Assessing the advantages and disadvantages of entrusting the financial management of the assets of the Common Provisioning Fund to the Commission, the EIB, or a combination of the two

Final Report

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Abbreviations

Abbreviation	Definition
AMG	Asset Management Guidelines
AUM	Assets Under direct Management
BUFI	Budgetary Fines
CC	Compliance Committee
CEF	Connecting Europe Facility
CPF	Common Provisioning Fund
CSP	Customer Security Program
DDG	Deputy Director-General
DG ECFIN	Directorate-General for Economic and Financial Affairs
EAU	EU Allowance Units
ECSC i.L.	European Coal and Steel Community in liquidation
EEC	European Economic Community
EFSD	European Fund for Sustainable Development
EFSI GF	European Fund for Strategic Investments Guarantee Fund
FAFA	Financial and Administrative Framework Agreement
FC	The Financial Control Directorate
FI	The Finance Directorate
FI/COOR	Finance Directorate Coordination Division
FI/PRO	Finance Directorate Planning & Settlement of Operations
FiSpbs	Finance Directorate Strategy, Policies & Business Support
FiTre	Finance Directorate Treasury Department
GFEA	Guarantee Fund for External Actions
IC	Investment Committee
ICF	Internal Control Framework
ICMG	Internal Control Management Group
IDP	Individual Development Plan
ISMS	Information Security Management System
JSIS	Joint Sickness Insurance Scheme
MAG	Market Abuse Guidelines
OBO	Off-Budget Operations
PGF	Participants Guarantee Fund

RC	Risk Management Committee
RCM	Risk Control Matrix
RSFF	Risk Sharing Finance Facility
RSI	Risk Sharing Instrument
RTO	Recovery Time Objective
TMB	Treasury Management Board
TPAMC	Third-Party Asset Management Committee

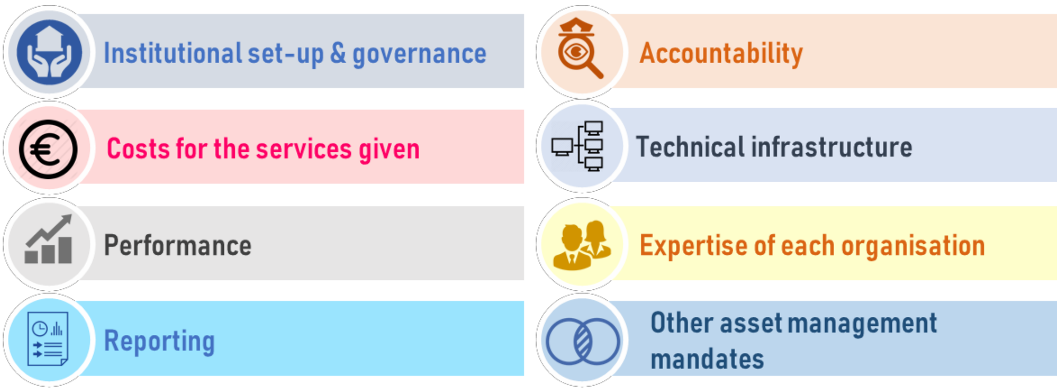
1 Introduction

This report documents the findings and results of an independent comparative assessment of the advantages and disadvantages of entrusting the financial management of the assets of the Common Provisioning Fund (CPF) to the Commission, the EIB, or a combination of the two. The assessment was carried out by ICF in association with Keypoint Financial who were appointed as by the Directorate-General for Economic and Financial Affairs (DG ECFIN), under Framework Service Contract ECFIN-001-2017.

1.1 Study context and objectives

Article 212 of the new Financial Regulation envisages the creation of a Common Provisioning Fund (CPF) "*to cover the financial liabilities arising from EU financial instruments, budgetary guarantees or financial assistance*"[1] going forward (the CPF is described further in section 2). It also requires an independent external evaluation of the advantages and disadvantages of entrusting the financial management of the assets of the CPF to the Commission, to the EIB, or to a combination of the two institutions, based on a set of technical and institutional criteria as illustrated in Figure 1[2]. The purpose of the study is to fulfil these requirements and thus, support the Commission in selecting the optimal solution for managing the assets of the CPF.

Figure 1. Assessment criteria as per Article 212 of the Financial Regulation



1.2 Structure of this report

The remainder of this Report is structured as follows:

- Section 2 Background to the study
- Section 3 Approach and methodology
- Section 4 Assessment of ECFIN and EIB against the set of criteria
- Section 5 Assessment of the advantages and disadvantages of each option
  Annexes provide further details on the analysis covered in this report.

[1] Article 212 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:193:FULL&from=EN

[2] Similar calls for an independent evaluation have been made in regulation establishing the EFSD and the 2018 compromise agreement reached between Council and Parliament on GFEA.

2 Background to the study

This section provides an overview of the asset management activities of the Commission (particularly DG ECFIN) and those of the EIB, by way of background and wider context for the information and analysis presented in subsequent sections of the report. It also details the options and scenarios relating to the size and scope of the CPF based on information currently available.

2.1 Treasury/ asset management within the Commission

DG BUDG is responsible for the execution as well as treasury management of the entire budget managed by the Commission and the European Development Fund. In this context, the Commission has been entrusted with an annual budget (payments appropriations) of more than EUR 140 billion and a balance sheet of a similar order (EUR 166 billion). DG BUDG's responsibilities involve management of short-term liquidities (< 12 months). What DG BUDG does is however, closer to treasury management than asset management[3].

The classical asset management activity is performed by DG ECFIN within the Commission. This typically involves management of funds available for longer horizons which are invested across the maturity spectrum and thus, have longer average maturities. The assets managed by DG ECFIN comprise certain off-budget activities[4] of the Commission. In this respect, DG ECFIN manages six different portfolios amounting to EUR 12 billion (Figure 2). In addition to the portfolios that are managed directly by ECFIN, it also has the role of overseeing the portfolios 'outsourced' to the EIB, as the Commission retains the ultimate responsibility for the execution of the EU budget[5]. More specifically, in its current role as the Asset Management Designated Service (AMDS) for other Commission DGs, ECFIN carries out the following functions:

- Designing the Asset Management Guidelines (AMGs) for each portfolio;
- Leading the negotiation of FAFA;
- Acting as an interface between parent DGs and the EIB;
- Providing advisory services to parent DGs on asset management;
- Approving investment strategies for the outsourced portfolios;
- Monitoring the portfolios;
- Risk control;
- Preparing consolidated accounts.

2.2 Treasury/ asset management within the EIB

EIB, on its side, undertakes treasury/ asset management activities mainly for its own account, to support the Bank's core financing activity[6]. EIB treasury activities are thus

[3] The difference between Treasury management and Asset Management is mainly the nature of it: Treasury management focuses on short-term management of liquidity and day-to-day financial activities, asset management focuses on obtaining longer term performance on a portfolio of assets, subject to certain pre-stated criteria.

[4] Off-budget activities are not explicitly covered by the Financial Regulation and do not fall under the responsibility of the Commission Accounting Officer, save for the need to include them in the Commission financial statements

[5] The Commission may entrust implementation tasks of the budget of the Union to entrusted entities and specifically the EIB pursuant to Article 58(1)(c)(iii) of the Financial Regulation. However, in accordance with Article 317 of the Treaty, it remains responsible for the implementation of the budget of the Union.

[6] A. 21 (ex A. 23) of EIB statutes

conducted with the primary objective of ensuring that the Bank can meet its payment obligations on time and in full, and protecting the capital invested. Altogether, the total volume of assets that EIB managed for its own account as of year-end 2018 was EUR 80.6 bn[7]. 91% of that amount are held in the Treasury Monetary Portfolio, designed for daily liquidity management. EUR 7.2 bn (or 9%) have relatively longer horizons (>12m) and are comparable with those managed by DG ECFIN.

EIB is also managing assets on behalf of third parties, essentially the European Commission. Presently, the EIB is managing eight different portfolios with a total value of EUR 8.3 billion on behalf of the Commission (Figure 2), out of a total value of EUR 8.9 billion for external mandates. The remaining EUR 0.6 billion is made of mandates managed on behalf of EU Member States (IF-Cotonou) and their regional or municipal authorities (SME-Spain).

2.3 Division of asset management between the Commission and the EIB: a historical perspective

Asset management responsibilities of the Commission date back to the 1950s. At the time, there were already some asset management activities associated with the receipts from the borrowing and lending activities of the Community, and the taxes paid by the steel & coal industry. The asset management activity of ECFIN was however, limited in the beginning but grew in the 1980s and 1990s primarily due to ECSC assets.

The EIB and the EC started working together on asset management in the 1990s. In 1994, the Guarantee Fund for External Actions (GFEA) was set up and the related AM activities were outsourced to the EIB following guidance received from the Council.

In recent years, various asset management mandates (mainly for financial instruments managed by the EIB Group such as InnovFin) have been given to the EIB as part of the whole package.

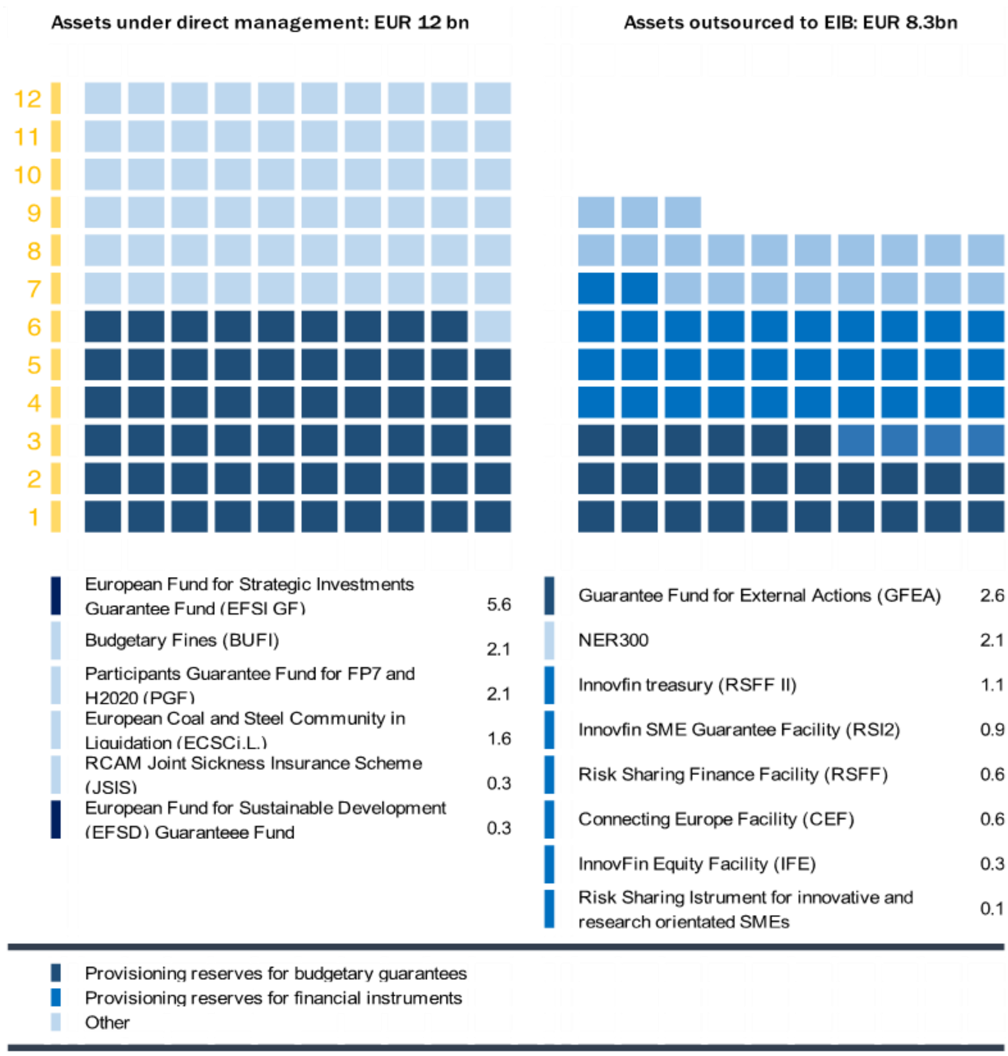
In 2009/10, DG ECFIN was assigned a new mandate by the Commission (competition fines). Three options for asset management were studied (in-house, outsourced to EIB or outsourced to another public or private asset manager) before allocating the task directly to ECFIN.

From then onwards, ECFIN's asset management capabilities have increased significantly. In 2014, the asset management of the Participants Guarantee Fund (PGF) was moved from the EIB to ECFIN as the EIB was not involved in the implementation of the actions covered by the Fund. In 2015, ECFIN was assigned asset management responsibilities for EFSI Guarantee Fund, the largest single mandate.

The figure below provides an overview of the current allocation of EU assets between ECFIN and the EIB.

[7] EIB Financial Report 2018, available at: https://www.eib.org/attachments/general/reports/eib_financial_report_2018_en.pdf

Figure 2. Overview of the EU Assets under direct management by ECFIN and of those outsourced to the EIB

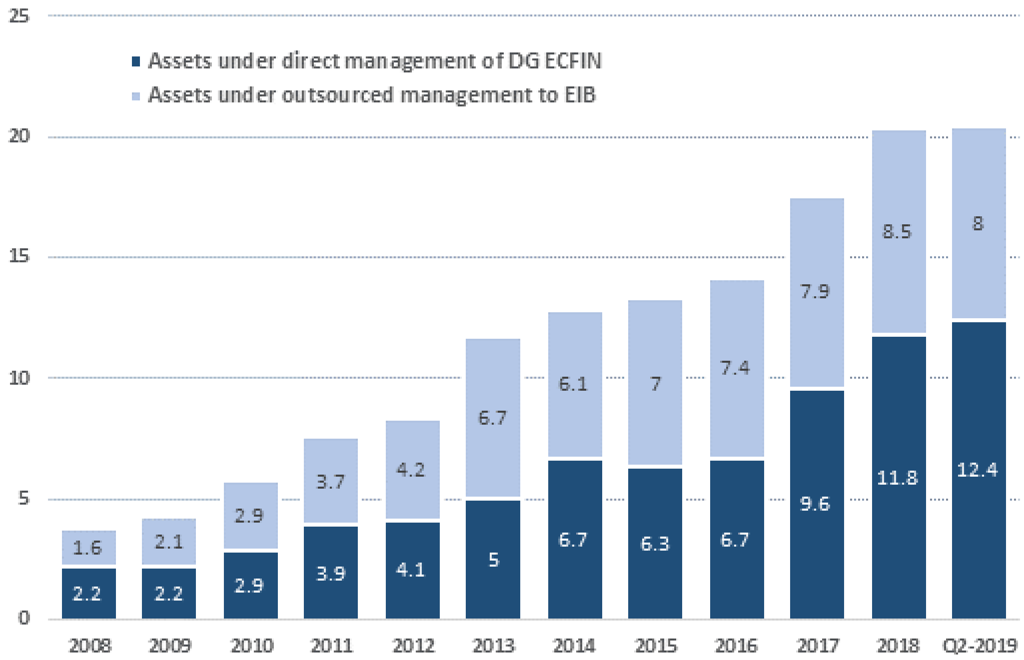


Source: ICF, based on data sourced from the Terms of Reference and updated as of end-Q1 2019.

Please note that ECFIN has also been tasked with managing combined Portfolios of the Local Agents Provident Fund and the Complementary Sickness Insurance Scheme for Local Agents on behalf of DG DEVCO and EEAS (EUR 0.1 bn). This portfolio has been made operational after the launch of the study

Figure 3 provides the historical evolution of the volumes of EU assets which are under ECFIN direct management and outsourced to EIB group.

Figure 3. Evolution of EU assets under ECFIN direct management and outsourced to EIB group, 2008-2019 (in EUR bn)



Source: ECFIN data

2.4 Future direction: creation of a Common Provisioning Fund

2.4.1 Background and context

The context is one of an increased use of financial instruments and budgetary guarantees

While not new (the EU's first budgetary guarantee, the External Lending Mandate, was created already decades ago, back in the 1970s), the use of financial instruments and budgetary guarantees (in complement to traditional EU grants) - has now taken on a new dimension. The objective is to "do more with less" and leverage the EU budget. Under the 2014-2020 MFF, the Commission has established sixteen fully provisioned and centrally managed financial instruments as well the European Fund for Strategic Investments based on a budgetary guarantee. Financial instruments and budgetary guarantees require a significant volume of payment appropriations to be mobilised and provisioned[8], and the number of funds whose assets need to be managed has expanded.

The multitude of EU-level financial instruments, and their multiple legal bases, has however been seen as “an obstacle to their efficient use”, as highlighted in the Commission's Reflection Paper on the future of EU finances[9]. There is a willingness to improve efficiency under the next MFF, on the investment side, as illustrated in the InvestEU proposal[10].

Going forward, the EIB is no longer going to be the exclusive implementing partner

[8] Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:193:FULL&from=EN

[9] COM(2017) 358 of 28 June 2017

[10] http://europa.eu/rapid/press-release_MEMO-18-4010_en.htm

Up until now, as far as internal policy was concerned, the Commission has always implemented its financial instruments via indirect management and always entrusted the EIB group, either the EIB or the EIF, despite the fact that it could possibly have entrusted other entities[11].

Going forward, the EIB will remain the main partner but in addition, other implementing partners will have direct access to the EU guarantee, following the external policy model[12]. Other implementing partners would include:

- National Promotional Banks and Institutions;
- Other IFIs (EBRD, COE Bank, World Bank Group)
- Other entities fulfilling the criteria laid down in the Financial Regulation (Art. 62.1).

EIB's share will vary between 50% in the field of external policy[13] and 75% in the field of internal policy[14].

There is a willingness to improve efficiency under the next MFF also on the asset management side

The new Financial regulation therefore envisages a Common Provisioning Fund, specifying that *the provisions made to cover the financial liabilities arising from financial instruments, budgetary guarantees or financial assistance shall be held in a common provisioning fund*.[15] The basic idea behind the CPF is to increase efficiency: by pooling provisions into a common fund, and for a given level of protection / provisioning, it reduces the amount of resources used and increases flexibility (as compared to a situation where the resources would be held separately).

The future CPF focuses on pooling the resources set aside for the financial tools which aim to support investment and to achieve EU policy objectives (e.g. EFSI GF, EFSD, GFEA), but the detail around the new CPF is yet to be fully fleshed out as further explained under section 2.4.2.

[11] See points (ii), (iii), (v) and (vi) of Article 58(1)(c) of the Financial Regulation

[12] in the field of external policy, implementation tasks have already been entrusted by the Commission to International Finance Institutions (IFIs) and development banks within the framework of blending facilities.

[13] European Commission, Proposal for a regulation of the European Parliament and of the Council establishing the Neighbourhood, Development and International Cooperation Instrument, COM/2018/460 final

[14] European Commission, Proposal for a regulation of the European Parliament and of the Council establishing the InvestEU Programme, COM(208) 439 final. Please note a partial provisional agreement on the proposal was reached between the co-legislators in early 2019. See also: http://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-mff-investeu

[15] Article 212 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:193:FULL&from=EN

Box: The Financial Regulation

The Financial Regulation lays down the rules for the establishment and the implementation of the general budget of the European Union and of the European Atomic Energy Community and the presentation and auditing of their accounts. A revised version was published in 2018, with the aim of simplifying and increasing the flexibility of the EU financial rules to adapt to changing circumstances and to respond to unexpected developments. The new Financial regulation should therefore increase access to EU funding and improve cooperation between administrations, increase focus on achieving better results with less bureaucracy and improved controls at a lower cost, increase leverage and flexibility of the EU Budget as well as better protect the EU Budget.

2.4.2 Size and scope of the CPF

The final design of the CPF has not yet been decided upon. The following parameters are however, currently under discussion:

- The future CPF focuses on pooling the resources set aside for the budgetary guarantees which aim to support investment and to achieve EU policy objectives. Thus, the CPF is expected to include (a) the assets of the EFSI guarantee fund; (b) the provisioning for the new InvestEU Guarantee fund and (c) the provisioning for the different third country lending mandates (post 2020 these will be grouped under the NDICI heading).
- The maximum size of the CPF is estimated to be around €25 bn, given expected calls. This estimate is based on the numbers currently included in the legislative proposals of the respective instruments, as further specified in the table below.
- No formal decisions have been taken yet as regards the type of assets in which the CPF will invest. The study team has however, been advised that it would be reasonable to expect that the focus will be on fixed income and that the PGF or EFSI AMGs could be regarded as a proxy at this stage.

Table 1. Hypotheses behind the calculation of the maximum size of the CPF

	Size of the EU budgetary guarantee	**Provisioning rate**	**Maximum size of assets under management next MFF**	**Comment**
EFSI[16]	€26bn	– 35%	€9.1bn	– EFSI will be close to fully provisioned by 2020
InvestEU[17]	€38bn	40%	€12.4bn	– Total provisioning under InvestEU will be €15.2 bn. The investment horizon for InvestEU will spillover two MFF cycles. Only, €12-12.4 bn will be provisioned over 2021- 2028
NDICI[18]	€60bn	9% to 50% depending on the type of operations *(9% for the Union's macro-financial assistance and for budgetary guarantees covering sovereign risks associated with lending operations; 50% otherwise)*	€9.3bn *(Commission's estimate based on potential profile of operations)*	NDICI will be fully provisioned under the next MFF
GFEA[19]	€30bn for 2014-2020[20]	9% *(calculated on the total outstanding capital liabilities arising from each eligible operation, increased by unpaid interest due. NB: some of the outstanding amount may relate to earlier programming period)*	€2.5bn	While it is clear that the balance of assets by 31 December 2020 in the EFSD Guarantee Fund and in the Guarantee fund for external actions will be transferred into the common provisioning fund, it is not clear whether or not that balance adds up to or is included in NDICI's estimated €9.3bn
EFSD[21]	€1.5bn	50%	€750m	

[16] Regulation (EU) 2017/2396 of the European Parliament and of the Council of 13 December 2017 amending Regulations (EU) No 1316/2013 and (EU) 2015/1017 as regards the extension of the duration of the European Fund for Strategic Investments as well as the introduction of technical enhancements for that Fund and the European Investment Advisory Hub

[17] European Commission, Proposal for a regulation of the European Parliament and of the Council establishing the InvestEU Programme, COM(208) 439 final. Please note a partial provisional agreement on the proposal was reached between the co-legislators in early 2019. See also: http://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs- growth-and-investment/file-mff-investeu

[18] European Commission, Proposal for a regulation of the European Parliament and of the Council establishing the Neighbourhood, Development and International Cooperation Instrument, COM/2018/460 final

[19] Council Regulation (EC, Euratom) No 480/2009 of 25 May 2009 establishing a Guarantee Fund for external actions

[20] Decision No 466/2014/EU of the European Parliament and of the Council of 16 April 2014 granting an EU guarantee to the European Investment Bank against losses under financing operations supporting investment projects outside the Union

[21] Regulation (EU) 2017/1601 of the European Parliament and of the Council of 26 September 2017 establishing the European Fund for Sustainable Development (EFSD), the EFSD Guarantee and the EFSD Guarantee Fund

	Size of the EU budgetary guarantee	**Provisioning rate**	**Maximum size of assets under management next MFF**	**Comment**
Total expected inflows[22] into the CPF			€30bn - €35bn	
Total expected outflows[23] from the CPF			€5bn - €10bn	
Expected maximum size of the CPF under next MFF			€25bn	

Based on provisional figures provided by DG ECFIN.

[22] Inflows are essentially made from payment appropriations of the Union budget and generated revenues.

[23] Outflows are essentially linked to guarantee calls and payment of administrative / management fees.

The main remaining uncertainties are as follows:

- Whether the existing AM mandates linked to financial instruments (e.g. InnovFin etc.) will be folded in within the CPF or grandfathered (i.e. continue to exist outside the CPF until they run out). These are, however, relatively small in comparison to the CPF (< €3bn).
- The maximum size of the CPF may reduce if within the context of the final agreement on the MFF, the final size of InvestEU and NDICI is lower than the Commission's proposal. For simplicity, this study is based on the numbers currently being proposed in the Commission's Legislative Financial Statements.
- Member States compartments may increase the size of the CPF. However, given the uncertainties around the take-up of Member States' compartments, it has been agreed with the Steering Group that the Study can disregard this element for the moment.

