policies and support for reforms.

In an environment where existing EU funds, particularly cohesion policy, were already in place, the RRF has attempted to bridge gaps in providing support for reforms and investment during an especially critical time. However, the RRF has evolved into a public policy instrument aimed at addressing long-lasting issues and forthcoming economic and societal challenges faced by MSs. The RRF's main **innovative elements bridging existing gaps** are the following:

- The RRF introduces a distinct approach by offering support in exchange for the implementation of reforms, even those that do not entail specific costs.
- The RRF's sheer size empowers an ambitious scale of initiatives that would be unattainable by Cohesion Policy alone.
- The RRF has emerged as a tool to enhance competitiveness and direct investments to regions which are not classified as less developed (as opposed to Cohesion Policy's primary focus), but in which there are nevertheless significant needs in terms of both the green and digital transitions.

The initial phase of implementing the RRF, which primarily concentrated on enacting reforms, has generally proceeded in a timely manner in 2021-2022. In 2023, substantial risks of delays have started to be observed (see EQ1). As the emphasis shifts towards investment, challenges are emerging that bear resemblance to long-standing issues commonly linked with cohesion policy. These challenges include concerns surrounding **administrative capacity, an onerous**

[71] Under cohesion policy, however, a comparison of target and achieved values under can also be misleading, as within programmes, targets set by managing authorities at the beginning of the programming period are not fixed for the whole cycle (in line with the aim to ensure flexibility and capacity to adapt to the needs of MSs and regions). They can be modified as part of reprogramming depending on methodological aspects but also on implementation progress, and therefore, at least in some cases, targets tend to be progressively adjusted towards the achievement.

[72] For the sake of comparison, the disbursement rate of 2014-20 Cohesion policy at a similarly early stage of the programming period was 3% at the end of 2015 and 9% at the end of 2016 (source: CohesionData).

administrative workload for managing authorities, a dearth of mature projects, and the delicate equilibrium between the necessity for controls and the risk of excessive scrutiny.

Fundamentally, the effectiveness of the RRF relative to the cohesion policy hinges on several key factors: the link to reforms, political backing, and media attention (see case study on RRF and cohesion policy). The implementation of structural reforms is widely recognised as an impactful policy mechanism of the RRF. These reforms not only benefit the broader public investment landscape but also align with cohesion policy. The synergy between reforms and a focus on investments emerges as a pivotal catalyst for change. Furthermore, the RRF has garnered significant prioritisation from decision-makers at both the EU level and across MSs (although in some of them, such as Lithuania and Romania, the priority of the two instruments appears to be equal, based on interviews with national authorities and informed stakeholders). This heightened priority has facilitated the development of a mature project pipeline and has enabled swift initial implementation. The extensive media coverage surrounding the NRRPs both reflects and reinforces this prioritisation, contributing to the RRF's elevated public profile in comparison to the cohesion policy. The expected medium-term impact of the RRF is likely to surpass what could have been achieved through the existing cohesion policy framework alone, as these three key elements influencing its effectiveness – reforms, political support, media attention – set the two instruments apart.

It is also necessary to note that RRF and cohesion policy have a partly different territorial scope. Cohesion policy, in fact, focuses especially on less developed regions, while the RRF does not foresee special attention towards those territories (measures in this regard are left to the MSs’ discretion).

Survey respondents were requested to give their opinion on how the effectiveness of the RRF compares with cohesion policy funds. The **opinion of respondents is mixed**. It is noteworthy, however, that only a limited number of respondents provided their feedback on this matter (9 out of 40). The two positive feedbacks point to the fact that RRF reforms being country-specific can positively influence the effectiveness of investments, while cohesion policy enabling conditions are the same for all MSs.

Interviewees from national authorities frequently refrained from directly comparing the effectiveness of the two instruments, highlighting the early stage of implementation as a reason for caution.

The literature offers further insights with respect to two aspects. First, the performance metrics. Second, the flexibility of the two instruments can be seen as an explanatory factor for effectiveness. Concerning the first aspect, a study for the Committee of the Regions conducted by Böhme et al. (2023) highlights that the metrics used to judge the effectiveness of investments differ in the two instruments. A result in the RRF basically corresponds to an output in Cohesion Policy. For example, a new hospital is a result under the RRF, while under Cohesion Policy it is considered an output. This means there is confusion as to what is considered a result or an output between the two instruments. Regarding the second aspect, Böhme et al. (2023) highlight that the two instruments enjoy a different level of flexibility. Cohesion policy is a flexible instrument, as demonstrated by its swift reaction to external shocks such as the COVID-19 pandemic or Russia’s war on Ukraine. Beyond regulatory changes introduced at the EU level to cope with the mentioned crises, thanks to reprogramming, MAs also have room for manoeuvre even during regular times. Reprogramming allows Cohesion policy programmes to remain relevant with respect to changing circumstances. Conversely, the **RRF approach features a procedurally heavy process for amending the plans**, that does not strongly differentiate especially between types of reforms, and overall has only limited (and burdensome) possibilities to adjust milestones to changing circumstances (see EQ 8.2).

EQ7: How visible has the Recovery and Resilience Facility been to the public? How was the instrument perceived by the public, by MSs and by beneficiaries?

Key findings:

Results of the **Eurobarometer** survey (in December 2022) show that across the EU around 51% of the respondents were **aware of a Recovery Plan for their country to support economic recovery**, 33% has seen, heard or read something about **NextGenerationEU**. Around 36% of the respondents think that the National Recovery Plan of their country is **financed** partially through NGEU and about one in six think the plan is entirely financed through NGEU. More than 90% of all respondents to the **public consultation** indicated that they are aware of the existence of the RRF, but **a plurality overall suggests that the financing has only been somewhat visible**. There is a range of factors influencing its visibility, such as the **size of the plan, political ownership, government communication, and stakeholder involvement**.

Article 34 of the RRF Regulation sets out the communication requirements for MSs and the RRPs. **MSs have taken a number of actions to ensure the visibility of RRF support**. This includes launching national RRF websites; publishing the respective Recovery and Resilience Plans and implementing the communication strategies outlined in the RRPs. The EC regularly discusses RRF topics with MSs in the context of the INFORM EU network (an EU-wide network of communication officers responsible for communicating EU and MS projects under EU funds, including the RRF). The network meets twice per year for plenary meetings.

In terms of transparency, the Commission publishes links to the RRPs and the annexes to the Council Implementing Decisions (approving the plans). For the concrete implementation of the RRF, country pages contain links to the operational arrangements agreed with Member States with details on the monitoring arrangements and information on how the assessment of milestones and target fulfilment will be ensured. Member states are instead in charge of publishing the plans as well as the information on the final beneficiaries of the RRF funds, including via setting up easy-to-use public portals containing the data on the 100 final recipients receiving the highest amount of funding for the implementation of measures under the RRF.

In order to increase transparency, the Commission also developed the RRF Scoreboard website, which contains: i) dedicated sections on the fulfilment of milestones and targets; ii) expenditure per policy area and a breakdown of green, digital and social expenditure under the Facility; iii) progress of disbursement; iv) reporting on 14 common indicators; and v) thematic analyses of measures. The Commission further compiled the links to the Member States' dedicated RRF websites on the country pages of its website. In this respect, it is worth stressing that the detail of information available in national websites varies significantly. There is in this respect no legal basis to oblige all Member States to follow a common approach

The EC also organises together with MSs **joint events** that highlight the European dimension of RRF-supported projects. Of particular note are Annual Events, which constitute a key communication moment bringing together institutions, stakeholders (in particular social partners and civil society at national level) and beneficiaries of RRF support to discuss the progress and state of play of the RRP implementation. As reported in the EC's RRF Scoreboard, 23 MSs have already organised annual events with stakeholders, while Germany, Hungary, the Netherlands, and Poland, have not yet organised an annual event.

In its closing note on the Strategic Initiative concerning the transparency and accountability of the RRF, the European Ombudsman acknowledged the progress made in improving the RRF transparency efforts by the Commission. At the same time, some recommendations are advanced for the Commission to publish the machine translations of the national plans, and to ensure that the Member States who have not done it yet, establish their online portals as soon as possible to show first 100 beneficiaries of the RRF

In December 2022, **Eurobarometer** conducted a **survey** to collect information on EU citizens' awareness of NGEU and their views, opinions and expectations about the recovery instrument

(Eurobarometer, 2023). This Flash Eurobarometer also explores the awareness about the National Recovery and Resilience Plans, the visibility across information channels, the general attitude toward the performance-based nature of the RR, the views about the impact of the recovery instrument on the economy and EU citizen's personal situation, and general views on REPowerEU.

The Eurobarometer survey finds that **across the EU around 51% of the respondents were aware of a Recovery Plan for their country to support economic recovery**. The highest awareness levels are observed in Slovakia (68%), Slovenia (69%), Italy (74%) and Portugal (78%), and the lowest levels in Germany (33%), Austria and Latvia (both 30%), Estonia and Sweden (both 28%). One-third of all respondents (33%) have seen, heard or read something about NextGenerationEU, the EU's COVID-19 recovery instrument. More than one-third of respondents think that the National Recovery Plan of their country is financed partially through NGEU and about one in six think the plan is entirely financed through NGEU. The remaining do not know how the recovery plan in their country is financed.

In terms of **sources of information**, the primary channel is **television** (65%), followed by the press (37%), social media (29%) and the radio (21%). Overall, EU citizens are supportive of the idea of a solidarity EU instrument to address the consequences of the pandemic crisis (74%) and 70% reply that this is a good approach for their country. On average, more than 60% of the respondents think it is a good approach for the EU to provide financial support through NextGenerationEU to recover from COVID-19. More heterogeneity emerges when respondents are asked whether NGEU as a common EU response is good for their own countries.

64% agree that the payments from the NGEU to MSs should be conditional on achieving the expected results. In terms of expectations, EU citizens expect the NGEU to be supportive, especially of health policies, employment and better working conditions, as well as energy, environmental issues and climate change. In 25 out of 27 MSs, 'health' is the most frequently mentioned area expected to be prioritised to receive EU support under NextGenerationEU. Finally, in terms of expected impacts, EU citizens think that NGEU will have a positive impact on future generations (around 66%) and will lead to economic growth and more jobs (61%). A positive impact on personal or professional situation is instead perceived by EU citizens as much less likely.

In addition, a **public consultation** was conducted from 16 March 2023 to 8 June 2023. The consultation was available via a dedicated webpage *EUSurvey,* and it was open to feedback from anyone interested in the topic. Only a total of 172 responses were received during the consultation. According to the replies, **more than 90% of all respondents indicated that they are aware of the existence of the RRF**, compared to about 75% for Next Generation EU. Excluding citizens, awareness is even higher: Among organisations and institutions, 97% (64 replies) are aware of the RRF, and 93% (64 replies) are aware that Next Generation EU exists.

Generally, respondents appear to be familiar with the RRF. More than half (59%) of respondents indicate a good understanding of the RRF, and another 35% of respondents indicate that they have at least a general understanding of the facility. Among organisations and institutions responding to the public consultation, almost all (97%) of respondents indicate that they have at least a general understanding of the RRF. The majority among these, about 80% of responses from organisations (55 replies), indicate that they have a good understanding of the RRF. **Just about half of the respondents (78 replies) have consulted the RRF Scoreboard.**

Slightly more respondents indicated that they or their organisation have been directly involved in activities related to the RRF (48%) than not (45%). A plurality of respondents has been involved in the monitoring of the national plan or the RRF (35 replies, including 12 of the public authorities, 14 of the citizens, and 4 of the NGOs responding). 28 respondents indicated that they have been beneficiaries or have been involved in projects funded by the RRF (including 14 citizens, 10 public authorities, and 2 companies), and 26 other respondents reported involvement in the implementation of the plan (including 6 citizens, 13 public authorities, and 3 NGOs). Among the 'other' option, individual respondents clarified that they are involved, e.g., in auditing, have been involved in the consultation process on the RRF, or that member organisations are beneficiaries.

Close to two-thirds of respondents (63%) indicate that the financing through the RRF has been at least somewhat visible in their countries, although **a plurality overall suggests that the financing has only been somewhat visible**. Close to 35% of respondents suggest that the financing through the RRF has not been visible at all in their countries. **Among citizens, visibility appears to be lower**. About 45% of the citizens responding to the public consultation (43 replies) suggest that the RRF is not visible at all, compared to only 21% (14 replies) among organisations.

Almost 9 out of 10 respondents (89% or 146 replies) are aware that the EU finances a programme of reforms and investments under a national recovery and resilience plan. All public authorities responding to the question are aware of this fact (29 replies). 92% of respondents (133 replies) are aware that the RRF supports investments, while a slightly lower share of respondents (85%, 122 replies) is aware that the RRF also supports reforms in the countries.

As for the information gathered by **stakeholder consultations**, visibility and perception of the RRF varies among the MSs and different stakeholders. **There is a range of factors influencing its visibility, such as the size of the plan, political ownership, government communication, and stakeholder involvement**.

Some MSs perceive the RRF as a priority instrument, while others may have limited interest. Beneficiaries (e.g., businesses) are aware of the RRF and its funding when the information is published on the dedicated RRF website or tender platforms, but not all MSs include such detailed information on their websites, as stressed above. Overall, however, public awareness remains generally low. In this respect, efforts have been made by some Member States to communicate through public websites, traffic light systems, media presence, and annual events organised by the EC. There is recognition that the RRF is more visible compared to other instruments, especially in countries where government communication and political ownership are strong.

EQ.8.1: What have been so far the most effective aspects of the RRF?

Key findings:

The **support for reforms** and the link with investments via the CSRs conditionality is considered the **most effective aspect of the RRF**. The effectiveness of the RRF in supporting reforms increases in those countries that are the largest beneficiaries of the RRF envelope. The conditionality of payments upon fulfilment of milestones and targets rather than costs incurred and the definition of a clear timeline for reforms and investments – at the core of the RRF **performance-based approach** – is considered the second most effective aspect of the RRF. **A high level of ownership** is indicated as a positive aspect in increasing the RRF's effectiveness, especially when it comes to reform implementation.

Three are the most effective aspects of the RRF, singled out in stakeholder consultation with national coordination bodies and EU institutions: **the support for reforms**, the **performance-based approach**, and the **high degree of political ownership at national level**. Some MSs and the EU EC also indicated the **support for the green transition** as an effective aspect of the RRF, in particular via the DNSH and the climate tracking methodology with the coefficients for the calculation of support to climate change and environmental objectives. Some other MSs, the EC and Parliament instead pointed to the **solidarity mechanism** as an effective element of the RRF, which allowed to support a quick recovery of countries with narrower fiscal margins – especially via grants. As mentioned in question 1, the speed of disbursement and in particular the **pre-financing** have been highlighted as a positive aspect by some MSs. In what follows, however, we zoom in on the three aspects that were indicated by a majority of countries, as well as by the EU institutions, as most effective.

Support to reforms: The first effective aspect of the Recovery and Resilience Facility is the capacity to support reforms. **More than one-third of all measures in the 27 recovery and resilience plans are reforms** (around 2,187 reforms compared to 3,780 investments). The purpose of these reforms is to increase MSs' resilience as well as to create the condition for the successful delivery of the related investments under the RRF or the Cohesion policy funds. As illustrated above, the **contribution of the RRF in supporting reforms that address the CSRs has been significant and unanimously indicated by national coordination bodies and the EU institutions as a successful factor of the RRF**. To date, a large number of flagship reforms have been adopted across MSs and brought tangible results, as illustrated in EQ 2.2.

It does not come as a surprise that both national coordination bodies and European institutions unanimously recognize the support for the implementation of long-time debated reforms as the most effective aspect of the RRF. By linking financial assistance to the presentation of long-term investment and reform plans in line with the Semester's CSRs, the RRF introduces **a new positive conditionality** in European economic governance. The CSRs conditionality attached to the RRPs pushed MSs to put in place controversial reforms for which there would otherwise be insufficient political capital (see examples below). Second, the RRF defines a **clear timeline for the reforms'** implementation and milestones and targets to monitor the effective intermediate steps for the reforms' adoption. The definition ex-ante of a rigid timeline, accompanied by well-defined milestones and targets, the fulfilment of which is a condition of the payment disbursement, is indicated by the large majority of respondents as a key factor to accelerate the political discussion on reforms which would otherwise have taken a much longer time to be adopted.

Predictably, **the effectiveness of the RRF in supporting reforms increases in those countries that are the largest beneficiaries of the RRF envelope**. According to the Italian interviewees, without the RRF it would not have been possible to adopt the public administration, justice reforms (civil justice, criminal justice, insolvency framework and tax courts) and competition reforms to update the regulatory framework to attract both public and private investment. Similarly, the Spanish authorities acknowledge the key role of the RRF in accelerating key reforms such as the labour market and the pension reforms that were adopted in consultation with social partners in a very short time frame. Likewise, the RRF was key for the adoption of the justice reform, the acceleration of the adoption of the reforms within the anti-money laundering framework reforms and the education system reform in Croatia. In Hungary,[73] Romania, and Poland – as illustrated in the case study – the rule of law reforms would not have been possible without the RRF.

By contrast, in other MSs, the reforms introduced with the RRF are not of the same magnitude. **In some countries, like Austria and the Netherlands, the reforms included in the plans were either already foreseen** in the government coalition programme or introduced only relatively minor changes. This notwithstanding, also in countries with relatively lower financial incentives, the RRF contributed to accelerating the introduction of important reforms. This is the case of the joint programme at national and regional levels to tackle investment bottlenecks in Germany or the spending review reform in France.

Performance-based approach: With tighter budgets and growing public attention being paid to the effectiveness of EU policymaking, it has become increasingly necessary to analyse the performance, impact and added value of EU-supported programmes and initiatives (Laffan and Schlosser, 2016; Mause, 2019; EC, 2018b; Zamparini and Villani-Lubelli, 2019). In this respect, the RRF represents a key novelty. MSs submit payment requests and receive disbursements based on a positive assessment by the EC of the satisfactory fulfilment of the milestones and targets linked to the instalment concerned. The introduction of this 'financing not linked to costs' approach has been welcomed as a positive step towards a new performance budgeting, a shift away – in the EU budget

[73] In the case of Hungary the conditionality procedure and the HEC Charter non-fulfilment in cohesion policy also contributed to the rule of law reforms.

– from managing (i.e., 'how much have we spent?'), to the achievement of policy objectives (i.e. 'what have we accomplished with our money?' (Darvas, 2022).

The **large majority of national coordination bodies as well as EU institutions acknowledge the conditionality of payments upon fulfilment of milestones and targets rather than costs incurred as one of the most effective aspects of the RRF**. Several MSs point to the important cultural shift towards performance budgeting as an important and more effective approach to public policy where one defines *ex-ante* the goals of the measure to put in place and then decides on disbursements upon the achievements of those objectives. The shift towards the performance-based approach is considered effective because it guarantees predictability and accountability with the clear definition ex-ante of performance indicators linked to milestones and targets and the definition of a clear timeline for implementation with a hard deadline in 2026. The results of the public consultation also show general support for the performance-based approach, with 134 out of 166 responses on the positive scale[74].

Accountability and predictability are welcomed as effective aspects of the RRF for two main reasons: efficiency in decision-making processes and internal discipline. First, the RRF performance-based approach was positively welcomed as a positive cultural shift in public policymaking. The ex-ante formulation of expected goals is seen to enhance deliberation about the usefulness of policy instruments and gives clear metrics to evaluate success. The selection of reforms and investments based on expected output and outcomes pushed MSs to think about reforms and investments in parallel and this is a positive element because it forces having a coherent approach.

Second, the milestones and targets approach attaches additional leverage for administrations at the domestic level (Bokhorst and Corti, 2023). The RRF has been used by domestic actors, notably national governments, to speed the adoption of long-time contested reforms. The requirement to set detailed milestones and targets was used by the governments to force and accelerate national decision-making processes. Overall, administrations have been eager to include a wide range of reforms in their plans and thus allow for external pressure to deliver. This is particularly true in those countries like Spain, Croatia, Italy, Portugal, where the financial envelope is high and where the risk is higher of losing out on EU funds due to noncompliance with milestones and targets. In these cases, the performance-based approach reduces leeway for deviation and increases common responsibility to meet the agreed objectives within the agreed timeline. By contrast, in countries with lower financial envelopes from the RRF, senior public officials do not feel responsible or pressed to meet the targets and milestones included in the plan, which translates into lower effectiveness.

Ownership: The third most effective aspect of the RRF indicated by the EU institutions and a large number of MSs is the high degree of ownership of national recovery and resilience plans. Overall, interviewees from MSs and EU institutions, highlight a positive and constructive dialogue with the EC in the phase of preparation and implementation of the recovery and resilience plans. In countries, which previously were under economic adjustment programmes indicate a positive shift with the RRF, which is described as a good balance between discipline and discretion. Other countries highlight that the RRF has introduced a demand-driven system, which has implied a huge effort of coordination and implication of the different administrative levels drafting up reforms and investments, but at the same time increased political ownership significantly.

A high level of ownership is indicated as a positive aspect in increasing the RRF effectiveness, especially when it comes to reforms implementation. As observed more in detail in question 10, the higher the government centralisation – especially at the prime minister's office - of the recovery plans the easier the compliance of line ministers with the RRPs' timeline, milestones and targets. Similarly, the higher the involvement ex-ante of social partners and sub-national authorities, the

[74] In your view, to what extent are the following features of the RRF valuable and important?: "Performance-based instrument" – 93 responses "To a large extent", 41 "To some extent", 17 "To a limited extent", 11 "Not at all", and 4 "Do not know".

smoother the implementation of the reforms, especially in the domain of social and labour market policies.

EQ8.2: What have been the least effective aspects of the RRF so far?

Key findings:

One of the least effective aspects of the RRF is the **lack of sufficient flexibility** linked to 1) the M&Ts assessment by the EC; 2) the disbursement procedures; and 3) the possibility to change the plans. First, MSs are concerned about the lack of clarity on the interpretation of deviation from the agreed milestones and targets, and criticize the discretion and at the same time, the too rigid interpretation by the EC in the assessment. In this respect, however, the EC communication of February 2023 on the assessment framework for Milestones and Targets seems to have largely clarified several pending issues, even though Member States perceive that the assessment criteria for reforms are not fully clear. With respect to the disbursement, a few MSs criticised the procedures for disbursement and in particular raised concerns regarding the payment suspension methodology. With respect to the possibility of changing the plans, MSs think that the revision process is burdensome, slow and implies unnecessary complexity. In particular, the lack of distinction between types of changes (based on risk profiles) and between minor and major measures is indicated as the least effective aspect.

The second least effective aspect is the **excessive administrative burden**. Unnecessary administrative burden (at the EU level) is indicated by a majority of MSs with respect to the procedures to review the plans, the informal dialogue with the EC, the reporting on common indicators and the multiple audits and controls by EU and national institutions. In particular, countries stress that the audit and control system imposes unrealistic and pointless verification requirements.

When it comes to the least effective aspects of the Recovery and Resilience Facility, the large majority of national coordination bodies indicate two main problematic aspects: **lack of sufficient flexibility** and **excessive administrative burden**.

Lack of sufficient flexibility: as illustrated more in detail in EQ24, with the implementation of the recovery and resilience plans, **the demand for flexibility has increased as a result of the changing circumstances affecting the roll-out of the national plans**, such as pressure on energy, food and other commodity prices, and the disruptions in global supply chains and logistics, linked to the war in Ukraine, but also the delays cumulated because of administrative delays and the delays linked to the innovative nature of certain types of investments. Such demand for flexibility is linked to 1) **the M&Ts assessment by the EC**; 2) **the disbursement procedures**; and 3) **the possibility of changing the plans**. Both in the survey and in the semi-structured interviews with national coordination bodies, more than half of the respondents indicate the lack of flexibility as the least effective aspect of the RRF hampering the effective roll-out of the plans.

With respect to the **assessment of milestones and targets**, MSs are concerned about the lack of clarity on the interpretation of the milestones and targets and the framework used by the EC when assessing M&Ts. In particular, MSs manifested scepticism about the 'literal' approach taken by the EC in the assessment of milestones and targets, which risks – in their view - deviating from the purpose of the implementation of the plans' measures and create undue delays and lengthy discussions. In this respect, several MSs have reflected upon the trade-off between precision and details provided in the M&Ts and the risk ex-post to have 'excessive scrutiny'. In several MSs, respondents declare that ex-post, they would have set their milestones and targets less ambitious to avoid excessive scrutiny afterwards. Related to this, some MSs further raise concerns about the lack of clarity regarding the documents that are considered by the EC when assessing the milestones and targets. Part of these criticisms have been significantly mitigated after the publication of the 2023 Communication by the EC, including the Framework for assessing milestones and targets under the RRF Regulation (Annex I) as well as the Commission methodology for the determination of payment suspension under the RRF regulation (Annex II). The Communication has been welcomed by a majority of MSs. Here, the EC explains that for the assessment of the M&Ts it relies on their description (set out in the Council Implementing Decisions) *in light of its context and purpose* to determine the requirements that MSs must fulfil. Concerning specifically the context and purpose, in the stakeholder consultation with the EC, it emerged with clarity that the assessment of Milestones and targets is not 'literal', but it is always done considering the end goal of the measures under assessment as well as the specific context. Concerning the sources to consult to identify the purpose, these include the national recovery and resilience plans, recitals of the Council Implementing Decision approving the assessment of the recovery and resilience plan, the Staff Working Documents accompanying the EC's proposals for such Council Implementing Decisions, notes to the file during the assessment, records of exchanges with the national authorities or the country-specific recommendations adopted by the Council linked to that measure. In addition to this, the EC communication of February 2023 further explains that in a limited number of circumstances and in line with the application of the *de minimis* principle, minimal deviations linked to the amounts, formal requirements, timing or substance can be accepted. Annex II of the EC Communication further details the framework for assessing milestones and targets and the application of the minimal deviations.

With respect to the **disbursement procedures**, MSs raise concerns about the application of the methodology for the (partial) suspension of payments and in particular the application of upward adjustment coefficients, which some national authorities considered as *unclear, unpredictable and of non-transparent nature*. The coefficients are applied by the Commission to the unit value of a milestone and a target in the case of a payment suspension. The coefficients reflect the importance of the milestone and target and differ depending on investments and reforms. As explained in Annex II of the EC Communication: '*Once corrected unit values are established, upward and downward adjustments will be made in the specific cases outlined below. The final amount to be suspended per unfulfilled milestone or target will be equal to the corrected unit value subject to any upward and downward adjustment ('suspension value')*. MSs are particularly critical of the coefficients related to reforms where the discretion of the Commission is higher in deciding the importance and accordingly justify the rating of a non-fulfilled milestone and target. While this criticism is partially justified, it is worth stressing that quantifying the coefficients applicable to the unit value is per se challenging for reforms that require a qualitative assessment. Related to disbursement procedures, few MSs indicated the need for a more dynamic approach to disbursement rather than a fixed (bi-)annual payment based on pre-agreed milestones and targets. With respect to this proposal, however, it is worth also stressing that this would entail no possibility for the Commission to plan budget spending, which in part is already limited due to the fact that the payment requests are not predictable nor regular. Considering the magnitude of the Recovery and Resilience Facility and the need to raise funds on the market, this would make such a proposal hardly feasible.

Concerning the possibility of **changing the plans**, MSs think that the revision process is burdensome, slow and implies unnecessary complexity (see EQ24). They point to the **lack of difference between the procedures to introduce small or major changes in the recovery plans**, and between types of investments (based on risk profiles). They criticised the lengthy procedures, even in the case of minor adjustments, and the time lag between plans' modifications and Council approval of the procedures and the excessively burdensome administrative procedures and justifications required to change the plans. MSs further highlighted the excessive number of procedures and justification that increases the time for modification so much that it almost makes ineffective the modification itself, especially considering the final deadline for the RRF of 2026. With respect to the above-mentioned shortcomings linked to the plans' amendments, the analysis of the limits of the RRF in plan's modification is also recognised by the stakeholders interviewed at the EU level.

Administrative burden: based on the stakeholder consultations with national coordination bodies, there is broad concern that the RRF's **performance-based financing model, as currently managed, has increased the administrative burden for public administrations**. Before zooming in on the specific aspects indicated by MSs on this, it should be stressed that both at the national and EU level, respondents to the stakeholder consultation recognize the steep learning curve that a new instrument like the RRF represented for both actors and accordingly. Similarly, national stakeholders acknowledge the entry costs linked to the creation of the new instrument and its implementation at national level. With this caveat in mind, based on the survey with national coordination bodies, unnecessary administrative burden is indicated in the following aspects:

- The procedures to review the plans
- The informal dialogue with the EC
- The reporting on common indicators
- The multiple audits and controls by EU and national institutions

With respect to the **procedures to modify the plans, as illustrated above, they are considered as not flexible and requiring excessive administrative burden**. With respect to the latter, MSs complain about the time lag between the plans' modification submission and the final Council approval. In particular, some MSs indicate the final approval by the Council as a 'formal step' not necessarily needed, especially for small plans' modification. Several MSs share the opinion that the EC asks for excessive justification for the objective circumstances. Based on the RRF Regulation (art 21), MSs may make a reasoned request to the EC to make a proposal to amend or replace the Council implementing decisions when the RRP and its milestones and targets are no longer achievable, either partially or totally, by the MS concerned because of objective circumstances. In this respect, the informal dialogue between MSs and the EC is considered in part helpful but in part also a burden, which significantly slows down the plans' modification. In this respect, some countries criticised the long time it takes for the EC to answer MSs requests, which clashes with the amount of documentation that is then required to MSs in a very short time. With respect to the excessive reporting, MSs point in particular to the common indicators, considered as not useful to track actual RRPs' results.

With respect to audit and controls, as documented in EQ10 and EQ12, a large majority of MSs considered the unclarity with respect to the role of audits and controls at the EU and national level as the least effective aspect of the RRF. National coordination bodies complain in particular about the lack of clarity in the RRF regulation about the authority in charge of the audit and control, the excessive documentation requested by multiple actors at the same time, which is considered inefficient and detrimental to the roll-out of the plans. Further burden is also linked to the time spent by national authorities in providing justifications for the national and ECA controls and audits in addition to the ones already foreseen by the EC. **Some countries stress that the audit and control system impose unrealistic and pointless verification requirements**. The box below illustrates the audits carried by MSs, the EC and ECA.

Box 19. The role of the national control system, the Commission and ECA in auditing the RRF

The RRF Regulation and the Guidelines provided by the Commission to Member States on the recovery and resilience plans clearly define the audit and control responsibility of the Member States and the Commission. At the national level, article 18(4)(r) explicitly states that the RRP shall set out *'an explanation of the Member State's system to prevent, detect and correct corruption, fraud and conflicts of interests, when using the funds provided under the Facility, and the arrangements that aim to avoid double funding from the Facility and other Union programmes'.* Member states should describe in their plans the control systems as well as other relevant measures and arrangements, including for the collection of data on final recipients, which can be requested by the Commission for audit purposes (article 22). To this end, MSs can make use of already existing national control system(s) and related bodies. Control and audit bodies should be clearly identified. Art. 19(3) explains that the Commission shall assess *'whether the arrangements proposed by the Member State concerned are expected to prevent, detect and correct corruption, fraud and conflicts of interests when using the funds provided under the Facility, including the arrangements that aim to avoid double funding from the Facility and other Union programmes'.* In case the Commission detects deficiencies, it may require the Member State to develop an action plan to remedy the deficiencies as a matter of urgency. Milestones and targets for these measures will be established and will become a condition for disbursements.

Concerning the role of the Commission, the *Commission is accountable towards the budgetary authority in the context of the annual discharge procedure and Union funds disbursed under the RRF will be subject to the external audit of the ECA. The Commission, the European Court of Auditors, the European Anti-Fraud Office and the European Public Prosecutors Office may therefore access and request information, undertake controls and investigate, according to their respective powers and competences. The Commission must ensure that the financial interests of the Union are effectively protected (Guidelines RRF part I, p. 29)*. Specifically, the Commission performs ex-post and system audits on milestones and targets, system audits on measures implemented to protect the financial interest of the Union and serious breaches of the Financing Agreement, as well as audits carried out in case of suspicion of serious irregularities.

Concerning the role of the ECA, this is not defined in the RRF Regulation. Accordingly, the European Court of Auditors has developed a strategy (2021-2025 Strategy) for carrying out its responsibilities for the NGEU and the RRF, which aims to provide broad coverage in terms of financial compliance, and several performance audits (ECA, 2022b). As noted by Campos Acuña (ECA, 2022b), there was a need for innovation and reinvention in the audit approach, leaving aside formalism, understood as looking at cost justification as in the case of Cohesion Policy. As in the case of the Cohesion Policy, the ECA has to carry out a Statement of Assurance on the NGEU, in which it gives an audit opinion on the financial compliance and the legality and regularity of the EU's finances (Csak et al. in ECA, 2022c).

Overall, the impression in a majority of MSs is that the RRF risks becoming **more focused on 'receipts' than 'results'**, with the risk that it does not contribute productively to improving the implementation of the reform and investment projects themselves. In this respect, while national interviewees praise the helpfulness of EC officials in informal dialogues in finding solutions to problems, at the same time, they complain that in the same informal dialogues, a lot of time is spent on providing justification documents rather than discussing the plans' implementation and coordination. Here, too, some EC officials acknowledge these constraining features of the RRF monitoring and assessment system, which sometimes involve heavy procedures. At the same time, a majority of interviewees at the national and EU level acknowledge that **there is a learning curve with the RRF, which comes – as a new instrument – with some unavoidable adjustments**.

Efficiency

EQ9: How does the cost (inputs) of the Facility compare with the RRF outputs, results and impact?

Key findings:

Under the QUEST scenario (i.e., 100% additionality for grants and 50% additionality on loans), our analysis using NiGEM suggests that **the cumulative impact on EU GDP by 2041 of the RRF funds disbursed up to the end of July 2023 is almost twice as large as the value of these disbursed funds.** Further, our analysis suggests that **the cumulative impact on EU GDP by 2041 of the entire RRF package of grants and loans is expected to exceed twice the total RRF funds**. Indeed, both the non-discounted and discounted values of the benefit-cost ratios calculated at the EU level and considering all the planned RRF funds are a little over 2. However, if different assumptions on additionality are considered the benefit-to-cost ratio will change. Under a scenario where 60% of RRF funds are used for additional public investment within the poorer Southern and Eastern MSs but only 25% of RRF funds are used for additional public investment in the richer Northern and Western MSs, the benefit-cost ratio falls below one; that is the cumulative effect on EU GDP becomes lower than the total RRF funds disbursed. However, this does not account for the long-run GDP effects of the structural reforms within MSs RRPs, which are hard to measure, particularly given the length of time over which the benefits will come to fruition, but which potentially could be substantial.

As concerns administrative costs, **there are significant variations** across countries in FTE declared by coordination bodies both for one-off activities and recurrent activities. **No clear trends emerge**. Indeed, the variations are influenced by several concurrent factors related to the availability of data, the governance of the RRF and the degree of outsourcing.

In many countries the FTEs working on plan amendments (incl. the REPowerEU chapters) are comparable and in some cases even higher than the FTEs for drafting the actual RRPs. According to most respondents (72%) in the survey**, the costs linked to the RFF implementation have increased over time**, while only 28% reported stable costs. The majority of respondents attribute the cost increase to more stringent application of requirements (particularly in reporting, control, and audit) than expected.

The cost of the RRF includes:

- The direct costs, i.e. the funding provided by the facility to MS.
- The administrative costs related to the implementation of RRF, including direct expenditure and staff costs linked to administrative activities such as planning, payments, controls and others. Administrative costs do not include the costs borne by final beneficiaries to comply with obligations imposed by the RRF regulation as well as regulations related to the support received, such as State aid, public procurement and environmental legislation. This mid-term evaluation focuses especially on the administrative costs related to MS public administration.

The two are discussed in what follows.

The analysis of the RRF's benefits has primarily focused on its GDP impact, leveraging the results of the macroeconomic analysis (see Annexes for methodological details). By comparing this GDP impact with the RRF funding, an attempt was made to estimate the benefit-cost ratio of the RRF.

In the end, “entry costs” and their evolution over time are discussed.

Direct costs

The direct costs of the facility, i.e., the funds made available to MSs, and the related financial costs (including the EU borrowing costs for the instrument and MS borrowing costs for loans) are part of the costs of RRF. The RRF’s budget amounts to €723.8 billion (in current prices): loans up to 385.8

€ billion (in current prices) and grants up to €338 billion (in current prices).[75] Under Amending Regulation (EU) 2023/435, the additional finance for the REPowerEU investments and reforms is established and totalling up to €42.4 billion.[76] Against this budget, according to data provided by the EC in July 2023, the planned payments for grants amount to €336.4 billion and the planned payments for loans amount to €165.4 billion. Grants disbursed amount to €106.3 billion and loans disbursed to €47.1 billion, representing respectively 31.6% and 28.5% of planned payments.

Concerning the financial costs, for RRF loans, while the debt is guaranteed by the EU budget, including through an increase in the own-resources ceiling, the costs associated with the debt are borne by the countries in question[77]. Article 9 of the EC implementing decision (EC, 2021a) provides that the loan agreements shall contain an unconditional and irrevocable commitment of the beneficiary MS to bear all costs related to the borrowing, including administrative costs, and to repay the principal amount and interests and may allow the use of derivatives, in particular swaps. Instead, the cost of repaying the borrowing related to the RRF grants and the associated interest costs will be serviced through the EU budget. Repayment will either be done through the new EU budget resources, or as a last resort through an increase in MSs' contributions to the budget (Council Decision (EU, Euratom) 2020/2053, 2020).

The 2021-2027 multiannual financial framework budgeted for €14.9 billion in current prices over the seven-year period to cover the borrowing costs for the NGEU.[78] This figure was based on an assumption that interest rates would gradually increase from 0.55% in 2021 to 1.15% in 2027. However, interest rates increased faster than expected, they already stand at over 3% in 2023 (EP, 2023). According to Bruegel's estimates (Claeys et al., 2023), because of the high current and expected levels of interest rates, the cost of EU borrowing for non-repayable support could be twice as high as what was initially estimated at the start of the EU's 2021-27 budget cycle. This means the borrowing costs for NGEU could reach €30 billion.

Claeys et al. (2023) comment that the significant increase in the borrowing costs for NGEU will be paired with a substantial increase in the gross national income of EU countries resulting too from the surge in inflation. Consequently, there will be a noteworthy rise in the 'own resources ceiling', enhancing the guarantee on EU debt provided by EU countries. However, the inflation surge does not increase the 'expenditure ceilings', which are capped at 2018 prices plus a fixed annual growth rate of 2% to account for inflation (Article 4.2 of Council Regulation 2020/2093, 2020)[79] Hence, they conclude that a large increase in interest payments could quickly exhaust funds at the expense of EU programmes under the same expenditure category, or 'heading' in EU budget jargon (for example, Erasmus+ or the European Social Fund+).

Due to inflation, as observed above, also the costs for achieving milestones have significantly increased since the adoption of the RRPs (see also Böhme et al., 2023; ECA, 2023b). This cost increase implies that with the same funding, fewer achievements (e.g., the number of purchased fleets, renovated buildings, etc.) will be possible (see the box under EQ 5.1).

Benefit-cost ratio

A benefit–cost ratio is an indicator that attempts to summarise the overall value for money of a project or intervention by comparing its benefits, expressed in monetary terms, relative to its costs,

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[75] The NGEU provides additional support (83.1 EUR billion in current prices) to six EU programmes under the Multiannual Financial Framework, i.e. ReactEU, Horizon, RescEU, InvestEU, the Just Transition Fund and the European Agricultural Fund for Rural Development.

[76] Additional finance come from the following sources: EUR 20 billion in REPowerEU grants, 60% of which will come from the Innovation Fund (established under Directive 2003/87/EC) and 40% from frontloading Member States' allowances; up to EUR 5.4 billion from the Brexit Adjustment Reserve; up to EUR 17 billion from the Cohesion Policy funds, in line with the existing possibility to transfer 5% of those funds to the RRF. Moreover, MS can use the remaining EUR 225 billion in loans under the RRF (until 31 August 2023).

[77] EU countries agreed in 2020 to increase the EU's debt guarantees via an added 0.6% of EU gross national income (GNI) in callable headroom.

[78] Source: https://commission.europa.eu/system/files/2021-01/mff_2021-2027_breakdown_current_prices.pdf.

[79] Council Regulation 2020/2093, Article 4.2

also expressed in monetary terms. In the context of this evaluation, as part of the macroeconomic analysis presented in EQ 4.2, we estimated the benefit-cost ratios of the RRF funds that have already been disbursed. Specifically, in this context, the benefit-cost ratio is defined as the ratio between the cumulative change in real GDP (against the baseline) predicted by our model to occur by 2041 as a result of the RRF funding (both grants and loans) already disbursed, i.e., the benefit, and the total RRF funds that have already been disbursed in real terms, I.e., the cost.[80] We then went on to calculate the expected benefit-cost ratio of the RRF funds once all funds are disbursed. In this case, the ratio is calculated as the cumulative change in real GDP predicted by our model to occur by 2041 as a result of the total RRF injection (relative to the baseline) over the total funding (both grants and loans) in real terms. The table below provides the benefit-cost ratio at the MS level and the EU level. It's important to note that the ratio associated with the entire EU does not correspond to the average national ratios because, as already pointed out in EQ 4.2, there are spillover effects.

We find that the cumulative impact of the entire RRF programme on EU real GDP is more than twice the total RRF funds in real terms. Indeed, both the non-discounted and discounted[81] values of the benefit-cost ratio for the EU presented in the table below are a little over 2. This implies that the EU-level quantifiable impact of the RRF on GDP is a little over twice the disbursed RRF funds.

When examining the ratios of individual countries, the situation varies. We first note that for a number of EU countries – specifically Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia – we cannot capture all of the benefits of RRF spending given the way these countries are modelled within NiGEM. In addition, Cyprus, Luxembourg and Malta are not modelled at all within NiGEM. As a result, we do not report the benefit-to-cost ratio for these countries. Focusing on the potential benefits and costs incurred with RRF payments that had been disbursed by the end of July 2023, we find that – if we assume 100% additionality for grants and 50% additionality on loans - the ratios are higher than one in all countries except Denmark and Finland (where it is negative), indicating that the benefits surpass the costs for most countries. For Denmark and Finland, their share of EU interest costs and the costs of paying back the EU bonds used to finance the RRF grants that have already been disbursed is much larger than the RRF payments they have received to date. This results in a negative impact on government finances that is significant enough to generate a negative effect on GDP in the long run. When considering the total expected amount of RRF payments, we find that the ratio is greater than one in all countries except Denmark, where it is close to one. This indicates that the **benefits of the RRF outweigh the costs in almost all countries, and quite considerably in some, e.g., Ireland, Germany and Portugal**.

[80] The funding of each MS has been considered gross of the interest payments on EU borrowing in proportion to their 2021 share of total EU budget.
[81] For the discounted ratio, a discount rate of 3% has been considered and applied both to "benefits" (i.e. the absolute change in real GDP generated year-by-year) and the "costs" (i.e. the real payments occurred year-by-year).

Table 10: Benefit-cost ratios under 100% for grants and 50% for loans additionality assumption

Country	Partial effect			Expected total effect		
	Cumulative change in real GDP (2015 EU millions unless otherwise stated)	Real payments (2015 EU millions unless otherwise stated)	Benefit/Cost ratio	Cumulative change in real GDP (2015EU millions unless otherwise stated)	Real payments (2015 EU millions unless otherwise stated)	Benefit/Cost ratio
Austria	937.59	1,643.81	1.75	2,843.85	6,112.34	2.15
Belgium	639.68	921.40	1.44	3,272.17	8,864.00	2.71
Czechia (2015 CZK millions)	33,102.19	35,513.00	1.07	138,630.43	139,171.00	1.00
Denmark (2010 DKr millions)	3,118.33	1,229.00	0.39	8,254.04	7,721.00	0.94
Finland	211.68	-183.31	-0.87	1,507.14	1,662.44	1.10
France (2014 EU millions)	10,905.16	20,501.50	1.88	31,773.44	75,683.40	2.38
Germany	1,843.70	3,024.10	1.64	21,914.94	73,077.20	3.33
Greece	10,854.38	16,946.80	1.56	26,826.45	59,511.30	2.22
Hungary (2015 HUF millions)	NA	No payments	NA	1,243,536.34	1,372,068.00	1.10
Ireland (2020 EU millions)	NA	No payments	NA	790.36	8,379.38	10.60
Italy	58,179.06	149,357.70	2.57	166,984.46	389,134.50	2.33
Netherlands	NA	No payments	NA	3,447.69	4,288.88	1.24
Poland (2010 Zloty millions)	NA	No payments	NA	90,310.71	109,539.50	1.21
Portugal (2016 EU millions)	4,261.63	12,829.80	3.01	14,604.26	46,309.30	3.17
Romania (2015 Leu millions)	21,072.45	35,820.75	1.70	78,525.23	171,462.63	2.18
Spain	33,165.52	38,411.20	1.16	63,839.88	132,427.10	2.07
Sweden (2022 SKr millions)	NA	No payments	NA	23,906.97	61,704.50	2.58
European Union	127,179.54	257,594.70	2.03	394,595.10	912,489.20	2.31
European Union Discounted	126,921.87	251,460.73	1.98	391,750.47	884,763.49	2.26

Source: own elaboration

But, as discussed elsewhere in this report, it is not clear that RRF funds have been used, or will be used, to finance as much additional public investment as assumed in our baseline case. So, to test the robustness of these results, we examined two alternative scenarios. In the first scenario, we assumed that only 60% of grants and loans are used for new public investment in the Southern and Eastern Member States while only 25% of grants and loans are used for new public investment in the core Northern and Western Member States. In the second scenario, we assumed the same degree of additionality for grants (i.e., 60% for Southern and Eastern Member States and only 25% for the core Northern and Western Member States) but that loans were only used to finance existing public investment plans (i.e., zero additionality). The results are shown in the table below.

We can first note that, in the scenario in which they use 60 per cent of their grants and loans to finance new public investment, the benefit-cost ratio is still greater than 1 – i.e., the cumulative effect on real GDP is expected to be larger than the total RRF-funded grants and loans the country is expected to receive in real terms – for Greece, Ireland, Italy, Portugal, Romania and Spain. However, if we assume that loans are not used to finance new additional public investment, then the benefit-cost ratio only remains greater than 1 for Ireland, Portugal, and Spain. For Denmark, Finland and the Netherlands, our results suggest that, in the scenario where only 20 per cent of their grants are used to finance new public investment, their share of EU interest costs and the costs of paying back the EU bonds used to finance the RRF grants is much larger than the RRF payments they expect to receive. This results in a negative impact on government finances that is significant enough to generate a negative effect on GDP in the long run. More generally, with real GDP in all the 'core' Member States not rising by as much as the RRF funds they receive in real terms (i.e., a benefit-cost ratio lower than 1) in our alternative scenarios, the result is a benefit-cost ratio for the European Union that is less than 1. That is, **where we assume a much smaller degree of 'additionality' for RRF-financed public investment, the cumulative effect on real EU GDP becomes lower than the total size of the RRF in real terms**. However, those Member States whose governments face higher interest rates than the rates charged on RRF loans would benefit from cheaper funding costs for all public investment financed by the RRF whether 'additional' or not, and these benefits are not accounted for in our analysis. In addition, our analysis does not account for the long-run GDP effects of the structural reforms within Member States' RRPs, which are hard to measure, particularly given the length of time over which the benefits will come to fruition, but which potentially could be substantial. So, it is certainly possible that even in the scenarios where we assume less additionality of public investment than our central case the benefit-cost ratio for RRF spending could be greater than 1.

Table 11: Benefit-cost ratios under different assumptions

	Expected total effect			Expected total effect: Lower additionality			Expected total effect: Zero additionality for loans		
Country	Cumulative change in real GDP (2015EU millions unless otherwise stated)	Real payments (2015 EU millions unless otherwise stated)	Benefit:Cost ratio	Cumulative change in real GDP (2015EU millions unless otherwise stated)	Real payments (2015 EU millions unless otherwise stated)	Benefit:Cost ratio	Cumulative change in real GDP (2015EU millions unless otherwise stated)	Real payments (2015 EU millions unless otherwise stated)	Benefit:Cost ratio
Austria	6112	2844	**2.15**	1406	2844	**0.49**	1406	2844	**0.49**
Belgium	8864	3272	**2.71**	1857	3272	**0.57**	1857	3272	**0.57**
Czechia (2015 CZK millions)	139171	138630	**1.00**	99802	138630	**0.72**	99802	138630	**0.72**
Denmark (2010 DKr millions)	7721	8254	**0.94**	-1135	8254	**-0.14**	-1135	8254	**-0.14**
Finland	1662	1507	**1.10**	-96	1507	**-0.06**	-89	1507	**-0.06**
France (2014 EU millions)	75683	31773	**2.38**	14302	31773	**0.45**	14302	31773	**0.45**
Germany	73077	21915	**3.33**	14294	21915	**0.65**	14294	21915	**0.65**
Greece	59511	26826	**2.22**	44775	26826	**1.67**	24653	26826	**0.92**
Hungary (2015 HUF millions)	1372068	1243536	**1.10**	1004488	1243536	**0.81**	1004488	1243536	**0.81**
Ireland (2020 EU millions)	8379	790	**10.60**	1986	790	**2.51**	1986	790	**2.51**
Italy	389135	166984	**2.33**	345960	166984	**2.07**	136911	166984	**0.82**
Netherlands	4289	3448	**1.24**	-119	3448	**-0.03**	-119	3448	**-0.03**
Poland (2010 Zloty millions)	109540	90311	**1.21**	88333	90311	**0.98**	71104	90311	**0.79**
Portugal (2016 EU millions)	46309	14604	**3.17**	29948	14604	**2.05**	25414	14604	**1.74**
Romania (2015 Leu millions)	171463	78525	**2.18**	142153	78525	**1.81**	61137	78525	**0.78**
Spain	132427	63840	**2.07**	79315	63840	**1.24**	79315	63840	**1.24**
Sweden (2022 SKr millions)	61705	23907	**2.58**	6426	23907	**0.27**	6426	23907	**0.27**
European Union	394595.10	912489	**2.31**	594379	912489	**0.65**	326966	912489	**0.36**
European Union Discounted	391750.47	884763	**2.26**	577060	884763	**0.65**	318292	884763	**0.36**

Administrative costs

As specified in the Better Regulation Guidelines, administrative costs include those borne at the EU level and those related to MS public administrations. At the EU level, most of the administrative costs are borne by the EC. **The support expenses for the RRF are budgeted at €88.2 million, equalling 0.026% of the total amount available for non-repayable support** (EC, 2022e). This amount will be deducted from the RRF non-repayable support, so it should not be considered additional to RRF funding. It is however a proxy of administrative costs sustained by the EC. At MS level, the administrative costs comprise costs for the staff working with implementation and costs for external services related to the activities illustrated in the figure below. The **estimation of these costs sustained by MSs is the focus of this mid-term evaluation**.

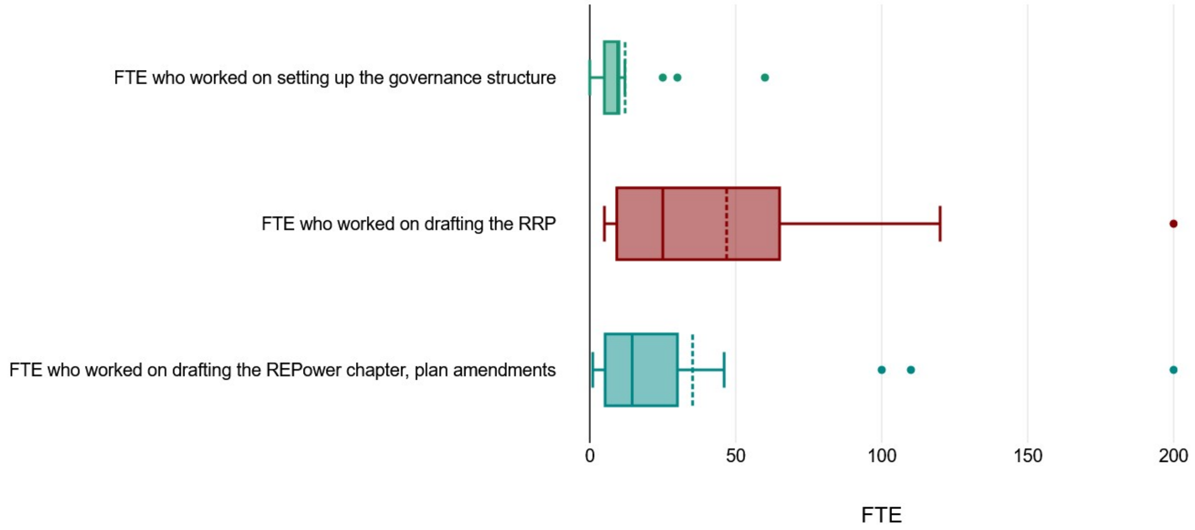
ACTIVITIES GENERATING ADMINISTRATIVE COSTS FOR MS	
One-off: Setting up the governance structure Drafting the NRRP Stakeholder consultation Informal dialogue with the COM on plan submission Official process of plan submission Drafting the REPower chapter, plan amendments	**Recurrent:** Bi-annual reporting on milestones and targets Bi-annual reporting on monitoring steps Bi-annual reporting on other EU funding Reporting on common indicators Informal dialogue with the COM on payment request submission Official submission of payment request Monitoring and performance management Audits by national authorities Audits by EU institutions (EC) Audits by EU institutions (ECA) Outreach activities

The collection of administrative costs has been done via a survey of national bodies involved in the activities listed in the above figure. Specifically, the full-time equivalent (FTE) and costs for external services were asked. Since the survey results are patchy and do not provide complete coverage of costs attributable to the various activities, with the only exception of national coordination bodies (see Annex I, section on analysis of costs and benefits), in order to ensure a certain degree of consistency, the elaborations presented in the rest of the section will focus solely on the costs reported by these bodies.

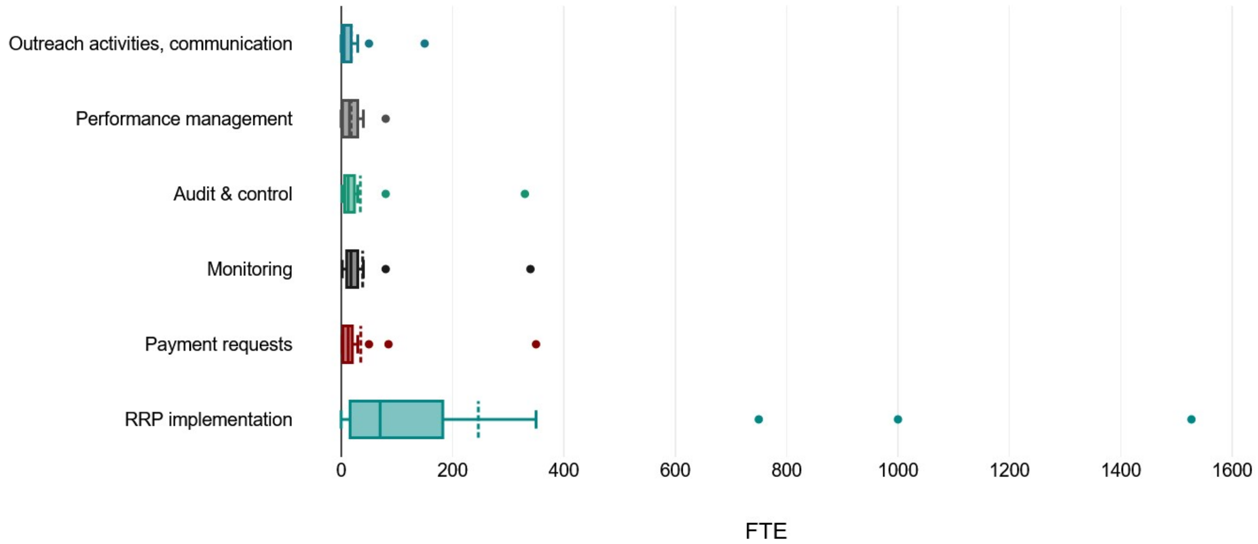
Overall, **there are significant variations** across countries in FTE declared by coordination bodies both for one-off activities and recurrent activities.

