



EU INDEPENDENT FISCAL INSTITUTIONS

ASSESSING THE FISCAL POLICY IMPACT OF CLIMATE TRANSITION

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AUTHORS & DISCLAIMER

This paper was prepared by an ad-hoc working group of the Network of the EU Independent Fiscal Institutions (IFIs). The group was composed by Inna Oliinyk and Willem Pieter de Groen (Secretariat of the Network of EU IFIs), Peter Zwaneveld (CPB Bureau for Economic Analysis, Netherlands) and Ricardo Vicente (Estonian Fiscal Council, Estonia).

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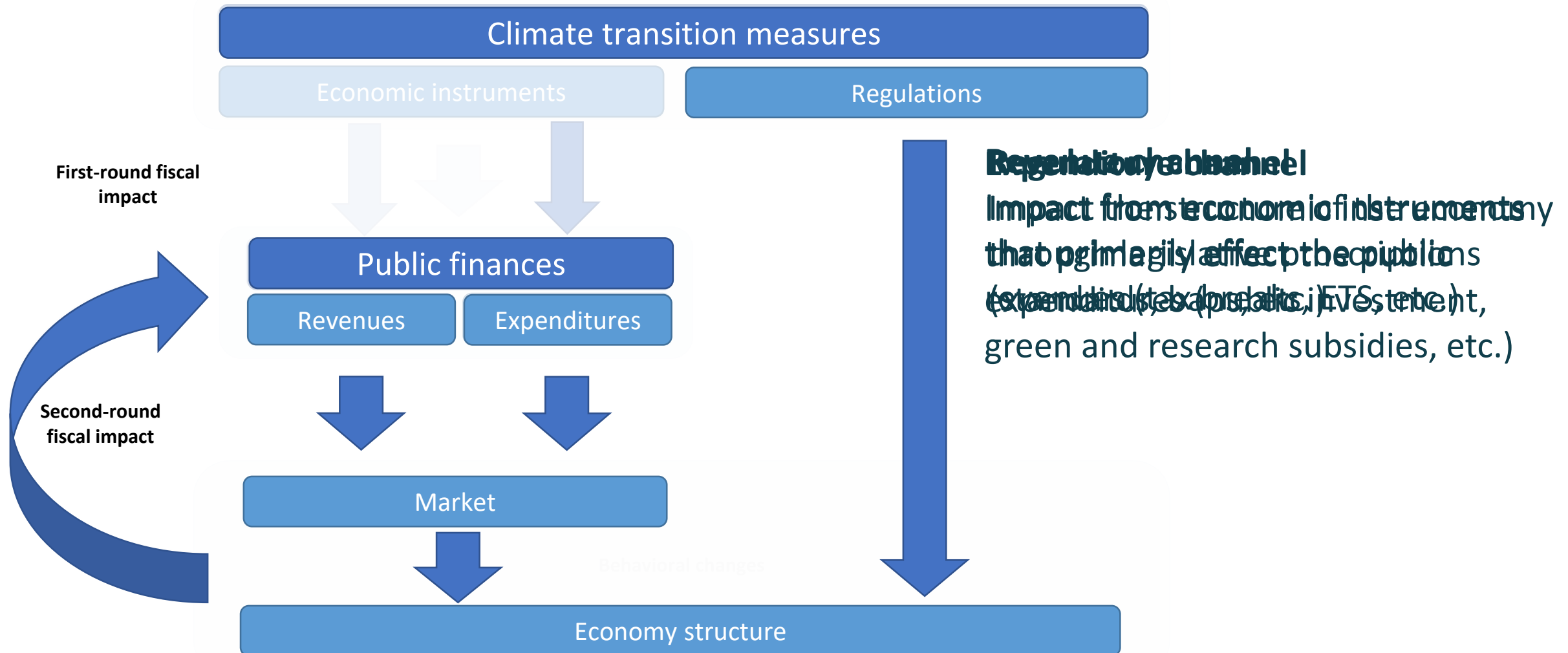
This paper has been reviewed by the EU IFIs Network. The analysis and views expressed do not necessarily represent the positions of individual members of the Network.