3 Approach and methodology

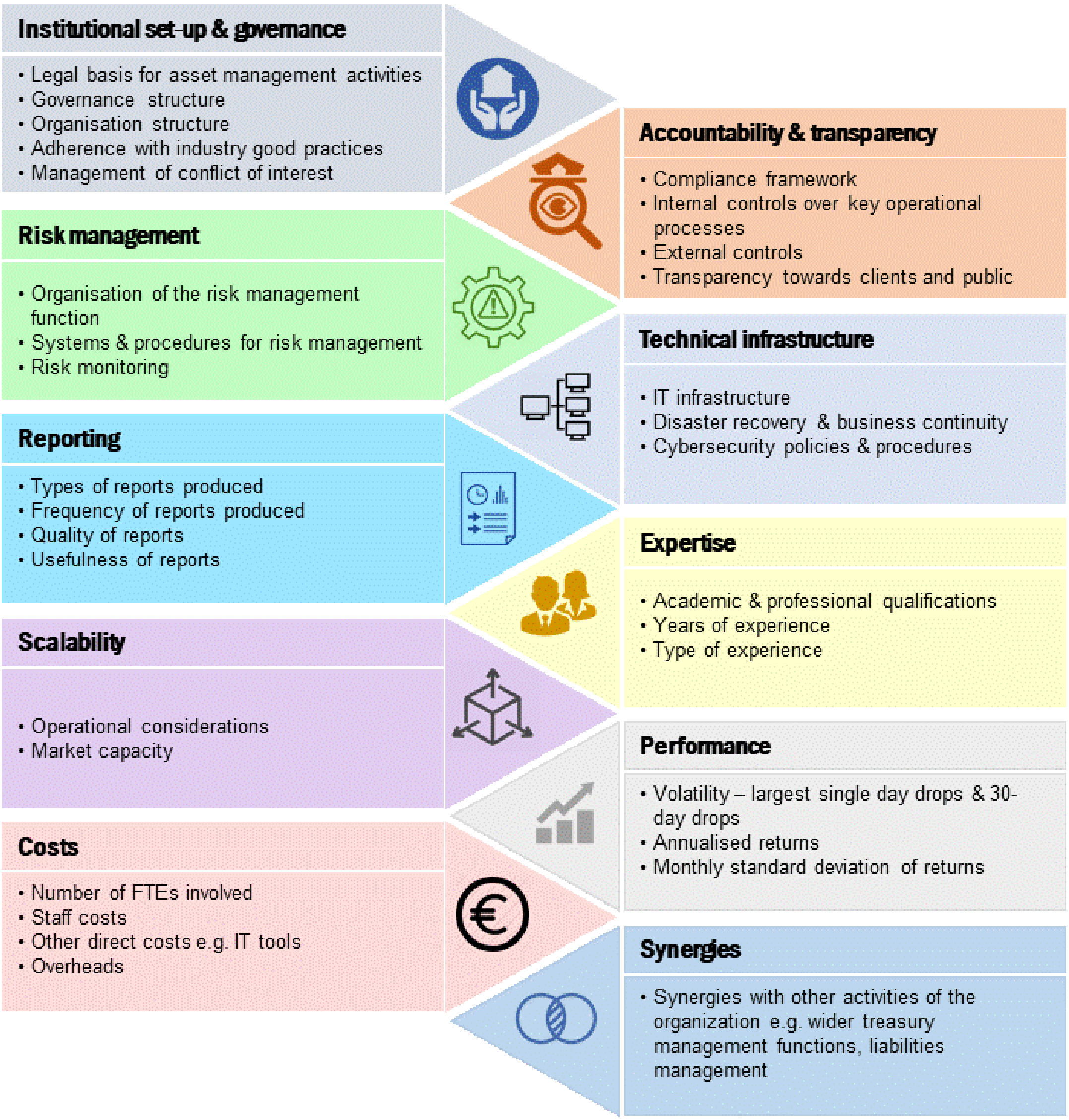
This section describes our overall approach to the study, including the criteria and the methods used to conduct the comparative assessment. However, as with any research there were some limitations to the work undertaken. These are discussed at the end of the section.

3.1 Overall study approach

3.1.1 Assessment criteria

The figure below provides an overview of the criteria developed by the study team to conduct the comparative assessment. It reflects the legislative requirements as specified in Article 212 of the Financial Regulation, as well as further precisions provided by the Commission in the study terms of reference.

Figure 4. Overview of assessment criteria



3.1.2 Methodology

The assessment was essentially based on documentary review and interviews / meetings with both institutions. The two methods were used in a complementary manner to enrich and cross-check the information collected from a single source. For example, documentary evidence was sought to validate the statements and claims made by the interviewees while interviews were undertaken to establish the extent to which documented procedures and processes were followed.

Beyond that, other elements which fed into the report include:

- Steering Group[24] meetings;
- Discussions among members of the study team;
- Follow-up exchanges with both DG ECFIN and EIB to address outstanding clarification needs;
- Workshop with Commission services held on 23 July 2019.
- Workshop with Commission and EIB services held on 25 September 2019, with an aim to expose the findings and results of the assessment to critical review and challenge by the Commission services as well as EIB representatives, thereby identifying and correcting any factual inaccuracies, misinterpretation of information or gaps.

Documentary review

Documentary review included:

- Assembling the necessary documentation and data and populating a repository database (see Annex 3), to which we constantly added over the course of the study;
- An in-depth review of all the documentation provided, including inter alia:
- The Asset Management governance related documentation, including organisation charts, mapping of decision-making processes information on roles / responsibilities, sample of minutes of main Governance structures;
- Key policies e.g. risk management policy, conflict of interest policy, Business Continuity Plan etc;
- Documents describing systems, processes and procedures e.g. front office manual, IT systems, operational procedures;
- Asset management guidelines;
- Annual investment plans for each portfolio (Tactical Asset Allocations and annual strategies);
- Performance and risk reports.
- A detailed mapping of the portfolios (see Annex 1),
- An analysis of the performance data provided by DG ECFIN and the EIB (see section 4.8 and Annex 6).

[24] The Inter-Service Steering Group (ISG) was composed of members from DG BUDG and DG ECFIN.

Site visits and interviews

A series of in-depth, face-to-face, semi structured group interviews were organised with staff involved in asset management and related functions at DG ECFIN and the EIB e.g. portfolio management, risk management, etc. in order to collect the necessary information and offer to both institutions the opportunity to provide feedback and clarifications. A list of interviews undertaken is provided in Annex 1. These interviews systematically explored each of the elements of the assessment criteria. The site visits also involved walkthroughs of key processes and controls e.g. trading process.

On ECFIN side, this included:

- A series of scoping interviews with key DG ECFIN staff with asset management responsibilities;
- A meeting with ECFIN officials to discuss current capacities and infrastructure, outsourcing of asset management mandates to the EIB, and the validation of options and scenarios;
- One follow-up clarification meeting. On EIB side, this involved:
- An introductory meeting to the EIB services and a group scoping interview;
- A meeting with the EIB teams (portfolio management, risk management and middle office) on 4 June 2019 to discuss current capacities and infrastructure and held a first discussion on the options and scenarios;
- Additional exchanges and discussions as well as several follow-up meetings (see table below).

Table 2. Overview of meetings organised with the EIB

Date of Meeting	Purpose	EIB Partcipants
14/05/2019	Kick off meeting	Portfolio Management (PM), Risk Management (RM), Middle Office (FI-MO), Back Office (BOT), Financial Control (FC), Financial Coordination(FI-COOR)
28/05/2019	Follow-up meeting	BOT, FICOOR, FC
04/06/2019	Follow-up meeting	PM, RM, FI-MO
19/06/2019	Follow-up meeting	PM
08/07/2019	Follow-up meeting	PM, SG (Secretariat General)
27/08/2019	EIB feedback & additional questions	PM, RM, FI-MO, FI-COOR

3.2 Caveats and limitations

There were some inherent limitations to the work undertaken. These are discussed here.

Differences in institutional context make it challenging to draw direct comparisons. The European Commission and the EIB are fundamentally different organisations in terms of their missions, mandates and activities. The Commission is the EU's executive arm whereas the EIB is the EU's bank. As such, the two organisation's governance structure and systems (e.g. IT infrastructure, business continuity plans etc.) are not directly comparable as they are driven by different institutional settings, legal basis and operational requirements. The institutional specificities mean that it is not always possible to compare apples to apples.

The study was not designed to be a due diligence exercise or an audit. While the study team took care to check the information provided by each organisation, certain types of information were taken at face value. For example, the information provided by each organisation on the expertise of staff working on asset management activities was not cross-checked through interviews or other sources. Moreover, the study scope did not include an independent verification of third-party service providers' identity or a review of the services being performed.

4 Assessment against the criteria

4.1 Institutional set-up and governance

The following aspects were examined under this criterion:

- Institutional set-up: the legal framework and institutional set-up for asset management within each organisation, to ensure that there is an explicit legal foundation for the asset management activities of each organisation.
- Governance aspects: the governance structure put in place to ensure that the organisation meets its fiduciary and legal duties to all stakeholders. This typically means delineating the investment decision making process from the dealing process. Moreover, a good governance structure should consist of the following three layers:
- A higher-level body such as a Board which defines the Strategic Asset Allocation (investment horizon and risk tolerance for the investment of the assets) and is responsible for oversight of the long-term execution of the strategy.
- An Investment Committee, responsible for formulating the Investment Strategy and monitoring its implementation. The Investment Committee should meet on a regular basis to review the portfolios under management, Investment Strategy and approach.
- Operational units which manage the assets on a daily basis according to the Investment Strategy and in line with applicable rules and procedures.
- Organisation structure: how the various asset management functions (portfolio management, risk management, reporting, transaction processing and settlement, control, compliance, etc.) are organised within each institution. There should be adequate segregation of duties within the operational units i.e. the front, middle and back-office functions. In practice this means that these functions should be carried out by different staff with separate reporting lines.
- Adherence with good practice: the extent to which each institution adheres with industry standards and good practices.
- Conflict of interest: processes and procedures put in place to manage potential conflicts of interest, which are especially relevant in the case of third-party management.

4.1.1 European Commission

4.1.1.1 Institutional set-up

The European Commission has the ultimate responsibility for managing the EU budget in accordance with the principles of sound financial management (Article 317 of TFEU).

As enshrined in Article 77 of the Financial Regulation[25], treasury management is part of the Accounting Officer's duties. The Accounting Officer needs to ensure that financial resources are readily available to make the payments which are inherent to the process of budget implementation and is required to set up cash management systems enabling the drawing-up of cash-flow forecasts. DG BUDG is, *inter alia*, responsible for the execution of the budget / treasury management of the entire budget managed by the

[25] Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012(1) OJ-L 193/30.07.2018, p.1

Commission and the European Development Fund. This typically involves the management of short-term liquidities. In this context, the Commission has been entrusted with an annual budget (payments appropriations) of more than EUR 140 billion and a balance sheet of similar order[26].

The Commission has delegated to DG ECFIN, on the proposal of or with the agreement of the Accounting Officer, the management of certain off-budget assets. This typically involves management of funds available for longer horizons which are invested across the maturity spectrum and have thus longer average maturities. In particular, ECFIN has been delegated with the responsibility for asset management of off- budget assets and investment of EU funds on behalf of 'parent' DGs such as BUDG, RTD, DEVCO etc[27].

In addition to the portfolios that are managed directly by the DG, ECFIN also has the role of overseeing the portfolios 'outsourced' to the EIB as the Commission retains the ultimate responsibility for the execution of the EU budget according to the TFEU, including in case of outsourcing[28]. ECFIN is thus responsible for:

- Negotiating the asset management guidelines for the outsourced portfolios;
- Approving the investment strategies;
- Acting as an interface between parent DGs and the EIB, including advising the parent DGs on asset management-related issues;
- Monitoring the risk and performance of the portfolios outsourced to the EIB;
- Consolidated accounting.

4.1.1.2 Governance

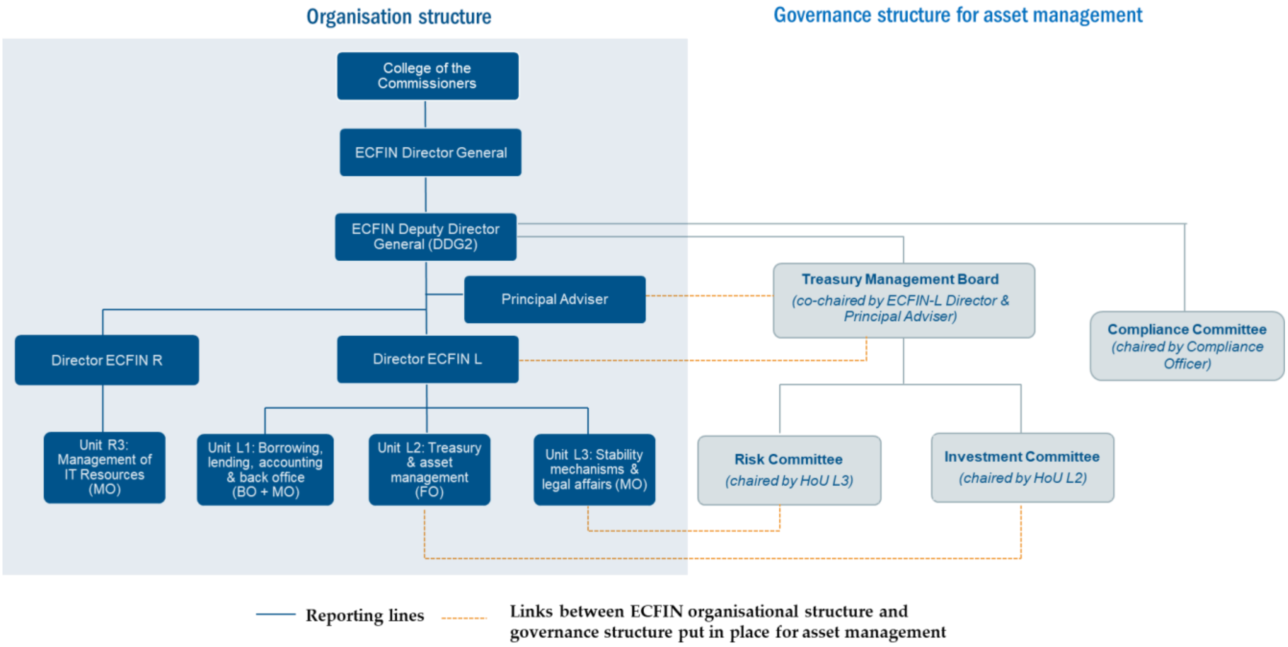
Following a peer review workshop with representatives of DG BUDG, the World Bank and the European Stability Mechanism, a new governance structure was put in place for the asset management activities of DG ECFIN as of 1 February 2018. As illustrated in Figure 5, the governance structure for asset management within ECFIN is integrated within the organisation structure of the Commission.

26 Assets of consolidated EU balance sheets are in the order of EUR 166 billion.

27 The division of tasks and responsibilities between ECFIN and parent DGs is defined in Service Level Agreements

28 The Commission may entrust implementation tasks of the budget of the Union to entrusted entities and specifically the EIB pursuant to Article 58(1)(c)(iii) of the Financial Regulation. However, in accordance with Article 317 of the Treaty, it remains responsible for the implementation of the budget of the Union

Figure 5. Governance structure for the management of EU assets under the remit of DG ECFIN



The overall authority for approving asset management guidelines lies with the College of the Commissioners. Within DG ECFIN, the responsibility for decision making on strategic matters lies with the Director-General who is supported by the following bodies:

- **Treasury Management Board (TMB):** the TMB is co-chaired by the ECFIN L Director and the Principal Adviser. The Principal Adviser, who is independent from ECFIN L and reports directly to the Deputy Director General, has a supervisory role for risk management matters. The TMB includes representatives from DG BUDG (observing member) and FISMA alongside key ECFIN staff (HoU and deputy HoU of L2, HoU L3) and the Compliance Officer. It plays an advisory role to the ECFIN Deputy Director General and Director General on strategic decisions such as strategic asset allocation (SAA); risk perimeter for the tactical asset allocation (TAA); investment strategy; benchmarks; performance attribution methodology; approval of new asset classes and instruments and changes in the investment process. The TMB meets on a bi-monthly basis.
- **Risk Management Committee (RC):** The RC oversees the functioning of the Risk Management Team (which sits within Unit L3) and validates its outputs and where relevant, approves them for transmission to the TMB. These include recommendation of benchmarks; recommendation of SAA based on an assessment of risk tolerance and investment horizon; preparation of risk perimeters; reporting of significant breaches of AMGs and investment limits that call for a review of practice or procedures; preparation and recommendation of new procedures or updates, risk methodologies; approval of monthly reports on risk and performance. The RC is chaired by the Head of Unit L3 (responsible for Risk Management) and is further composed of representatives from the same unit as well as observers from units L1 (responsible for Back Office functions and accounting) and L2 (responsible for Portfolio Management). It meets on a fortnightly basis.
- **Investment Committee (IC):** The Investment Committee's responsibility is to adopt, implement and calibrate on an ongoing basis the TAA within the allowable risk framework. It is chaired by the Head of Unit L2 and further composed of the

Deputy Head of Unit (DHoU), portfolio managers and analysts and observers designated by Unit L3. The IC meets on a weekly basis to discuss future outlook and implications for key exposures and trading ideas; asset allocation; new asset classes or instruments; and investment process enhancements.

- **The Compliance Committee (CC):** The CC is chaired by the Compliance Officer and is further composed of representatives of ECFIN as well as the Legal Service. It defines internal rules relating to market sensitive information in line with the Market Abuse Regulation ("Chinese walls") and personal conflicts of interest; ensures coherence of ECFIN Treasury compliance rules with the general Commission framework (on ethics, gifts and hospitality; on whistleblowing); and regularly assesses regulatory changes applicable to the asset management and borrowing activities undertaken. The CC meets once every two months.

The composition, mission, decision making modalities, frequency of meetings and tasks of each committee are clearly defined and documented[29]. The study team reviewed a sample of minutes of meetings (there is a detailed record of each committee meeting) and concludes that the minutes are:

- Clear – topics are clearly laid-out and differing opinions are noted;
- Thorough – current investment themes are explained within their macro-economic context as well as through the economic impact on current and potential future positions.

Although ECFIN's governance structure was already assessed by peers (notably, the World Bank) as compliant with industry standards, the above changes to the governance structure applied since early 2018 bring further improvements, in light of the anticipated increase in assets under management (under the current programming period, linked to EFSI and EFSD's ramp up). These improvements include:

- Clearer and better separation of strategic issues from operational issues (e.g. assigning responsibility for benchmarks to RC, leaving the formulation of the TAA proposals to the IC);
- Increased independence of risk management (e.g. by the creation of a new committee and adapting the reporting lines - the Principal Adviser, who has a supervisory role for risk management matters is independent from ECFIN L and reports directly to the Deputy Director General). Nevertheless, according to industry best practice (as coded in the three lines of defense model) and EBA guidelines[30] the risk management function should ideally have direct access to the management body.
- A more formalised compliance function (e.g. creation of the CC and an independent compliance officer – see section 4.2.1.2 on accountability);
- Clear delegation of the decision-making process.

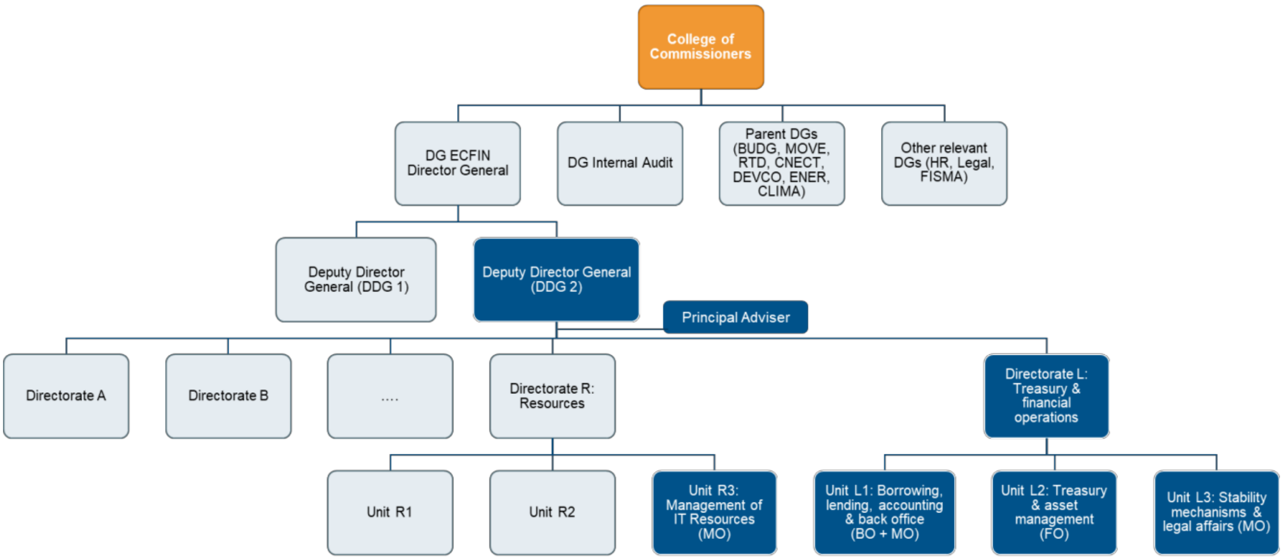
4.1.1.3 Organisation structure

Within ECFIN, Directorate L is responsible for operational management of the assets. Its resources are exclusively dedicated to the management of EU assets as the Commission is not managing assets on behalf of third parties.

[29] Ref. Ares(2018)828484 - 13/02/2018

[30] EBA (2017) Guidelines on internal governance under Directive 2013/36/EU

Figure 6. Organisation structure for asset management within DG ECFIN



Adapted from the European Commission

As illustrated above, the tasks necessary to carry out the asset management activities are spread across four units of ECFIN as follows:

- **Unit L2 (Treasury and Asset Management)** performs the typical front office functions such as tactical asset allocation, portfolio implementation, market intelligence, or market analyses and valuation, development of investment methodologies for new asset classes and instruments, supervision of outsourced portfolios, etc. This unit consists of eight portfolio managers and three market analysts.
- **Unit L1 (Borrowing, lending, accounting & back office)** is, inter alia, responsible for **Back-Office functions and Accounting** with four staff supporting payments/settlements and two staff dedicated to reconciliation of the treasury activity. Unit L1 is also responsible for accounting for off-budget activities within the framework established by the Financial Regulation and under the overall supervision of the Accounting Officer[31].
- **Middle office activities (accounting, reporting)** are carried out by Units L1 and L3 with the support of R3 (IT which belongs to a different directorate).
- **Unit L3 (Stability mechanism and legal affairs) is responsible for the Risk Management function.** Within this Unit, a team of six risk managers is in charge of the SAA and benchmarking process, measuring risk and performance and limiting compliance/operational risk through the proposal and monitoring of a limit framework.

The functions and roles of each unit are clearly defined and well documented in manuals, notably the Treasury and Asset Management Manual, the Back Office and Reconciliation Manuals, the Front Office Manual and the Risk Management Manual. ECFIN- L also has a detailed process mapping which offers a comprehensive view of the decision-making chain and procedures for the asset management activities.

[31] These activities also cover the borrowing and lending operations and reporting

There is adequate segregation of duties between the various operational units and at the decision-making level. A distinction is drawn between the transversal functions (Legal, Operations and IT) and the operational units directly in charge of the management of the assets.

ECFIN provided examples of constructive discussions that take place between the front-office and risk management functions. In addition, internal and external audit provide the independent assurance that the interaction between Front Office and Risk Management is working well.

4.1.1.4 Adherence with good practice

ECFIN regularly subjects its asset management activities to independent peer reviews (2014, 2018) to ensure alignment with industry best practice. ECFIN provided evidence to demonstrate that the recommendations arising from the peer reviews have been implemented.

ECFIN's Financial Risk Management Policy makes reference to the market standards and the relevant recommendations of the asset management industry representative bodies and of financial services regulators, which should be applied by ECFIN where appropriate – in a non-mechanistic manner given the nature of the organisation and the nature of the treasury activities (own funds managed rather than funds of third-party investors). In particular, the Good Asset Management Principles which need to be respected as per ECFIN's Financial Risk Management Policy include:

- Investment activities to be performed in full compliance with Investment Guidelines or investment policies formulated by the mandating services of any given portfolio (or by equivalent bodies);
- Asset management activities to be executed with full respect of fair-trading rules, ensuring that the various portfolios are entitled to equal treatment in prices and other conditions when trading simultaneously in the same sense (purchase/sale) in the same instrument;
- Risk Management to be fully independent from all units performing front-office activities, in accordance with the principle of segregation of duties. In this context, it should be noted that while the risk management functions lie in a unit (L3), that is separated from the front office (Unit L2), the two units report to the same Director. Strategic issues, also those related to risk management and SAA, are however decided at a higher level, by the Director General, not the Director of ECFIN L. In addition, the Principal Advisor, who has a supervisory role for risk management matters is independent from ECFIN L and reports directly to the Deputy Director General. It has however no direct report staff and has to rely on risk reporting and expertise coming from ECFIN L3 that is neither hierarchically, nor functionally, independent from DG ECFIN L.
- Performance measurement to be executed by Risk Management;
- The rules to be followed in case of limit breaches to be clearly defined in Financial Risk Management Manual.

4.1.1.5 Conflict of interest

Articles 11 and 16 of the EU staff regulation[32] set out the general rules on conflicts of interest applicable to all Commission staff. Aside from complying with these rules, Commission staff involved in asset management (across front office, risk management and

[32] REGULATION No 31 (EEC), 11 (EAEC)

managers of the back office) have to sign declarations to confirm no conflict of interest and to acknowledge personal trading limitations.

Additionally, the inside information control manual (dated May 2018) sets out internal rules and procedures aimed at preventing and detecting possible misuse or misappropriation of non-public market sensitive information within the framework of ECFIN's asset management activities.

More broadly, the Commission does not manage third party mandates and thus it is not subject to potential conflicts of interest that may arise from a principal -agent relationship.

4.1.2 EIB

4.1.2.1 Institutional set-up

The EIB was created by Articles 129 and 130 of the Treaty establishing the European Economic Community (EEC), signed by the six founding members of the EU (Belgium, France, Germany, Italy, Luxembourg and the Netherlands) on 27 March 1957 in Rome. In accordance with Article 308 of the TFEU, the EIB is owned by the Member States of the EU. The mission of the EIB is set out in Article 309 of the TFEU: to promote sound projects, especially for the development of the less-developed regions, this being financed by borrowing on the international capital markets and from its own resources.

Asset management within the EIB is mainly carried out to support the Bank's core activity,

i.e. providing financing to sound and sustainable investment projects that contribute to EU policy objectives[33]. The EIB, however, also provides treasury services to third parties, mainly to the European Commission.

Since 2014, the cooperation between the two institutions has been organised under the umbrella of the Financial and Administrative Framework Agreement (FAFA) which primarily concerns the domain of financial instruments, but it also contains some sections on the management of related assets, setting out the required information flows (e.g. the need to provide information on cash flows and to submit investment strategies for the approval of the Commission) and asset management guidelines (including risk limits, etc.).

4.1.2.2 Governance

For the portfolios outsourced to the EIB, the Commission retains the overall responsibility for the good management of the assets. The Commission and/or its services also agree the asset management guidelines (including investment limits), the benchmarks and the annual investment strategies. The investment function is however, delegated to the EIB which *inter alia* involves, designing and proposing the annual investment strategies for each portfolio, portfolio construction and asset allocation, ongoing monitoring, portfolio rebalancing, day-to-day risk management and reporting.