Figure 27: Number of FTE declared by coordination bodies

Total FTE for one off-activities



Annual FTE for recurrent activities



Note: the dashed line represents the mean value. Source: own elaboration, based on the survey with national coordination bodies

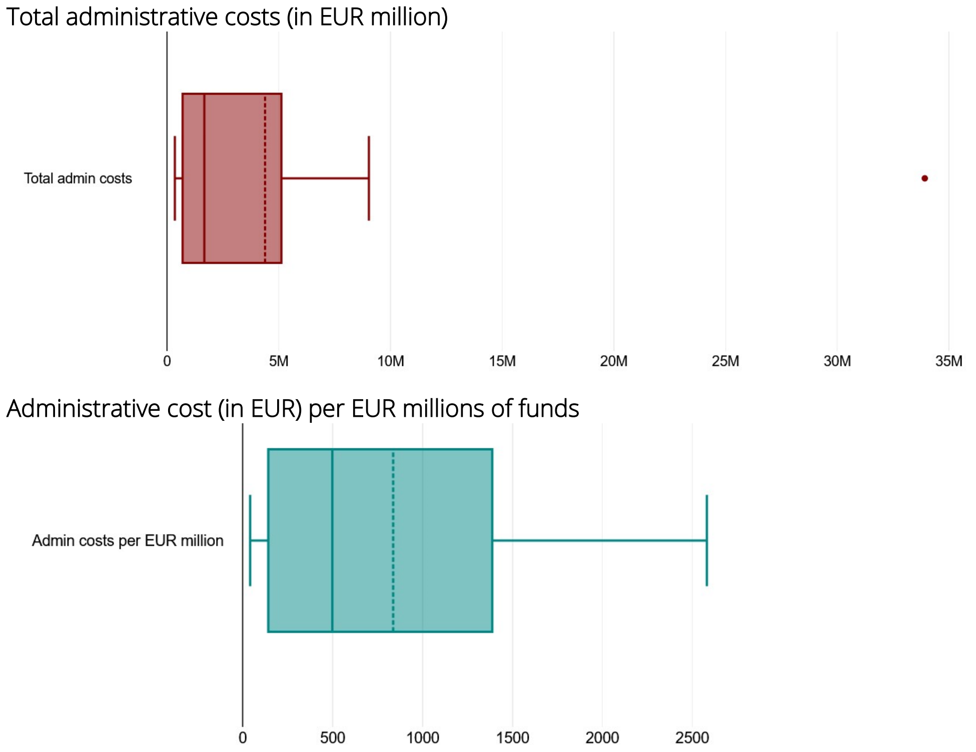
No clear trends emerge. Indeed, the variations are influenced by several concurrent factors related to the availability of data, the governance of the RRF and the degree of outsourcing:

- Different understanding. Despite indications provided in the survey, the figures provided by various coordination bodies must be taken with caution since they may reflect different interpretations of the question related to FTE counting. Some may have taken a very restrictive perspective, considering only the costs of coordinating bodies, while others might have considered the staff cost of various bodies involved in the relevant activity. Different information may also have been available to respondents, so some replies may have been more comprehensive than others.

- Different governance systems. The costs borne by the coordination bodies (as well as the other bodies) depend on the governance system adopted by the countries. Some countries have a more centralised management system of the RRF, while others have a decentralised structure. In countries with decentralised governance, it is likely that the costs provided are underestimated because the coordination bodies have a relatively less significant role. Also, there are countries (e.g., Bulgaria, Estonia, Lithuania) where existing structures have been converted to manage the RRF, while others (e.g. Belgium, Croatia, Portugal) have set up entirely new structures (e.g. new directorate/task force) for RRF coordination.
- The degree of contracting out to external experts. Some countries (Belgium, Denmark, Estonia, Finland, Germany, and Latvia) declared not to have used outsourcing at all. Others reported having used external experts, but they did not provide the cost incurred. A few countries (Czechia, Lithuania, Portugal, and Slovenia) also provided the costs for hiring external experts.

The following boxplot presents the total administrative costs (for one-off activities, recurring activities over six years[82], and external experts). When considering absolute values, **administrative costs are below €10 million** for all countries except Portugal, which is an outlier. When comparing administrative costs to the total planned funding (for both grants and loans), variations are less pronounced. For **all countries the administrative costs per EUR million are less than €2,500**.

Figure 28: Total administrative costs (in EUR million) and administrative cost (in EUR) per EUR millions of funds



Note: in this figure the administrative costs are presented in monetary terms. FTEs were converted in EUR using the average salary of PA employees in the different countries expressed in PPS. Source: own elaboration, based on the survey with national coordination bodies

[82] Assuming the average annual costs will be constant over the implementation period.

The variations in costs could also be caused by the characteristics of the plans, namely:

- Financial size of the plan. As many tasks are not related to the size of a plan, smaller plans tend to be relatively more costly than financially larger plans. Indeed, for Germany and Poland (which have the two largest plans among those for which admin costs are available) the administrative costs per MEUR of funding are notably low, i.e., EUR 41 and 57 respectively.
- Number of measures devoted to investments. The total number of measures supported, as well as the financial size of individual measures funded by a plan, matter. More investments and more final recipients imply more administrative workload.
- Thematic focus of the plan. The thematic coverage of a plan can also have a considerable impact on its administrative costs, as some objectives are more work-intensive than others, e.g., as they, by their nature, involve more small-scale actions or a larger number of final recipients.

The administrative costs have increased over time. **According to most respondents (72%) in the survey, the costs linked to the RFF implementation have increased over time, while only 28% reported stable costs**. Some respondents commented on the cost increase, citing rising material and energy costs, and inflation as contributing factors.[83] However, **the majority of respondents attribute the cost increase to the introduction of new requirements** (particularly in reporting, control, and audit) as the process evolved and amendments for REPowerEU. Fulfilling these obligations required more resources, time, and personnel than initially expected. Nevertheless, it is worth noting that cost increase over time is typical for similar investment programmes such as the Cohesion Policy. EC (2018c) shows how the administrative workload for the programming period 2014-2020 builds up from the start of programme preparation to a peak in 2017-2018 and then declines towards closure after 2022.

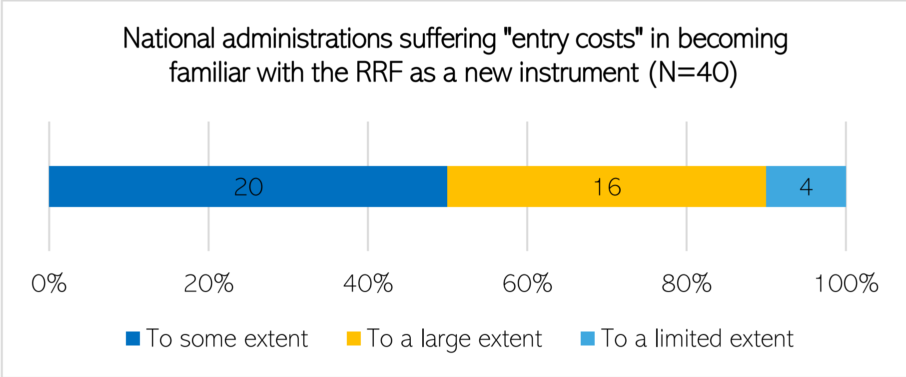
"Entry costs" for both national administrations and EU institutions and their evolution over time

There have been quite significant entry costs for both national administrations and the EU institutions to become familiar with the functioning of the RRF. According to interviews with EC representatives, the RRF required a change of perspective for everybody. Countries receiving substantial CP Funds faced the challenge of adjusting their mindset, but at the same time, they benefited from their prior experience in navigating complexity. In contrast, other countries experienced a more substantial jolt in terms of the administrative burdens they had to handle.

Asked to what extent the RRF - as a new instrument - created significant "entry costs", 40% of the survey participants assessed "to a large extent" (see graph below). Only 10% of the respondents, who represent Cyprus, Estonia, Romania, and Croatia, believe that the costs to become familiar with the new instrument are limited. Nevertheless, other stakeholders from the same countries defined the familiarisation process as costly "to some extent" (Estonia, Romania) and "to large extent" (Cyprus).

[83] This was indicated by the stakeholders representing 6 of the 19 MS that provided feedbacks as one of the reasons for the increase of costs over time.

Figure 29: Entry costs - opinion of national authorities



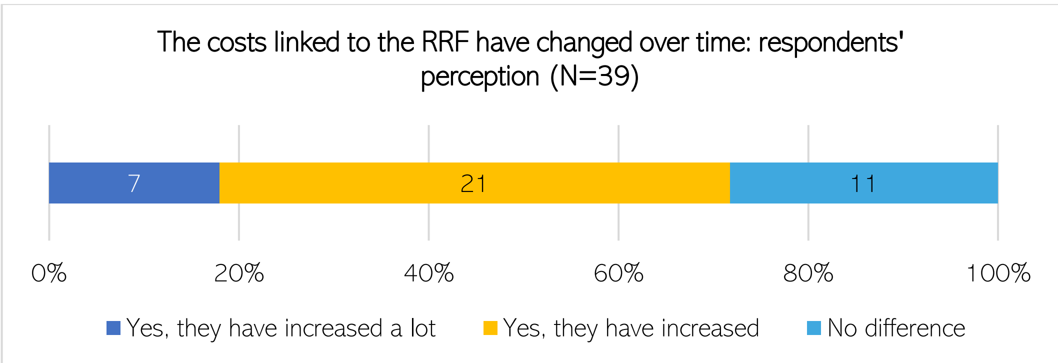
Source: own elaboration, based on the survey with national coordination bodies

According to representatives of most countries (17 out of 21 for which feedback was provided), **the implementation of the RRF required new skills and knowledge**. National administrations were not familiar with all formal requirements for implementing RRF projects, especially those related to reporting and verification based on results. For example, the Austrian respondents pointed out that these new skills and knowledge had to be spread across different ministers and often additional staff was needed. The learning curve was steep as it took time to familiarize themselves with the new requirements, as highlighted by Belgian, Danish, Greek, Hungarian, and Slovenian representatives. A respondent also stressed that RRF lacks technical assistance, which would have been beneficial in getting systems and structures in place.

Another issue identified to generate high costs, according to many respondents, was the **lack of clarity of some rules and the lack of prompt feedback by the European institutions (see also EQ3)**. According to a representative, some requirements became clear only after some time, and adjustments had to be made while projects were already being implemented. It has also been reported that feedback from the EC often took considerable time, as they needed to consult colleagues and obtain validation across directorates, leading to several unnecessary and repetitive interactions with national competent authorities.

The costs linked to the RRF have increased over time, according to 72% of the respondents to the survey. However, only 18% of participants rated the surge to be substantial.

Figure 30: Change of costs - national authorities' opinion



Source: own elaboration, based on the survey with national coordination bodies

The two main reasons pointed out by the respondents are:

1) **Inadequate knowledge and poor understanding of the RRF during the planning and design phase. According to some respondents, inexperience has led to an**

underestimation of the actual resources and workforce required for successful implementation. Consequently, adjustments had to be made to meet the real demands. Similarly, other respondents have reported that unforeseen tasks emerged during the implementation process, for instance, the need to establish new levels of administration, resulting in a substantial increase in costs.

2) **Additional and changing requirements introduced in the implementation phase.** They have led to a necessary increase in staff and associated costs. These requirements encompassed additional layers of reporting (e.g., Art 22 and Art 25) and scrutiny, as well as new requirements connected to REPowerEU. As previously mentioned in EQ3, interviews with MSs revealed that many of them are experiencing an increasing overload of audits and controls, which is affecting the efficient implementation of their plans. All coordination bodies have highlighted that this learning process initially suffered from a lack of clarity regarding the roles of auditors. This, in turn, resulted in an administrative burden for national authorities subject to multiple audits, ultimately having a negative impact on plan implementation in countries such as Slovakia, Croatia, Italy, and Spain.

Over time, the administrative burden is expected to decrease as MS authorities gain more experience with the RRF. Nevertheless, most interviewees at the MS level claimed that the administrative burden will remain higher compared to nationally or Cohesion Policy-financed projects. This is because they have chosen to track both indicators to demonstrate the achievement of results and collect evidence of expenditure incurred.

EQ10: How did the instrument's governance affect the efficiency of the RRF, including the reporting/performance management systems?

Key findings:

Two main factors explain the governance effect on the RRF efficiency: The **degree of centralisation of the decision-making process** and the **reporting/performance management system**.

While the RRF comes with a centralisation in all MSs, differences emerge in the governance setting of national RRPs, which affect the efficiency of the RRF. The first difference regards the **involvement of the Prime Minister's office**. In those countries where the governance has not involved the Prime Minister's office or even excluded the Ministry of Finance, this translated into a more difficult and slower implementation path of reforms. The second difference regards the **involvement of social partners,** especially when it comes to the labour market or social policy reforms, where their involvement played a key role in speeding up the adoption process. Third, the different degree of **involvement of sub-national authorities** in the drafting and implementation of the plans affects the efficiency of the plans, in particular investments. No relevant involvement of NGOs is instead observed neither in the drafting not in the implementation phase.

The efficiency of the performance-based systems is negatively affected by different factors: the **excessive reporting**, the **multiple audits** and the **lack of clarity regarding flexibility**.

Based on the stakeholder consultation and the country-specific analysis, two main factors seem to explain how the RRF governance affects the efficiency of the recovery and resilience plans:

- The degree of centralisation of the decision-making process and
- The reporting/performance management systems

Centralisation of decision-making: The most visible and widespread effect of the RRF governance is the reinforcement of the centralisation of authority and decision-making within national governments. Contrary to CP funds, the RRF is under direct management and MSs are the final beneficiaries (Corti and Ferrer, 2021). According to various commentators, the centralisation is further reinforced by the new performance-based approach of the RRF, characterised by the ex-ante definition of milestones and targets with low flexibility for ex-post adjustments and the requirements to maintain a single national point of contact for verifying the fulfilment of the relevant milestones and targets in support of scheduled payment requests (Zeitlin et al., 2023; Carrosio et al., 2022; Bokhorst and Corti, 2023; Vanhercke and Verdun, 2021). An interviewed national coordination body also highlighted the lack of extensive regional involvement in the RRF instrument, but the issue was not extensively explored in the evaluation, as it would require significant input from regional authorities, which was beyond its scope.

While the RRF comes with a centralisation in all MSs, **differences emerge in the governance setting of national RRPs, which affect the efficiency of the RRF**.

The first difference regards the **involvement of the Prime Minister's office**. While in the majority of MSs, the Minister of Finance is in charge of the plans' coordination, in some countries the Prime Minister's office is also involved, for instance in Croatia, Italy, Greece and Spain. This is generally perceived as a very positive fact contributing to a smoother implementation of the plans due to increased political ownership and enhanced capacity to steer internal decision-making processes, especially when it comes to reforms. By contrast, in **those countries where the governance has involved less the Prime Minister's office or even excluded the Ministry of Finance, this translated into a more difficult and slower implementation path of reforms**, due to the difficulties in holding line ministers committed to the reforms' implementation. For example, this is the case in Romania, Poland, and the Czech Republic. With respect to investments, difficulties in steering the plans' implementation are less linked to the degree of political ownership of the plans but rather to the different governance structures across MSs. In particular, federal states like Germany, Austria, and Belgium have to decentralise also part of the plan monitoring, due to constitutional competencies. Such decentralisation is in some cases linked to greater difficulties in making implementing authorities accountable. The lack of willingness of implementing authorities (line ministries or regional/local actors) to pursue the agreed investments is one of the key reasons for the delays in the implementation (as compared to the original planning).

The second difference regards the **involvement of social partners** in the implementation of the plans. Social partner involvement in the implementation of the RRPs is crucial in this period of global instability as their contribution will help to ensure the successful and timely delivery of planned reforms and investments. As documented in Eurofound (2023), several MSs have established specific bodies to boost social partners' participation in the implementation of the RRPs. Based on the consultation with national coordination bodies, **respondents agree that especially when it comes to labour market or social policy reforms, the involvement of social partners played a key role in speeding up the adoption process**, such as in Spain. In other countries, the low involvement of social partners translated into opposition to the adoption of certain controversial reforms, such as pension reforms.

Box 20.Social partners and civil society involvement in the RRPs' preparation and implementation[84]

Eurofound dedicated three ad hoc studies to study the involvement of social partners in the drafting and implementation phase of the RRF (2022; 2023; 2024).
In the first study conducted in 2022, what emerges is that social partners were involved in the preparation of the 2021 national Recovery and Resilience Plans (RRPs) through a greater variety of settings and procedures than in previous European Semester cycles. However, the quality and intensity of the involvement were reported as uneven and rather weak in a relatively high number of countries. The most common issue reported by social partners in the preparation of the RRPs was insufficient time for consultation, as well as the lack of adequate feedback regarding their contributions to the plans. The 2023 study which focuses on the implementation of the RRPs, shows that several Member States have established specific bodies to boost social partners' participation in the implementation of the RRPs, although their effectiveness has not yet been confirmed. And while the engagement of social partners through tripartite

[84] The authors would like to warmly thank Ricardo Rodriguez Contreras for the input provided.

social dialogue institutions can provide better opportunities for meaningful contributions, this may not be entirely effective.

In the 2024 study, the analysis of the quality of the social partners in the implementation of the RRPs has focused on the two groups of countries where social partners involvement was channelled through more institutionalised settings, either through already existing social dialogue institutions, or a specific body created for RRP monitoring and implementation. Overall, the findings from the analysis did not show significant differences in the quality of the social partners' involvement between the two settings considered.

- In line with previous two studies, the lack of sufficient time for consultations was an issue raised by social partners in most of the Member States,
- The quality of the form of the involvement is assessed as poor or insufficient in most countries, with few differences between social partners, although in some cases employers' organisations show slightly more positive views than unions, as in Italy or France.
- Similarly, the quality of exchanges with national authorities is generally assessed in negative terms, as social partners complained about their limited margin to influence the implementation either because of time constraints or the lack of appropriate information or feedback from national authorities, with the only exception of Belgium and Poland.

These assessments should be nuanced and contextualised, as they can be influenced by various factors, as the following

- At the time of writing, the operation of the RRP monitoring committees is at their early stages in most of the cases and social partners' assessment might be conditioned by discussions related to their composition or the agreement of procedural rules. Recent changes agreed in the composition of the RRP Monitoring Committee in Poland explain the overall positive assessment in the evolution of the quality of the involvement reported by both social partners. This contrasts with the situation in Hungary where the Committee has not yet started work.
- Another factor that can influence the assessment of social partners is related to the complexity of the governance structure for the implementation of the RRP, and the subsequent difficulties in providing and overall assessment of the different bodies, institutions and committees which are involved in the implementation of a wide range of policies provided in national plans. Social partners' assessments are usually gathered from representatives from peak-level organisations, and their views refer to their involvement at this level of the implementation, as in the Netherlands, where trade unions showed concerned about their limited influence with the Ministry in charge of the implementation of the RRP. This contrasts with the situation in other countries, as in Germany, where trade unions reported a significant improvement in their involvement during the implementation as compared with previous stages, as they had increased opportunities to take part in different measures through their representatives at different levels.
- In some cases, social partners' assessment might also be conditioned by political instability or broader social conflicts, as in France or Sweden. This is also the case in Bulgaria, where trade unions demand a renegotiation of the RRP target for the reduction of carbon emissions.

When it comes to civil society and non-governmental organisations, the involvement is low both in the drafting and in the implementation phase, as highlighted in the technical study supporting the European Economic and Social Committee's Opinion on the evaluation of the RRF (2023). NGOs are instead informed only ex-post about the decisions related to the RRPs and – due to their low administrative capacity – have more difficult access to RRF funding.

In a similar vein, the different degree of **involvement of sub-national authorities** in the drafting and implementation of the plans affects the implementation of RRP measures, in particular investments. According to a survey conducted by the European Committee of the Regions (2022), cities and regions have so far often been neglected in the monitoring and implementation of the RRF plans. Yet differences emerge across MSs. In some countries the NRRP emerged from a broad national or regional consultative process, such as in Portugal, Spain and Belgium. In other countries, the consultation was less structured and limited to ex-post information, like in Italy. Finally, in a third group of countries, there was barely any meaningful involvement of non-state actors in the drafting of the NRRP, like in Estonia and – to a lesser extent - Latvia. According to the majority of national coordination bodies this low involvement - especially in the drafting phase of the plans – is explained by the tight timeframe that does allow for effective involvement. Where the consultation was more systematic is in the federal MSs and is rather linked to the national constitutional setting.

As in the case of social partners, the limited stakeholder inclusion in the drafting phase is reflected in implementation problems. This affects, in particular, the investments that are largely implemented at sub-national level, as observed in the Childcare and in the Active Labour Market Policies case studies, but also in the case of large investments that still require permits and authorisations of sub-national authorities, as in the case of the cross-border investments.

Reporting/performance management systems: One of the key novelties of the RRF is the performance-based approach. As illustrated above, this is perceived as one of the most effective aspects of the RRF since it comes with the definition ex-ante of milestones and targets proposed by MSs and agreed by the EC and stronger internal leverage. Yet, the efficiency of the performance-based systems is – according to national coordination bodies - negatively affected by different factors: excessive reporting, multiple audits and the lack of clarity regarding flexibility.

Concerning the **excessive reporting**, as documented more in EQ12, national coordination bodies indicate that some reporting requirements could be avoided. As an example, MSs indicate reporting on common indicators as not necessary to track the results of the RRP reforms and investments[85]. Common indicators have been introduced in the RRF Regulation (Art. 29) for reporting on the progress and for the monitoring and evaluation of the Facility towards the achievement of the general and specific objectives. According to MSs there is not an explicit link between the RRPs' measures and the information reported in the common indicators, which therefore have a relatively low added value. As observed by the ECA, contrary to the common indicators in the cohesion fund-specific regulations, the RRF ones do not have associated targets to be achieved and are not systematically linked to each RRP. This diminishes their contribution to actually report on the progress of the measures in the plans and their monitoring and evaluation. Similar concerns on the common indicators have been expressed by some interviewees in the EC.

With respect to the **audit and control requirements**, as observed above, national coordination bodies indicate the initial uncertainty around the A&C responsibilities at the European and national levels created an excessive burden on MSs, that affected the efficient implementation of the plans. In particular, MSs lamented that this situation resulted in excessive reporting by national authorities, that ultimately hampered the efficient implementation of the plans. MSs had in fact to allocate human resources to provide justifications for the actions implemented under the RRF. Even in countries where the RRF governance has been welcomed as highly efficient, the excessive time allocated to respond to the audit and control requirements have been considered excessive. In this respect, it is worth stressing that none of the MSs criticised the existence of such requirements per se, but they rather complained about the excessive reporting at multiple level. Such reporting materializes in terms of an excessive demand – according to MSs - for justification proof to disburse the RRF payments. According to the majority of MSs, the request for documentation on milestones and targets by so many actors is unnecessary and requires allocating time and resources that could otherwise be dedicated to the implementation of the plans. Several MSs point to the fact that the current audit carried out by the national court and the ECA is an unnecessary burden that could be simply streamlined. The excessive (national and European) audit is also considered an obstacle to the approval of the payment request and the speed of disbursement of the Facility.

In a Special Report 07/2023, the Court concluded that 'the Commission has designed a control system that provides for an extensive process for verifying the fulfilment of milestones and targets. At the same time, the Court observed that 'the control system provides only limited verified information at EU level that RRF-funded investment projects comply with EU and national rules. The lack of such verified information impacts the assurance the Commission can provide and results in an EU-level accountability gap'. In its response to the ECA report, the EC (2023g) argued that 'the RRF control framework is tailored to the legal design of the RRF, which attributes a clear

[85] Member states indicate that the data reported in the common indicators are difficult to link to the actual RRF interventions.

responsibility for the assessment of milestones and targets to the Commission and a clear responsibility to MSs – as beneficiaries – 'to take all the appropriate measures to protect the financial interest of the Union'. This said, the EC further adds that it is still 'very actively engaged in ensuring an adequate protection of the financial interest of the Union'. Notably, the EC argues it has made a 'thorough assessment of the adequacy of national control systems in the context of the assessment of the recovery and resilience plans, [and, second], it has insisted with MSs on additional and timebound improvements to those systems, as a pre-condition for future disbursements.

The efficiency of the performance-based approach is reduced by the **excessively complex procedures** for the plans' **modification**. As illustrated in EQ8.2, several MSs point to the need to have Council approval for each plan modification for which an assessment by the EC is considered to be sufficient. Linked to this is a broader concern regarding the flexibility of the performance-based approach that we have addressed above.

Finally, it is worth noting that the EU's Technical Support Instrument (since 2021) has been supporting the public administrations to enhance their internal governance and capacity to manage and implement RRPs efficiently. It offers general support for the implementation of national RRPs, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures (general support across RRP components), and also policy-specific interventions (thematic support for thematic RRP measures). See EQ14 for further information.

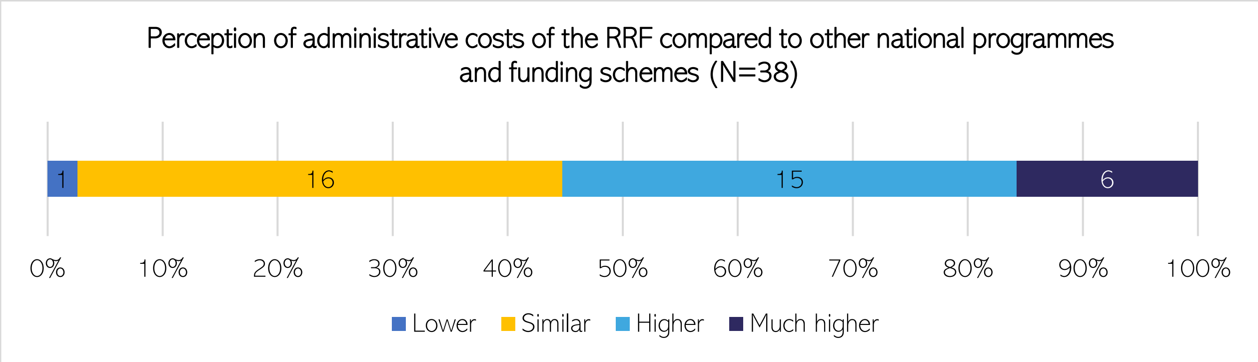
EQ11: How do the costs/burden of the RRF compliance compare with those of other instruments, notably cohesion funds, also taking into account the costs of audits and controls, as well as of data collection?

Key findings:

The **cost/burden associated with RRF compliance tends to be more demanding than other national investment programmes**. While the RRF, especially through its performance-based approach, could in principle, be expected to lead to a reduced administrative burden compared to CP, there is currently no conclusive evidence supporting this claim. Overall, the administrative costs/burden of the RRF are considered to be **comparable to those of the cohesion policy**. However, this perception varies from country to country. Nonetheless, there is a consensus that the uncertainty of the RRF's implementation framework, notably with respect to audits and controls, created a major source of burden.

The cost/burden associated with RRF compliance tends to be more demanding than other national programmes, according to respondents in the survey. Asked to express their perception of the costs of RRF compliance compared with those of other national programmes, approximately 55% of the survey respondents rated them as "higher" or "much higher." All respondents that evaluated the administrative cost of the RRF as higher compared to national programmes and provided feedback (corresponding to 15 MSs) identified the additional cost associated with the supplementary requirements mandated by the RRF. These include several layers of operational reporting (for the biannual report, payment requests, and most importantly final recipients), specific requirements for data collection, and controls and audit (including system audits, compliance audits, milestones, and target audits). Another burden indicated by many MS representatives, including Cyprus, Germany, Ireland, Portugal, and Slovakia, is the lack of familiarity and the additional requirements linked to the performance-based system.

Figure 31: Perception on administrative costs as compared to other schemes



Source: survey with national authorities

Survey respondents were also requested to give their opinion on the burden of RRF compliance compared with Cohesion policy funds. According to their responses, **the administrative costs of the RRF are considered to be comparable to those of the cohesion policy**. It is noteworthy, however, that only a limited number of respondents provided their feedback on this matter (9 out of 40). The perceived similarity of cost/burden associated with the two instruments is especially confirmed by MSs that have adopted the Cohesion policy governance for the RRF and similar procedures, including control procedures, for both instruments.

The RRF – especially through the performance-based approach – could be in principle expected to lead to a reduced administrative burden compared to the Cohesion Policy (CP). However, there is so far no evidence supporting this claim. In fact, in addition to the survey results, **interviewees from EU and national authorities concurred in stating that administrative burdens under the RRF are similar to those under CP, if not higher**. National authorities highlighted that the procedure for preparing payment requests under the RRF is as burdensome as those under the Cohesion Policy. Indeed, the data collection to prove that milestones and targets have been achieved is often demanding, especially when it requires pooling data from different authorities. Also, despite the RRF's emphasis on a performance-based model, it still incorporates elements of a cost-based approach. This is primarily because many Members States have decided to track both indicators to demonstrate the achievements of milestones and targets and gather evidence of expenditure incurred.[86] In Lithuania, for instance, where the NRRP management and control system mirrors that of the Cohesion Policy, equivalent checks and procedures are enforced. In Romania, although checks differ somewhat between the Cohesion Policy and the RRF, as under the latter, incurred costs are compared against standard costs set out in the NRRP, the administrative burden for the overseeing authorities is comparable to that under the Cohesion Policy.

Compared to the long experience in implementing CP, albeit with its evolutions over programming cycles, **the RRF's implementation is frequently seen by national authorities as having a less certain framework, in part also due to the fact of being a relatively recent instrument (as illustrated in EQ 8.2)**. This uncertainty pertains not only to the payment system but also to audit procedures and is linked to the interviewees' perception that RRF rules are evolving as its implementation progresses. For instance, many authorities noted a lack of clarity regarding the repercussions of not achieving a milestone and the potential reduction in the associated payment claim. Additionally, they expressed the view that some requests for supplementary information from the EC on payment requests might stem from a need for EC officials to be on the side of caution for future audits. However, these requests were seen as somewhat excessive in caution, possibly diverting focus away from results attainment. Similarly, some authorities also expressed concerns

[86] This is because expenditure information is required to meet the requirements of audit authorities – regarding both EU-level audit authorities as well as those operating at the national level.

about the absence of precise guidelines on audit procedures, highlighting a need for greater clarity in this aspect of RRF implementation.

The literature also points to some interesting complementing aspects regarding the costs/burden of the RRF and Cohesion Policy.

First, the **difficulty in estimating the costs of the instruments**. ECA (2023c) acknowledges that calculating the cost of implementing Cohesion policy funds is not easy, as there is little or no information available on administrative costs. The EC carries out studies to estimate these global administrative costs, the last one being published in 2018 (EC, 2018d), and ECA (2020d) found that the Cohesion policy is implemented at a comparatively low cost to other European and international programmes. However, it was also noted that the data underlying these studies was incoherent, inconsistent and incomplete. ECA (2023c) concludes that similarly as for the Cohesion policy, it will be difficult to estimate the cost of implementing the RRF, not least because the RRF Regulation does not require administrative costs to be reported to the EC. The exercise attempted in the context of this mid-term evaluation somehow confirms the ECA conclusion.

Second, the **double structures brought about by the RRF**. Many interviewees pointed out that the RRF is a new instrument, and it has to be implemented in parallel to the Cohesion policy, it has created new administrative structures and tasks. As observed by Böhme et al. (2023), in some countries, the RRF is handled by the same teams as the Cohesion policy, which leads to a substantial overburden of administrative capacities when new emergency initiatives (e.g. CRII, CRII+, CARE) and preparation for the new programming period having already stretched administrative capacities.

Third, the **costs of audits and controls**. These, according to Böhme et al. (2023), are major sources of administrative costs and burden under the Cohesion policy, and the RRF mainly delegates these responsibilities to the MSs. As Gauer (ECA, 2022b) highlights, this does not mean that the EC does not check the national audit and controls systems as this is one of the assessment criteria that the EC checked before approving the NRRPs and – as broadly discussed in EQ8.2 – the Commission is responsible for auditing milestones and targets as well. Yet, the perception of Member States was that the RRF would have come with a lighter system of control and audits while – in part due to the overlapping audits carried by multiple authorities – this turned out to be much more burdensome than expected.

EQ12: Can any unnecessary administrative burden and complexity be identified? To what extent is there scope for simplification?

Key findings:

The **unnecessary administrative burden** and complexity of the RRF refer to the revision of the plans, the multiple controls at national and European levels, and the interplay between national and European courts together with the EC, the reporting requirements, and the informal dialogue with the EC. Many stakeholders also highlighted administrative burden linked to **the assessment of** milestones and targets, the payment requests and the plans' modification (see EQ8.2).

There is room for **simplifying** control and audit procedures, ensuring better coordination among actors and avoiding multiple checks. Some MSs proposed limiting audit and control requirements solely to the achievement of milestones. There is room for simplifying bi-annual reporting by removing the requirement to report when a Member State already submits two payment requests per year. Finally, simplification of the informal dialogue process with the EC can come from accelerating the time to provide answers and reducing the rounds of comments from the EC to MSs on the documentation submitted for payment requests.

The perceived administrative burden associated with the RRF is quite high, as emerged from the interviews, the open public consultation[87], and the survey conducted with national stakeholders. Asked to identify unnecessary administrative burdens and complexity, nearly 70% of the survey respondents pointed to the **revision of RRP**. Some MSs emphasised that this process consumes excessive resources, while others complained about the lack of initial methodology for the form and organisational structure of the process for submitting the plan review. The interviews confirmed the negative perception of plan modification. Several MSs pointed to the excessive burden caused by the fact that plan amendments are assessed by the EC and have to go through the Council.

The second most mentioned burden emerging from the survey derives from the EU-level **audits**, perceived as unnecessary by 50% of respondents. Indeed, as already pointed out in question 10, the multiple controls at national and European levels, and the interplay between national courts and the ECA, together with the EC is generally perceived as a burden that hampers the efficiency of the performance-based approach. According to the majority of MSs, the request for documentation on milestones and targets by so many actors is unnecessary and requires allocating time and resources that could otherwise be dedicated to the implementation of the plans. While all MSs acknowledge the necessity of the EC ex-post audits to assess the fulfilment of milestones and targets, several MSs point to the fact that the audits carried out by the national court and the ECA are an unnecessary burden that could be reduced through improved coordination and fewer redundant checks. The excessive audit is also considered an obstacle to the timely launch of tendering processes as well as to the approval of the payment request, endangering the speed of disbursement of the RRF.

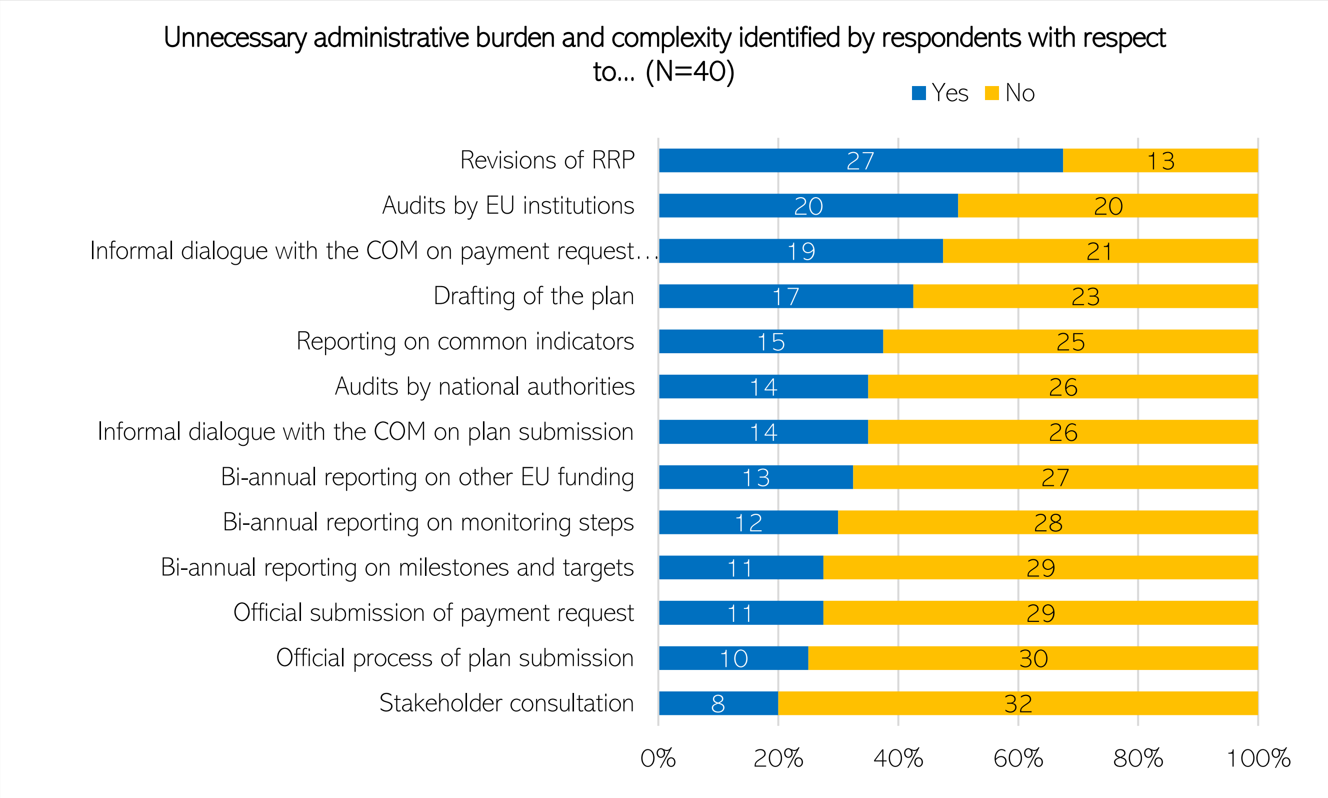
Regarding the **informal dialogue** process with the EC, 48% of survey participants acknowledged room the potential for simplification. Respondents, as also revealed during interviews, recognize the value of such dialogue. It allows MSs to seek clarifications and guidance from the EC, which in turn ensures a smoother implementation of plans, strong coordination with the EC, and the anticipation of possible issues. However, some respondents proposed improvements, including reducing response times and number rounds of comment rounds, increasing the precision of comments, and minimising variations in approaches across sectors and departments. A similar perspective was also expressed view is also conveyed in interviews.

The survey also indicated possibilities for simplifying **reporting requirements**. According to some national coordination bodies, reporting on reforms which receive no money could be removed from the bi-annual reporting. Article 27 of the RRF Regulation in fact foresees that MSs shall report **twice a year** in the context of the European Semester on the progress made in the achievement of its recovery and resilience plan. Such reporting is mandatory even in the absence of a payment request. Such a suggestion may raise some concerns. Reporting on reforms is key for a reform-investment instrument like the RRF the added value of which is supporting the introduction of structural reforms in MSs, in line with the country-specific recommendations. The bi-annual reporting is an opportunity for the EC to have a clear and updated view of the reforms (and investments) implementation progress. In this respect a possible venue for simplification might come from removing the requirement to report when a Member State already submits two payment requests per year.

Some countries propose to make reporting on common indicators only voluntary. Finally, the survey identifies unnecessary administrative burden linked to the lack of flexibility in the assessment of milestones and targets, the disbursement procedures and the plans' modification (see EQ 8.2 for more details).

[87] More than half of the public authorities replying to the open public consultation (53%, corresponding to 16 replies) indicated that the RRF created unnecessary burden and complexity to some or a large extent.

Figure 32: Perception on administrative burden



Source: survey with national authorities

Q13: To what extent have there been efficiency gains from pursuing reforms and investments together under one instrument?

Key findings:

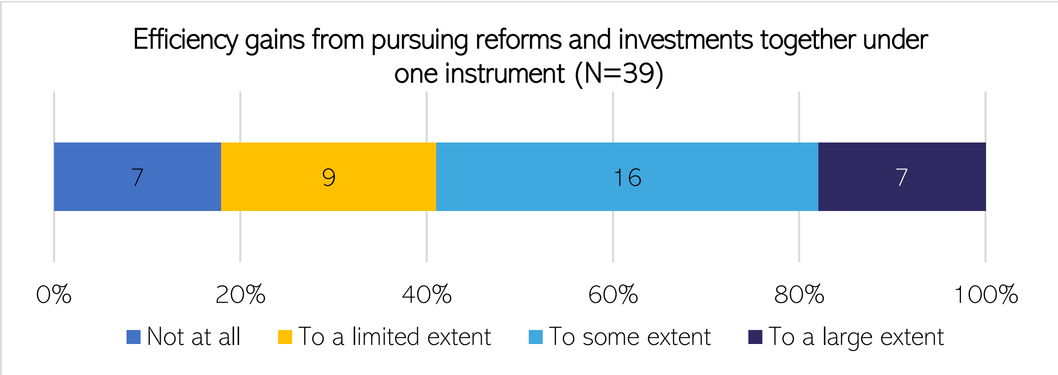
While it is generally considered premature to assess the overall efficiency gains resulting from the simultaneous pursuit of reforms and investments within a single instrument, 59% of survey respondents believe that combining reforms and investments in one instrument leads to some or significant efficiency gains. This is because coordinating the two becomes simpler when planned in one document, and it encourages countries to implement reforms that facilitate investments.

It is still premature to assess the overall efficiency gains resulting from the simultaneous pursuit of reforms and investments within the framework of a single instrument as pointed out by some stakeholders. However, when asked about the extent to which there have been efficiency gains have resulted from pursuing reforms and investments together under one instrument, **59% of survey respondents asserted that it indeed leads to some or significant efficiency gains**. This is because coordinating the two becomes simpler when they are planned with one single document and it, in a way, it encourages countries to implement reforms that can facilitate investments.

In contrast, **41% of the respondents foresaw that this approach either yields no significant efficiency gains or only produces limited ones**. Negative feedback primarily stems **from concerns related to the separation of decision-making and implementation processes between reforms and investments**.

Lastly, it is worth noting that some MSs find it challenging to assess efficiency gains due to the absence of a counterfactual scenario. Indeed, some of the measures included in their RRP would likely have been implemented even without the RRF and were already partially in place before the finalisation of the plan.

Figure 33: Perception on efficiency gains from pursuing reforms and investments under one instrument



Source: survey with national authorities

The case studies provide anecdotal evidence of situations where **the combined implementation of reforms and investments can lead to a greater impact (for more details see EQ 19)**. For example, in Spain, the RRF supports the implementation of the new Organic Law on Education. This aims to increase the availability of quality (inter alia by promoting a more competence-based rather than a memory-led education approach) and affordable public or publicly funded childcare places for children under the age of three, particularly those who are most vulnerable. The reform in both countries is fully integrated with investments, as it seeks to streamline the management of domestic and external funds for the creation and functioning of childcare facilities, establish stable, long-term domestic financing of childcare services for children up to the age of three, and introduce a set of binding minimum education and quality standards for childcare facilities. Another example is the link between the reform of the French public employment agency, Pôle Emploi, which was supported by an investment to increase the resources of Pôle Emploi and which, more generally, is intended to provide improved support for jobseekers in the context of increased demand, complementing investments on skills and employment.

At the same time, the case studies provide anecdotal evidence of situations where **delays in carrying out investments have adverse effects on the outcomes of specific reforms**. For example, the Bulgarian RRP includes various investments and reforms to support the digitalisation of the justice system. One of the investments is to upgrade the Single Case Management Information System so as to enable the deployment and automation of electronic summons in administrative courts. According to the Plan, the investment shall support the implementation of a reform to the Administrative Procedure Code allowing judicial acts to be drafted as electronic documents and enabling the electronic submission of documents. However, whereas the investment shall be executed by mid-2023 (there is a target to achieve 25% of all summonses in administrative courts to be delivered electronically by Q2 2023) the reform is indicatively planned for Q4 2024. Various stakeholders have pointed out the lack of synchronisation between these two measures and view achieving the 25% target as impractical until changes are made to the Code, making the receipt of electronic summons for regular proceedings mandatory – or at the very least, preferable – over traditional paper-based summons. Similarly, in Croatia, the reform 'eHealth' that should introduce provisions for the establishment of a functional national telemedical framework for the transmission of patient vital parameters from the Emergency Health Service (HMS) to the Joint Emergency Hospital Service (OHBP) and remote monitoring of outpatient Emergency Health Service (HMS), is tied with five investments (Digital integration of operating theatres and robotic surgery at KBC Split; Telecordis; Tele-transfusion; Digitalisation and integration of operating rooms equipped with robotic surgery in Clinical Hospital Centre 'KBC Sestre Milosrdnice'; and Digitalisation and equipping of Clinical Hospital 'KB Merkur' diagnostic units). The Telecordis and Tele-transfusion projects have been completed.

Coherence

The Recovery and Resilience Facility (RRF) has been a subject of scrutiny concerning its coherence with other Union policies and instruments. In 2020, the ECA (2020e) raised awareness around the potential incoherence/overlapping of the RRF with other Union policies by issuing an opinion on the Facility, pointing out deficiencies and making recommendations. Since then, **measures have been taken to ensure coherence with other EU and national policies**. The RRF Regulation highlights the need for effective coordination to safeguard the consistency, coherence, complementarity, and synergy among sources of funding (recital 62). Furthermore, coherence was among the criteria applied by the EC in the assessment of the RRPs. The scope of the RRF, grouped into six pillars, broadly covers all key EU policies, while at the same time requiring focus on the EU's twin transition policy via the climate (37% of the RRPs' allocation) and digital (20% of the RRPs' allocation) targets included in the RRF Regulation. Thus, **the general coherence of the RRF with key EU policies is ensured by the design of the RRF and the RRPs**. To go beyond a general assessment of coherence in the following sections we focus on the coherence with EU instruments (such as the TSI and Cohesion policy) and provide examples of coherence via the assessment of the extent to which EU's priorities guided the reforms and investments put forward by MSs in their recovery and resilience plans (EQ16).

EQ14: To what extent was the RRF coherent with the Technical Support Instrument?

Key findings:

There is a high level of **coherence between the Recovery and Resilience Facility (RRF) and the Technical Support Instrument (TSI)**. The TSI offers both general and thematic support, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures, and policy-specific interventions. The strategic decision to incorporate TSI support right from the inception of the RRF's development along with the flexibility provided by Article 7 of the RRF Regulation, has strengthened the coherence between these two instruments and has empowered MSs to effectively leverage the TSI support to effectively implement their RRPs. Finally, the alignment of assessment criteria and policy priorities confirms the coherent integration of the RRF with the TSI.

The **coherence of the Recovery and Resilience Facility and the Technical Support Instrument is evident in several aspects**. first of all, from the inception of the RRF regulation, the Technical Support Instrument, along with its predecessor, the Structural Reform Support Programme (SRSP), has been recognised as a crucial tool for supporting MSs in the implementation of their Recovery and Resilience Plans (RRPs).

To promote synergy between the RRF and TSI, the European Commission introduced provisions like Article 7 of the RRF Regulation, allowing MSs to allocate additional resources, up to 4% of the plan's total allocation, for additional technical support in RRP implementation. This can be achieved through transfers from national funds to TSI or by utilising transfers from the RRF to TSI. So far, four countries - Romania, Croatia, Greece, and Cyprus - have used these options, financing eight additional projects lined to their Recovery and Resilience Plan in the areas of healthcare, education, public procurement, energy, better regulation, administrative burden reduction and investment promotion[88]. Another relevant dimension of the coherence between the RRF and the TSI lies in the **alignment of the assessment criteria between RRF and TSI.** For instance, the relevance of CSRs for selecting TSI projects to be supported is also one of the assessment criteria for assessing investments and reforms included in the National RRPs across the EU. This emphasizes that the RRPs are built upon the same policy objectives and priorities as the TSI and the SRSP, fostering coherence in the overarching goals of both instruments. The alignment extends to most of the 'six pillars' supported by the RRF as these areas are in line with the reform support provided by the TSI and SRSP before the introduction of the RRF.

As of the end of October 2023, **more than 400 projects approved under the TSI are linked to the preparation or implementation of MSs' RRPs**. In early 2021, the EC provided capacity-building support to 5 MSs (CY, CZ, EL, HR and SK) for the preparation of their RPPs (5 projects focussing on costing methodologies, methodologies to assess alignment with DNSH principle or complementarities with other EU funds and programmes). As the time was extremely limited for the TSI to intervene (RRF and TSI Regulations were adopted at the same time), this support was initially provided through the SRSP special measures mechanism or through reprogramming of ongoing projects. The table below illustrates some measures included in the National Recovery and Resilience Plans supported by the TSI. These examples illustrate the TSI's role in supporting the implementation of the plans and the alignment between the NRRPs and the EU political priorities.

Table 12. TSI thematic support

Area	Examples of supported measure
Digital transition	▶ Greece: Implementation of the national plan for digital skills ▶ Portugal: Reform for digitalising the justice sector ▶ Spain: Implementation of the national plan for digital skills
Green transition	▶ Cyprus: Introduction of the green taxation reform ▶ Romania: Development of a national hydrogen strategy ▶ The Netherlands: Supporting clean, smart and fair urban mobility
Education	▶ Austria: Strengthening the national financial literacy strategy by setting up a centralised and comprehensive online platform ▶ Bulgaria: Implementing a national skill strategy ▶ Slovakia: Improving the quality and attractiveness of higher education
Public finance	▶ Belgium: Introduction and institutionalisation of spending reviews ▶ Finland: Implementation of DNSH principle in public funding ▶ Italy: Development of data-driven approaches for risk analysis of tax evasion
Healthcare	▶ Czechia: Strengthening the capacity of the Ministry of Health to establish National eHealth Centre ▶ Italy: Building IT skills for the health workforce ▶ Slovenia: Digital transformation of healthcare sector
Public sector	▶ Croatia: Optimise administrative processes ▶ Latvia: Development of public sector innovation ▶ Italy: Improving the exchange of information in the public administration, by introducing and testing new methodologies

Source: own elaboration based on 2022 European Semester Country Reports.

[88] More info available at: https://reform-support.ec.europa.eu/what-we-do/recovery-and-resilience-plans_en.

EQ15: To what extent has the RRF been integrated into the broader country-specific surveillance under the European Semester? To what extent have National Reform Programmes been used as a reporting tool for the RRF?

Key findings:

The RRF has been well-integrated in the Semester which has been used by all MSs as a platform for the biannual reporting. The national reform programmes have been used by all MSs – with few exceptions – to report on the implementation of the RRPs. Yet, important differences emerge across MSs in the level of details of reporting. The Semester and in particular the country reports are also the key tool for the EC to regularly monitor the implementation of the RRPs. In the CSRs, the EC then provides recommendations to each MS to continue or accelerate the implementation of its RRP.

Based on Article 27 of the RRF Regulation, MSs shall report twice a year in the context of the European Semester on the progress made in the achievement of its recovery and resilience plan, no later than the end of April and mid-October. This includes reporting on the common indicators (based on Art. 29.4 RRF Regulation) and on the relevant indicators related to the fulfilment of the envisaged milestones and targets and the arrangements for providing full access by the EC to the underlying relevant data (Art. 20.6 RRF Regulation). The national reform programmes (NRPs) – on top of their role - fulfil one of the two bi-annual reporting requirements of Member States under the Recovery and Resilience Facility. The Recovery and Resilience Scoreboard gives an overview of how the implementation of the RRF and the national recovery and resilience plans is progressing. In the country reports, there is an overview of the economic and social developments and challenges in all MSs, including an analysis of their resilience.

In 2022, all countries except Bulgaria, Estonia, Hungary, Poland, the Netherlands, Slovenia, and Sweden[89] reported on the implementation progress of the RRP. Some differences can be noted across MSs in the presentation of the information related to the RRP. While almost all countries presented an annex in the national reform programme with the status of M&T (MS reporting), some of them included a dedicated section to the RRP, others instead reported the implementation of RRP-specific measures under each policy heading addressed in the national reform programme. Finally, some countries structured the entire national reform programme around the RRF. **In 2023, all countries but Estonia, Hungary, and Sweden reported on the implementation of the RRF in the national reform programme**. No significant differences are noted in the structuring of the programmes in 2023 compared to 2022. Both in 2022 and 2023, the level of detail in reporting varies across countries. Some countries indeed limit reporting to EC data, while other countries further detail and describe the progress in depth for each policy measure contained in the RRP.

The European Semester and in particular the country reports are also the tool used by the EC to assess the implementation progress of the national plans. In the CSRs, the EC then provides recommendations to each MS to continue or accelerate the implementation of its recovery and resilience plan, taking potential country-specific implementation risks into account. MSs are classified into four broad categories based on the implementation progress of their RRPs: well underway; underway; underway with significant delays; and significantly delayed. Based on the 2023 CSRs and the NRRP-related section of the 2023 country reports, the table below presents a synthesis of the **EC's assessment of the RRPs' implementation progress and the recommendations addressed to MSs**.

[89] In the case of these countries, this was due to the late adoption of Operational Arrangements.

Table 13. CSR progress

Assessment	Recommendation	MSs
Well underway with no risks identified	Continue the steady implementation of the RRP	**Denmark**, **Croatia**, **Latvia**, **Lithuania**, **Malta**, and **Austria**
Well underway with some challenges going forward	Maintain the momentum in the steady implementation and ensure continued sufficient administrative capacity in view of the planned increase in the size of the plan	**Greece**, **Spain** and **Slovakia**
Underway with no risks identified	Proceed with the steady implementation of the RRP	**Estonia**, **France**, **Luxembourg**, **the Netherlands**, **Sweden** and **Finland**
Underway with increasing risks of delays identified	Ensure effective governance and strengthen administrative capacity to allow for a continued swift and steady implementation of the plan	**Italy**, **Romania**, **Bulgaria** and **Slovenia**
	Ensure an effective governance to allow for a swift and steady implementation of its recovery and resilience plan.	**Belgium**
Underway with some risks of delays identified	Accelerate the implementation of its recovery and resilience plan, also by ensuring an adequate administrative capacity	**Czech Republic, Cyprus** and **Portugal**
Underway with significant risks of delays identified	Significantly accelerate the implementation of the RRP, also by ensuring sufficient resources	**Germany** and **Ireland**
Significantly delayed	Urgently fulfil the required milestones and targets related to strengthening judicial independence and safeguarding the protection of the financial interests of the Union in order to allow for a swift and steady implementation of the RRP	**Hungary** and **Poland**

Source: CSR database

In terms of staff involved in the preparation of the national reform programmes, **the same officials previously involved in the preparation of the European Semester at national level are now involved in the preparatory documents and in the reporting** under the recovery and resilience facility, in close collaboration with the national coordination bodies, and the RRF national contact points. At the level of the EC, the officials previously involved in the Semester's country desk are also responsible for the preparation of the EC assessment of the RRPs in the country reports and the CSRs. To strengthen the capacity of the EC, country desks have been reinforced with the European Semester's Officers and with ad hoc hiring of extra personnel.

With respect to the role of the Council's committees involved in the Semester, they are involved in part also in the RRF. The Economic and Financial Committee (EFC) has a role in the disbursement of the financial contribution, notably by issuing an opinion on the satisfactory fulfilment of the relevant milestones and targets by the MSs within four weeks after the EC preliminary assessment. As acknowledged by interviewees, however, this role is very marginal. The reasons are threefold:

- the lack of expertise and enough personnel to assess detailed plans for country-specific reforms and investments.
- the procedural complexities, especially the very short time to provide a proper assessment.
- the political sensitivity which prevents MSs from commenting on each other's plan implementation.

A role is also played by the Economic Policy Committee (EPC) with respect to the RRF. The committee is regularly informed by the EC on the payment requests and the plans' amendments and based on this information, should provide support on to the EFC. The EPC delegates can ask written questions to the EC on specific aspects of the payments or plan' modification that are then the subject of discussion in the EPC meetings. Overall, however, such discussions remain very limited given the very short time available and the fact that the information is shared only with very short notice by the EC.

By contrast, no role is played in the RRF by the Employment and Social Protection committees (EMCO and SPC), which are instead involved in the Semester process multilateral surveillance.

EQ16: To what extent have EU's priorities guided the reforms and investments put forward by MSs in their recovery and resilience plans?

Key findings:

The EU priorities guided the reforms and investments only to some extent, with significant variation across policy areas and across countries. In the active labour market policies' domain, the EU priorities only marginally guided the reforms and investments in all the countries, with the exception of the Youth Guarantee. Also, in the domain of ECEC policies, the EU priorities only marginally guided the selection of reforms and investments, with the link with the Child Guarantee largely identified ex-post. By contrast, National Energy and Climate Plans and national long-term renovation strategies seem to have played an important role in guiding the measures aimed at supporting the energy efficiency of buildings. Similarly, the rule of law reforms are largely guided by the priorities identified in the CSRs. Only partial is the link between the Small Business Act (SBA) framework and the measures to support SMEs. The link between the E-Health measures in the RRPs and the EU4Health Programme and the 2030 Digital Compass is partial and depends on the country.

Based on the RRF Regulation 2021/241, the RRPs shall not only address a significant subset of CSRs. They shall also be consistent with the information included by the MSs in the National Reform Programmes under the Semester, in their National Energy and Climate Plans and the updates thereof (currently being under assessment by the EC) under Regulation (EU) 2018/1999 (2018), in the territorial just transition plans under the Just Transition Fund, in the Youth Guarantee implementation plans and in the partnership agreements and operational programmes under the Union funds. The plans should further include measures that fall within the priorities of the European Green Deal and the Digital Agenda and should contribute to the implementation of the European Pillar of Social Rights and the UN Sustainable Development Goals.

Given the width of the RRF policy measures and related EU priorities, in what follows, we illustrate the extent to which EU priorities (excluding the CSRs[90]) guided the measures included by MSs in their recovery plans by zooming in on specific policy measures in a selected sample of MSs.