Context

RATIONALE FOR THE PAPER

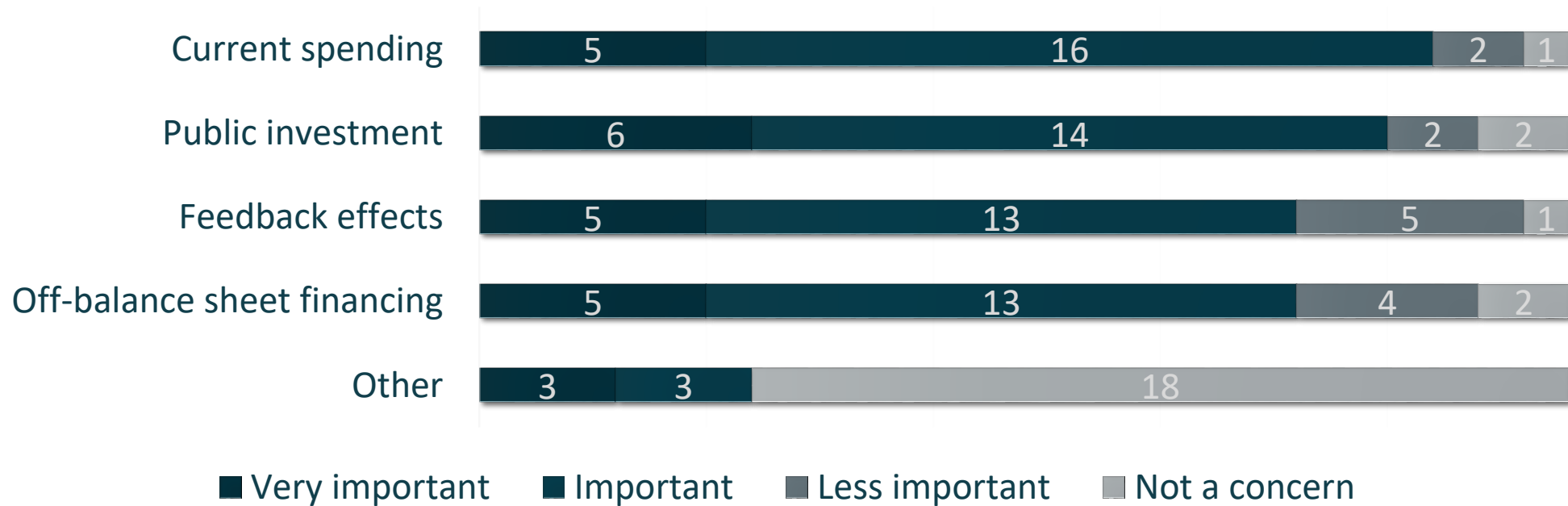
- **Climate transition measures are defined as policies to reduce net greenhouse gas emissions**
 - Rather than measures that address actual climate events
- The climate transition measures **require substantial funding**
 - Investments are estimated at around 2% per annum over the next decade (IMF,)
- Most European countries have **not carried out a comprehensive assessment** of the fiscal impact of climate transition to date
- **High risk of unanticipated fiscal pressures** in both short and long-term and sub-optimal decision making about policy measures
- Today, **national IFIs have little oversight** over the climate transition measures **due to lack of transparency from the governments**

MAIN CHANNELS OF TRANSMISSION



RISKS THAT CLIMATE TRANSITION POSES TO PUBLIC FINANCES

IFIs' concerns over the sources of the risks that climate transition poses to public finances