Within the EIB, the role of the Investment Committee is performed by the Third-Party Asset Management Committee (TPAMC). The TPAMC has been set up in 2013 to facilitate structured communication and exchange between the functional areas relevant to the operational framework of the third-party mandates. The TPAMC also covers investment and market issues related to each portfolio. The TPAMC endorses the annual investment strategies based on proposals from Third Party Mandates Portfolio Managers[34] (the TPAMC

[33] A. 21 (ex A. 23) OF EIB statutes

[34] For EU mandates, a single annual investment strategy is presented by the EIB to the Commission for approval (as AMGs are very similar across all portfolios). However, given that benchmarks are not the same across the portfolios (owing to different AMGs), each portfolio will have slightly different approach. For own resources, the EIB management committee approves the investment strategy, and it is updated on semi-annual basis.

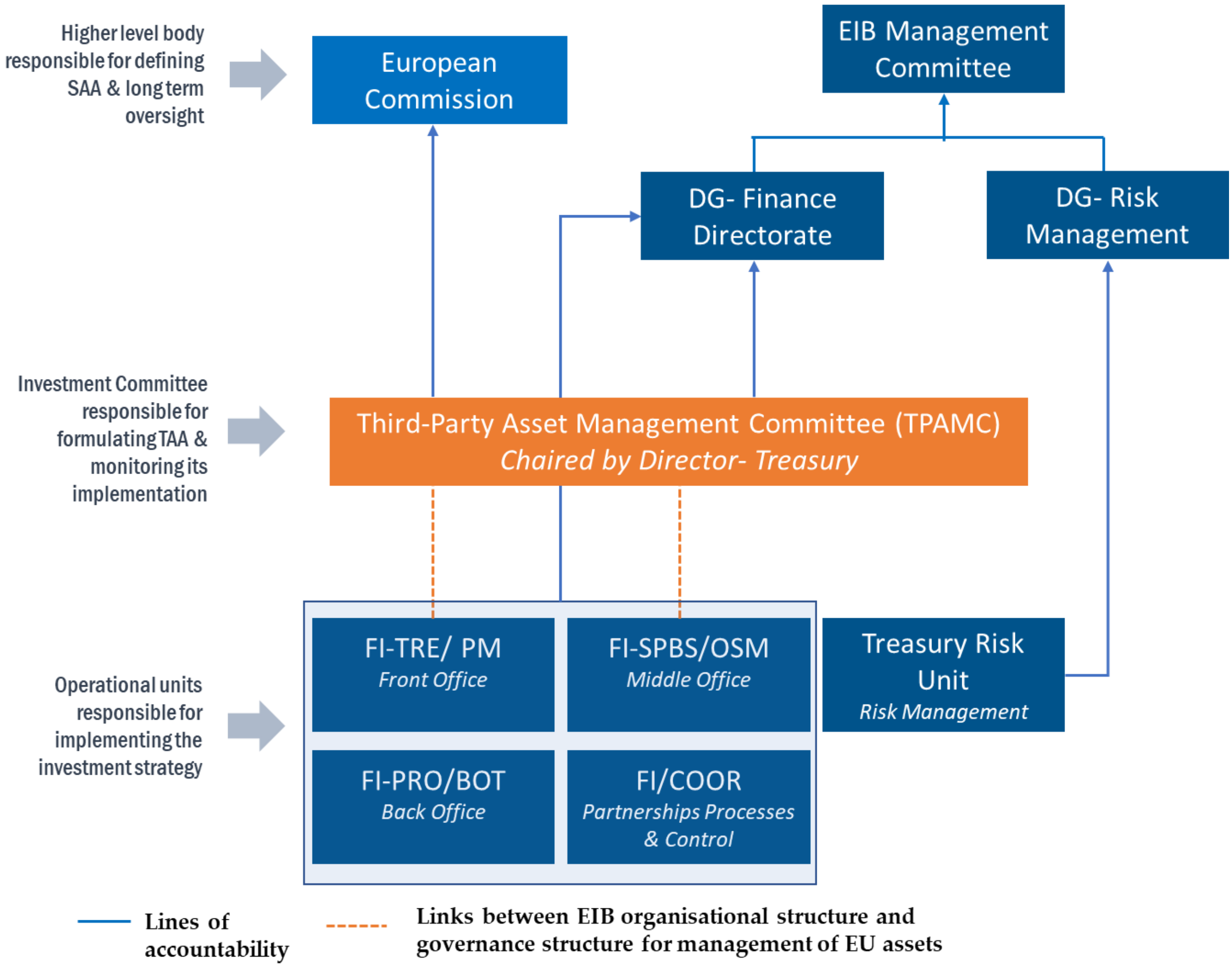
does not approve investment strategies for EU mandates as these are approved by the Commission) and supervises their implementation. The TPAMC constantly reviews TAA and makes decisions on basis of whether these correspond with relevant investment strategies. It reviews the investment opportunities and the asset allocation of each mandate and can issue recommendations regarding the different mandates.

It is composed of the Director- Treasury (chair)[35], the Head of Portfolio Management, the third-party mandates Portfolio Managers, one representative from Middle office's Operational Support and Monitoring team, one representative from Liquidity Management and one representative from the team of the Risk Management's Treasury Risk Unit dedicated to external mandates. The chair of the TPAMC reports to the Director General of the Finance Directorate.

The TPAMC typically meets on a monthly basis and discussions are minuted. The study team reviewed a sample of the minutes of TPMAC meetings (held between October 2018 and April 2019). These are not as detailed or as thorough as the minutes of the ECFIN Investment Committee, but capture the main points discussed and agreed actions. The minutes of the TPAMC serve as a review of the focus of PM in terms of executing the strategy along with a review of other policy issues concerning the mandate portfolios. TPAMC decisions are in the form of action points and are related to issuer eligibility, exposure concentration and special market topics such as Brexit. Issues discussed are thus typically similar to those addressed during EIB – Commission monthly calls.

[35] The Director- Treasury also heads the Investment Committee for EIB own resources, thus ensuring a link between third party mandates activity and the EIB own resources activity

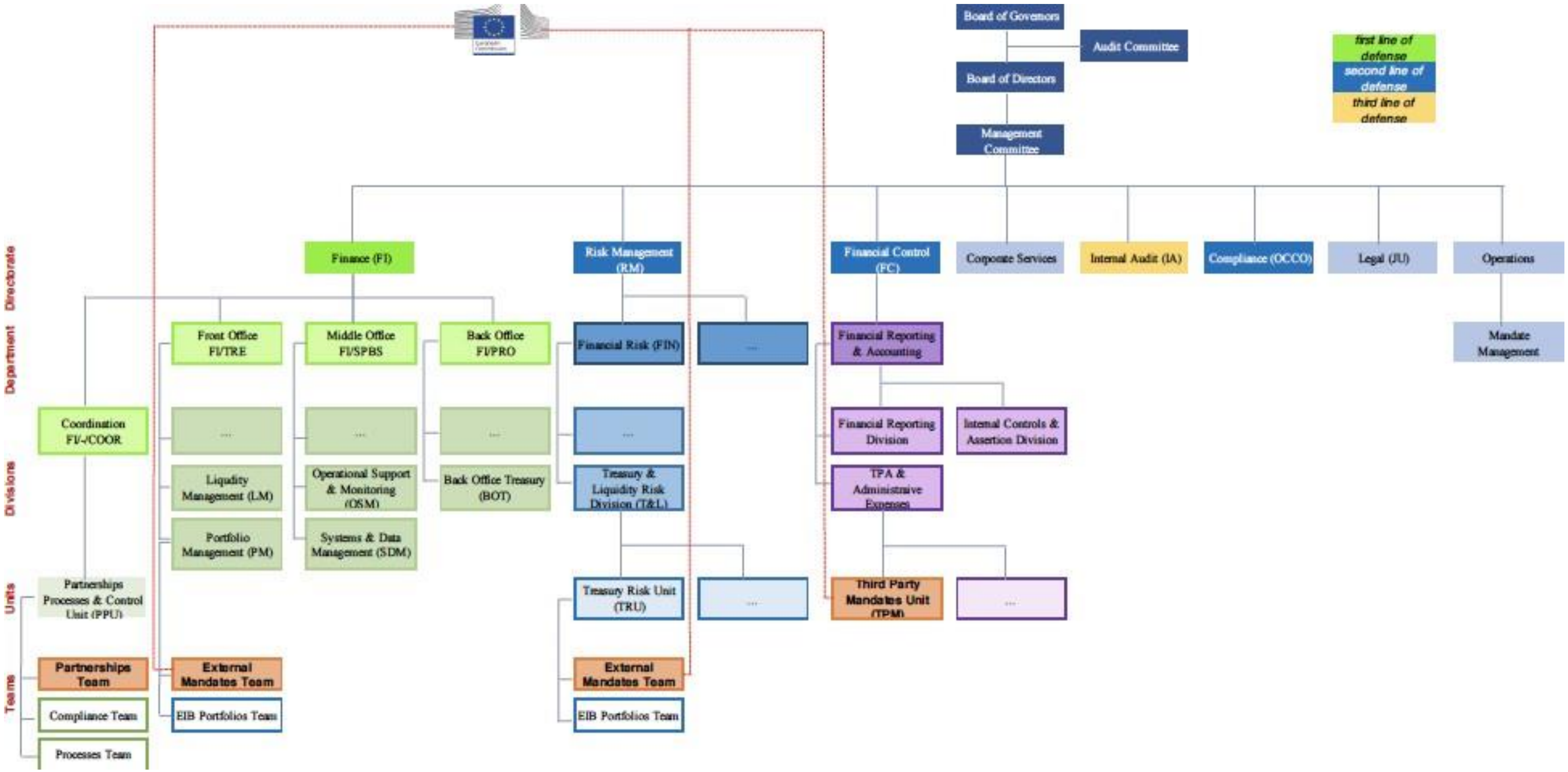
Figure 7. Governance structure for the management of EU assets outsourced to the EIB



4.1.2.3 Organisation structure

Several directorates and units are involved within the EIB in the asset management function as illustrated in Figure 8 and further explained below.

Figure 8. Organisation structure for asset management activities within the EIB



Finance

The Finance Directorate (FI) performs front/middle/back-office functions relating to the EIB's asset management activities.

Within the Finance Directorate, the **FI/COOR (coordination) Division** and specifically the *Partnerships Processes & Control* Unit, has three key roles:

- *Partnerships* team is responsible for the coordination of mandate activity[36], including the negotiation and set-up of new mandates. Within the FI Directorate, this team acts as the central contact point for mandate activity, i.e. it liaises with all FI teams involved in mandate activity and acts as an interface with other EIB Directorates *involved in mandate activity and in particular the Mandate Management officers[37].*
- *Processes* team is responsible for (i) the documentation and the maintenance of processes & procedures and for (ii) the establishment and maintenance of the Internal Control Framework for all FI Directorate.
- *Compliance* team is responsible for preparing internal (at FI Directorate level) policies and procedures, including the Front Office Manual, and monitoring their implementation by exercising the relevant control functions within the first line of defence. Its full responsibilities are described in section 4.2.2 on Accountability and Transparency.

FiTre (Treasury) Department is responsible for the front office operations. FiTre also develops the annual investment strategy for the Commission mandates (which is internally discussed at the TPAMC and is subject to final approval by the Commission). Within FiTre, the EIB Portfolio Management division has two sub teams, one responsible for managing EIB own portfolios and the other responsible for third-party mandates. There is a separate Liquidity Management Division in the Treasury functioning as a money market desk, responsible for managing the short-term liquidity of the Bank and the third party mandates, the commercial paper program and the Unitary Fund (an internal money market fund).

FiSpbs (Strategy, Policies & Business Support) is responsible for the middle office functions. FI-SPBS was set up recently, following a recent FI reorganisation based on the 'Middle Office & Operational Support for FI Front Offices' project initiated at the end of 2014 to implement an Internal Audit recommendation requiring a robust and independent market conformity check of all front office transactions, and based also on the Oliver Wyman high-level review of EIB's Control Framework focused on the three lines of defence paradigm. The new department was approved by the Management Committee in November 2016 and has been in place since September 2017. The middle office does not have a dedicated team for third party mandates. The middle office inter alia carries out market conformity checks and full trade surveillance. It performs a control function within the first line of defence. As such, it also checks the reports produced by the Treasury Risk Unit within the Risk Management Directorate.

FI/PRO (Planning & Settlement of Operations) provides back office services covering the Bank's funding, treasury and lending activities. The back office treasury operates on a pool of competency principle. This means that, with a view to allow each staff to perform all functions and improve internal back up and resilience, staff rotate on a weekly or bi-weekly basis. As such, there is no dedicated team for third party

[36] Asset management is only one of the aspects coordinated by FI/COOR

[37] Mandate Management officers coordinate the mandate implementation at EIB level, when the mandate foresees EIB operations from own resources (e.g. lending, guarantee).

mandates. They are responsible, among other tasks, of the trade processing and settlement, collateral management activities, intraday cash and liquidity management for the front office, payments and reconciliation. The treasury back office has around 30 staff members (of which more than 20, involved in two separate pools of competency, are relevant for mandates).

There is clear segregation of duties between the different functions (front office, middle office, back office). Within the front office, there is a dedicated team for third party mandates. Although the third party mandates team and the EIB's own portfolios team report to the same manager (Head of Portfolio Management) and as such are not entirely segregated, the EIB has put in place several measures to mitigate any potential conflict of interest risks (see section 4.1.3.4).

The tasks, rules and workflows are clearly documented in procedures and process manuals – see box below.

Box: FI procedures and Process Manual

Procedures

Detailed manuals updated on a yearly basis by the teams in charge of the respective activity

Analytical description of tasks

Front Office Manual: defining rules applicable to Front Office Activities, including Compliance Guidelines

Process Manual

High-level Process mapping with end-to-end description of the 'who does what'

Centrally maintained at directorate level

Key Controls (as described in Risk Control Matrix) mapped in the process flow

Risk management

The Risk Management Directorate at EIB is the second line of defence responsible for risk, segregated from the first line of defence (Finance Directorate and Lending Directorate). The DG of Risk Management reports directly to the President of the Bank, in a fashion independent from other Directorates.

Within the Risk Management Directorate, in the Treasury Risk Unit, 3 FTEs are dedicated specifically to Commission mandates. They sit in a specific team tasked with external mandates only and their overarching role is to monitor, on a daily basis, that portfolios are managed in accordance with the AMGs as well as to monitor the related credit and market risks. The risk management team also calculates the performance of each portfolio managed on behalf of the Commission and the related benchmark and prepares all risk and performance reporting dedicated to the mandates: these activities are run independently from the front, middle and back offices.

Accounting

The Financial Control Directorate as an independent Directorate, is a second line of defence function and responsible for accounting, financial reporting and the Bank's internal control framework. Dedicated team, the TPM unit, is responsible for the financial reporting of the third-party funds, including the financial instruments of the

EC and third-party funds under treasury asset management. The team is responsible for the day-to-day accounting, preparation of monthly "marked-to-marked" assets under management reports, preparation of annual financial statements, coordination of the external audits and cooperation with the DG BUDG to ensure the smooth reporting of the EC concerning the funds managed by EIB.

4.1.2.4 Conflict of interest

The EIB Group conflict of interest policy document lays out the general principles and mitigating measures for managing potential conflicts. It covers institutional as well as personal conflicts of interest. The former is further addressed through implementing measures and the latter via the Staff Code of Conduct[38].

Additionally, EIB has put in place an Integrity Policy and Compliance Charter which underlines the commitment of the EIB on integrity which is a fundamental principle for the prevention of possible conflicts of interest[39].

There are two particularly relevant conflicts of interest associated with outsourcing of asset management to the EIB (which do not apply in case the assets are managed in house by the Commission). These are further discussed below.

Potential conflict of interest between the Bank's lending and treasury activities

There are Chinese Walls between Portfolio Management activities and the lending teams/operations. The EIB Group Market Abuse Guidelines and the market abuse provisions of the Front Office Manual further reinforce these Chinese Walls.

Conflict of interest arising out of principal-agent relationship

Conflicts of interest can often arise in a principal-agent relationship. In a principal-agent relationship, the principal is the party that legally appoints the agent to make decisions and take actions on its behalf. The separation of the "ownership" (principal) and the "control" (agent) in principal-agent relationships creates the grounds for the conflict of interest between the two parties. For example, the agent may not prioritise the best interests of the principal, but may instead pursue its own goals.

The measures taken by the EIB to manage the risk of potential conflicts of interest arising, inter alia, from a principal-agent relationship are summarised in the box below.

[38] https://www.eib.org/en/publications/staff-code-of-conduct

[39] EIB Integrity Policy and Compliance Charter. Available at: https://www.eib.org/attachments/general/occo_charter_en.pdf

Box: Measures put in place by the EIB to mitigate Conflicts of Interest[40]

In 2013 the EIB revised its Group Guidelines on Conflicts of Interest (CoI) and the CoI requirements arising from MiFID I and Market Abuse were also considered.

The possible CoI for the EIB own account dealing and the third party asset management had been identified and the following organisational measures were taken to mitigate the risks:

ensure that EIB own funds and third party assets are managed separately by a different individuals with fair/transparent allocation of fund management resources: three members of the Portfolio management team are working on EIB Own Funds (SLP) and three are working on third party assets

ensure that third party assets are governed by clear allocation policies: Front Office Manual (FOM) rules on the prior allocation and the fair and equitable allocation for multiportfolio transactions (see below the relevant extract from the Front Office manual). The EIB provided the study team with an operational level e-mail, showing how the procedures described in the manuals are implemented in the PM team. This established practice guarantees proportionate asset allocation of mandate portfolios (equal treatment of own resources and external mandates)

Extract from the Front Office Manual

Multi-portfolio transactions

On an exceptional basis, certain transactions can be executed for several portfolios simultaneously (e.g. a specific security can be purchased for two different portfolios).

In such cases, the following rules have to be applied by the Operational Front Office Staff member concerned:

Prior Allocation: the allocation of the securities to the various portfolios cannot be modified between the moment the purchase order was given and its execution, in particular if the price obtained is less advantageous than expected.

Fair and equitable allocation: the securities purchased have to be fairly distributed among the various destination portfolios. In particular, in the case of orders filled at different prices, the average price at which the securities are then allocated to the different portfolios should then be almost identical for all portfolios.

- ensure segregation of EIB funds/accounts from third parties: securities are segregated in different custody accounts. All mandate portfolios have separate custody accounts since 2018, following a request from the Commission;
- restrict co-operation or sharing of information relating to portfolio composition or particular investments between fund managers;

[40] Different mandate portfolios have differing asset management guidelines (AMGs), liquidity requirements, issuer limits and legacy holdings, therefore, proportionate allocations can defer from portfolio size.

- separate portfolio management from trading and lending activity and guidelines to protect managers' investment decisions from inappropriate influence: EIB Market Abuse Guidelines, rules in the FOM, information barriers between lending and portfolio management teams to avoid misuse of confidential/inside information
- provide fixed and transparent charges with clear disclosure of expenses (if any);
- ensure that fund management staff remuneration is not structured in a way that might compromise clients' interests or EIB's objectives. There are no economic incentives for any portfolio manager to benefit any particular portfolio – bonuses are relatively small (1-1.5 months' salary) and primarily depend on the Bank's performance. For the part of the bonus which depends on individual contribution and performance, there is no 1:1 relationship between the portfolio performance and the financial incentives, portfolio performance being one element amongst others which are taken into account when assessing individual performance in broader terms.
- establish the TPAMC to ensure a forum for the representation of third party mandator's interests;
- use independent third parties, or an independent division within the organisation for valuation (FI/SPBS/SDM Division which is also using external consultants);
- justify and document Asset Management Guidelines

Furthermore:

- The EIB requires the Front Office staff to sign annually a declaration to acknowledge the personal investment prohibitions and all the rules (including the rules for the management of the conflicts of interest) contained in the Front Office Manual. the Front Office Manual Rules are in addition to the EIB Group Conflicts of Interest policy.
- The EIB Group Market Abuse Guidelines for the prevention of Insider Dealing and Market Manipulation (the "MAG") provide for personal prohibitions of trading when in possession of inside information. In the same context front running is of course prohibited.
- Transfer of assets between portfolios has to be approved by the relevant Commission DG;
- Portfolio managers cannot sell positions to other desks within EIB (see box below) and brokers are not allowed to resell positions bought from EIB to EIB for five days.

Box: Extract from the Front Office Manual

Intra-portfolio transactions

Subject to exceptions duly signed-off by the Director General of FI, no transaction between two portfolios managed by FI/TRE (whether EIB portfolios of portfolios managed on behalf of third parties) will be authorised.

4.1.2.5 Adherence with good practice

The EIB is not subject to the supervision as the typical MFI[41] but voluntarily complies with best banking practice, which is mostly based on EU regulation, but also aligned with relevant global best practice.

The Bank has policies and processes, including strict customer due diligence and anti-money laundering rules to promote high ethical and professional standards in the financial sector and prevent the Bank from being used, intentionally or unintentionally, for criminal activities.

Regulatory changes, applicable also to the treasury – asset management activities, are monitored by the **EIB BBP Watch Team** established by the EIB. FI is an active member of the Watch Team, represented by the dedicated FI/SPBS/FPM Division established in FI for the monitoring of financial policies and best banking practices and by FI/COOR especially for the market conduct best banking practices, The composition, mission, decision making modalities, frequency of meetings (convening in principle on a monthly basis) and tasks of the Watch team are clearly defined and documented.

The Audit Committee of the EIB, as part of its statutory duties, is required to verify, and report to the EIB's Board of Governors, that the activities of the EIB conform to best banking practice applicable to it.

Additionally, the EIB complies with the following good practice principles:

- Investment activities to be performed in full compliance with Investment Guidelines or investment policies formulated by the mandating services of any given portfolio (or by equivalent bodies);
- Asset management activities to be executed with full respect of fair-trading rules, ensuring that the various portfolios are entitled to equal treatment in prices and other conditions when trading simultaneously in the same sense (purchase/sale) in the same instrument;
- Risk Management to be fully independent from all units performing front-office activities;
- Performance measurement to be executed by Risk Management;
- The segregation of duties between the first, second a third line of defence is compliant to best banking practices;
- In order to ensure compliance with best market practice, prior to engaging in the revision of the benchmark methodology, EIB's Risk Management initiated a market survey among peers to determine the best market practice in setting up appropriate benchmarks.

[41] The European Investment Bank has reportedly agreed to discussions which could lead to it falling under the supervisory eye of the European Central Bank.

- The rules to be followed in case of limit breaches are clearly defined in the Front Office manual.

4.1.3 Comparative summary overview

Before turning to the conclusions, this table provides a high-level overview of the governance structure at both organisations.

Table 3. Comparative overview: governance structure

	European Commission	European Investment Bank
A higher level body defining SAA and overseeing long term execution	The Risk Committee proposes the SAA, which is endorsed by the Treasury Management Board co-chaired by ECFIN-L Director and Principle Adviser (outside ECFIN-L) and approved by the Director General. Oversight is conducted by the same actors.	The COM agrees and oversees the SAA, via reporting from EIB.
An Investment committee responsible for formulating the TAA and monitoring its implementation	Investment Committee lead by the Head of Unit L2 (Portfolio Management)	Third Party Asset Management Committee led by the Head of Treasury
Operational Units – see table below for further detail	Most functions are spread across four units in Directorate L Unit L1: Back Office Unit L2: Front Office Unit L3: Risk management Unit R3: IT support Middle office functions (accounting & reporting) are carried out by L1 & L3	Functions are spread across four Directorates and independent functions as third line of defence: Finance Directorate FI-TRE/PM: front office with dedicated team for third party mandates FI-SPBS/OSM: Middle Office FI-PRO/BOT: Back office Treasury FI/COOR/Partnerships, Processes and FI Compliance 2. Financial Control Directorate responsible for accounting & reporting and . FC/ICA: responsible for internal control framework 3. OCCO: the Office of the Chief Compliance Officer 4. Risk management Directorate responsible for risk management Internal Audit (third line of defence)

4.1.4 Conclusion

There is an explicit legal foundation for the asset management activities of each organisation and the Commission retains in all cases the ultimate responsibility.

In terms of governance, Table 3 provides a comparative overview of the structure in place at both organisations.

Key features at the Commission include that it has a Risk Committee, reporting to the TMB. The TMB is co-chaired by the Director of ECFIN-L and the independent Principal Advisor who is responsible for the strategic asset allocation and risk related management matters. All risk measurement, monitoring and management activities, as well as performance measurement, are performed within ECFIN L3, separately from the front office. The Principal Advisor reports directly to the Deputy Director-General (DDG. All strategic issues, also those related to risk management and SAA are decided by the Director General, not the Director of ECFIN L. In the commission the accounting activities of ECFIN L are taking place within the framework established by the Financial Regulation and under the overall supervision of the Accounting Officer (who is the DDG of DG BUDG).

Within the EIB, there are dedicated, but not segregated teams[42] for third party mandates where relevant (accounting, front office, risk management). In the EIB, risk management is performed by a separate Directorate, which is segregated and independent from other Directorates and whose Director General reports directly to the President of EIB. All risk measurement, monitoring and management activities, as well as performance measurement against benchmark, are performed within the Risk Management Directorate of EIB, independent from the front office (located instead in the Finance Directorate). Moreover, accounting lies in an entirely separate Directorate (Financial Control) and is separated from payments and settlements to reduce operational risk.

Both organisations have appropriate governance and organisational structures for their asset management activities, respecting good corporate governance principles with clear delegation of decision making, adequate segregation of duties, clearly defined roles and well defined and documented procedures and processes.

Both organisations have sound procedures and codes in place to manage conflicts of interest.

The EIB additionally has to manage conflict of interest risks arising from its role as a bank and as an agent acting on behalf of the Commission (principal). The study team is satisfied with the organisational structures, procedures and rules put in place by the EIB to manage these risks. In addition, ECFIN uses independent/external reviews to strengthen the procedures and compliance to the best industry practice standards on a regular basis. EIB tasks its Audit Committee to check compliance with best practices.