Active labour market policies: in this policy domain, the EU priorities are defined in three main recommendations: Council Recommendation on Upskilling Pathways: New Opportunities for Adults (as part of the Skills Agenda), the Council Recommendation on the Reinforced Youth Guarantee, and the EC Recommendation on Effective Active Support to Employment following the COVID-19 crisis (EASE). Based on the assessment of four RRPs (Italy, France, Croatia and Spain), we observe that in the process of adopting the RRPs, consistency with the general EU framework played a relative role. For instance, in France, specific attention was paid to the identification of measures within the RRP that could support the implementation of the EASE recommendation and ad hoc financing is dedicated to the implementation of the French Youth Guarantee plan. The active labour market policy measures in the Croatian RRP were also developed to be consistent with EU priorities, in particular the Council Recommendation on Upskilling Pathways. The measures included in the Spanish plan are in line with the European Union's employment objectives. Notably, the reform to modernise active labour market policies has included a plan to tackle youth unemployment in the

[90] For an overview see EQ2.3

framework of the Youth Guarantee, and the various legislative texts adopted seek to act in line with the different EU recommendations (see, for example, section II of the preamble to the Employment Law). The Italian measures are also broadly in line with EU priorities. In particular, there is a strong link with the Youth Guarantee. Specifically, the newly introduced GOL programme builds on and substitutes the existing Youth Guarantee, which ran until April 2023. Based on the stakeholder consultation, it emerges that EU priorities guided only to a small extent the reforms and investments put in place in the ALMP domain and the alignment was largely guaranteed only ex-post after the policies were selected and designed by MSs.

Early Childhood Education and Care: In the ECEC domain, three are the main EU documents that could be used by the MSs in preparing their plans: the 2019 Council Recommendation on High-quality ECEC, the 2021 Council Recommendation on the European Child Guarantee and the most recent 2022 Council Recommendation on Early Childhood Education and Care: Barcelona Targets for 2030[91]. Zooming in on the ECEC measures in five national recovery and resilience plans (Belgium, Italy, Poland, Spain and Germany), we find that the EU priorities in part guided the measures included in the plans. In the case of Italy, the RRF investment in ECEC is explicitly linked to the Italian Child Guarantee (CG) action plan. The latter defines the Italian strategy for children, including the provision of childcare policies. The objective of the CG action plan is to extend the supply of full-time places in early childhood education services to over 33% and towards the target of 50% for new nurseries and early childhood sections by 2030, developing fair and sustainable accessibility in the birth to three years age group and gradually abolishing nursery fees. The RRF investment is thus expected to be accompanied by a series of legislative actions to be adopted in the CG framework. Similarly, the measures introduced in the Spanish plan are presented together with the CG action plan, and in particular with the objective to expand by 2030 the coverage of the first cycle of early childhood education through an increase in publicly owned places, prioritising access for pupils at risk of poverty or social exclusion, with an extension to rural areas. Also in Belgium, the RRF investment is linked to the CG action plan. The latter includes a new strategy to improve childcare accessibility that is based on the 2021-2025 programme of the *Office de la Naissance et de l'Enfance* (ONE) and includes seven actions, the first one of which is creating and subsidising new childcare places (in part financed via the RRF), giving priority to disadvantaged areas where coverage is often the lowest. In the case of Poland, no direct link is made with the CG action plans. Yet, the reform of the childcare system is explicitly inspired by the Council Recommendation on High-Quality Early Childhood Education and Care Systems and aims to put in place a framework for quality standards for childcare, including educational guidelines and standards of care services for children under three years of age. By contrast, in Germany, there is no link between the RRF investments and the CG action plan nor the 2019 Recommendation on High-quality ECEC.

Rule of Law reforms: The Rule of Law is a principle enshrined in the Treaty on the European Union and is considered a prerequisite for the protection of fundamental rights. The annual Rule of Law reports contain country-specific analyses, identify challenges and as of 2022 also provide recommendations. The CSRs capture rule of law matters insofar as they are relevant for the business environment. The case study on justice reforms shows a strong alignment with EU's priorities in the field of justice. Three of the four countries having received 2019 or 2020 CSRs to improve the effectiveness of their justice system (CY, HR, IT) and four of the five countries having received CSRs to guarantee judicial independence (HU, MT, PL, SK), have included measures in their RRPs to address these recommendations. In the case of Romania and Poland, the RRPs include measures to safeguard judicial independence. In the case of Hungary, the four 'control milestones' related to justice reforms included in the RRP correspond to the requirements Hungary would need to fulfil for fulfilling the related aspects of the horizontal enabling condition under the charter HEC, offering an efficient way to combine the two mechanisms. The EC has further exploited synergies between the

[91] This recommendation was however adopted when the RRPs were already in place.

RRF and other EU mechanisms to catalyse judicial reforms at the national level. This has been particularly important for HU and RO. The most important one has been created with the Rule of Law mechanism. Synergies were also exploited with the CVM mechanism. In contrast, synergies have not been exploited in the case of Poland. As pointed out in the case study, the actions required by the RRP are not fully coherent with the implementation of the ECJ rulings which declare the nullity of the former Disciplinary Chamber as well as all the decisions taken by this institution. By allowing a review of decisions taken by the former Disciplinary Chamber on a case-by-case basis rather than declaring their nullity, these experts consider that the NRRP "creates an alternative legal reality in which Poland may be financially rewarded for enacting "reforms" that fall short of its true obligations under EU law, undermining the authority of the ECJ and its decisions".

Supporting SMEs: At the EU level, the Small Business Act (SBA) for Europe is the main EU policy framework that promotes entrepreneurship and small business growth through ten key principles, fostering a supportive business environment and facilitating SME access to finance, markets, innovation, and skills. The SBA consists of ten principles, ranging from supporting entrepreneurship, giving a second chance to entrepreneurs who have faced bankruptcy, making public administrations responsive to the needs of SMEs and facilitating SMEs' participation in public procurement and access to finance. Zooming in on the measures included in the case study on RRF and SMEs, we find that the first set of SBA key principles on ensuring a supportive entrepreneurship environment (no. 1-3) are the least covered by the SME-related measures implemented in the selected countries. In Greece, the reform measures included in the RRP align to some extent with the above-mentioned EU programmes and SBA. Primarily, this relates to the various reforms in the Greek RRP that target the reduction of administrative burden. The Finnish RRP is found to cover most, but not all key principles. In line with the key challenges of Finnish SMEs in accessing international markets, the Finnish RRP puts a considerable emphasis on key principles 7 and 10. The Portuguese SME measures are found to cover four of the ten SBA key principles. By including cross-border e-commerce and general enhancement of exports of SMEs, the investment measure on digital transformation and the reform measure on Mobilising Agendas cover principles no. 7 and 10. The Irish SME-related measures have been found to not cover seven out of the ten SBA key principles, which is likely due to the limited number of measures. By implementing the 'Reducing Regulatory Barriers to Entrepreneurship' measure, primarily consisting of introducing the SME test (explained in further detail in section 3.3), the SBA key principles no. 1, 2 and 3 are found to be focus areas.

Digital Agenda: The EU4Health Programme calls for "strengthening the use and re-use of health data for the provision of healthcare and for research and innovation, promoting the uptake of digital tools and services, as well as the digital transformation of healthcare systems, including by supporting the creation of a European health data space" (Regulation (EU) 2021/522, 2021). These priorities are aligned with the 2030 Digital Compass: the European way for the Digital Decade (EC, 2021b) as well as Shaping Europe's Digital Future (EC, 2020a). In Croatia, there is a partial alignment between healthcare milestones and digitalisation actions, with a focus on improving individual facilities but limited attention to cross-border data exchange and interoperable systems. However, their commitment to telemedicine services indicates progress in digitally driven patient care. In Czechia, milestones strongly align with digitalisation actions, emphasising electronic healthcare infrastructure, interlinked databases, and telemedicine support. Denmark demonstrates a clear dedication to digital transformation, especially in patient involvement, telemedicine integration, and the 2022 Digital Strategy. Estonia's milestones align well with digitalisation actions, emphasising technology use in patient care, integrated healthcare systems, digital skills, and regulatory changes for sustainable healthcare. Additionally, they prioritise patient-centric care through resource redistribution and empowerment.

Energy efficiency in buildings: When it comes to meeting EU climate targets, renovating public and private buildings has been identified in the EU's Renovation Wave as an essential action to deliver on European Green Deal objectives and climate targets linked to energy efficiency. MSs have identified individual targets and measures in their integrated National Energy and Climate Plans

(NECPs) and national long-term renovation strategies (LTRS). Naturally, the existence of these plans and strategies has helped MSs in developing renovation wave components in the NRRPs in line with EU priorities. The case study on energy efficiency in buildings, which in particular assessed the situation in France, Latvia, Bulgaria and Romania, found that the investments and reforms of these countries are strongly guided by the principles of the Renovation Wave. For example, Romania has established as part of its RRP a renovation wave fund providing grants for renovations. Similarly, the French MaPrimeRénov provides a grant scheme for building owners to invest in energy efficiency. In addition to direct investments, leveraging private investments has been identified as a cornerstone of the Renovation Wave. The selected countries also put in place reforms and investments that facilitate private financing for building renovation.[92]

EQ17: To what extent have complementarity effects and synergies between the RRF and other EU programmes and instruments (such as Cohesion Policy funds) been identified and exploited?

Key findings:

MSs have put in place **four approaches to demarcation** between RRF and cohesion policy: a thematic demarcation; a territorial demarcation; a demarcation based on the typologies of beneficiaries; a temporal demarcation. The most frequently adopted approach has been of thematic nature, but MSs have de facto adopted a mix of demarcation approaches.

While demarcation strategies are key to avoiding overlaps between the two instruments, they can, but do not necessarily ensure synergies. In this regard, obstacles consist, among other things, in the thematic overlap; the implementation of NRRPs being prioritised over 2021-2027 Cohesion policy funds, to ensure rapid absorption of EU funds in general; in some cases, different governance systems.

As the implementation of the RRF progresses, synergies and complementarities between RRF-supported reforms and cohesion policy investments come into focus. Sectoral, structural or enabling reforms supported by the RRF innovate the context in which public investments, including those funded by Cohesion policy, are embedded. In turn, the Cohesion policy makes financial resources available to put the revised framework to good use, promoting investments on the ground.

The relationship between the RRF and other EU funds has been a subject of analysis ever since 2020 (Bachtler et al., 2020; Molica and Lleal Fontas, 2020). In light of the RRF's peculiar nature and sheer size, its relationship with other EU funds has strategic importance for the current implementation and, even more, for the future evolution of EU investment policies.

The complementarity and synergy between RRF and Cohesion policy at programming stage have been investigated by Lleàl Fontàs (2021) and the ECA (2023c). The two studies attribute the rather succinct descriptions of the complementarities and synergies between the RRF and Cohesion policy in recovery plans[93] to the fact that Cohesion policy programmes were still in the early development phase when recovery plans were submitted. Moreover, the fact that RRF funds are sometimes managed by structures different from those which manage the Cohesion Policy funds did not facilitate coordination in those cases.

Building on Lopriore (2022) and ECA (2023c2022), we identify four different demarcation approaches between RRF and Cohesion policy.

1. A **thematic demarcation** can reserve certain areas of funding exclusively for the RRF. For example, the RRF is able to finance the modernisation of public administration, whereas this

[92] For example, Romania put in place a financial instrument for the private sector on energy efficiency investment in the residential and building sector and Bulgaria introduced a reform of the Condominium Ownership Management Act to address barriers in energy efficiency investments.

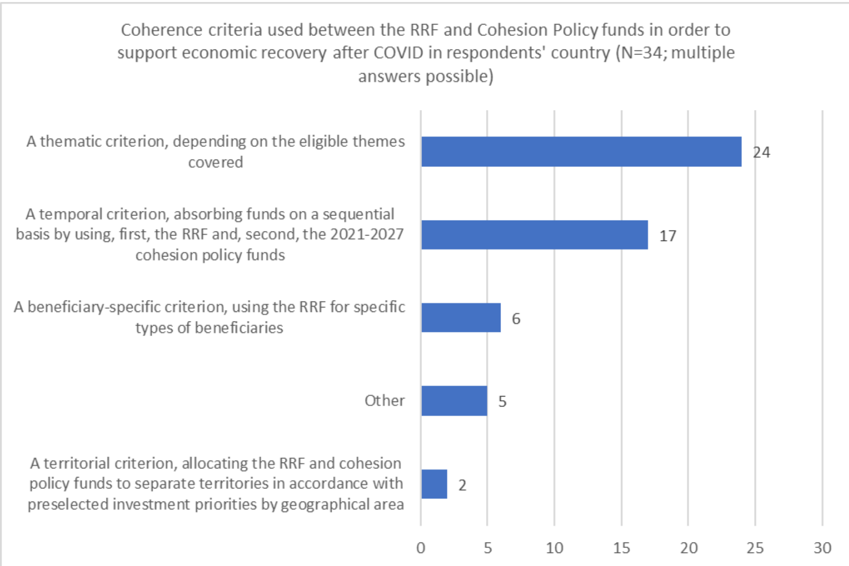
[93] For example, NRRPs in Germany, Greece, Italy and Spain included only broad references to a necessary alignment but provided no details on the relationship between the NRRP and the national Partnership Agreement or CP programmes (see Annex 1 to Lleàl Fontàs, 2021).

is no longer possible for Cohesion Policy funds since thematic objective 11 linked to public administration is no longer supported by Cohesion Policy in 2021-2027.

2. A **territorial demarcation** within individual sectors. For instance, in the French recovery plan, the RRF focuses on soft mobility in rural areas while the ERDF finances it in urban areas.
3. A **demarcation based on the typologies of beneficiaries**. For instance, the German plan supports the energy efficiency of residential buildings with the RRF, while support for non-residential buildings comes from the ERDF.
4. A **temporal demarcation**, with the absorption of funds based first on RRF resources and then on Cohesion Policy funds.

The results of the survey we conducted with national coordination bodies suggest **that thematic demarcation has been the most frequently adopted approach**.

Figure 34: Overview of responses on the demarcation between RRF and CP



Source: Authors' elaboration on survey results.

Partnership agreements and programmes under CP also provide broad indications about demarcations vis-à-vis the RRP. However, even if most Partnership Agreements were finalised after the RRPs, **they do not significantly substantiate the demarcation between the two instruments**[94].

Illustrative examples show that **MSs de facto adopted a mix of demarcation criteria** (for more details, see the case study on RRF and Cohesion policy):

- In **Germany**, the demarcation strategy was driven by the separate governance of the two instruments, with RRF managed centrally and CP implemented by Länder[95]. This differentiation prevented the possibility of demarcating based on types of territory, favouring

[94] For example, the Italian Partnership Agreement makes frequent but rather generic references to synergies with the RRF under numerous investment sectors. At the same time, it recognises that this demarcation will be a crucial issue at a later stage and, therefore establishes a specific policy mechanism (based on the setup of a specific technical panel) to address it during the implementation stage. This mechanism, according to interview feedback, is however not yet in place.

[95] For ESF+, there is however a federal programme.

a thematic and beneficiary-based approach instead. This distinct demarcation also stems from difficulties encountered in establishing synergies due to practical conflicts between the RRF's performance-based approach and CP's cost-based approach. Hence, a demarcation approach is considered safer.

- In **Greece**, the thematic criterion plays a considerable role, as the RRF supports investments in areas where CP does not intervene, such as airports and highways. In the energy efficiency sector, a timing demarcation has been adopted, with RRF resources supporting for instance a specific project that is expected to continue with CP funds. However, interviewees from a national authority noted that demarcation efforts at the programming stage were rather challenging, and issues related to this matter are expected to be addressed during the implementation phase.
- In **Italy**, demarcation is primarily of a thematic nature. The RRF includes significant funding for sectors not covered by CP, such as justice, or sectors to which CP allocates relatively fewer resources, such as healthcare. According to interviews, elements of demarcation based on beneficiary types or types of investment are present as well. Similar to Germany, energy efficiency interventions in public buildings are expected to be mainly funded by CP, while the RRF's contribution in this area is relatively smaller. For energy communities below 5,000, support comes from the NRRP, while those above that threshold are funded by CP. Furthermore, large infrastructure projects are generally included within the NRRP, whereas regional-level ones fall under CP. While no demarcation based on timing criterion is reportedly foreseen, it might arise in future years.
- In **Lithuania**, different types of demarcation are in place, depending on the sector. In some cases, the demarcation of investments is based on a territorial approach. In the field of the development of the ecosystem for innovative start-ups, the support for from CP funds is directed to the start-ups in the region of Central-Western Lithuania, while RRF invests into the start-ups in the Capital Region. Beneficiary preparedness is also taken into consideration. In the transport sector, CP funds sustainable mobility measures for 18 major cities and resorts that have already adopted Sustainable Urban Mobility Plans (SUMPs) in the framework of the Operational Programme for the EU funds' investments 2014-2020. For the other 2 cities, whose SUMPs were not financed by the funds of 2014-2020, sustainable mobility measures are funded through the RRF.
- In **Romania**, given substantial investment needs across various sectors, the use of funds from both instruments is necessary. Demarcation at programming stage involved diverse criteria, depending on the sector at hand, such as the geographic criterion and the criterion based on investment types. In the field of transport, demarcation is relatively straightforward, as major infrastructure projects should be predominantly implemented at the national level and financed through the RRF, while county-level projects should be solely funded by CP. Productive investments in SMEs are covered by both instruments, and to prevent double funding, beneficiaries are required to provide self-declarations. Authorities can then cross-check this information using a national database. In the wastewater sector, the RRF targets areas closer to directives' compliance, and a similar criterion applies to waste management. The RRF supports less technically complex investments, such as the installation of separate collection, because they can be delivered in a shorter timeframe. More complex interventions are covered by CP instead.
- In **Spain**, following a thematic approach to demarcation, the NRRP foresees for instance major interventions in labour and pensions, and significant support for improving the country's transport infrastructure. In contrast, 2021-27 CP only allocates only 3% of its total budget to Policy Objective 3 (A more connected Europe by enhancing mobility), focusing more heavily on competitiveness and innovation (26% to Policy Objective 1 – Smarter Europe), the green transition (28% in total to Policy Objective 2 – Greener Europe, and the Just Transition), and social and inclusive growth (36% to Policy Objective 4 – Social Europe). Under the social component, a temporal demarcation towards the RRF can be observed.

Actions related to vocational training are supported by the NRRP until 2024, followed up by CP in subsequent years through ESF+.

While demarcation strategies are key to avoid overlaps between the two instruments, they can, but do not necessarily, ensure complementarities and synergies. The latter can be achieved either by financing different operations that build on each other, or by using the two instruments to finance different elements of the same operation. For instance, the Portuguese plan is expected to support initial investments in the hydrogen sector with the RRF but intends to follow up with Cohesion Policy funds. Yet, early on, the literature has recognised that the pursuit of synergies between RRF and Cohesion Policy faces considerable hurdles (Bachtler and Dozhdeva, 2021; Bachtler and Mendez, 2021). In principle, the potential for synergies between the two instruments would be significant, thanks to the thematic overlap that could be exploited to achieve additional impacts, to the possibility for the RRF to improve framework conditions for investments and implement CSRs that are too broad for Cohesion policy to address, and to the possibility to build on Cohesion policy's experience for RRF implementation. In practice, the challenges that make synergies difficult are however numerous, among which: an explicit territorial dimension of the NRRPs being often limited or absent; cumbersome strategic and operational cooperation; the implementation of NRRPs being prioritised over 2021-2027 Cohesion policy funds, to ensure rapid absorption of EU funds in general; different governance systems (Bachtler and Dozhdeva, 2021; Ferry and Kah, 2021). Moreover, it has been noted that the option of using two funds for the same project is quite limited. Despite some examples in this regard (e.g. the Austrian NRRP supports additional sections of a project that already benefits from the Connecting Europe Facility about the construction and electrification of regional railway lines), this possibility remains constrained by the difficulties in aligning schedules and procedures of different funds (Lopriore, 2022).

The case study on RRF and Cohesion policy also illustrates that **the choice of some MSs to establish that a single body is responsible for both instruments in principle facilitates complementarities and synergies but is not necessarily a decisive element**. Interviews, especially regarding **Lithuania** and **Romania**, confirmed that placing the responsibility for both instruments under a common body enabled smooth cooperation and brought about benefits in terms of a more ambitious joint strategy. However, with reference to some other MSs (Greece, Italy, Spain), interviewees noted that irrespective of the governance structure, the NRRP is generally given priority over CP. As such, the possibility of complementarities and synergies is influenced not only by governance structures, but also by factors such as the different level of attention from the political level and the media environment, generally higher for NRRPs than for CP, although not in every MS.

So far, the literature has not yet focused on complementarities and synergies promoted during the NRRPs' implementation (i.e., beyond demarcations and potential synergies identified at the programming stage). However, challenges have been identified in the parallel implementation of NRRPs and Cohesion policy in terms of high workload for administrations. According to ECA (2022), the parallel programming of the two instruments was problematic, as delays traditionally linked to the programming of the MFF lasted even longer. This was in part due to the fact that managing authorities were also involved in programming REACT-EU, the RRF, CRII and CARE. Such delays are expected to negatively affect especially those MSs with an already low absorption rate. Similar observations have been made by Núñez Ferrer and Ruiz de la Ossa (2023), who expressed concerns, especially for Spain and Italy, as their difficulties in using EU funding imply a lack of capacity to manage the level of funding.

During the implementation phase, **Cohesion Policy procedures provide mechanisms to establish clear boundaries and promote synergy between NRRPs and CP initiatives**. Insights gathered from interviews with EC's officials, as well as national authorities from Italy, Greece, Lithuania, and Romania, underscore the importance of the meetings of programme monitoring committees, as they serve as a platform for regular deliberations on the alignment and harmonisation of NRRPs and CP actions. Furthermore, selection criteria within each CP programme assume a crucial role in facilitating this coordination as well. In this regard, especially where cohesion policy's management is strongly decentralised compared to the RRF's centralised approach, cohesion policy offers the tools to organise the relationship between cohesion policy and RRF at local level and foster synergies between the two.

Feedback from interviews suggests the potential emergence of an additional form of territorial demarcation during implementation. This risk can arise from the fact that resources from the RRF may flow to more developed regions and capital cities in a larger proportion compared to the Cohesion Policy. This risk could materialize through either the even distribution of resources across a country, or the prevalence of responses to national-level calls originating from regions with higher administrative capacity or larger economic bases. During interviews, this concern was particularly voiced in relation to Italy, Lithuania and Spain, while it appeared to be of less concern for Germany, Greece and Romania.

Finally, as the implementation of the RRF reform components is well underway, **synergies and complementarities between RRF-supported reforms and CP investments come increasingly into focus**. Sectoral and enabling reforms supported by the RRF innovate the context in which CP investments are embedded, for instance, through new legislation, strategies, governance structures, simplified procedures. In turn, CP programmes make financial resources available to put the revised framework to good use, promoting investments on the ground. In Italy, for example, RRF support for reforms and investments in energy and transportation is coupled with ERDF measures. In Lithuania, RRF-supported reforms related to lifelong learning are coupled with ESF following up with post-reform training activities. In Greece, reforms supported by the RRF for the governance of the waste and water sectors (through the setup of a waste and water regulatory authority) and the restructuring of the Public Railway Organisation (OSE) pave the way for a facilitated implementation and impact generation of CP investments.

Apart from the synergies between RRF and Cohesion policy, the case study on justice reforms reveals the existence of synergies between the RRF and other EU-level instruments to promote the Rule of Law reforms. This is especially relevant in the case of Hungary. Remedial measures proposed by the Hungarian government in the context of the Conditionality procedure are incorporated in the Hungarian RRP as control milestones. In addition to that, the four control milestones of the judicial reform package in Hungary are also important for the fulfilment of the 'horizontal' enabling condition on the Charter of Fundamental Rights under the EU cohesion funds[96] Therefore, without the adoption of these reforms, Hungary can access neither cohesion policy funds nor the RRF.

In addition to the TSI (reviewed in EQ14) and the Cohesion policy funds, another sectoral instrument available to Member States to support them in implementing RRF reforms is the **Horizon Policy Support Facility (PSF)**[97]. Member States such as Romania and Croatia have already requested and benefited from this support to help them implement key, structural R&I reforms included in their RRPs (e.g. strengthening the capacities of the Croatian Science Foundation, streamlining R&I governance in Romania, etc.). In particular, the Implementation plans for recommendations from the PSF Country Review of the Romanian Research and Innovation System consider the interconnections between the PSF recommendations and the Romanian National Recovery and Resilience Plan investment milestones and reform targets[98].

[96] The disbursement of EU cohesion funds is conditioned to the compliance of certain 'horizontal enabling conditions', among which the condition to comply with the EU charter of fundamental rights when programming and implementing EU funds.

[97] More information is available at: https://ec.europa.eu/research-and-innovation/en/statistics/policy-support-facility

[98] More information can be found in European Commission, Directorate-General for Research and Innovation, Nauwelaers, C., Holm-Nielsen, L., Camarero, M. et al., Implementation plans for recommendations from the PSF country review of the Romanian research and innovation system – Final report, Publications Office of the European Union, 2023: https://data.europa.eu/doi/10.2777/634682

EQ18: To what extent were RRF/RRPs coherent/complementary with relevant MS instruments aiming to support the economic recovery after the Covid crisis?

Key findings:

The EC guidance on coherence tends to focus on internal coherence between reforms and investments, but there is **no specific mention of ensuring coherence with national measures addressing the effects of the COVID-19 pandemic**, as this is required at national level, rather than an EU mandate. The review of EC assessments and Council Implementation decisions on the approval of RRP assessments shows that the issue of coherence between MSs' instruments (that are not financed by the EU), which aim to support the economic recovery after the COVID-19 crisis, and the RRP **has not been described and analysed in-depth**.

Nevertheless, **coherence/complementarity between MSs and RRP economic recovery measures has been largely ensured by three factors:** 1) in MSs that had already put in place a post-pandemic recovery plan, the RRP built on the already planned measures and either replaced or further expanded them; 2) in countries that had not yet a recovery plan, the RRPs became the national government strategic plans for the recovery after the pandemic; 3) in both cases, the short time for the plans' drafting and implementation pushed national authorities to develop plan coherently with the already existing or planned investments and reforms.

Looking at the Coherence between the national measures and the RRF, according to the RRF Regulation, "the EC and the MS should ensure, in all stages of the process, effective coordination in order to safeguard the consistency, coherence, complementarity and synergy among sources of funding". These sources include national financing, but the focus of the RRF Regulation is to ensure that there is no double funding from the Facility and other Union programmes for the same expenditure (e.g. Recital 62, Art.18r, and At19j), in line with Article 191 of the EU Financial Regulation (2018/1046) (2018). The EC guidance (EC, 2021c) on coherence tends to focus on internal coherence between reforms and investments (section 4), but there is **no specific mention of ensuring coherence with national measures addressing the effects of the COVID-19 pandemic**. Instead, it only mentions that "consistency with the relevant national policy frameworks, strategies and plans" (EC, 2021c) should be demonstrated, and that **support provided from national funds can also be combined with the RRF in particular to ensure the replication and scaling up of planned national support schemes** (EC, 2021c). In particular, "MSs should demonstrate coherence and links within each component of the plan, between components and of the overall plan, and in particular the coherence between reform and investment dimensions" (EC, 2021c). The ECA report on the EC's assessment of national recovery and resilience plans does not comment on the assessment of coherence with national recovery measures. Overall, the coherence between RRF and national recovery measures is considered to be an issue that has to be explored at national level by the MS.

The **overall EC assessment on the coherence of RRPs is very positive** (high extent – Rating A), with the exception of the Belgian, Czech and Estonian RRPs. Yet, if we zoom in on EC assessments and Council Implementation decisions on the approval of RRP assessments, we notice that **the issue of coherence between non-EU financed MSs' instruments, which aim to support the economic recovery after the Covid crisis, and the RRP has not been described and analysed in-depth**.

Despite the lack of detailed guidance, description, and assessment of the RRPs, one might expect that **coherence/complementarity between MSs and RRP economic recovery measures would be ensured via the RRF focus on addressing mid/long-term and structural COVID-19 recovery measures**. As observed by the IMF in its database on national COVID-19 measures, between 2020 and 2021, several countries shifted the focus from addressing immediate COVID-19 crisis impacts to preparing for post-pandemic recovery. This is coherent both with the RRF timing (the RRF Regulation was adopted in February 2021) and the RRF general objective, which includes the promotion of "the Union's economic, social and territorial cohesion by improving the resilience, crisis preparedness, adjustment capacity and growth potential of the MSs, by mitigating the social and economic impact of that crisis" (Art. 4 of the RRF Regulation).

Building on the IMF database, the table below shows illustrates the measures put in place by a selection of seven MSs to address the challenges of the pandemic, distinguishing between emergency support measures and post-pandemic recovery measures.

Table 14: COVID-19 recovery measures in 7 MSs

Country	Emergency support measures	Post-pandemic recovery measures
Austria	Health care system support, short-term work arrangements, liquidity support for firms, and public loan guarantees, deferral of personal and corporate income taxes, social security contributions, and VAT payments, as well as VAT reduction in some categories.	Investment in climate protection, affordable housing, health, and digitalisation, innovation and research.
Belgium	Boosting health expenditure and hospital funding; increasing support for those in temporary unemployment and self-employed; liquidity support through postponements of social security and tax payments for companies and self-employed; solvency support through various tax and "below-the-line" measures.	-
Germany	spending on healthcare equipment, hospital capacity and R&D; expanded access to short-term work subsidies to preserve jobs and workers' incomes, expanded childcare benefits for low-income parents and easier access to basic income support for the self-employed; grants to small business owners and self-employed persons severely affected by the COVID-19 outbreak; temporarily expanded duration of unemployment insurance and parental leave benefits.	The *stimulus package* in June comprises a temporary VAT reduction, income support for families, grants for hard-hit SME's, financial support for local governments, expanded credit guarantees for exporters and export-financing banks, and subsidies/investment in green energy and digitalisation
France	Streamlining and boosting health insurance for the sick or their caregivers; increasing spending on health supplies; liquidity support through postponements of social security and tax payments for companies and accelerated refund of tax credits (e.g., CIT and VAT); support for wages of workers under the short-time work scheme; direct financial support for affected microenterprises, liberal professions, and independent workers, as well as for low-income households.	Support measures for the hardest-hit sectors (e.g., including incentives to purchase greener vehicles and green investment support for the auto and aerospace sectors); measures under the "Plan de Relance" package (which includes the RRF measures), focussing on the ecological transformation of the economy, increasing the competitiveness of French firms, and supporting social and territorial cohesion.
Italy	Funds to strengthen the Italian health care system and civil protection; measures to preserve jobs and support the income of laid-off workers and self-employed; tax deferrals and postponement of utility bill payments in most affected municipalities; measures to support credit supply.	-
Portugal	Additional resources for virus-related health and education spending; support for those temporarily furloughed by their employer, as well as financial incentives to support the progressive reopening and to normalize business activity; state-guaranteed credit lines for medium, small and micro enterprises in affected sectors, operated mainly through the banking system; tax and social security contribution deferrals for companies and employees.	-
Spain	Transfers to the regions for regional health services; additional healthcare-related spending including research related to COVID-19; entitlement of unemployment benefits for workers temporarily laid off; corporate solvency support.	-

Source: IMF database, own elaboration

Based on the table above and the interviews with national coordination bodies, we can distinguish between two groups of MSs. On the one hand, the countries that when preparing the national recovery and resilience plans in September 2020 had already put in place the policies to support the economic recovery. Among the few, in June 2020, Germany launched its package for the post-pandemic recovery called Konjunkturprogramm. In September 2020, France launched "Plan de Relance" package, focussing on the ecological transformation of the economy, increasing the competitiveness of French firms, and supporting social and territorial cohesion. Similar stimulus packages were adopted also in Austria, Ireland, and Denmark. In these countries, national coordination bodies highlighted that the measures included in the RRPs were selected among the ones already included in their respective national recovery plans.

On the other hand, a large part of the MSs was still facing the consequences of the COVID-19 pandemic and the measures in place were still aimed at supporting the health system, job retention, and liquidity support for businesses (in particular SMEs), i.e., they focused on addressing the short-term effects of the crisis. For these countries, the Recovery and Resilience Facility became the main instrument to prepare for the post-pandemic recovery. This is the case, for instance, of Italy, Spain, and Portugal. In these countries, the fiscal stimulus of the RRF represented an occasion to put in place not only reforms but also investments that would have otherwise not been implemented.

In the first group of countries, coherence between MSs and RRP economic recovery measures has been largely ensured by the fact that the measures included in the latter are either the ones already planned in the national recovery plans or an expansion/continuation of the pre-existing projects. For instance, the **German** RRP includes the financing of project-related climate protection research as well as the financial support for electric vehicle purchases, both already regularly financed since respectively 2016 and 2015 but significantly expanded in December 2020. Similarly, the **Austrian** RRP continue to finance – for example - a support scheme for the replacement of oil and gas heating systems, which the government announced – already before the RRF – that it intended to continue and expand. Similarly, all the activation measures included in the **French** RRP are also financed by the 2020 France Relance plan and are fully integrated in already existing national policies. In the second group of countries, coherence is guaranteed mostly by political ownership. This is the case for instance of **Belgium**, where the measures included in the RRP are the ones indicated in the government agreement signed in October 2020 by all the coalition partners. Similarly, in **Italy**, the RRP reflects the priorities identified by the new government coalition that was created in February 2021. In **Spain** the RRP became the occasion to implement the government agenda both in terms of reforms, especially in the labour market, and investments, especially with respect to the green transition.

Both in the case of countries that had already in place national post-pandemic recovery strategy and in the ones that did not have any, coherence between MSs and RRP economic recovery measures was implicitly guaranteed by another factor: the short period to design and submit the RRF plans. The large majority of the national coordination bodies stressed that the limited time both in the plans' drafting and, in their implementation, (with a hard deadline in 2026) often impeded the inclusion of new investment projects, with no anchor in already existing projects or strategies. Planning and executing periods, indeed, can take years and therefore the time constraints imposed forced governments to focus on projects that had already reached a more advanced stage. Hence, MSs relied on existing programmes as blueprints for their plans.

EQ19: To what extent have reforms and investments in the plans been complementary and mutually reinforcing?

Key findings:

The EC guidance on coherence tends to focus on internal coherence between reforms and investments. The overall EC assessment on the coherence of RRPs is very positive (high extent – Rating A), with the exception of the Belgian, Czech and Estonian RRPs. The findings are in large part corroborated also by the analysis we carried in the framework of the case studies, where we zoomed in on a selected sample of MSs and assess the degree of complementarity between reforms and investments in the RRPs. What we observe is that reforms and investments in the plans have to some extent been complementary and coherent, without significant differences across policy areas but with differences across countries. In some cases, the investments in the RRP are coherent with already existing measures put in place before the RRF at national level.

As illustrated in EQ8.2 the combination of reforms and investment under one sole instrument is considered as one of the most effective aspects of the RRF. Yet, the fact that the RRF combines reforms and investments does not automatically imply that these are mutually reinforcing, i.e., that for each reform in the RRP, a corresponding investment is foreseen and vice versa. According to the RRF Regulation, the RRPs should contain measures for the implementation of reforms and public investment projects that represent coherent actions. In its assessment, the EC took into account whether the measures in the RRPs contribute to reinforcing the effects of one another or are complementary to one another. The importance of complementary and mutually reinforcing reforms and investments is largely acknowledged by all stakeholders both at EU and national level. The **overall EC assessment on the coherence of RRPs is very positive** (high extent – Rating A), with the exception of the Belgian, Czech and Estonian RRPs. The reasons for the lower scores are presented below:

- BE – the potential of some of the investments could have been further reinforced by more far-reaching complementary reforms (e.g. insufficient complementarity between: RRP energy efficiency measures and the energy taxation system; and between the RRP measures to increase employment and improve labour market performance and measures to reduce disincentives to work from the tax system) (Council of the European Union, 2021a);
- CZ - for some components, investment is not accompanied by relevant reforms (e.g. measures to support renewable energy sources, clean mobility as well as digital and sustainable transport infrastructure, as explained in EC (2021d)), while the demarcation lines were sufficiently developed but were contingent on the finalisation of the partnership agreement (which was not finalised at the time of the assessment of the Czech RRP) and cohesion policy programmes (Council of the European Union, 2021b);
- EE – according to the EC’s assessment, while the RRP includes substantial investments to foster the green and digital transitions and support economic growth, more reforms to strengthen the social safety net, in particular broadening the coverage of unemployment insurance benefits, could contribute to cushioning possible adverse effects on certain groups (Council of the European Union, 2021c).

Overall, the EC assessment of the RRP coherence has been high, and in only a few cases (presented above) the score was lower due to insufficient coherence between investments and reforms. The findings are in large part corroborated also by the analysis we carried out in the framework of the case studies, where we zoomed in on a selected sample of MSs.

Active labour market policies: in this policy area, the reforms and investments of four RRPs (Italy, France, Croatia and Spain) have been analysed. The result of the analysis provides a very positive picture as synergies and complementarities can be identified in all four MSs. Overall, reforms can be seen as a prerequisite for investments which allow for improving conditions. In some cases, there are direct links between measures, as in the case of the Croatian reform to introduce a voucher system, which is combined with an investment to fund the implementation of this system. In the French case, the reform of the public employment agency was supported by an investment to increase the resources of Pôle Emploi. There are also broader synergies between measures. The changes introduced in the Spanish ALMP system required an increase in PES resources to cope with the changes. Although limited in amount, the investment analysed in this case study is complementary to the various reforms introduced as it aims to improve the skills of PES staff. In Croatia, there are also synergies between the measures on targeted active labour market policies and vouchers and the measure to improve CES services for vulnerable groups. In the Italian case, while the ALMPs included an increase in public spending on ALMPs and a shift towards a new type of ALMP, as discussed above, the investments included were aimed at increasing the staff and capacity of the PES, the latter being the body responsible for the proper implementation of the policy.

Early Childhood Education and Care: in the domain of ECEC, the reforms and investments of the RRPs of five MSs (Belgium, Italy, Poland, Spain and Germany) have been examined. Contrary to the case of the ALMP, there are disparities between countries as regards the combination of reforms and investments. In the Spanish case, the investment in ECEC was accompanied by a reform of the law on education. The reform led to the approval of a Royal Decree in 2022, which aimed at increasing the offer of quality services for children under the age of 3 (I.e., the main objective of the investment). Similarly, in Belgium, a reform aimed at increasing the quality, offer and affordability of childcare services was adopted in 2019. The investment included in the Belgian plan is in line with the provisions of the reform, as it has the objective of expanding the provision of services in municipalities lagging behind in terms of coverage and with lower socio-economic levels. Also in Italy, the investment included in the RRP is meant to finance the reform of the integrated education system adopted in 2017 but still lacking structural financing and capital investments. Poland, on its end, provides the best example of how to use reforms and investments together under the RRF in the ECEC field. The Polish RRP has put in place an integrated reform programme in which it includes as a reform a programme aiming at increasing access to high-quality childcare, and it does so by financing the creation and functioning of childcare facilities through, inter alia, the investment included in the plan. On the contrary, Germany did not include reforms and investments in this area together.

Rule of law: in the RoL area, there is a high level of complementarity between the various reforms included in the plans. However, when it comes to the use of reforms and investments together only some of them have taken complementary and mutually reinforcing approaches. For instance, the Romanian RRP includes various investments aimed at supporting the transition to a new centralised economic data management system in the justice system. This investment underpins the strategy for the development of the judiciary 2022-2025, which is one of the reforms included in the RRPs. The Bulgarian RRP includes reforms and investments to support the digitalisation of administrative justice. One of the investments is to upgrade the Single Case Management Information System. This upgrade shall enable a number of new functionalities for the system, including the deployment and automation of the process of service of electronic summons, remote access to and submission of electronic documents for citizens, and the capacity for remote court hearings in the 28 administrative courts. The first intermediate step for this investment is due for Q2 2023, with the introduction of a module aimed at deploying electronic summons and a target of achieving 25 % of all summonses in administrative courts delivered electronically by Q2 2023). However, the investment to create this new module for the delivery of electronic summons has been postponed by one year. According to government officials, the main reason for the postponement is the need to wait until the adoption of amendments in the Administrative Procedure Code setting the legal framework for e-Justice in administrative cases. These amendments are necessary to set out clear rules concerning the use of electronic summoning and remote court hearings. For instance, it must be unambiguously clear how the deadlines for electronic summons run, as well as the consequences of changing electronic addresses and specifying incorrect or non-existent ones. Guarantees and evidence must be created for proper electronic summoning and service, confirmation of receipt and establishment of other facts of legal significance occurring in the electronic environment. According to the Plan, this legislation must enter into force before the fourth quarter of 2024. The deployment of electronic summons depends on the regulatory changes, and therefore the implementation of the investment is objectively postponed by one year to synchronize the action with the regulatory reform. Two external experts have confirmed the need to better synchronize these two measures. They consider it unfeasible to reach the 25% target before amending the Code and clarifying the rules for the use of electronic summons. However, according to representatives from the Commission, the legal possibility for electronic summoning in administrative proceedings has existed since October 2019. Making the existing possibility more widely known and improving technical aspects, notably through the creation of a module, would have helped reach the 25% target according to the indicative calendar.

Support to SMEs: In terms of the support to SMEs in MS’ NRRPs, it has been found that there is a visible level of complementarity between investment and reform measures. However, these tend not to be explicitly connected in the NRRPs. The SME-related measures in the NRRPs of the four investigated countries are particularly centred around the green, digital and reduction of administrative burden realm, resulting in various connections with other measures included in the NRRPs, albeit not being explicitly mentioned. Nevertheless, a complementary reform and investment measure has been identified for Greece in the SME case study. The Greek reform, "Establishment of a digital business ecosystem and introduction of tax incentives for SMEs' digital transformation," aims to create policies, programs, and government incentives to boost digital transformation in businesses, enhance industrial competitiveness, and ensure SME sector sustainability (Greek 2.0 NRRP, 2021). This reform directly complements the "Digital Transformation of SMEs" investment measure, which focuses on developing the digital infrastructure and encourages at least 100,000 SMEs to invest in digital technologies with grant support. Together, these measures work towards fostering a digital business ecosystem for SMEs. This includes defining strategies, action plans, and policy initiatives for new digital technologies, tools to support digital transformation, addressing the digital skills gap, and implementing tax incentives to promote digitisation in business activities. Another example of a complementary reform is the creation of the Portuguese Promotional Bank, which was established by merging financial entities. Its mission is to provide tailored financing solutions to foster economic development, enhance entrepreneurship, investment, and job creation. As such it complements well the three identified Portuguese investment measures relevant to SMEs (Digital Transition of Enterprises, Mobilising Agendas/Alliances for Business Innovation and Catalyst for the Digital Transition of Enterprises).

Energy efficiency in buildings: From the case study research focusing on Bulgaria, Latvia, Romania and France, we found that there are strong connections between reforms and investments in Bulgaria, Romania and France. The three RRPs have reforms that facilitate renovation investments and encourage private investments to complement the direct public investments in the form of grants. For example, the French RRP has a reform to set common climate and environmental criteria crucial to guide investments. Bulgaria is introducing one-stop-shops through a reform to channel grants and information on energy efficiency at the municipal level and provide target information to residents. In addition, Bulgaria introduces a definition and criteria for energy poverty through a reform facilitating support measures to poorer households. Finally, Romania complements its renovation wave fund with a reform for a simplification and update to its regulatory framework to support the implementation of investments in the transition to green and resilient buildings. This includes an intervention methodology for the non-invasive approach to energy efficiency in buildings with historical and architectural value.

3.2. How does the RRF make a difference?

EU-added value

EQ20: What has the RRF provided over and above what MSs actions and funding could have achieved?

Key findings:

The overall EU added value of the RRF can be identified in its **positive effects on GDP and unemployment**. Looking at specific added value aspects, evidence of substitution effects generated by the RRF to the detriment of Cohesion Policy was not found with regard to 2014-20 programmes, as they were already well underway at the time the RRF was launched. **Interviewees, however, highlighted substitution effects for 2021-27 programmes**. In countries with substantial investment gaps in traditional sectors, there is no risk of displacement between the two instruments, and RRF resources add up to CP to tackle the existing needs.

Although reducing spreads was not per se one of the objectives of the RRF, it has been an important positive side effect, which helped mitigation risks of financial fragmentation. Despite improving the financial position of governments across the European Union, **the reduction in spreads is unlikely to have had any significant effect on EU GDP.**

While the RRF contributed to the implementation of multi-country projects, the impact and full potential of such projects could have been better exploited. An analysis of selected cross-border projects focusing specifically on IPCEIs provides some more evidence towards **obstacles in the implementation of multi-country projects**. **It should be noted that cross-border projects, particularly IPCEIs, contribute to the Union's objectives and their importance is specifically reflected in providing a comparative advantage to European companies by pooling skills and know-how.** Due to their cross-border nature, as well as their strategic role in fostering cooperation in strategic industrial sectors and potential contribution to green and digital transition, they hold the potential to strengthen the resilience of industrial ecosystems and deepen the Single Market.

The analysis of the RRF effectiveness in previous sections has already described the positive effects of the instruments on GDP and employment. These **macroeconomic effects represent a part of the EU added value of the RRF**, in the sense of going beyond and above what MSs would have achieved anyway. Specifically, according to the simulations presented in response to EQ4.2, **GDP was 0.4 per cent higher in 2022** than it would have been in the absence of RRF spending. The simulations also suggest that the initial disbursements **lowered unemployment in the European Union** by around 0.2 percentage points relative to what it would have been in the absence of the RRF. To avoid repeating the same points, in this section we focus on specific EU added value issues: possible substitution effects, reducing spreads (continuation of the analysis of EQ4.9), multi-country projects, and levelling the playing field.

EQ20.1: Have substitution effects with national policies/programs and/or with other EU-funded programmes been identified, and if so, to which extent?

Evidence of substitution effects generated by the RRF to the detriment of Cohesion Policy was not found with regard to 2014-20 programmes, as they were already well underway at the time the RRF was launched. **Interviewees, however, highlighted substitution effects for 2021-27 programmes**. In fact, in some MSs, mature projects initially expected to be implemented under 2021-2027 CP were redirected to the NRRPs. The case study on the relationship between the RRF and Cohesion policy (which focuses on six MSs) illustrates that such a shift towards NRRPs occurred in Spain and Greece, where the recovery plan is accorded higher priority by political authorities and garners closer media attention. The beneficiaries' expectation of a reduced administrative burden compared to CP also played a role in this shift. A displacement effect emerged in Italy as well, where a scarcity of mature projects, partly due to longstanding administrative capacity limitations, resulted in their relocation to the NRRP. Romania also experienced such displacement; however, this did not raise concerns among national authorities, due to substantial investment gaps, an extensive project pipeline, and effective demarcation efforts. In fact, the case of Romania points to the fact that the importance of the substitution question varies depending on national contexts. **In countries with substantial investment gaps in traditional sectors, there is no risk of displacement between the two instruments, and RRF resources add up to CP to tackle the existing needs**. No evidence of substitution effects was reported in Germany (attributed to clear demarcation and the limited role of CP in the country) and Lithuania (primarily due to effective demarcation efforts). Nevertheless, in these latter two countries, **examples were reported of measures previously funded by the state budget now receiving support through the NRRPs** (see also EQ22). In the case of Germany, as documented by Corti et al. (2022a), more than 80% of the investments included in the RRP were already included in the June 2020 Konjunkturprogramm.

EQ20.2: To what extent have the EU's advantageous borrowing conditions and the impact that the RRF had on reducing spreads of EU MSs at its creation, contributed to the benefits of the RRF?

Although reducing spreads was not per se one of the objectives of the RRF, it has been an important positive side effect. Specifically, the reduction in spreads has led to an improvement in the public finances in EU countries and, by improving financing conditions for the household and corporate sectors, it will likely lead to increased investment and GDP in the future. At the same time, the reduction in spreads helped to mitigate the risk that the Covid shock would lead to financial fragmentation with borrowing rates varying more widely across EU countries. In addition, by using RRF loans to finance spending that would otherwise have been financed domestically, those MSs with relatively high borrowing costs have been able to take advantage of the European Union's advantageous borrowing conditions to reduce the costs associated with the increased borrowing that has resulted from the Covid shock.

To examine the effects of the announcement of Next Generation EU and its core instrument, the RRF, on spreads, we followed Bankowski et al. (2022) and measured the impact on spreads as 'the initial decline in sovereign bond spreads that was recorded within three weeks of the announcement, made on 18 May 2020, of the initial Franco-German proposal for a recovery fund' (given that this morphed into NGEU). With the caveats in mind on assumptions regarding the baseline illustrated in EQ4.9, table 20.2.1 shows the reduction in the spread of benchmark bond yields over bunds between 15 May 2020 (April for monthly data) and 5 June 2020 (June for monthly data) for all EU countries excluding Estonia (for data availability reasons) and Germany (where the spread is zero by definition). As can be seen, there was a reduction of between 50 and 100 basis points for those MSs in Southern and Eastern Europe where borrowing costs are typically high. For given assumptions about the long-run rates of inflation and GDP growth, we can calculate for each country the equivalent reduction in the primary surpluses that their government needs to run in order to ensure that their debt-to-GDP ratio does not explode. Table 20.2.1 also shows the resulting numbers for the case where inflation is assumed to be two per cent in the long run and GDP growth one per cent. Greece and Italy are major beneficiaries with an extra 1.60 and 0.97 percentage points of GDP in fiscal space, respectively. Cyprus, Portugal and Spain also gain more than half a percentage point of GDP in fiscal space by this measure.

Table 15: Reduction in spreads over the three weeks after the Franco-German announcement of a 'Recovery Fund'

Country	Average spread in 2019 (basis points)	Reduction in spread (basis points)	Reduction in primary surplus (percentage points of GDP)
Greece	279.8	96.5	1.60
Cyprus	127.1	92	0.77

Romania	484.5	75.7	0.35
Italy	214.4	68.9	0.97
Bulgaria	78.1	65.7	0.15
Slovakia	49.7	62.4	0.35
Portugal	98.1	59.9	0.66
Slovenia	60.8	52.7	0.36
Spain	88.1	52.6	0.58
Latvia	55.3	31.55	0.13
Lithuania	91.6	30.7	0.11
Belgium	40.2	24.1	0.25
France	34.1	21.3	0.23
Ireland	55.1	21	0.09
Croatia	150.3	20	0.13
Malta	86.8	18.5	0.10
Finland	27.6	17.4	0.12
Austria	26.9	15.3	0.12
Sweden	30.3	12.4	0.04
Luxembourg	9.0	11.55	0.03
Denmark	5.7	11.2	0.03
Czech Republic	178.7	9.5	0.04
Netherlands	15.2	8.7	0.04
Poland	262.1	2.2	0.01
Hungary	275.1	1.7	0.01

The big question is whether or not this reduction in spreads has had a positive effect on EU GDP. There are several reasons to think that the effect is likely to be very small at best. As reductions in risk premia only affect newly issued government debt it will take time to pass through into the average interest rate on government debt. But, more importantly, falls in the risk premium on government debt are unlikely to lead to significant falls in the cost of capital, which matters for private-sector investment. We can note that private-sector risk premia tend to be lower and less dispersed than sovereign risk premia and reflect a variety of other factors. Indeed, private sector borrowing costs in Spain and Italy in 2019-20 were in the same ballpark as those in France and Germany. Given that, you would expect a lowering of bond spreads to have no effect on the cost of capital and private-sector investment in these countries. At the same time, the uncertainty created by Covid was bearing down on investment throughout the European Union, nullifying any positive effect that might have resulted from a fall in spreads. Overall, our best guess is that, despite improving the financial position of governments across the European Union, **the reduction in spreads is unlikely to have had any significant effect on EU GDP.**

EQ20.3: To what extent did the Facility contribute to the implementation and further development of multi-country projects?

While the RRF contributed to the implementation of multi-country projects, the impact and full potential of such projects could have been better exploited. Multi-country projects act as enablers and have the potential to create new value chains and thereby strengthen the position of the EU as a global economic player. However, some minimum criteria need to be fulfilled for multi-country projects to result in maximum spill-over effects. These are identified as: ensuring a clear political steer and clear strategic objectives, transparency in the design of projects (i.e., selection of companies and projects to be financed through clear screening of projects), and established communication lines between participating MSs.

As a key instrument to support economic recovery, the RRF holds the potential to facilitate cross-border cooperation opportunities. By encouraging collaboration and coordination between countries, the RRF can help maximize the effectiveness of investments and address common challenges faced by EU nations. The RRF foresees supporting investments that have a significant cross-border impact and MSs are encouraged to consider these as such projects reflect common concerns and shared priorities of (a number of) MSs and are aligned with the objective of promoting further integration and cooperation within the EU.

An overview of NRRPs shows that numerous RRPs include measures participating in a number of multi-country projects (EC, 2022f), **with most projects contributing to the green and digital transition.** More than half of the RRPs include measures contributing to multi-country projects or cross-border initiatives related to the green transition, with the IPCEI on hydrogen exhibiting the highest uptake. The second biggest contribution is seen in the area of the digital transition, where once more, most NRRPs include measures contributing to multi-country projects or cross-border initiatives. Here, the IPCEIs on microelectronics (12 RRPs) and cloud technologies (6 RRPs) are amongst the multi-country projects with the highest take-up in RRPs. Further contributions towards the digital transformation are also seen in cloud technologies (with 6 RRPs including IPCEI measures), the European Digital Innovation Hubs (8 RRPs), 5G corridors (7 RRPs) and quantum communication (4 RRPs). While the extent to which such uptake would have been possible at national level, Dias et al. (2021) argue that having RRF funds available may have been the opportunity to enlarge participation in such projects by providing MSs with the funds needed (Dias et al., 2021). The increasing number of participating MSs in IPCEIs indicates that there is increasing interest in participation in such projects. Since 2018 (with the exception of 2020), the EC has approved State aid for at least one integrated IPCEI each year, with the number of participating MSs increasing with each IPCEI (rising from five MSs in 2018 to 14 in the IPCEI on Microelectronics and Connectivity in 2023). Experience from past IPCEI projects (IPCEI on Batteries) shows that cross-border projects can contribute to the creation of new value chains.

While interest grows**, the contribution of such projects to green and digital objectives and the resulting spill-over effects remain questionable and will require more time to materialise.** Contributions to green and digital objectives are usually ensured through careful consideration of project selection criteria. For example, in the case of the IPCEI on Microelectronics and Connectivity in Austria, the milestone required climate-related eligibility criteria established in call documents for projects. In particular, the second call included climate-related eligibility criteria that obliged potential beneficiaries, i.e., recipient companies, to explicitly commit to the reduction of greenhouse gas (GHG) emissions within their project portfolios and estimate the extent of GHG savings. Therefore, only projects with the commitment to reduce GHG emissions over their lifecycle and providing the estimation of the extent of GHG savings were eligible under the Call for Expression of Interest. Thus far, such milestones have been reached, but the results of these will be reflected towards the end of the implementation period. The case study analysis showed that the progress of IPCEI-related implementation of reforms and investments within the NRRPs varies significantly across the different IPCEIs and within the same IPCEI at project level. While most milestones of the analysed IPCEI-related measures (reforms) are fulfilled, implementation of most IPCEI investments (targets) is facing potential delays. IPCEIs generally have an initial R&D phase, followed by industrial deployment, which involves the majority of investments to purchase machinery and scale up production. This means that the most significant share of investments is expected towards the end of the funding period, which will result in a lower percentage of funds distributed to projects by Q3 2026.

While theoretically cross-border projects carry huge potential for advancing the competitiveness of the European economy, Corti et al. (2022a) argue that only a minor share of RRF-supported cross-border projects had so far an effective cross-border impact. This can mainly be attributed to the complexity of cross-border projects, which require more time in design and see more challenges in implementation due to the multi-partner component. Specifically, IPCEIs typically present challenges in fostering cooperation beyond the conventional value stream with supply partners or customer partners due to antitrust rules that restrict the sharing of processes and developments with competitors. Despite the undisclosed aspects, cooperation is still possible across various other dimensions, with examples of sharing concerning the measurement of a certain technology or the implementation of recycling and circular economy practices within the production process. In the case of developing new technologies, instead, results can be distributed and used in other projects, but actual joint technological development is restricted due to antitrust rules. To navigate antitrust limitations, some companies establish shared production facilities. All these factors might impede the further development of multi-country projects.

An analysis of selected cross-border projects focusing specifically on IPCEIs (see case study on cross-border projects) provides some more evidence towards **obstacles in the implementation of multi-country projects**. Communication amongst participating MSs appears to be challenging at times. The coordinating MS is in charge of steering conversations and proposing a specific plan for the IPCEI, yet all participating MSs are expected to contribute in an equal manner. Semi-structured interviews pointed towards challenges in these regards, with different stakeholders reporting a different degree of communication among MSs. Overall, the lack of an institutionalised gateway to communicate with all participating MSs poses a challenge to seamless interaction. In addition to country differences, the degree of communication varies across different phases of the project but is particularly intense during the project's design process. Although the coordinating MS assumes a leading role during the drafting of the Chapeau document, contributions from other MSs remain essential. However, not all MSs engage to the same extent. This could be attributed to resource limitations or the country's size, for which limited capacity could hinder a more active involvement.

Further obstacles are linked to the notification process, the lack of clarity and communication. The lengthy notification process remains the main challenge of the implementation of IPCEIs. With an average time of 1,5 years for receiving authorisation, the timeline for IPCEIs remains uncertain. While efforts put into the revision of the Communication on IPCEIs were welcomed by all, some unclarities remain and concerns are expressed by various stakeholders. **A year's delay can cause substantial problems for businesses, especially for such industries that live on innovation and speed**. The lack of clarity refers to the processes, timeline, and responsibilities, but also requirement criteria for project selection, the definition of additional benefits or spillovers, and the issue of the off-taker (Hydrogen). **Communication amongst participating Member States appears to be challenging at times**. The coordinating Member State is in charge of steering conversations and proposing a specific plan for the IPCEI, yet all participating Member States are expected to contribute in an equal manner. Overall, the **lack of an institutionalised gateway to communicate with all participating MSs poses a challenge to seamless interaction**. In addition to country differences, the degree of communication varies across different phases of the project but is **particularly intense during the project's design process**. Although the coordinating Member State assumes a leading role during the drafting of the Chapeau document, contributions from other Member States remain essential. However, **not all Member States engage to the same extent**.