RISKS THAT CLIMATE TRANSITION POSES TO PUBLIC FINANCES

- **Short- and medium-term fiscal risks**
 - **Unbalanced policy mix and disorderly climate transition** could give rise to unexpected developments in the composition of public finances
 - The large majority of the national IFIs warn that to achieve the climate goals **current and capital public spending needs to increase** substantially
- **Long-term fiscal risks**
 - **Further direct tax/spending pressures and second-round impacts** of climate transition (including also the impact on productivity and underlying growth) are likely to become more important
 - Another source of long-term fiscal risks is **increased use of off-balance sheet financing** for the climate transition measures
 - Some climate transition measures could also lead to **erosion or dilution of the tax bases** through the second-round impact on the public revenues

Role of national IFIs

CURRENT PRACTICES OF IFIs IN ASSESSING POLICY IMPACT OF CLIMATE TRANSITION

- **Current practices**
 - About one-quarter of the national IFIs assessed the budgetary impact of the climate transition efforts required to achieve climate goals to a certain extent
 - Most IFIs assessed **aggregate policies** rather than individual policy measures
 - In general, national IFIs used **simple methodologies to assess the first-round impacts** of economic instruments
- **Good practices**
 - The **collaboration with other institutes** is primarily important to cover climate related aspects, which is an area outside of usual expertise
 - Using a **suite of economic models** to account for a wide range of factors is essential to capture feedback effects appropriately
 - Considering a **financial stability impact** of climate mitigation risks due to (gradual) revaluation of assets in so-called ‘dirty’ sectors in the models

CURRENT PRACTICES OF IFIs IN ASSESSING POLICY IMPACT OF CLIMATE TRANSITION

Challenges IFIs face in assessment of the fiscal impact of the climate transition



THREE CASE STUDIES: ESTONIA

- **Carbon pricing in Estonia**

- Substantial effects of EU ETS carbon pricing via oil shale mining for electricity production (**GHG emissions have reduced by 64%** in 2020 compared to 1990)
- The **impact on budget is through revenues** (increase in ETS revenues but losses of corporate income tax and dividends from the SOEs)
- The **impact on budget is through expenditures** (higher current and capital spending)
- Regional consequences in North-East of Estonia with potentially have **important social and political costs**

- **Key insights**

- Estonia **achieves its climate objectives** so far with seemingly **limited additional national climate measures**
- **Assessment of fiscal impact** of climate transition is crucial, especially second-round fiscal, economic and social effects

THREE CASE STUDIES: NETHERLANDS

- **Assessing climate, budgetary, economic and income effects of the Dutch Climate Agreement in 2019** (compared to baseline no-policy change projection)
 - Emissions **reduction of 43%-48% in 2030** (ambition was 49%)
 - **Increase in public expenditure** by EUR 3.9 billion (**0.5% of 2021 GDP**) in 2030
 - Negative feedback effect on **GDP by more than 0.5%** in 2030
 - Cumulative **negative income effect of 0.4%** in 2030, compared to 2018
- **Fiscal sustainability of climate costs up to 2060 assessment**
 - Climate change and well-designed climate measures have a **limited effect on the sustainability of public finances** (based on 2019-expectations)
- **Key insights**
 - First attempt of assessing effect of climate costs up to 2060 in the Netherlands shows **limited effects on GDP growth and fiscal sustainability**, unlike in the UK
 - Annual assessment of climate and economic effects of policy measures is **important to track progress and to factor in the high uncertainty** as well as rapidly changing economy and policies

THREE CASE STUDIES: UK

- **OBR Fiscal risk assessment of UK's transition to net zero**
 - Public spending is expected to be **heavily front-loaded**. Main source - decarbonisation of buildings
 - Net revenue gains from decarbonization are expected to rise sharply in the 2020s and **turn negative in the 2030s**, potentially eroding the tax base
 - Risk to public finance: **'significant but not exceptional'**
 - Potentially **substantial impact of unmitigated global warming** on public finance

- **Key insights**
 - Revenue measures have a **larger impact on the public finances in the long-term**. Largest fiscal cost - loss of existing carbon-based motoring taxes
 - There are **fiscal benefits from acting sooner**. Delayed and disorderly climate transition is particularly risky due to higher economic and fiscal costs