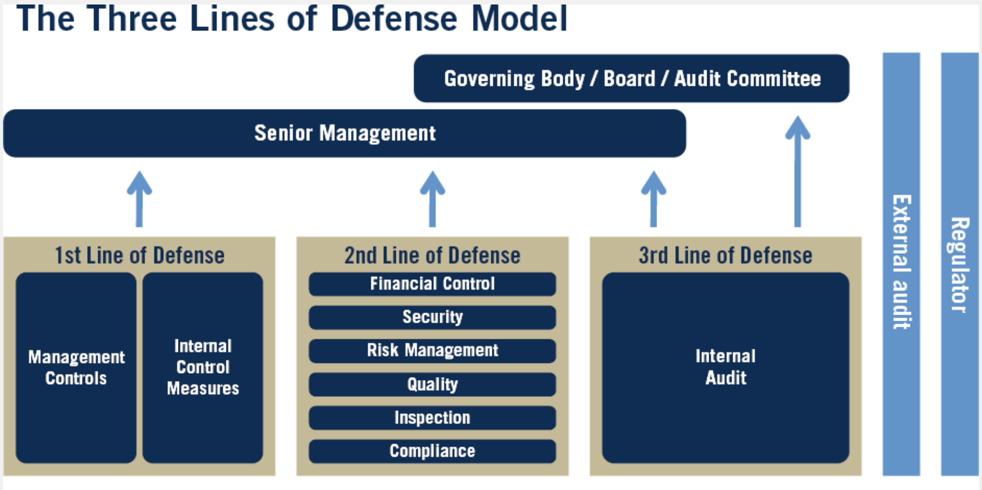
4.2 Accountability and transparency

Under this criterion, the study team examined whether there are clear lines of accountability, mechanisms for independent internal and external control as well as public transparency of each organisation's asset management activities. Generally speaking, a fund manager should have an effective compliance function to ensure that it complies with its own internal policies and procedures as well as all applicable legal and regulatory requirements. The compliance function should be independent of other functions and report directly to the fund manager's senior management. Furthermore, a fund manager should maintain an independent (internal) audit function to check the adequacy and effectiveness of the fund manager's management, operations and internal controls. The audit function should have a direct line of communication to senior management or the audit committee. The internal audit function may be supplemented by external audits. The *three lines of defense model* is typically

[42] This means that there are separate staff for the third party mandates, but they report to the same line manager as the staff responsible for activities related to the management of the EIB's own assets

regarded as the best practice model for organising risk and control functions within the financial services sector[43]– see box below.

Box: Three lines of Defense



Adapted from ECIIA/FERMA *Guidance on the 8th EU Company Law Directive, article 41*

The Three Lines of Defense model distinguishes among three groups (or lines) involved in effective controls and risk management:

- ***Functions that own and manage risks:*** as the first line of defense, operational management is responsible for maintaining effective internal controls and for executing risk and control procedures on a day-to-day basis.
- ***Functions that oversee risks and control:*** The specific functions will vary by organization and industry, but typical functions in this second line of defense include a risk management function (and/or committee); a compliance function reporting directly to senior management or governing body; and a controllership function that monitors financial risks and financial reporting issues.
- ***Functions that provide independent assurance:*** this role is performed by an internal audit function that provides assurance on the effectiveness of governance, risk management, and internal controls, including the manner in which the first and second lines of defense achieve risk management and control objectives.

Finally, the study examined the following aspects of transparency:

- *Transparency towards clients:* the fund manager should provide total cost incurred by the client for their services, both asset management fees as well as transactions costs. For other reporting MiFID requires that fund managers provide clients with portfolio information – valuation and composition; performance; income; and any security related external actions, for example corporate mergers, successor events or redemption announcements.
- *Transparency towards the general public:* as public institutions, both the European Commission and the EIB should provide the public with basic

[43] Institute of Internal Auditors (2013) The Three Lines of Defense in Effective Risk Management and Control, position paper.

information on the costs/ fees of the service as well as risk and performance data related to the management of EU assets.

4.2.1 European Commission

4.2.1.1 Lines of accountability

The Director of ECFIN-L is the Authorising officer by sub-delegation[44] for ECFIN's asset management activities. He is accountable to the ECFIN DDG/DG who in turn is accountable to the College of Commissioners, which in turn is accountable to the European Parliament and the Council (see Figure 5).

4.2.1.2 Compliance and control

The control function in ECFIN is placed independently from ECFIN L in Directorate R, sector R.1.002, to ensure segregation of duties and is based on the three-lines-of-defence model:

- The first line of defence: operational management;
- The second line of defence: the various risk control and compliance oversight functions established by management (the Financial Risk Management sector, the Compliance Officer, the Internal Control sector R.1.002 and the Internal Control Management Group (ICMG) chaired by the Risk Management and Internal Control Coordinator (RMIC) who is Director R);
- The third line of defence: independent (re-)assurance by auditors notably the Internal Audit Service and the European Court of Auditors, as well as external audit firms[45]. The EU follows the Single Audit Model, which ensures that there is efficient co-ordination among the activities of various external and internal auditors

For the second line of defence, the ICMG mandate is to oversee the proper functioning of the internal control system in ECFIN (including financial management and the financial circuits). The compliance officer is part of the ICMG (see box below).

Additionally, ECFIN applies a number of control activities to make sure all its internal control objectives are met:

- Independent ex-post checks are carried out by the ex post controller in R.1.002 to give assurance about DG ECFIN's operations,
- The functioning of internal control is reviewed annually by the ICMG.
- The list of all functions where there is a risk that jobholders may deliberately use their decision-making power or influence to gain some personal advantage are reviewed annually by the ICMG to ascertain whether a rotation would be warranted. The review encompasses a census of the associated mitigating measures and an assessment of their effects.
- One main accountability document is the annual, publicly available activity report of the DG which contains a declaration of assurance signed by the Director- General, covering, inter alia, the sound management of all financial transactions.

[44] The Authorising Officer of the Commission is the College of Commissioners. The College delegates financial management tasks to the Directors-General or Heads of Service who thereby become Authorising Officers by Delegation. These tasks can further be delegated by the Authorising Officer by Delegation to Directors, Heads of Unit and others, who thereby become Authorising Officers by Sub-Delegation.

[45] The EU follows the Single Audit Model, with an aim to ensure that there is efficient co-ordination among the activities of various external and internal auditors

Box: Role of the Compliance Officer

In addition to the Compliance Committee, ECFIN has one compliance officer, who works exclusively on treasury issues. The compliance officer is independent from Directorate L and reports directly to the Deputy Director General.

The mission of the compliance officer is to monitor compliance with applicable legal and regulatory requirements and internal policies, and to report senior management on compliance risks. Regarding the portfolios outsourced to the EIB Group, the Compliance Officer liaises with EIB compliance.

The compliance officer is supported by and liaises with HR, the Legal Service and Internal Control where appropriate.

- **Transparency of asset management activities**

Transparency towards clients

ECFIN provides regular reporting (monthly, quarterly and annual) to mandators (parent DGs) as per the requirements set out in the various service level agreements.

Public transparency

The annexes to DG ECFIN's annual activity reports (which are publicly available) contain a section on the treasury and asset management activities of the DG. It provides an overview of the market value of each of the portfolios managed by the DG.

Beyond this, for budgetary guarantees, the Commission produces public reports to EP and the Council (e.g. in the case of EFSI GF[46] or in the case of the GF for external action[47]. These reports provide inter alia information on risk and performance, composition of portfolios and financial statements including information on fees and charges, etc, and are available for both in-house and outsourced portfolios[48].For other types of portfolios, ECFIN already provides detailed information to the public in the annexes to its annual activity reports[49] and in the consolidated annual accounts of the European Union[50]. The transparency could be even further increased, using for example as a basis the annual EFSI report to the European Parliament and the Council.

4.2.2 EIB

4.2.2.1 Lines of accountability

The Director of FiTre (Treasury) Department has the ultimate responsibility for the management of portfolios outsourced by the Commission. He is accountable both to the European Commission (DG ECFIN) as well as his internal hierarchy at the Bank

[46] See COM(2019) 244 final

[47] See SWD/2019/314 final

[48] In case of outsourced portfolios, the management report on the Fund is based on information submitted by the EIB.

[49] See: https://ec.europa.eu/info/publications/annual-activity-report-2018-economic-and-financial-affairs_en

[50] See COM(2019) 316 final

(i.e. the Bank's Management Committee which operates under the authority of the Bank's President who is accountable to the Board of Governors[51]).

4.2.2.2 Compliance and control

The EIB is also organised around the three lines of defence model.

- The first line of defense: Finance Directorate;
- The second line of defense: Financial Control Directorate, Internal Control and assertions Division, the Risk Management Directorate and the Office of the Chief Compliance Officer- OCCO (the Directorate General for Compliance);
- The third line of defence: Internal Audit Directorate and external audits.

Additionally, the EIB Compliance and Controls Committee (CCC) is responsible for strengthening and monitoring the compliance and control framework.

The first line of defense

Within the Finance Directorate, the FI-Compliance team (under the Partnership Processes & Control Unit) within FI/-/COOR (coordination) Division, is responsible for:

- Preparing internal (i.e. at Finance Directorate level) policies and procedures for the implementation of EIB Compliance related policies (such as AML/CFT, Sanctions, Non-Compliance Jurisdictions) and Market Conduct Best Banking Practices (such as Market Abuse);
- Monitoring their implementation and exercising relevant control functions within the first line of defense;
- Liaising with DG Compliance (OCCO) when cases are escalated to the second line of defense;
- Liaising with the dedicated team established in the EIB, for the "Know Your Customer Due Diligence" of the EIB counterparties (including counterparties established/used for mandate activities).

Moreover, the middle office also performs a control function within the first line of defence. It inter alia carries out market conformity checks, full trade surveillance and it also checks the reports produced by the Treasury Risk Unit within the Risk Management Directorate

The second line of defense

The **TPM Unit of the Financial Control Directorate** is responsible for the financial reporting of mandate activities. Each audited financial statement prepared by the Bank where the relevant mandate agreement is not explicit about the process of approving the financial statements, is approved by the Management Committee (MC approval by delegation to the Secretary General and Financial Controller).

Besides on an annual basis, FC prepares a Note to the Management Committee about the financial situation of the EIB partnerships (including the mandates in scope). The Note is subsequently also presented to the Board of Directors and the Audit Committee.

Internal Controls & Assertion Division (FC/-/ICA)'s specific role is to strengthen the second line of defence in monitoring the appropriate implementation and

[51] The Board of Governors comprises Ministers designated by each of the 28 Member States, usually Finance Ministers

maintenance of the Internal Control Framework (ICF) across EIB Directorates. As such, the ICF and its associated maintenance tasks are the primary evidence to substantiate and legitimise the EIB Senior Management's annual assertions to its Management Committee, President and Audit Committee. These assertions, in the form of representation letters signed-off at Directorate General level supported by ICF reports, provide reasonable assurance over EIB's control environment. Assertions on internal controls are not only an internal EIB requirement, but are also addressed to the Bank's mandators (i.e. the EC Delegation Agreements via the annual FAFA Management Declaration of Assurance reporting obligation) and to External Auditors.

Risk Management

For the assets managed on behalf of Commission, Risk Management officers:

- Perform daily compliance checks against the limits set out in the specific AMGs, per each mandate and report to ECFIN any breach in a timely manner (5 business days)
- Analyse the eligibility of the limit requests sent by FI/TRE and decide to open limits;
- Prepare for ECFIN a risk and performance report on a quarterly basis, for each specific mandates and aggregated, for all the assets managed on behalf of ECFIN. Annexes detailing the counterpart limits open and positions per ISIN at the end of each month of the quarter accompany the report.
- Analyse the current benchmark methodology and propose revisions to ECFIN
- Participate in drafting or revisions of the AMGs;
- Analyse market movements and regulatory changes with a potential impact on the assets managed on behalf of ECFIN and informs ECFIN about such occasions during the Risk Managers Conference Call

DG Compliance (OCCO)

OCCO represents the Bank's independent compliance function. It is responsible for setting compliance policies in relation to AML/CFT, Non Compliant Jurisdictions, EU, UN and International Sanctions, Market abuse, Reputational risks, ethics, professional conduct and is also responsible for the identification, assessment, monitoring and reporting of compliance risks and for the testing of the relevant compliance controls.

In this context OCCO is responsible for the controlling of the implementation of market abuse, liaising with the Legal Services of the EIB as necessary. It defines internal rules relating to market sensitive information in line with the Market Abuse Regulation ("Chinese walls") and personal conflicts of interest; OCCO ensures compliance with the general EIB compliance framework (on ethics, gifts and hospitality; on whistleblowing);

Third Line of defence Internal Audit

Internal Audit is an independent function which provides a systematic, disciplined approach to evaluate and improve the effectiveness of the Bank's governance, risk management and internal control. It furnishes all levels of the Bank's management with analyses, agreed action plans or recommendations, counsel and information concerning the activities reviewed.

Internal Audit helps the EIB accomplish its objectives by providing management with the assurance that the Bank is operating properly and efficiently.

Audit Committee

The Audit Committee of the EIB, as part of its statutory duties, is required to verify, and report to the EIB's Board of Governors, that the activities of the EIB conform to best banking practice applicable to it.

External audit and controls

Various external checks are conducted to ensure that controls are effective:

- The FAFA management declaration of assurance provided annually, subject to an independent external audit.
- Annual external audits conducted by a commercial provider.
- Annual review of the external auditors' working papers performed by the Court of Auditors.

As regards scrutiny by the ECA, in accordance with Article 287(3) of the TFEU, it can audit operations under the mandate conferred by the EU on the Bank as well as the operations managed by the Bank that are guaranteed by the general EU budget. To this end, a tripartite agreement has been adopted by the Commission, the ECA and the EIB[35]. The EIB's non-EU budget related operations, however, fall outside the scope of the ECA.

4.2.2.3 Transparency of asset management activities

Transparency towards clients

EIB provides the Commission with ex-ante and ex-post information on the fees charged by the EIB for its asset management services.

The Commission would want to see a detailed breakdown of the EIB's internal costs in order to assess if the Bank fulfils its commitment to be cost neutral on the asset management services that it provides to the Commission, also considering that, as a service provider, the EIB does not enter into competition with other asset managers. So far, the EIB has not provided this information to the Commission or the study team. The EIB has shared with the study team a general qualitative description of the cost allocation methodology, but without the concrete and specific calculations underpinning its application in the case of the EU mandates. In addition, EIB provided a list of services included within its fees – see section 4.9 on costs.

As far as reporting of risk, performance and other variables is concerned, the EIB fully complies with the reporting requirements of the Commission – see section 4.4 on reporting.

Public transparency

The EIB's annual financial reports (which are publicly available) contain a section on its own treasury activities. When required, e.g. for the GFEA, EIB also shares the necessary information feeding into the public management reports published by the Commission[52] on its outsourced portfolios.

[52] This role of producing public reports sits with the Commission who has the ultimate responsibility for the management of the assets

4.2.3 Conclusion

Both organisations have clear lines of accountability for asset management functions and apply the three lines of defence model. . -.

Compared to the EIB, the Commission has a Compliance Officer and a Compliance Committee exclusively dedicated to the asset management activities. This role is fulfilled by FI-Compliance team at the EIB (the compliance controlling function within the first line of defence), while the Office of the Chief Compliance Officer (OCCO) represents the compliance control function as second line of defence and the Compliance and Control Committee (CCC), strengthens and monitors the compliance and control framework. The overall risk management and control structures at the Bank adequately cover its third party mandate activity. Moreover, the FAFA management declaration of assurance provided annually by the EIB to the Commission is subject to an independent external audit. Similar declaration of assurance is provided annually by each Director General, also of ECFIN (such declaration covers all activities of the DG, including asset management).

Both organisations are subject to external scrutiny by the ECA as far as asset management of EU resources is concerned, and by private auditors.

In the case of portfolios linked to budgetary guarantees, as required by the relevant regulations, the Commission provides reports to the EU Parliament and the Council. For other types of portfolios, ECFIN provides reports in line with the requirements defined by the mandators. Additionally, publicly available information includes the annexes to its annual activity reports[53] and the consolidated annual accounts of the European Union[54].

Regarding access to cost data for the purpose of this study, the study team could access more information on the side of the Commission. The EIB on the other hand, has not provided the Commission or the study team with a detailed breakdown of the costs incurred by it in managing EU assets.

4.3 Risk Management

Asset Management requires robust risk management to ensure current and future compliance with the agreed asset management guidelines/ investment strategies. A dedicated risk management team, independent from the portfolio management team should develop, set and monitor the risk management strategy and risk management parameters. The systems used to do so should be robust and based on information obtained from sources independent from the portfolio management team. In other words, the risk management team is responsible for the monitoring and management of both financial and operational risk.

4.3.1 European Commission

ECFIN's financial risk management is documented in its Financial Risk Management Policy (14 November 2016), which also applies to outsourced asset management, and is further specified in the Financial Risk Management Manual. The risk management activities for outsourced asset management is of limited nature and involve advisory, monitoring and reporting functions. ECFIN's risk management functions are carried out by unit L3 within Directorate ECFIN L, which is separate and operates independently from ECFIN's asset management teams (see sections 4.1 and 4.2). ECFIN L3 performs the strategic asset allocation, all risk assessment, risk management, risk reporting and performance measurement activities, which includes performance

[53] See: https://ec.europa.eu/info/publications/annual-activity-report-2018-economic-and-financial-affairs_en

[54] See COM(2019) 316 final

attribution, analysis of expansion into new asset classes, instruments and currencies and is responsible for the production of the Financial Risk Management manual.

The Risk Management Strategy is based on the Asset Management Guidelines of each individual instrument, programme or mandate. It is periodically updated mainly based on market evolutions. It sets out further details with respect to limits and guidelines for the portfolios. The Risk Management team prepares the Strategic Asset Allocation for each portfolio, amongst others based on this Strategy and the limits and guidelines of each portfolio. As part of this process it produces benchmarks for each portfolio managed by ECFIN and updates thereof. ECFIN has an active approach to the production of benchmarks, based on modern portfolio theory:

- It obtains implied returns from market prices
- It optimises portfolios using a Markowitz based modern portfolio theory approach

ECFIN's Financial Risk Management Policy specifies the principles to be applied for the risk management of:

- Market Risk
- Interest Rate Risk
- FX Risk
- Credit spread market risk
- Equity risk
- Derivative risk
- Credit risk
- Counterparty risk
- Issuer risk
- Settlement risk
- Liquidity risk
- Operational risk

Risk management is responsible for the administration of the Bloomberg AIM and the Bloomberg Port+ module, as well as for obtaining data and quality control thereof.

Risk management is responsible for assessing these financial risks, controlling the risk limit process and monitoring them. Front office can resolve breaches in co- operation with risk management. A review of breaches over 2018 showed no major breaches – most breaches resulted from passive exposure breaches due to relative valuation changes.

ECFIN Risk Management reviews observations stemming from risk and performance reports or limit breach notifications received from EIB related to the AMDS function in order to identify remedies and minimise risk of recurrences, and, in a few cases, to make proposals for limit waivers.

The Financial Risk Management Policy describes the roles and responsibilities regarding financial risk management and details an appropriate allocation of functions and responsibilities respecting an appropriate segregation of duties.

The Risk Management group provides reports to senior management. Annex 4 provides an overview of Risk Management Reports available. In short, the Risk Management team provides or contributes to the following reports:

- Annual report on Management of Off-Budget Operations.
- Quarterly Risk Report related to Treasury Activities
- Monthly Risk and Performance Reports
- Ad-hoc reports, for example to describe market developments and their impact on the EC portfolio.

The reports are produced in line with the guidelines specified in the Financial Risk Management Manual and are consistent and clear.

4.3.2 EIB

The EIB performs its risk management activities within the framework of best banking practices recommended by the Basel Committee on Banking Supervision:

- Risk identification: New products are subject to adequate assessment procedures
- Risk assessment: measurement
- Risk monitoring: Appropriate systems to monitor risks
- Risk control and mitigation: Policies, processes and procedures

The EIB Financial Risk Guidelines, *inter alia*, specify the principles to be applied for the risk management of:

- Market Risk
- Interest Rate Risk
- FX Risk
- Spread risk
- Credit risk on treasury and derivatives
- Liquidity risk
- Funding liquidity risk
- Asset liquidity risk
- Asset and collateral reuse
- Legal risk
- Substitution risk
- Margining risk
- Settlement risk

Furthermore, specific guidelines are dedicated to the principles to be applied for non-financial risk, such as:

- Credit Risk on lending transactions

- Operational risk
- Model risk (model validation policy)

EIB's Financial Risk Management procedures for the EC portfolios are described in the Financial Risk Procedures Manual, Volume2, Extract for Mandates published in January 2018. It is supplemented by the EIB Operational Risk Policy 2014, which focuses on operational risk.

According to the EIB Front Office Manual (update 2018), Risk Management performs the role of the second line of defence (with first line of defence being controls performed by FI services: front office, middle-office and back-office and compliance function within FI).

The external mandates for EIB are managed distinctly from the other assets managed by the bank.

- Assets are kept separately
- All proceeds are for the benefit of the particular fund
- There is separate reporting by the units RM//FIN/T&L/TRU, on the following aspects
- Market Risk
- Credit Risk
- Monitoring and reporting of compliance of other limits as per the asset management agreements

The procedures describe the relevant risk management processes and allocate responsibility and accountability. This segregation of responsibility also applies to the input and maintenance of Wall Street WSS TRM, EIB booking system.

EIB Risk Management provides reports to ECFIN AMDS. Table 14 in annex 4 Reporting, provides an overview of Risk Management Reports available. In short, the following reports are provided:

- Annual Guarantee Fund Risk & Performance report
- Quarterly report per portfolio (as well as an aggregated version), which includes the following elements:
- Portfolio overview
- Credit Risk overview
- Market Risk overview
- Performance
- Portfolio activity, assets bought/sold and redeemed
- Limits and other information
- Limit breaches
- Late settlement transactions

The performance attribution is different from ECFIN's internal approach, which is more quantitative and includes interest rate performance attribution.

- Monthly valuations
- Risk management produces an internal weekly risk management monitoring report. Any breaches of limits are provided to AMDS shortly following

confirmation. Any breaches during the quarter are provided in the quarterly reports. Breaches are resolved in co-operation with ECFIN. A review of breaches over 2018 showed no extraordinary results – most breaches resulted from rating downgrades, passive exposure breaches due to relative valuation changes. Furthermore, proactive action was taken on future limit changes due to policy decisions from the mandator, in cooperation with ECFIN.

- Ad-hoc reports as requested by the commission

Separately, the EIB produces several risk management reports for its own internal processes, such as internal and external audit reports, daily reports, including performance reconciliation, monthly reports per business line with losses, risk incidents and management views, as well as monthly operational risk scorecards for key departments.

The EIB holds minuted monthly Third-Party Assets Management Committee meetings in which it discusses the tactical approach to the management of Third-Party Assets. A document containing key statistics on portfolio details (performance, risk analytics, transactions) and market views (main market drivers) is prepared for each Third-Party Asset Management Committee. These reports are used for EIB's internal process, although a synopsis of the risk management overview is sometimes shared for the benefit of the monthly update between EIB and ECFIN.

The performance of portfolios managed by EIB is measured against pre-set benchmarks which are proposed by the EIB and approved by the EC. As identified in this document, up until earlier this year, the benchmark process used by EIB was not in line with the process used by ECFIN which made the benchmark information less valuable for ECFIN. EIB used benchmarks adjusted on the composition and tenor of the actual portfolio. This has been resolved at the request and in consultation with ECFIN, with the EIB now using fixed benchmarks since January 2019. There are still some methodological differences between ECFIN L's approach (producing benchmarks based on Modern Portfolio Theory, with return optimized for a given level of market risk) and EIB's benchmark approach. However, with the better benchmark alignment, the quarterly reports provided to ECFIN are concise, consistent with the FAFA and clear.

4.3.3 Conclusion

Both ECFIN and EIB have properly documented risk management procedures that meet standards that can be expected for asset managers of their stature. There is a clear segregation of duties at both institutions and due processes are in place to pre-empt, identify, control, monitor and report both financial and operational risks.

The Commission has the ability to adequately manage financial risk management regardless of the in-house / outsource decision. The Commission has more direct control over the portfolios it manages directly. In case of an outsource decision, the information provided by EIB does enable the Commission to regularly monitor the financial risk management of the portfolios and also to have a grasp of any breaches of portfolio limits.

4.4 Reporting and information management

Good reporting and information management provides relevant information in a clear, consistent and timely manner to enable decision making and to assess performance. This section reviews the quality and usefulness of reporting produced and/or used by the two organisations. A detailed mapping of the reports and indicators available is included in Annex 4.

4.4.1 European Commission

Reporting is performed at regular intervals, on a weekly, monthly, quarterly and annual basis and, if needed, on an ad-hoc basis. Since the introduction of the weekly Investment Committee's meetings and its dashboard, frequency of reporting on risk and performance has increased. The reporting requirements towards both the hierarchy and decision-making bodies are seen by the study team as adequate. Further details on the various reports and their frequency are available in Table 13.

The range of performance and risk indicators in the monthly reports, presented in Table 15, is seen as adequate. Those cover all necessary aspects in relation to: (i) Portfolio composition; (ii) Market and Credit Risk Analysis; (iii) Performance; (iv) Performance Analysis; and (v) Limit breaches. The approach taken by ECFIN with regards to credit risk analysis and performance analysis is quantitative (based on stress tests and analysis of return factors).

In addition to the main formal reporting exercise which takes place on a monthly basis, the various teams / committees produce information to support decision making processes (e.g. weekly Investment Committee's meeting dashboard and minutes, which record discussions on market developments, performance and positioning or the monthly comprehensive Risk and performance report distributed widely, in ECFIN, FISMA, BUDG and responsible cabinet).

In parallel with the information produced in-house, day-to-day decision-making by ECFIN teams is supported by standard market databases and connectors and (Bloomberg, Reuters), frequent contacts with counterparties and access to the information produced by external credit agencies. Positions are real-time available on Bloomberg AIM.

4.4.2 EIB

Table 14 describes the reports that EIB submits to ECFIN in its role as AMDS and to designated services. ECFIN as AMDS receives[55] the main risk and performance report for portfolios outsourced to the EIB on a quarterly basis[56], as per FAFA requirements. It also receives a report on Portfolio Holdings each month, containing the list of assets in each respective portfolio and their "marked-to-market" valuations and corresponding credit ratings, where applicable. Increasing the frequency of the main quarterly report has already been a topic under discussion but no change has so far been formally requested (understanding that there would have resource and cost implications).