As for **communication with the Commission,** from the interviews, it emerged that takes place **mainly with DG COMP**, which holds procedural expertise, while for a more strategic perspective on the IPCEIs or more technical background different DGs are involved based on the topic of the IPCEI, such as DG GROW for hydrogen and batteries and DG CNECT for microelectronics. Despite certain **capacity constraints and limitations in terms of timeline**, communication is perceived positively. On the other hand, **companies seem not to have direct contact with the**

Commission services itself, but communication is rather channelled **through Member States,** which often act as intermediaries and translate the Commission requests for the companies.

Furthermore, **external factors** (such as the war in Ukraine) have to be taken into account when looking at the materialisation of multi-project impacts. Initial figures for the IPCEI projects were established in late 2021, setting the foundation for the project. However, these figures were affected by the energy crisis triggered by the Russian invasion of Ukraine impact. While awaiting formal notification, the landscape shifted dramatically - construction and equipment costs experienced a sharp escalation due to disruptions in energy supplies. These numbers were at odds with the original project plan. This represented a challenge not only for larger corporations but also an even bigger strain on smaller enterprises. Rising material prices have indeed posed challenges in the implementation of the IPCEI projects. The fluctuations in material costs have led to delays in the delivery of products, impacting project timelines. In response, two primary courses of action emerged. One approach was to absorb the mounting costs, a solution that posed considerable difficulty even for major companies grappling with the energy crisis and material cost fluctuations. This situation led some to contemplate **downsizing the project** or **trimming down its activities**.

Lastly, we concur with Corti et al. (2022a), who highlight some missed opportunities for other cross-border projects and in developing European public goods as part of the RRF. Even though there was no explicit coordination through the RRF, the existence of overarching projects and the IPCEI mechanism has led to some progress on European public goods in transportation and digital technology (ibid). As the latest geopolitical developments stressed the urgency to transform Europe's energy system, investing in strategically important areas in a joint and coordinated manner across the Union has become more pertinent than ever. Cross-border and multi-country projects can therefore act as optimal tools for policymakers to enhance the resilience of European economies.

EQ20.4: To what extent did the RRF contribute to maintaining the level-playing field and strengthening the Single Market?

The RRF is set to contribute added value by fostering convergence, supporting investment, job creation and growth, helping reduce economic, social and territorial disparities within MSs and across Europe. MSs are encouraged to work together to integrate value chains, strengthen the resilience of industrial ecosystems and deepen the Single Market. Cross border, and specifically IPCEI projects, have an important role in that sense as they are essential for the recovery and to strengthening Europe's resilience and are of particular relevance for the flagship initiatives. As such, they contribute to increasing potential spill-over effects that the RRF – as a coordinated investment and reform programme across the EU - can foster. Nevertheless, the IPCEI mechanism can create some tensions with EU competition policy. Key challenges for the Single Market's level playing field can emerge due to differences in financial, technical, and administrative capabilities between Member States and their enterprises as well as shortcomings in the arrangements governing the creation, implementation, and evaluation of IPCEIs. Smaller and less advanced economies often lack the fiscal space necessary to finance IPCEI projects or do not have sufficient administrative staff to manage the development, implementation, and evaluation of IPCEIs (Eisl, 2022a). Participants of the cross-border case study roundtable confirmed this notion, stating that there are differences across Member States in terms of capacity and organisation of IPCEI. Some organisational changes, such as creating a centralised unit in one Ministry dealing exclusively with the IPCEI could help in this regard and can be considered as best practice.

Grüner (2013) and Dolls et al. (2018) argue that cross-border projects have the potential to create positive externalities for other MSs which are not internalised and therefore neglected by MSs acting alone. In this sense, NRRPs with a stronger focus on cross-border projects could thus strengthen the European Single Market and lead to more substantive spill-over effects across countries than currently estimated (Pfeiffer et al. 2021). Corti et al. (2022a) add that these spillover effects are particularly relevant in the areas of green transition and digitalisation as neighbouring countries could benefit from investments in transport or digital infrastructure or other aspects concerning digital transformation, such as broadband expansion and 5G. Nevertheless, Poitiers and Weil (2022) provide a harsh critique of IPCEI, stating these provide incentives to EU countries to compete over industrial subsidies, which is what state aid disciplines were introduced to avoid. They call for deep reform of IPCEIs and stricter criteria to avoid damage to the Single Market.

There are positive aspects, however, with Eisl (2022b) arguing that **the RRF contributed to significantly lowering the entry barriers for MSs to participate in IPCEIs by giving smaller countries with comparatively fewer budgetary capacities an opportunity to completely finance or at least co-finance IPCEIs with European money instead of having to rely exclusively on their national budgets**. Arguably, this can be seen in the growing number of participating countries and companies (reflected in the increasing number of projects within each single IPCEI). This development could reduce the tensions between an increasingly more active industrial policy in the EU and the maintenance of a level playing field between the MSs of the Single Market (ibid).

The first and second IPCEI on microelectronics provide an example where the strategic importance of the industry and Europe's position as a producer of semiconductors was (and continues to be) strengthened[99]. Semiconductor technologies are key for a lot of applications which are important for the EU (e.g., the automotive industry). Even if only a small portion of the global revenue of semiconductors is generated in Europe (less than 10%), some European companies are world-leading companies in these technologies. Thus, ensuring a level playing field for companies operating in the sector is key for Europe's economy.

Semi-structured interviews conducted as part of the cross-border case study provide insight with regard to the added value of IPCEI on Microelectronics and spillover effects. While the implementation of company-level projects as part of the first IPCEI microelectronics would not have been possible without the cooperation of multiple countries and stakeholders, **the requirement to demonstrate spillover effects poses a challenge to companies involved in implementation** (EFECS, 2019). The construction of semiconductor production facilities in Germany would not have been possible without the IPCEI, in the absence of which, these factories would have likely been built up outside of Europe. While this presents a clear benefit, the spillover effects in cross-border projects that hold a production component (i.e., infrastructure, building facilities, etc.) will be less clear-cut than with R&D projects due to antitrust laws. Cooperation amongst partner companies occurs in a vertical manner rather than horizontally. This means that partners are active in different stages of the value chain, as opposed to the case of R&D, where multiple partners develop technologies jointly. As vertical cooperation entails benefitting from the end product of a partner lower in the chain, disclosure of information is not a given. This has a direct impact on the scope of spillover effects that such projects can exert. Thus far, these are manifested mostly through knowledge-sharing activities via conferences, lectures and reporting.

Nevertheless, **the IPCEI framework is considered as a tool that can help to balance market distortions in a broader geographical scope**, i.e., catching up with non-EU countries which subsidise strategic sectors (e.g., China). As IPCEI-type projects are mostly relevant in the competition field, scoping out state-aid rules for projects that implement common important priorities and allow the pooling of public (and private) resources to implement such common policies is key (Dias et al., 2021). **However, the lengthy State aid notification process remains the main challenge of the implementation of IPCEIs**. With an average time of 1,5 years for receiving authorisation, the timeline for IPCEIs remains uncertain, which can be an obstacle for companies to start implementing their projects[100]. Companies can start their projects within IPCEI

[9999] While the RRF contributed only to the second wave, we refer to both as it is important to reflect on the continuity of R&D know how.
[100] Semi-structured interviews on IPCEI Microelectronics.

even before the notification approval, however, should approval not be granted, they will have to rely on their own funding. This uncertainty can act as a blocker for companies that are not willing to allocate their own funds to new research lines.

While revised State aid rules on Important Projects of Common European Interest are applicable as of January 2022 (EC, 2022g), anecdotal evidence suggests that the lengthy process continues to be a challenge, with examples of the two IPCEIs on hydrogen, which were approved in 2022 but saw multiple hydrogen projects being carried forward even without the approval[101]. On the other hand, Eisl (2022b) finds that learning from the initial experiences with IPCEIs, the process for MS participation was rendered more inclusive and transparent, requiring IPCEI initiators to inform other MSs early on in the development of such projects.

The alignment of NRRP measures with the EU Single Market's principles is of utmost importance, especially given the backdrop of the COVID-19 crisis. The pandemic introduced substantial risks to the fair competition framework established by the single market, potentially resulting in lasting disparities in living standards and increased divergence within the monetary union. The crisis had the potential to disrupt this equilibrium, favouring companies in wealthier nations at the expense of their counterparts in less prosperous countries (EC, 2021d).

In this context, a robust Single Market becomes indispensable to tackle these challenges and ensure an equitable recovery. To ensure the competitiveness of markets within the Single Market, measures should be accessible to companies in all EU MSs, promoting fair competition and fostering integration and collaboration. Ultimately, a cohesive approach in the NRRPs that aligns with Single Market principles safeguards equal opportunities for businesses throughout the EU, thereby contributing to a balanced and resilient recovery.

For the case study on Smart and sustainable growth: supporting SMEs, the NRRPs of several countries and their SME-related measures have been evaluated to what extent they align with Single Market principles. This analysis has resulted in **varying results between investigated NRRPs of MSs**. In general, the SME-related measures included in the four NRRPs of the selected countries do, in theory, allow for the participation of foreign businesses. However, no clear example or case of this occurring could be identified. This has been echoed by consulted stakeholders in all four countries, in the sense that, while they are open to foreign businesses to apply for the (investment) measures in their country, none of them had any experience in it occurring. To facilitate access, information for Finnish and Portuguese measures had been made available in English next to their national languages, however in Greece, the flagship digitalisation measure only provides information in Greek making it more difficult for foreign companies to access it.

Moreover, as per literature and discussions with stakeholders, the prioritisation of specific sectors by certain countries can result in more significant support and opportunities for SMEs in those areas than for their counterparts in neighbouring Member States. On the flip side, SMEs in other Member States with distinct national focuses might not enjoy equal access to RRP opportunities. Although these disparities could lead to an uneven playing field and negatively impact fair competition, especially for internationally-oriented SMEs, specific instances of such issues were not identified.

In conclusion**, cross-border projects (in particular, IPCEIs) contribute to the Union's objectives and their importance is specifically reflected in providing a comparative advantage to European companies.** By pooling skills and know-how, IPCEIs can help European companies find ways to compensate for the lack of specific technologies and skills in the wider IPCEI ecosystem, providing the possibility of establishing whole new value chains. Due to their cross-border nature, as well as their strategic role in fostering cooperation in strategic industrial sectors

[101] Preliminary findings, still to be triangulated.

and potential contribution to green and digital transition, the EC promoted their use to strengthen the resilience of industrial ecosystems and deepen the Single Market.

EQ21: To what extent did the simultaneous implementation of reforms and investments across MSs create EU added value?

The simultaneous implementation of reforms and investments across MSs **created EU added value notably by increasing the scale and level of ambition** of the implemented measures. As noted in EQ19, there has been complementarity and coherence between reforms and investments in the NRRPs, which is illustrated by the performed case studies. Constructing a counterfactual scenario at EU/national level where so many reforms and investments are not pursued simultaneously is not attainable. Nevertheless, the five MS authorities that provided answers to this question on EU added value via the additional request for input (see Annex I – interviews), have unanimously stated that even if most of the RRP measures had already been planned and had been included into government programmes, the combination of reforms and investments, which is pursued by the RRF, allowed them to: make the measures more ambitious in scale; likely increased the speed of implementation; and solidified the planned governmental measures and implementation of the CSRs. **The increased ambition in scale is valid particularly for investments**, while for reforms **the RRF has brought EU added value mostly in terms of strengthening the incentives to perform CSRs, ensuring continuity of policies, and speeding up some politically challenging reforms**. These issues are further explored in the following evaluation question (EQ22).

EQ22: To what extent, could similar resu*lts/impact be achieved with a different instrument at Union level (e.g., budget support) or by MSs?*

Key findings:

More than 20% (155) of the 705 milestones/targets fulfilled have been implemented before the date of the official endorsement of the RRPs, which suggests that the related measures would have taken place without the RRF. The **general assessment of the stakeholders on the RRF additionality has been positive**, but about **a quarter of the participants in both the national coordinator survey and the public consultation expressed a negative opinion** on the extent to which the RRF supported measures that would not have been implemented by MSs. Similar mixed sentiments were expressed during the performed interviews, but nevertheless, they revealed **cases of rule of law and structural reforms, which would have likely not taken place without the RRF**. The reviewed examples show **the added value of the RRF, in particular in terms of politically challenging reforms**.

The extent to which similar results/impact could be achieved with a different instrument at Union level (e.g., budget support) or by MSs alone is always difficult to assess, because it also requires considering a counterfactual situation, in this case a situation without the RRF. Starting with the data, **more than 20% (155) of the 705 milestones/targets fulfilled so far have been implemented before the date of the official endorsement of the RRPs**. Only eight of these M&Ts are targets and the rest are milestones. Of course, one can claim that despite being fulfilled before the official endorsement, the very programming of the RRPs may have contributed to the fulfilment of the M&Ts. Extensive informal discussions took place during the preparation of the plans, where Member States adjusted some reforms based on the Commission's informal input and feedback. While this is the case, it has to be acknowledged that the fulfilment of some M&Ts after the endorsement of the RRPs does not necessarily mean that they were fulfilled thanks to the RRPs. Thus, **20% provides a reasonable approximation of the share of milestones/targets that would have been achieved by MSs anyway**.

While this is a significant share of the fulfilled milestones/targets, 155 M&Ts represent only 2.5% of all planned milestones and targets. Yet a comparison with the total number of M&Ts would also take into account planned milestones/targets envisaged for 2020-2021 for countries that have not yet requested payments, while there is currently no available data on the achievement of the milestones and targets for countries, which have not asked yet for payments. Altogether for 2020-2021, the achievement of 655 milestones/targets was planned, which represents 10.5% of all milestones/targets under the RRF. Most RRPs were approved in 2021, but not at the same time – 16 in July, and 6 more by the end of the year, while 5 RRPs were approved in 2022, so this number does not provide a good approximation of the milestones/targets that would have been achieved without the RRF.

A table presenting the M&Ts fulfilled before the official endorsement of the plans per MS is presented below. It illustrates the different approaches by MSs when designing and planning the milestones/targets achievement, rather than a judgement on additionality in the MSs. Nevertheless, it shows that for some countries (Austria, Bulgaria, Denmark, France, Luxembourg, Malta, and Spain) more **than 30% of the fulfilled milestones/targets were achieved before the endorsement of the RRP**. On the other hand, **for countries like Croatia, Cyprus, Czechia, Greece, Italy, Lithuania, and Slovakia, this percentage is lower than 10%**.

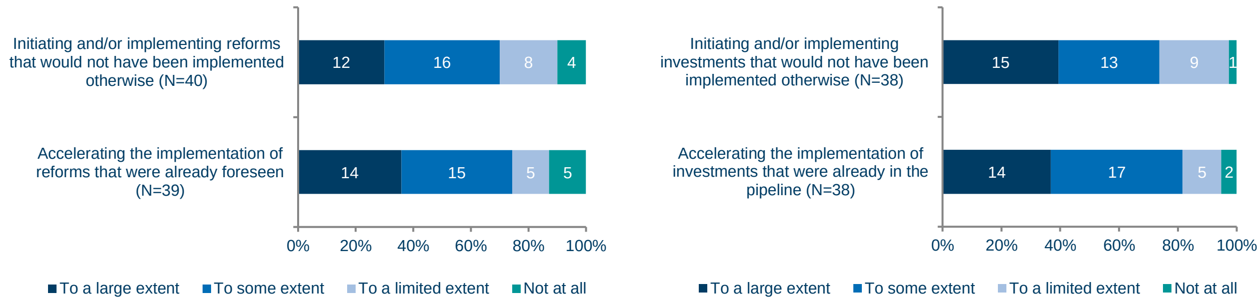
Table 16: Fulfilment of M&Ts ahead of the RRP endorsement

	2020	2021	2022	Total	Fulfilled until end-July 2023	% of fulfilled before the RRP endorsement
Austria	4	12		16	44	36%
Bulgaria	4	7	1	12	22	55%
Croatia	2	1		3	59	5%
Cyprus		1		1	14	7%
Czechia	1			1	37	3%
Denmark	2	6		8	25	32%
France	2	15		17	38	45%
Greece	1			1	43	2%
Italy		5		5	96	5%
Latvia		2		2	9	22%
Lithuania		1		1	31	3%
Luxembourg	5	6		11	26	42%
Malta	4	8		12	19	63%
Portugal	3	5		8	58	14%
Romania		2		2	21	10%
Slovakia		2		2	30	7%
Slovenia		3		3	12	25%
Spain	24	26		50	121	41%
Total	**52**	**102**	**1**	**155**	**705**	**22%**

Source: RRF scoreboard (timelines) and EC data on milestones and targets database

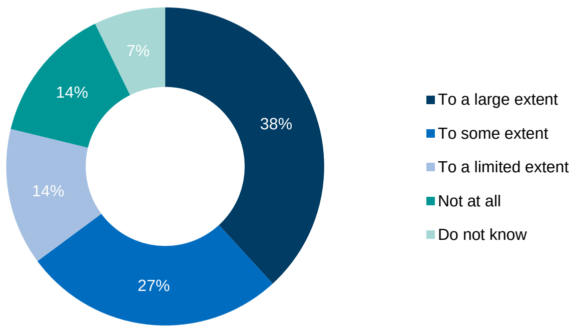
The extent of contribution of the RRF to national reforms and investments is **overall assessed positively by the national authorities participating in the survey** (see Figure below). Most authorities agree "to a large extent" or "to some extent" (12 and 16 respondents for reforms / 15 and 13 respondents for investments) that the initiation and implementation of reforms/investments would not have taken place without the RRF. The results for accelerating the implementation of reforms and investments are very similar. Nevertheless, it has to be acknowledged that **roughly a quarter of the responses on the RRF additionality to reforms/investments are in the negative scale**.

Figure 35: Additionality of the RRF - reforms and investments



Source: survey

Figure 36: RRF additionality - public consultation results



Source: public consultation

The responses to the public consultation are very similar. **The majority of respondents (65%) provided a positive response** to the question on the extent to which the RRF produced more results than what MS action and funding could have produced alone (see Figure left). Nevertheless, **above a quarter of the respondents (28%) responded in the negative scale**, claiming that the RRF did not provide more results than what could have been achieved by the MSs alone.

The feedback **received from interviews (at national and EU level) is also mixed** with some countries declaring that it would have been difficult to achieve similar results without the RRF (e.g., due to lack of resources), while others declaring that the measures included in their RRPs were already a part of the governments' programmes before their inclusion in the plans. Naturally, it is not just about the number, but also about the extent to which measures have proven to be challenging. In this regard, **interviewees specifically provided examples of challenging reforms that would have likely not taken place without the RRF**. Examples include **rule of law reforms** (e.g. Poland) and **structural reforms** (e.g. long-standing country-specific recommendations such as pensions and long-term care in Slovenia and the reform concerning regulated professions in Portugal). In more details, the measure for 'Reduction of restrictions in highly regulated professions' in Portugal[102], has been included in the CSR for Portugal

[102] The elimination of access restrictions to certain professions by the respective professional associations is one of Portugal's structural challenges (for several years included in CSRs as well as in OECD reports). Reforming professional associations aims to achieve fewer restrictions, more equality, less precariousness, more transparency, and increased independence. The objectives include removing barriers, promoting fairness, avoiding unnecessary delays, ensuring quality services, and enhancing regulatory functions with external input. Given the high political sensitivity of this reform, the government used the RRF funding as a 'carrot' to drive the reform forward. The reform of regulated professions was approved in a final global vote by Parliament on 22 December 2022. However, the approval generated a lot of criticism from the opposition in the Parliament and especially from the Lawyers/Bar Association. The President of the Republic, after the Parliament's approval, sent a request for preventive supervision of the Law to the Constitutional Court referring to a probable violation of the principles of equality, proportionality, self-regulation and the democratic nature of regulated professions. The Constitutional Court unanimously ruled that the Act is constitutional. The new law on professional organisations will change issues such as the conditions of access to the respective professions, introduce paid professional internships and create an external body to supervise professionals. The final text introduced changes such as clarifications on the fees charged during the internship and the possibility of reducing them. The duration of traineeships was set at 12 months, which may be longer in exceptional cases. Another change was the approval of the existence of a disciplinary body, which was not provided for in the previous framework law, which provides for the supervision of the performance of members of professional organisations, composed of elements external to the respective professions. The law will enter into force by the end of 2023.

for several years. However, due to political and party constraints, it was considered very difficult to introduce a reform in this area. While at the moment of writing the reform is still to be formally signed by the President of Portugal following the adoption by the parliament, interviewees from the national authorities and at EU level confirmed that this reform would not have been possible without the RRF. Interviewees also highlighted the following country-specific reforms as ones that would not have been likely to be implemented soon without the RRF: the Zero-emission company cars of the Federal State in Belgium[103] and the Implementation of the Online Access Act in Germany[104].

As concerns **investments**, interviewees also provided examples of investments in infrastructure that were considered under the RRF (e.g., schools in Cyprus), but then a decision was taken to implement them under the national budget due to the very demanding 2026 deadline. For the very same reason, countries prioritised "mature" projects under the RRP, which could have been financed under the Cohesion policy funds (see EQ23.2). This is the case, for example, with a metro line in Sofia, where some sections would be financed by the RRF, and some would be financed via national financing[105]. An example of scaling up of three subsidy schemes that were already in place before the RRF is the scheme for the replacement of oil burners and gas furnaces in Denmark[106]. Overall, these considerations show that **investment measures are largely interchangeable between RRF, national budgets, and Cohesion Policy financing, but naturally the sheer size of the RRF budget supports countries in implementing/accelerating these interventions**.

Input from the case study on justice as regards the added value of RRF:

- In RO, the added value of the RRP is less clear-cut as the amendment of the ´justice laws´ was a binding CVM recommendation.
- In HU, experts consider that the adoption of the justice reforms has been mostly motivated by the need to unblock the EU cohesion (CPR) funds (suspended by application of the horizontal enabling condition on compliance with the Charter of Fundamental Rights) rather

[103] The law organising the fiscal and social greening of mobility was adopted on 25 November 2021. The new rule on the deductibility of car expenses apply to both personal and corporate taxes. For diesel or petrol cars purchased before 1 July 2023, the current rules will continue to apply. This scheme will also apply to cars purchased between 1 July 2023 and 31 December 2025. From the 2026 tax year, a transitional system will come into force. It will no longer provide for a minimum deduction. The maximum deduction will decrease from year to year. From the 2029 tax year, the costs of these cars will no longer be deductible. Nothing will change for electric cars purchased before 1 January 2027. The costs of these cars will remain 100% deductible throughout their life cycle. For cars purchased from 1 January 2027, deductibility will be gradually reduced to 67.5% in 2031.

[104] The Online Access Act (OZG) entered into force 18 August 2017, and its main objective was the comprehensive digitalization of the German administration by the end of 2022. In doing so, the federal, regional and local administrations were to offer all administrative services digitally via administrative portals and link these portals to form a network. This meant that 575 OZG legally defined services and official procedures of the public administrations had to be digitised.
The implementation of this act was included as part of the German NRRP. The target included under the plan did not envisage the full implementation of all administrative services, as it only included the implementation of 100 of the most important administrative services of the Lander and 115 Federal Government Services. Several commentators have been critical of the state of the implementation (Heiner Rohl, 2023; Bundesrechungshof, 2023) as it was initially thought that all the services would be provided by the end of 2022. However, this is not preventing the target from being met, as can be seen in the OZG dedicated dashboard. 127 OZG services are available nationwide online for the federal level, and all the landers exceed the number of 115 services, as shown in the map below.

[105] The investment refers to the construction of a section of line 3 of Sofia metro (3 km and with 3 stations), which is expected to allow transport of 7.6 million passengers per year on average as of 2026. Thus, according to the Bulgarian NRRP, it is expected to lead to a reduction in greenhouse gases and air pollution in the city, in the number of cars in circulation in the city and to enhance the public transport for the city's inhabitants. The investment is expected to be completed by 31 December 2025, and the milestone achieved so far relates to signing the contracts for the construction of the new line section Hadzhi Dimitar – Levski (Lot 1). The public procurement procedures were conducted in 2020-2021, and the contract was awarded in the autumn of 2021. The construction started in March 2022, i.e. before the adoption of the NRRP. Further construction of the metro line 3 (Lot 2) is envisaged to be performed via national financing, and to be finalised by 2026. The main reason for not including the whole project under the RRP, despite the project readiness, was the need to diversify investments also outside the capital.

[106] The aim of the investment is to speed up the removal of oil burners and gas furnaces and support the transition to heating based on green and sustainable sources while simultaneously promoting energy renovations. The support scheme is to be distributed into the three sub-schemes:
1. Sub-scheme for district heating ("Fjernvarmepuljen"): shall provide a subsidy to expand district heating grids into new areas;
2. Sub-scheme for decoupling ("Afkoblingsordningen"): the Danish state-owned gas distribution company charges a fee to cover the cost of decoupling. With this subsidy scheme, households may be exempted from this fee.
3. Sub-scheme for scrapping ("Skrotningsordningen"): shall provide a subsidy for companies that offer heat pumps on subscription for private year-round housing. The scheme is particularly relevant for citizens who wish to convert to a heat pump but who have limited financing opportunities.
The effort of this investment is estimated to reduce greenhouse gas emissions by DKK 0.06 million tonnes of CO_2e in 2025 and 0.04 million tons of CO_2e in 2030.

than the fear of losing the RRF funds. This statement seems to be confirmed by the fact that the Hungarian government has shown less willingness to progress on other super milestones, whose fulfilment is not necessary to unblock the EU cohesion funds.

- Bulgaria - Reform in preschool and school education and lifelong learning (fulfilled in 2020) - It is also worth noting that the reform was adopted in 2020, i.e., two years before the adoption of the Bulgarian RRP. There have been previous attempts to lower the preschool age by amending the preschool law in 2013, which failed due to protests and government changes. This shows that, on one hand, this is a reform that predates by far the RRP, but at the same time it is not an easily accepted reform by society, so perhaps including it in the RRP could help solidify it.
- The additionality of RRF funds is also reflected in the widened pool of countries implementing multi-country and cross-border projects. The Cross-border case study demonstrates the growing number of MSs participating in multi-country projects, most noticeably IPCEIs. While the use of RRF financing did not influence the decision whether to take part in the IPCEIs, it had an impact on the scale of financing such projects. According to stakeholders, the scope of IPCEIs (notably hydrogen) would have likely been lower in the absence of the RRF funds. The RRF represented in fact a good source of funding for the MSs and an opportunity to integrate IPCEIs in the national programmes. Additionally, in terms of multi-country projects, the RRF helped to enlarge the circle of MSs able to take part in IPCEIs, especially towards Central and Eastern Europe (Eisl, 2022a).

3.3. How relevant is the RRF?

Relevance

EQ23: To what extent does the RRF continue to be relevant in view of its objectives and how well do these objectives correspond *with current needs within the EU?*

Key findings:

The **relevance of the RRPs is widely acknowledged** and is ensured by the following factors: the reforms and investments are linked to the CSRs, which are typically linked to strategic reforms; the twin transformation (green and digital), which is an overarching EU-wide policy for years to come, is at the heart of the RRF and consequently the RRPs; the RRF has envisioned a mechanism for adaptation of the RRPs, which is currently being implemented.

As concerns the **allocation key**, there may be a need to re-evaluate which MSs are more in need of RRF disbursements given their GDP experience.

While the reasons behind the 2026 deadline are well understood**, it has led to limitations in selecting investments, particularly in the renewable energy sector**. As concerns feasibility, national authorities have already **flagged that the 2026 deadline cannot be met.** The current progress of the RRF, to a large extent, confirms that **reaching this deadline would be extremely difficult.**

EQ23.1: To what extent did the initial allocation key remain relevant over the period?

The European Union set up NGEU – of which the RRF is the centrepiece – in order to support the economic recovery from the coronavirus pandemic and build a greener, more digital and more resilient future. Given that, the goal was to allocate RRF funding to those MSs that were most badly affected by the pandemic and, more generally, needed more support than others to embark on the structural reforms and public investment necessary to increase their resilience. This resulted in the initial allocation key for RRF funding being based on each MS population, the inverse of their GDP relative to the EU average, their average unemployment rate in the years leading up to the Covid pandemic relative to the EU average, and the falls in their GDP over the pandemic period (2020-21).

More specifically, the allocation of the first 70% of RRF funds, committed in 2021 and 2022 depended on MSs' 2019 population, inversely on their GDP per capita relative to the EU average in 2019, and on their average unemployment rate over the 2015-19 period, again relative to the EU average. As argued by Darvas (2020), the population measure ensures that the support is, at least partly, related to country size. Beyond that, those MSs with high unemployment rates and/or low GDP per capita before the crisis would receive more than those with low unemployment rates and/or high GDP per capita. In addition, the caps on the unemployment rate and GDP per capita further weight the payments towards low-income countries. But, given the role of the RRF in helping those MSs that were most affected by the crisis, the remaining 30% of funds were allocated in such a way as to favour those whose GDP fell by the most, both in 2020 itself and over the 2019-21 period.

In answering the question of whether this formula remains relevant, we need to examine the extent to which those MSs most badly affected by the pandemic have bounced back since 2021 and whether other MSs have struggled more over this period. The table below shows those MSs whose GDP per capita fell the most between 2019-20, 2019-21 and 2019-22. As can be seen, **Spain was the most badly affected MS and remains so in the most recent data**. Malta and Greece, despite being the second and third worst-hit MSs in 2020 itself, have since recovered reasonably well with Greece having grown in per capita terms by 5.2 per cent between 2019 and 2022 and Malta by 5.0 per cent, as compared with the European Union as a whole, which has only grown by 3.2 per cent in per capita terms. Conversely, Finland was relatively less badly affected by the pandemic in 2020 itself but has since fallen relatively behind with growth in per capita GDP of only 1.7 per cent between 2019 and 2022. The Rank Correlation Coefficient between MSs' growth in 2020 and their growth over the whole 2019 – 22 period is equal to 0.39. This suggests that **there may be a need to re-evaluate which MSs are more in need of RRF disbursements given their GDP experience**. However, the coefficient may also have been influenced by the Russian invasion of Ukraine and the resulting energy crisis, which affected countries' GDP heterogeneously. With this in mind, to the extent that the RRF was set up specifically to help MSs recover from the pandemic, it could be argued that the initial allocation key should not be altered and that, if those countries most badly affected by the pandemic have been growing faster since, then this is a sign that the RRF has been successful.

Table 17: MSs ordered by growth in GDP per capita (lowest to highest)

2019-20 (%)		2019-21 (%)		2019-22 (%)	
Spain	-11.64	Spain	-5.92	Spain	-1.07
Malta	-10.06	Austria	-3.49	France	-0.21
Greece	-9.17	Portugal	-3.11	Czechia	0.00
Italy	-8.52	Czechia	-2.38	Austria	0.03
Portugal	-8.41	France	-2.29	Germany	0.17
Croatia	-8.16	Greece	-1.01	Finland	1.70
France	-7.88	Germany	-0.89	Luxembourg	2.20
Austria	-7.04	Italy	-0.40	Slovakia	2.38
Czechia	-5.74	Belgium	0.33	Belgium	2.58
Belgium	-5.70	Finland	0.38	Portugal	3.43
Slovenia	-4.86	Malta	0.43	Italy	3.64
Cyprus	-4.51	Netherlands	0.98	Netherlands	4.34
Netherlands	-4.41	Slovakia	1.50	Sweden	4.69
Hungary	-4.36	Sweden	2.49	Malta	4.96
Germany	-3.89	Slovenia	2.74	Estonia	5.18
Slovakia	-3.51	Hungary	2.85	Slovenia	5.20
Bulgaria	-3.47	Luxembourg	2.86	Greece	5.23
Romania	-3.23	Romania	3.23	Denmark	5.49
Latvia	-2.93	Denmark	3.61	Lithuania	7.40
Sweden	-2.87	Cyprus	4.00	Cyprus	7.76
Denmark	-2.63	Latvia	4.63	Hungary	7.81
Luxembourg	-2.55	Bulgaria	4.83	Latvia	7.97
Finland	-2.50	Poland	5.36	Romania	8.39
Poland	-1.99	Lithuania	5.76	Poland	11.86
Estonia	-1.23	Estonia	5.83	Croatia	15.07
Lithuania	0.00	Croatia	6.83	Bulgaria	15.84
Ireland	5.48	Ireland	20.50	Ireland	29.40

Source: Eurostat

EQ23.2: To what extent have the initial RRPs remained relevant/feasible to implement until 2026 (i.e., scope of changes made to the RRPs till the cut-off date)?

The **continued relevance of the RRPs is ensured** by the following elements:

- The programming stage was done in very close cooperation between the EC and the MSs with countries having sufficient leeway to design the RRPs in line with national/regional needs;
- The reforms and investments are linked to the CSRs, which are typically linked to strategic reforms that take time to implement (see EQ2.4);

- The twin transformation (green and digital), which is an overarching EU-wide policy for years to come, is at the heart of the RRF and consequently the RRPs;
- The RRF has envisioned a mechanism for adaptation of the RRPs, which is currently being implemented (see EQ24).

Practically, **no interviewee questioned the overall relevance of the RRPs**. Most interviewees mentioned the CSR long-term relevance and the continued relevance of green and digital reforms/investments. More granular look into the relevance of specific measures explored in the case studies confirms the relevance of the RRPs (e.g., the analysed active-labour market policies, rule of law measures, the measures in support of SMEs, energy efficiency, and eHealth measures).

On one hand, **the relevance of the 2026 deadline is well-understood across stakeholders**, particularly as concerns reforms. It is acknowledged that the deadline has to play a role in accelerating reforms. Furthermore, the disbursement deadline allows the EU to borrow, as it gives credibility on the completion of reforms and investment. On the other hand, the 2026 limits the investment measures only to mature ones, because they would otherwise not be completed by this hard deadline. While this allows for some level of demarcation between RRP and non-RRP actions, this has also **limited the choice of interventions** and raises questions about the additionality of investments (see the EU added value criterion). For example, Poland considered off-shore green energy investments, but tendering showed that completing the investments by mid-August 2026 would likely not be feasible, which led to not including a worthwhile measure in the RRP. The opinion that the RRF does not allow for some big new investments because of its timeline has been pointed out by several other countries, as well, in particular as concerns clean technology measures, which would require 5-10 years. According to interviewees, **the close deadline of 2026 has limited the ambitions in the REPowerEU chapters**.

As concerns **feasibility**, national authorities have already flagged that not all the milestones and targets - in particular those related to infrastructure investments - can be completed by August 2026 due to reasons ranging from strategic (political instability, too high level of ambition in the RRPs) to more operational ones (delays in implementation, lack of interest in some measures due to the short timelines, following standard and lengthy investment procedures). For this reason, several member states decided to propose an amendment to their plans, and in particular those measures where the timeline is considered to have become unrealistic. This should in principle decrease some of the risks in terms of feasibility of the of the fulfilment of milestones and targets by the 2026 deadline. With respect to the delays observed in the current fulfilment of milestones and targets, this is expected also to be reduced once payment requests are sent to the Commission. As of today, several milestones and targets that are reported as completed by member states in their bi-annual reporting have not yet been assessed by the Commission even though de facto significant progress has been achieved in the implementation.

EQ24: To what extent is the instrument suffic*iently flexible/agile to adjust to changing circumstances?*

Key findings:

The modification of the plans is a natural necessity since plans are conceived over a 6-year time frame, but **most national authorities think that the RRF is either not at all or only to a limited extent flexible**. The most cited reasons for this opinion are the plan modification procedures do not distinguish between small and major adjustments, even if targeted revisions were processed faster; lengthy procedures and the significant time lag - up to almost one year in some cases - between the decision to modify the plans and the final approval of the modification by the Council; rigidity in the modification of the timeline for milestones and targets.

Since the adoption of the RRF Regulation, but especially in the face of the changing circumstances linked to the war in Ukraine, and the consequent pressure on energy, food and other commodity prices, as well as the disruptions in global supply chains and logistics, the question on whether the M&Ts agreed in the plans could be revisited became the object of an extensive debate. In part we have illustrated above, the discussion on the EC assessment criteria for the plans' implementation. In this case, we have stressed that the perception of MSs is that of an **increasing rigidity in the interpretation of milestones and targets fulfilment** even though the Communication of February 2023 (COM(2023) 99 final) was an important step to clarify the margins for manoeuvre for MSs, especially when it comes to investments.

The discussion on flexibility however is broader than M&Ts assessment and also includes the possibility to change the plans. The RRF Regulation in this respect foresees three venues to change the plans: objective circumstances (Article 21.1), additional loans (Article 14.4) and revisited 30% financial contribution (Article 11.2). As of 5 November 2023, **all 27 MSs have submitted a request for modification of their plan**. Four member states submitted two requests for modification (Italy, Finland, Germany, Ireland). The EC **endorsed the request of eighteen countries**: Austria, Czechia, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, Spain, and Sweden. Fourteen requests have been approved by the Council: Czechia, Estonia, France, Germany, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. The table below summarises the timeline of the plans' modification.

Table 18: Timeline of RRPs modification (updated 05 November 2023)

Member State	Date of submission of Plan modification(s)	Date of Commission endorsement	Date of Council approval
Austria	14/07/2023	19/10/2023	
Belgium	20/07/2023		
Bulgaria	29/09/2023		
Croatia	31/08/2023		
Cyprus	01/09/2023		
Czechia	30/06/2023	26/09/2023	17/10/2023
Denmark	31/05/2023	19/10/2023	
Estonia	09/03/2023	12/05/2023	16/06/2023
Finland	26/01/2023	28/02/2023	14/03/2023
	05/10/2023		
France	21/04/2023	26/06/2023	14/07/2023
Germany	09/12/2022	19/01/2023	14/02/2023
	15/09/2023		
Greece	31/08/2023		
Hungary	31/08/2023		
Ireland	22/05/2023	26/06/2023	14/07/2023
	26/10/2023		
Italy	07/08/2023	28/07/2023	19/09/2023
	11/07/2023		
Latvia	26/09/2023		
Lithuania	30/06/2023	24/10/2023	
Luxembourg	11/11/2022	12/12/2022	17/01/2023
Malta	26/04/2023	26/06/2023	14/07/2023
Netherlands	06/07/2023	29/09/2023	17/10/2023
Poland	31/08/2023		
Portugal	26/05/2023	22/09/2023	17/10/2023

Member State	Date of submission of Plan modification(s)	Date of Commission endorsement	Date of Council approval
Romania	08/09/2023		
Slovakia	26/04/2023	27/06/2023	14/07/2023
Slovenia	14/07/2023	29/09/2023	17/10/2023
Spain	06/06/2023	02/10/2023	17/10/2023
Sweden	24/08/2023	19/10/2023	

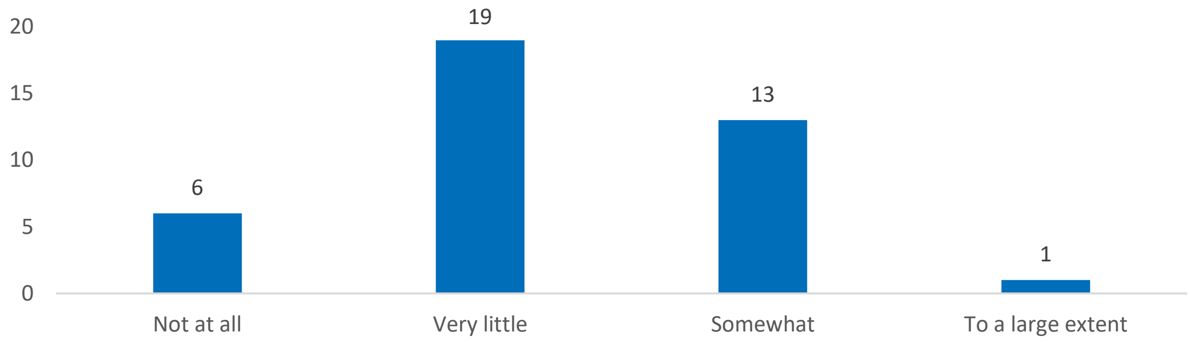
Source: EC Data

National coordination bodies unanimously agree that **the modification of the plans is a natural necessity since plans are conceived over a 6-year time frame during which multiple factors can occur which require adjustment and modifications.** This is particularly true in the case of the most innovative investments that entail a certain degree of risk that is to be considered. And even more true considering the external factors that significantly affected – as illustrated above – the roll-out of the recovery and resilience plans. At the same time, national coordinators agree that such flexibility is to be applied to investments more than reforms that are instead meant to be structural and to address the fundamentals of national economies.

When asked about the RRF flexibility and capacity to adjust to the changing circumstances, however, **the perception of national coordination bodies is overall negative**. As illustrated in the following figure, **25 out of 39 respondents think that the RRF is either not at all or only to a limited extent flexible**. The remaining think instead that the RRF is flexible only to some extent. Overall, MSs think that the revision process is burdensome, slow and implies unnecessary complexity. For instance, some countries highlight that the **plan modification procedures do not distinguish between small and major adjustment** and point to the risk in terms of efficiency of too rigid verification mechanisms. According to some other MSs instead in the assessment of the plans' modification request and so in the use of flexibility, **a difference should be made between new investment projects**, usually riskier and that require more adjustments, and already structural investment projects. Other countries point to the **lengthy procedures and the significant time lag** (up to almost one year) between the decision to modify the plans, the submission to the EC, the assessment of the latter and the final approval of the modification by the Council. This is a time during which, ministries and the public administration remain on hold and in uncertainly and the projects' implementation is delayed. It should be noted that targeted revisions were processed faster than more encompassing ones. Nevertheless, according to other MSs, the result of this lack of flexibility is that the plans' modification becomes more of an administrative cost than an adjustment to changing circumstances in turbulent times. They further lamented the **rigidity in the modification of the timeline for milestones and targets** and argued that the process of amending the plans is a very cumbersome administrative process, partly due to the excessive level of granularity in the description and costing of the projects and their objectives.

Only one country has manifested satisfaction with the degree of flexibility of the RRF, which is considered to offer a good possibility to adjust the plan if objective circumstances make implementation no longer possible, at the same time guaranteeing that MSs still commit to what the promised to deliver at the adoption of the plans.

Figure 37: RRF sufficiently flexibility and agility to adjust to the changing circumstances.



Source: survey with national authorities

EQ25: *What was the rationale behind MS decisions to apply - or not apply - for loans under the RRF?*

Key findings:

Decisions of MSs to apply or not for loans under the Recovery and Resilience Facility (RRF) are driven by **a complex interplay of financial and non-financial considerations**. Some MSs, facing pre-COVID high debts or structural deficits, have sought additional support to facilitate a robust recovery from the crisis, including RRF loans, which for them offer lower interest rates compared to market rates. Conversely, countries with sound public finances might refrain from applying for loans, preferring not to increase their debt burden or engage with loans that could carry higher interest rates than market alternatives. **Non-financial factors** are also important drivers of MS choices. Some countries may apply for loans to amplify the ambition of their recovery and resilience plans, seeking additional funds beyond what grants provide.

In line with Article 14 of the Regulation (EU) 2021/241 (2021) of the EP and of the Council establishing the Recovery and Resilience Facility, "the EC may grant the MS concerned a loan for the implementation of its recovery and resilience plan" until December 2023. By the end of August 2023, MSs can request support in the form of loans providing information on the increased financial requirements associated with extra reforms and investments outlined in the recovery and resilience plan. Additionally, the request should reflect a higher cost for the recovery and resilience plan compared to the maximum financial contribution provided through non-repayable contributions.[107]

As of September 1, 2023, 13 MSs had formally indicated their decisions regarding the utilisation of loan support as per the revised RRF Regulation's Article 14(6). Greece, Italy, Cyprus, Poland, Portugal, Romania and Slovenia have been firstly allocated under the RRF loan support under the Council Implementing Decision. Following the revision of their national plans and the submission of the REPowerEU Chapter, Belgium, Czechia, Spain, Croatia, Lithuania, and Hungary made the request for loans support for the first time, while Greece, Poland, Portugal, and Slovenia requested additional loans support. In case of positive assessment and approval of the loan request, the final loan support allocated under the RRF would be around 292.6 billion Euro, corresponding to 76% of the total loan support available.

[107] The maximum volume of the loan support for each Member State shall not exceed 6,8 % of its 2019 GNI in current prices.

Table 19: Overview of MSs with loan support allocation under the RRF (preliminary)

Country	Committed loans under first RRPs - amount (Euro)	Additional requested loans after the revision of RRPs – amount (Euro)	Total loans to be committed – amount (Euro)
Belgium		264,200,000	264,200,000
Czechia		818,100,000	818,100,000
Greece	12,727,538,920	5,000,000,000	17,727,538,920
Spain		84,267,050,000	84,267,050,000
Croatia		4,442,508,187	4,442,508,187
Italy	122,601,810,400		122,601,810,400
Cyprus	200,320,000		
Lithuania		1,722,000,000	1,722,000,000
Hungary		3,920,000,000	3,920,000,000
Poland	11,506,500,000	23,034,803,518	34,541,303,518
Portugal	2,699,000,000	3,191,756,353	5,890,756,353
Romania	14,942,153,000		14,942,153,000
Slovenia	705,370,000	587,000,000	1,292,370,000
EU27	165,382,692,320	127,247,418,058	292,630,110,378

Source: EC Final overview of MSs' loan requests under the RRF – Note to the Council and EP. 1 September 2023: https://EC.europa.eu/system/files/2023-09/01092023-Final-overview-of-MS-loan-requests-under-the-RRF_en.pdf.

This EQ explores the reasons behind MSs' decisions to apply - or not apply - for loan requests under the RRF. These reasons revolve around both financial and non-financial considerations. MSs' financial motivations for either seeking RRF loans or refraining from doing so can be delineated as follows:

Potential Financial Reasons to Apply for RRF Loans:

1) *High debt or/ structural deficit*: Some MSs, facing pre-COVID high debts or structural deficits, have sought additional support to facilitate a robust recovery from the crisis. This support may include opting for RRF loans, which offer lower interest rates compared to market rates. Such decisions are aimed at alleviating financial pressures on public finances.
2) *Compensation for grant allocation reduction*: the allocation of funds and potential revisions play a key role in the decision-making process. If an MS's grant allocation from the RRF has been revised downwards, they might consider applying for loans to make up for the shortfall and ensure the continuity of their projects.

Potential financial reasons not to apply for RRF loans:

1) *Sound public finances*: MSs with healthy public finances might choose not to apply for loans as they have no incentive to increase their debt or seek offered loans with potentially higher interest rates compared to their market alternatives. Another factor is the financing conditions of the market. If the market provides more attractive financing options with less bureaucratic requirements, countries might choose to pursue those instead of RRF loans. There are exceptions like Belgium which, despite its ability to self-finance in the market, is evaluating the utilisation of RRF loans.
2) *Inflation concerns*: Some MSs may decide not to apply for loans to avoid exacerbating inflation. Injecting additional money into an economy already facing inflationary pressures could worsen the situation. Ireland, for instance, has considered this aspect in its decision-making.
3) *Initial sufficiency of grants*: Some countries might initially consider grants sufficient to meet their plan's objectives. However, changing economic conditions like inflation and overly optimistic projections might later necessitate applying for loans to bridge the funding gap.

Beyond financial considerations, non-financial factors also wield significant influence on MSs' choices. MSs may choose to apply for loans as a way to *boost the ambition of their plans* requiring additional funding beyond what grants can provide. At times, grants might be initially deemed sufficient, but due to factors like inflation and overly optimistic planning, an increase in loans could become necessary. Czechia's decision to request additional loans alongside grants highlights this motivation, as the added funds are intended to elevate the scale and impact of planned projects. The additional loans will be used for projects such as supporting households for heat sources, renovating houses, expanding the renovation of businesses, and installations of photovoltaics on rooftops. The additional funds are necessary to boost the ambition of the plan. This was also the rationale originally followed by Slovenia. However, after the catastrophic floods in August 2023, Slovenia amended its RRP and required additional loans to support investments aimed at improving resilience and sustainability.

On the other hand, the *administrative burden* associated with RRF funding might deter some MSs from pursuing this option. Estonia's decision not to opt for RRF loans was influenced both by unfavourable market conditions and, most importantly, by the RRF funding utilisation process that was considered highly complex.

In conclusion, MSs' decisions to apply for or not apply for loans under the RRF are shaped by a mix of financial and non-financial considerations. Factors such as the health of public finances, the need for additional funding, inflation concerns, administrative burden, and the scale of planned projects all play a role in determining whether countries opt for RRF loans or not.

4. Specific analyses

This section provides two **additional** analyses, which complement the evaluation questions. The Terms of Reference also envisage as a specific analysis country-level analysis, but it has been fully incorporated into the answers to the evaluation questions.

4.1. REPowerEU

The REPowerEU plan was presented in May 2022 as a response to the Russian invasion of Ukraine, which led to energy price spikes and heightened supply risks. The EC published the updated guidance on recovery and resilience plans in February 2023 and the Regulation on REPowerEU entered into force in March 2023. Using the Fit for 55 package of proposals as a basis, and complementing the actions to secure energy supply and storage (Regulation (EU) 2022/1032), the purpose of REPowerEU is to help MSs to: save energy, produce clean energy; and diversify their energy supplies. The amended RRF Regulation specifies the following objectives that the measures proposed in the REPowerEU chapters should contribute to:

a. improving energy infrastructure and facilities to meet immediate security of supply needs for gas, including LNG, notably to enable diversification of supply in the interest of the Union as a whole.
b. boosting energy efficiency in buildings and critical energy infrastructure, decarbonising industry, increasing production and uptake of sustainable biomethane, renewable or fossil-free hydrogen and increasing the share and accelerating the deployment of renewable energy
c. Addressing energy poverty
d. Incentivising the reduction of energy demand
e. Addressing internal and cross-border energy transmission and distribution bottlenecks, supporting electricity storage, and accelerating the integration of renewable energy sources, and supporting zero-emission transport and its infrastructure, including railways.
f. Supporting the objectives set out in points (a) to (e) through an accelerated requalification of the workforce towards green skills and related digital skills, as well as support of the value chains in critical raw materials and technologies linked to the green transition.

As of 4 October 2023, **22 MSs have submitted their REPowerEU chapters** to the EC. To date, 46.8 billion euros of the available 264.1 billion[108] for financing as part of the REPowerEU chapters was requested, equivalent to **almost 18% of the available funds**. The 22 REPowerEU chapters submitted thus far amount to 17 billion in grants (**85% of the available grant funds**) and 28.3 billion in loans (**13% of the available loan funds**). While there is no compulsory deadline for the submission of REPowerEU chapters, MSs were encouraged to submit their proposals by 30 April 2023 (only four MSs submitted their REPowerEU chapters by that date). To be able to benefit from relevant RRF grant and loan resources the EC assessment and the Council adoption of REPowerEU chapters need to take place by the end of 2023. In this respect, the EC encouraged MSs not to submit any modified RRPs after 31 August 2023, as there will be no guarantee that the assessment and adoption process can be finished on time for the signing of the financing and/or loan agreements still in 2023. Out of 22 REPowerEU chapters submitted to date, 19 were submitted by 31 August 2023.

The EC was expected to assess whether the modified RRPs and REPowerEU chapters fulfil all the assessment criteria in the RRF Regulation within two months and make a proposal for a Council

[108] €264.1 billion are broken down to €20 billion in new grants; €2.1 billion and €17 billion in possible voluntary grant transfers, respectively from the Brexit Adjustment Reserve (BAR) and cohesion policy funds; and €225 billion in sums still available for RRF loans. To date, the Commission has not received transfer request from any Member States to transfer up to 5% of their initial allocation under cohesion policy funds to the RRF.

Implementing Decision. MSs will then have up to four weeks to endorse the EC's assessment. **The EC has complied with the two-month assessment deadline for the first four amended RRPs** (Estonia, France, Malta, and Slovakia). In addition to the four REPowerEU Chapters already approved by the Council, five other Chapters were recently positively assessed by the EC, however **the timeframe of the assessment was longer** and took between 2.5 months (Slovenia) to almost 4 months (Portugal), which may lead to delays in their implementation.

Table 20: Submission of REPowerEU chapters as of 4 October 2023 (amounts in € million)

MS	Submission	EC endorsement	Council approval	RRF grants[109]	Transfers from BAR	Additional loans[110]	Total resources
EE	09/03/2023	12/05/2023	16/06/2023	83.4	6.6		90
FR	20/04/2023	26/06/2023	14/07/2023	2,300	504		2,804
MT	26/04/2023	26/06/2023	14/07/2023	30	40		70
SK	26/04/2023	27/06/2023	14/07/2023	367	36.3		403.3
PT	26/05/2023	22/09/2023		704	81	3,200	3,985
DK	31/05/2023			131	66		197
ES	06/06/2023	02/10/2023		2,600	58	1,700	4,358
CZ	30/06/2023	26/09/2023		682	55	5,800	6,537
LT	30/06/2023			194	4.7	1,700	1,898.7
NL	06/07/2023	29/09/2023		455	280		735
AT	14/07/2023			210			210
SI	14/07/2023	29/09/2023		116	5		121
BE	20/07/2023			282	229	215	726
IT	07/08/2023			2,760			2,760
SE	24/08/2023				66		66
EL	31/08/2023			769.22	25.6	5,000	5794.82
PL	31/08/2023			2,760		2,300	5,060
HU	31/08/2023			700		3,900	4,600
HR	31/08/2023			269	7.2	4,400	4,676.2
CY	01/09/2023			52.5	52		104.5
RO	08/09/2023			1400	43.2		1443.2
LV	27/09/2023			124	10.9		134.9
Totals				16,989.12	1,570.5	28,215	**46,774.62**

Note: As most of the amended RRPs and REPowerEU Chapters are still under assessment (as of October 2023), and only four were approved by the Council, the values provided in the table are estimates based on available information included in the Recovery and Resilience Scoreboard.

Source: Recovery and Resilience Scoreboard

As to the content of the REPowerEU chapter, this new section of the RRPs must outline new energy-related actions and their corresponding milestones and targets. REPowerEU measures may be either

[109] Additional non-repayable support available per Member State for REPowerEU measures (20 billion in grants)

[110] Additional loans requested as part of the revisions. For example, the Italian RePowerEu chapter is worth over 19 billion, but Italy only requested additional 2.7 billion in grants, the rest of the REPowerEU measures will be financed by reshuffling of the already allocated loans to REPower measures

new reforms and investments or the scaling-up of reforms and investments already included in the RRPs of the respective MS aimed at driving the green transition.

The review of the REPowerEU chapters, which are briefly presented on the next pages, leads to the following main observations:

- In total, **75 reforms and 150 investments** (some of them scaled up from the already approved RRPs) have been included in the 22 REPowerEU Chapters[111].
- The majority of the proposed measures **respond to objective b)** aiming to introduce energy efficiency measures and faster deployment of renewable energy. Such measures usually include energy renovation of buildings and introduction of smart grids, and with regard to renewable energy, faster permitting, expansion of electricity grids, introduction of PPAs to ensure stable remuneration, simplifying grid connection procedures for renewables, obligation to install rooftop solar panels.
- Other measures included by some of the MSs in their REPowerEU chapters included: zero emission/sustainable transport (France, Croatia, Poland, Belgium, Slovenia, Austria, Portugal), green upskilling (Denmark, Slovakia, and Italy) and addressing internal and cross-border energy transmission and distribution bottlenecks (Estonia, Malta, Slovakia, Italy, the Netherlands, Slovakia, Hungary, Poland). Countries targeting renewable or fossil-free hydrogen investments are France, Austria, Croatia, and Spain.
- To date only two countries (Croatia and Poland) included measures related to **investments in fossil fuels** in their draft REPowerEU chapters with a view to y meeting the **objective a)** of improving energy infrastructure and facilities to meet immediate security of supply needs for gas, including LNG.

MS-level review

Reforms and investments in approved REPowerEU chapters (Estonia, France, Malta, Slovakia)

EE: The REPowerEU chapter includes one scaled-up reform and two new investments. The reform aims at facilitating the deployment of renewable energy sources by defining suitable areas for wind energy, streamlining the permitting framework and building up capacity in permitting authorities. The two investments will facilitate the absorption of renewable energy in the country's distribution network and increase the production and uptake of sustainable biomethane (Council of the European Union, 2023a).

ES: The adopted REPowerEU chapter includes a new reform, a scaled-up investment and seven new investments included, which contribute significantly to the green dimension of the plan. The reform aims at facilitating the deployment of renewable energy sources and streamlining the processing of permitting applications. The seven new investments focus on renewable hydrogen, the value chain for renewable energy, electricity networks, and the decarbonisation of industry. The scaled-up investment will support energy self-consumption, energy storage and energy communities.