Conclusions

CONCLUSIONS

- Most countries will need to **increase current public spending and investment to finance climate transition**
- Additionally, some **public revenues sources might be lost in the long-term**, especially due to the gradual reduction in fossil fuel usage
- Climate transition measures should be **timely, well-targeted and cost-efficient**
- **Regular and continuous assessment** of the impact of climate transition on public finances could contribute to a cost-efficient climate transition
- The assessment of the fiscal impact of the climate transition measures is still in its infancy and would benefit from the **independent assessment by specialist agencies**

RECOMMENDATIONS

- The assessment should cover **all measures** and estimate both **first-round direct and second-round indirect impact on public finance**
- Given high uncertainty, **multi-scenario analysis would be the most suitable tool** to assess the fiscal impact of climate transition measures
- **Detailed assumptions** behind each of the scenarios should be disclosed
- **Multiple independent cost assessments** should be easily available for national IFIs
- A well-established, independent and easily accessible assessment of the **effect of EU policies for GHG emissions** of individual countries may be great help for national IFIs
- The governments need to provide the **detailed information on the measures** to facilitate the assessment
- The national IFIs can further benefit from the **exchange of best practices**



THANK YOU!

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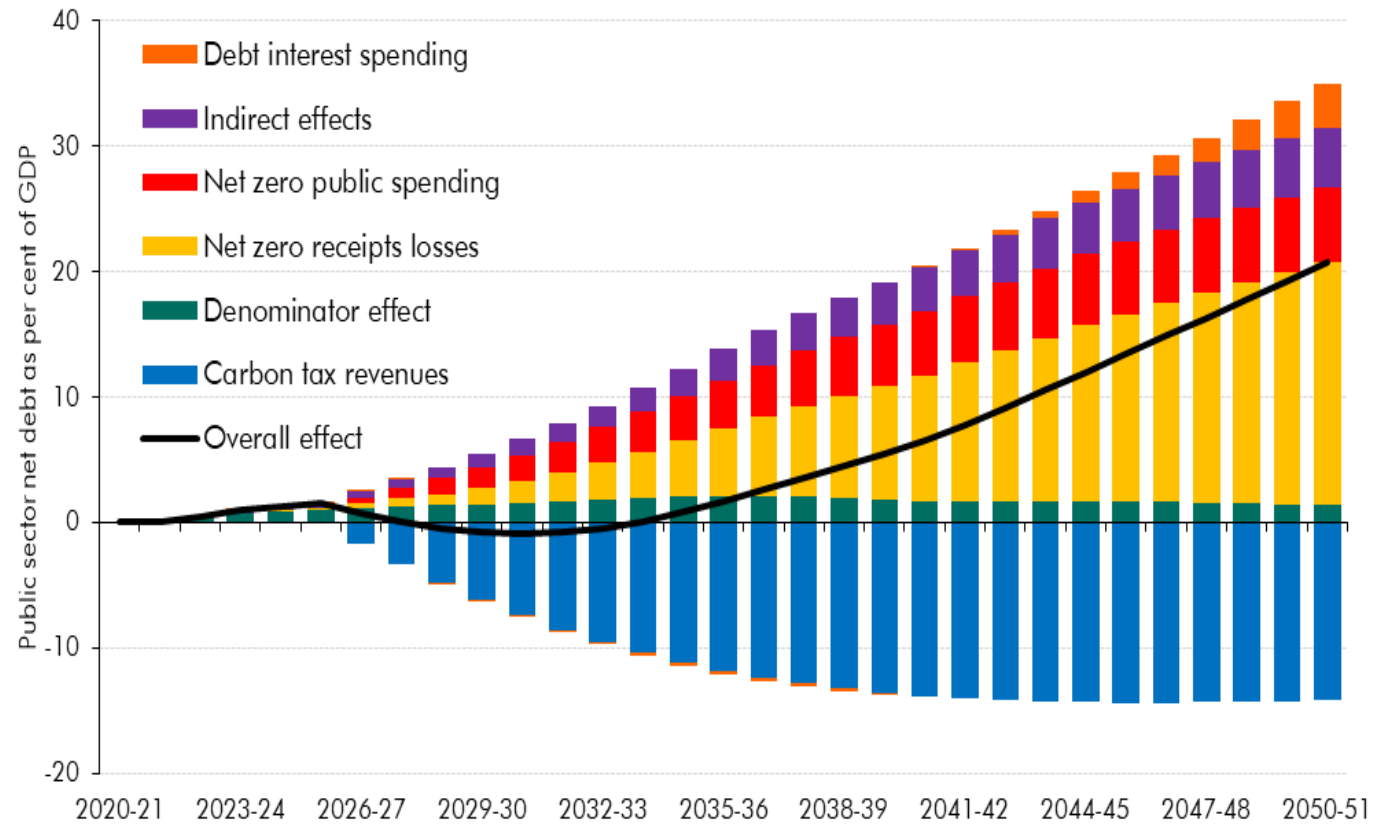
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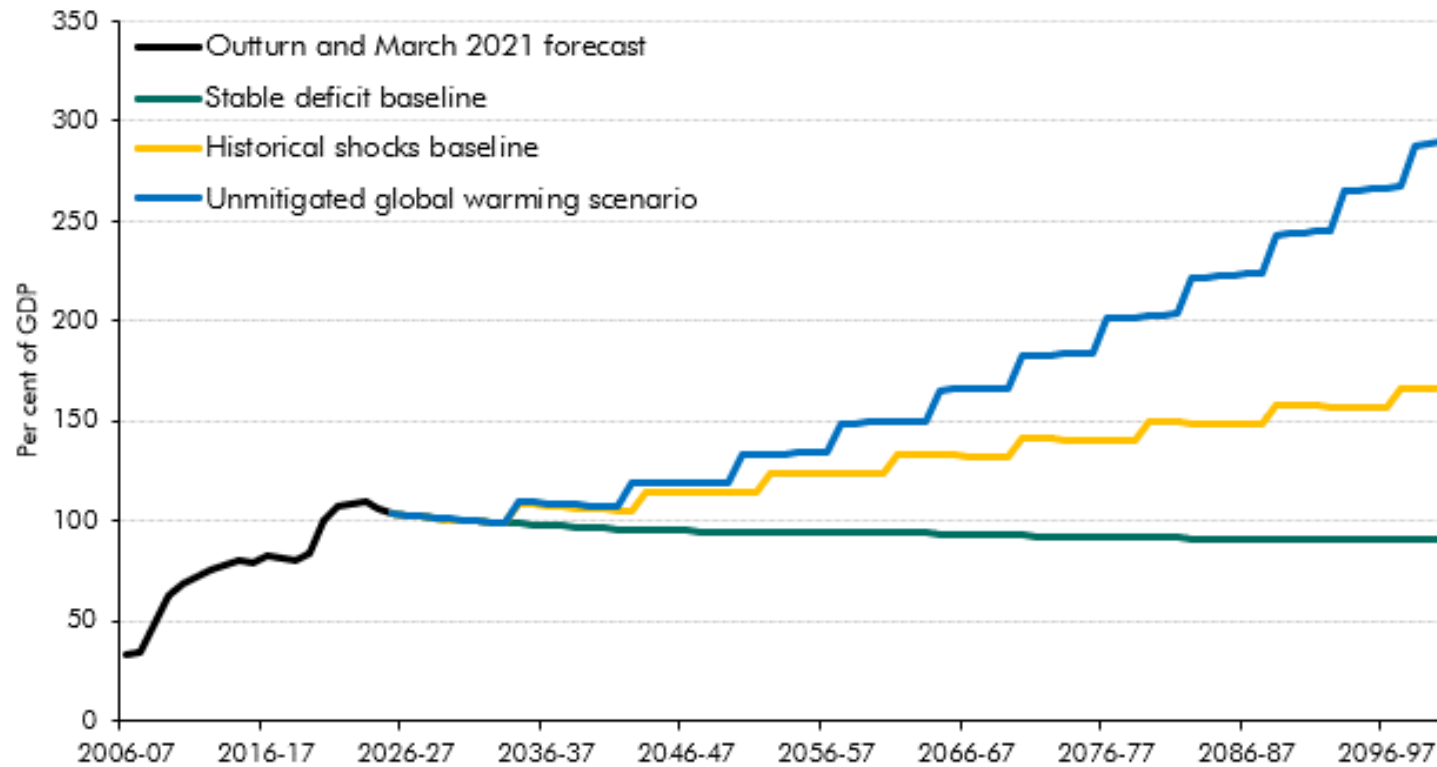
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ANNEX 1