In terms of content, there is a range of performance and risk indicators in the quarterly reports. Those cover the same aspects as the ECFIN reports, namely: (i) Portfolio composition; (ii) Market and Credit Risk Analysis; (iii) Performance; (iv) Performance Analysis; and (v) Limit breaches. In addition, EIB reports contain sections which are useful to add in a context of outsourced assets, namely an historical view of performance and an overview of the portfolio activity, which enhances reporting on the outsourced portfolio. To inform its performance analysis, EIB reports performance for portfolio and benchmark also by asset class, rating and maturity bucket and complements this by qualitative comments of the asset managers on factors impacting performance.

[55] ECFIN receives its reporting through Client connect, EIB's secured web reporting tool where the following documents can be retrieved: (i) Assets Management Guidelines, (ii) Investment strategies, (iii) Risk reports, (iv) Audited Financial package.

[56] This includes some data being reported for each month of the quarter, including Credit limits and concentration limits per issuer, Concentration limits per issue, Por tfolio by credit rating

Now that the new benchmark methodology based on fixed weights is in place, the relevance of performance indicators in relative terms has increased as compared to the past. In that context, further new indicators are being considered for addition (e.g. Interest risk measurement figures in relative terms vis-à-vis the benchmark).

In addition to the formal reporting, there are monthly calls with ECFIN as AMDS (focused on information exchange). Furthermore, in case of breaches, a notification would be sent to the European Commission, within 5 business days.

Other than for the AMDS, other reports are produced, or information extracted, for EIB's own use. For instance, a document containing key statistics on portfolio details (performance, risk analytics, transactions) and market views (main market drivers) is prepared ahead of each Third-Party Asset Management Committee, which takes place on a monthly basis. On a weekly basis, a summary of breaches, overview of limits and performance figures for the third-party mandates are included in the weekly report, which is sent to several recipients within the Bank, including the Head of FI Directorate and the Head of RM Directorate. To support day-to-day decision-making processes, further data and data sources are available. EIB teams are, inter alia, using standard market connectors (Bloomberg, Reuters) and are provided with access to the information produced by external credit agencies. Additionally, the Middle Office produces a daily report on all mandate portfolios to PM. A market update, based on Bloomberg information but containing qualitative information beyond statistics, is also extracted twice a day to be circulated internally by email to RM, PM and a wider audience.

4.4.3 Conclusion

From the perspective of the Commission, it has, by definition, information on the portfolio it manages internally more frequently, quasi instantly, as opposed to the portfolios it has outsourced. Information on outsourced portfolios is provided mainly on a quarterly basis, for risk and performance information, and complemented by report on Portfolio Holdings on a monthly basis. This is in line with the reporting requirements which have been set out in FAFA but higher frequency reporting (on a monthly basis) is typical among peers.

Portfolios need to be followed closely. That role of close monitoring on a daily or instantaneous basis is however by definition outsourced as well to external asset manager in case of an outsourced portfolio. Given the type of portfolios and the additional obligations and practices which have been put in place, the existing arrangements between ECFIN and EIB suffice. That said,

Both parties provide clear and well-structured reports. EIB reports contain information which is useful in the context of outsourced portfolios Reports on both sides are equally insightful, even if the information provided and approaches taken inside those reports is somewhat different (e.g. ECFIN gives a quantitative analysis of return factors for its performance analysis, including attribution analysis, while the EIB relies on an analysis of breakdowns of performance data by asset class, rating and bucket complemented by qualitative comments). Generally, in terms of content / quality of reporting, no gap has been identified. Indicators which are covered on one side but not on the other could easily be replicated using existing information (e.g. historical performance, additional performance indicators and stress tests).

For their own purposes, both asset managers produce - and have access to - current information at any point in time.

4.5 Technical infrastructure

The study examined the following parameters:

- IT systems: Technology is a key component of asset management, integral to many functions including trading, risk management, compliance and client service. At a very basic level, asset managers require IT systems to facilitate data management, information processing and the flow of information between multiple functions internally as well as with external parties. More sophisticated IT systems include risk analytics and decision support tools. An integrated IT system can help eliminate redundant data input across multiple systems, enhance data integrity through shared and transparent information, and increase operating efficiencies and controls (e.g. through process automation of time-consuming tasks and by improving the quality of risk management). Moreover, asset managers rely on high-quality and timely information to, inter alia, make and execute investment decisions, manage risks and performance. Front to back integrated IT systems allow asset managers to have: (i) real time or near real time visibility of operational, performance and risk data; and (ii) a holistic view across all portfolios and asset classes.
- Business continuity plans: Business continuity and disaster recovery plans should be in place to ensure that asset managers can continue to operate when external events impact availability of systems, facilities and staff. At a minimum, plans should ensure the ability to recover staff, technology systems and business operations in a timeframe that meets business requirements. Moreover, organisations should test their plans on a regular basis.
- Cyber security: Financial services firms are experiencing a growing number of cybersecurity breaches. Asset managers, therefore, need to invest in developing and implementing robust cybersecurity policies and measures, including alignment with industry frameworks (e.g. ISO 27001 and Cyber Essentials Plus).

This section is based on both institutions' systems infrastructure landscapes, as presented to the study team in stand-alone documents and commented on during interviews. ECFIN's and EIB's respective business continuity plans / disaster recovery plans have also been reviewed.

4.5.1 European Commission

4.5.1.1 IT systems

Until recently, ECFIN was using a system based on SAP's Treasury Management module (SAP FSCM-TM). To enhance functionalities[57], ECFIN complemented its IT landscape with Bloomberg AIM in 2018. Bloomberg AIM is an off-the-shelf system used by many other large asset managers and global multilateral banks and official institutions[58]. Bloomberg AIM frequently and automatically gets upgraded.

As part of the above change, the Front Office, Back Office and Risk Management functions were migrated from SAP to Bloomberg AIM. All transaction-related data are automatically flowing through the various functions and automatically replicated in SAP, but only for accounting and for business continuity purposes.

Bloomberg AIM allows for many functionalities, including specific trade entry restrictions based upon each mandate's settings. It offers pre-trade limit checks, meaning that a breaching transaction cannot be submitted as a request to the trading and execution system.

[57] For example, real time update of positions under AIM instead of end of day under the SAP Asset Management module.

[58] AIM is used by many professionals including global multilateral banks and official institutions

Global performance figures are reported by ECFIN L3 based on SAP. ECFIN uses Bloomberg Portfolio & Risk Analytics module, PORT+, e.g. for the performance calculation, benchmark maintenance, performance attribution, and some risk measures, e.g. Value at Risk. Other risk measures, e.g. CVaR or stress-testing, are devised internally based on Matlab software.

To ensure the secure transfer of financial instructions (payment instructions, confirmation, etc.), ECFIN uses the SWIFT network.

4.5.1.2 Back-up facilities

ECFIN recovery time objectives and preventive measures are in line with the Business Impact Assessment and the Risk Assessment for ECFIN asset management and borrowing and lending activities.

In practical terms, ECFIN has different business contingency sites. A hot-site is available in Luxembourg as per EC's business continuity plan / disaster recovery plan, which is reviewed at least annually or after significant organisational changes. The site is fully operationally equipped with hardware and system software to operate SWIFT, Bloomberg and SAP. Furthermore, effectively ECFIN also has a second hot-site in Brussels (since the DG is mainly located in Brussels), with full connectivity to Bloomberg and SAP[59].

Concerning IT infrastructure, several Service Level Agreements are in place to ensure response times of 2-4 hours. Concerning application availability, ECFIN depends on external service providers like SWIFT and Bloomberg like any other market participant. For the internal SAP application, the Recovery Time Objective (RTO) is set to 48 hours, however it only applies if the real-time failover system of SAP (which has a 2 hours activation window) is not working.

4.5.1.3 Connection with market infrastructure

The EC has a network of counterparties and access to market infrastructure using central and commercial banks.

4.5.1.4 Cybersecurity policies and procedures

Since ECFIN is part of the centrally-managed IT infrastructure, several different IT security policies are set. The baseline of all these policies is laid down in Commission Decision 46/2017 and its implementing rules[60], and is based on international standards and IT security good practices including ISO/IEC 27001, 27002, 27005, 27035.

Furthermore, ECFIN complies with the SWIFT CSP (Customer Security Program).

4.5.2 EIB

4.5.2.1 IT systems

EIB operates on Wallstreet Suite/Finance Kit, used as backbone for trade booking and payment processing. Several software solutions (package or in-house developed) are complementing this core package, e.g. Collateral Management Solution from FIS (former Sungard), Liquidity and Cash Management, Cash and Securities account reconciliation. Integration is mainly done through a data hub called ION Bus, which allows real-time event messaging and seamless integration with other systems,

[59] Since Bloomberg also acts a SWIFT service provider for ECFIN, SWIFT could be used for such cases (from Brussels), through Bloomberg.

[60] The exact references are Implementing Rules for Commission Decision 46/2017 and Implementing Rules for article 6 of Commission Decision 46/2017

through API. As of 2016, Finance Kit is used by many central banks across the world[61].

There are regular technical upgrades to the system, which EIB selectively decides to buy depending on whether it would serve a purpose in the EIB context.

Finance Kit allows for many functionalities, including specific trade entry restrictions based upon each mandate's settings. More specifically Finance Kit gives the possibility to simulate trades, including their impact on credit limits availability but a breaching transaction can still be submitted as a request to the booking system (and be accepted given the way the system is currently configured). This is a disadvantage although not a major weakness given that the front office has the ability to pro-actively check available limits, directly in Finance Kit, and has the possibility to consult Risk Management in specific cases pre-trade. Positions are refreshed on a daily basis and EIB/RM verifies on a daily basis the compliance of the mandate portfolios with their respective AMGs.

Finance Kit requires new securities to be set-up separately which adds an operational step to the trade flow. The impact of this is, however, quite limited given the limited frequency of these events and the semi-automated process required to be followed. EIB also uses Bloomberg Portfolio & Risk Analytics solution, PORT, for EC portfolios, to enhance analytical capabilities, in combination with other solutions, e.g. Algorithmics.

EIB uses Oracle PeopleSoft Financials as an accounting system. The accounting IT environment operates under a straight through processing model including Finance Kit and therefore it requires very limited manual interventions.

The trade messaging system is SWIFT.

4.5.2.2 Connection with market infrastructure

EIB is fully connected with market infrastructure. EIB for instance has direct access to TARGET2, a payment system owned and operated by Eurosystem. It also has access to the Continuous Linked Settlement System (CLS) for FX transactions, to a network of cash correspondents, custodians and central clearing counterparties. This connectivity to market infrastructure constitutes an advantage when managing liquidity and settlement risk. It is however of limited importance in the context of the CPF, given the envisaged contractual payment times and the different tools which will be available to honour calls (e.g. the share of cash and cash-like holdings).

4.5.2.3 Back-up facilities

EIB's Business Continuity Policy, approved by its Management Committee, is based on the Business Continuity Institute's Good Practice Guidelines considered to be an independent body of knowledge for good business continuity practice worldwide.

In practical terms, there is a resilience centre outside Luxembourg City (but within the borders of Luxembourg), which contains a fully-equipped dealing room and where 10 tests a year are conducted. Concerning application availability, EIB depends on global players (e.g. SWIFT, Bloomberg or ION), like any other market participant.

The Business Continuity Plan for Finance - Treasury Department clearly identifies portfolio and third parties' mandates management as a core activity which has to be recovered into two hours. It clearly maps all the business continuity requirements needed for the recovery to happen successfully and on time.

[61] Wallstreet Suite has been rolled out across 35 central banks since 1994 according to the press. See: https://www.centralbanking.com/awards/2440200/risk-management-services-provider-of-the-year-wall-street-systems

4.5.2.4 Cybersecurity policies and procedures

EIB's Information Security Policy framework is built upon a set of policies and supporting documents including an overarching Information Security Policy, and additional operational supporting Policies, Standards, Guidelines and Procedures. The overarching Information Security Policy specifically refers to compliance with ISO/IEC 27001: 2013, the best-known standard in the 27000 family providing requirements for an information security management system (ISMS). Furthermore, EIB's Internal Control and Assertions division (FC/-/ICA) together with IT has completed the IT Internal Control Framework, based on EBA Guidelines on ICT Risk Assessment under SREP and ISO 27001. The ICT Risk Assessment has been enhanced with FC/ICA's risk assessment, including the evaluation of ICT control design adequacy.

The responsibility of verifying that the adequate security controls foreseen in the relevant frameworks and policies are actually implemented lies within the risk management function of the EIB (thereby guaranteeing the independence of the oversight function from the IT department).

Furthermore, EIB complies with the SWIFT CSP (Customer Security Program) and also, given it participates in TARGET2, the TARGET2-specific security requirements.

4.5.3 Conclusion

Both organisations use major commercial systems, "battle tested' by others in the industry, Bloomberg AIM in the case of ECFIN and Finance Kit at the EIB. Both systems are centralised, front-to-back vendor systems guaranteeing all parts of the institutions are looking at the same information. They ensure good data flows, close monitoring and analytical tools for Risk Management, Front Office and Back Office. They provide the managers with essential and sufficient tools for the execution and risk management of their portfolios.

The independence of Finance Kit does mean that there is some limited operational duplication in booking new transactions (i.e. new instruments have to be set up in Finance Kit, while in Bloomberg they are set up on behalf of the issuer, thus effectively reducing the risk of manual errors).

By using Bloomberg AIM, the Commission also has the advantage to prevent breaching transactions from being submitted, as a request to the trading and execution system. This is an important comparative advantage, but not critical given adequate safeguards are in place at the EIB (Finance Kit allows simulating trades' impact on credit limits availability and EIB/RM verifies on a daily basis the compliance of the mandate portfolios with their respective AMGs).

Both institutions have access to market infrastructure. EIB's connectivity to market infrastructure as a bank could in principle bring value to manage liquidity risk. In the context of the CPF however, it would in fact be of limited use e.g. given the envisaged contractual payment times and the different tools which will be available to honour calls. The Commission, on the other hand, has an industry-typical access to market infrastructure though the broad network of counterparties, including central and commercial banks, custodians and other market infrastructure providers.

Both institutions have adequate back-up facilities and cybersecurity policies and procedures in place, in line with industry best practices.

4.6 Expertise

It is important that an asset management team is adequately staffed. It should also possess the right set of skills and experience. Opportunities for upgrading skills and participating in trainings are also essential given the evolving environment in which teams works. In this section, we analyse whether both institutions are well equipped in terms of HR resources. Annex 5 presents in more details the profiles of the portfolio management and risk management teams at the EC and the EIB.

4.6.1 Presentation of the number of FTEs directly working on asset management

The table below provides a comparative overview of the FTEs working on the management of EU assets at the Commission and the EIB. To put the figures in context, the value of EU assets managed by each organisation is also provided. However, the following should be born in mind:

- The FTEs performing middle office and IT functions at the EIB are not taken into account – while they are included on EC sides;
- EIB's portfolio and risk managers also work on external mandates other than EC mandate. By amount, those other mandates are however not substantial (less than 10% of AUM as part of external mandates;
- ECFIN included in its number of FTEs staff performing support functions, e.g. the secretaries and administrative assistants, which is not the case of the EIB (the cost of staff performing support functions are however, included in the EIB's fees charged to the Commission – see Box 4.6).

In that context, no conclusion can be drawn from reading this table.

The data presented in Annex 5 is more informative, comparing the number of portfolio managers and risk managers on both sides (sixteen in total at the Commission, six in total at the EIB). Not being understaffed is important but a higher number of staff members does not necessarily mean higher efficiency. Note that ECFIN staff levels are partly explained by the additional recruitments which have been made to prepare for the increase in EFSI and EFSD AUM in the coming years (see also Box 5.1).

Table 4. Number of FTEs involved in asset management

Inhouse management of EU assets by ECFIN		**Outsourcing the management of EU assets to the EIB**	
AUM EUR bn*	**11.8**	**AUM EUR bn***	**7.8**
Number of portfolios managed	**6**	**Number of portfolios managed**	**8**
Number of FTEs: ECFIN		**Number of FTEs: EIB****	
Front Office	13.25	Front Office	3
Back Office	3.2	Back Office	2
Risk Management	6.7	Risk Management	3
Other : Dedicated IT resources , Senior Management, other	2.35	Financial control (accounting)	2
		Financial coordination	0.5
Total number of FTEs at ECFIN	**25.5**	**Total number of FTEs at EIB**	**10.5**
		Number of FTEs: ECFIN	
		Management of outsourced portfolios	**4**

*Source: based on data provided by ECFIN and EIB. *Figures as of 31 December 2018. **Does not include middle office / IT functions*

4.6.2 Skills and training opportunities

4.6.2.1 European Commission

The study team reviewed the profile of ECFIN's asset management teams, who are highly qualified and experienced. All of the sixteen portfolio and risk managers have acquired a master or PhD in a relevant domain. Among them, six hold a professional qualification (e.g. Chartered Financial Analyst (CFA) and/or Financial Risk Manager (FRM)). They have on average thirteen years of relevant experience, including six years in the same function. Typical previous workplaces before the European Commission include commercial banks, investment banks, equity funds, asset management companies, central banks, corporate treasuries and universities.

ECFIN L staff has access to economics and finance related courses from the internal training catalogue and the so-called summer school organised each June/July by ECFIN. For more specialised trainings, staff also has access to conferences and seminars organised by central banks, investment banks, private asset managers. In addition, there are specialised group trainings by external trainers. In 2018 for instance, 9 days of specialised trainings were offered by external qualified trainers, attended by 20 colleagues each. These covered Credit Risk Modelling (2 days), Risk Budgeting (2 days), Covered Bonds (1 day), Interest Rate Risk management/Bond futures (2 days), Financial programming with Python (2 days). For specific needs, individual external trainings are provided.

4.6.2.2 EIB

The team examined the profile of the FTEs dedicated to external mandates in the portfolio management team and the risk management team. The teams are made up in total of six highly qualified experienced staff. They all have relevant academic degrees (Master or PhD) and four of them have a professional certification (e.g. Chartered Financial Analyst (CFA) and/or Financial Risk Manager (FRM)). On average, they have thirteen years of relevant experience, including eight years in the same function. Prior to joining the EIB, staff has acquired experience with commercial banks, investment banks, asset management companies, central banks, corporate treasuries and universities.

EIB's asset managers have the possibility to benefit from external and internal trainings and conferences. In 2018 for example, external trainings were organised by central banks, investment banks, private asset managers and external credit rating agencies on the following topics management of FX Risk using Derivatives (2 days), Advanced Corporate Credit Analysis (3 days), Interest Risk Strategies (2 days), Credit Derivatives (2 days) and Asset Allocation (5 days). In addition, all team members have the option to highlight any specific individual training needs through their Individual Development Plan.

4.6.3 Conclusion

The Commission has a higher number of portfolios and risk managers (sixteen versus six). This is partly driven by the anticipated increase in AUM on ECFIN side (in relation to EFSI and EFSD). Both institutions have the right mix of skills and experience and adequate training programmes in place.

4.7 Scalability

In the run up to the launch of the CPF, having scalable systems in place is important to minimise additional costs for the EU budget. There is also a need to ensure that HR constraints could easily be filled by additional recruitments and/or skills upgrades. We cover this assessment in the following section. How well both institutions are equipped to absorb the CPF depends on the characteristics of the CPF itself – whether the CPF means doing more of the same or means doing radically different activities. Given that the future design of the CPF is still unknown and for example no formal decisions have been taken yet as regards the type of assets in which the CPF will invest, the team's assessment is based on what is reasonable to expect, as advised by the Steering Group and spelled out in section 2.4.2. One important and reasonable hypothesis in that context is for instance that the focus will be on fixed income and that the PGF or EFSI AMGs constitute a proxy of the CPF AMGs.

Additionally, we also assessed whether from the market perspective there is scope to accommodate the envisaged increase in EU assets under management. We performed this analysis only at an aggregate level.

4.7.1 Operational scalability

4.7.1.1 European Commission

At ECFIN, key milestones have been achieved recently in terms of upgrading IT and governance systems. These changes were made in light of the increase in AUM which took a new dimension with EFSI. The new portfolio management system, Bloomberg AIM, is scalable: there is no limit to the size of assets it can manage and no changes in the system would be required to accommodate an increase in the assets under management. The governance structure has also been streamlined and the processes are in place now to handle higher volumes of assets.

In terms of HR resources, ECFIN highlighted that incremental HR needs are not necessarily directly proportionate to the increase in the assets under management. In addition, some efficiency gains could be made from the reduction in the number of portfolios that will take place in parallel to the increase in size of assets under management. Some of the functions would however have to be reinforced but this could be made through a reallocation of the staff currently fulfilling AMDS functions.

Note here that even if recruitments were needed, there would be no need to wait for the organisation of a new recruitment competition for officials, even if no adequate profile can be found from the list of names of successful candidates from previous competitions ('laureates'). Quicker selection procedures, for temporary and contract staff[62], could be used, should the needs be urgent. There is thus no EC-specific issue related to the speed at which new talents could be recruited – beyond the standard time needed to recruit and on-board financial specialists.

Besides, given that it is not expected there will be a need to accommodate new asset classes and instruments (no planned move towards non-rated corporates, Private Placements or equity), there would be no impediments in terms of skills set.

The EC has the capability to invest in derivatives (currency derivatives) to hedge currency risk.

The EC has recently been given the responsibility of managing a pooled fund[63] and has developed the relevant infrastructure and expertise to manage internally the valuation and accounting of shares of the participating mandates, which are the main particularities specific to a pooled fund.

4.7.1.2 EIB

EIB systems and teams can handle significant increase in assets under management, as illustrated by the fact that the portfolio of EIB's own assets (a large portion of which

[62] See C(2013) 9049 final and C(2017) 6760 final, respectively, for the exact procedures to be followed.

[63] ECFIN has been tasked with managing one pooled fund, combining two small mandates (amounting to 100 million EUR in total) namely the Portfolios of the Local Agents Provident Fund and the Complementary Sickness Insurance Scheme for Local Agents. This fund has been made operational over the course of 2019.

consists of instruments with investment horizons below one year[64]), fluctuates frequently, from €65bn to 85bn.

More than the size of the portfolios, the limiting factor is the number of portfolios (e.g. the higher the number of portfolios, the higher the number of limits which need to be managed in the IT systems, the more reports which need to be produced etc.).

An increase in the size of AUM will still create some additional HR needs as soon as it involves a higher number of trades (as opposed to larger trade sizes). All functions can potentially be impacted: front office (carrying out more transactions), middle office (checking more transactions) and back office (confirming more transactions). No estimate has been produced especially for the purpose of this study but a general rule of thumb applied in the *current* context at the EIB is that every additional EUR 3bn assets under management equals 1 FTE, across functions.

Furthermore, given that the focus will remain on investment grade fixed income assets, there would be neither impediments in terms of skills set, nor legal/political considerations[65].

EIB has the capability to invest in derivatives (currency derivatives, interest rates derivatives), these tools providing some flexibility to hedge currency risk and adjust the portfolio (i.e. make duration longer or shorter).

The EIB has also experience of managing funds with multi-investors, namely the Unitary Fund and one pooled fund on behalf of the EC, the CEF Fund. Currently, the main aspects which are specific to the management of pooled funds (e.g. valuation and accounting of shares of participating mandates) are not undertaken in-house by the EIB for cost reasons and/or to have an independent calculation of NAV and shares[66].

4.7.1.3 Conclusion

From the infrastructure point of view, both institutions can handle a large increase in AUM. While the EIB has a track record of frequently adjusting to fluctuating assets, ECFIN has, over the recent years, also proven its ability to cope with increased assets under management and upgraded its systems.

Both institutions see the number of portfolios as the restraining factor, and therefore rather expect efficiency gains to come with the CPF. CPF's sheer size would not be a disruptive factor for the respective teams / functions, especially in a context where the focus will continue to be on investment grade fixed income assets.

Additional HR needs are expected to be limited[67] and manageable by both institutions given the anticipated shape of the CPF.

EIB is more experienced with currency and interest rates derivatives, which could be helpful going forward as additional tools to hedge currency risk and adjust the portfolio, provided that the CPF can use derivatives.

EIB has been managing pooled funds for a longer period of time while the EC is managing pooled funds since the beginning of 2019. Both organisations have acquired relevant expertise with pooled funds while relying on different management models: EIB is outsourcing the tasks, specific to the management of the pooled funds

[64] See also section 2.2

[65] Legal/political considerations could have arisen should equity investment have been contemplated.

[66] Independent calculation of NAV and shares is required in specific cases.

[67] Views on rule of thumb applied at the EIB (that every additional EUR 3bn assets under management equals 1 FTE) will be sought at the workshop.

(valuation and accounting of shares) while the Commission has developed an in-house expertise.

4.7.2 Market

Post 2020, the size of EU assets is expected to grow from the current €20bn to €34bn. Given the size of the market for EU fixed income[68] which stands at €15,000bn in May 2019[69], it is expected the market can absorb the increase in EU assets without a pressing need to accommodate new asset classes and instruments. Also looking at the individual asset types, there is scope for ECFIN and/or EIB to buy higher volumes on the primary market. For instance, European Government bond and bills gross issuance amounted to close to €600bn in the second quarter of 2018[70], to be put into perspective with the overall 10bn of EU assets which are currently invested in sovereigns, supranational and agencies across ECFIN and EIB.

4.8 Performance

4.8.1 Approach

This section provides an assessment of performance. The study team obtained annual, monthly and daily[71] performance data on the funds managed by the Commission and the EIB. In the analysis the study team:

- Performed basic analysis on the portfolios to see whether there is any significant short-term performance that cannot be explained by general market movements and that are not in line with objectives of the portfolio.
- Grouped portfolios with similar investment criteria and performed a comparable analysis of portfolios with similar features for which data is available over a longer period. The performance of a fixed income portfolio is determined by many decisions of the portfolio manager, within the limits and guidelines of the portfolio management agreement and can be studied in a detailed performance attribution analysis. Following the scope of our analysis we compare similar portfolios with similar duration profiles.
- Compared the general risk measures as provided in the risk reports.

Each fund is guided by asset management guidelines (AMGs). – See Annex 2 for an overview of legal construct and asset management guidelines.