FR: The REPowerEU chapter includes three reforms, three new investments and one scaled-up investment. In terms of reforms the following are included: law on the acceleration of renewable energy production, which aims to solve the main bottlenecks that currently hinder the deployment of renewable energy, setting up the General Secretariat for Ecological Planning responsible for coordinating the development of national strategies on climate, energy, biodiversity and the circular economy, preparation of energy sobriety plan. In terms of investments, France plans to invest in decarbonising industrial heat, energy efficiency and process change investments in industry to reduce fossil energy consumption, support four projects contributing to the uptake of hydrogen production and hydrogen-based technology and zero-emission transport, support the thermal

[111] For one country, Lithuania, no information was available on the number of measures included in the REPowerEU Chapters (the chapter was not publicly available, nor the information was included in the Recovery and Resilience Scoreboard)

renovation of public buildings, and scale up the measure of energy renovation of private buildings including energy sieves (Council of the European Union, 2023b).

MT: The REPowerEU chapter added to Malta's RRP includes a reform aiming at accelerating the permitting of renewable energy projects and introducing an obligation to install rooftop solar panels on certain new buildings. It also includes an investment targeted at strengthening and widening the electricity distribution network, through investments in the grid, distribution services and battery storage (Council of the European Union, 2023c).

SK: The REPowerEU chapter includes six new reforms, four new investments and four scaled-up investments. The reforms will accelerate the deployment of renewables by defining suitable areas for wind energy development in Slovakia, streamlining the permitting framework, including for the use of geothermal energy and heat pumps, and simplifying grid connection procedures for renewables. The investments will expand the capacity of the electricity grid and boost sustainable transport through zero-emission vehicles. The REPowerEU chapter also includes measures to increase energy efficiency, for instance, by investing and supporting the house renovation of families at risk of energy poverty, and measures to accelerate workers' take-up of green skills (EC, 2023o).

The table below provides an assessment of the measures included in the four approved REPowerEU Chapters in terms of their contribution to the six objectives. **All four countries included measures corresponding to objectives b) and e)** which focus on energy efficiency, renewable energy deployment and improvements in internal and cross-border energy transition and distribution bottlenecks. Finally, according to the EC's assessment, **most measures included in the four REPowerEU Chapters have a cross-border or multi-country dimension** or effect through their contribution to reduction in the dependency on fossil fuels (reduced energy demand, deployment of renewable energy and better cross-border transmission of renewable energy) and securing energy supply in the Union as a whole.

Table 21 REPowerEU Chapter measures' contribution to the six objectives

Objective		Estonia	France	Malta	Slovakia
a.	improving energy infrastructure and facilities to meet immediate security of supply needs for gas, including liquified natural gas, notably to enable diversification of supply in the interest of the Union as a whole				
b.	boosting energy efficiency in buildings and critical energy infrastructure, decarbonising industry, increasing the production and uptake of sustainable biomethane and of renewable or fossil-free hydrogen, and increasing the share and accelerating the deployment of renewable energy	X	X	X	X
c.	addressing energy poverty		X		X
d.	incentivising reduction of energy demand		X		X
e.	addressing internal and cross-border energy transmission and distribution bottlenecks, supporting electricity storage and accelerating the integration of renewable energy sources, and supporting zero-emission transport and its infrastructure	X	X	X	X
f.	Supporting the objectives set out in points (a) to (e) through accelerated requalification of the workforce towards green skills and related digital skills, as well as support of the value chains in critical raw materials and technologies linked to the green transition		X		X

Own elaboration based on EC's assessments.

Reforms and investments in the submitted REPowerEU chapters

IT: The REPowerEU chapter is divided into 19 investment measures, divided into three main blocks, and six reforms. Out of the nineteen investment measures included in the blocks, four represent a scale-up of measures already contained in the NRRP. The reforms refer to reduced cost connection to gas networks for biomethane production; Power Purchasing Agreements to ensure stable remuneration for those who invest in renewables; green skills for private and public sector; Road map for rationalisation of inefficient fossil fuel subsidies; and consolidated text regarding the legislation on licenses for renewable sources. The three main areas comprising several investments are notably related to the enhancement of energy grids, energy efficiency and strategic supply chains.[112]

PT: With the RRP revision, Portugal proposed a REPowerEU chapter, including six reforms and 18 investments. These 24 measures focus on energy efficiency in buildings, renewables and biogas, sustainable transport, the electricity grid and green industry, i.e., supporting the production of climate technologies such as wind turbines, photovoltaic panels, and heat pumps.[113]

DK: The REPowerEU chapter includes four measures (one reform and three investments). The reform is related to the establishment of a National Energy Crisis Staff (NEKST) tasked with driving a reform agenda to reduce administrative burdens and simplify permitting procedures in order to speed up the green transition. Thereas the investments are covering green upskilling; replacing oil burners and gas furnaces (upscaling existing measure); and Carbon Capture and Storage (CCS) (upscaling existing measure) (Danish Government, 2023).

LT: The proposed REPowerEU chapter includes new measures aimed at facilitating investments in renewable energy, developing green financial products, expanding the production of renewable energy capacity and supporting the renovation of multi-apartment buildings (EC, 2023p).

NL: The submitted REPowerEU chapter includes one new reform and one new investment. The investment is a scaleup of an existing measure already included in the plan in the area of energy efficiency, whereby firms and households can benefit from this subsidy scheme for taking energy-saving measures. The reform concerns measures to address the congestion of the electricity grid and facilitate its expansion. It also aims to improve coordination related to public investments in the electricity grid so that these can be better prioritised, and to simplify the permitting for renewable energy projects to speed up the construction process (EC, 2023q).

AT: The proposed REPowerEU chapter contains two new reforms that aim at streamlining permitting procedures for renewable energy projects and the adoption and implementation of a national Hydrogen Strategy. The chapter also includes one new support scheme for "rooftop" solar power installations in buildings owned by citizens and NGOs, as well as the scale-up of an investment already included in the original plan to buy zero-emission commercial vehicles and start building recharging infrastructure to reduce road transport greenhouse gas emissions (EC, 2023r).

SL: The REPowerEU chapter includes one reform and four investments. The reforms aim at facilitating the deployment of renewable energy, shortening permitting procedures and promoting sustainable mobility. The investments aim at accelerating the decarbonisation of Slovenia's industry, strengthening its national energy distribution network, and giving a boost to sustainable mobility, in both the public and private sectors (EC, 2023r).

SE: The submitted REPowerEU chapter includes one new reform, as well as two existing measures that have been scaled up. The scaled-up investments refer to energy efficiency improvements of

[112] IT secondary database.
[113] PT secondary database.

apartment buildings and support for rental housing and housing for students, whereas the reform aims at faster permitting process for electricity network construction (Regeringskansliet, 2023).

BE: REPowerEU chapter proposed by Belgium contains four new reforms, 16 new investments and eight measures transferred or reinforced compared to the initial plan. Several reforms and investments in this chapter aim to accelerate the development of renewable energies, in particular by streamlining authorisation procedures and shortening the processing of appeals against authorisations. Other measures encourage the energy renovation of buildings, support the installation of heat pumps and solar panels, or aim to decarbonize the industry. Five investments (new and transferred ones) concern sustainable mobility (EC, 2023s).

EL: The REPowerEU chapter includes energy efficiency measures related, for instance, to energy renovations for households and utilities, and to increasing penetration of renewable energy sources, with measures promoting energy storage, as well as reforms promoting the transition towards a smart grid and energy sharing (EC, 2023t).

HR: The REPowerEU chapter covers measures related to energy security, uptake of renewable energy sources, energy efficiency of buildings, transport and fossil-free hydrogen. Seven new reforms and 12 new investments to deliver on the REPowerEU objectives are included, as well as eight existing measures which have been scaled up (EC, 2023u).

HU: The REPowerEU chapter covers both reforms and new and scaled-up investments (it includes five reforms and five investments). The reforms include incentives to expand energy storage capacity and a commitment to substantially boost the country's energy system's ability to integrate renewables, to be mirrored by one of the chapter's investments in supporting the electricity network development. The many other investments in the chapter also include the improvement of the energy efficiency of households, companies, and the public sector (EC, 2023u).

PL: The REPowerEU chapter contains new investments aiming at the development of electricity distribution networks in rural areas, supporting institutions implementing the REPowerEU measures, and developing gas infrastructure to enable diversification of supply. In addition, five investments were transferred from the initial plan to the REPowerEU chapter, three of which have been scaled up. These concern support for electricity transmission networks, renewable energy sources, energy storage, low- and zero-emission buses, and offshore wind farms. The chapter also includes new proposed reforms concerning energy communities, regulatory aspects linked to the distribution network and measures to facilitate the deployment of technologies for the energy transition and to decrease imports of natural gas from Russia (EC, 2023u).

CY: The proposed REPowerEU chapter covers measures related to energy efficiency in buildings, the electrification of transport, and research and development in the field of the green transition. Two new reforms and two new investments to deliver on the REPowerEU objectives are included, as well as five existing measures which have been scaled up (EC, 2023v).

RO: The REPowerEU chapter covers two new reforms and six new investments, as well as a strengthened measure that was already in the plan. The chapter's reforms and investments are linked to increasing green energy production, improving the energy efficiency of buildings, and strengthening the skills of the production workforce of green energy (EC, 2023w).

LV: REPowerEU chapter contains a reform to facilitate the development of renewable energy communities and energy self-generation. The reform also aims at increasing the uptake of sustainable biomethane. The chapter contains three investment measures. Two investments seek to improve the electricity grid by increasing its capacity, by digitalising and securing it, and by synchronising it with the EU grid. The third investment aims at increasing the share of sustainable biomethane in final energy consumption by creating a regional centre, where sustainable biomethane can be injected into existing infrastructures, building a regional biomethane 'injection point' (EC, 2023x).

4.2. Gender equality

This chapter includes the more in-depth analysis executed for **Evaluation Question 4.1**, to what extent the RRF has been effective in cushioning the social and economic impact of the crisis on women. The analysis builds upon a review of **relevant literature, descriptive statistics, and 7 interviews with 12 interviewees** (including 3 gender equality experts, 4 staff members of European Institutions and 5 experts on specific national measures). The analysis includes sections which elaborate on various factors which are expected to influence the effectiveness of the Recovery and Resilience Facility (RRF) including (1) gender equality considerations in the RRF regulation, (2) the share, quality and topic areas of gender-flagged measures in the RRPs, and (3) the degree of gender mainstreaming in the RRPs, and (4) gender-related progress, revisions and implementation. The analysis will then examine the initial outputs and expected results and impacts of the RRF.

Gender equality considerations in the RRF Regulation

The RRF regulation makes several references to gender equality. Article 18(4)(o) of the EU Regulation 2021/241 (2021) specifies that Member States (MSs) should explain how the measures in the RRP will contribute to gender equality and consider it throughout the process of preparing and implementing their RRPs. In addition, the RRF Regulation required MSs to address Country Specific Recommendations (CSRs) issued in 2019 and 2020 in their RRPs, including gender-related ones. To ensure the monitoring of the implementation of the RRF, MSs also have to report on the progress of implementation (Article 27 of RRF Regulation). The EC has adopted two delegated acts, which allow for the tracking of the gender impact of the RRF:

- Delegated Act 2021/2105 (2021) entails that measures with a focus on gender equality will be assigned flags. The EC, in consultation with Member States, assigned flags to measures with a focus on gender equality. It should, however, be noted that the EC applied this methodology not only applies anymore to measures of a social nature, but also to all other measures included in adopted RRPs which focus on gender equality.
- Delegated Act 2021/2106 (2021) establishes 14 common indicators against which MSs report twice a year on the progress towards the objectives of the Facility. Four of these indicators are required to be disaggregated by gender, namely indicators 8, 10, 11, and 14 (respectively the number of participants in education or training, number of people in employment or engaged in job searching activities, number of young people aged 15-29 years receiving support under the Facility).

Efforts to incorporate gender equality within the RRF Regulation have been acknowledged, but at the same time, some have highlighted that more (should and) could have been done. Some interviewees and literature (EIGE, 2023; Sapała, 2022) have mentioned limitations in the RRF regulation, such as the late inclusion of gender equality in the Regulation, and arguably insufficient legally binding requirements when compared to EU's legal obligation to combat gender equality. Also, compared to the green and digital transition, the Regulation does not set a minimum threshold for spending relating to gender equality, nor has it been incorporated in the 11 main criteria for assessing the plan. Interviewees have acknowledged (some of) these limitations, while also underlining the challenging context in which the RRF was established, which left little room to develop a full-fledged approach to gender equality. Overall, the introduction of gender equality in a financial and emergency instrument with such magnitude has by some been described as a **considerable accomplishment** (also in comparison to other equality areas, which do not have a specific flagging methodology or disaggregated common indicators).

The quantity, quality, and topic areas of gender-flagged measures in the RRPs

MSs have different shares of measures assigned with a gender equality flag in their RRPs (EC, 2022a; EC, 2023h; EIGE, 2023). According to primary databases, 134 measures are considered to have been flagged for gender equality (with 266 linked milestones and targets). Some MSs have a comparatively high share of measures with a gender equality flag (CZ, AT, ES, FI, IR, NL and SE). Two MSs do not have any flagged measures at all (DK and LU) (EC, 2022a; EC, 2023h).

Gender-flagged measures target gender equality to different extents. Some interviewees and studies (EIGE, 2023) emphasise that measures with a gender flag have an indirect link to gender equality, but that they are often not explicitly linked to gender equality (i.e. there is a lack of explicit references to gender equality in publicly available information on measures, milestones, targets and explanations). EIGE (2023) concluded that based upon publicly available information, only 16 MSs include explicit gender-targeted measures in their RRPs (BE, BG, CZ, DE, EE, EL, ES, FR, HR, IT, LV, HU, MT, AT, PT, RO). The EC has highlighted that the gender-flagged measures can indeed be directly or indirectly linked to gender equality, gender equality thus did not have to be the major focus of the concerned measures. In addition, they underline that gender flagging has happened not only within the social component, but across the six policy areas (to stimulate gender mainstreaming) (EC, 2023h; EC, 2023y).

MSs focus their measures on different topic areas, and some topic areas (e.g. women's participation in the labour market) are more emphasised than others (e.g. gender-based violence and improving women's participation in decision making). The effectiveness of the RRF could thus also vary between gender-related topic areas. Although the prioritisation of certain topic areas could be explained by the goal of the RRF and the scope to which gender equality was recognised, some considered it a main shortcoming that certain topics are not sufficiently addressed in the RRPs (EIGE, 2023; Farré, 2022). EIGE (2023) listed that many MSs prioritised measures which promote women's participation in the labour market, including investments on skilling, reskilling and upskilling women, acquisition of digital skills, getting more women into STEM and ICT and women entrepreneurship (incl. BE, CZ, DE, ES, HR, CY, MT, IE, AT, RO, IT, LV). Fewer MSs (incl. EE, ES, IT, PT and MT) have measures on gender inequalities in the workplace. Numerous MSs have measures which stimulate a better work-life balance (incl. BE, DE, EL, ES, HR, IT, CY, HU, AT, PL, LV, LT, SK, LT), most often focused on developing early childhood education and care, and to a lesser extent on addressing long-term informal care, or non-care related measures. Numerous MSs have prioritised investments to improve and create new health infrastructures, while only a few MSs have been found to invest in the working conditions in health professions traditionally taken-up by women (incl. IE, IT, LU, RO, SE), or support women's health (incl. EL, AT, RO). Also, only a few MSs focus on addressing the gender pension gap (incl. BE, ES, AT), improving women's participation in decision-making (incl. FR, CR, RO) combatting domestic violence (incl. ES, HR, PT), or gender-based violence more generally (incl. ES).

Various considerations regarding the quality and topic areas of measures are expected to be influential. Although having more measures targeted to some topic areas compared to others might lead to the impacts of the crisis on women being cushioned in some, but not in others, (in)direct effects on other topic areas could be expected. Some interviewees mentioned that some topic areas might be worth prioritising, since (1) they address relevant CSRs, (2) they are linked to the national areas most affected by the crisis, or (3) to the most effective intervention areas. Regarding CSRs, the RRF regulation required MSs to address gender-related CSRs issued in 2019 and 2020 in their RRPs (e.g., AT, CY, CZ, EE, ES, FR, IE, IT, MT, PL SI and SK). According to Dias and Grigaitė (2021) almost all of these MSs have an RRF component that directly addresses these CSRs, only one (EE) having an RRF component that indirectly addresses it. Interviewees also mentioned that some topic areas (e.g., universal childcare, equal employment opportunities) are pivotal due to the positive (spill-over) effects these might have on various topic areas related to gender equality. From a national perspective, these important areas have been considered to not always have received enough attention or supported enough (e.g., linked investments to reforms).

The degree of gender mainstreaming in the RRPs

There is some variation across literature and interviewees on to what extent gender mainstreaming has taken place in the RRPs and what the effects are. Gender mainstreaming has been understood as treating gender equality as a horizontal objective considered across all measures and across policy stages. According to some interviews and literature (Sapała, 2022), all the RRPs declare, in line with the RRF Regulation, to have treated gender equality as a horizontal objective. Some interviewees have mentioned that MSs have even surpassed expectations with regards to gender mainstreaming based upon what was required. According the EIGE (2023), however, gender equality seems to be a horizontal principle in only a few RRPs. 14 MSs (BE, DK, DE, EE, ES, IT, CY, LT, LU, AT, PL, LV, SI and SK) indicate that they took gender equality considerations into account when defining measures, approximately half of these (DE, ES, CY, LU, PL and SI) seem to treat it as a horizontal principle in at least some pillars. Only 2 MSs are considered to have established gender equality as a cross-cutting priority in their RRPs (ES, IT), but still have limitations. EIGE (2023) also found that many MSs had originally only to a limited extent planned to adopt a gender perspective during all policy stages. They listed different entry points for the EC and MSs to include gender equality throughout various stages (e.g. by including future CSRs that address gender equality, providing gender expertise within the TSI, and providing specific evaluations on gender equality).

Some interviewees and literature have referred to 'gender blind' measures and a 'male employment bias' in some sectors as influencing the effectiveness of the RRF with regards to gender equality (Farré, 2022; Klatzer and Rinaldi, 2020; Badalassi, 2022; Pimminger, 2022). Measures where gender mainstreaming has not taken place, have by some been referred to as 'gender blind'. According the EIGE (2023), in nearly half of the RRPS (e.g. those of BG, FR, IE, LT, HU, PL, RO, SI, SK and FI), a gender perspective was missing with regard to measures under the digital and green pillars of the RRF, and other MSs have arguably done it in an insufficient manner. Partly as a result, measures in the green and digital transition are expected to be leading to an increase in male employment and benefit men over women (in the short term) (Farré, 2022; Klatzer & Rinaldi, 2020; EIGE, 2023; Badalassi, 2022; Pimminger, 2022). This is due to the fact that sectors like construction, digitalisation, transport, and energy are traditionally male-dominated (De Luca, 2023; Clancy et al., 2023; Farré, 2022). On the other hand, some interviewees and literature (EC, 2022a) have underlined that measures in the **green and digital pillar are expected to have a positive impact** on gender equality through measures which will benefit women as final beneficiaries (in terms of employment and beyond), for example, by stimulating access to remote education, health services and affordable social housing. Common indicators, as discussed below, do not yet underpin a male employment bias (there are, however, also limitations and unclarities about the data it relies on).

Gender-related progress, revisions and implementation

Literature and all interviewees have highlighted that the implementation has and will have a critical influence on the effectiveness of the RRF in cushioning the impact of the crisis on women. Although the design and planning of the RRPs is expected to have an essential mark on the capacity of the RRF to address gender equality, there are limitations in deriving the impact of the plans, because of the changes that can happen within the implementation, methodological constraints, the ex-ante nature of the assessment and the performance-based nature of the RRF (EC, 2022a; EIGE, 2023).

MSs diverge in progress, but generally most gender-related milestones and targets are still to be fulfilled. According to primary databases, 23 milestones and targets linked to measures with a gender equality flag have been fulfilled, while 243 milestones and targets are non-fulfilled. For the milestones and targets planned for Q2 2023, 26% of the milestones and targets were fulfilled (23 out of 88 milestones and targets). Primary databases also show that MSs with directly gender-related CSRs diverge in progress. The MSs with the most fulfilled gender-related milestones and targets are Spain (11), Austria (3), and Italy (3). There is, however, also a range of countries with gender-related CSRs with one fulfilled milestone or target (incl. BG, CR, CY, EL, PT, SI) or no fulfilled milestones and targets linked to flagged measures (incl. SK, PL, IE, FR, EE, MA, CZ).

Several additional actions have been taken by the EC and MSs to include more gender equality considerations within implementation and evaluation. An important development includes that the REPowerEU Regulation, Regulation (EU) 2021/241 (2021), requires Member States to explain not only how they have consulted stakeholders (as already envisaged in the RRF Regulation), but also how stakeholders' feedback is taken into account the design of the REPowerEU chapter. The Guidance of RRPs in the context of the REPowerEU Regulation (EU) 2022/C 214/01 (2022), specifies that MSs should describe how the changes in their RRPs contribute to gender equality and equal opportunities for all. It outlines that MSs should include (1) how (gender) equality will be looked at in implementation and monitoring, (2) how equality and non-discrimination bodies will be involved in implementation, and (3) include, where possible, (gender) equality considerations in the revised milestones and targets. Other actions that have been taken to further include gender equality include that (1) gender expertise has been offered in the TSI, (2) country teams in the EC remain receiving support by an equality taskforce, (3) gender equality was discussed during the informal expert group in March 2023 in which Spain and Italy presented their approach to other MSs (EC, 2023), and (4) several analyses on the topic, including the review report and thematic analysis on equality, have been published (EC, 2022a; EC, 2023h).

Initial outputs and expected outcomes and effectiveness

The initial outputs and the expected outcomes and effectiveness of the RRF with regards to gender equality will be discussed based upon various sources. **Looking at the progress of the common indicators, it emerges that at EU level more women than men were supported by the RRF for three of the four disaggregated indicators and that other relevant indicators have progressed positively.** Specifically, more women were supported in employment or engagement in job-searching activities and digital skills. In addition to the four common indicators with disaggregated data, indicators 12 and 13 (capacity of health care and capacity of education and childcare facilities) are relevant from a gender perspective and show relevant progress as well. **Conclusions on the disaggregated data should, however, be treated with caution**. According to the RRF Scoreboard, currently six MSs (BG, DK, HU, LV, NL, PL) did not report any data yet for any of the four gender-disaggregated indicators. Regarding the other indicators, the share of MSs reporting data changes depending on the indicator. For indicator 8, 19 MSs have not reported any data, and for indicator 10 data is missing from 8 MSs (EC, 2023k). In addition, some of the stakeholders interviewed and literature (ECA, 2023c) raised concerns about the significance and the quality of the data used for the common indicators (for which MSs are responsible) and the extent to which the numbers can be exclusively attributed to the RRF intervention. The most updated version breakdown for each of the relevant common indicators based on RRF Scoreboard as of October 2023 is as follows (EC, 2023k):

- **Common indicator 8:** More men working in research facilities have been supported by the RRF in full-time equivalents (3,429 FTEs) compared to women (1,833 FTEs). All MSs with disaggregated data have supported more men in research.
- **Common indicator 10:** More women (3,730,678) are participants in education or training (in digital and other skills) due to support received through RRF measures compared to men (3,154,756) and non-binary (2,687). Especially on digital skills, more women (628,376) than men (334,254) have been supported.

- **Common indicator 11:** More women were supported in employment or engaged in job-searching activities due to the support of the RRF (409,036) compared to men (279,054). Especially more women were supported in the age categories 30 to 54 and 55 or over.
- **Common indicator 14:** More women aged 15-29 received support under the RRF (2,093,722) compared to men(2,021,423) and non-binary (51), although the difference between women and men is not so significant. There are, however, differences between MSs that have disaggregated data on whether more women, men or non-binary were supported.
- **Common indicator 12:** 18.6 million places (about 4.3% of the EU population) of annual capacity have been built or modernised in health care facilities (incl. hospitals, clinics, outpatient care centres, or specialised care centres) thanks to the RRF.
- **Common indicator 13:** 555,062 places of capacity have been created in new or modernised childcare and education facilities due to RRF support.

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Looking at progress in gender-related CSRs, a degree of progress is mentioned for all gender-related CSRs (as listed by Dias and Grigaitė (2021))**.** It is widely acknowledged that the incentives provided by the RRF have been reinforcing the implementation of CSRs, including the gender-related ones (D'Alfonso, 2023; EC, 2023l). According to the CSR database (EC, 2023l), all relevant (sub-parts of) CSRs report at least a degree of progress. There are MSs with gender-relevant CSRs reported so far to have limited progress (AT, CY, PL, SI and SK), some progress (AT, CY, CZ, EE, ES, FR, IE and IT) and substantial progress (FR, IE, SI and SK). The contribution of the fulfilment of milestones and targets on gender-related measures to CSR progress can in some cases be more clearly made (e.g. Spain has fulfilled milestones and targets in the same area as its CSRs on improving income schemes and family support, which has reported to have some progress) than in others (e.g. France has some and substantial progress on gender-related CSRs, but no fulfilled milestones and targets on gender-flagged measures yet).

Three national gender impact ex-ante evaluations commissioned by MEPs are rather critical about the impact of the RRP investments on gender equality (Farré, 2022; Badalassi, 2022; Pimminger, 2022)**, but they also have limitations**. In the case of Germany, a possible continuation or exacerbation of gender-related economic and employment imbalances was expected due to the limited focus on gender throughout the RRP (Pimminger, 2022). In the case of Spain, the planned investments were expected to have a moderate effect on gender equality, and to likely not provide a turning point from a gender equality standpoint in the case of Italy. The Italian and Spanish evaluations expect a **varied effect on the short-, medium- and long-term.** They concluded that in the short-term (input side), the activities needed to start up infrastructural investments are expected to mostly benefit male employment (more than 65% of the investments). In the medium-term (output side), the implementation of the investments will presumably lead to infrastructures that will enable activities and services employing women (around 40% of the investments) besides stimulating male job opportunities. In the long-term (outcome side), the Italian RRP was expected to positively influence men and women due to the expected growth, but the gender gap was expected to be hardly influenced. In the Spanish case, a larger, but still limited fraction of the investments would contribute to reducing gender disparities in this perspective (Farré, 2022; Badalassi, 2022). The studies have, however, the **limitation** that they mostly focus on investments and not reforms. They also need to be underpinned with further research, and because the real impact can also not be directly derived from the plans themselves due to methodological constraints, the ex-ante nature of the assessment, the performance-based nature of the RRF and additional work that has been and will be done within implementation to further include gender equality considerations (EC, 2022a).

Looking at specific gender-flagged measures with fulfilled milestones and targets more in depth, some relevant outputs have been found and relevant results and impacts are expected. The actual outcomes of measures are (yet) difficult to capture, since it is for many too early to tell and they largely depend on further implementation. This is the case for investments, but even more so for **reforms** which can be expected to have a **strong impact but are generally difficult to measure** (see also Section 1 on limitations). For illustration purposes, the box below delves deeper into the outputs and (expected) results and impacts of some Italian and Spanish investments and reforms.

Looking more in depth in the case of Spain, interviews and internal documents showed that **generally results of gender equality-related measures could often not yet been identified** since gender equality data was not available yet, the evaluation was not carried out yet, the law was still in process of regulatory processing or activities were being planned. On the other hand, quite some investments could be coupled to specific numbers and achievements. Thousands of women have, for example, been trained or have commenced their training actions in digital skills and entrepreneurship, and labour market integration through various Spanish investments (C13.I1, C19.I3, C20.I1.c, C23.I2.a b). In terms of the RRF's additionality, Spanish interviewees mentioned, in line with the findings of section 3.2, that although some measures were already in place, the RRF has been considered to bring not only an economic but also a political impetus to guarantee the control and monitoring of these new regulations in companies and public administrations and incorporate gender perspective in public policies. The quality, speed, allocation of resources and personnel and/or the inter-institutional and -stakeholder coordination has increased which could be linked to also a better transversal integration of gender in the RRP.

Box 21. Examples of gender-flagged measures with outputs and expected results and impact

Italian Reform: Framework Law for disability

- *Introduction to the measure and fulfilled milestone:* The measure aims to organically reform the system for recognising the condition of disability, support for independent life and the protection and promotion of the rights of persons with disabilities (Italiadomani, 2023; Council of the European Union, 2021d). The milestone 'Entry into force of the Framework Law to strengthen the autonomy of people with disabilities' was fulfilled in Q4 2021. The law was approved on 22 December 2021 and represents the first step of a reform to review disability assessment (Italiadomani, 2023). It is complemented by a milestone to be fulfilled by Q2 2024 'Entry into force of the Framework Law and governmental adoption of the legislative decrees developing the provisions set out by the Framework Law'.
- *Expected effectiveness:* According to interviewees, the effectiveness will be **highly dependent on the actual implementation** and the transition to the legislative decrees (foreseen for Q2 in 2024). The principles and objectives of the Framework Law are **positive and encouraging**, but the **risks of delays, difficulties and downgrading of the goals** are considerable. Interviewees shared that the expected result of implementing the reforms should be to provide more support to families, thereby alleviating, at least partially, the disproportionate burden of unpaid caregiving responsibilities on women. The **actual impact on gender equality** remains, however, thus **remains implicit and is highly dependent** on how these reforms are put into practice through legislative decrees.

Italian Investment: Creation of women's enterprises

- *Introduction to the measure and fulfilled milestone:* The Female Entrepreneurship Fund (Fondo Impresa Donna) was established with the inter-Ministerial Decrees of 30 September 2021 and of 24 November 2021. The measure has a total budget of around €200 million, of which €160 million from RRP resources and €40 million from the 2021 Budget Law (Ministero delle Imprese e del Made in Italy, 2023; Council of the European Union, 2021d). The milestone 'Approval of ministerial decree establishing the Female Entrepreneurship Fund' was fulfilled in Q3 2021. It is complemented by two targets (yet to be fulfilled): T18 (at least 700 women's enterprises financed by Q2 2023) and T19 (at least 2400 women's enterprises financed by Q2 2026). 4,985 applications were received for intervention A and 8,095 for Intervention B and as of June 2023, more than 1,000 firms were officially selected (Invitalia, 2022).
- *Expected effectiveness:* The fund aims to **boost the participation of women in the labour market through supporting the firms selected** and, in particular, business activities by

providing loans or grants to all female enterprises, regardless of their size, whether already established or to be established (Ministero delle Imprese e del Made in Italy, 2023; Crif.it, 2022). Italy had a law (215/1992) to promote female entrepreneurship, but it had **not received funding since 2016**. Therefore, the establishment of this fund marks **a significant step in providing support to female-owned businesses**. In 2022, female-led enterprises accounted for 22% of all businesses in Italy, highlighting the need for initiatives like this (Crif.it, 2022).

Spanish reform: Strengthening long-term care and promoting a change in the model of support and long-term care and related reforms and investments in component 22

- *Introduction to the measure and fulfilled milestones:* This measure aims to assess the current state of care policies, particularly the System for Autonomy and Care for Dependents, identifying areas for improvement and formulating proposals for the reform of Law 39/2006, of December 14, on the Promotion of Personal Autonomy and Care for people in dependent situations (LAPAD). It is part of component 22 "Shock Plan for the Care Economy and Reinforcement of equality and inclusion policies" which includes three reforms and three investments. The reform is specifically linked to the investment "Long-term care and support plan: deinstitutionalisation, equipment and technology". Related to these measures, a milestone "Approval by the Territorial Council of the evaluation of the System for Autonomy and Dependency Care" has been fulfilled in Q2 2022. An evaluation study has been carried out, approved and published on the System for Autonomy and Care of Dependency, which includes a chapter that analyses long-term care from a gender perspective (Rodríguez Cabrero et al., 2022). For the related investment, subsidies were also given for the implementation of six innovative pilot projects in the field of long-term care, which are running from January 2022 (Plataforma Vidas, 2023).

- *Expected effectiveness:* **The reform, together with other reforms and investment in component 22, are considered to have a direct impact on the promotion of gender equality** by interviewees. In the Spanish cultural and social context, care tasks continue to fall mostly on women without receiving any remuneration in return or recognition from social security. The reforms and investments are expected not only have the positive effect of **professionalising care work and regularising it as a source of employment**, but also of making it easier for women to **no longer take care of it** in their family context or in the informal economy, and to get training in areas of their preference and access regular jobs.

Spanish Investment: Programme for the construction of energy-efficient social rental housing

- *Introduction to the measure and fulfilled milestone:* The objective of this measure is to build at least 20,000 new dwellings for social rental purposes or at affordable prices compliant with energy efficient criteria. These will be built in particular in areas in which social housing is currently insufficient and on publicly owned land. The primary energy demand of the social housing will be at least 20% below the requirements of nearly zero-energy buildings (Council of the European Union, 2021e). The milestone 'Entry into force of the Royal Decree on the definition of the regulatory framework for the implementation of the programme on energy efficient social rental dwellings compliant with energy efficient criteria' has been fulfilled in Q3 2021. The Royal Decree 853/2021 defines the regulatory framework and the technical requirements for the implementation of the programme on energy efficient social rental dwellings compliant with energy efficiency criteria (Council of the European Union, 2021e). This milestone is complemented by a target of 20,000 dwellings build for social rental or at affordable prices (to be completed by Q2 2026).
- *Expected effectiveness:* According to interviewees, the impact on gender equality of this measure should, however, be **considered positive**, since women (specifically single mothers) are more frequent users of social and affordable housing. Generally, interviewees mentioned, however, it is **too early to tell**, and the **effectiveness will vary** on the design and implementation of the policies, regional differences, and the specific needs of the population. According to some interviewees the positive effects would only be visible on the **long-term, and, on the short-term,** the construction of social housing might rather stimulate employment in the construction sector.

To further understand and maximise the effectiveness of the RFF in cushioning the crisis' impact on women, interviewees and literature (EIGE, 2023; Farré, 2022) provided various suggestions. First of all, continued evaluation and reporting from a gender perspective was encouraged. This could include ex-post evaluations of RRPs which have integrated gender equality to a different extent and in different ways, analysing changes in certain employment sectors due to the RRF and looking more into reforms to better understand the impacts these might have. In addition, all interviewees encouraged that gender equality considerations should continue (where possible) to be integrated by MSs and the EC since the RRFs effectiveness still largely depends on the implementation. Looking beyond the RRF timeline, interviewees shared that in future scenarios, gender equality and efforts like in-depth gender mainstreaming, extensive gender budgeting and including gender assessment criteria should be considered and included from the start, if relevant. Overall, the RRF has so far showcased various achievements and lessons learned that are expected to and can be utilised for mitigating the effects of past, current and future crises on women and ensuring inclusive recoveries.

5. Conclusions and lessons learned

Overall assessment

The Recovery and Resilience Facility is the cornerstone of the EU's plan to emerge stronger and more resilient from the Covid-19 crisis (Next Generation EU) and the socio-economic challenges caused by Russia's invasion of Ukraine (via the implementation of the REPowerEU plan). To address these broad and challenging objectives, the RRF provides significant financing - up to €723.8 billion in loans (€385.8 billion) and grants (€338 billion), and REPowerEU additional resources (€20 billion in new grants and €2.1 billion of funds from the Brexit Adjustment Reserve) on a scale that could not be attained at MS level only. Thus, **the RRF provided a common and synchronised EU response to common challenges such as COVID-19-related socio-economic impacts and the energy crisis** caused by Russia's invasion of Ukraine. This evaluation has shown that the RRF has triggered the implementation of major and long-awaited reforms across a wide range of policy areas, it increased EU GDP and lowered EU unemployment, and led to a reduction in spreads. **It has also supported the EU's green transition** (in particular through climate mitigation measures and application of the do-no-significant-harm principle) **and has contributed to the digital transformation**.

As of mid-2023, more than €150 billion have been disbursed under the RRF, which represented 31% of the overall amount of planned grants and loans[114]. **The planned[115] and the disbursed financing in the first two years of operation of the RRF (2021-2022) are almost aligned**.

However, the pace of the financial progress in 2023 poses a **significant risk of delays as compared to the indicative planning**. While **MSs largely adhered to the planning of the first payments requested in 2021 and 2022, most have pushed back the indicative timing of the payment requests in 2023 due to a combination of different factors** such as: the need to revise the plans following the update of the max allocation of grants (in 2022), to plan the loans and to include REPowerEU chapters (in 2023); difficulties in fulfilling the milestones/targets; changes of governments and governmental priorities; administrative capacity; and various external factors - the war in Ukraine, the energy crisis, inflation, and supply and labour shortages. The **disbursement of payments within less than 4 months on average after the requests for payments can be considered timely**, but the timelines for the payments performed in 2023 are longer than the averages for all years of implementation. This phenomenon can be explained by various factors, such as the parallel revisions of the RRPs, the more complex application of the 'payment suspension' procedure, the growing number of payment requests submitted in parallel, including by MSs that are submitting their first requests. It is difficult to draw conclusions based on data, which does not cover the full 2023 year. There is always the possibility of increased speed of payments by the end of 2023, but nonetheless, the partial data points at **increased risks of delays in the financial implementation of the RRF**. As of end-July 2023, 11.3% of all planned targets/milestones have been fulfilled[116]. So far 639 milestones (19.3% of the total number) and 66 targets (2.3% of the total number) were fulfilled. Despite this progress, the fulfilment of the milestones/targets is behind the indicative schedule provided in the Council implementing decisions

[114] These numbers represent the situation as of the end of August 2023. It has to be acknowledged that the overall RRF envelop is larger and it can disburse up to €723.8 billion (in current prices) in grants and loans to EU Member States. After the cut-off date of the evaluation, the RRF envelop grew to approximately €650 billion.

[115] Planned financing in the form of grants and/or loans, which is included in the Recovery and Resilience plans as of 31 July 2023.

[116] The analysis only considers milestones/targets covered in payment requests submitted to and assessed by the Commission, not the progress made in completing milestones/targets covered in subsequent payment requests. As it becomes clear in the bi-annual reporting from MS, progress on milestones and targets covered in subsequent payment requests is being made in parallel (for example, the RRF Annual Report 2023 shows 1,155 completed milestones and targets in the period Q12020-Q12023, as self-reported by the Member States).

on the RRF plans - the number of milestones/targets planned until Q1 2023 is 2,205, i.e., the fulfilled targets/milestones stand at 32% of this indicative planning. With respect to the delays observed in the current fulfilment of milestones and targets, this is also expected to be reduced once payment requests are sent to the Commission. As of today, several milestones and targets that are reported as completed by member states in their bi-annual reporting have not yet been assessed by the Commission even though de facto significant progress has been achieved in the implementation.

External factors had a **significant impact on the RRF implementation**. Factors such as the war in Ukraine, the energy crisis, inflation, and supply and labour shortages **affected the speed and cost of implementation of the RRF measures**. Internal factors, such as low administrative capacity, political instability, low awareness of end recipients of the opportunities offered under the RRF, and insufficient communication/coordination, also negatively affected the implementation of the RRF measures.

Effectiveness

The **fulfilled milestones/targets cover all six pillars of the RRF.** The pillars of Smart, sustainable, and inclusive growth and Health, and economic, social and institutional resilience have the highest percentages of fulfilled milestones/targets (above 12%) out of the planned milestones/targets linked to these pillars. The highest number of fulfilled targets is under the pillar of Green transition, but the overall percentage of fulfilled milestones/targets out of all milestones/targets linked to the pillar (10.1%) is behind the growth and health resilience pillars. The Digital pillar has the lowest percentage fulfilled out of all milestones and targets linked to the pillar (8%).

The **RRF has progressed along all fourteen common indicators**. Noteworthy achievements include: 22 million MWh/year savings in annual primary energy consumption, 18 million additional dwellings with internet access, close to 1.5 million enterprises supported, close to 7 million supported participants in education or training, 4 million young people (aged 15-29) receiving support. For some of the common indicators (e.g., additional operational capacity installed for renewable energy and additional dwellings with internet access) only 5-7 MSs have reported achievements so far, but it has to be acknowledged that investments in infrastructure usually require time until they become operational and can be reported.

The reforms indicated by MSs address all or a significant subset of challenges identified in the Semester's CSRs. **Most interviewees at both national and EU level confirm that the RRF contributed to putting on the agenda long-awaited reforms**, as reforms benefit from being packaged with investments. The strength of the link between CSRs implementation and financial support decreases in the case of MSs that receive a proportionally smaller financial envelope, and which are less incentivised to commit to structural reforms.

Overall, as of today, the **implementation of the RRF reforms has led to tangible results across a wide range of policy areas**: labour market, social protection and pensions, civil and criminal justice, public administration, including digitalisation of the PA, spending review and public finance governance, anti-money laundering, licensing simplification reforms to boost the investments in renewables, roll-out of renewable energy and sustainable transport, introduction of 5G and broadband, structural reform of the education system, anti-corruption and tax planning. By contrast, only a few investments have completed the first steps and have already produced tangible results.

Zooming into the climate measures, considering that they should represent at least 37 % of the RRP's total allocation, the analysis shows that the RRF has been **successful in emphasising the need to introduce reforms and invest to foster the green transition**. However, it is too early to assess the overall impacts of the RRF as most measures are still under implementation and the final effects will only materialise in the longer term. **Energy efficiency is the most popular policy**

area in terms of the number of RRP measures and has been allocated a significant amount of RRF funding. **The vast majority of respondents to the public consultation think that the RRF has contributed or will contribute to the green transition** (62 %) and the **European Green Deal** (64 %) to some or large extent. However, **fewer respondents are confident about the role of the RRF in contributing to the EU Biodiversity Strategy,** with less than half of them thinking the RRF contributes to the Strategy to some or large extent. The performed case study on energy efficiency identified common challenges (also valid for the RRF implementation overall) in all countries include rising material prices and a lack of skilled workforce, which can impact implementation of the measures.

As concerns the **'do no significant harm' (DNSH) principle**, interviewees at EU and national level expressed their satisfaction with the novelty of the principle and its potential to shape investments in line with the European Green Deal objectives. According to several national authorities that took part in the survey, the DNSH principle **is a new feature of the RRF, which has added value by improving the quality of MS measures** (even for those countries that already had existing pipelines of projects that could be financed under different mechanisms) and could have "spillover effects" and improve public financing at national level. At the same time, the novelty of the principle **requires clear guidance** which, according to the respondents, was not always provided in a timely fashion.

The results of the application of the NiGEM model show that the **RRF disbursements that have already been made have raised EU GDP between late 2021, when the first pre-payments were made, and 2023**. The RRF disbursements have raised EU GDP in 2022 by 0.4 per cent. That is, **GDP was 0.4 per cent higher in 2022 than it would have been in the absence of RRF spending**. RRF disbursements had stronger effects in the Southern and Eastern countries than in the Western and Northern MSs with relatively higher levels of GDP. The **initial disbursements lowered unemployment in the European Union by around 0.2 percentage points relative to what it would have been in the absence of the RRF**. We found this overall fall in unemployment to be driven by large falls in the southern European MSs of Greece, Italy, Portugal, and Spain.

The **issuance of common debt on the part of the Commission** - a key feature of the RRF - to provide fiscal support and liquidity to Member States contributed to ensure full coordination of the (public) investment impulse and avoid major frictions in the Single Market (with some MSs providing massive subsidies to their industries and others not) and allowed substantial benefits in terms of spill-overs, which immediately materialised – at its announcement - in a **reduction in spreads** of between 50 and 100 basis points for those MSs in Southern and Eastern Europe where borrowing costs are typically high. **The 13% pre-financing – a key feature of the RRF –** effectively provided quick disbursements in support of public finances and boosted the financial progress (measured in payments) of the instrument.

In terms of impact of the RRF measures on **territorial cohesion**, this varies across countries. Some RRPs include territorial rebalancing especially as a transversal priority in all policies, others dedicate *ad hoc* resources to support the most disadvantaged areas, others instead lack a strategy to enhance territorial cohesion. With respect to **social inclusion**, we observe that ad hoc criteria to benefit the most disadvantaged groups are included in some measures in some member states, while in others the distributional effect of the investments is not considered. The case studies on ALMP, ECEC and Energy Efficiency show the different choices operated by member states and the expected impact on territorial cohesion and inclusion. Some countries incorporate explicit design elements to target vulnerable groups or address territorial inequalities in service provision, which should in principle enhance social and territorial cohesion. In other cases, instead, the unrestricted scope of the measures creates a risk of them ultimately being benefitted by the socio-economic groups most in need. The ECEC and ALMP case studies further investigate the implementation of the measures and show a mixed picture, whereby in some countries – despite the initial territorial or social objectives – they have either reached a much lower share of vulnerable groups than envisioned or they have not managed to target the envisioned territories.

Based upon the specific gender analysis, RRPs are expected to have **varying levels of effectiveness in cushioning the impact of the Covid-19 crisis on women**. Various **factors are considered to affect the effectiveness,** including the share, topic areas and quality of gender-related measures, the extent to which gender mainstreaming (and male employment bias) is present, and the actions that have been and will be taken in implementation, monitoring and evaluation. The analysis showed that all gender-related **CSRs show at least a degree of progress** and **more women than men** have been supported for some gender-disaggregated common indicators (based upon limited data). On the other hand, some national ex-ante gender evaluations are rather critical about the effectiveness in specific MSs, but need to be further researched. Lastly, an analysis of some gender-flagged measures also showed **relevant outputs** so far and expected to have **relevant results and impacts but** depend on further implementation. To maximise the effectiveness, some interviewees and literature provided suggestions, including having follow-up **research** on MS level, continuing actions to **include gender equality considerations** in the implementation, monitoring and evaluations, and strongly integrating **gender equality from the start** of (future) policy instruments.

The REPowerEU chapters of the RRPs, submitted as of 4 October 2023, **are expected to contribute to the six REPowerEU objectives specified in the amended RRF regulation**, **which are in line with the three goals of the REPowerEU plan**. Most of the proposed measures contribute to introducing energy efficiency measures and accelerating the deployment of renewable energy responding to the first two goals of the REPowerEU Plan. Only two countries so far have also included measures related to fossil fuel investments in their draft REPowerEU chapters, linked to the objective of diversification of energy supplies.

As of today, several factors (internal and external) can be identified that might negatively affect the implementation of the RRPs. As for the external factors, these include the **increasing pressure on energy, food, and other commodity prices, the disruption in supply chains and logistics, the tightening of financial conditions and the overall worsening macroeconomic environment, as well as labour shortages**. As for the internal factors, **administrative capacity** - especially in those MSs with pre-existing low absorption rates of EU funds – and political instability remain the main concerns for the implementation of investments and reforms.

In addition to the above-mentioned factors, specific obstacles emerged for policy measures. For instance, in the case of cross-border projects, **investment bottlenecks** have emerged linked to the long time for the State aid **notification process** and the **lack of clarity** (in terms of processes, timeline, and responsibilities, the requirement criteria for project selection, the definition of additional benefits or spillovers). **Communication difficulties** have also surfaced between member states in the phase of project design, as well as between the MSs and the EC, and between companies and the EC. Concerning the investment involving local authorities, three types of problems negatively affect the implementation of the measures: lack of resources to cover the **recurrent costs**, the **tight timeline** and the **lack of technical capacity** of municipalities to present projects, and the lack of **qualified personnel** to run the new (or requalified) infrastructures. Additional challenges emerge due to the **complexity of the governance structure** and of the **public procurement procedures.** In the case of measures to support SMEs, the **complexity of programmes** discourages SME participation. **Awareness** among SMEs is a crucial factor for uptake and therefore poor communication has been identified as another factor negatively affecting the implementation of the measures. Similarly, in the case of active labour market policies, where measure design is simple, and measures are easily accessible implementation is more successful. In contrast, **lack of clarity in design or insufficient communication/awareness-raising** can hinder take-up. Moreover, take-up of measures can be influenced by the **changing labour market context**, which may influence demand, and external factors, such as emigration. The **capacity of regional actors** also plays a key role.

To cushion the negative effects of both external and internal factors, **MSs adopted different strategies** including increasing the RRF budget with national resources or other **additional financing**, **reducing the ambition of the milestones and targets (proportionally to reduced financing)**, **removing investment projects that are no longer feasible**, and **postponing the initially foreseen timeline** of milestones and targets. The revision of plans has been subject to specific rules, ensuring that the proposed amendments are based on objective circumstances (Art. 21 of the RRF Regulation) and that the overall ambition of the plans is not lowered. To address the low administrative capacity, MSs took action to mitigate the risk via training, reforms and investments that aim at modernising the public administration and the use of the TSI. Yet the results linked to such measures are expected to materialise only in the medium to long term. In the short term, MSs put in place ***ad hoc*** **measures to directly support the administration to implement the plans**. Still some major concerns remain - especially for the measures included in the REPowerEU chapters - the more the final RRF deadline (2026), which is not extendable, approaches.

Efficiency

Under the QUEST scenario (i.e., 100% additionality for grants and 50% additionality on loans), our analysis using NiGEM suggests that **the cumulative impact on EU GDP by 2041 of the RRF funds disbursed up to the end of July 2023 is almost twice as large as the value of these disbursed funds.** Further, our analysis suggests that **the cumulative impact on EU GDP by 2041 of the entire RRF package of grants and loans is expected to exceed twice the total RRF funds**. Indeed, both the non-discounted and discounted values of the benefit-cost ratios calculated at the EU level and considering all the planned RRF funds are a little over 2. However, if different assumptions on additionality are considered the benefit-to-cost ratio will change. Under a scenario where 60% of RRF funds are used for additional public investment within the poorer Southern and Eastern MSs but only 25% of RRF funds are used for additional public investment in the richer Northern and Western MSs, the benefit-cost ratio falls below one; that is the cumulative effect on EU GDP becomes lower than the total RRF funds disbursed. However, this does not account for the long-run GDP effects of the structural reforms within MSs RRPs, which are hard to measure, particularly given the length of time over which the benefits will come to fruition, but which potentially could be substantial.

There are **significant variations** in administrative costs across countries in full-time equivalents (FTE) declared by coordination bodies both for one-off activities and recurrent activities and **no clear trends emerge**. The variations are influenced by several concurrent factors related to the availability of data, the governance of the RRF and the degree of outsourcing. According to most respondents (72%) in the survey**, the costs linked to the RFF implementation have increased over time**, while only 28% reported stable costs. The majority of respondents attribute the cost increase to the introduction of more stringent requirements (particularly in reporting, control, and audit) as the process evolved. In many countries the FTEs working on plan amendments (incl. the REPowerEU chapters) are comparable and in some cases even higher than the FTEs for drafting the actual RRPs.

The **administrative burden** and complexity of the RRF result from several factors, *in primis* the lack of clarity with respect to the role and timing of **control and audits** and the **interpretation of milestones and targets fulfilment**[117]. With respect to the former, the complexity of the audit and control procedures for the new performance-based instrument created uncertainty in MSs and an overload of administrative procedures. Such complexity is mainly related to two factors: 1) the lack

[117] By contrast, the EC's Communication is largely considered timely and clear in the drafting phase of the RRPs.

of clarity concerning the role of the MSs' control systems, the European Commission and the European Court of Auditors; 2) the consequent overlapping of audits taking place at the same time and demanding continuous reporting and providing justification by national authorities on the implementation of the RRPs. With respect to the latter, MSs raised concerns about the **M&T's assessment framework** used by the Commission, the **payment suspension methodology**, and the **plan's modification procedures**. While the EC Communication of February 2023 (COM(2023) 99 final) has been broadly welcomed by MSs as adding transparency, some points remain not sufficiently clear (especially with respect to reforms) and excessively demanding in terms of information reporting. However, it is worth noting that the payment suspension methodology has only been applied for the first time in 2023, and there is a learning curve for MSs. Additional administrative burden has been identified by Member States with respect to the **reporting requirements**, in particular the **common indicators**[118] process with the EC. Member states also identified margins for simplification. In particular, there is room for **simplifying control and audit** procedures ensuring better coordination among actors and avoiding multiple checks. Many stakeholders also highlighted the **need for flexibility** with respect to the interpretation of milestones and targets, which is perceived as overly strict by some respondents. With respect to the reporting, Member States propose to make the bi-annual reporting not mandatory when a Member State already submits two payment requests per year. Finally, simplification of the informal dialogue process with the EC can come from accelerating the time to provide feedback to MSs and reducing the rounds of comments from the EC to MSs on the documentation submitted for payment requests. The efficiency of the RRF is also affected by its **governance** setting at national level and in particular the degree of centralisation of the decision-making process and the reporting/performance management system. While the RRF comes with centralisation in all MSs, differences emerge in the governance setting of national RRPs, which affect the efficiency of the RRF. The first difference regards the involvement of the Prime Minister's office. In those countries where the governance has not involved the Prime Minister's office or even excluded the Ministry of Finance, this translated into a more difficult and slower implementation path of reforms. The second difference regards the involvement of social partners, especially when it comes to labour market or social policy reforms, where their involvement played a key role in speeding up the adoption process. Third, the different degree of involvement of sub-national authorities in the drafting and implementation of the plans affects the efficiency of the plans, in particular investments.

Since 2021, the EU's Technical Support Instrument has been supporting the public administrations to enhance their internal governance and capacity to manage and implement RRPs efficiently. It offers general support for the implementation of national RRPs, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures (general support across RRP components), and also policy-specific interventions (thematic support for thematic RRP measures).

The **cost/burden associated with RRF compliance tends to be more demanding than other national investment programmes**. While the RRF, especially through its performance-based approach, could in principle be expected to lead to a reduced administrative burden compared to CP, there is currently no conclusive evidence supporting this claim. Overall, the **administrative costs/burden of the RRF are considered to be comparable (if not higher) to those of cohesion policy**. However, this perception varies from country to country.

Finally, in terms of efficiency gains in pursuing together reforms and investments, 59% of the survey respondents (national RRF stakeholders) believe that combining reforms and investments in one instrument leads to some or significant efficiency gains. This is because coordinating the two becomes simpler when they are planned in one single document, and it encourages countries to

[118] The informal dialogue is a process in which Member States can ask for clarifications and timely guidance from the European Commission, for example before submitting a request for payment.

implement reforms that facilitate investments. The case studies provide anecdotal evidence of situations where **the combined implementation of reforms and investments can lead to a greater impact** (even if admittedly it is extremely challenging to elaborate a counterfactual scenario).

Coherence

The RRF Regulation highlights the need for effective coordination between reforms and investments included in the plans to safeguard the consistency, coherence, complementarity, and synergy among sources of funding. Furthermore, coherence was among the criteria applied by the EC in the assessment of the RRPs. Thus, **the general coherence of the RRF with key EU policies is ensured by the design of the RRF and the RRPs**. The EC guidance on coherence tends to focus on internal coherence between reforms and investments. The overall EC assessment on the coherence of RRPs is very positive (high extent – Rating A), with the exception of the Belgian, Czech and Estonian RRPs. The findings are in large part corroborated also by the analysis we carried out in the framework of the case studies, where we zoomed in on a selected sample of MSs and assessed the degree of complementarity between reforms and investments in the RRPs. What we observe is that reforms and investments in the plans have to some extent been complementary and coherent, without significant difference across policy areas but with differences across countries. In some cases, the investments in the RRP are coherent with already existing measures put in place before the RRF at national level.

Concerning the coherence/complementarity between RRF measures and other **national measures addressing the effects of the COVID-19 pandemic,** although this aspect was not assessed in the EC assessments and Council Implementation decisions on the approval of RRPs, this **has been largely ensured by three factors:** 1) in MSs that had already put in place a post-pandemic recovery plan, the RRP built on the already planned measures and either replaced or further expanded them; 2) in countries that had not yet a recovery plan, the RRPs became the national government strategic plans for the recovery after the pandemic; 3) in both cases, the short time for the plans' drafting and implementation pushed national authorities to develop plans coherent with already existing or planned investments and reforms.

In terms of coherence with other EU instruments, the RRF has been **well-integrated in the European Semester,** which has been used (in particular the National Reform Programmes) by all MSs – with few exceptions – to report on the implementation of the RRPs. Yet, important differences emerge across MSs in the level of details of reporting. MSs also use the Semester to report twice a year on the progress made in the achievement of their recovery and resilience plans, notably the common indicators and on the relevant indicators related to the fulfilment of the envisaged milestones and targets and the arrangements for providing full access by the EC to the underlying relevant data. The Semester and in particular the country reports are also the key tools for the EC to regularly monitor the implementation of the RRPs. In the CSRs, the EC then provides recommendations to each MS to continue or accelerate the implementation of its RRP.

As the implementation of the RRF progresses, **synergies between RRF-supported reforms and Cohesion policy investments come into focus**. Both horizontal and sectoral reforms supported by the RRF improve the context in which public investments, including those funded by Cohesion policy, are embedded. In turn, Cohesion policy makes financial resources available to put the revised framework to good use, promoting investments on the ground. In order to minimise the overlaps in investment with Cohesion policy, MSs have put in place **four approaches to demarcation** between RRF and Cohesion policy: a thematic demarcation; a territorial demarcation; a demarcation based on the typologies of beneficiaries; a temporal demarcation. The most frequently adopted approach has been of a thematic nature, but MSs have *de facto* adopted a mix of demarcation approaches. While demarcation strategies are key to avoid overlaps between the two instruments, **they do not necessary ensure synergies**. The latter can be achieved either by financing different operations that build on each other, or by using the two instruments to finance different elements of the same operation. However, the combined use of RRF and CP is constrained by the difficulties in aligning schedules and procedures of different funds. Additional obstacles to the complementary deployment of the two instruments include the thematic overlap, which increases the risk of competition, and the prioritisation of the NRRPs over Cohesion policy due to pressure to achieve rapid absorption.