Estimated costs to the public sector of the transition to net zero GHG emissions



ANNEX 2



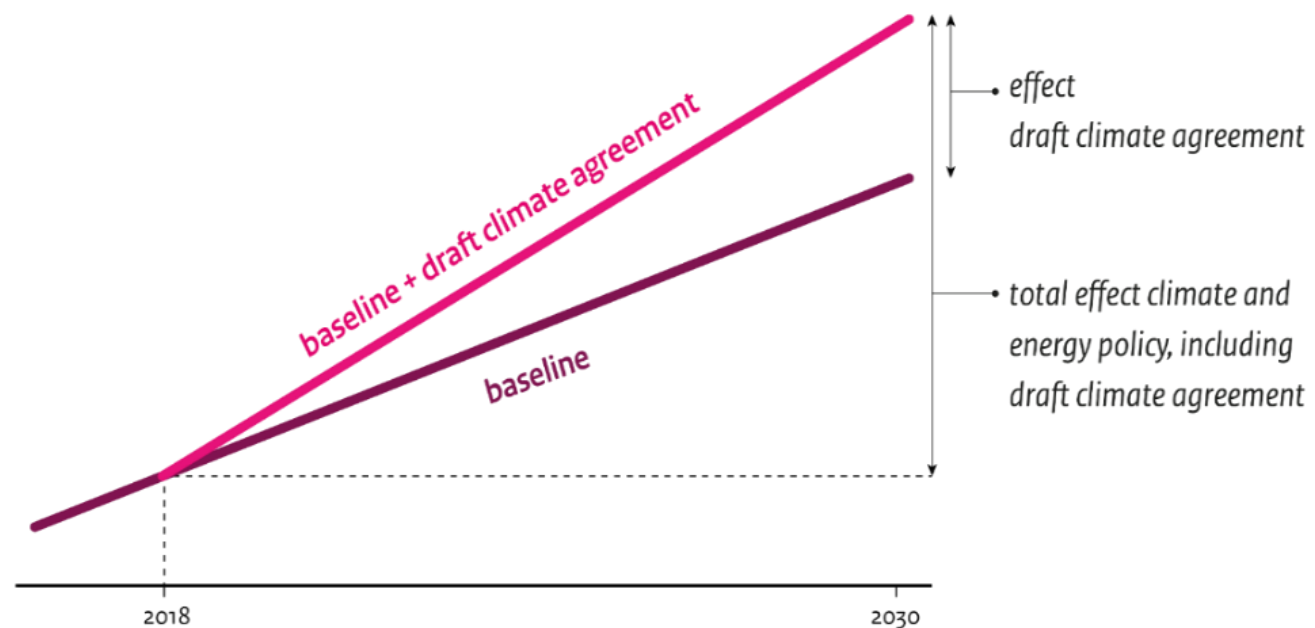
ANNEX 3

- **Main take-aways from the UK OBR**

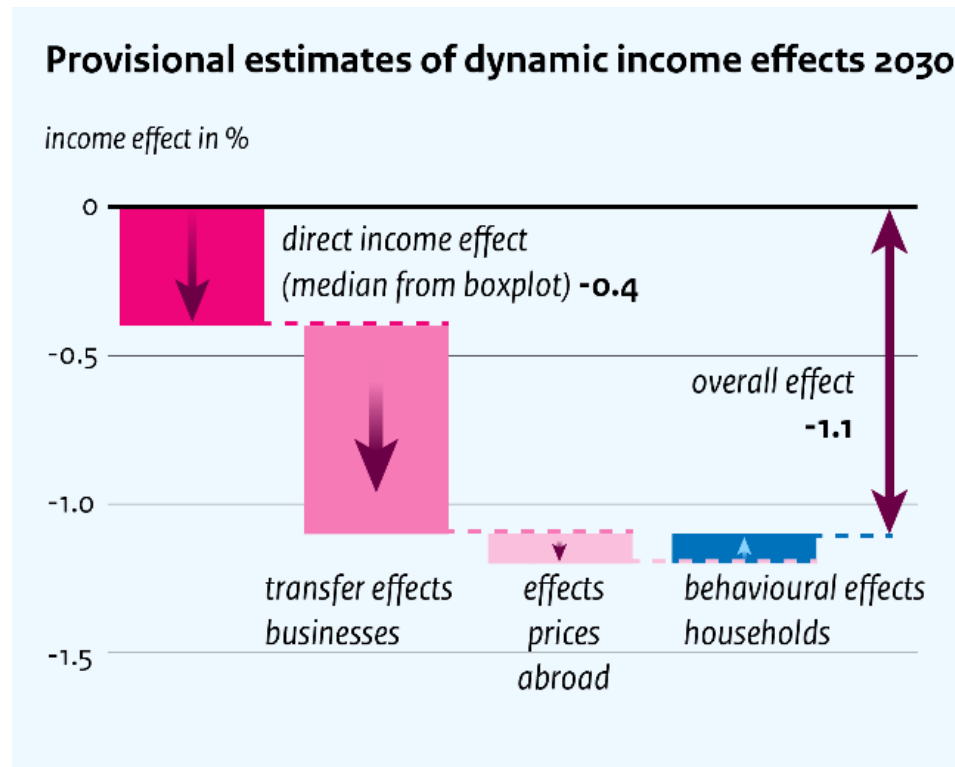
- Fiscal costs of climate transition to net zero in the UK are likely to be **significant but not exceptional**
- Revenue measures have a **larger impact on the public finances in the long-term**.
Largest fiscal cost - loss of existing carbon-based motoring taxes
- There are **fiscal benefits from acting sooner**. Delayed and disorderly climate transition is particularly risky due to higher economic and fiscal costs
- **Cooperation is needed** between national IFIs and other specialist institutions, including with expertise in data and modelling
- Lots of scope to refine inputs and assumptions in future forecasts and scenarios but considerable value in developing and publishing **relatively simple scenarios**
- Given the high uncertainty **scenario analysis is the most appropriate tool** to assess the fiscal impact of climate transition

ANNEX 4

Stylized representation of Climate agreement and baseline scenario ('total cost effect')



ANNEX 5



ANNEX 6

- **Main take-aways from the NL CPB**

- The targeted 49% reduction for the Netherlands of GHG emissions may land within the possible 2030 reduction bandwidth **if additional measures are worked out in detail and on time**
- Future EU policies (e.g. EU ETS systems) should **help emission reductions** in the coming decades in the Netherlands
- Annual assessment of climate and economic effects of (overall) policy measures is **important to track progress and to factor in the high uncertainty** as well as rapidly changing economy and policies
- Balanced purchasing power effects are very **important for the acceptance** of the climate mitigation package. These are reached by taking additional compensating measures
- First attempt of assessing effect of climate costs up to 2060 in the Netherlands shows **limited effects on GDP growth and fiscal sustainability**, unlike in the UK