As per their respective investment guidelines, both managers only invest in Fixed Income assets, predominantly investment grade sovereigns, supranational, agencies (together SSA), financials and other corporates. An overview of asset allocation at the end of Q1 2019 is provided in Table 20.

Both EIB and the EC produce daily performance data and have provided daily, monthly and annual performance data in as far as available for the benefit of this analysis – see Table 22 for an overview of the relevant period per portfolio.

[68] Concerns debt securities issued by euro area residents in Euros

[69] Source: ECB data, available at: https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/securities_issues/debt_securities/html/inde x.en.html

[70] Source: AFME

[71] The official data have a monthly periodicity. The study team received monthly official data as of April 2009. The daily data are provided on best efforts basis and are used only for some limited analytical purposes

The official data[72] for the EC and for the EIB is produced monthly. This corresponds to the periodicity of official reporting in the EC. The data is reported quarterly from the EIB to the EC.

Daily data are neither audited nor validated. They are used as a reference for management purposes and internal checks only and cannot be used as the basis for official comparison of results. For the purpose of this analysis, we analysed the difference between monthly performance data based on monthly official numbers as of April 2009 and calculated using unofficial daily data and did not find differences that are significant for the purpose of those parts of our analysis where we use daily data.

For the benefit of our analysis we have used the official data up to and including 30 June 2019. An analysis of each separate fund's performance data together with comments on each specific fund is provided in the appendix (section A6.5).

4.8.2 Results

4.8.2.1 Analysis of portfolio behaviour

In general, the following observations can be made:

- the general objective for the portfolios is that a high degree of security and stability is maintained over a long period of time. Thus, the funds have a long-term performance objective. However, most funds could be drawn upon with a relatively short notice period. We therefore assessed for all portfolios whether there are any significant short-term movements that cannot be explained. In our analysis we determined the largest single day and monthly performance swings over the full period for which data is available.
- The largest single day drops over all portfolios are in the order of -0.50%, which is in line with the objectives.
- The largest 30-day drops occurred in the portfolios ECSC and GF managed by the EC and EIB respectively. For both portfolios these drops occurred during the November 2011 bond sell-off when Italian yields surpassed 7% and the associated benchmark went down with a similar order of magnitude.
- Large increases can be explained by:
  - The Greek bond restructuring in 2012, affecting portfolios managed by both the EC and EIB. As the relevant benchmarks did not include sub- investment grade assets, these increases explained a significant outperformance over the benchmarks.
  - Bond market correction in December 2011 following the sell-off in November 2011.
  - In conclusion we find that both managers have performance data without significant unexplainable daily or monthly performance swings.

[72] The methodology employed to produce official data produced on both sides is meant to be consistent. The study team was however advised over the course of the study that official data initially provided by the EIB is, for certain mandates, net of certain fees (while data provided by the EC is always gross of fees and costs), thereby creating minor inconsistency concerns. It was not possible within the timeframe of this Study to obtain new data from the EIB in which the way fees are presented would have been fully harmonised with the Commission approach. Indeed, the EIB has provided new gross-of-fees return calculations (on an annual basis) reflecting following fees: treasury management fee, custody fee, income from securities lending, cash account fees. The approach taken however appeared to be not consistent with that of the EC which does not reflect e.g. custody fees. Therefore, that new data was not used for the purpose of this study. The order of magnitude of the inconsistencies across official data have been assessed as being minor by all parties and, as such, monthly official data is presented in this report. The EIB should nevertheless work on resolving these methodological minor issues going forward, in consultation with the Commission.

4.8.2.2 Analysis by portfolio grouping

We analysed the performance parameters, grouping portfolios that share certain criteria based on:

- Investment universe
- Portfolio guidelines
- Period that the portfolios have been in existence

The criteria used for the grouping and the results of the analysis are presented in the Annex A6.3.

Group I gathered the longest standing portfolios both under direct management of the EC and of the EIB, sharing comparable investment universe and restrictions.

Group II gathered shorter standing portfolios both under direct management of the EC and of the EIB, with similar characteristics.

Group III contain portfolios that are not comparable to each other. For completeness the performance measures are shown, but they should not be compared to other portfolios.

The following subsections present the results of the performance comparison for the portfolios with similar features and reference period. It shows the annual return per portfolio over different time periods up until 30 June 2019[73] - the monthly standard deviation of these returns is provided between brackets as a measure of volatility.

Group 1

Table 5. Group 1

Return & (Standard Deviation)	ECSC-EC	RCAM-EC	GF-EIB	RSFF-EIB
July 2009-2010	5.52% (0.66%)	**5.92% (0.50%)**	3.97% (0.57%)	1.89% (0.32%)
July 2010-2011	**1.11% (0.43%)**	0.68% (0.48%)	-0.18% (0.54%)	0.37% (0.22%)
July 2011-2012	4.05% (0.91%)	4.57% (0.69%)	**5.68% (0.92%)**	3.59% (0.39%)
July 2012-2013	2.21% (0.51%)	1.82% (0.47%)	**2.69% (0.35%)**	1.42% (0.30%)
July 2013-2014	**2.83% (0.25%)**	2.64% (0.23%)	2.20% (0.17%)	1.00% (0.09%)
July 2014-2015	0.61% (0.41%)	0.25% (0.52%)	**0.94% (0.19%)**	0.20% (0.06%)
July 2015-2016	3.03% (0.34%)	**3.75% (0.34%)**	2.32% (0.30%)	2.13% (0.28%)

[73] The study team has been provided monthly official data as of April 2009. In general, strategies are finalised in May of each year.

July 2016-2017	-0.47% (0.34%)	**-0.17% (0.34%)**	-0.41% (0.33%)	-0.30% (0.28%)
July 2017-2018	0.51% (0.28%)	**0.71% (0.26%)**	0.50% (0.21%)	0.46% (0.17%)
July 2018-2019	**2.04% (0.22%)**	1.91% (0.22%)	1.36% (0.18%)	1.06% (0.14%)
July 2009-2019	23.45% (0.48%)	**24.19% (0.44%)**	20.61% (0.45%)	12.42% (0.25%)

Note: Numbers in the data show annual return from the period starting 1 July until and including 30 June the following year. The standard deviation is monthly and not annualised. Please note that given the use of monthly observations, the standard deviation is based on a small amount of observations.

Observations:

- The comparable funds in Group 1 are, ECSC-EC, RCAM-EC GF-EIB[74] and RSFF-EIB. The table shows the annual performance per year, with the highest annual return in bold. The figure
- also shows the cumulative return over the full period of 1 July 2009 up to and including 30 June 2019.
- The portfolio durations at the end of Q1 2019 were just below 3. With ECS-EC 2.9, RCAM-EC 3.0, GF-EIB 2.8 and RSFF-EIB 2.6.[75]
- Expressed as cumulative return, the performance over the 10-year period, was:
  - ECSC-EC: 23.4%
  - RCAM-EC: 24.2%
  - GF-EIB: 20.6%
  - RSFF-EIB: 12.4%

  The performance of RSFF is consistently below that of the other portfolios[76].

  Both institutions managed the portfolios within the volatility expectations implied by the investment guidelines. Note that the standard deviation is used as an indicator of volatility - it is however based on a moderate amount of observations.

[74] Investments are restricted to the AAA-AA/A category for ECSC and GFEA, while RCAM can also invest in BBB rated assets. RSFF can invest in BBB for SSA only.
[75] Note that this is a single spot observation and that durations fluctuate over the examined time horizon.
[76] Between 2009 and 2014 RSFF kept a high percentage of assets as liquid assets with a maturity of less than 1 year. This was required in 2009, but in subsequent years this was amended by the investment strategy to be EUR 100 million or around 10%-13% of the portfolio. In October 2014 about a third of the portfolio was redeemed. Early in 2019 EIB was informed that the portfolio would be fully redeemed later in the year.

Group 2

Table 6. Group 2

Return & (Standard Deviation)	PGF-EC	CEF-EIB	NERAM-EIB	RSFF2-EIB
July 2014-2015	**1.17% (0.29%)**		0.80% (0.19%)	
July 2015-2016	2.08% (0.27%)		2.01% (0.26%)	**2.41% (0.29%)**
July 2016-2017	-0.44% (0.26%)	**-0.17% (0.31%)**	-0.36% (0.25%)	-0.17% (0.32%)
July 2017-2018	0.40% (0.21%)	**0.53% (0.18%)**	0.36% (0.16%)	0.49% (0.16%)
July 2018-2019	**1.61% (0.20%)**	1.26% (0.18%)	0.85% (0.14%)	1.20% (0.18%)

Note: Numbers in the data show annual return from the period starting 1 July until and including 30 June the following year. The standard deviation is monthly and not annualised. Please note that given the use of monthly observations, the standard deviation is based on a small amount of observations.

Observations:

- The comparable funds in Group 2 are PGF-EC, CEF-EIB, NERAM-EIB and RSFF2-EIB. The table shows the annual performance per year, with the highest annual return in bold.
- The portfolio durations at the end of Q1 2019 were just below 3. With PGF- EC 2.9, CEF-EIB 2.7, NERAM-EIB 2.2 and RSFF2-EIB 2.7.
- Expressed as cumulative return, the performance over the final 3-year period, was:
  - PGF-EC: 1.6%
  - CEF-EIB: 1.6%
  - NERAM-EIB: 0.8%
  - RSFF2-EIB: 1.5%
- The performance of NERAM-EIB stays behind the performance of the other portfolios in Group 2. Note that the standard deviation is used as an indicator of volatility - it is however based on a moderate amount of observations.

Group 3

Group III contain portfolios that are not comparable to each other. For completeness the performance measures are shown in A6.4, but they should not be compared to other portfolios.

4.8.3 Considerations and conclusions

4.8.3.1 Considerations on the environment / context

- By definition, the period over which the performance was analysed was unique; for the longer running portfolios this period was marked by the uncertainty of the financial crisis, the start of quantitative easing, sovereign crises and associated rate swings and a currently unprecedented low interest rate environment. Performance in the past is no guarantee for the future.

- The risk tolerance for the portfolios is low – the driving objective for the portfolios is that a high degree of security and stability is maintained over a long period of time.
- Although both the EC and EIB have used benchmarks for most of their portfolios for most of the time, the benchmark methodology has not been comparable until the EIB changed its methodology in January this year in agreement with ECFIN[77]. Over or under performance versus the benchmark is therefore not comparable between the two managers and we have not included this in our analysis.

4.8.3.2 Conclusion

- The performance and the volatilities are in line with the objectives and the risk tolerance defined in the asset management guidelines and monitored in the risk reports (see overview in Annex 4). Both institutions adopt a prudent approach in their asset management activities.
- For those comparable portfolios with a longer history, the two Commission-managed portfolios (ECSC-EC and RCAM-EC produced the highest return (23.4% and 24.2%, respectively, while GF-EIB and RSFF-EIB produced 20.6% and 12.4% respectively) over the 10 period up until the end of H1 2019.
- The management of all funds, over the periods analysed, would allow to make funds available when needed.

4.9 Costs

Article 212 of the Financial Regulation requires this study to compare the cost of inhouse management of EU assets by the Commission against the cost of outsourcing asset management to the EIB. This section firstly, provides an overview of the cost information provided by each organisation as background and context for the subsequent comparisons.

4.9.1 Overview of the information provided by the two institutions

4.9.1.1 European Commission

The Commission disclosed to the study team its own estimates of

- its current costs; and
- the future costs in January 2021, just at the time of the introduction of the CPF, as well as the estimation of the costs from 2021 onwards, after the implementation of the CPF; (iii) the current number of FTEs allocated to each function (iv) an estimate of how the staffing needs going forward under the different options (vi) an overview of the overall approach to costings including costs per FTE.

[77] Before the change in benchmark methodology, EIB's benchmark was based on the composition and tenor of the actual portfolio, this meant that the benchmark was not independent of the portfolio selection and therefore somewhat circular.

The Commission produced its estimation based on the rules established by DG BUDG[78] and the requirements of the Financial Regulation, as a function of the number of full time equivalent (FTE)[79] working on asset management at ECFIN plus additional costs which are specifically related to asset management.

The Commission's estimates are derived as follows:

Cost of asset management = Number of FTEs involved in asset management and support functions X total cost per FTE+ other costs specifically linked to asset management

where:

- total cost per FTE[80] = Average personnel costs per FTE + Average building and administrative costs per FTE + Average ICT costs per FTE.
- Number of FTEs = list of all staff involved in AM / support functions in relation to AM * ratio representing the share of their time spent on AM / support functions in relation to AM.

[78] Guidance on the charge-back process within the Commission Ares(2014)1634104 - 20/05/2014, Note published by DG BUDG Ref. Ares(2018)6177896 on the average costs to be utilized by the Commission

[79] To assist the Commission DGs and services in costing of their services, DG Budget regularly publishes the standard cost of an FTE including and excluding "habillage"("habillage" covers certain overheads such as buildings, IT equipment, electricity per FTE, etc). The starting point for calculating staff costs is the number of Full Time Equivalents (FTE) allocated to the delivery of the service. The total cost will be obtained in multiplying the FTE total by an annual average cost per FTE.

[80] Based on an official internal note emanating from DG BUDG providing average cost per FTE for different categories and broken down into personnel costs, building and administrative costs, and ICT costs. The figure which is provided in the Ares note is frequently updated and is the one to be used consistently for all legislative proposals if and as needed. According to internal rules, the FTE price has to be utilized by the Commission DGs and services in costing of their services.

Specific costs linked to asset management (the cost of access to Bloomberg and AIM port) are separately added on the basis of the actual costs incurred by ECFIN.

The Commission's average personnel direct costs per FTE include

- Salaries and allowances;
- Pension contribution of employees
- Expenditure relating to staff recruitment;
- Socio-medical infrastructure; and
- Training costs.

Average personnel costs are estimated separately by DG BUDG for each of the following categories of staff: AD, AST, Contract Agent and Seconded National Expert.

The Commission indirect costs per FTE include the average building and administrative costs :

- Rental of buildings and associated costs;
- Movable property and associated costs;
- Current administrative expenditure; and
- Postage and telecommunications

Average ICT costs per FTE comprise the costs of general ICT equipment (e.g. computers and laptops, printers etc.), external IT consultants IT services and software. The IT resources directly dedicated to asset management are added to the total cost.

Overheads

There are costs that cannot be attributed to a specific service such as, management, internal audit, HR etc. According to internal rules, such costs are to be allocated in accordance with a reasonable key e.g. proportional to the relative number of FTE staff directly involved in a delivery of a service. The overheads included in the calculation provided by the Commission are taking into account all support functions comprehensively, namely the HR, Legal, Senior Management, Internal Audit, participation of DG FISMA and DG BUDG in the TMB every 2 months.

Note that some direct HR, IT and administrative costs taken into account as direct costs (e.g. time of the HoU and DHoU linked to recruitment, dedicated IT FTEs in R).

EIB

The EIB disclosed to the study team (i) a summary overview of the fees charged over the period 2008- 2018, (ii) the current fee schedule which will remain applicable until the FAFA expires (around the introduction of the CPF), (iii) an indicative range for the fees going forward, (iv) a detailed list of the elements which are included / not included in the fee schedule, (v) the number of FTEs which are *dedicated* to the management of EC portfolios in specific teams, (vi) an overview of its cost allocation methodology.

It is important to note the following:

- The EIB makes the assertion that it is cost-based, i.e. that it is operating on a not-for-profit basis as far as the management of EU portfolios and works on a full cost recovery approach to pricing its services to the Commission. The level of fees are thus said to represent the costs actually incurred.

- However, the study team was not separately provided with an estimate of the costs incurred by the EIB broken-down by item. The EIB only shared a high-level overview of its activity-based costing methodology – see Box below. The EIB's claim that it is cost-based cannot be independently verified by the study team in absence of a detailed breakdown of costs.
- The Commission own costs cannot be compared to EIB's internal costs in absence of this detailed cost information given that the EIB follows an activity based costing model whereas the Commission's approach is different (see Box above).

Box: EIB's approach to cost allocation

The process is conceptually and technically divided in two phases: Phase 1 pertains to allocation of Bank-wide operating costs to front-line cost centres (corresponding in principle to most of Operations, Projects, Legal, Finance, Risk Management, Transactions Management and Restructuring, SG-External Representation Division (EER) and SG-Advisory Services front-line divisions) and in Phase 2 costs charged to front-line cost centres are further allocated to final EIB products and services.

Phase 1 – Allocation to front-line cost centres
At the end of phase 1, the following components of a front-line cost centre's cost can be identified:

- Direct costs: front-line cost centre's own costs which include salaries (EIB agents, GRADs and Local Agents); staff cost equivalents (Secondees and Temporary staff); and other direct costs - consultancy, missions, decentralised training, etc.;
- Allocated direct costs: which include other staff costs (a share of allowances, performance awards, social expenses etc.) and indirect costs. The latter is made up of (a) a share of IT costs; (b) a share of facilities management costs;

(c) a share of costs of non-front-line (and thus typically non-time-recording) organisational entities within own directorate, e.g. DG's office, Head of Department cost centres, co-ordination divisions and other divisions as defined e.g. FI/PRO/BOT; (d) a share of costs reported by cost centres belonging to the Corporate Support category (which include full costs of Corporate Services (excl. IT and FM), SG (excl. EER & Advisory Services), Financial Control, Inspectorate General, OCCO and part of Legal- Corporate.

Phase 2 – Allocation of costs to final EIB products and services
Time records[77]drive the allocation of each and every front-line cost centre's costs to final EIB products and services[81] . Project direct costs are costs allocated directly to final EIB products and services in relation to which they had been originally incurred on the basis of product IDs indicated directly in General Ledger.

4.9.1.2 Conclusion on the comparability and usefulness of the information provided

In absence of detailed breakdown of costs from the EIB, the assessment against the cost criterion has therefore been conducted as follows:

[81] EIB clarified that it keeps timesheets per se only in relation to the Cotonou mandate which is outside the scope of this exercise. Lighter time records are used for other mandates, which permit to separate time spent at trainings for instance and are used as a basis for the production of its fee schedule.

- *Estimated cost of inhouse asset management derived as a function of the number of full time equivalent (FTE) working on asset management at ECFIN plus specific IT costs related to asset management;*
- *Estimated cost of outsourcing* as the sum of fees charged by the EIB to the Commission and the cost of Commission resources involved in oversight and management of the outsourced portfolios.
- The only required pre-requisite was that the costings provided by the Commission were broadly comparable to the EIB fee structure in terms of (i) the level of services covered and (ii) accuracy and reliability of cost estimates.
- In relation to (i) given the assessment performed against the criteria other than costs as part of this assignment, it can be safely assumed that both organisations are capable and provide a similar level of services.
- In relation to (ii), some differences (which may have some minor implications for the analysis) persist. For instance, the staff costs (which represent a significant proportion of asset management costs) are not directly comparable between the two institutions: while the European Commission uses average cost of staff, the EIB makes its calculations on the basis of actual staff costs incurred. However, although the approaches followed are different and some uncertainties remain, it is the team's assessment that the estimates provided by ECFIN can be safely used and compared with EIB actual fees, given that:
  - the Commission estimates do not change when using average cost for each type of contract instead of organisation-wide average (confirming that ECFIN AM staffing mix is no different from the average Commission staffing mix);
  - these were produced following official standards;
  - these are in line with own estimates based on financial reports[82];
  - sufficient reassurances were provided as to the comprehensiveness of the estimates of the EC (e.g. inclusion of pension costs, like on EIB side).

4.9.2 Current costs

The table below provides an overview of the costs of in-house management of EU assets by the Commission versus the cost of outsourcing asset management to the EIB .

Table 7. Cost of in-house management of EU assets by ECFIN versus the costs of outsourcing asset management to the EIB, based on situation at the end of December 2018

	In-house	Outsourcing
Value of AUM, EUR bn	11.8	7.8
Costs/ fees, EUR	3,930,500	3,425,513
Effective costs/ fees	0.033%	0.044%
	In-house	**Outsourcing**
Cost of AMDS (at the EC), EUR	n.a	547,000
Total costs, EUR	n.a	3,972,513
Effective total costs	0.033%	0.051%

Source: based on data provided by ECFIN and EIB Note that fees are fees actually incurred.

[82] Section III — Expenditure, Administration, EU Budget 2017, Financial Report

Costs are rounded estimates provided by the Commission on best efforts basis. These are of indicative nature, due to the uncertainties linked to the CPF design and implementation. The sensitivity of the estimate to the exact number of FTEs is low: if one FTE is added the current cost of the Commission would change from 3,3 bps to 3,4 bps.

4.10 Synergies

Against a backdrop where the EU budget will be exposed to larger contingent liabilities (arising from operations under InvestEU/NDICI), there will be an increased focus on liability management in the future. The way in which the CPF assets (i.e. the capital provisions for these guarantees) will be managed will increasingly be driven by the need to ensure a stable and predictable capital base for supporting the guaranteed investment. One of the relevant questions in this context is whether it would be more optimal for the same organisation to manage both the liabilities (i.e. the lending operations) and the assets or, whether a split of the two functions would yield more advantages. In this section we explore the potential synergies between asset management and related activities of each institution: (i) for the Commission looking at synergies with the management of the EU guarantee; and (ii) for the EIB, looking at advantages that could arise from having the same institution in charge of the lending and the asset management activities.

We also explore the potential synergies of asset management activities with the wider resources, activities and capabilities of each organisation.

4.10.1 Synergies between AM activities and other responsibilities

4.10.1.1 European Commission (and synergies with the management of the EU guarantee)

For portfolios linked to budgetary guarantees, in any case, regardless of whether asset management is done in-house or outsourced, the European Commission retains the responsibility for the provisioning of the EU guarantee and the setting the provisioning rate i.e. the percentage of the EU Guarantee that is required to be held as a buffer in the Guarantee Fund. Through this work, the Commission has an intricate understanding of the risk profile of the operations and the cash flow estimates. This does however not constitute a comparative informational advantage for the portfolio asset management function given that this knowledge is based on inputs provided by the implementing partners[83].

For the CPF, which involves a multitude of partners, the Commission will however become an aggregating hub and benefit more from informational advantage in the sense that due to confidentiality issues, it becomes the natural receiver / aggregator of the information coming from the various implementing partners (who could not be expected to share similar kind of information with the EIB).This informational advantage has an important role when considering the significant resources of the CPF and the need to swiftly adapt the assets to the liabilities, the Commission being both aggregator and manager of contingent liabilities.

4.10.1.2 EIB (and synergies with the operational lending activities)

As explained in the introductory section, the use of financial instruments and budgetary guarantees has taken on a new dimension under the 2014-2020 MFF[84]. Thus far, on the implementation side, the EIB has been the sole entrusted entity of

[83] The provisioning rate calculated for EFSI is based on in-house credit portfolio model created by DG ECFIN, but the model inputs and the vast majority of parameters are provided by the EIB and the other implementing partners. See ICF (2018) Independent Evaluation of the EFSI Regulation. (page 104-105)

[84] Sixteen fully provisioned and centrally managed financial instruments as well the European Fund for Strategic Investments based on a budgetary guarantee have been set up.

the EC. For the first time as part of EFSI Regulation, the co-legislators decided to assign the asset management of the EFSI Guarantee Fund to the Commission, while the implementation of the budgetary guarantee was mandated to the EIB. The study team examined if this created any issues with respect to management of assets and, specifically, the objective of meeting calls in a timely manner. There is for now a limited track record[85] of answering to guarantee calls under EFSI, which limits our ability to judge whether the arrangements are appropriate from that point of view.

It is however our assessment that splitting AM and operational lending activities does not create inefficiencies for the following reasons:

- As per the FAFA agreement, EIB has the obligation to provide the EC with cash flow projections in relation to the EU contribution if and as required [86];
- In case AM and operational lending activities are not split but rather all sit within the EIB. EIB portfolio Managers, benefiting from integrated systems, can get cash management information on a daily basis as well as intraday to take position and manage liquidity or settlement risk, which is an advantage (e.g. anticipating investments and avoiding leaving cash in accounts in current negative conditions or avoiding re-investing cash maturing in T+3, T+5 only to liquidate the position immediately taking a mark-to-market risk). However, contractual payment times are such[87] that the benefit of EIB's informational advantage (linked to access to instantaneous information) brings limited added value. Besides, even if the EIB manages both the assets and operations, the Commission needs to be involved in case of guarantee calls since it manages the EU Guarantee (e.g. it needs to receive news on calls)

In addition, there is one feasibility argument. Going forward, the EIB will no longer be the sole implementing partner on the operation sides, excluding the possibility to delegate to the EIB as part of the same package 100% of the lending and 100% of the corresponding asset management. In that new context, there will be a need to create a level playing field across implementing partners and due to confidentiality issues, other implementing partners cannot be expected to share cash-flow information with the EIB. The cash-flow information, at least the one coming from the other implementing partners, will have to be centralised at the Commission level.

4.10.2 Synergies with the wider resources and capabilities of each institution

4.10.2.1 European Commission

Potential synergies lie with the production of macroeconomic, financial information by other teams (e.g. other directorates from ECFIN produce macro-economic research and forecasts on macroeconomic issues, some of EC staff also provide advice to the Member States and/or involved in bank restructuring taskforce in cooperation with the single resolution board). The use of such information for asset management purposes is however, largely restricted if non-public, to avoid any risk of insider trading. The analytical frameworks and models do provide a solid basis for the research work and

[85] Just one call has been made as of mid-2019. It has been honoured ahead of the contractual payment time (set at 20 business days)

[86] Article 7.2 reads that "the Bank shall provide to the Commission forecasts for the financial year for disbursements or other utilisation of the EU Contribution on an annual or semi-annual basis or more frequently as set out in the Delegation Agreement. These duly substantiated disbursement forecasts shall include applicable management fees."

[87] An overview of contractual payment time is available in the Annex 1. Overall, there is quite some time available to answer the calls. In many cases, a specific number of days is not specified but expectations are that it is quickly met. "Quickly met" is a subjective term but it could mean that efforts need to be made to pay within a reasonable timeframe, i.e. a timeframe which can be justified by a willing and active party.

there are potential synergies e.g. when DG FISMA colleagues participate in the TMB meetings to provide high-level insights into financial market developments.