There is **a high level of coherence between the RRF and the Technical Support Instrument** (TSI). The TSI offers both general and thematic support, covering horizontal areas important for RRP implementation, such as project management, reporting, governance structures, and also policy-specific interventions. The strategic decision to incorporate TSI support right from the inception of the RRF's development along with the flexibility provided by Article 7 of the RRF Regulation, has strengthened the coherence between these two instruments and has empowered MSs to effectively leverage the TSI support to better implement their RRPs. As of the end of October 2023, more than 400 projects approved under the TSI are linked to the preparation or implementation of MSs' RRPs.

Finally, with respect to other EU policies and the related priorities, we observe that the reforms and investments explicitly refer to EU initiatives only to some extent, with significant variation across policy areas and across countries. Finally, with respect to other **EU policies and the related priorities**, we observe that they **guided the reforms and investments only to some extent, with significant variation across policy areas and across countries**. In the active labour market policies' domain, for instance, the EU priorities only marginally guide the reforms and investments in all the countries, with the exception of the Youth Guarantee. In the domain of ECEC policies, the EU priorities also only marginally guided the selection of reforms and investments, with the link with the Child Guarantee largely identified ex-post. By contrast, the National Energy and Climate Plans and the national long-term renovation strategies seem to have played an important role in guiding the measures aimed at supporting energy efficiency of buildings. Similarly, the rule of law reforms are largely guided by the priorities identified in the CSRs and RoL reports. Only partial is the link between the Small Business Act (SBA) framework and the measures to support SMEs. The link between the E-Health measures in the RRPs and the EU4Health Programme and the 2030 Digital Compass is partial and depends on the country. This notwithstanding, it is worth stressing that the lack of an explicit reference to other EU initiatives in the RRPs' measures does not imply a lack of coherence with EU priorities, which is instead guaranteed by the requirement for the plans to align with the CSRs, which already reflect the priorities identified in EU initiatives.

EU added value

The **RRF macroeconomic effects** of increasing GDP, lowering unemployment, and reducing spreads in a context of severe external shocks (the COVID-19 pandemic and the war in Ukraine) **represent a part of the EU added value of the instrument**. At the same time, **more than 20% (155) of the 705 milestones/targets fulfilled, as of 31.07.2023, have been implemented before the date of the official endorsement of the RRPs**. **This does not necessarily mean that** the related measures would have taken place without the RRF. Indeed, the drafting of the plans started already in September 2020 and several countries started implementing measures that would have then been included in the RRPs. The **general assessment of the stakeholders on the RRF additionality has been positive**, but about **a quarter of the participants in both the national coordinator survey and the public consultation expressed a negative opinion** on the extent to which the RRF supported measures that would not have been implemented by MSs. Similar mixed sentiments were expressed during the performed interviews.

Overall, the EU added value is largely recognised in the case of **structural reforms, which would have likely not taken place without the RRF**. When it comes to **investments**, the **added value varies across countries**. As emerged from the case studies, the added value of the RRF in some countries is particularly high, namely without the RRF these investments would have not taken place. In others, the RRF funds are additional and top up already existing national funding or are complementary to other EU funding. The availability of RRF funding allowed existing programs to substantially expand their capacity or countries to accelerate their implementation. Without the RRF, these programs might have continued but at a much smaller scale. Finally, in some cases, the RRF funds are used to substitute for national spending.

The EU added value of the RRF also emerges in two other aspects: the advantageous borrowing conditions and the impact on reducing spreads and the contribution to the implementation and further development of multi-country projects. First, **although reducing spreads was not per se one of the objectives of the RRF, it has been an important positive side effect**. Despite improving the financial position of governments across the European Union, **the reduction in spreads is unlikely to have had any significant effect on EU GDP. Second, while the RRF contributed to the implementation of multi-country projects, the impact and full potential of such projects in generating benefits for Member States could have been better exploited.**

Concerning the interplay between RRF and CP, evidence of widespread substitution effects generated by the RRF to the detriment of Cohesion Policy was not found with regard to 2014-20 programmes, as they were already well underway at the time the RRF was launched. **Interviewees, however, highlighted substitution effects for 2021-27 programmes**, for instance in Greece, Italy and Spain. In countries with more substantial investment gaps in traditional sectors and an extensive project pipeline, there is no risk of displacement between the two instruments, as RRF resources add to CP to tackle the existing needs.

Finally, with respect to the RRF contribution to maintaining the level-playing field and strengthening the Single Market, the RRF measures in one country largely remain not accessible to companies in other MSs. The SME case study shows varying results whereby – despite the formal alignment with EU Single Market principles – no provision is taken to facilitate access to other countries' companies. In this respect, an EU level channel to support SMEs and provide them information about RRPs' opportunities could have helped. In this respect, specific initiatives by the Chambers of Commerce of Austria and Finland are positive examples of bottom-up approaches to support businesses.

Relevance

The **relevance of the RRPs is widely acknowledged** and is ensured by the following factors: the reforms and investments are linked to the CSRs, which are typically linked to strategic reforms that take time to implement; the twin transformation (green and digital), which is an overarching EU-wide policy for years to come, is at the heart of the RRF and consequently the RRPs; the RRF has envisioned a mechanism for adaptation of the RRPs, which is currently being implemented.

As concerns the **allocation key**, this is based on each MS population, the inverse of their 2019 GDP per capita relative to the EU average, their average 2015-2019 unemployment rate relative to the EU average, and the falls in their GDP over the pandemic period (2019-2020 and 2019-21 for 30% of the envelope). The allocation key still remains relevant today. Yet, the countries - who experienced a revision downwards - complained about the fact that the update by 30 June 2022 of the maximum financial contribution for non-repayable financial support stipulated by Art 11.2 of the RRF Regulation and the substantial revision of the 30% of the amount available caused internal delays in the plans' implementation due to the need to either revise the plans or compensate with national resources the loss of EU financing.

While the reasons behind the 2026 deadline are well understood, **it has led to limitations in selecting investments, particularly in the renewable energy sector**. As concerns feasibility, national authorities have already **flagged that not all the milestones and targets can be completed by August 2026**, in particular those related to infrastructure investments. For this reason, several member states decided to propose an amendment to their plans, and in particular those measures where the timeline is considered to have become unrealistic.

The modification of the plans is a natural necessity since plans are conceived over a 6-year time frame, but **most national authorities think that the RRF is only flexible to a limited extent**. The most cited reasons for this opinion are: 1) the plan modification procedures do not distinguish between small and major adjustments (even if targeted revisions were processed faster than more encompassing ones), and between innovative (new) projects and structural measures; 2) lengthy procedures and the significant time lag between the decision to modify the plans and the final approval of the modification by the Council; and 3) rigidity in the modification of the timeline for milestones and targets.

Finally, concerning the decision to apply for loans under the RRF, this is driven by a complex interplay of **financial** and **non-financial considerations**. Some MSs, facing pre-COVID high debts or structural deficits, have sought additional support to facilitate a robust recovery from the crisis, including RRF loans, which for them offer lower interest rates compared to market rates. Conversely, countries with sound public finances might refrain from applying for loans, preferring not to increase their debt burden or engage with loans that could carry higher interest rates than market alternatives. Non-financial factors are also important drivers of MSs' choices. Some countries may apply for loans to amplify the ambition of their recovery and resilience plans, seeking additional funds beyond what grants provide.

Lessons learned on the RRF performance-based approach.

At the EU level, the discussion on performance-based budgeting started in the early 2000s and revamped in 2015 with the launch of the EC initiative e EU Budget Focused on Results (for an overview, see Downes et al., 2017 and the box below). During the negotiations of the 2021-2027 MFF, there has been extensive discussion on how to measure the results and impacts of public spending, going beyond just looking at direct outputs (Sapała, 2018). The performance-based approach is fully embraced by the RRF Regulation, which links funding disbursement to the achievement of milestones and targets (M&Ts).

Box 22 The idea of performance-based budgeting

The idea of performance-based budgeting has been around for decades, but as an IMF (2009) working paper observed, ‛a new wave of enthusiasm for performance budgeting began to sweep through advanced nations in the 1990s’ and has subsequently been applied in varying forms in most OECD countries (including the organisation’s EU members). A succinct definition in this 2009 IMF paper is that ‛Performance-based budgeting aims to improve the efficiency and effectiveness of public expenditure by linking the funding of public sector organisations to the results they deliver, making systematic use of performance information’. The IMF note observes, further, that it is a concept that should not be seen in isolation, going on to comment that a notion of ‛managing for results’ is critical, with a focus ‛more on results delivered and less on internal processes. The OECD has since provided a still more comprehensive definition of this budgetary method, describing it as:

> *‛the systematic use of performance information to inform budget decisions, either as a direct input to budget allocation decisions or as contextual information to inform budget planning, and to instil greater transparency and accountability throughout the budget process, by providing information to legislators and the public on the purposes of spending and the results achieved’ (Schick, 2014).*

The OECD has identified different models of performance budgeting, including presentational performance budgeting, performance-informed budgeting, performance-based budgeting and managerial performance budgeting (Downes et al., 2017). Overall, unlike the traditional budgeting approach, performance budgeting has an underlying purpose of allocating resources to programmes where government objectives are more likely to be achieved. In other words, the adoption of performance budgeting implies a shift in the focus of budgeting, from managing (i.e. 'how much have we spent?') to the achievement of policy objectives, i.e. 'what we have accomplished with our money?' (OECD, 2008).

In the 2000-2006 Multiannual Financial Framework (MFF), for the first time, ex-ante, ex-post, and mid-term evaluations were introduced, as well as performance-specific indicators (PSI) and Annual Implementation Reports (AIR). Then, in the 2007-2013 implementation period, common indicators (CIs), aimed at improving performance monitoring were introduced, but it was for the 2014-2020 MFF that a performance orientation gained political momentum, with the introduction of the performance framework (PF) for cohesion policies, comprising milestones and targets, and the performance reserve (PR). The MFF 2014-2020 introduced, for the first time, performance (mostly output) indicators. Member States were also required to measure the impact and the contribution to the EU objectives of interventions co-funded by the EU structural funds.

For 2021-2027, a new 5+2 approach was introduced, based on which the first five years of the budget will be programmed initially, with funding for the remaining two years contingent on an in-depth mid-term review and a reprogramming process taking account of progress in achieving objectives, the socio-economic situation and new challenges identified in the country-specific recommendations. Some innovations aimed at reducing the administrative burden for national managing authorises in data collection and monitoring were introduced, but results will continue to be assessed through the comparison of the achievements with the targets (achievement ratio) as well as the comparison of the results with the outputs (success rate). Targets for outputs and results will continue to be set by Member States for each programme.

As we have argued in this study, the performance-based approach is certainly the main innovation of the RRF together with the large issuance of common EU debt and the focus on a combination of reforms and investments. In the sections above, we have summarised the main findings of the study and we highlight – based on the empirical evidence collected – the most and least effective aspects of the RRF, the added value of the instrument, the relevance of the reforms and investments, their coherence and the coherence with national and other EU measures and priorities, as well as the efficiency of the intervention(s) (costs and benefits).

In what follows, we illustrate some lessons learned for possible future performance-based instruments in the post-2027 MFF as well as for possible improvements for the remainder of the RRF period.

The **large majority of national coordination bodies and the EU institutions acknowledge the conditionality of payments upon fulfilment of milestones and targets rather than costs incurred as one of the most effective aspects of the RRF**. For several countries, the performance-based approach introduced with the RRF represents an important **cultural shift** and an important and more effective approach to public policy. The definition *ex-ante* of the milestones and targets pushes the public administration to think about the expected output and results of public policies rather than cost inputs. Such a shift is particularly welcomed because it enhances predictability and accountability, with the clear definition ex-ante of performance indicators linked to milestones and targets and the definition of a clear timeline for implementation with a hard deadline in 2026. Both elements are appreciated as they introduce and/or enhance transparency in public finance, increase the efficiency of decision making and create the conditions for proper policy monitoring of the progress in the implementation of the reforms and investments. In this respect, several Member States highlighted that the RRF represented an incentive to the development of a more effective structure for monitoring the implementation of domestic policies. Among the positive unexpected effects, the RRF is triggering the set-up of performance-based instrument at national level (ex AT) with potential positive repercussions, notably for federal States.

The fact that the RRF combines reforms and investments is also particularly welcome as it allows public administrations to properly monitor not only spending output and results but – more comprehensively – value the synergies between the two. An additional positive aspect of the RRF performance-based approach is that – despite the decision being taken at the central level – it forces different administrative levels to work together since the scope of the interventions is quite large and accordingly involves multiple actors. By setting ex-ante the timeline for reform and investment implementation, the RRF accelerates the decision-making process and helps overcome possible deadlocks. Finally, a positive aspect of the RRF performance-based approach is being based on a constant dialogue between the Member States and the Commission both in the drafting phase (with perceived higher ownership from national authorities) and in the implementation phase. In this respect, the informal dialogue between MS and the EC is considered to bring efficiency gains (despite some time considered too lengthy). Without such a dialogue, in fact, the formal phases would take much longer and may result in unfulfilled milestones or targets.

As a new instrument, the performance-based approach also showed some limits linked to the implementation of the Facility.

As we have illustrated in this study, uncertainty in the implementation of the RRF emerged on three aspects: 1) **the M&Ts assessment by the EC**; 2) **the disbursement procedures**; and 3) **the possibility of changing the plans**.

With respect to the **assessment of milestones and targets**, the Commission Communication of February 2023 provided clarity with respect to the framework used by the European Commission to assess the implementation of milestones and targets. The Communication explains that for the assessment of the M&Ts it relies on their description (set out in the Council Implementing Decisions) *in light of its context and purpose* to determine the requirements that MSs must fulfil. Concerning the sources to consult to identify the purpose, these include the national recovery and resilience plans, recitals of the Council Implementing Decision approving the assessment of the recovery and resilience plans, the Staff Working Documents accompanying the EC's proposals for such Council Implementing Decisions, notes to the file during the assessment, records of exchanges with the national authorities or the country-specific recommendations adopted by the Council linked to that measure. In addition to this, the EC communication of February 2023 further explains that in a limited number of circumstances and in line with the application of the *de minimis* principle, minimal deviations linked to the amounts, formal requirements, timing or substance can be accepted. Annex II of the EC Communication further details the framework for assessing milestones and targets and the application of the minimal deviations.

With respect to the **disbursement procedures**, again the EC Communication of February 2023 provides a clear illustration of the functioning of the payment suspension methodology and the functioning of the coefficient applied to both investments and reforms. Still some member states remain critical of the coefficients related to reforms where the discretion of the Commission is higher in deciding the importance and accordingly justify the rating of a non-fulfilled milestone and target. As we argued above, it is worth stressing that quantifying the coefficients applicable to the unit value is per se challenging for reforms that require a qualitative assessment and therefore some further reflection might be needed in the case of a continuation of this approach in the MFF. Less convincing, in our view, is instead the proposal by a few MSs for a more dynamic approach to disbursement rather than a fixed rata based on pre-agreed milestones and targets. In this respect, it is worth also stressing that this would entail no possibility for the Commission to plan budget spending. Considering the magnitude of the Recovery and Resilience Facility and the need to raise funds on the market, this would make such a proposal hardly feasible.

With respect to the **possibility of changing the plans**, the revision process is considered by a majority of MSs as burdensome, slow and – sometimes - unnecessarily complex. They point to the lack of difference between the procedures to introduce small or major changes in the recovery plans, even though targeted revisions were objectively processed faster (e.g. less than 2 months in the case of Italy), and between types of investments (based on risk profiles). MSs further highlighted the excessive number of procedures and justification that increases the time for modification, which poses a problem, especially considering the final deadline for the RRF of 2026. With respect to these criticisms, the proposal for a differentiated approach based on the type (new or existing investment) and the size of investment, we think that further reflection might be needed in this direction. Yet, it is worth considering the difference as well between investments (for which such distinction of type and size can be applied) and reforms.

An additional concern that emerged in the implementation of the RRF regards the **coordination and division of labour between different audit and control bodies**. A large majority of MSs considered the lack of clarity with respect to the role of audits and controls at the EU and national level as the least effective aspect of the RRF, which translate into a perceived excessive documentation requested by multiple actors at the same time, which is considered inefficient and detrimental to the roll-out of the plans. This perceived burden is linked in particular to the time spent by national authorities in providing justifications for the ECA controls and audits which come in addition to the ones already carried by the national control systems and the EC. In this respect, it is worth stressing that both the RRF Regulation and the Guidance to Member States are clear in the definition of the audit and control responsibility of the Member States and the Commission. By contrast, what remains to be clarified is the European Court of Auditors audits and what national bodies and the Commission audit, as well as the effectiveness of running many audits in parallel, requiring a considerable amount of time and resources of national authorities and Commission staff, which otherwise could be devoted to the actual implementation of the RRPs.

Some concerns emerged also in the implementation of the RRF regards the functioning of the **reporting system**. Member States pointed to the excessive reporting requirements linked to the RRF and the risk to progressively shift the focus away from results. Member States indicate room for simplification in the biannual reporting of M&Ts (April and October). Member States, even though they find FENIX a user-friendly tool, they also perceive the bi-annual reporting extensive, being characterised by tight deadlines and short intervals between the submission of different reports. This is the case especially for those countries that submit already two payment requests per year and so regularly submit the information on M&Ts to the Commission. In this case the proposal is to steer the reporting system and avoid duplication and unnecessary administrative burden, for instance making the bi-annual reporting more flexible for those countries that submit two payment request per year. In particular, with respect to the reporting, some interlocutors suggested that simplification can be achieved making the common indicators voluntary rather than mandatory. However, such an approach will not lead to uniform reporting, will likely underreport the RRF-achievements, and would overall diminish the accountability of the instrument.

At the core of the RRF reporting system, is the **quality of data collected** by Member States, which should be efficient, effective and timely (Art 29.2 RRF Regulation). The Special Report 26/2023 by the European Court of Auditors (ECA, 2023c) assessed the arrangement for data collection, aggregation and verification in a sample of member states. What emerges is that, despite the very short timeframe, member states managed to set up IT systems and governance and control structure for the RRF, which also required the introduction of new or adapted procedures for reporting and checking data at every level of the implementation due to the performance nature of the new instrument. The Court also points to some obstacles in the data collection related the aggregated data on targets, which are collected by different implementing bodies and concerning multiple final recipients. In this respect, possible venues to improve the quality of data include automated procedures when transferring data from one IT system to another to provide more accurate results than manual ones, as well as being faster and more efficient.

Concerning the timing of quality checks performed by the Member States on fulfilled milestones and targets, risks can emerge related to incorrect data or ineligible items included in data aggregation, which are then reproduced unnoticed until the end of the reporting chain. In this respect, the timing of the national audit is of key importance to avoid that the errors are found ex-post by the Commission. The RRF Regulation does not require Member States to carry out audits before the submission of payment requests, nor envisage specific timing for such controls. To avoid any possible problem ex post, as highlighted by the Court of Auditors in the Special Report 26/2023 and by the Commission in its reply to the same report, national authorities should, and are encouraged to perform ex-ante check on the reliability and accuracy of data on milestones and targets to be included in payment requests.

Data quality and reliability is a concern that emerges also linked to the common indicators which are ultimately the responsibility of Member States. In fact, since no funding disbursement is linked to the common indicators, the Commission does not require any supporting evidence nor explanation on the data reported by member states, except in cases where member states report estimated figures (in the case of data either not final or not available). The Commission only performs a plausibility check on the common indicators data reported by member states. As a result, two limits identified by the Court in its 26/2023 special report are: the lack of adherence to the principle only outputs from completed interventions or operational installations at the time of reporting and the lack of comparability of data across member states. These findings thus point to the limits of such common indicators which rely ultimately on MSs' data track trace results in a performance-based instrument like the RRF.

A final aspect of the current RRF performance-based approach regards the nature itself of the milestones and targets. The RRF Regulation defines milestones and targets as "*measures of progress towards the achievement of a reform or an investment*". The EC's guidelines for preparing the recovery plans specify that M&T indicators should remain within the control of the MSs and should not be conditional on external factors such as the macroeconomic outlook or the evolution of the labour market. Since fulfilling previously agreed M&Ts is the criterion to justify disbursing an RRF payment request, milestones and targets are likely to remain limited to tracking outputs[119] rather than results[120] or impacts[121]. While this is not a concern per se, the significant heterogeneity of milestones and targets limits the possibility to track the results. In this respect, the heterogeneity of the information provided by member states in national RRF websites and portals also represents a limit in terms of transparency and accountability. In this respect, the call by the Ombudsman on the Commission to encourage the Member States to use this portal to include all recipients and to set such portals up for those who have not done it yet is to be welcomed.

[119] Something produced or achieved by a project, such as the delivery of a training course or the construction of a road.
[120] The immediate effect of a project or programme on its completion, such as the improved employability of course participants or improved mobility following the construction of a new road.
[121] The wider long-term consequences of a completed project or programme, such as socio-economic benefits for the population as a whole.

Annex I. Methodology and analytical models used

Literature Review

To support the mid-term evaluation an advanced literature review has been carried out. The literature review is a key step to establishing state of the art and gathering general information for the RRF evaluation. The literature review is carried out to inform the different aspects of the mid-term evaluation, namely:

- The overall functioning and implementation of the Recovery and Resilience Facility, including reporting in the European Semester and audit.
- The six RRF Pillars: green transition, digital transformation, smart sustainable and inclusive growth, social and territorial cohesion, health, economic, and social and institutional resilience, and policies for the next generation;
- Cross-border projects and EU added value.
- Borrowing operations under NGEU.
- Macro-economic impact of the RRF.
- Role of sub-national actors in the RRF (drafting and implementation).
- Role of social partners and civil society in the RRF (drafting and implementation).

As of September 2023, the literature review has included a systematic review of a broad set of sources which served to the preparation of the country-specific analysis and the case studies, as well as the preparation of the surveys and the macro-economic analysis. The table below summarises the key documents reviewed for the preparation of the different phases of the Mid-term evaluation. The main findings of the relevant literature are provided in Annex III, while the bibliography is included in Annex IV. Concerning the case studies, the references to the literature reviewed are indicated at the end of each case study.

Table 22: Literature review – key sources

Sources	Analysis
RRF Regulation and REPowerEU, Council Implementing Decisions plans and payments' request and related annexes, Operational Arrangements (where available), NRRP national websites and related publications, National Bank's RRF-related publications, Research institute and think tanks country specific RRF-related publications, EC's publications on the RRF (e.g. Review Reports, Fact sheets on bi-annual reporting from MSs) EP studies and papers produced by and for the EP Research Service, ECA' audit reports and discussion papers, Committee of the Regions and European Economic and Social Committee reports Eurofound reports.	Country specific analysis
Council Implementing Decisions and related annexes, Operational Arrangements (where available), NRRP national websites and related publications, National Bank's RRF-related publications, Research institute and think tanks country specific RRF-related publications, EC's thematic reports, EP studies and papers produced by and for the EPary Research Service, ECA' audit reports and discussion papers	Case studies

European Central Bank publications, including Economic bulletins, Occasional Papers, and Blogs, Research institutes and think tanks, EC DG ECFIN publications	Macroeconomic analysis
For coordination bodies: RRF Regulation and REPowerEU For national parliaments: we built on information collected for country-specific analysis	Surveys
Sources changed based on the interviewee: - Coordination bodies and EC lead negotiators: see sources for country-specific analysis - Other DGs in the EC: same sources as case studies - EFC/EPC: Regulations - EP: RRF/REPowerEU Regulations and Recovery and Resilience Dialogues between the EP and the EC - Social partners: RRF/REPowerEU Regulations and their own position papers on RRF	Semi-structured interviews (not related to case studies)
Academic literature, OECD reports and other think tank publications	Background information

Databases creation

Our team established a database with primary (available monitoring data) and secondary information on implementation (collected via desk research and interviews). The main characteristics of the databases are presented below.

- **Primary database** – it includes data provided by **the EC** (payments, milestones and targets, investments and reforms, tagging) and the **RRF Scoreboard**. The data from the EC has been complemented by Scoreboard information where needed. The data was used extensively in the first evaluation questions on Effectiveness.
- **Secondary database –** it includes information on the implementation of the RRF, which is based on the **interviews** and the **desk research** performed at country level. The database is provided in Annex V.

Public consultation

The public consultation was conducted from 16 March 2023 to 8 June 2023. The consultation was available via a dedicated webpage in all official EU languages. It was open to feedback from anyone interested in the topic.

A total of 172 responses were received. Data was screened in line with the Better Regulation Toolbox. No duplicates or campaigns were identified, which means that all responses were included in the analysis. The largest number of contributions stems from Portugal (57 responses), followed by Belgium (16) and Germany (15), Spain (13), Romania (12), Italy (11) and Czechia (10 responses). Four replies come from Austria and three from Hungary. Jointly, respondents from these countries accounted for almost three out of four replies. All but one respondent indicated an EU MS as their country of residence. Respondents from 24 MSs provided responses.

The consultation outcome and the summary report, prepared by the evaluation team, are available on the following website: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13608-Recovery-and-Resilience-Facility-2020-2024-mid-term-evaluation/public-consultation_en.

Surveys

Two targeted surveys were launched end of May 2023 and closed on the 7th of July. The first survey addresses key national stakeholders involved in the programmes' implementation, in the projects' selection, and in the monitoring and reporting procedures. The views and perspectives of this category inform on the aspects of state of implementation, administrative costs and burden, agility of processes and rules, potential overlaps and/or synergies with other existing instruments, in particular cohesion programmes, and views about the performance-based system. The second survey targets national parliaments involved in committees linked to areas of reform identified in the national Recovery and Resilience Plans.

The survey questionnaires were amended in line with DG ECFIN/SG comments and translated in all official languages of the EU.[122] The survey questionnaires were uploaded on EUSurvey, an open-source software solution funded by the EC for creating surveys and questionnaires.

Table 23: Survey status

	Survey 1 – to key RRF national stakeholders	**Survey 2 – to national parliaments**
Date of launch	18 May	25 May 2023
Total number of contacts	60 (plus snowball effect)	1,820
Number of reminders	5 (plus ad hoc emails)	5
Total number of replies	40	5
Of which fully answered questionnaire	18	1
Of which partially answered questionnaire	22	4

Due to the low number of responses received for the survey from national parliaments, its results were not incorporated into the study. Hence, the rest of the section focuses only on the survey to RRF national stakeholders.

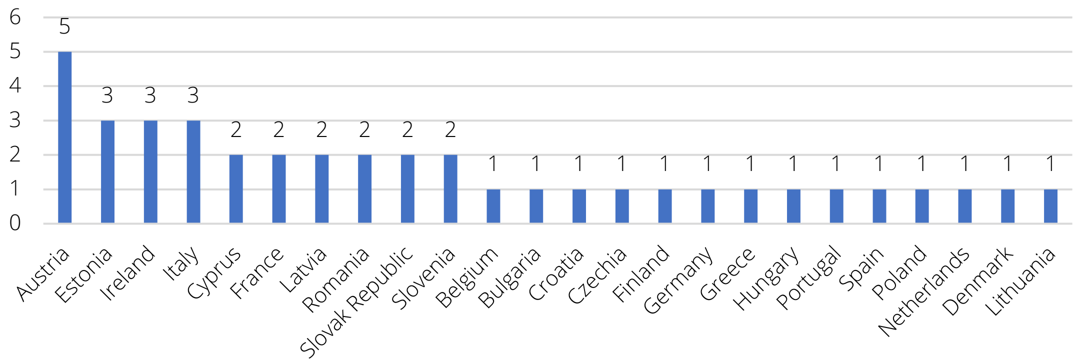
The questionnaire was structured into eight sections, with the initial one designated as the "welcome" (section A). The following sections sought to collect information about the respondents' profile (section B: "Respondent profile"), their country of origin, and the governance organisation set up to manage RRF within their country (section C: "Country"). Subsequent sections aimed to collect participants' perceptions and opinions concerning the effectiveness of the RRF (section D: "Effectiveness of RRF"), its efficiency (section E: "Efficiency of RRF"), as well as its coherence and added value (respectively section F: "Coherence of RRF" and section G: "Value added of RRF"). The final section allowed respondents to share potential contacts to be

[122] Except Gaelic and Maltese.

contacted to further contribute to the study and to provide potential contacts for further contribution to the study and share any thoughts that were not addressed in the survey (section F: "Final remarks").

In total, the survey received responses from 40 participants, representing 24 different EU MSs[123]. Five responses came from Austria, accounting for 13% of the replies. Estonia, Italy, and Ireland each contributed three responses (8%). Two replies (5%) were provided by each of the following countries: Cyprus, France, Latvia, Romania, Slovak Republic, and Slovenia. No contributions were provided by representatives from Malta, Luxembourg, and Sweden. All the other MSs provided one response each. The figure below offers comprehensive information regarding the country of origin of the respondents.

Figure 38: Country of the respondents (n=40)

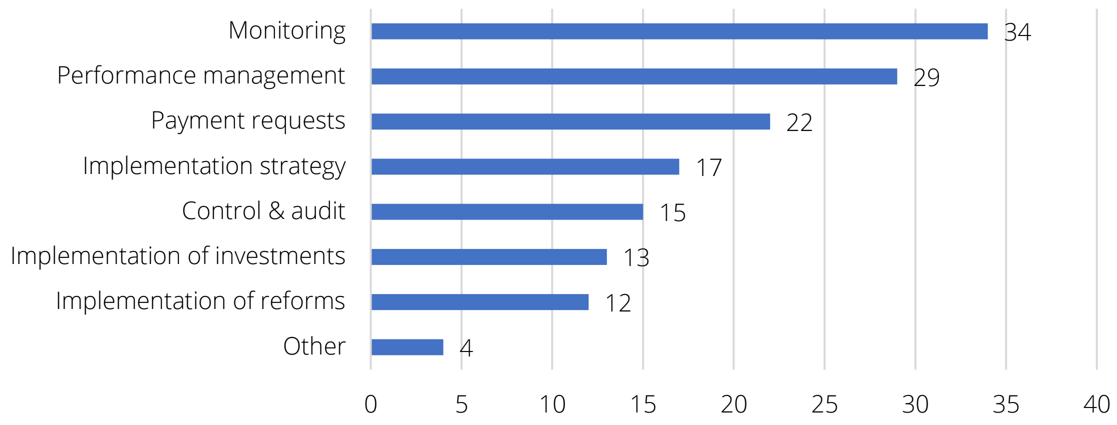


In answering the survey, participants had to provide information concerning their role in the RRF[124]. 85% (34) of them declared that they were involved in the monitoring of the RRF while almost 73% (29) participated in activities related to performance management. Over half of the respondents (55%; 22) reported involvement in payment requests and more than one-third (37%; 15) in control and audit activities. Moreover, around 43% (17) stated that they were involved in implementing the RRF strategy. The figure below shows the roles held in the RRF by the participants. "Other" replies include different activities such as coordination activities, the implementation of RRF management and internal control system, consulting and outreach activities, evaluation activities as regards to NRRP milestone and targets achievement, support to the design of a centralised monitoring system, methodological aspects and management of data quality issues, support to administrations responsible for the implementation of reforms and investments, and the promotion of ex-post evaluations on the impacts of the NRRP.

[123] Question "Country", section C.

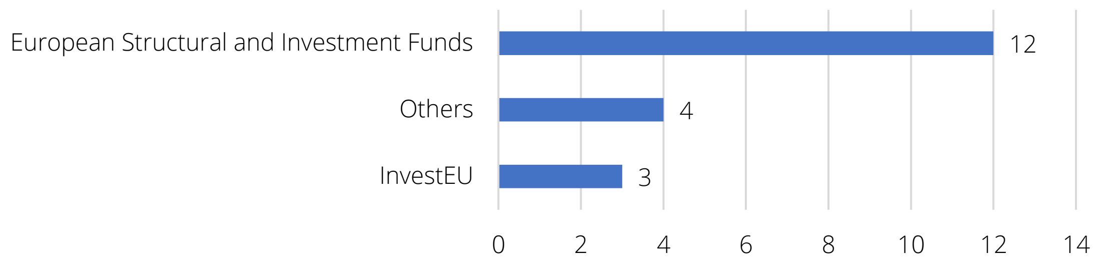
[124] Question "Role in RRF (select all that apply)", section B.

Figure 39: Role of the respondents in the RRF (n=40; multiple answers possible)



Respondents were also asked to select (if any) which other EU programmes they have been or are involved in[125]. Only 35% (14) of them provided such information, with the vast majority (86%; 12) being or having been involved in the European Structural and Investments Funds (ESIF). Around 8% (3) also declared being or having been involved in InvestEU programme (see Figure 40 below). "Others" answers include EEA grants, ALMA, EaSI, Next Generation EU and REPower EU.

Figure 40: Involvement of respondents in other EU programmes (n=14; multiple answers possible)



On the 18th of September, members of the Expert Group of the RRF have been further reached out and invited to provide responses to three evaluation questions:

- Question 1: The 31st of August 2023 was the deadline to ask for the RRF loans. What was the rationale behind your decision to apply - or not apply - for loans under the RRF?
- Question 2: To what extent do you believe that the reforms and investments outlined in the RRP would have been pursued simultaneously if the RRF were not in place? And what efficiency gains (if any) is this simultaneous implementation generating?
- Question 3: Looking at the implementation of your RRF plan, can you identify any (positive or negative) effects that you did not expect when you design the plan?

[125] Question "Involvement in other EU programmes (select all that apply)", section B.

Six member states answered this additional request and provided the answers, which have been included in the Final Report.

Interviews

Targeted interviews are a cornerstone of our stakeholder consultation and allow us to gather particularly qualitative and in-depth information on the RRF. The interviews contribute significantly to the strategic effectiveness, relevance, and EU added value evaluation criteria. The input is inserted into an **Interview matrix** (an Excel file), which links the interview notes with the evaluation questions/criteria. In total **61** semi-structured interviews have been conducted. In addition to the horizontal interviews, additional **95** semi-structured interviews have been conducted in the framework of the case studies and specific analyses (for more details see below). In total, **156** semi-structured interviews have been conducted. The table below summarises the semi-structured interviews:

Table 24: Interview progress

Institution	Country-specific analysis / horizontal analysis	Cases studies
National coordination bodies	**26** interviewed (Missing: Luxembourg)	-
National competent ministries/ national court	-	**5** for ALMP **5** for Cross-border **3** for ECEC **4** for Energy Efficiency **3** for Rule of Law **7** for Digitalisation **3** for SME **2** for gender
National agencies		**1** for Cross-border **1** for Energy Efficiency **2** for Digitalisation
Local/regional government		**7** for ECEC **1** for Energy Efficiency
Managing authorities		**7** for Cohesion Policy
Businesses	-	**3** for Cross-border **4** for SME
EC (SG RECOVER and ECFIN)	**11** interviewed (8 lead negotiators and 3 directors)	**1** for gender
EC (Other DGs)	**7** interviewed: DG EMPL, DG BUDG, DG CLIMA, DG ENV, DG GROW, DG REFORM, DG RTD	**3** EMPL for ALMP) **1** GROW for Cross-border **1** EAC for ECEC **1** ENER for Energy Efficiency **7** REGIO for Cohesion Policy **1** REFORM for Cohesion Policy **1** JUST for gender
Economic and Financial Committee and Economic Policy Committee	**2** interviewed	-
EP	**3** interviewed	-
European Social Partners	**4** (ETUC, SGI Europe, EPSU, Business Europe)	-
European Economic and Social Committee	**2** interviewed	**1** for Cohesion Policy
Committee of the Regions	-	**1** for Cohesion Policy

EU level NGOs	**5** interviewed	**3** for Energy Efficiency 2 for Rule of Law
EU agencies	-	**1** EIGE for gender
Experts	**-**	**5** for ALMP **6** for Rule of Law **2** for gender

Case studies

The aim of the case studies (provided separately in Annex VIII) is to take a deep dive into several themes relevant to the RRF's objectives, identify and analyse unintended consequences and highlight challenges or success stories in implementing RRF measures. **This mid-term evaluation includes eight cross-country thematic case studies**. The case studies are aligned with the six pillars defined in Article 3 of the RRF regulation: (a) **Energy efficiency buildings** (green transition); (b) **Digitalisation of healthcare** (digital transformation); (c) **Support to SMEs** (smart, sustainable and inclusive growth); (d) **Active labour market policies** (social and territorial cohesion); (e) **Rule of law** (health, and economic, social and institutional resilience); and (f) **Early Childhood Education and Care** (Policies for the next generation). In addition to the case studies on the six Pillars, two additional case studies have been added, one on **cross-border projects** and one on the interaction between other EU **Cohesion Policy and the RRF**. Except for the case study on Cohesion, the approach we follow is composed of three steps:

- First, **we describe the measures included in the Recovery and Resilience Plans**, starting from the status of milestones and targets and the level of governance involved (national or subnational). This step largely relies on desk research.
- Second, we **assess the effectiveness, coherence, added value and relevance of the investments and reforms** included in the plans. This requires assessing – to the extent possible – the already tangible results. This step relies on desk research and semi-structured interviews. In total, 88 semi-structured interviews as detailed above (including also interviews executed for gender equality).
- The third step builds on the combination of the previous two steps for the identification of **missed opportunities and persisting gaps**, and of the obstacles or delays currently encountered in the execution of the plans. The third step includes the organisation of roundtables with key national stakeholders responsible for the implementation and policy experts.

Validation workshops

To validate the findings of the cases studies, validation workshops have been organised with representatives from national ministries and policy experts (except for the Cohesion and Digitalisation case study). A general validation workshop on all key findings was also performed with academics, EC services, NGOs, and international institutions. Below is the list of the workshops:

- Energy Efficiency: 14th of September, 14:00-16:00

- Supporting SMEs: 12th of September 14:00-16:00
- Rule of Law: 28th of September 10:00-12:00 (only with national experts)
- Early Childhood Education and Care: 19th of September, 10.30-12.30
- Active Labour Market Policies: 14th of September 14:00-16:00
- Cross-border projects: 8th of September 10:00-12:00
- General validation workshop: 24th of October 2023.

Analysis of costs and benefits

In the context of this study, and in agreement with the client, the analysis of costs and benefits has been structured along the following steps: cost mapping; assessing costs; assessing benefits; concluding on the benefit/cost ratio.

The starting point has been the **mapping of relevant costs**. Based on a documentary review and interviews with the EC, the costs of the RRF have been mapped. See the table below.

Table 25: Mapping of costs

DIRECT COSTS	ADMINISTRATIVE COSTS OF RRF IMPLEMENTATION	
	EU ADMINISTRATIVE COSTS	MS ADMINISTRATIVE COSTS
The funds made available to MS, and the related financial costs (including the EU borrowing costs for the instrument and MS borrowing costs for loans)	**Activities generating administrative costs** **One-off:** Assessing the NRRPs Preparing the proposal for a Council Implementing Decision, operational arrangements and financing and loan agreements Drafting and approving the REPower Regulation Assessing the REPower chapter of NRRP Assessing NRRP amendments Evaluating mid-term and ex-post (estimation) Setting up the FENIX IT tool **Recurrent:** Reporting to the European Parliament and the Council Dialogue with the Council and the European Parliament Ex-ante controls at payment requests Monitoring Performance management Ex-post audits Outreach activities, Communication	**Activities generating administrative costs** **One-off:** Setting up the governance structure Drafting the NRRP Stakeholder consultation Informal dialogue with the COM on plan submission Official process of plan submission Drafting the REPower chapter, plan amendments **Recurrent:** Bi-annual reporting on milestones and targets Bi-annual reporting on monitoring steps Bi-annual reporting on other EU funding Reporting on common indicators Informal dialogue with the COM on payment request submission Official submission of payment request Monitoring and performance management Audits by national authorities Audits by EU institutions (EC) Audits by EU institutions (ECA) Outreach activities

Note: Administrative costs do not include the costs borne by final beneficiaries or citizens to comply with obligations imposed by the RRF regulation as well as regulations related to the support received, such as State aid, public procurement and environmental legislation. They are out of scope of the present evaluation.

The collection of administrative costs has been attempted via a survey of national bodies involved in the activities listed in the above figure. Specifically, the full-time equivalent (FTE) and costs for external services were asked. The following table shows that the survey results are patchy and do not provide complete coverage of costs attributable to the various activities. Nevertheless, there is a relatively good coverage of information provided by coordination bodies. Hence, to ensure a certain degree of consistency, the elaborations presented in the rest of the section will focus solely on the costs reported by the coordination bodies.

Table 26: Mapping of data collected through the survey

	FTE				Cost for external experts
Country	**Coordination body**	**Ministries**	**Other bodies (e.g. monitoring/accounting)**	**Audit Authority**	
Austria	YES	NO	NO	NO	Not relevant
Belgium	YES	Not relevant	NO	NO	Not relevant
Bulgaria	YES	Not relevant	NO	NO	NO
Croatia	YES	Not relevant	NO	NO	NO
Cyprus	YES	Not relevant	NO	NO	NO

Country	FTE				Cost for external experts
	Coordination body	Ministries	Other bodies (e.g. monitoring/accounting)	Audit Authority	
Czechia	YES	Not relevant	NO	NO	YES
Denmark	YES	NO	NO	NO	Not relevant
Estonia	YES	NO	NO	NO	Not relevant
Finland	YES	NO	NO	YES	Not relevant
France	NO	NO	NO	YES	NA
Germany	YES	NO	NO	NO	Not relevant
Greece	NO	Only for 1 Ministry	NO	NO	NA
Hungary	NO	NO	YES	NO	NA
Ireland	YES	NO	YES	NO	NO
Italy	NO	Only for 3 Ministries	NO	NO	NA
Latvia	Partially	NO	NO	NO	Not relevant
Lithuania	YES	Not relevant	NO	NO	YES
Luxembourg	NA	NA	NA	NA	NA
Malta	NA	NA	NA	NA	NA
Netherlands	YES	NO	NO	NO	NO
Poland	YES	NO	NO	NO	NO
Portugal	YES	NO	Maybe yes	Maybe yes	YES
Romania	YES	NO	NO	NO	NO
Slovak Republic	YES	NO	NO	Maybe yes	NO
Slovenia	YES	Not relevant	YES	YES	YES
Spain	NO	NO	NO	NO	NA
Sweden	NA	NA	NA	NA	NA

The second step has involved the **assessment of costs**. While under EQ9, all the above-listed cost categories are briefly discussed, the quantification focused especially on the administrative costs related to MS public administration. As said, the collection of such administrative costs has been attempted via a survey of national bodies involved in the activities listed in the above figure. Specifically, the full-time equivalent (FTE) and costs for external services were asked. Since the survey results are patchy and do not provide complete coverage of costs attributable to the various activities, with the only exception of national coordination bodies, in order to ensure a certain degree of consistency, the elaborations presented in the EQ9 focuses solely on the costs reported by these bodies. Nonetheless, despite indications provided in the survey, the figures provided by various coordination bodies must be taken with caution since they can reflect different interpretations of FTE counting. Some may have taken a very restrictive perspective, considering only the costs of coordinating bodies, while others (such as Portugal and Slovakia) might have considered the staff cost of various bodies involved in the relevant activity. Different information may also have been available to respondents, so some replies may have been more comprehensive than others. In agreement with ECFIN, a fact-checking process with coordination bodies for the collected data was conducted after the submission of the draft final report to validate the data to the best extent possible. While we received some amendments and validation, the data cannot be considered fully validated. Additionally, some coordination bodies confirmed differences in understanding and time constraints in collecting data beyond their organisation.

As for the **assessment of benefits**, as anticipated during the inception stage, quantifying and monetising them has proven to be not feasible. This is due to the wide and varied range of effects, many of which have not yet materialised. Consequently, the analysis of the RRF's benefits has primarily focused on its GDP impact, leveraging the results of the macroeconomic analysis (see next section for methodological details).

As a final step two sets of **benefit-cost ratios** at the MS level and the EU level have been calculated.[126] The first set concerns the benefit-cost ratio defined as the ratio between the absolute cumulative change in real GDP predicted by our model to occur by 2041 as a result of the RRF (against the baseline) and the funding (both grants and loans) already disbursed (in real terms).[127] The second set concerns the expected benefit-cost ratios of the RRF funds once all funds are disbursed. In this case, the ratio is calculated as the absolute cumulative change in real GDP predicted by our model to occur by 2041 as a result of the total RRF injection (relative to the baseline), i.e., the benefit, over the total funding (both grants and loans) in real terms, i.e., the cost. It is worth noting that the administrative costs were excluded from the benefit-cost ratio calculation due to their minimal impact compared to the funds disbursed/expected to be disbursed.

Macroeconomic model

The macroeconomic analysis reported in the main body of this report was carried out using the National Institute Global Econometric Model (NiGEM). NiGEM has been developed and maintained since 1987. NiGEM is the leading global macroeconomic model, used by both policymakers and the private sector across the globe for economic forecasting, scenario building and stress testing. It is used by many European central banks and international organisations such as the OECD. The model consists of individual country models for the major economies that are linked through trade in goods and services and integrated capital markets. The individual country models within NiGEM incorporate long-run relationships grounded in economic theory with flexible lag structures that are fitted to the data. Because NiGEM is fitted to the data, it can be reliably used to calculate the magnitudes of the effects of various economic shocks. Specifically, a model such as NiGEM can provide an efficient way of assessing the development of national economies, disaggregated by demand and supply components, in response to RRF spending. In addition, because NiGEM is a global model with trade and financial linkages across countries, it can be used to examine spillovers: that is, the effects of RRF spending in one EU country on the rest of the European Union.

NiGEM contains around 6,000 variables and over 10,000 model equations, as several variables have multiple equation options. It has global coverage with all OECD countries except Colombia, Israel and Luxembourg being modelled individually within it. There are also separate models of Argentina, Brazil, Bulgaria, Chile, China,

[126] For a number of EU countries – specifically Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia – we cannot capture all of the benefits of RRF spending given the way these countries are modelled within NiGEM. In addition, Cyprus, Luxembourg and Malta are not modelled at all within NiGEM.

[127] The funding of each MS has been considered gross of the interest payments on EU borrowing in proportion to their 2021 share of total EU budget.

Estonia, Hong Kong, India, Latvia, Lithuania, Malaysia, Romania, Russia, Slovenia, South Africa and Taiwan, while the rest of the world is modelled through regional blocks: Africa, Middle East, Latin America, Developing Europe, and East Asia. Within NiGEM some countries are represented with 'full' country models and some countries being represented with reduced form models. Within the European Union, NiGEM contains full country models for Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Romania, Spain and Sweden. It contains reduced country models for Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia. Cyprus, Luxembourg and Malta are not modelled separately within NiGEM.

Figures 41 and 42 present a broad schematic overview of country models, distinguishing between the full model and reduced model specifications. As detailed in the figures, the key difference between the two is that in a reduced country model there is no distinction between consumption and investment. That is, rather than split domestic demand into private consumption, private investment, stock building, government consumption and government investment we only have the split between private and public-sector spending and no measure of either private or public-sector capital. In both cases, output is demand determined in the short run and supply determined in the long run. For full country models, long-run supply is determined by population growth, labour force participation, the equilibrium unemployment rate, labour-augmenting technological progress, and the capital stock. For reduced country models, long-run supply is simply determined by trends in the labour force and labour-augmenting technology. Importantly for the analysis contained in this report, full country models contain a link between government investment and long-run potential output and so can be used to analyse the long-run effects of RRF spending on investment projects. Unfortunately, this is not the case for reduced country models or for the three countries not modelled separately in NiGEM, though, given these countries only represent less than 4 per cent of EU GDP, this should not make much of a difference to the overall results for the European Union.

Figure 41: NiGEM Full country specification

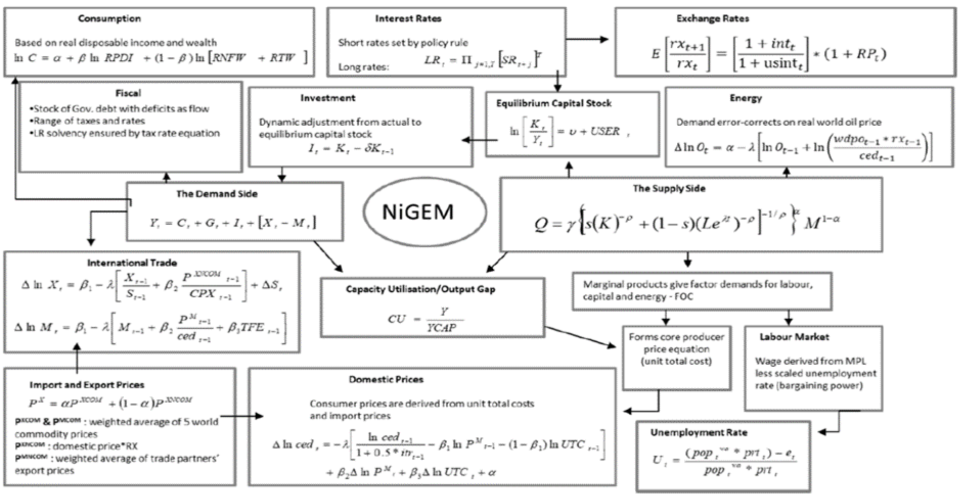
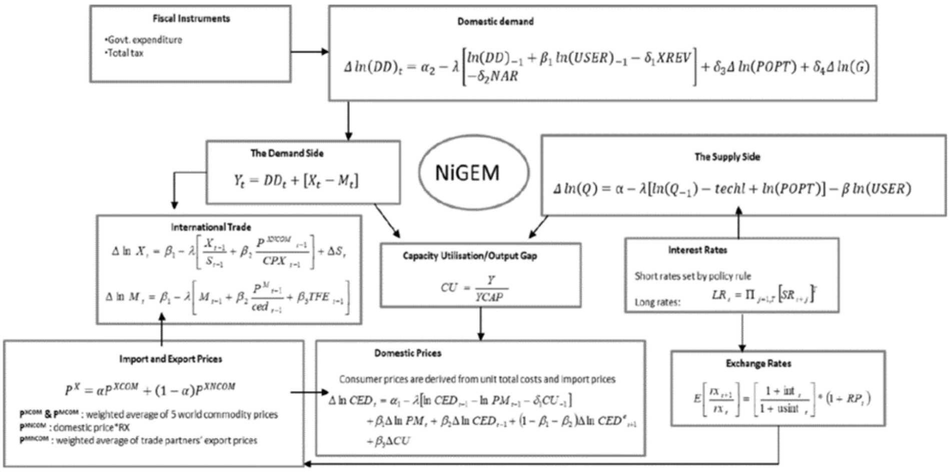


Figure 42: NiGEM Reduced country specification



Full details of the equations underlying NiGEM can be found in Handzsche et al. (2018) but here we concentrate on the channels through which the RRF, by increasing public investment, may lead to higher EU GDP. We can first note that, for full country models within NiGEM, an increase in public investment, *GI*, will lead to an increase in GDP in the short run:

$$Y = C + DS + PSI + GC + GI + XVOL - MVOL \quad \textbf{(1)}$$

Where *Y* denotes GDP, *C* denotes household consumption, *DS* denotes stock building, *PSI* denotes private-sector investment, *GC* denotes government consumption, *XVOL* denotes exports and *MVOL* denotes imports. The increase in GDP will depend on the size of the multiplier, which is itself determined by the general equilibrium responses of the other variables in equation **(1)**.

An increase in government investment will also lead to a higher public-sector capital stock, *KG*, in the future:

$$KG = (1 - \delta)\ KG_{-1} + GI \quad \textbf{(2)}$$

And this higher capital stock itself leads to higher trend output, *YCAP*, and so can increase in GDP in the long run:

$$YCAP = (KP + KG)^{1-\alpha-\theta}(TECHL*ETRND)^{\theta}\,(OIVOL*Y)^{\alpha} \quad \textbf{(3)}$$

Where *KP* denotes private-sector capital stock, *TECHL* denotes labour-augmenting technical progress, *ETRND* denotes trend employment and *OIVOL* is energy use as a share of GDP.

These are the two channels through which an increase in public investment affects output in full country models. As reduced country models do not include investment or capital, for those countries we instead shock total government expenditure. This adds directly to domestic demand and, hence, raises GDP in the short run but it has no effect on potential output or GDP in the long run.