4.10.2.2 EIB

The EIB's asset management activities are inserted within the Bank's wider activities. The advantages which come with being a bank are however rather small and not decisive for asset management activities. There are many independent asset managers in Europe who do not depend on banking groups, especially in certain markets (e.g. in the UK or France where 65-67% of asset managers are independent[88]).

For example, the fact that the EIB has a strong expertise in repos and reverse repos could be important in a crisis situation to avoid distress/ fire sale of assets, but it is not a differentiating factor as the Commission also has access to repo lines, via the EIB but also via private sector banks. That said, it is understood that there is a risk that EIB repo lines are no longer available to the Commission for asset management purposes in future in case the EIB stops managing EU assets.

According to the EIB, the CPF could also benefit from its existing counterparty relationships and legal documentation (the EIB currently has more than 50 active GMRAs). Current AMGs of the Commission portfolios do not allow reinvestment of cash received in repo transactions, but if that were to be permitted by the AMGs of the CPF, it could have a marginal impact on performance of the order of 0.5bp of revenue on a portfolio on an annual basis, depending on the nature of securities (asset class, rating, etc.) used as collateral.

The EIB also has teams which carry out the necessary economic or financial background studies and produce internal ratings. Since the EIB implements an advanced internal ratings based model for CRR, it produces internal ratings for each counterpart including treasury counterparts. This however, by definition does not bring advantages in the case of sovereigns, supranational, agencies (together SSA) investments [89] and can only play a role at the margin on some occasions to help mitigate downside risks (in instances where EIB portfolio managers are more prudent thanks to the existence of internal ratings).

4.10.3 Conclusions

There is no configuration that allows all activity to be carried out in-house: the Commission has, in any case, to rely on implementing partners on the operational side (for implementing the financial instruments and budgetary guarantees), while retaining liability management responsibility (for budgetary guarantees). This means that, in any case, information will need to be shared with third parties.

The fact that the EU is the ultimate guarantor of the operations does not make it materially better placed to manage the assets. Similarly, the need to avoid splitting asset management and operations is not materially relevant given the contractual payment times, the nature of the investments made and the obligation to share cash flow projections across organisations. In addition, going forward, given the increase in the number of implementing partners on the lending side, it will not be possible to task the EIB with 100% of the asset management. The EIB would not be well placed to collect cash- flow information from other implementing partners.

The aspects where there are synergies at the EIB (in relation to repos, internal ratings) are not decisive for the management of the assets of the CPF. No material synergies

[88] EFAMA, 2017. Asset Management in Europe, 9th Edition Facts and figures

[89] EIB does not produce internal ratings for Member States (given EIB's shareholding structure).

with the Commission's production of macroeconomic, financial information are to be highlighted.

5 Description and analysis of options and scenarios

5.1 Description of the options and scenarios

This section provides an outline and analysis of the three potential options for management of the assets of the Common Provisioning Fund (CPF) 2021 onwards. These are as follows:

- Option 1: The assets of the CPF are managed by the European Commission;
- Option 2: The management of the assets of the CPF is outsourced to the EIB, but the Commission retains overall responsibility and oversight;
- Option 3: The asset management of the CPF is split between the Commission and the EIB. The two organisations will however, manage the assets of the CPF under a single set of Asset Management Guidelines and using the same benchmark.

For each option, two scenarios have been developed:

- Scenario A: legacy portfolios continue to exist alongside the CPF until they are wound down;
- Scenario B: legacy portfolios are folded in within the CPF.

For ease of reference, the box below provides an overview of the legacy portfolios as of January 2021.

Box: Understanding of the legacy situation at the time of the introduction of the CPF

The following table provides the baseline at the time of the introduction of the CPF.

Table: Estimated size of legacy portfolios as of January 2021

	ECFIN	EIB
Legacy portfolios that will be folded in within the CPF	EFSI GF: €9bn EFSD: €0.75bn	GFEA: €2.5bn
Portfolios that lie outside the scope of the CPF	Other EC mandates e.g. BUFI, ECSC fund: ~€ 6 bn n total	n.a.
Other legacy portfolios where a decision is yet to be made as to whether these will be integrated within the CPF or not		Portfolios linked to financial instruments (e.g. Innovfin, RSFF etc.): <€3bn

Based on figures provided by DG ECFIN.

Notes: Although it has been decided that NER 300 will be out of scope of the CPF, it is not included in the above table as it is expected to be wound down by 2021.

Estimated size of legacy portfolios linked to FIs is based on the current figures but the level of assets could be lower since some instruments, e.g. RSFF, are expected to be wound down (although funds currently under RSFF will be invested under a different mandate).

Furthermore, a series of estimates have been made regarding the size of the CPF. The scenarios and assumptions relating to the size and scope of the CPF however, do not preclude the final design of the CPF.

The figure below shows the estimated provisioning for EU financial instruments, budgetary guarantees and some other operations post 2020. This is the input data for the table that follows.

Table 8. Estimated size of EU assets post 2020

Based on figures provided by DG ECFIN.

Notes: Whether the existing AM mandates linked to financial instruments (e.g. InnovFin etc.) will be folded in within the CPF or grandfathered (i.e. continue to exist outside the CPF until they run out) has still not been decided.

Estimated size of legacy portfolios linked to FIs is based on the current figures but the level of assets could be lower since some instruments, e.g. RSFF, are expected to be wound down (although funds currently under RSFF will be invested under a different mandate).

The table below shows the various options and scenarios relating to the management of the above assets.

Table 9. Options and scenarios (post 2020)

Scenario A: legacy portfolios linked to FIs exist outside CPF			Scenario B: all legacy portfolios are folded in CPF	
Option 1: ECFIN manages CPF	ECFIN manages the assets of : CPF Portfolios out of scope (BUFI, PGF, ECSC and JSIS)	EIB manages legacy portfolios linked to FIs	ECFIN manages the assets of : CPF Portfolios out of scope (BUFI, PGF, ECSC and JSIS)	EIB manages no portfolios on behalf of the EC
	Total: €31 bn in-house (+ Steering and monitoring outsourced portfolios €3 bn)	Total: €3 bn in small portfolios	Total: €34 bn	
	ECFIN manages the assets of the portfolios out of scope (BUFI, PGF, ECSC and JSIS)	EIB manages the assets of : CPF Legacy portfolios linked to FIs	ECFIN manages the assets of the portfolios out of scope (BUFI, PGF, ECSC and JSIS)	EIB manages the assets of CPF Total: same as scenario A
Option 2: EIB manages CPF	Total: €6 bn in-house (+ Steering and monitoring outsourced portfolios €28 bn)	Total: €28 bn	Total: same as scenario A	
Option 3: Two asset managers with same AMGs and benchmarks	ECFIN manages the assets of : % of CPF Portfolios out of scope (BUFI, PGF, ECSC and JSIS) Total: €X + 6 bn in-house (+ Steering and monitoring outsourced portfolios €Y + 3bn)	EIB manages the assets of : Remainder of CPF Legacy portfolios linked to FIs Total: €X*+ 3 bn	ECFIN manages the assets of : % of CPF Portfolios out of scope (BUFI, PGF, ECSC and JSIS) Total: €Y + 6 bn in-house (+ Steering and monitoring outsourced portfolios €Ybn)	EIB manages remainder of the assets of CPF Total: €Y* bn

5.2 Analysis of the options and scenarios

Both organisations have demonstrated themselves as being capable of managing the EU assets. The analysis presented in the previous sections suggests that neither organisation has a significant relative advantage or disadvantage in terms of its governance structure and accountability framework, IT infrastructure, expertise, overall performance against objectives, risk management or reporting capabilities. Both organisations have demonstrated the capacity to scale up their operations to handle a significant increase in the size of EU-AUM under the CPF. Potential synergies with wider resources or activities are also not a decisive factor.

We further note that the asset pool is a limited and homogeneous pool and we see both organisations as being capable of managing all asset classes that are currently included in the various portfolios (and are likely to be included in the CPF portfolio in future). From this perspective, no conclusion on the (optimal) split of assets between the two institutions under Option 3 can be drawn.

Our assessment (of options)[90], summarised below, is also a principle-based consideration of the in-house versus outsourcing decision. By definition, in-house decision avoids the risk of a principal-agent problem and allows for a more hands-on approach. Having said that, measures can be put in place to mitigate the conflict of interest risks associated with the principal agent relationship. None of the two models guarantees better outcomes. The analysis in this report shows that the Commission

[90] Note that for the sake of simplicity and given the small differences in size of assets between scenario 1 and 2, the qualitative analysis of advantages and disadvantages makes no distinction between scenarios.

can manage asset management activity at a lower cost, with returns which have historically been higher (when looking at comparable portfolios with longer history)[91].

It is also worth bearing in mind that given the institutional responsibilities of the Commission, it will always retain responsibility for the ultimate management of EU assets including the development of guidance on the key parameters of portfolios, even when the asset management function is outsourced. By way of reference, organisations such as the ESM and the EIB have not outsourced their asset management function.

We find that a major differentiating factor is cost. The estimated cost of managing the assets in-house by the Commission (€4.8 - €6.3 million) are significantly lower in absolute terms as compared to the fees that will be charged by the EIB (€9.9 million or higher in case legacy portfolios are maintained outside the CPF). However, the cost differential should not be the only decisive factor. In the view of the study team, it is ultimately a strategic decision on which option to choose going forward. Other considerations, such as risk diversification, having healthier competition, etc., may also play a role.

5.2.1 Option 1: Inhouse management by the Commission

Table 10. Costs

Scenario A: legacy portfolios outside the CPF	Scenario B: legacy portfolios folded in within the CPF
European Commission costs Direct management of assets of the CPF by the EC: 1.4 bps of 31 billion AMDS cost: ~€ 500K **EIB fees** Management of legacy portfolios by the EIB: 5 bps of 3 billion ***Estimated total (range): €6.3 million*** per year	**European Commission costs** 1.4 bps of 34 billion ***Estimated total: €4.8 million*** per year

<u>*Notes and caveats:*</u>

- *The FAFA is subject to revision in 2020. The fee range provided for the purpose of this study by the EIB is indicative only. No revised fee schedule has been approved by the EIB management committee as yet.*
- *The costs provided by the Commission were estimated on best efforts basis. These are of indicative nature, due to the uncertainties linked to the CPF design and implementation*
- *The costs exclude external costs as custody fees which will be charged to the fund for both – EC and EIB.*

Advantages

The advantages of Option 1 are as follow:

[91] In particular, the EIB managed the RSFF portfolio which has historically shown a lower performance.

- A fully-fledged asset management infrastructure is in place at the Commission, which would be further utilized.
- There would be economies of scale, especially under scenario B (under this scenario, legacy portfolios are assumed to be folded in within the CPF).
- This is the cheapest option for the management of the CPF portfolio both in absolute and relative terms.
- ECFIN staff currently involved in the oversight of external asset management mandates, could be reallocated to asset management and risk management/control function. Additional recruitment needs would thus, be limited by the possibility to redeploy staff currently in charge of AMDS functions.
- In-house decision would allow a more hands-on approach, give access to real time information on risks and performance of the entire CPF portfolio and lower the number of steps and controls that have to be taken for any action (without necessarily guaranteeing a better outcome).
- In-house decision avoids the risk of a principal-agent problem, although in practice mitigation measures can be put in place when outsourcing.
- The Commission has recently gained experience with developing and managing pooled funds, relying fully on in-house expertise.
- For unforeseen events / in case of crisis management which cannot be foreseen in AMGs, it could be quicker to react in-house, and e.g. amend the guidelines as seen fit.

Disadvantages

- Full reliance on infrastructure and people in a single organisation – all eggs in one basket" argument.
- Option 1 does not create healthy competition and there are some risks associated with a monopoly situation (complacency, missing opportunities in terms of challenging and benchmarking internal thinking which can to some extent be mitigated by the organisation of workshops and peer reviews).

5.2.2 Option 2: Management of CPF by the EIB

Table 11. Costs

Scenario A: legacy portfolios outside the CPF	Scenario B: legacy portfolios folded in within the CPF
EIB fees FAFA schedule based on 25 billion + 3 billions in smaller portfolios: estimated cost would depend on the number / size of portfolios to be managed separately but will be higher than for scenario B	**EIB fees** FAFA schedule based on 28 billion: 2.11 bps or ~€ 5.9 million under scenario B (estimated cost for scenario would depend on the number / size of portfolios to be managed separately)
European Commission costs 5 bps of 6 billion for assets under direct management by DG ECFIN: €3 million € 1 million cost for monitoring outsourced management	**European Commission costs** 5 bps of 6 billion for assets under direct management by DG ECFIN: €3 million € 1 million cost for monitoring outsourced management
Estimated total (range): *Higher than for scenario B*	***Estimated total (range): €9.9 million***

Notes and caveats:

- *The FAFA is subject to revision in 2020. The fee range provided for the purpose of this study by the EIB is indicative only. No revised fee schedule has been approved by the EIB management committee as yet.*
- *The costs provided by the Commission were estimated on best efforts basis. These are of indicative nature, due to the uncertainties linked to the CPF design and implementation.*
- *The costs exclude external costs as custody fees which will be charged to the fund*

Advantages

The advantages of Option 2 are as follow:

- A fully-fledged asset management infrastructure is already in place at the EIB.
- Economies of scale are expected to be reflected in the fee schedule, especially under scenario B (under this scenario, legacy portfolios are assumed to be folded in within the CPF.
- The CPF could benefit from EIB core banking activities (in relation to repos). This is however, not a decisive advantage.
- EIB has more experience investing in derivatives (currency derivatives, interest rate derivatives) which could be useful to increase flexibility when adjusting the risk of the portfolio.
- EIB has longer experience of managing pooled funds (using a model where the main aspects which are specific to the management of pooled funds, e.g. valuation and accounting of shares of participating mandates, are outsourced by the EIB to an external contractor).

5.2.2.1 Disadvantages

- The option is more expensive both in absolute and in relative terms.
- There are management and other costs inherently associated with outsourcing, in particular:
  - There is a need to preserve an appropriate level of expertise at the Commission to be able to oversee and monitor effectively the management of the CPF, thereby limiting the savings which can be made on its side;
  - There would be management and outsourcing costs relating to initial negotiations on conditions for delegated management to EIB (in addition to the ongoing coordination costs which are captured under the cost criteria, amounting to EUR 1 million);
  - In addition, ECFIN will need to keep asset management capabilities for the portfolios which are not absorbed into the CPF. This asset management infrastructure would eventually become under-utilised under Option 2.
  -
- Full reliance on infrastructure and people in a single organisation – all eggs in one basket” argument.
- Option 2 does not create a healthy competition and there are some risks associated to a monopoly situation (complacency). In particular, there is a risk that dependency on an external fee-charging asset manager could make the Commission vulnerable to progressive fee increases.
- Since the EIB will no longer be the sole implementing partner for guarantee programmes under InvestEU and NDICI, Option 2 would necessitate providing

the EIB with access to information on calls of other implementing partners, thus raising confidentiality issues.

5.2.3 Option 3: Joint management

Table 12. Costs

Scenario A: legacy portfolios outside the CPF	Scenario B: legacy portfolios folded in within the CPF
Costs likely to be higher than Option 1 but lower than Option 2	
Estimated total (range): Not available	

Advantages

The advantages of Option 3 are as follow:

- Splitting the assets across two organisations is a form of risk dilution as dependency on one asset manager is avoided.
- Given that the two institutions would share the same AMGs and that over time their performance could be benchmarked, it would create healthy competition and avoid the pitfalls of a monopoly situation (e.g. complacency).
- There is a possibility to divide the assets in a manner that would maximise the economies of scale for the EU budget (for example, by specialisation in managing a particular asset class, although, given that asset pool is a limited and homogeneous pool - comprising corporates, financials, or government bond - it limits the benefit that can be derived from specialisation).
- It allows leveraging the advantages of the two institutions (e.g. use of different IT platforms, wider pool of expertise, reliance on two different Business Continuity Plans).
- It would ensure the CPF benefits from the EIB's core banking activities (in relation to repos) and the Bank's experience of investing in derivatives.

5.2.3.1 Disadvantages

- Option 3 would be less efficient from an operational point of view as it involves the pooling of assets managed by two independent entities. This will call for innovative solutions for attributing performance if differences arise in the implementation of the common investment strategy by the two asset managers. For example, for risk measurement and for performance calculation and reporting, CPF data of the EIB and the Commission will have to be aggregated at least on a monthly basis, and some additional risk monitoring may be needed at consolidated level, on top of what is done at the EIB and the Commission on a standalone basis.
- This option may prove cumbersome and costly from an operational point of view, especially considering that the EIB and the Commission infrastructures are not integrated and especially in the design phase. Other back- office issues include valuation issues (a common pricing system, possibly needing to be provided by a shared external administrator). These operational issues will need to be handled by a governance system for managing and reconciling performance/valuation differences between the two pools. This option will

therefore, require careful elaboration from an operational and governance perspective.

- In the absence of an objective basis for dividing responsibilities between the two asset managers, the division of assets could prove arbitrary and contentious particularly if not aligned with ex-post performance.

Costs would be higher than Option 1. The need to maintain a monitoring and oversight function would limit the scope for economies of scale on the Commission side.

Annex 1 Interviews and meetings undertaken

- Kick off meeting with the Steering Group - 30 April 2019
- Scoping interviews with ECFIN L1, L2, L3, R3 and Compliance Officer - 8 May and 14 May 2019
- Introductory meeting at the European Investment Bank, together with the European Commission - 6 May 2019
- Group scoping meeting at the European Investment Bank (with PM, RM, FI-MO, BOT, FC and FI-COOR), 14 May 2019
- Inception meeting with the Steering Group – 24 May 2019
- In-depth interview with EIB (BOT, FI-COOR and FC) - 28 May 2019
- In-depth interview with EIB (PM, RM FI-MO) - 4 June 2019
- ECFIN group meeting (with ECFIN L1, L2, L3, R3 and Compliance Officer) – 5 June 2019
- Additional clarification meeting with ECFIN – 14 June 2019
- Additional clarification meetings with the EIB – 19 June 2019, 8 July 2019 and 27 August 2019
- Interim meeting with the Steering Group – 28 June 2019
- Workshop with the Commission to discuss the Draft Final Report – 23 July 2019
- Workshop with the Commission and EIB services – 25 September 2019
- Meeting with the steering group – 25 October 2019

Annex 2 Mapping of the portfolios managed by the EC and portfolios outsourced to the EIB

mapping portfolio FINAL.xlsx

Annex 3 List of assembled documentation

Updated list of assembled documentati

Annex 4 Reporting

Table 13. Main reports available from ECFIN

Author	Name of the report	Content	Recipient	Frequency
Risk management	Annual Report on the Management of Off- Budget Operations (OBO)	Overview of the financial risk exposure and the Risk Management activities linked to Off-Budget Operations	Recipients: Director General ECFIN	Annual
Risk management	Quarterly Risk Report related to the Treasury and Borrowing and Lending Activities	Overview of key statistics, including inter alia: Volumes of assets under direct management (AUM) Market risk, performance, recent market events Credit risk including credit quality of the portfolios, exposure by issuer, FX exposure Compliance with Investment Guidelines and respect of limits Operational risk Borrowing and lending activities: outstanding nominal amounts, outstanding derivatives Other important matters, if any	Recipients: Director ECFIN-L; Principal Adviser; Director ECFIN-R Cc: Director General ECFIN; Deputy Director General ECFIN L	Quarterly
Risk management	Monthly Risk and Performance Report	snapshot of performance and risk drivers and performance attribution Portfolio composition Risk measurement data Monthly performance measured against benchmark, where available and applicable Performance analysis indication of limit breaches	Recipients: TMB Members Cc: Director General ECFIN; Deputy Director General ECFIN L; Cabinet members	Monthly
Investment Committee	Investment Committee report to TMB	Summary of market developments and their effect on the tactical positioning of the portfolios managed by ECFIN.	Recipients: TMB Members	Every two months
Front Office	Front Office Report	More detailed version of the Investment Committee report	Not used for official communication but only for analytical purposes	Every two months
Investment Committee	Investment Committee's meeting dashboard	Performance review of previous period, portfolio structure and risk factors	ECFIN L Director and Principal Adviser	Weekly
Risk management	Ad-hoc reports	Anomalies to the parameters set by Senior Management must be immediately reported.	Head of Unit L-1, L-2, L-3, as appropriate	Ad hoc

Sources: ECFIN financial risk management policy, ECFIN asset management Governance document, example reports and minutes of the TMB

Table 14. Main reports available from EIB to ECFIN

Author	Name of the report	Content	Recipient	Frequency
Financial Control	Annual audited financial statements	Full set of financial statements prepared under EU accounting rules alongside with the management declaration of assurance, verified by an independent external auditor.	AMDS	Annually
Risk management	Quarterly report – individual reports	This is a report on report on the investments made for the account of the Financial Instrument Account, the risks and the performance. Content includes: Portfolio overview Credit risk Market risk Performance Portfolio activity Limit monitoring and other information	AMDS	Quarterly
Risk management	Quarterly report – aggregated version		AMDS	Quarterly
Financial Control	Monthly "marked-to-market" valuations – as per FAFA requirement	EIB provides monthly valuations on an individual portfolios basis and on each individual asset, with the corresponding ratings of certain investments where applicable	AMDS	Monthly
Risk management	Ad-hoc reports	Report on any other relevant information reasonably requested by the Commission, e.g. reporting of limit breaches and information to the mandator within 5 business days.	The Designated Service and the AMDS	Ad-hoc

Sources: FAFA, example reports

Table 15. Detailed list of risk and performance indicators used by the EC and EIB

Content	ECFIN (Monthly Risk and Performance Reports)	EIB (Quarterly reports)
Portfolio composition	Total Market Value Total Market Value (ex. cash and callable deposits) Total Number of Counterparties (Parent Level) Concentration of top 10 Issuer Concentration Coefficient % Weighted Average Credit Rating YTM (bps) Portfolio and benchmark weights (% by asset class) Portfolio by rating (%) Top 10 exposures per issuer (parent level), including cash Portfolio allocation and relative allocation by country of risk (%)	Nominal value (cash included) Total market value (cash included) Composition of the portfolio per asset class, country, credit rating, maturity profile top 10 exposures per top parent of issuer/guarantor
Market and Credit Risk Analysis	**Market Risk Indicators *Modified Duration*** Portfolio Modified Duration Benchmark Modified Duration Active Position (years) DV01 Portfolio ***Credit Spread Duration*** Portfolio Spread Duration Benchmark Spread Duration Active Position (years) CR01 Portfolio	***Market risk*** Portfolio Modified Duration, by bucket, asset class and sub-portfolio Benchmark Modified Duration, by bucket, asset class Active Position (years) PV01 IR Exposure Spread Duration **NB:** value at risk is included in Performance chapter
	Stress Tests ***Term Structure Stresses***	
	Impact of Yield Curves (bps) on P&L ***Credit Spread Stresses*** Impact of Credit Spread (bps) on P&L	
	Value at Risk Indicators	
	Market Value-at-Risk incl. VaR (Hist3Y), VaR (param), VaR (MC), CVaR (Hist3Y), CVaR (param), CVaR (MC) Credit Value-at-Risk (1 year default risk) FX Exposure	
Performance	Monthly return of portfolio and benchmark, excess return YTD return of portfolio and benchmark, excess return	Monthly return of portfolio and benchmark, excess return Split by asset class, rating and maturity bucket YTD return of portfolio and benchmark, excess return YTD annualised return of portfolio and benchmark, excess return 12 month rolling return of portfolio and benchmark, excess return 3 year rolling return of portfolio and benchmark, excess return Other performance measures (12 month rolling) (tracking error volatility, information ratio, Sharpe ratio, value at risk, expected shortfall)
Performance	Absolute and relative analysis of return factors for	Qualitative comments on return factors made by
Analysis	portfolio and benchmark	Portfolio Management
	Total Curve Return [Yield Curve Change (bps);	
	Yield Curve Carry]	
	Total Spread Change Return [Allocation Effect;	

	Selection Effect]	
	Transaction Return	
Portfolio activity		-Short term portfolio: purchases and sales of securities -Long term portfolio: purchases and sales of securities -Short term portfolio: redemptions of securities -Long term portfolio: redemptions of securities
Indication of limit breaches	Annex with compliance rules violations Note: Compliance with Investment Guidelines addressed in separate quarterly risk report	List of limit breaches List of transactions with late settlement: For each end of month during the quarter: Credit limits and concentration limits per issuer Concentration limits per issue Portfolio by credit rating

Annex 5 Expertise

Table 16. Background of RM and PM staff at the EIB

EIB division	employee	Highest degree	Professional qualification	number of years spent in: same function	total capital markets	type of previous workplaces
risk management	1	PhD in business administration, finance and banking		5	19	EC, commercial bank, central bank, university professor
	2	Master of science in finance and banking	Chartered Financial Analyst (CFA)	8	8	central bank, corporate
	3	Master of sciences and math		10	10	private asset management
portfolio management	4	Master of sciences in economics	Financial postgraduate (EFFAS - European Federation of Financial Analyst Societies)	10	17	central bank, commercial bank, NGO
	5	Master in Economics	Chartered Financial Analyst (CFA)	14	17	commercial bank, central bank
	6	Master of science in business engineering and in finance	Professional Risk Manager (PRM), Chartered Financial Analyst (CFA) candidate	2	6	N/A

Table 17. Background of RM and PM staff at the EC

Commission AM activity	employee	Highest degree	Professional qualification	number of years spent in: same function	total capital markets	type of previous workplaces
risk management	1	PhD in Economics	Chartered Financial Analyst (CFA), Certified Credit Risk Manager (Frankfurt School of Finance)	1	1	
	2	PhD in Economics, MSc in Finance	Financial Risk Manager (FRM)	8	10	

	3	Master in Finance, MBA		5	5	private investment bank and rating agency.
	4	Master in Business Engineering	Financial Risk Manager (FRM), Certified Internal Auditor (CIA)	2	15	commercial bank, consulting firm and EIB
	5	PhD in Finance	Professional Risk Manager (PRM), Chartered Financial Analyst (CFA)	3	9	University professor
	6	Master in Science, Mathematics		9	20	commercial bank
portfolio management	7	Master in Business Administration, Major in Finance		7	7	Investment bank private equity fund).
	8	Bachelor		1	12	Private asset managemen t company and central bank
	9	Bachelor		6	6	Commercial bank
	10	Master in Economics, Finance and management		17	24	Corporate treasury
	11	Master in Finance	Chartered Financial Analyst (CFA)	4	8	Project finance, private equity fund , consulting firm
	12	Master in Mathematical economics,	Chartered Financial Analyst (CFA)	0.2	16	Central bank
	13	MBA	Chartered Financial Analyst (CFA)	9	9	Commercial bank
	14	Master Economics & Business Management	Chartered Financial Analyst (CFA)	2	14	Investment bank, markets analysis firm, , consulting firm
	15	Master in applied macroeconomics		14	29	Central bank,

		, MSc in Finance, PhD in Finance			university teacher
	16	Master of Research in Finance , Master in Business management	6	17	Private and public asset management

Annex 6 Performance

A6.1 Performance Investment guidelines

Table 18. Portfolios managed by ECFIN

	European Fund for Strategic Investments Guarantee Fund (EFSI GF) (ECFIN)	Budgetary Fines (BUFI) (BUDG)	Participants' Guarantee Fund for FP7 and H2020 (PGF) (ECFIN)	European Coal and Steel Community in liquidation (ECSC i.L.) (RTD)	RCAM, Joint Sickness Insurance Scheme (JSIS) (JSIS)	European Fund for Sustainable Development (EFSD) Guarantee Fund (DEVCO)
Source	AMG_EFSI and Risk Strategy	SLA_BUFI and sideletter 2016 and Risk Strategy	SLA_H2020 PGF and Risk Strategy	AMG_Council Decision 2003 Financial Guidelines of ECSC.pdf.pdf + Council Decision 2008 and Risk Strategy	AMG_RCAM and Risk Strategy	AMG_EFSD GF and Annex I and II and Risk Strategy
Date (first agreement)	2016	2009	Repatriated to ECFIN in 2014	2003	2004	2016
Type	Budgetary guarantee	Other	Other	Other	Other	Budgetary guarantee

	European Fund for Strategic Investments Guarantee Fund (EFSI GF) (ECFIN)	Budgetary Fines (BUFI) (BUDG)	Participants' Guarantee Fund for FP7 and H2020 (PGF) (ECFIN)	European Coal and Steel Community in liquidation (ECSC i.L.) (RTD)	RCAM, Joint Sickness Insurance Scheme (JSIS) (JSIS)	European Fund for Sustainable Development (EFSD) Guarantee Fund (DEVCO)
Related to	Budgetary guarantee which supports additional investments in the EU and access to finance for small companies. The Guarantee Fund has been established to provide a liquidity cushion against potential losses incurred by the EIB in relation to its financing and investment operations under the EFSI Agreement	Fines imposed and provisionally cashed from 2010 onwards are invested in this specifically created portfolio. The main objectives of the portfolio are the reduction of risks associated with financial markets and the equal treatment of all fined entities by offering a guaranteed return calculated on the same basis.	Provides security against defaults in payment to H2020 beneficiaries. The beneficiaries' liability is limited to their own debts.	Assets of the Research Fund for Coal and Steel, which were created in the context of the winding- up of the ECSC	A joint fund for the sickness insurance scheme of all agents subject to the Staff Regulations. The scheme's expenditure (reimbursement of medical costs) is managed by the different Settlement Offices, while its financial reserve is managed by DG ECFIN.	Budgetary guarantee designed to leverage additional financing for projects in partner countries. The GF constitutes a liquidity cushion from which the eligible counterparts shall be paid in the event of a call on the EFSD Guarantee pursuant to the relevant EFSD guarantee agreement.