Annex II. Evaluation matrix

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
Effectiveness	**Overall RRF functioning**				
	EQ1: To what extent has the RRF been effective in providing financial support to MSs (cf. pre-financing, speed of disbursements)	Timely (i.e., no lags) analysis and disbursement of the requests for pre-financing and instalments requests	• Timelines of the payment requests (in line with the original planning) • Time lag between disbursement requests – approval or rejection – actual disbursement	Primary database and stakeholder consultations	Descriptive statistics of: • Speed of disbursement • Value of disbursements • Pre-financing value Opinion on the effectiveness of the provision of financial support
	EQ2: To what extent has the RRF been effective in enabling the implementation of reforms and investments respectively, as set out in the respective Council Implementing Decisions (CIDs)?	Summative question (answer to be provided on the basis of the sub-questions below)			
	EQ2.1: Given the current state of play of the Facility's implementation, which outputs (milestones/targets) and results have already been achieved?	Fulfilment of milestones and targets Extent of progress on the common indicators	Values of milestones and targets Common indicator values	Primary database and RRF scoreboard	Descriptive statistics and literature review (reports on the RRF implementation)
	EQ2.2: To what extent did the achievement of milestones and targets translate into the successful implementation of reforms and investments?	Results of investments and reforms are aligned to the expectations. Degree of granularity of targets and clarity of milestones and capacity to trace investments and reforms implementation	Identified results of investments Identified results of reforms Qualitative assessment of targets/milestones granularity and clarity vis-à-vis national decision-making processes	For the results of investments/reforms - secondary database, stakeholder consultations, and case studies	• Case Studies • Survey • Semi-structured interviews

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ2.3: How effective has the RRF been in supporting reforms that address the CSRs (as the support for implementing reforms is a key feature/novelty of the instrument)?	Alignment between reforms and CSRs	Qualitative interviews and comparative synoptic tables State of implementation of the CSRs	Secondary database and stakeholder consultations EC CSRs database[128]	• Semi-structured interviews • Descriptive statistics
	EQ3: Was the EC's communication (including information discussions preceding the formal submission of RRPs/payment requests, timing and availability of guidance) effective to support the timely implementation of the RRF?	Timely and available information communication on RRF procedures (e.g., submission of RRPs, payment requests, reporting etc.)	• Timeliness of issuing guidance documentation • National authorities' perception of EC communication effectiveness and impact on the plans' implementation	Stakeholder consultation (in particular the survey with national coordination bodies) Review of guidance documents	• Semi-structured interviews • Survey • Literature review (on guidance documents)
	RRF objectives' accomplishment EQ4: To what extent has the RRF been effective in:				
	EQ4.1: cushioning the social and economic impact of the crisis, in particular on women	Identified contribution to cushioning the social and economic impact of the crisis on women	Common indicators, disaggregated by gender and the scoreboard: • researchers working in supported research facilities; • participants in education or training; • people in employment or engaged in job searching activities; • young people aged 15-29 receiving support. Qualitative and quantitative references related to the United Nations Sustainable Development Goal 5 on gender equality and the European Pillar of Social Rights.	Primary database and RRF scoreboard Stakeholder consultations	• Descriptive statistics • Case studies • Semi-structured interviews • Descriptive statistics • Literature review

128 The full database can be found at: https://ec.europa.eu/economy_finance/country-specific-recommendations-database/.

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ4.2: supporting the economic recovery	Identified contribution to positive economic recovery trends	Macroeconomic indicators (i.e. GDP, employment, productivity, government debt)	National Institute of Economic and Social Research's Global Econometric Model - NiGEM	• Descriptive statistics • Quantitative (macroeconomic) analysis of impacts – both by ECFIN and through NiGeM
	EQ4.3: enhancing social and territorial cohesion	• Enactment of reforms and investments to address social and territorial cohesion	• Allocation of RRF funds between and within countries	Primary database Stakeholder consultations	• Case study on modernisation of labour market institutions • Descriptive statistics • Semi-structured interviews
	EQ4.4: increasing health, economic, social and institutional resilience	• Enactment of reforms and investments to support health, social and institutional resilience • Progress and expected progress of the relevant common indicators	• Milestones and targets related to resilience • Relevant common indicators: Number of users of new and upgraded public digital services, products and processes; Capacity of new or modernised health care facilities	Primary database and RRF scoreboard Secondary database, incl. on stakeholder consultations	• Case study on justice reform • Semi-structured interviews • Descriptive statistics on the common indicators progress
	EQ4.5: supporting the green transition	• Enactment of reforms and investments to support the green transition in the MSs. • Progress on the relevant common indicators • Compliance with the DNSH principle is ensured by the existing procedures	• Milestones and targets related to the green transition • Green common indicators: 1) Savings in annual primary energy consumption; (2) Additional operational capacity installed for renewable energy; (3) Alternative fuels infrastructure (refuelling/recharging points) • Information on procedures and application of the DNSH principle by beneficiaries	Primary database and RRF scoreboard Secondary database, incl. on stakeholder consultations	• Green transition case study • Surveys • Semi-structured interviews • Desk research, incl. on the alignment to the DNSH principle • Descriptive statistics on the common indicators progress

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ4.6: supporting the digital transformation	• Enactment of reforms and investments to support digital transformation in the MSs • Progress on the relevant common indicators	• Milestones and targets related to the digital transformation • Digital common indicators: 5) Additional dwellings with internet access provided via very high-capacity networks; 6) Enterprises supported to develop or adopt digital products, services and application processes; 7) Users of new and upgraded public digital services, products and processes	Primary database and RRF scoreboard Secondary database, incl. on stakeholder consultations	• Digital transformation case study; • Surveys; • Semi-structured interviews • Desk research • Descriptive statistics on the common indicators progress
	EQ4.7: fostering smart, sustainable and inclusive - economic growth and employment potential within the Union	• Enactment of reforms and investments to support inclusive economic growth and employment in the MSs • Progress and expected progress of the relevant common indicators	• Milestones and targets related to fostering smart, sustainable and inclusive - economic growth and employment potential • Relevant common indicators: 8) Researchers working in supported research facilities; 9) Enterprises supported (of which small – including micro, medium, large); 10) Number of participants in education or training; 11) Number of people in employment or engaged in job searching activities	Primary database and RRF scoreboard Secondary database, incl. on stakeholder consultations and macroeconomic imbalance trends	• Case study on smart, sustainable and inclusive growth; • Surveys; • Semi-structured interviews • Descriptive statistics on the common indicators progress
	EQ4.8: supporting policies for next generation	• Enactment of reforms and investments to support Early Childhood Education and Care, Education policies and Youth integration in the labour market • Progress of the relevant common indicators	• Milestones and targets related to policies for the next generation • Relevant common indicators: 13) Classroom capacity of new or modernised childcare and education facilities and 14) Number of young people aged 15-29 years receiving support	Primary database and RRF scoreboard Secondary database, incl. on stakeholder consultations	• Case study on policies for the next generation • Surveys • Semi-structured interviews • Descriptive statistics on the common indicators progress

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ4.9: mitigating the long-term risks stemming from the Covid-19 crisis	• reduction in spreads of MS • positive effects on the MS GDP	• MS spreads • GDP effects	NiGEM	• Literature review • Quantitative analysis of impacts (macroeconomic modelling)
	EQ.4.10: contributing to REPowerEU objectives	• Expected contribution of reforms and investments to replace Russian fossil fuels and providing clean, affordable and secure energy to households and businesses across Europe.	• Number of modified plans including a REPowerEU chapter as approved by the EC • Number of measures in the REPowerEU chapters implemented (if any); • REPowerEU objectives pursued in the respective chapters	Desk research of REPowerEU chapters Stakeholder consultations	• Desk research • Semi-structured interviews
	RRF implementation obstacles and unexpected effects				
	EQ5.1: To what extent did external factors have an impact on the RRF roll-out? How this may have had an impact on the Facility's effectiveness in reaching its objectives?	Delays in or partial fulfilment of Milestones and Targets due to external factors (cf. war in Ukraine, exceptionally high inflation, supply shortages, labour shortages, energy crisis, other)	Indicators related to external factors, e.g. inflation, energy prices	Primary database – data on disbursements Contextual data on external factors, e.g. inflation, energy prices, labour shortages etc.	• Semi-structured interviews • Surveys • Descriptive statistics • Literature review
	EQ5.2: To what extent did the absorption capacity of MSs affect the RRF effectiveness?	Extent to which absorption capacity represents a factor in the RRF progress	Evidence of problems related to absorption capacity	Stakeholder consultations	• Desk research • Semi-structured interviews
	EQ5.3: Have any positive/or negative unexpected effects been identified?	Exploratory question, i.e. no criteria / indicators			
	RRF and EU Funding Instruments EQ6: How does the effectiveness of the RRF compare with that of other EU programme and instruments, notably cohesion funds?	• Benchmarking RRF degree of achievement of targets and milestones with Cohesion policy financing	• Types and number of RRF 'common indicators' aligned with the ones of other programmes and funds (Cohesion policy funds in particular) • Stakeholder perception on the RRF effectiveness in comparison with the Cohesion Policy financing	Primary database – data on the progress of milestones / targets / common indicators Data on other programmes (e.g. Cohesion policy) Stakeholder consultations	• Case study on other instruments • Semi-structured interviews • Survey • Case study • Descriptive statistics

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	RRF public visibility and contribution to strengthen the Union EQ7: How visible has the Recovery and Resilience Facility been to the public? How was the instrument perceived by the public, by MSs and by beneficiaries?	• Perception (positive/negative) • Communication strategy and funding visibility and acknowledgement	• Awareness of the RRF by the general public • Outreach statistics • Media coverage	• Eurobarometer • Public consultation	• Analysis of the Eurobarometer survey results • Public consultation results of citizens
	Overarching question EQ8: What have been so far the most effective aspects of the RRF (cf. speed of disbursements, implementation of long-standing/awaited/difficult reforms?) What has been the least effective?	• Answers to the previous questions	No specific indicators	Response to the above EQs	Qualitative assessment based on the answers to the previous questions
EFFICIENCY	EQ9: How do the cost (inputs) of the Facility compare with the RRF outputs, results and impact?	• (Positive) benefit-cost ratio • (Positive) general assessment on the proportionality of costs / achievements	• Administrative costs – FTEs and total costs in EUR • Stakeholder opinion on the proportionality of the costs and achievements	Information/reports from MS on procedures and costs	• Desk research • Semi-structured interviews • Survey • Descriptive statistics
	EQ9.1: To what extent has the RRF - as a new instrument - created significant “entry-costs” for both national administrations and EU institutions (to become familiar with the functioning of the RRF)? EQ9.2: To what extent, did these “entry costs” evolve over time with the implementation of the instrument? How did the costs for the preparation of the Plans compare with those for the implementation of the plans?	(Positive) stakeholder opinion on the proportionality of costs	• New administrative procedures created • New units/organisms created (e.g., audit, control, monitoring/reporting, coordination)	Information/reports from MS on procedures and costs Stakeholder consultations	• Desk research • Semi-structured interviews • Survey

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ10: To what extent has the RRF - as a new instrument - created significant “entry-costs” for both national administrations and EU institutions (to become familiar with the functioning of the RRF)?	Exploratory question, i.e., no indicators / judgement criteria		Information/reports from MS on procedures and costs	• Desk research • Semi-structured interviews • Survey
	EQ11: How do the costs/burden of the RRF compliance compare with those of other instruments, notably cohesion funds, also taking into account the costs of audits and controls, as well as of data collection?	Level of proportionality of actual and perceived administrative costs of RRF as compared to cohesion funds in all the phase of the programming cycle (design, negotiation, information, implementation, funds disbursement, monitoring, reporting, audit and control)	Exploratory question, i.e., no indicators / judgement criteria	Available reports/information on administrative costs / burden Stakeholder consultations	• Desk research • Semi-structured interviews • Survey
	EQ12: Can any unnecessary administrative burden and complexity be identified? To what extent is there scope for simplification?	Identified potential for simplification	List of areas with unnecessary burden, administrative complexity and for potential simplification	Stakeholder consultations	• Desk research • Semi-structured interviews • Survey
	EQ13: To what extent have there been efficiency gains from pursuing reforms and investments together under one instrument?	Shared perception of efficiency gains	Stakeholder opinion of the efficiency gains resulting from the coordination of different policy areas	Stakeholder consultations	• Desk research • Semi-structured interviews • Survey
COHERENCE	EQ14: To what extent was the RRF coherent with the Technical Support Instrument?	Level of coherence in terms of objectives and implementation with broad Union policies (e.g., in the green and digital sector) and the Technical Support Instrument Complementarity of specific activities	Objectives, achievements, and timing of broad Union policies (e.g., in the green and digital sector) Objectives, achievements, and their timing of the Technical Support Instrument Share of RRF-linked projects in the TSI portfolio	RRF regulation (and related acts) TSI-related documents (e.g., Decisions, portfolio)	• Desk research • Semi-structured interviews • Descriptive statistics on the TSI portfolio

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ15: To what extent has the RRF been integrated into the broader country-specific surveillance under the European Semester? To what extent have National Reform Programmes been used as a reporting tool for the RRF?	Level of integration of the RRF in the Semester cycle 2021-2022 and 2022-2023 via the National Reform Programme	Actual inclusion of the NRRPs reporting in the Semester	RRF reporting within the European Semester (biannual)	• Desk research • Semi-structured interviews
	EQ16: To what extent have EU's priorities guided the reforms and investments put forward by MSs in their recovery and resilience plans?	The objectives defined in the EU Regulation as well as in the CSRs and the other EU initiatives (e.g., Child Guarantee, Youth Guarantee, Social Pillar, EU Green Deal etc) mentioned in the Regulation did guide the drafting of the RRF plans	• National and EU authorities' perception of the guidance of EU objectives in the drafting phase of the RRF • Alignment between EU priorities defined in the CSRs but also in other EU initiatives and RRF reforms and investments	Key EU policy documents describing the EU priorities on twin transition, resilience, COVID response.	• Desk Research • Semi-structured interviews • Case studies
	EQ17: To what extent have complementarity effects and synergies between the RRF with other EU programmes and instruments (such as Cohesion policy funds) been identified and exploited?	Mechanisms put in place to exploit synergies and complementarities and avoid overlapping and displacement effects	• Guidelines and formal indications about how to exploit synergies. • Mechanisms reported by stakeholders and programme managers on how to exploit synergies and their effects	Description of existing mechanisms Stakeholder consultation	• Case study on other EU funds • Desk Research • Semi-structured interviews • Survey

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ18: To what extent were RRF/RRPs coherent/complementary with relevant MSs' instruments aiming to support the economic recovery after the Covid crisis?	Mechanisms put in place to ensure coherence with MS instruments related to the COVID crisis	• Guidelines and formal indications about how to exploit synergies with other MS instruments to cope with the Covid crisis; mechanisms reported by stakeholders and programme managers on how to exploit synergies and their effects; • Quantitative data on crisis response measures • Degree of alignment with MS fiscal measures • Degree of complementarity between NRRPs and the existing national post-pandemic recovery strategies	Description of other existing MS instruments aiming at support the economic recovery after the Covid crisis and mechanism to ensure consistency and complementarity	• Desk Research • Semi-structured interviews • Survey • IMF database
	EQ19: To what extent have reforms and investments in the plans been complementary and mutually reinforcing?	Alignment between reforms and investments vis-à-vis country-specific needs as identified in the Country Reports	-	Case studies	• Case studies • Desk research • Semi-structured interviews
EU ADDED VALUE	Overarching question: EQ20: What has the RRF provided over and above what MSs actions and funding could have achieved? In particular:				
	EQ20.1: Have substitution effects with national policies/programs and/or with other EU funded programmes been identified and if so, to which extent?	Evidence / extent of substitution effects with national policies / programmes	• Data / information of transferring investments from other national / EU programmes to the NRRPs	Stakeholder consultation	• Semi-structured interviews •
	EQ20.2: To what extent have the EU's advantageous borrowing conditions and the impact that the RRF had on reducing spreads of EU MSs at its creation, contributed to the benefits of the RRF?	Evidence / extent of impact on spreads	• Actual spreads vs under counterfactual • Borrowing rates / conditions (maturities, yield on govt bonds etc.)	Eurostat/ECB statistics	• Macroeconomic modelling (EC and NiGeM) • Desk research

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ20.3: To what extent did the Facility contribute to the implementation and further development of multi-country projects?	Evidence of implementation / development of multi-country projects	• Numbers and types of multi-country projects • Numbers and types of multi-country projects financed by EU funds (e.g., Interreg)	Primary database – data on the multi-country projects Databases on other multi-country projects	• Desk Research • Semi-structured interviews • Descriptive statistics • Case study on cross-border projects
	EQ20.4: To what extent did the RRF contribute to maintaining the level-playing field and strengthening the Single Market?	Crisis response measures by individual MS would have been more disruptive/would have caused divergence in the single market in the absence of the RRF	-	Case studies	• Desk research • Case studies
	EQ21: To what extent did the simultaneous implementation of reforms and investments across MS create EU added value?	RRF plans used to plan reforms together with investments that would otherwise not be implemented due to financial, technical or political constraints	• National policy makers acknowledge the EU added value of the RRF instrument to implement together reforms and investments overcoming existing obstacles • Uptake of longstanding CSRs in reforms	Stakeholder consultation	• Semi-structured interviews • Case studies

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ22: To what extent, could similar results/impact be achieved with a different instrument at Union level (e.g., budget support) or by MSs?	Identification or lack of evidence that RRF objectives could have been achieved via other EU level instruments or MS actions	• Existing EU and MS instruments/funds dedicated to achieving similar objectives to the RRF	Primary database – data on the progress of milestones / targets / common indicators Stakeholder consultation	• Semi-structured interviews • Survey • Case studies • Secondary database with NRRP results
RELEVANCE	Overarching question: EQ23: To what extent does the RRF continue to be relevant in view of its objectives and how well do these objectives correspond with current needs within the EU?				
	EQ23.1: To what extent did the initial allocation key remain relevant over the period?	Allocation key reflects the evolving needs	• Allocations data • Indicators used to calculate the allocation key (e.g., GDP, employment)	Primary database – data on allocations (current and original)	• Descriptive statistics
	EQ23.2: To what extent have the initial RRPs remained relevant/feasible to implement until 2026 (i.e., scope of changes made to the RRPs till the cut-off date)?	RRPs remain relevant and feasible until the cut-off date	• Milestones and targets compared to the implementation status; • Qualitative judgement on forward looking (until 2026) part.	Primary database – data on the progress of milestones / targets / common indicators Assessment of effectiveness (and the expectations for the future)	• Semi-structured interviews
	EQ24: To what extent is the instrument sufficiently flexible/agile to adjust to changing circumstances (cf. REPowerEU)?	Timely changes in the instrument to changing circumstances Existing mechanisms for changes in the instrument	• Identification of changing circumstances • Qualitative judgement based on REPower EU experience	Analysis on changing circumstances and corresponding changes in the instrument	• Desk research including (Review of REPowerEU chapters) • Semi-structured interviews

	Evaluation questions	Judgement criteria	Indicators	Main sources	Evaluation tools
	EQ25: What was the rationale behind MS's decisions to apply - or not apply - for loans under the RRF?	Use of the loan compartment is in line with what could be expected based on market developments, level of debt burden of individual MS and size of allocations	• Uptake of loans • Rationales for using/not using loan compartment	Overview of MSs' loan requests[129]	• Descriptive statistics • Analysis on borrowing conditions (interest), indebtedness (debt/GDP) and loan uptake • Semi-structured interviews

[129] https://commission.europa.eu/system/files/2023-09/01092023-Final-overview-of-MS-loan-requests-under-the-RRF_en.pdf

Annex III. Literature review

In what follows we present the main findings from the literature review by key topics.

The heterogeneity of milestones and targets across MSs

The link between milestones and targets fulfilment and the successful implementation of the related reforms and investments included in the RRF plans has been the object of an extensive debate. Such debate has largely revolved around the actual capacity of milestones and targets to track the results and the impacts of the related investments and reforms.

Darvas et al. (2023) highlight that the RRF Regulation does not require the achievement of results in the commonly understood sense, but instead "*measures of progress towards the achievement of a reform or an investment*". He further stresses that the EC guidelines for preparing recovery plans by EU national authorities, to access RRF funding, explicitly discouraged result indicators. The guidance in fact specifies that M&T indicators should remain within the control of the MSs and should not be conditional on external factors such as the macroeconomic outlook or the evolution of the labour market.

Similar observations have been made by the ECA (2022a) that highlights how the Guidance suggest to use input indicators or preferably output indicators, while it discourages impact indicators since they are not under the control of the MSs. In this respect, since (not) fulfilling previously agreed M&Ts is the only criterion to justify (not) disbursing an RRF payment request, milestones and targets are likely to remain limited to tracking outputs[130] rather than results[131], let alone impacts[132].

As a result of this lack of clarity on the type of indicators for milestones and targets, there are major differences in defining milestones and targets across national recovery plans. This is considered as a limit and an obstacle to assess the actual translation of the milestones and targets into successful implementation of reforms and investments. The ECA, for instance, stresses that the lack of a harmonised approach in defining milestones and targets affects comparability across MSs and poses a risk in terms of equal treatment. Darvas (2023) highlights that the lack of a consistent use of result indicators misses the opportunity to completely rule out projects without immediate usability (e.g. roads to nowhere).

In support of its claim, the Court assesses the milestones and targets in six countries (Germany, Greece, Spain, France, Croatia and Italy), and observes that most milestones and targets are output-oriented (e.g., number of buildings renovated/kilometres of railways renovated/charging stations installed). Furthermore, at least half of the sampled RRPs included measures with input indicators, generally referring to spending of a certain amount of funds (e.g., Germany, Spain and France). Darvas and Welslau (2023) instead analysed the targets set out by the five largest EU countries and Romania, and put them into three

[130] Something produced or achieved by a project, such as the delivery of a training course or the construction of a road.
[131] The immediate effect of a project or programme on its completion, such as the improved employability of course participants or improved mobility following the construction of a new road.
[132] The wider long-term consequences of a completed project or programme, such as socio-economic benefits for the population as a whole.

categories (inputs, outputs and results). Like the Court, they observe that there is still heterogeneity across MSs in the types of indicators used to track the targets. The results show that France, Germany and the Netherlands adopted very few results indicators (respectively 3%, 7% and 6%), Italy, Finland and Romania have a larger share of result indicators (19%, 17% and 15% respectively) while Spain is somewhere halfway (10%).

Other authors zoomed in on the differences between the objectives set at the EU level in the CIDs, and those set at national level. Zooming in on the Italian recovery and resilience plan, Corti and Ruiz (2023) observe that different targets have been set for the investments in Early Childhood Education and Care and Public Employment Service. In both cases, at national level, the objectives are set at regional level since the aim of the measures is to address territorial inequalities in service provision. As observed by the authors, it can happen that Italy will be compliant with the RRP targets but not with the national plan, which thus put into question to what extent the achievement of milestones and targets translate into the successful implementation of reforms and investments.

The RRF support to reforms that address the CSRs.

Since the creation of the RRF, several studies have highlighted the potential positive interaction between the European Semester and the Recovery and Resilience Facility. Moschella (2020) argues that the RRF and the Semester are mutually beneficial: the EU Semester offers important informational and signalling advantages for the preparation of recovery and resilience plans. The RRF, in turn, offers important implementation benefits for the policy advice issued under the European Semester. Vanhercke and Verdun (2021) argue that - as a result of the linkage between the RRF and the Semester - the latter acquires new prominence. The RRF offers financial incentives in return for a coherent package of public investments and reforms, thereby giving European governments additional means to overcome domestic institutional resistance in the face of Semester tools and recommendations.

Before the adoption of the RRF, the Semester support for the implementation of reforms has broadly considered weak. In a special report 16/2020 (ECA, 2020a), the European Court of Auditors found that over the 2011-2017 period, only 1.6 % of CSRs were deemed to have been 'fully implemented' within a year of been issued. 'Substantial progress' was achieved in only 4.6 % of the CSRs. The multi-annual assessment showed a better but still not very positive picture: MSs implemented 26 % of the CSRs substantially or fully over the 2011-2018 period.

Based on the own EC assessment, the Recovery and Resilience Facility contribute to effectively addressing all or a significant subset of challenges identified in the relevant CSRs addressed to the MSs in the context of the European Semester (EC, 2022a). Based on the 2023 European Semester Spring Package (EC, 2023) which takes stock of the MSs' policy actions to address the challenges identified in the 2019-2020 CSRs (reference year of the RRF), 54% of the CSRs have some progress, 30% have limited progress, 12% substantial progress, and 2% are fully implemented. From a multiannual perspective, at least some progress has been achieved with the implementation of 63% of the 2019-2020 CSRs.

The literature is quite unanimous in recognising that the RRF contributed effectively to the support of reforms that otherwise would not have been implemented. The ECA recognizes that overall the RRPs contribute to address a significant subset of CSRs and effectively supported the implementation of long-awaited reforms, such as the assessment of the quality of public expenditure in France, spending review in Italy or judiciary and anti-corruption measures in Croatia. Other examples of reforms related to CSRs implemented thanks to the RRF include the liberalisation of closed professions in Portugal, the pension reform in Slovakia and the reform to address investment bottlenecks in Germany.

Zooming in on social and employment reforms in six MSs (Italy, Germany, Spain, Croatia, Belgium and Austria), Corti and Vesan (2023) show that the RRF has significantly contributed to reinforcing MSs' compliance with social Country Specific Recommendations. They further notice that the number of reforms adopted to address the challenges identified in the CSRs varies across countries and largely depends on the size of the financial envelope whereas the level of commitment is higher in highly RRF beneficiary countries, which are also the ones most in need for reforms. Among the key social reforms that could not be implemented without the RRF they indicate, the pension and labour market reforms in Spain, the reform on transparency and adequacy of social benefits and the education reform in Croatia, the reform for non-self-sufficient elderly persons and public employment reform and simplification reform in Italy.

The EC's communication

Both in the case of the plans' drafting as well as their implementation, the Communication of the EC to MSs came when MSs were already preparing the plans or were in the course of the implementation. The EC was responsible for providing MSs the needed operational guidance. The need for clear steering was broadly considered positively by all MSs in the preparatory phase of the plans. Due to the time constraints, the EC had to develop such guidance before the legal text on the RRF was even finalised. While the overall guidance was perceived positively, still some concerns emerged with the publication of the second version of the guidance and in particular with the DNSH guidance that was adopted at the same time as the RRF Regulation. Regarding the DNSH, the Court noted that *'the EC's assessment documentation of the DNSH checklists was spread across multiple working papers and lacked a summary list showing all DNSH assessments for every measure to back up its overall conclusion in the SWD and its final assessment' (*ECA 2022b*).* At the same time, it is worth stressing the specific context in which the DNSH guidance was developed. Indeed, the time required to prepare the DNSH was linked to the ongoing debate on the Green Taxonomy.

In the preparation phase, another aspect that MSs indicated could be improved is the communication with other countries. As stressed by Corti et al. (2022a) as well as by the ECA (2022b), MSs maintain they would have benefitted more from an exchange of best practices not only with the EC but also with other MSs, especially for the identification of cross-border projects.

While the guidance on drafting the plans was broadly welcomed positively by all MSs, more concerns have instead been raised with respect to the implementation of the

RRF. Climent del Castillo (2022) for instance highlights that the EC, unlike in the case of the Structural Funds, has no specific EU guidance for implementing the RRF, besides the 'Technical guidance on the application of 'do no significant harm' under the Recovery and Resilience Facility Regulation', which focuses on the programming phase rather than the implementing phase. Concerns regard in particular two aspects of the RRF: 1) unclarity with respect to the role of control and audits 2) interpretation of flexibility in milestones and targets.

With respect to the role of controls and audits, the first element to consider regards the audit responsibilities, which are mostly delegated to MSs. Gauer (ECA, 2022b) highlights that this does not mean that the EC does not check the national audit and controls systems – as this is one of the assessment criteria that the EC checked before approving the NRRPs. Neither it means that the EC doesn't have sufficient mechanisms to act in case of misuse of funds. However, this is only a "residual" responsibility as Valdis Dombrovskis puts it in an interview for the 2nd edition of the ECA's Journal in 2022 (ECA, 2022b). Accordingly, the ECA, which carries out a Statement of Assurance on the NGEU (Csak et al. In ECA, 2022c), has developed a strategy (2021-2025 Strategy) for carrying out its responsibilities for the NGEU and the RRF, which aims to provide broad coverage in terms of financial compliance, and several performance audits (ECA, 2022a). As noted by Campos Acuña (2022), there was a need for innovation and reinvention in the audit approach, leaving aside formalism, understood as looking at cost justification as in the case of Cohesion Policy. As stressed by all coordination bodies, this learning process came initially with some unclarity with respect to the roles of the auditors at the European and national level, which in part translated into perceived administrative burden from national authorities which are subject to multiple audits.

The second aspect that raised some unclarity when it comes to the implementation of the plans regards the interpretation of flexibility of milestones of targets. Such debate has been largely driven by the challenges posed by the inflation peak, the disruption of the supply chain and the global energy market disruption caused by Russia's invasion of Ukraine. While the RRF Regulation is clear in identifying the conditions under which the plans can be modified (Article 21.1, Article 14.4 and Article 11.2), the EC assessment of the milestones and targets fulfilment as well as the related payments were object of discussion. Some national coordination bodies lamented some lack of transparency and equal treatment amongst MSs. In this respect, the EC Communication of February 2023 has been broadly welcomed by all actors as a positive step to clarify the assessment criteria for the payment requests or (partial) suspension and the milestones and targets' satisfactory fulfilment. The framework is considered to be satisfactory by all national coordination bodies when it comes to investments while some margins of discretion are still associated with reforms.

The RRF role in cushioning the social and economic impact of the crisis on women

The effectiveness of the RRF in cushioning the impact of the crisis on women depends on various factors, this preliminary literature review distils them under (1) the way how gender equality has been integrated within the RRF and RRPs, (2) the progress made and foreseen impact of gender equality related measures. Based upon the literature review so far, the effectiveness of the RRF in cushioning the impact of the crisis on women is expected to vary across MSs and thematic areas, but in general to be rather moderate.

The RRF Regulation (2021) recognised women were particularly affected by the crisis, since they represent most healthcare workers across the Union and balance unpaid care work with their employment responsibilities (highlighting the importance of care infrastructure). The situation is especially difficult for single parents, 85 % of whom are women. Shreeves (2021) discussed how lockdowns measures have led to an increase in violence against women and disrupted access to support services and sexual and reproductive healthcare services, widened the existing gender divide in unpaid care work and greater work-life conflict. EIGE (2023) found that the crisis has impacted women by aggravating pre-existing disadvantages. Compared with men, women were more negatively affected by a decline in the hours of work and more absence from work and a higher likelihood to be unemployed or work fewer hours than wished.

The literature highlights that almost all MSs have planned and mapped out how gender equality will be addressed in their NRRP (EC, 2022a), although to different extents and in different areas (EC, 2022a; Sapała, 2022; EIGE, 2023). Some argue that gender equality could have been better integrated in the RRF and the RRPs as currently done by many MSs and mention limited incentives from the RRF to make MSs advance on gender equality (EIGE, 2023; Thissen, 2022).

The EC's (2022a) Review Report on the implementation of the Recovery and Resilience Facility reported that although gender equality did not constitute a formal criterion for the EC's assessments of NRRPs, equality measures are prominently featured in the RFF and reporting tools are being promoted. The RRF Regulation (2021) requires MSs to explain how their respective plans contribute to gender equality, requires plans to address relevant CSRs linked to gender equality, and provide a summary for the conducted consultation process with relevant national stakeholders.

According to Sapała (2022), while all the NRRPs analysed declare gender equality to be a horizontal objective to be given consideration in all measures, only some MSs have included dedicated reforms or investments addressing gender-related challenges explicitly or indicating women as the main beneficiaries. The most numerous and innovative measures, with gender equality clearly indicated in the milestones or targets linked to them, are present in the plans of Belgium, Estonia, Spain, Italy and Austria.

A report by the European Institute for Gender Equality (2023) concludes that there are several ways in which the RRF and NRRPs could have better integrated gender equality, among others, they include that: (1) The gender equality provisions of the RRF framework fall short of the legal and policy commitments to gender equality by the EU Members States (the regulatory requirements in relation to gender equality are limited); (2) some RRF requirements could support further integration of gender equality; (3) there is no duty on MS to conduct gender mainstreaming in their RRPs, just the requirement of RRPs to provide a standalone explanation and make links to EPSR and SDG 5; (4) gender equality rarely extends beyond the standalone explanation on gender equality (only a few exceptions including the Spanish and Italian RRP); (5) often ministries of finance shaped the selection of measures focused on economic priorities (which were rarely linked to gender equality). EIGE concludes that the RRF could have been/ can become more effective, if it would address and take seriously the different gender equality entry points (across preparation, implementation, monitoring and evaluation).

The Special Report by the ECA (2021) recommended to develop a robust system for tracking funds allocated and used to support gender equality which can be applied to all EU funding programmes including the RRF, and the EC should assess whether the measures in the RRPs have contributed to gender equality. These messages were reiterated by others (EIGE, 2023), parliamentary committees supported the recommendations of the ECA calling for better communication and coordination between the EC and MSs on measures linked to gender equality (EP, 2021) and the Council called the EC to further examine and report the NRRPs from a gender equality perspective (Council, 2021f).

When looking at gender mainstreaming from a thematic perspective, the Review Report (EC, 2022a), summarised that MSs were encouraged within the RRF to demonstrate gender equality considerations across the 6 pillars, but that most are connected to pillar 5 and 6. 129 measures in 25 plans adopted as of 30 June 2022 were considered to have a gender equality focus. Depending on the MS between 0-11% of measures can be considered related to gender equality. EIGE (2023) finds that many RRPs measures prioritised promoting women's participation in the labour market. The importance of closing gender care gaps and transforming gender relations within the family or gender-based violence was often less emphasised. Looking specifically into care policies in eight care countries, Thissen (2022) finds that the national plans studied all address care (with considerations across phases of care) and there is a general convergence towards similar solutions, with the institutionalisation of childcare and the deinstitutionalisation of long-term care. There is, however, not always an intersectional and cross-border approach and EU-induced incentives for care within the RRF remain low, heavily relying on political will at the national level.

The EC (2022a) Review Report notes that majority of measures with a gender flag have not yet been implemented but indicated 13 measures with a focus on gender equality that include fulfilled milestones and targets.

Looking at specific MSs, Farré (2022) provides in a gender impact evaluation on the Recovery, Resilience and Transformation Plan of Spain. The Spanish NRRP has been complimented for their intersectional and encompassing approach to gender mainstreaming, as gender equality is one of the plan's four objectives. Mostly given the large component of funds devoted to the green and digital transition, in the short-term, the RRP is mostly considered to benefit the employment opportunities of male workers in the construction and the communication and information sector but might have a mild overall impact on gender equality. From the input side, the analysis of the Spanish NRRP concluded that 6 from the 108 investment projects detailed in the RRF plan have women as direct beneficiaries either from the output or the outcome side perspective (good for 0.8% of the total RRF plan). The other investments are rather seen as Gender Blind Investments, which will only have a limited impact on women's prospects. From the output side, the study is slightly more optimistic and maps out less Gender-Blind Investments. From the outcome side, 7.1% of the total RRF funds are considered to contribute to gender disparities and a large percentage will target gender-neutral domains.

The RRF support to the economic recovery

Since the publication of the RRF proposal in May 2020, the effects of the RRF on the economic recovery has certainly been one of the most investigated questions.

Drawing on the NiGEM model, Watt and Watzka (2020) find that, first, if the funds are in fact used to finance additional public investment, public capital stocks throughout the EU will increase markedly during the time of the RRF. Second, in some especially hard-hit southern European countries, the RRF would offset a significant share of the output lost during the pandemic. Third, as gains in GDP due to the RRF will be much stronger in (poorer) southern and eastern European countries, the RRF has the potential to reduce economic divergence. Finally, and in direct consequence of the increased GDP, the RRF will lead to lower public debt ratios; between 2.0 and 4.4 percentage points below baseline for southern European countries in 2023.

Most other assessments are based upon dynamic-stochastic general equilibrium (DSGE) models developed and used by the EC and by the ECB. Bankowski et al. (2022) point to three key channels through which the RRF can impact the macroeconomy:

- By reducing spreads and country risk premia, the facility can improve the sustainability of public finances in EU countries and also improve financing conditions for the household and corporate sectors, leading to increased investment.
- The increased public-sector spending resulting from the RRF, particularly if used for productive public investment purposes, will lead to increased output in both the short run and the long run.
- The structural reforms approved and/or implemented under the RRF will lead to long-run increases in the level of actual and potential GDP.

They conclude that NGEU may increase gross domestic product (GDP) in the euro area by up to 1.5% by 2026, with the impact expected to be significantly larger in the main beneficiary countries. In Italy and Spain, two of the main beneficiaries, the public debt-to-GDP ratio may be more than 10 percentage points lower by 2031. At the same time, all euro-area countries are expected to benefit from NGEU through positive spillovers, greater economic resilience and convergence across countries.

Bankowski et al. (2022) also make the point that the RRF has been effective in mitigating the long-term risk of unsustainable public finances that resulted from the large interventions made during the Covid-19 crisis. In particular, they argue that the reduction in spreads and country risk premia was sizeable. In addition, by stimulating GDP growth, RRF spending and structural reforms would also act to improve the public finances in European countries. Using the ESCB's Debt Sustainability Analysis (DSA) tool, they found that NGEU led to a moderate reduction in public debt in euro-area countries but a significantly larger reduction in public debt in high-debt countries. More specifically, they found that although NGEU only reduced the average euro-area government debt-to-GDP ratio by four percentage points, it has the potential to reduce it by up to 14 percentage points in Spain and 12 percentage points in Italy by 2031.

Pfeiffer et al. (2021) find that the NGEU program is expected to increase aggregate euro area GDP by about 1.5 percentage points by 2024. They show that one third of the effect can be explained by spillover effects from trade between EU MSs (intra-EU trade). A simple aggregation of national effects would, therefore, underestimate the assessment of the effects of NGEU. They do not quantify the impact of structural reforms, which can further enhance the growth impact of NGEU.

Bozou and Creel (2022) with a (two-country) DSGE model, find strong fiscal multipliers from the use of grants from NGEU. An increase of public investment by one percentage point of GDP would increase GDP by eight percentage points after 20 years. They also find that funding via the NGEU programme would add 0.8 and one percentage points of GDP to the core and the periphery of the euro area, respectively, in comparison with a similar increase of public investment funded domestically. They show also that the lower debt and lower interest rate induced by a European-funded fiscal shock, in contrast with domestic funding, contributes to accelerating growth in the country implementing the fiscal impetus, which has, in return, a positive impact on the partner country. A fiscal shock on the core generates an additional rise in the GDP of the periphery of one percentage point, via trade effects. Furthermore, a fiscal shock on the periphery also generates an additional rise in the GDP of the core of 0.5 percentage points, which accounts for the larger size of the core versus the periphery in the euro area. To sum up, NGEU grants provide additional fiscal multiplier effects and additional spillovers for both the core and the periphery of the euro area.

Bozou and Creel (2023) also investigate the impact of NGEU loans, i.e., not only grants, and fiscal shocks on public consumption, i.e., not only public investment. They show that, based on the hypothesis that risk premiums on long-term interest rates in the periphery would not be too sensitive to higher debt, NGEU loans perform relatively well in comparison with NGEU grants: they notably boost GDP more immediately because of wealth effects from the holding of public bonds. As for shocks on public consumption, their effects on GDP are much lower than those after a public investment shock; grants make a difference only in the country that implements the public consumption policy and spillover effects are actually negative.

The RRF contribution to enhance social and territorial cohesion

The contribution of the RRF to the social and territorial cohesion pillar has been addressed in several papers. In a comprehensive analysis of the state of convergence in the EU, Eurofound (2023) includes a chapter evaluating the role of the RRF in accelerating social convergence in four MSs: Italy, Spain, Germany and Croatia. As regards the expected impact of the Italian plan, Eurofound observes that it pursues territorial rebalancing and the relaunching of the south of the country as a transversal priority. The strategic axis of social inclusion aims to overcome profound inequalities (often worsened by the pandemic) and to overcome the structural weakness of the productive system of the south. It supports convergence between the southern region and the central and northern regions as an objective of economic growth. Italy also allocates ad hoc resources for special interventions in support of territorial cohesion. In addition, territorial cohesion is streamlined across all of the other components of the Italian RRP. Similarly, in Spain, both territorial cohesion and social cohesion figure among the four axes on which the plan is built, and in each of the 10 driving policy areas of the plan, they are systematically addressed. In contrast to the Italian RRP, which includes specific projects dedicated to less developed regions, the Spanish plan adopts a more horizontal approach whereas territorial criteria are attached to the different projects' funds' distribution. In the case of the Croatian plan, territorial convergence is not pursued systematically but the plan includes measures targeted at disadvantaged groups in society. By contrast, the German plan lacks a strategy to enhance social and territorial cohesion.

Similar observations have been made by Simões (2022). The author examines the role of the RRF in youth labour market policies and its influence on the school-to-work transition in southern MSs. While the author's overall assessment is positive, one of the main criticisms of his paper is that the measures do not take into account the territorial (regional) differences that exist in these MSs and that it may be a caveat for the implementation of the plan. Positive is the assessment by Ferry et al. (2022) who look at the RRPs of Ireland, Italy, Portugal and Poland. They observe that each of the NRRPs covered includes spending in specific territories. Prominent examples of this are support for the rehabilitation of peatlands in the Midlands region of Ireland, investment in health infrastructure in Madeira and support for Italy's inner areas. Moreover, the 'territorialisation' of investment in infrastructure and social services is anticipated to strengthen cohesion.

The objective of supporting territorial and social cohesion has been further assessed by looking not only at the investment side but also at the reforms. Corti and Vesan for instance focus on the alignment of reforms with the European Semester social country-specific recommendations and their capacity to address the social vulnerabilities identified int eh Social Scoreboard. They show that the RRF has only contributed to reinforcing MSs' compliance with social CSRs – most important - has contributed to fasten-forward the implementation of welfare reforms and initiatives which would have been remained on the paper, especially for whose countries with limited fiscal capacity. This is the case in particular of countries like Spain Croatia and Italy. The contribution of the Spanish plan in particular to support social cohesion with the adoption of unprecedented reforms is considered as highly relevant.

Interestingly the countries where the most ambitious social reforms have been implemented are also the ones with the highest additionality in social spending via the RRF. As observed by Corti et al. (2022b) find that the largest share of social spending in the Italian and Spanish RRPs are additional (the same is true for Portugal and Belgium). By contrast, in countries such as Germany and Austria, RRF social spending is used largely to replace already planned or budgeted investments.

If the above-mentioned studies focused on the drafting of the plan, others have instead focused on at the plans' implementation. Preliminary evidence collected from the expert interviews run in the context of the ALMP and ECEC case studies highlights three sets of obstacles that could hamper the effectiveness of the measures put in place: the lack of funds to cover current expenditures, the lack of support (technical assistance) for providers or local authorities to accurately develop projects' proposals and the lack of time to present projects. In the case of Italy, for instance, these problems specifically affect the investments channelled through public tenders, which represent 45% of the total Italian RRP allocation and almost the entire allocation for social infrastructural investments (Viesti et al., 2022).

With respect to the financial constraints, the RRF in principle supports only capital investments, while recurrent costs should be borne by national governments. This, in principle, risks discouraging local authorities in particular, notably in disadvantaged territories, from applying for this funding due to the lack of certainty around the capacity to bear these costs after the end of the RRF. In addition, given the very tight time constraints, in countries like Italy, the distribution of the funds is done via public tenders, with very strict and detailed requirements. These risks discouraging authorities and potential providers in marginalised areas (which also have less planning capacity) from presenting projects and acquiring RRF funds, given their lack of technical capacity to apply for such tenders. The tight timing for the implementation of the RRF is forcing public administrations to significantly accelerate the presentation of fundable projects and often – given their limited technical capacity to present projects and the financial constraints – this is forcing public authorities to apply for a limited number of projects, thus not taking advantage of the full amount available.

Some studies focused on specific policy examples to substantiate the risk illustrated above. For instance, Corti et al. (2022c) look at the contribution of the RRPs of Italy, Spain, Germany, Portugal and Slovakia to increasing the supply of childcare services and examine whether the increase in supply is accompanied by a reduction in territorial and socio-economic disparities. They conclude that while in only Italy and Spain include measures in their RRPs that contribute to reducing territorial and socio-economic disparities, still in these two cases obstacles emerge from the low administrative capacity and tight timing for implementing the projects. Implementation obstacles emerge also in the case of investments in public employment services. Corti and Ruiz (2023) zoom into Active Labour Market Policies (ALMP) and Public Employment Services (PES) in Croatia, Italy and Spain. They observe that – although the measures are relevant - their effectiveness may be hampered by the lack of consideration of territorial aspects in the implementation of the measures, due to the lack of targets at regional or local level.

The RRF support to health, economic, social and institutional resilience

The RRF Regulation defines resilience as 'the ability to face economic, social and environmental shocks and/or structural changes in a fair, sustainable and inclusive way' (art 2.5). While the regulation does not include a specific definition of 'institutional resilience', this is widely understood not as an isolated characteristic of institutions but rather the product of a virtuous cycle of institutional performance (the ability to deliver and enhance results over time) which, in turn, engenders trust, legitimacy and credibility, themselves constituting sources of resilience (Anderson and De Tollenaere, 2020).

From this perspective, the contribution of the RRF in support of institutional resilience will mostly come from investments and reforms aimed at modernising public administrations and improve the effectiveness and integrity of public governance institutions. The study by Bankowski et al. (2022) reveals that reform plans of the NRRPs are strongly geared towards the public sector. In particular, 39% of the reforms envisaged by the RRPs of euro area countries relate to the public sector. The most important sub-sectors of reforms are health care, the judiciary and tax administration. Bankowski et al. (2022) note that progress in many of these areas was particularly slow over recent years.

Based on EC's assessments of NRRPs, Dias and Grigaité (2022) analyse the extent to which NRRPs address CSRs related to public administration, judicial system and business environment. They note that these three inter-related subjects are often addressed in the same CSR, which illustrates how, in the context of the European Semester, effective public administration and judicial systems are seen as pre-conditions for striving businesses. Dias and Grigaité (2022) conclude that most MSs that received CSRs on public administration, judicial system and business environment addressed the concerns underpinned by such CSRs, fully or to a relevant extent. Eight MSs received 2019 or 2020 CSRs related to the justice system, all being partially or totally addressed in their respective plans.

Focusing on the justice system, Fromont and Van Waeyenberge (2021) discuss the potential role of the European Semester and the RRF to address rule of law issues. They note that, since 2019, the European Semester has included rule of law CSRs and see it as part of a broader strategy to promote the rule of law through mechanisms which were not specifically designed nor envisioned to protect the rule of law. According to the authors, the combination of the European Semester and the anchoring of the RRF in it may convert the RRF into a particularly powerful tool to make progress in rule of law issues. At the same time, being the RRF basically an economic instrument, they see a risk of adopting a biased conception of the rule of law, i.e., one wherein economic and budgetary aspects are hierarchically superior to the protection of European values and therefore not all relevant rule of law dimensions are (sufficiently) considered.

Looking at the specific case of Italy, Falavigna and Ippoliti (2021) underline the importance of judicial efficiency in supporting both firm (e.g entrepreneurship) and banking (e.g. access the financial market) dynamics on the market. They argue that the RRF offers an opportunity to deal with such structural reforms and particularly to improve courts' technical efficiency. Polidori (2021), however, notes that to improve the efficiency of the Italian courts it is essential to combine investments in human, infrastructures and IT resources with an appropriate regulatory intervention, and also to guarantee adequate funding to sustain them over time and stabilise them in the future.

Taking a specific angle to the issue, Yiatrou (2023) indicates that reforms of the national judicial systems and the insolvency frameworks under the RRF will aggravate the effectiveness of consumer protection in the jurisdictions where the most aggressive debt recovery practices are present.

The RRF contribution to the green transition

The contribution of the RRF in supporting the green transition has been broadly debated and been subject of in-depth scrutiny. The Green Recovery Tracker is one of the first project that was set up to assess the contribution of EU MSs' national recovery plans to the green transition and was in place until the end of 2021. To assess the RRF measures contribution to the green transition, the Green Tracker assesses the effect of any given measure on climate mitigation, i.e., emissions reductions, in the context of the transition to climate neutrality. In doing so, the Green Tracker methodology builds on the EU taxonomy as well as, with regards to climate mitigation, on the climate tracking methodology outlined in Annex VI of the RRF Regulation. Measures are classified based on their very positive, positive, no significant, negative and very negative climate effect. According to the final report published in early 2022, Mölter et al. (2022) observe that a large share of the recovery budget may have a substantial climate impact, but still it is unclear whether this is in a positive or negative direction.

Hindrinks et al (2022) focus on the 'sustainable mobility' theme and analyse five countries (France, Denmark, Estonia, Spain and Slovakia). They find that while the measures are generally coherent and balanced, their 'lasting impact' is not adequately assured. Moreover, the milestones and targets of the measures provide insufficient guarantees that the RRF objectives will be met.

Zooming in on reforms and investments in energy and mobility sectors of four EU MSs (Austria, France, Germany and Spain), Millet et al. (2023) state that all four MSs fell short of investing sufficiently in their energy and mobility sectors through their NRRPs. Without sufficient additional investment, they will be unable or greatly challenged to carry out the green transition necessary for the EU and for limiting warming to 1.5°C. Additionally, while some MSs' components had promising elements, none were comprehensive enough to create a systemic transformation through these plans.

The energy efficiency of the European buildings stock plays a crucial role in achieving the EU 2030 and 2050 climate targets. Based on the estimates in the Renovation Wave strategy (EC, 2020b), the additional investment needed for renovation to meet the Fit-for-55 target, including decarbonising heat in buildings, is €275bn per year until 2030. The building sector therefore has the largest climate investment gap compared to any other sector as the total investment needs would be total of over € 3.5 trillion by 2030 (Renovate2Recover, 2021).

Regarding the role of RRF in contributing to energy transition in a more general level, EP briefing (D'Alfonso, 2022) indicates that the RRF does support energy efficiency through a wide range of measures. Nevertheless, in order to achieve the EU GHG reduction targets, a significant amount of financing from other sources will be needed. The NRRPs alone are not sufficient to bring the building stock in line with the targets. Thus, it is crucial that the plans go in hand with other national funding programmes and are able to attract and leverage private financing. In order to create safe markets for the sector, the investments should be linked with reforms and/or with other enabling measures, such as capacity building, awareness raising and support to beneficiaries. However, Renovate2Recover (2021) report concludes that many of the plans do not link the investments to other enabling measures, present clear provisions how to attract private finance nor combine the measures with other EU of national funding schemes.

However, the RRP measures do contribute to the green and energy transition, they are just not sufficient alone. CEE Bankwatch (2022) indicates that the RRF has had a positive impact on the progress of financing innovative reforms and investments in the climate and green sector, for example in financing measures to renovate houses.

Another weakness regarding the renovation measures is the lack of measures incentivising deep renovations. The EC set a minimum of 30% energy saving recommendation which is enough for the measure to be qualified as 100% climate coefficient. This minimum translates to medium renovation as deep renovation includes significantly more ambitious energy savings. According to a definition used in Renovate2Recover report, deep renovations reduce energy demand by at least 60% (for the worst-performing buildings) or result in an energy demand of 80kWh/m²/year (for buildings of medium level of consumption). Deep renovation is necessary to meet the EU climate targets in the building sector. Nevertheless, the study finds that the vast majority of renovation measures in the NRRPs have adopted only the minimum requirement for eligibility and have not put place the needed incentives to go beyond it.

The RRF support to digital transformation

The contribution to the RRF in the facilitation of the digital transformation of EU MSs has been subject of discussion since the drafting of the regulation. The reason behind the relevance of this question stems from the key role of this component in relation to the overall funding granted to MSs. In fact, the regulation requires MSs to reserve at least 20% of the total expenditure to the digital transformation. MSs showed their commitment in transitioning towards a digital economy, going beyond such target, with an average expenditure of 26% of their total EU funding. Austria, Germany and Ireland represent the top countries in terms of relative expenditure (i.e., 53%, 51%, and 32% respectively). Overall, more than €130 billion contribute to the digital transformation across EU MSs.

Pilati (2021) observes that several national plans included fragmented measures, particularly in the digital component (e.g. France, Italy, Belgium). Specifically, the Belgian plan included standalone projects stemming from the lack of coordination among national and regional entities during the development phase. It follows that national governments should invest more efforts in outlining a unitary vision across their proposed measures before discussing budget allocation within their administration. In this regard, reducing fragmentation would be instrumental to increase the effectiveness of the plan towards digital transformation.

More recently, Da Empoli et al. (2023) highlighted that, whereas several MSs designed measures to foster the digitalisation of their public administrations through the uptake of data governance and electronic identification, positive awareness and communication campaigns would still be beneficial to strengthen public trust in the new digital tools/services. Moreover, these initiatives could be further complemented by increasing the participation of end-users in their conceptualisation and design. The authors also pointed out that few countries include initiatives to reduce the gap in digital opportunities faced by specific vulnerable groups (e.g., lower socio-economic conditions, immigrant origins, persons with disabilities). As some MSs are frontrunners in emerging technologies, increased cooperation with EU national counterparts would foster knowledge creation and sharing, ultimately enabling innovation.

Similarly, concerning the cross-border dimension, Lilyanova (2022) reported that around 60 measures in NRRPs had a cross-border aspect, with the 'important projects of common European interest' (IPCEIs) on microelectronics and cloud technologies being the ones more included in national plans. Furthermore, several plans include investments in multi-country projects on the European Digital Innovation Hubs, 5G and quantum communication. Nevertheless, the author stressed the necessity to further enhance the cross-border dimension of national initiatives, linking the scarcity of these projects in NRRPs to three main reasons, namely: (i) the short time for the drafting and implementation of the national plans; (ii) the higher degree of complexity of these initiatives; and (iii) the absence of an explicit RRF objective.

While analysing the initiatives related to the digitalisation of SMEs in six national programs, Godlovitch and Bodin (2022) highlighted that several of these initiatives are instrumental to extend pre-defined national programs. On the one hand, this represents a positive aspect as it ensures continuity and certainty to economic operators while leveraging on existing communication channels. On the other hand, the author raises doubts on the extent to which the RRF contributed to an expansion in funding vis-à-vis the status quo, given that the RFF funding appears to replace national funding without enlarging the scope of the intervention in EU MSs. In this regard, as highlighted by Pilati (2021), the Polish plan was comprehensive in its digital component but largely encompassed government’s priorities set over the past years, with several measures around digitalisation that were already planned. Furthermore, Godlovitch and Bodin (2022) highlighted that certain NRRPs focus on infrastructural investments rather than training and capacity building activities aimed to effectively make use of technologies. Interestingly, the authors reported that some plans do not foresee measures on advanced technologies (e.g., quantum computing and AI) in relation to SMEs.

The RRF support to smart, sustainable and inclusive growth

No relevant literature found.

The RRF contribution supporting policies for next generation

The contribution of the RRF to policies for the next generation, children and the youth, such as education and skills has been extensively studied. Mileusnic (2022) provides an overview of the education policies in and their inclusion in the RRF, the alignment with the CSRs and how different MSs plan to address them in their RRPs. The paper also examines the evolution of the common indicators 10, 12 and 14 and how these indicators relate to education policy. Based on a rather descriptive analysis, the author concludes that the RRF is expected to provide a major boost to education policy in the short term, which will help to achieve the long-term objectives pursued in this policy area.

Corti and Ruiz (2023) examine whether the RRF is used to expand childcare provision in the RRPs of 5 MSs: Italy, Spain, Portugal, Germany, Poland and Belgium. They find that the RRF is certainly a game changer in Italy, where the inflow of EU financial resources has opened a window of opportunity to finance infrastructural projects that would otherwise have remained on paper. Similarly, Spain has used the RRF to strengthen its supply of public services and especially to fill territorial asymmetries. Spain also adopted measures to support the most disadvantaged children and to guarantee them free access to childcare. It recognizes childcare as an educational service and is introducing structural and procedural quality standards for childcare facilities. Poland and Belgium are positive case studies, having both taken the territorial dimension into account in their allocation of RRF investments. Poland also introduced an important reform aimed at reviewing the financing framework and introducing a set of binding minimum education and quality standards for childcare facilities. Finally, mixed assessments emerge in the cases of Portugal and Germany, where the increase in public ECEC places is good news and a social investment turn has already been seen, but the lack of territorial attention in the distribution of funds might widen any internal asymmetries that exist.

Other studies instead focused on the RRF contribution to youth employment policies. Simões (2022) focuses in particular on how the RRF influences the school to work transition. Overall, the author is positive about the increased investment in youth active labour market policies in the recovery and resilience plans. The author also stresses that especially in Southern Europe MSs show a "reformist impetus", which the author qualifies as positive, as they introduce several legislative provisions trying to address the challenges they face. Nevertheless, many of the youth-oriented active labour market policies are universal, lacking a focus on specific, vulnerable groups. Moreover, he notices that school to work transition is addressed mostly from the education intake side, instead of being balanced by more reforms and investment in youth employment support measures. He finally stresses the lack of a territorialisation of the investments.

Samek Lodovici and Pesce (2022) dive into Early Childhood Education and Care (ECEC) and youth employment policies measures in the NRRPs of 8 countries: Belgium, Croatia, Finland, Germany, Ireland, Italy, Poland, Spain and Belgium, with a gender perspective. An analysis of the relevance and adequacy of the measures of these countries shows mixed results, also influenced by the fact that these countries had different starting points and CSRs in these two policy areas.

The RRF contribution to REPowerEU objectives

The REPowerEU plan is seamlessly integrated into the legal framework of NGEU, strengthening its goals and objectives. With the adoption of REPowerEU and the mobilisation of European resources through the RRF, the EU has the potential to drive the transition towards sustainability and secure funding for the implementation of its European Green Deal (Famà, 2023).

The EC presented the REPowerEU plan in May 2022 and published the updated guidance on recovery and resilience plans in February 2023. Formally the Regulation on REPowerEU entered into force in March 2023 as a response to the Russian invasion of Ukraine, which led to energy price spikes and heightened supply risks. Using the Fit for 55 package of proposals as a basis, and complementing the actions to secure energy supply and storage, the purpose of REPowerEU is to help MSs in: 1) save energy; 2) produce clean energy; and 3) diversify the energy supplies. More specifically, the REPowerEU plan aims also to increase the production and import of green hydrogen as part of its energy diversification strategy and long-term decarbonisation goals.

In July 2022, the ECA published its opinion 04/2022 (ECA, 2022c) in which the Court questioned the RRF capacity to achieve the REPowerEU objectives. The Court in particular argued that the limited timeframe of the RRF (due to end in 2026) restricts the achievement of the REPowerEU objectives, especially the long-term objectives. The Court also points also to the uncertainties related to the availability of sufficient RRF funds to achieve such objectives, indicating especially the Cohesion and Rural Development Policy transfer component and the RRF remaining loans. The lack of a binding cut-off date to submit the REPoweEU chapters is indicated by the Court as an obstacle to a coordinated answer and the inclusion of strategic cross-border projects which instead would be desirable to achieve the REPowerEU objectives.

Schmidt et.al (2023) instead criticised the REPowerEU regulation that lacks consideration of the European Emission Trading Scheme (ETS) and its impact on hydrogen production and consumption. Furthermore, the proposed "additionality" rules, which require the use of renewable electricity for hydrogen production, are insufficient in ensuring carbon neutrality, especially in non-EU exporting countries. As a consequence, they argue that the EU's hydrogen targets may inadvertently increase short-term global CO2 emissions+.

Stoykova and Martin (2022) instead stress that the introduction of the REPowerEU chapter, along with the requirements for prior consultation and achieving an 'A' score to pass the EC's assessment, increases the administrative burden on MSs already dealing with the implementation of the Recovery and Resilience Facility.

The external factors impact on the RRF roll-out

The impact of external factors on the deployment of the RRF becomes a cornerstone in light of the invasion of Ukraine by Russia and the inflationary pressures. The shocks unleashed by the Russian invasion of Ukraine are reverberating deeply and widely across the EU and the entire globe (Orsini et al. 2022):

- pressure on energy, food and other commodity prices
- bringing renewed disruptions in global supply chains and logistics
- contributing to the tightening of financial conditions
- spreading sentiment of uncertainty

The macroeconomic risks stemming from the EU high dependency on imports of oil and gas from Russia and the need to support policy action targeted both at supply and demand were at the basis of the proposal by the EC of the REPowerEU Regulation. Yet, the consequences of the war and the inflationary pressures had significant consequences on the roll-out of the plans.

RRF and absorption capacity of MSs

In traditional Cohesion Policy, the absorption rate is the percentage of the total amount committed in the EU budget to a MS that has been paid by the EC to that MS. Actual payments depend on the ability of all beneficiaries to use funds which vary significantly across MSs. When the RRF was launched in 2020, several observers point to the risk of absorption capacity of the new funding, which came on top of the still remaining portions of the 2014-2020 MFF funds, and the new 2021-2027 MFF funds (Darvas, 2020; Alcidi et al. 2020).

While the Facility is a performance-based approach where payments are done upon fulfilment of milestones and targets that are linked not only to investments but also to reforms, absorption capacity still affects the effectiveness of the Facility. In an Opinion on the Implementation of the RRF adopted in December 2021, the Committee of the Regions stressed that many MSs did not pay enough attention to strengthening administrative capacity at local and regional levels, which is a precondition to ensure proper implementation of the NRRP and an adequate take-up of the RRF funds. Similarly, the ECA in the annual report for 2020 (ECA, 2020c) already noted that the level of administrative resources needed to manage the substantial increase of funds may not be sufficient. Specific concern was raised by the Court for those MSs where a high share of public investments is already financed by the EU, which may not be able to spend the funding available to them and deliver value for money.

To ensure the effective implementation of the PNRR, MSs put in place ad hoc measures to strengthen their administrative capacity. Such interventions include reforms and investments that aim at modernising the public administration, including improving the transparency and effectiveness of tendering procedures and their compliance with EU legislation. The purpose is to increase the participation and competition in procurement, improve efficiency and aggregated procurement and increase the professionalisation of public buyers. Examples in case include Cyprus, Italy, Latvia, Romania and Croatia (for an overview see the thematic analysis of the RRF Scoreboard – EC, 2021e). Administrative capacity is also linked to the competences of public officials. In this respect, several plans include investments with a focus on the training and development of skills of civil servants. As mentioned by Rubio (2022) the Spanish plan would be an example of this, as it foresees the training of at least 3.150 public employees of the central Public Administration during its implementation. Carrosio et al. (2022) also mention the Portuguese example of improving the digital skills of Portuguese civil servants.

While the structural measures listed above are expected to have a positive impact on the medium- and long-term, some countries also include also ad hoc interventions to directly support the administration to implement the plans.

For instance, in Italy, central administrations, regions and local authorities can benefit from actions to strengthen administrative capacity in two main ways: hiring of experienced staff on a fixed-term basis, specifically intended for the structures responsible for implementing the PNRR initiatives, from design to actual implementation; and support from specially selected external experts, in order to ensure the correct and effective implementation of the projects, and the achievement of the predetermined results. According to the ECA (2023c) Romania and France are two additional examples as they plan to hire additional staff to implement their RRPs.

Despite the support to strengthen the administrative capacity, this remains a significant factor affecting the effectiveness of the RRF plans. When zooming in on investment in Early Childhood Education and Care in four countries (Italy, Spain, Germany and Portugal), traditionally run at local level, Corti et al. (2022c) find that two key problems affecting the implementation of the foreseen investments are related to low administrative capacity especially at local level: the lack of support and technical assistance to providers or local authorities to accurately develop projects' proposals; and the lack of time to present projects which is linked to the lack of enough personnel. The lack of administrative capacity in Italy – for instance – risks to reinforce the pre-existing territorial asymmetries whereby local authorities in disadvantaged territories do not access to RRF funding. In this respect, the Department of Cohesion Policies stressed that – due to lack of administrative capacity - 30 % of the resources so far awarded through competitive procedures in South of Italy are subject to a medium to high risk of reallocation outside the South (Presidenza del Consiglio dei Ministri, 2022).

The effectiveness of the RRF compared with the cohesion funds

While this aspect remains under-investigated, the preliminary literature points to two aspects. First, the performance metrics. Second, the flexibility of the two instruments, which can be seen as an explanatory factor for effectiveness.

Concerning the first aspect, Böhme et al. (2023) highlights that the metrics used to judge the effectiveness of investments differ for the two instruments. A result in the RRF basically corresponds to an output in Cohesion Policy. For example, a new hospital is a result under the RRF, while under Cohesion Policy it is considered an output. This means there is confusion as to what is considered a result or an output between the two instruments.

Concerning the second aspect, Böhme et al. (2023) highlights that the two instruments enjoy a different level of flexibility. Cohesion policy is a flexible instrument, as demonstrated by its swift reaction to external shocks such as the COVID-19 pandemic or Russia's war on Ukraine. Beyond regulatory changes introduced at the EU level to cope with the mentioned crises, thanks to reprogramming, MAs also have room for manoeuvre even during regular times. Reprogramming allows Cohesion policy programmes to remain relevant with respect to changing circumstances. Conversely, the RRF milestone approach does not allow for flexibility and has only limited possibilities to adjust milestones to changing circumstances. On the one hand, this limited flexibility is justified due to the shorter timeframe for the RRF implementation compared to Cohesion policy. On the other hand, it can create difficulties for the RRF implementation, hence hampering its effectiveness. As acknowledged by Böhme et al. (2023) and ECA (2023b), due to inflation, the costs for achieving a milestone have increased substantially since adoption of the RRPs. However, the lack of flexibility prevents MSs to reallocate funds and oblige MSs to set aside additional national funds to complete RRF investments and reforms.

The RRF most effective factors

Speed of disbursement/funding strategy: The financing strategy adopted in April 2021 for NGEU differs from back-to-back funding used for instance for other instruments like SURE/EFSM. Such "diversified funding strategy" decouples the timing, volume and maturity of the borrowing transactions from the timing of the disbursements of these funds. The funding method is a mixture of bond syndications, auctions and private placements, while the instruments include both long-term EU bonds and short-term EU bills. The time and amount of disbursement is not linked to a single borrowing transaction. Proceeds are pooled together and held in a centralised bank account until disbursement. As for the calculation of the borrowing costs, this is based on the costs of all borrowing transactions within a 6-month time period. As a guarantee to the borrowing NGEU has the EU budget and he commitment of MSs to provide – if necessary - additional funds up to 0.6 % of their gross national income (GNI) until end of 2058.

According to the ECA' Special Report 16/2023, the new structure and competences allowed NGEU funding to begin quickly. Internally, the EC's rapidly established debt management capacities require adjustment to comply with best practice. The EC also borrowed on time the funds, communicated its borrowing needs well and complied with key regulatory requirements for NGEU debt (ECA, 2023a). The Court further stresses that the borrowing costs mirror the market conditions and the objective of providing sufficient funding on time.

The speed of disbursement so far is certainly one of the most effective aspects of the RRF. As observed by Zorell and Tordoir (2021), the envisaged speed of NGEU disbursements is significantly faster than that observed for structural funds in the regular EU budget. The EU's Multiannual Financial Framework (MFF) cycle runs for seven years, although actual disbursement can take place with a grace period of some years into the next period. To date, the EC has disbursed a total of over (€144 billion) under the Facility, in both grants (€106.27 billion) and loans (€47.11 billion). These figures include the pre-financing disbursed to MSs (€56.5 billion). Pre-financing provided fast direct support to MSs, playing a stabilising role in the aftermath of the unprecedented economic and social shock caused by the COVID-19 pandemic, thereby also helping to kick-start the recovery.

First sign of deceleration in the speed of disbursement, however, can be tracked in 2023 when the time for disbursement has increased also due to the longer time required for the EC assessment of the payment request by MSs. As stressed by the EC, respecting the timelines by delivering the milestones and targets as foreseen in the Council Implementing Decisions is of key importance to ensure efficient planning of funding operations on the capital markets and timely disbursements.

Performance-based approach: With tighter budgets and growing public attention being paid to the effectiveness of EU policymaking, it has become increasingly necessary to analyse the performance, impact and added value of EU supported programmes and initiatives (Laffan and Schlosser, 2016; Mause, 2019; EC, 2018b; Zamparini and Villani-Lubelli, 2019). The regulatory framework of the 2014-2020 programming period for the European Structural and Investment (ESI) Funds already placed a strong emphasis on the need to evaluate the relevance, effectiveness, efficiency and coherence of the programmes supported (EC, 2018c). For the first time, MSs were required to measure the impact and the contribution to the EU objectives of interventions co-funded by the EU structural funds (EC, 2018c). The Common Provision Regulation for the programming period 2014-2020 also supported the strengthening of monitoring requirements, putting more emphasis on pursuing a reinforced intervention logic, the need for a results-oriented approach and a strengthened system of indicators.

As documented by Begg et al. (2023), however, the monitoring and evaluation approach set out in the CPR 2014-2020 as well as in the new CPR 2021-2027 still present some limits. In this respect, the RRF represents a key novelty. MSs submit payment requests and receive disbursements based on a positive assessment by the EC of the satisfactory fulfilment of the M&Ts linked to the instalment concerned. The introduction of this 'financing not linked to costs' approach has been welcomed as a positive step towards a new performance budgeting, a shift away – in the EU budget – from managing (i.e., 'how much have we spent?'), to the achievement of policy objectives (i.e. 'what have we accomplished with our money?' (Darvas, 2022). The introduction of the M&T approach is certainly one of the most effective aspects of the RRF, especially when it comes to reforms.

More than one-third of all measures in the 27 recovery and resilience plans are reforms (around 2187 reforms compared to 3780 investments). The purpose of these reforms is to increase MSs' resilience as well as to create the condition for a successful delivery of the related investments under the RRF or the Cohesion policy Funds. As well documented in the EC's Communication of February 2023 (COM.2023. 99 final), a large number of flagship reforms have been already adopted across MSs. More importantly, all national coordination bodies agree that the RRF was effective in supporting the implementation of long-time debated reforms.

As documented by Bokhorst and Corti (2023), the M&T approach attaches additional leverage for administrations at the domestic level, notably in the high-beneficiary countries. In these countries, the RRF as an important opportunity, a 'trigger' and a tool for the implementation of many reforms that were already in the pipeline of national governments, but that either would not have been adopted because of a lack of adequate funding or would have been further delayed because of political obstacles. Overall, the RRF has been used by domestic actors, notably national governments, to speed the adoption of long-time contested reforms. The requirement to set detailed milestones and targets was used by the governments to force and accelerate national decision-making processes. Overall, administrations have been eager to include a wide range of reforms in their plans and thus allow for external pressure to deliver. This is particularly true in those countries, where the financial envelope is significant and where the risk is higher of losing out on EU funds due to noncompliance with milestones and targets. Put it differently, the performance-based approach contributed to developing mechanisms of internal disciplining and efficiency.

In addition, the RRF's arrangements were positively welcomed in countries like Italy, Spain and Croatia, as a positive cultural shift in public policymaking. In these countries, interviewees stress that despite the heavy administrative burden of the detailed operationalisation, this new approach forced the administrations to identify expected outputs and outcomes and introduced an efficiency dimension in public policymaking. At the same time, they stress that the contractualisation of the performance-based approach reduces leeway for deviation and increases common responsibility to meet the agreed objectives within the agreed timeline. By contrast, in countries with lower financial envelope from the RRF, senior public officials do not feel responsible or pressed to meet the targets and milestones included in the plan which translate into lower effectiveness.

The ex-ante formulation of expected goals is seen to enhance deliberation about the usefulness of policy instruments and gives clear metrics to evaluate success. Beyond increasing national ownership, the selection of reforms and investments based on expected output and outcomes pushed MSs to 'think about reforms and investments in parallel and this is a positive element because it forces having a coherent approach'.

The RRF governance

The literature on the RRF governance has mostly focused on the decision-making process. The most visible and widespread effect of the RRF governance is to reinforce the centralisation of authority and decision-making within national governments. Contrary to CP funds, the RRF is under direct management and MSs are the final beneficiaries (Corti and Ferrer, 2021). According to various commentators, the centralisation is further reinforced by the new performance-based approach of the RRF, characterised by the ex-ante definition of milestones and targets with low flexibility for ex-post adjustments and the requirements to maintain a single national point of contact for verifying the fulfilment of the relevant milestones and targets in support of scheduled payment requests (Zeitlin et al. 2023; Carrosio et al., 2022; Bokhorst and Corti, 2023; Vanhercke and Verdun, 2021).

While the RRF comes with a centralisation in all MSs, differences emerge in the governance setting of national RRPs which affect the efficiency of the RRF. The literature has in particular focused on the involvement of social partners and sub-national levels of government.

As documented in Eurofound (2023), social partner involvement in the implementation of the RRPs is crucial in this period of global instability as their contribution will help to ensure the successful and timely delivery of planned reforms and investments. Several MSs have established specific bodies to boost social partners' participation in the implementation of the RRPs. Based on the consultation with national coordination bodies, respondents agree that especially when it comes to labour market or social policy reforms the involvement of social partners played a key role in speeding up the adoption process, such as in Spain. In other countries, the low involvement of social partners translated into an opposition to the adoption of certain controversial reforms, such as pension reforms.

On a similar vein, the different degree of involvement of sub-national authorities in the drafting and implementation of the plans affects the efficiency of the plans, in particular investments. According to a survey conducted by the European Committee of the Regions in 2022, cities and regions have so far often been neglected in the monitoring and implementation of the RRF plans. Yet differences emerge across MSs. In some countries the NRRP emerged from a broad national or regional consultative process, such as in Portugal, Spain and Belgium. In other countries, the consultation was less structured and limited to ex-post information, like in Italy. Finally, in a third group of countries, there was barely any meaningful involvement of non-state actors in drafting of the NRRP, like in Estonia or Latvia. According to the majority of national coordination bodies this low involvement - especially in the drafting phase of the plans – is explained by the tight timeframe that does allow for effective involvement.

Where the consultation was more systematic is in the federal MSs and is rather linked to the national constitutional setting.

As in the case of social partners, the limited stakeholder inclusion in the drafting phase is reflected in implementation problems. This affects in particular the investments that are largely implemented at sub-national level, as observed in the Childcare and in the Active Labour Market Policies case studies, but also in the case of large investments that still requires permits and authorisations of sub-national authorities, as in the case of the cross-border investments.

The costs/burden of the RRF compliance compare with cohesion funds.

While this aspect remains under-investigated, the preliminary literature points to some aspects.

First, the difficulty to estimate the costs of the instruments. ECA (2023c) acknowledges that calculating the cost of implementing Cohesion policy funds is not easy, as there is little or no information available on administrative costs. The EC carries out studies to estimate these global administrative costs, the last one being published in 2018 (EC, 2018d), and ECA (2020d) found that Cohesion policy is implemented at a comparatively low cost to other European and international programmes. However, it was also noted that the data underlying these studies was incoherent, inconsistent and incomplete. ECA (2023c) concludes that similarly as for Cohesion policy, it will be difficult to estimate the cost of implementing the RRF, not least because the RRF Regulation does not require administrative costs to be reported to the EC.

Second, the double structures brought about by the RRF. As the RRF is a new instrument and it has to be implemented in parallel to Cohesion policy, it has created new administrative structures and tasks. As observed by Böhme et al. (2023), in some countries, the RRF is handled by the same teams as Cohesion policy, which leads to a substantial overburden of administrative capacities when new emergency initiatives (e.g. CRII, CRII+, CARE) and preparation for the new programming period having already stretched administrative capacities.

Third, the costs of audits and controls. These, according to Böhme et al. (2023), are major sources of administrative costs and burden under Cohesion policy, and the RRF mainly delegates these responsibilities to the MSs. As Gauer (ECA, 2022b) highlights, this does not mean that the EC does not check the national audit and controls systems – as this is one of the assessment criteria that the EC checked before approving the NRRPs – or that it doesn't have sufficient mechanisms to act in case of misuse of funds. However, this is only a "residual" responsibility, as ECer Dombrovskis put it in an interview to the ECA's Journal in 2022 (ECA, 2022b).

While, in principle, the delegation to MSs, coupled with the fact that the control and audit framework for the RRF focuses on the satisfactory fulfilment of milestones and targets, could reduce administrative costs and burden for MSs, the supporting evidence is lacking. Some recent studies seem to point to the oppositive direction, claiming that the RRF's performance-based financing model, as currently managed, has not reduced the administrative burden on either side, relative to the cost-based reimbursement system associated with the cohesion policy funds (Zeitlin et al., 2023).

Such burden is attributed to the excessive demand of justification proof by the EC to MSs to disburse the RRF payments.

The increasing need for justifications is related to the multiple audit and controls to which MSs are subject to. Since the beginning, the RRF posed challenges for the ECA. Indeed, it implies an increase in the EU budget to be audited, and to take a strategic view on audit compliance and performance, as one of the ECA's directors notes (ECA, 2022c). It also requires a change of mindset, as the link between the results achieved and the money spent can be difficult to establish, because there is no way of knowing the costs of the different elements, whereas in Cohesion Policy this relationship is crystal clear (ibid).

A recent special report of the ECA (2023b) further notes that the control system used by the EC, although comprehensive in terms of checking that milestones and targets have been met, does not allow a proper understanding of whether RRF projects comply with EU and national rules. The Court criticizes the lack of documented information on the preliminary assessment of MSs' fulfilment of milestones and targets. Another element that attracted criticism was that in cases of fraud, corruption, conflict of interest or double funding the EC can only take action to recover funds, which the Court sees as an "accountability gap" at EU level. On a positive note, the report mentions the ex-post audits, as these are considered well-planned and sufficiently developed, even though is too early to judge their effectiveness.

The complementarity between the RRF with cohesion policy funds

The relationship between the RRF and other EU funds has been a subject of analysis ever since 2020 (Bachtler et al., 2020; Molica and Lleal Fontàs, 2020). Studies have highlighted similarities and differences with other funding schemes, examining policy dimensions such as design, delivery system, monitoring and evaluation systems, payments, audit and control, and the interaction between RRF and other schemes has fuelled debate and investigation on possible synergies, complementarities, duplication and substitution effects. In light of the RRF's peculiar nature and sheer size, its relationship with other EU funds has strategic importance for the current implementation and, even more, for the future evolution of EU investment policies.

Predictably, the launch of the RRF has led to a lively debate on the compatibility of this new instrument with Cohesion policy. The complementarity and synergy between RRF and Cohesion policy at programming stage have been object of the scrutiny of the CPMR (Lleal Fontàs, 2021) and the ECA (ECA, 2022). Given that the Cohesion Policy programmes were still in the early development phase when the recovery plans were submitted, these two studies concluded that is not surprising that recovery plans include only rather succinct descriptions of the complementarities and synergies between the RRF and cohesion policy funds. Moreover, it is acknowledged that the fact that RRF funds are often managed by structures different from those which manage the Cohesion Policy funds does not facilitate the task. However, some MSs have developed specific demarcation strategies. Lopriore (2022) and ECA (2022c) observe that MSs put in place different strategies. First, there can be a thematic demarcation that reserves certain areas of funding exclusively for the RRF. For example, the RRF is able to finance the modernisation of public administration, whereas this is no longer possible for Cohesion Policy funds since thematic objective 11 linked to public administration is no longer supported by Cohesion Policy in 2021-2027. Secondly, there can be a territorial demarcation. For instance, in the French recovery plan, the RRF focuses on soft mobility in rural areas while the ERDF finances it in urban areas. Third, there can be a demarcation based on the typologies of beneficiaries. For instance, the German plan supports the energy efficiency of residential buildings with the RRF, while support for non-residential buildings comes from the ERDF.

While demarcation strategies are key to avoid overlaps between the two instruments, they do not necessary ensure complementarities and synergies. The latter can be achieved either by financing different operations that build on each other, or by using the two instruments to finance different elements of the same operation. For instance, the Portuguese plan is expected to support initial investments in the hydrogen sector with the RRF but intends to follow up with Cohesion Policy funds. Yet, early on the literature has recognised that the pursuit of synergies between RRF and Cohesion Policy faces considerable hurdles (Bachtler and Dozhdeva, 2021; Bachtler and Mendez, 2021). In principle, the potential for synergies between the two instruments would be significant, thanks to the thematic overlap that could be exploited to achieve additional impacts, to the possibility for the RRF to improve framework conditions for investments and implement CSRs that are too broad for Cohesion policy to address, and to the possibility to build on Cohesion policy's experience for RRF implementation. In practice, the challenges that make synergies difficult are however numerous, among which: an explicit territorial dimension of the NRRPs being often limited or absent; burdensome strategic and operational cooperation; the thematic overlap; the implementation of NRRPs being prioritised over 2021-2027 Cohesion policy funds, to ensure rapid absorption of EU funds in general different governance systems (Bachtler and Dozhdeva, 2021; Ferry and Kah, 2021). Moreover, it has been noted that the option of using two funds for the same project is quite limited. Despite some examples in this regard (e.g., the Austrian NRRP supports additional sections of a project that already benefits from the Connecting Europe Facility, about the construction and electrification of regional railway lines), this possibility remains constrained by the difficulties in aligning schedules and procedures of different funds (Lopriore, 2022).

So far, the literature has not yet focused on complementarities and synergies promoted during the NRRPs' implementation (i.e., beyond demarcations and potential synergies identified at programming stage). However, challenges have been identified in the parallel implementation of NRRPs and Cohesion policy in terms of high workload for administrations. According to ECA (2022c), the parallel programming of the two instruments was problematic, as delays traditionally linked to the programming of the MFF lasted even longer. This was in part due to the fact that managing authorities were also involved in programming REACT-EU, the RRF, CRII and CARE. Such delays are expected to negatively affect especially those MSs with an already low absorption rate. Similar observations have been made by Núñez Ferrer and Ruiz de la Ossa (2023), who expressed concerns especially for Spain and Italy, as their difficulties in using EU funding imply a lack of capacity to manage the level of funding.

At a more strategic level, preliminary lessons learned from the RRF experience and the relationship between RRF and Cohesion policy have triggered reflections about the future of EU investment policies. While some contributions have identified the implementation of the RRF as the key factor that will define post-2027 Cohesion policy and outlined different scenarios in this regard (Bachtler and Mendez, 2021), others have interpreted the launch of the RRF as a threat to the current Cohesion policy and expressed the view that the territorial-based approach of Cohesion policy is in danger (Lleal Fontàs and Teixeira, 2023). A different type of analysis is proposed by Hunter (2023). After recognising the RRF's ability to address structural reforms in MSs, the author calls for revitalising Cohesion Policy's reform orientation. Cohesion policy grants a continuity that can boost RRF reforms (and investments) beyond 2026 and is uniquely placed to embed them within a place-based logic. Accordingly, the author suggests to the Cohesion policy community to move away from a narrative highlighting the differences between the two instruments and calling for policy alignment, towards a new vision that adopts a policy sequencing perspective. Under this new perspective, Cohesion policy builds on the lessons learned from the RRF as well as the RRF's shortcomings and positions itself as the optimal tool to ensure future consolidation of the progress expected to be made under the RRF.

The RRF contribution to the implementation of multi-country projects

As a key instrument to support economic recovery, the RRF also holds the potential to facilitate cross-border cooperation opportunities. By encouraging collaboration and coordination between countries, the RRF can help maximize the effectiveness of investments and address common challenges faced by EU nations. The RRF foresees supporting investments that have a significant cross-border impact and MSs are encouraged to consider these as such projects reflect common concerns and shared priorities of (a number of) MSs and are aligned with the objective of promoting further integration and cooperation within the EU.

An overview of NRRPs shows that numerous RRPs include measures participating in a number of multi-country projects[133], with most projects contributing to the green and digital transition. More than half of the RRPs include measures contributing to multi-country projects or cross-border initiatives related to the green transition, with the IPCEI on hydrogen exhibiting the highest uptake. The second biggest contribution is seen in the area of the digital transformation, where once more most NRRPs include measures contributing to multi-country projects or cross-border initiatives. Here the IPCEIs on microelectronics (12 RRPs) and cloud technologies (6 RRPs) are amongst the multi-country projects with the highest take-up in RRPs. Further contributions towards the digital transformation are seen also in cloud technologies (with 6 RRPs including IPCEI measures), the European Digital Innovation Hubs (8 RRPs), 5G corridors (7 RRPs) and quantum communication (4 RRPs). While the extent to which such uptake would have been possible at national level, Dias et al. (2021) argue that having RRF funds available may have been the opportunity of enlarging participation in such projects by providing MSs with the funds needed.

Grüner (2013) and Dolls et al. (2018) argue that cross border projects have the potential to create positive externalities for other MSs which are not internalised and

[133] Report from the commission to the European Parliament and the Council on the implementation of the Recovery and Resilience Facility, COM(2022) 75 final, available at https://commission.europa.eu/system/files/2022-03/com_2022_75_1_en.pdf

therefore neglected by MSs acting alone. In this sense, NRRPs with a stronger focus on cross-border projects could thus strengthen the European Single Market and lead to more substantive spill-over effects across countries than currently estimated (Pfeiffer et al., 2021). Eisl (2022b) argues that the RRF contributed to significantly lowering the entry barriers for MSs to participate in IPCEIs by giving smaller countries with comparatively fewer budgetary capacities an opportunity to completely finance or at least co-finance IPCEIs with European money instead of having to rely exclusively on their national budgets. The author argues that this development should be welcomed as it reduces the tensions between an increasingly more active industrial policy in the EU and the maintenance of a level playing field between the MSs of the Single Market.

Corti et al. (2022a) find that only a minor share of RRF supported cross border projects had an effective cross-border impact. This can mainly be attributed to the complexity of cross-border projects, which require more time in design and see more challenges in implementation due to the multi-partner component. The authors highlight that funds made available to cross-border projects were relatively small compared to total government spending in the countries analysed: Germany (26% allocation of the volume to cross border projects), Austria (24% allocation), and Belgium (15% allocation), which can also be an underlying reason for limited impact. On the other hand, anecdotal evidence suggests that the (cross-border) objective of the RRF was not set up clearly and there was no specific target defined for cross border investments that the MSs should reach. All these factors might impede further development of multi-country projects.

Furthermore, Corti et al. (2022a) highlight some missed opportunities for other cross-border projects and in developing European public goods as part of the RRF. The authors argue that a more active role of the EC in the coordination process between MSs might have helped MSs to identify (and agree on) common cross-border projects. Mandatory quotas on a certain share of cross-border projects would also have strengthened the commitment of MSs to prioritise these projects. According to the authors, such quotas could have been accompanied by less strict timing requirements for (large) cross-border projects, which might take more time to develop and implement. With more coordination, larger cross-country projects could have played a bigger role and pushed forward the creation of European public goods.

Annex IV. Bibliography

All the references used in this Study have been provided with a hyperlink in the text, which should facilitate the reader in quickly identifying the text. Below we provided a non-exhaustive list of the main documents consulted. The references for the case study are instead included in the respective separated documents submitted with this study.

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Annex V. Secondary database

Secondary database (reforms and investments) - link

Annex VI. Stakeholders consultation - synopsis report

Introduction and background

The Synopsis report has been prepared as a summary of the stakeholder consultations activities conducted as part of the "Study supporting the Mid-term evaluation of the Recovery and Resilience Facility". The study started on 15th March 2023 and has been implemented by a consortium that includes Ecorys, CEPS, NIESR, CSIL and Wavestone.

The Recovery and Resilience Facility has been introduced with the Council Regulation (EU) 2021/241 on February 2021 and is the main instrument to mitigate the economic and social impact of the COVID-19 pandemic in the EU. The RRF is evaluated in light of the five criteria of relevance, effectiveness, efficiency and coherence of the initiative, and its added value.

Consultation strategy and methodology

The stakeholder consultations involved conducting interviews, sending targeted surveys, and a public consultation (launched by the EC through *EUSurvey*). Below we provide a short description of the targeted stakeholder per each activity and the number of participants.

Activities	Stakeholder targeted	Timing, stakeholder engagement
Public consultation	Individual citizens, Academic and research institutions, NGOs, Consumer and social organisations, Individual economic operators and representatives, Public authorities	16th March – 8th June 2023, 172 responses
Targeted surveys	Survey for RRF coordination bodies	18th May 2023 –7th July 2023, 40 respondents
	Survey for parliaments	25th May 2023 – 7th July 2023, 5 responses
	Survey for SMEs	May 2023 – 7th July 2023, 33 responses
Interviews	National NRRPs coordination bodies, EU institutions, societal actors/social partners	Between May and August 2023, 61 (+81 for the case studies) interviews. Additional input on administrative costs and specific evaluation questions (e.g. on loans) was received from 5 MS, following a request to the RRF expert group.

At the end of each consultation activity, the team collected, cleaned and analysed the inputs and data received in line with the Better Regulations Guidelines and Toolbox (#54).

Results of the consultation activities

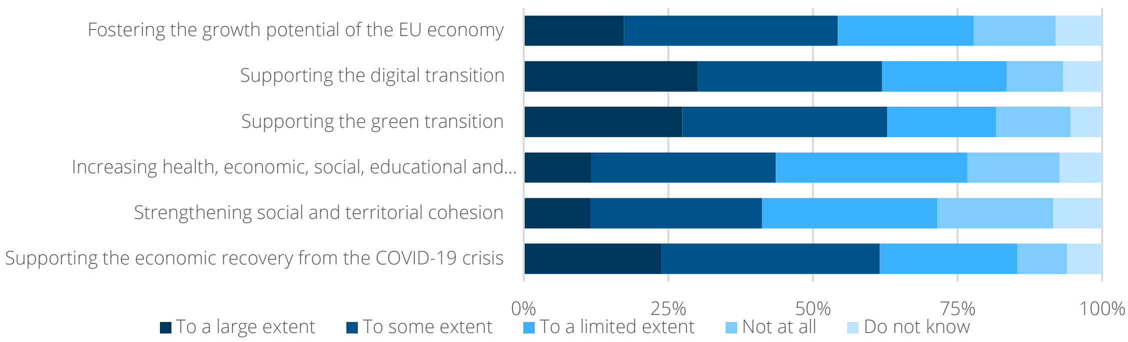
Feedback from the public consultation

The public consultation on the RFF was open for twelve weeks between 16 March and 8 June 2023 and aimed to collect the views and evidence from all relevant stakeholders on the RFF, its contribution and features and the main elements that link the RFF with other policies and reforms. The consultation was accessible in all official EU languages via a dedicated page. A total of 172 responses were received from 24 EU Member States and 1 non-EU countries. The largest number of contributions stems from Portugal (57 responses), followed by Belgium (16) and Germany (15), Spain (13), Romania (12), Italy (11) and Czechia (10 responses). Four replies come from Austria and three from Hungary. The largest share of replies stems from EU and non-EU citizens, jointly accounting for almost two-thirds of the responses (99 replies). Public authorities provided the second-largest share of replies (32). Including ministries and other authorities (26 replies) and agencies (3 replies), their scope is local (7 replies), regional (7 replies), national (15 replies), and international (1 reply) level. Companies, businesses, and business associations provided 16 replies, while 12 responses stem from NGOs and environmental organisations.

Most respondents to the public consultation are familiar with the EU's Recovery and Resilience Facility (RRF), and they are aware that it supports reforms and investments under national recovery and resilience plans. Public authorities are particularly aware of RRF's conditionality on reform implementation, while approximately 85% of the respondents have been directly involved in RRF-related activities. In particular, 28 respondents have benefited from RRF-funded projects and 26 have participated in plan implementation. While most respondents feel their organisations were adequately considered in the national consultation process, the response rate to this question was particularly low.

Around two-thirds of respondents believe the RRF has contributed to economic recovery from COVID-19, and a similar proportion recognizes its contribution to green and digital transitions (Figure 43). However, only 54% believe the RRF significantly fosters EU growth. Respondents expressed mixed views on the RRF's contribution to enhancing EU resilience, social and territorial cohesion: approximately 44% feel it increased resilience to some extent, while 49% believe the impact was limited or non-existent. About half of the respondents think its contribution to social and territorial cohesion is, to some extent, limited.

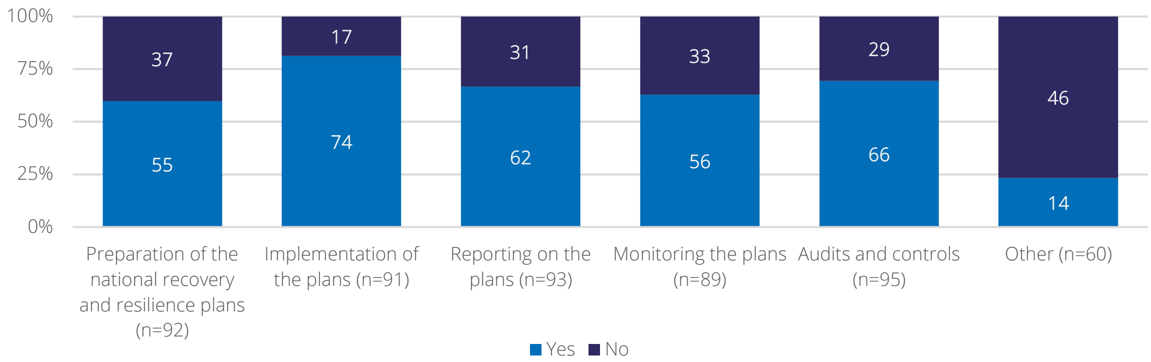
Figure 43: To what extent the RRF has contributed (or will contribute) to the following objectives?



Most respondents believe that the RRF contributed to the initiation or implementation of reforms, with only 14% indicating otherwise. Examples of areas where the RRF played a role include the green and digital transition, labour reforms, and the health sector. Similarly, around 80% of respondents are aware that the RRF supports measures aligning with the "Do no significant harm" principle, which many believe has contributed to the green transition. However, respondents are less certain about the RRF's impact on gender equality, equal opportunities, and policies for children and young people: less than 10% believe the RRF addresses these issues to a large extent, while around a third see some contribution. Most respondents highly value the RRF's performance-based feature (93 replies), followed by the speed of payments to Member States, and support for reforms. Support for projects in multiple countries is seen as less valuable but still important by 3 out of 4 respondents.

Approximately half of the respondents believe that the RRF has created unnecessary burdens and complexity (Figure 44). This sentiment is shared across different respondent groups, including citizens, public authorities, and businesses. The perceived burden and complexity are identified in various stages of the RRF, with implementation, controls and reporting being particularly problematic, according to a significant proportion of respondents. Among the examples listed, there were high proposal preparation costs and transaction costs related to the performance-based delivery model. In general, more than half of the respondents see opportunities to simplify the RRF: apart from general calls for a reduction of the administrative burden, respondents suggest that more guidance should be provided by the EC, and that procedures (especially on reporting) could be streamlined and further harmonised with other existing reporting requirements to reduce complexity.

Figure 44: At which stages have you identified unnecessary administrative burden and complexity?



Almost 75% of respondents suggest that it has been beneficial for the EU to support reforms and investments together under one instrument. More than two-thirds of respondents suggest that the RRF continues to be an appropriate way to support and complement the COVID-19 recovery in Member States, at least to some extent. Majorities of respondents suggest that the RRF has supported the Green Deal, initiatives on the circular economy, sustainable transport, the digital agenda, and the European Semester to some or to a large extent. For the European Semester and the European Green Deal, approximately two-thirds of the respondents expressed these views. Among all policies, the largest share of respondents sees no support from the RRF for the biodiversity strategy. Among 99 respondents aware that the RRF seeks to improve the rule of law, 46 respondents suggest that the RRF strengthened the rule of law to at least some extent, while 28 respondents replied that it did so to a limited extent.

A vast majority of stakeholders (almost 4 in 5) express the view that the RRF produced, at least to a limited extent, more results than what Member States could have done on their own. Finally, two-thirds of respondents express the view that this has happened to some or even a large extent, compared to only 14% of respondents who do not see any additional contribution from the RRF overall.

Feedback from targeted surveys

Two targeted surveys were launched at the end of May 2023 and closed on the 7th of July. The first survey addresses key national stakeholders involved in the programmes' implementation, in the projects' selection, and in the monitoring and reporting procedures. The views and perspectives of this category will inform on the aspects of state of implementation, administrative costs and burden, the agility of processes and rules, potential overlaps and/or synergies with other existing instruments, in particular cohesion programmes, and views about the performance-based system. The second survey targets national parliaments involved in committees linked to areas of reform identified in the National Recovery and Resilience Plans.

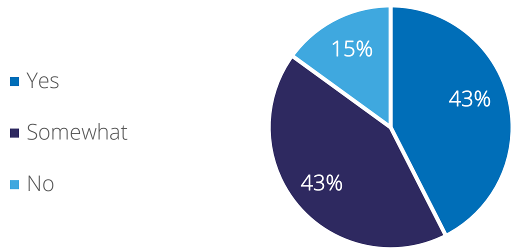
The survey questionnaires were amended in line with DG ECFIN/SG comments and translated into all official languages of the EU. The survey questionnaires were uploaded on EUSurvey, an open-source software solution funded by the EC for creating surveys and questionnaires.

Survey for RRF coordination bodies

The survey received responses from 40 participants representing 24 different EU Member States. Five responses came from Austria, accounting for 13% of the replies. Estonia, Italy, and Ireland each contributed three responses (8%). Two replies (5%) were provided by each of the following countries: Cyprus, France, Latvia, Romania, Slovak Republic, and Slovenia. 85% (34) of respondents declared that they are involved in the monitoring of the RRF while almost 73% (29) participated in activities related to performance management. Over half of the respondents (55%; 22) reported involvement in payment requests and more than one-third (37%; 15) in control and audit activities. Moreover, around 43% (17) stated that they were involved in implementing the RRF strategy.

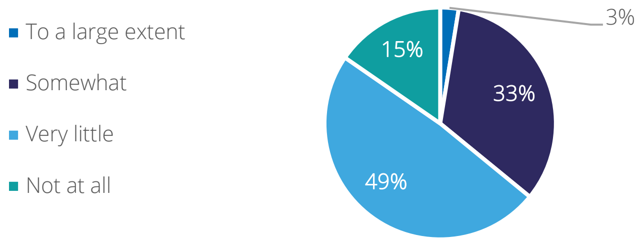
Respondents were divided regarding the Commission's communication with respect to guidelines and support documentation for the RRPs preparation. 43% (17) of respondents found that the EC communication and guidance has been timely and clear. In contrast, 43% (17) respondents affirmed that the Commission's communication has been somewhat clear and on time, and finally, 6 respondents (15%) underlined the lack of timelessness and clarity of the EC communication for designing the NRRPs.

Figure 45: Timeliness and clarity of the Commission's communication with respect to guidelines and support documentation for the preparation of the RRPs



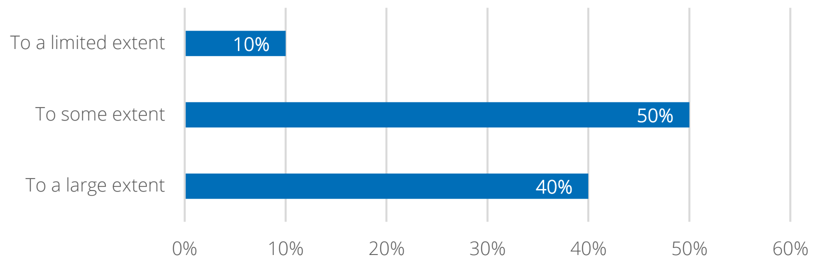
The majority of respondents identified poor flexibility as one of the main weaknesses of the RRF funding instrument, counting 19 (49%) replies stating that the RRF showed very little flexibility, 13 (33%) responses consider the RRF somewhat flexible, 6 (15%) feedback declared that the RRF was not flexible at all. Only one respondent stated that the RRF has been flexible to a large extent.

Figure 46: Respondents' feedback regarding the extent of flexibility of the RRF to adjust to the changing circumstances



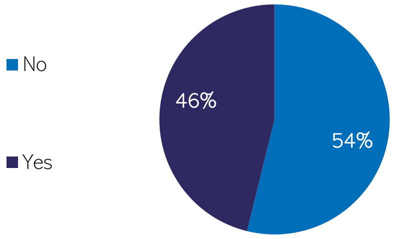
Survey respondents were requested to give their opinion on how the effectiveness of the RRF compares with Cohesion Policy funds. The opinion of respondents is mixed. However, it is noteworthy that only a limited number of respondents provided feedback on this matter (9 out of 40). The two positive feedbacks point to the fact that RRF reforms being country-specific can positively influence the effectiveness of investments, while Cohesion Policy enabling conditions are the same for all MS. 40% (16) and 50% (20) of respondents declared that MS administration suffered the "entry costs" in gaining familiarity with the RRF to a large and to some extent, respectively. Only 10% (4) of replies affirmed that the acquaintance process took a limited extent of "entry costs".

Figure 47: Respondents' feedback on the level of national administrative "entry costs" in becoming familiar with the RRF as a new instrument



With regard to the governance setting, opinions were divided. 21 affirmed that they would not change the current setup of the national RRF governance, in contrast to 46% of respondents who would set up a different governance structure after two years of RRF implementation.

Figure 48: Respondents' feedback to the question "Over two years into the implementation of the RRF, would you set up the national RRF governance structure differently?"



Survey for national parliaments

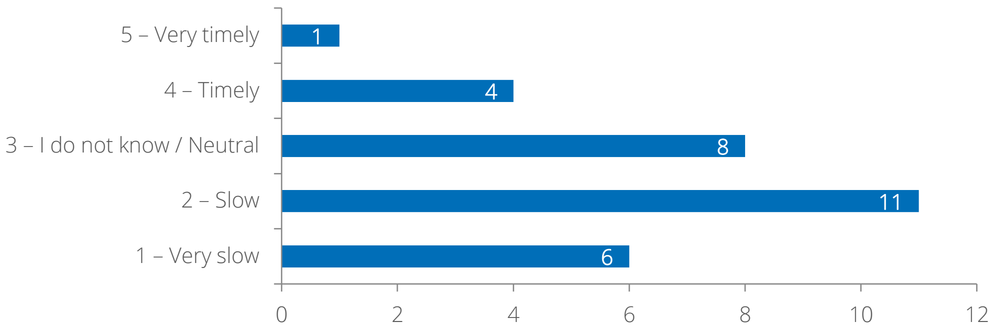
Due to the low number of responses received for the survey from national parliaments, its results were not incorporated into the study.

Survey for SMEs

The survey received responses from 33 participants, out of which 30 came from EU SMEs - six responses from Romania, five responses each from Italy and Bulgaria, four answers from Spain, and two responses each from Belgium and Greece.

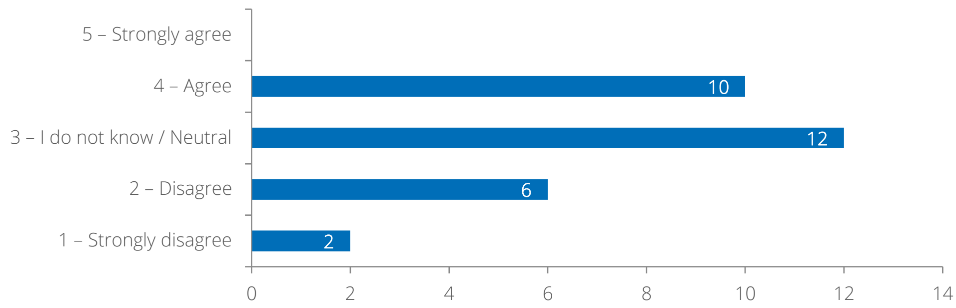
The survey provided insight into the speed of disbursement to the final beneficiaries. Out of 33 respondents, 13 to the question on allocation, most (20) categorised the disbursement process as slow (14) or very slow (6), with only 5 considering it timely (4) or very timely (1). A few interviewees also raised the issue of slower payments to the ultimate recipients of RRF support. Unfortunately, there is no data available to confirm the issue of disbursements to final beneficiaries beyond some anecdotal evidence provided by interviewees (e.g. 12% paid to final implementation entities in one MS).

Figure 49: SMEs feedback regarding the RRF speed of disbursement to final beneficiaries



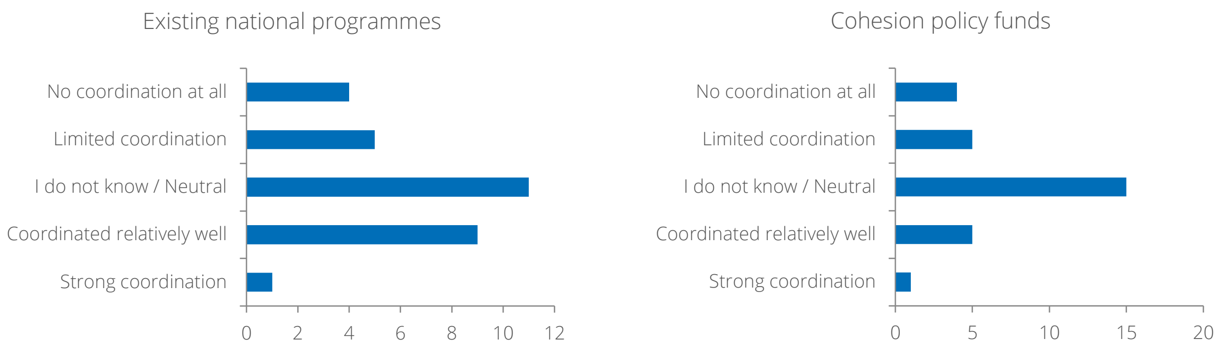
SMEs did not find a common agreement on the positive impact of the NRRPs on businesses and SMEs. 10 respondents declared that the NRRPS had a positive impact on businesses, while 6 and 2 respondents disagreed and strongly disagreed. 12 participants considered themselves neutral to the question (Figure 50).

Figure 50: Feedback from the question: "Do you agree that the measures included in your country's NRRP positively impact businesses and SMEs in particular?



Regarding synergies with other national programmes, 10 respondents affirmed that the RRF measures were coordinated and aligned relatively well and very well (1), while for 9 other responses, the coordination was limited or absent. 11 SME participants responded, "I do not know". With regards to the Cohesion policy funds, 6 respondents affirmed that the coordination and alignment of enterprise or SME-relevant NRRP measures was strong. In comparison, 9 respondents found limited or absent coordination. Results are shown in the figures below (Figure 51).

Figure 51: Level of coordination between the enterprise RRF-measures with other programmes



Summary of the interviews

A total of 61 interviews were conducted between May and August 2023[134]. The aim of the interviews was to collect the views and perspectives based on the mid-term evaluation questions and in line with the criteria of effectiveness, efficiency, relevance, coherence and EU added value.

Below, we also include some findings from the interviews with MSs ministries shared by the team executing the study on the 'Mapping of performance-based schemes in the National Recovery and Resilience Plans and identification of conditions for successful use of this method in ESF+ Programmes' commissioned by DG Employment (Unit G.1: European Social Fund+).

Effectiveness

Overall, interview participants stated that the RRF has been an **effective instrument**. On one hand, most EU institutions highlighted that the RRF has demonstrated a swift and efficient **disbursement of payments** to MSs. Compared to other EU Policies, such as the Cohesion Policy, the RRF has been innovative and effective by blending a broad range of initiatives, investments and performance-driven reforms. In particular, several Member States and EC-level interviewees observed that pre-financing provided fast direct support, playing a stabilising role in the aftermath of the unprecedented economic and social shock caused by the COVID-19 pandemic, thereby also helping to kick-start the recovery. On the other hand, most Member State coordination bodies indicated several challenges and difficulties observed in the initial planning of investment request submissions, mostly due to the lack of flexibility and requested amendments, and ultimately, they argued that RRF disbursements to final beneficiaries had been frequently delayed by National authorities. The majority of consulted societal actors, underlined also the democratic deficit due to simplified Member State consultation, limiting democratic participation, and top-down planning.

Most of the interviewees at national and EU levels confirmed that the RRF contributed to pushing forward reforms in national agendas. In particular, interviewees underlined that **linking investments to reforms** served as an incentive during the NRRPs implementation. The financial support has been considered as the predominant factor accounting for the RRF's success in implementing reforms aimed at addressing the **Semester's CSRs**. While most respondents, including societal actors, considered the RRF a good instrument helping to accelerate the implementation of specific reforms and investments, other participants – mainly from national coordination bodies – emphasised that certain reforms encountered obstacles within the RRF framework due to political hurdles and time constraints.

According to some respondents, the instructions and communication with the Commission were considered sufficient and smooth. However, during our interviews, a large majority of participants confirmed the presence of challenges and difficulties

[134] Additional 81 were conducted in the framework of the case studies but the related findings are not included here.

in the **EC's communication and guidance** for supporting the RRF implementation For example, operational agreements were detailed but with some unclarities; responsibilities/roles of Member States were still vague or the there was not a clear answer on the protocol for delays and acceptance of milestones and targets. Some coordination bodies emphasised the lack of clear instructions and guidance for setting up the governance structure, as one of the key difficulties.

During our consultations, most EU-level interviewees highlighted the complexity of **monitoring** and assessing the achievement of **milestones and targets** and the importance of performance-based approach and outcomes monitoring. Instead, some coordination bodies criticised the performance-based approach and emphasised the importance of evaluating milestones and targets based on policy aspects rather than fulfilments, which are often delayed due to energy crises, issues in the supply chains or lack of flexibility in changing the national plans. Regarding outputs, most interviewees highlighted the RRF's effectiveness in promoting reforms addressing various policy areas, such as green, digital and governance areas. According to EU-level stakeholders, the RRF has been considered effective in supporting economic recovery by promoting this broad range of policies. Some national coordination bodies confirmed its effectiveness in supporting a fast economic recovery, with expected modest positive impact on GDP and employment; nevertheless, delays in the RRF disbursements led to national budgetary challenges.

As opposed to the Cohesion policy, one respondent of national coordination bodies highlighted the lack of extensive **regional involvement** in the RRF instrument. In terms of **green transition** policies, findings from our consultation activities vary. While some CSRs pushed for environmental considerations in investments, only few of them are considered purely environmental, according to EU-level participants and societal actors. Funding for sustainable energy, mobility, and climate mitigation is substantial, but investments directly targeting environmental aspects like biodiversity and circular economy are limited. One national coordination body reported significant investments in green and digital transformation initiatives, alongside efforts to strengthen social and territorial cohesion. According to societal actors and one coordination body, the RRF has been effective in supporting the **digital transformation**, also by investing in training programmes for digital skills development addressed to the public sector that created positive spillover effects to SMEs. Ultimately, societal actors indicated that although there are cases of advancement in the execution of reforms for **the next generation, general guidelines** (e.g. on linking CSR and milestones/targets) **were unclear** and ongoing challenges related to the quality of reforms in education.

The effectiveness of the RRF in contributing to **REPowerEU** objectives is still in the early stages of assessment. On one hand, most EU institutions reported that the REPowerEU balances short-term needs like reducing dependence on Russian gas with long-term climate and energy targets. On the other hand, several national coordination bodies noted the challenges posed by political barriers and complexities in aligning RRF measures with REPowerEU despite the value of the RRF in setting government programmes for several years.

Responses regarding the impact of **external factors** on the RRF were quite homogenous. Respondents underline that external factors, such as the war in

Ukraine, the energy crisis, high inflation levels and issues in the supply chains, led to substantial barriers and challenges to the RRF's implementation.

Interviewees from national authorities frequently refrained from directly comparing the effectiveness of the RRF and other cohesion policies, highlighting the early implementation stage as a reason for caution. Based on the inputs collected by the team of the DG EMPL study, some respondents viewed the RRF, and especially its result-based approach.

Efficiency

According to several EU-level interviewees, administrative **costs** and the burden of implementing the RRF have been a complex issue. Some countries have faced challenges adapting to the RRF's performance-based approach, with the need to establish efficient monitoring and auditing authorities. Costs included hiring additional staff to meet RRF requirements. The comparison with other instruments, such as Cohesion Funds, revealed differences in the audit and control systems, with RRF having a more demanding set of requirements. All interviewees at both EU and national levels highlighted the complexity and administrative burden of the RRF. According to the interviewed national coordination bodies, challenges consisted of: high detailed cost estimation, administrative burdens requested up to final recipients, excessive paperwork and reporting, and high complexity of the auditing processes. The inputs collected by the team of the DG EMPL study confirmed the high complexity of the NRRPs and the associated administrative burdens and paperwork. The **linkage between reforms and investments** has been identified as one of the key innovative aspects of the RRF. Both EU-level, national bodies and societal actors agreed the pursuit of reforms and investments together was also aligned with the CSRs.

Most participants, both at the EU and national levels, highlighted the importance of a more flexible and adaptable **governance setting** for an effective instrument. EU-level institutions also underlined that a more centralised political approach to governance has proven to be more effective, where responsibilities are clearly defined and payment requests are based on the overall performance of the plan rather than individual milestones and targets. The interviewed societal actors highlighted the limited involvement of Civil Society organisations in the plan design and implementation.

Coherence

According to interviewees, in some Member States, coherence between the RRF and other **cohesion funds** was ensured due to the nature of the governance settings. In fact, in some cases, coherence was endogenously guaranteed because the same team within the Ministry is in charge of designing both NRRPs and cohesion policies. In other cases, coherence was ensured between RRF and national funding.

With regard to the European Semester, it has been reported that the same staff works simultaneously at country desks and RRFs at the EC. According to interviewees, the link between RRF and EU Semester has been considered positive. The European Semester has been considered integrated into the RRF, as several reforms included in national plans came as a result of the CSR from previous EU Semester cycles.

In addition, according to most interviewees, the **EU's priorities** significantly influenced the reforms and investments included in the NRRPs, particularly the measures focused on green and digital areas, circular economic and social dimensions. According to a few MS-level respondents, the national plans were built upon already existing programmes and strategies. Some societal actors, underlined that the **DNSH principle** has not been sufficiently integrated and incorporated into the RRF instrument, but it just served as a 'checkbox' for ensuring compliance with legislation.

EU added value

Some respondents found that the linkage between reforms and investments demonstrated complementarity and mutual reinforcement. Most interviewees underlined that the **introduction of reforms** to a financial funding instrument has been the key EU added value of the RRF.

According to some national-level participants, the RRF has not been necessary for introducing certain reforms by governments. In some Member States, such as Sweden and Austria, reforms under the NRRP were already included in the political agenda.

Relevance

According to national-level participants, adjustments and revisions of the initial funds' allocation have been considered necessary for maintaining the NRRPs still relevant. Again, Member States underlined that more flexibility to adjust RRPs would have been crucial to better adapt to changing circumstances and to address external factors.

National coordination bodies listed different potential financial reasons that may affect the decision for applying – or not – for loan requests under the RRF. High debt or structural deficits or compensation for grant allocation reduction have been considered as the main reasons behind the decision to apply for loans. On the contrary, healthy public finances, inflation concerns, and sufficient initial grant allocation may disincentivise MSs from requesting loans.

Annex VII. Overview of costs and benefits, and simplification

This table has been prepared to meet the BRG's requirements. It deviates slightly from the one suggested in Annex IV of the BRG because the evaluation work did not permit a clear separation of costs and benefits into the same categories as outlined in the mentioned Annex, nor a full quantification of costs and benefits.

Overview of costs and benefits

Type	Name	Description	One-off/ Recurrent / Long-term	Stakeholder		
				EU	MS administration	MS / Final beneficiaries
Direct cost	RRF financial contribution	Sum of RRF estimated grant value and loans	One-off	✓ EC data: planned payments amount to 336.4 billion EUR for grants to 165.4 billion EUR for loans	/	✓ Costs of paying back the EU bonds
Direct cost	Financial cost	Cost of borrowing of RRF debt	Lont-term	/	/	✓ Budgeted: EUR 14.9 billion* Estimated: EUR 30 billion*
Administrative cost	Setup cost	Resources spent to setting up the governance structure	One-off	✓ Budgeted: EUR 88.2 million	✓ Median FTE: 10	/
Administrative cost	RRP preparation cost	Resources spent to prepare, negotiate, and officially submit the NRRP.	One-off		✓ Median FTE: 25	/
Administrative cost	RRP amendments cost	Resources spent to prepare REPower chapter and plan amendments	One-off		✓ Median FTE: 15	/
Administrative cost	Audit and control cost	Costs associated with auditing for administrations (i.e. Audit Authorities).	Recurrent		✓ Median annual FTE: 13	/
Administrative cost	Payment claim cost	Costs associated with payment requests	Recurrent		✓	/

					Median annual FTE: 13	
Administrative cost	Communication cost	Resources spent for consultation, outreach activities and communication	Recurrent		✓ Median annual FTE: 6	/
Administrative cost	Performance management cost	Resources spent for meeting/checking performance-based requirements	Recurrent		✓ Median annual FTE: 15	/
Administrative cost	Implementation cost	Resources spent by implementing bodies to prepare tenders and guidelines and to screen and select project applications	Recurrent	/	✓ Median annual FTE: 70	/
Administrative cost	Monitoring and reporting cost	Resources spent by implementing bodies in relation to monitoring and reporting.	Recurrent	/	✓ Median annual FTE: 18	/
Direct benefits	Improved well-being, changes in pollution levels, safety, health…	Wide and varied range of benefits along the six pillars	Long-term	/	/	✓ Quantification not possible beyond the common indicators
Wider benefits	GDP growth	Cumulative change in real GDP predicted by our model to occur by 2041 as a result of the RRF funding (both grants and loans) against the baseline.	Long-term	/	/	✓ EU level: EUR 127,179.5 million (in 2015 prices) under the QUEST scenario (100% additionality for grants and 50% additionality on loans).

The following table has been prepared to meet the BRG's requirements. It deviates slightly from the one suggested in Annex IV of the BRG because the evaluation work did not permit a clear separation of costs and benefits into the same categories as outlined in the mentioned Annex, nor a full quantification of costs and benefits.

Overview of simplification measures

Type	One-off / Recurrent	Simplification and burden reduction	
		Already achieved	Potential
Reduction in spreads	One-off	The launch of the RRF led to savings in the cost of borrowing. The announcements of a recovery fund – specifically, the initial Franco-German proposal on 18 May 2020 and the European Commission proposal on 27 May that became the RRF – led to a reduction in spreads of between 50 and 100 basis points for those Member States in Southern and Eastern Europe where borrowing costs are typically high. Greece and Italy were major beneficiaries, gaining an extra 1.60 and 0.97 percentage points of GDP in fiscal space.	/
Administrative cost savings due to a unique plan	One-off	Having just one plan per MS for both reforms and investments is considered a simplification as compared to other EU instruments. This led to some time and cost savings in the preparation and negotiation process.	/
Administrative cost savings for plan amendments	Recurrent	/	Shortening of the NRRP modification process by considering the possibility to just rely on the EC assessment.
Administrative cost savings for control and audit	Recurrent	/	Ensuring better coordination among actors and avoiding multiple checks by the national audit court and ECA. Limiting audit and control requirements solely to the achievement of targets and milestones funded by the RRF.
Administrative cost savings for payment requests	Recurrent	(in principle) No need to provide evidence of the cost incurred	Less rigid and legalistic interpretation of milestones and targets. Reducing requests from EC for supplementary information to be on the side of caution for future ECA audits

Administrative cost savings for reporting	Recurrent	/	Making bi-annual reporting non mandatory for countries that have a bi-annual payment requests

Annex VIII. Case studies

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