	European Fund for Strategic Investments Guarantee Fund (EFSI GF) (ECFIN)	Budgetary Fines (BUFI) (BUDG)	Participants' Guarantee Fund for FP7 and H2020 (PGF) (ECFIN)	European Coal and Steel Community in liquidation (ECSC i.L.) (RTD)	RCAM, Joint Sickness Insurance Scheme (JSIS) (JSIS)	European Fund for Sustainable Development (EFSD) Guarantee Fund (DEVCO)
Principles of management	To provide sufficient liquidity in relation to the potential guarantee calls, while still aiming at optimising the return and risk level that is compatible with maintaining a high degree of security and stability.	ensure that funds are easily available when needed, while under normal market conditions, the investment aim is to deliver a return which on average is in line with the return of the BUFI Benchmark minus costs incurred, while preserving the nominal amount of the fines (capital preservation). However, it is acknowledged that the objective of attaining a return floored at zero, irrespective of market conditions, may entail positive or negative deviations from the Benchmark performance.	The management of the Fund shall aim at maximizing the return subject to the risk limitations set out in Annex 1 and maintaining a high degree of security and stability over the longer term. Particular care shall be taken to ensure that the managed assets provide sufficient liquidity in relation to the commitments to which the Fund must respond.	The management of the assets should be aimed at the highest possible yield that is compatible with security The entire capital should be preserved intact	The main function of the reserves shall be to cover any deficit which may arise.	To provide sufficient liquidity in relation to the potential guarantee calls, while still aiming at optimising the return and risk level that is compatible with maintaining a high degree of security and stability.

Table 19. Portfolios managed by EIB with ECFIN as AMDS

	Guarantee Fund for External Actions (GFEA) (ECFIN)	**Risk Sharing Finance Facility (RSFF) (RTD)**	**Risk Sharing Instrument for Innovative and Research oriented SMEs and small Mid-Caps (RSI) (RTD)**	**Innovfin treasury (RSFF II) (RTD)**	**InnovFin SME Guarantee Facility (RSI2) (RTD)**	**Connecting Europe Facility (CEF) (PBI-TEN-E, PBI-TEN-ICT, PBI-TEN-T) (MOVE, ENER, CNECT)**	**Innovfin Equity facility (IFE) (RTD)**	**NER300 (CLIMA)**
Source	AMG_GF (Supplementary agreement 5)	AMG_RSFF (Amendment 4)	AMG_RSI (Amendment 5)	AMG_RSFF II and Amendment 7	AMG_RSI II and Amendment 7	AMG_CEF	AMG_IFE	AMG_NER300
Date (first agreement)	1994	2007	2007	2014	2014	2014	2014	2013
Type	Budgetary guarantee	Financial instrument	Financial instrument	Financial instrument	Financial instrument	Financial instrument	Financial instrument	Other
Related to	Backs loans and loan guarantees granted to non-EU countries, or to finance projects in non-EU countrie. The Guarantee Fund's objectives are to help protect the EU budget against the risks associated with such loans.	Financial instrument aiming to foster investment in research, technological development and demonstration, and innovation. Used to provision financial risk for loans and guarantees given by the EIB to eligible research projects.	Financial instrument created as part of the RSFF, providing guarantees to banks and leasing companies for loans and financial leases to research- based SMEs and small Mid-Caps	Horizon 2020 Financial instrument aiming to foster investment in research, technological development and demonstration, and innovation. Used to provision financial risk for loans and guarantees given by the EIB to eligible research projects.	Horizon 2020 financial instrument providing guarantees and counter-guarantees on debt financing between EUR 25 000 and EUR 7.5 million, in order to improve access to loan finance for innovative SMEs and Small Midcaps	Debt instrument established with the objective to facilitate infrastructure projects' access to financing in the sectors of transport, telecommunications and energy. It offers risk-sharing for debt financing in the form of senior and subordinated debt or guarantee as	Financial instrument providing equity investments and co-investments to or alongside funds focusing on companies in their pre-seed, seed, and start- up phases operating in innovative sectors covered by Horizon 2020, including life sciences, clean energy and high-tech.	Funding programme for carbon capture and storage demonstration projects and innovative renewable energy technologies. The Facility covers two activities: the monetisation of EU Allowance Units (EAU) and the management and disbursement of

	Guarantee Fund for External Actions (GFEA) (ECFIN)	Risk Sharing Finance Facility (RSFF) (RTD)	Risk Sharing Instrument for Innovative and Research oriented SMEs and small Mid-Caps (RSI) (RTD)	Innovfin treasury (RSFF II) (RTD)	InnovFin SME Guarantee Facility (RSI2) (RTD)	Connecting Europe Facility (CEF) (PBI-TEN-E, PBI-TEN-ICT, PBI-TEN-T) (MOVE, ENER, CNECT)	Innovfin Equity facility (IFE) (RTD)	NER300 (CLIMA)
						well as support for project bonds		cash received via the EAU.
Principles of management	Same as in FAFA, "need to ensure that the managed assets provide sufficient liquidity in relation to the commitments to which the assets must respond, while still optimising the return that is compatible with maintaining a high-degree of security and stability over long-term."	need to be taken to ensure that the managed assets provide sufficient liquidity in relation to the commitments (…) while still optimising the return that is compatible with the risk limitations set out under these guidelines.	preservation and protection of RSI Assets is of fundamental importance. aims at achieving a steady positive total rate of return by preserving capital and managing the risk-return relationship.	Prudence, liquidity in relation to the fund commitments while optimizing return. More precisely, "*need to ensure that the managed assets provide sufficient liquidity in relation to the commitments to which the assets must respond, while still optimising the return that is compatible with maintaining a high-degree of security and stability over long-term."* (source: FAFA, SCHEDULE IV, PART I)"				Same as in FAFA, "need to ensure that the managed assets provide sufficient liquidity in relation to the commitments to which the assets must respond, while still optimising the return that is compatible with maintaining a high-degree of security and stability over long-term."

A6.2 Portfolio composition

Table 20. EU Assets by asset type

	EIB total (EUR m)	EIB total (%)	EC total (EUR m)	EC total (%)	Total EU assets (EUR m)	Total EU assets (EUR %)
SSA	3,593	44%	6,923	58%	10,516	52%
Covered bonds / Financials / Corporates	4,496	55%	4,207	35%	8,703	43%
Cash / UF	35	0%	806	7%	841	4%
	8,124	100%	11,936	100%	20,060	100%

Sources: aggregated risk report Q1 2019 for the EIB; TAA April 2019 for the EC.

Note: Breaking down the category "Covered bonds / Financials / Corporates " is not possible since, as per ECFIN classification, Financials are either classified as covered bonds or corporates (for unsecured financials)

A6.3 Portfolio grouping

The following criteria were used:

- Investment Universe: Eligible asset classes and specific restrictions concerning their share on the portfolio, i.e. minimum share of Sovereigns, Local Governments and Supranational Organizations, maximum share of Corporate, Financial or Covered bonds, etc.

Note that most of the portfolios share a similar investment universe in terms of eligible asset classes, however some of them bear restrictions concerning the proportion that some asset classes can have. Important exceptions are:

- EC-BUFI: Can only invest in securities issued by EUR Sovereign and Sub-Sovereigns, leaving aside asset classes like Corporate and Covered bonds;
- EC-EFSI, EIB-RSI2, EIB IFE: Multi-currency portfolios: EC-EFSI invests in EUR and USD whereas EIB-RSI2 invests in currencies linked to the underlying operations (e.g. USD, GBP, NOK);
- Length of common periods: The portfolio have been in existence for different periods. Comparison is made on a period-equivalent basis, by privileging the longer-term history as required in the evaluation TORs;
- Minimum share of the portfolio's short-term bucket (securities with duration lower than 1 year). This liquidity constraint may be an important contributor to differential returns;
- Credit rating constraints: Some portfolios are more restrictive than others concerning credit rating;
- Restrictions on maturity/duration: Portfolios have different restrictions on the maximum permissible duration (or even maturity) of eligible instruments.

Based on the precedent criteria, we identified the following groups:

Table 21. Rationale for the grouping of each portfolio

Group	Reason
Group I: ECSC* (EC), RCAM (EC), GFEA (EIB) RSFF (EIB)	These portfolios have strict minimum requirements (50% except for RCAM 60%) of bonds issued by Sovereigns and SSAs; Long series of data (at least 10 years) available for the portfolios in this group; Rating criteria, similar across these portfolios. Although most investments are restricted to the AAA-AA/A category, RCAM can also invest in BBB rated assets. RSFF can invest in BBB, but for SSA only. Note that between 2009 and 2014 RSFF kept a high percentage of assets as liquid assets with a maturity of less than 1 year. This was required in 2009/10 and 2014, but not in the other years, and it has therefore not been a reason for exclusion from Group 1. More specifically, the 2009 AMGs stated that "initially a minimum 40% of assets shall be placed in a monetary portfolio to cover the projected short term (less than 1 year) outflows from the EU RSFF account, such percentage to be reviewed (considering in particular that it is correlated to the disbursement forecasts) and, if necessary, amended in the annual investment strategy". In subsequent years this was indeed amended by the investment strategies to be EUR 100 million or around 10%-13% of the portfolio. Other relevant contextual factors include that: In October 2014, about a third of the portfolio was redeemed. In 2019, RSFF went into run-off mode.

Group II: PGF (EC), CEF (EIB), NERAM (EIB) and RSFF2 (EIB)	These portfolios have similar investment universe (Sovereigns, SSA, covered, corporates and financials) as well as rating scale, which they share with portfolios in Group I, but they differ in a key aspect: they do not have the minimum share requirements (of 50% to 60%) concerning Sovereigns and SSAs; Shorter series of data (these portfolios have between 3.3 and 5.4 years of data); Similar rating requirements (In the category "bonds of other legal entities" PGF can invest up to Baa3 rated securities whereas EIB portfolios can invest up to A3); In April 2019 PGF had c.11% exposure to BBB rated assets. PGF portfolio was built out of transferred assets from EIB-FP7 portfolio, which included a high proportion of FRNs and other illiquid assets (inflation linkers) which imposed restrictions on its management for the initial years which became a drag on total return.
Group III: Other portfolios (not comparable between them): BUFI (EC), EFSI (EC), RSI (EIB), RSI2 (EIB), RSI (EIB), IFE (EIB)	BUFI: The Investment Universe is restricted to securities issued by Sovereign and SSAs; EFSI and RSI2: Multi-currency portfolios: EUR and USD for EFSI whereas for RSI2 the investment currencies are linked to the signed commitments; RSI: It has characteristics of a Money Market Fund given the short duration of securities that can be bought (740 days is the maximum tenor). IFE: Multi-currency. The maximum allowed duration is 3 years and has a minimum allocation to liquidity bucket of 40%.
Outside Scope: Group IV: Portfolios that ceased to exist, all EIB:	FP7: transferred to EC in March 2014; LGTT, PBI-E, PBI-T and PBI-ICT: blended into CEF in December 2015.

**ECSC had a limit of at least 40% investments in the short-term bucket (less than 1-year duration) until year 2015, when it was lowered to 20%.*

The following table shows the period that each portfolio has been analysed and its grouping:

Table 22. List of portfolios by manager, date of available data for analysis and grouping

Direct Manager	Portfolio	Since*	Until	Group
European Commission	ECSC	31-Jan-08	30-Jun-19	1
	BUFI	30-Sep-10	30-Jun-19	3
	PGF	01-Apr-14	30-Jun-19	2
	EFSI	12-Apr-16	30-Jun-19	3
	RCAM	31-Jan-09	30-Jun-19	1
EIB	GF	31-Dec-01	30-Jun-19	1
	RSFF2	27-Aug-14	30-Jun-19	2
	RSFF	01-Jan-09	30-Jun-19	1
	CEF	01-Jan-16	30-Jun-19	2
	RSI	01-Jan-13	30-Jun-19	3
	NERAM	30-Nov-13	30-Jun-19	2
	IFE	01-Oct-15	30-Jun-19	3
	RSI2	28-Aug-14	30-Jun-19	3

From this table it results that only four portfolios (2 EC and 2 EIB) had available data the last 10 years. *The official monthly data available for the purpose of the analysis has been provided as of April 2009.

A6.4 Analysis of results for Group 3

Return & (Standard Deviation)	BUFI-EC	EFSI-EC	RSI-EIB	RSI2-EIB	IFE-EIB
July 2011-2012	*1.89% (0.18%)*				
July 2012-2013	*0.18% (0.11%)*				
July 2013-2014	*0.42% (0.05%)*		*0.23% (0.08%)*		
July 2014-2015	*0.15% (0.05%)*		*0.15% (0.09%)*		
July 2015-2016	*0.86% (0.11%)*		*-0.14% (0.10%)*	*1.11% (0.26%)*	
July 2016-2017	*-0.48% (0.26%)*	*-0.64% (0.37%)*	*0.35% (0.08%)*	*-0.57% (0.27%)*	*-0.24% (0.19%)*
July 2017-2018	*0.11% (0.25%)*	*-0.25% (0.27%)*	*-0.33% (0.04%)*	*0.10% (0.14%)*	*0.22% (0.13%)*
July 2018-2019	*1.45% (0.18%)*	*1.57% (0.21%)*	*-0.05% (0.06%)*	*1.01% (0.13%)*	*1.28% (0.18%)*

Note: Numbers in the data show annual return from the period starting 1 July until and including 30 June the following year. The standard deviation is monthly and not annualised. Please note that given the use of monthly observations, the standard deviation is based on a small amount of observations.

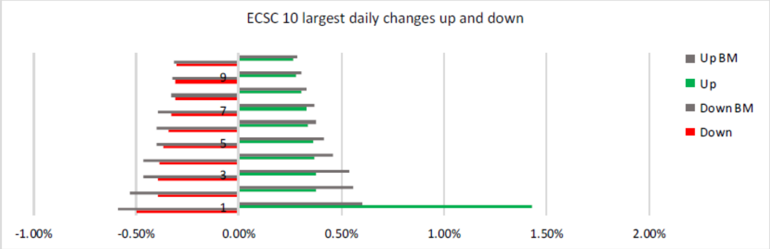
RSI2 and IFE data is based on EUR portfolio information.

A6.5 Analysis of each separate fund's performance data

ECFIN

ECSC	
Largest 1 day drop	-0.50%
Largest 1 day increase	1.43%
Largest 30 day drop	-2.48%
Largest 30 day increase	2.60%

ECSC 10 largest daily changes up and down

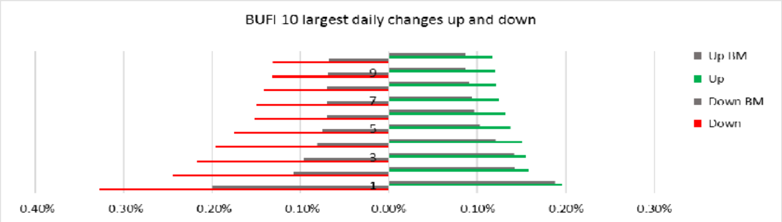


Notes

- Monthly performance data since 2008
- Daily performance data since 2011
- Largest increase of 1.43% in March 2012 – based on recovery of Greek bonds – non-investment grade bonds are reflected in BM, so main driver for outperformance in 2012
- Largest 30-drop of 2.48% in November 2011 bond sell-off when Italian yield surpassed 7% and benchmark went down 1.99%
- Largest 30-increase of 2.6% in November 2008 following response to Lehman default
- Largest increases and decreases generally below benchmark changes

BUFI	
Largest 1 day drop	-0.33%
Largest 1 day increase	0.20%
Largest 30 day drop	-0.61%
Largest 30 day increase	0.76%

BUFI 10 largest daily changes up and down

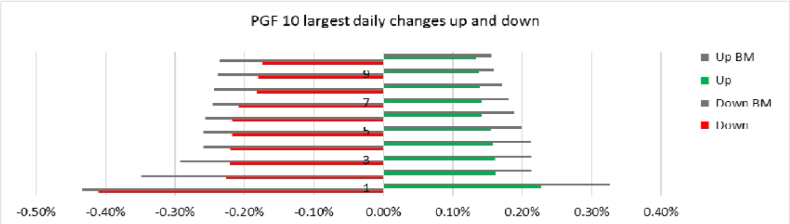


Notes

- Monthly performance data since Sep 2010
- Daily performance data since 2011
- Largest moves slighly larger than largest move of the benchmark
- Implicit objective of keeping return floored at zero vs negative benchmark returns over the years 2016 to 2019 year to date

PGF	
Largest 1 day drop	-0.41%
Largest 1 day increase	0.23%
Largest 30 day drop	-0.83%
Largest 30 day increase	0.68%

PGF 10 largest daily changes up and down

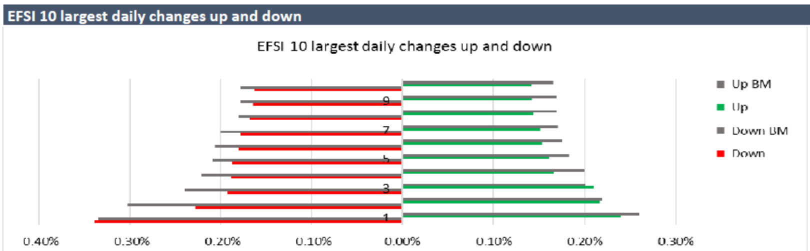


Notes

- Daily performance data since April 2014
- Largest moves slighly smaller than largest move of the benchmark

EFSI	
Largest 1 day drop	-0.34%
Largest 1 day increase	0.24%
Largest 30 day drop	-1.07%
Largest 30 day increase	0.79%

EFSI 10 largest daily changes up and down

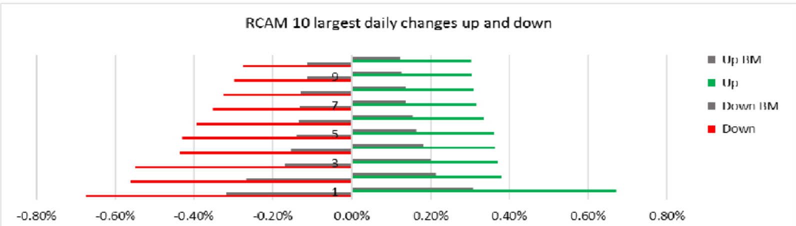


Notes

- Daily performance data since 12 April 2016
- Largest moves similar to the benchmark

RCAM	
Largest 1 day drop	-0.67%
Largest 1 day increase	0.67%
Largest 30 day drop	-1.89%
Largest 30 day increase	1.86%

RCAM 10 largest daily changes up and down



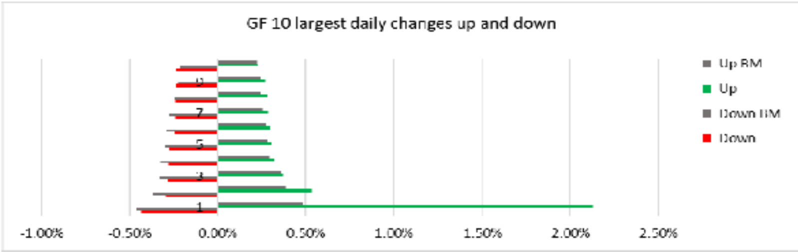
Notes

- Annual performance data since 2008, monthly data since 2009 and daily data since 2011
- Benchmark data only available since 2018, as mandator did not require benchmark
- Largest 30-drop of 1.89% in November 2011 bond sell-off when Italian yield surpassed 7%
- Largest 30-drop of 1.86% in December 2011 following correction of November sell-off

EIB

GF	
Largest 1 day drop	-0.50%
Largest 1 day increase	2.13%
Largest 30 day drop	-1.90%
Largest 30 day increase	2.65%

GF 10 largest daily changes up and down

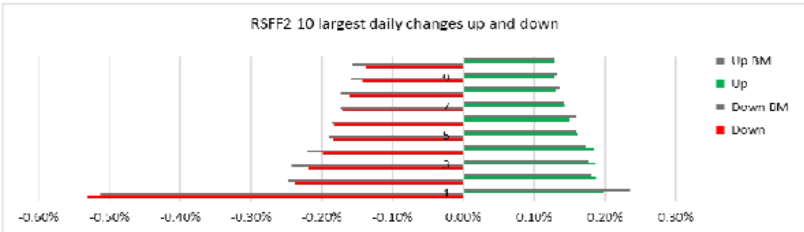


Notes

- Annual performance data since 2002
- Daily performance data since 2006
- Largest increase of 2.13% in March 2012 – based on recovery of Greek bonds – non-investment grade bonds are reflected in BM, so main driver for outperformance in 201
- Largest 30-day drop of 2.48% in November 2011, when benchmark went down 1.99%
- Largest increases and decreases generally around benchmark changes

RSFF2	
Largest 1 day drop	-0.53%
Largest 1 day increase	0.20%
Largest 30 day drop	-0.76%
Largest 30 day increase	0.70%

RSFF2 10 largest daily changes up and down

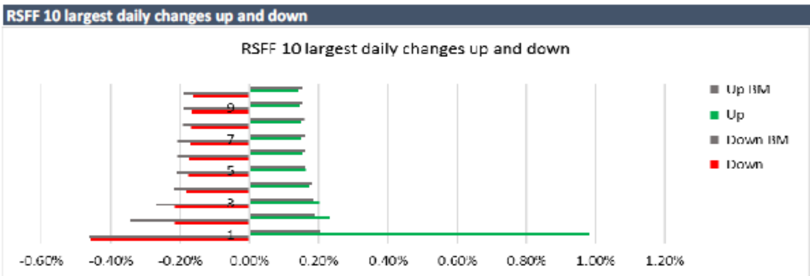


Notes

- Daily performance data since 27 August 2014
- Largest daily drop of 0.53% on 3 December 2015, when the ECB did not announce an expected extension of quantitative easing.
- Largest increases and decreases generally in line with benchmark changes

RSFF	
Largest 1 day drop	-0.46%
Largest 1 day increase	0.98%
Largest 30 day drop	-0.80%
Largest 30 day increase	1.33%

RSFF 10 largest daily changes up and down

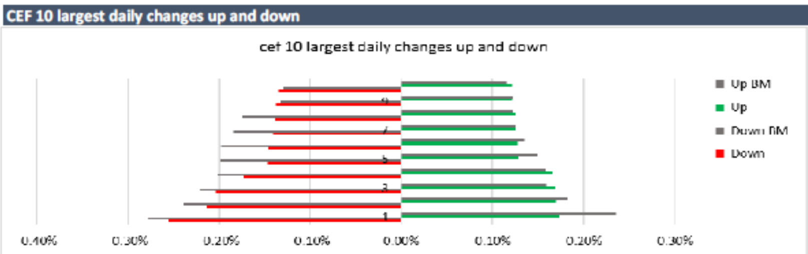


Notes

- Daily performance data since 2009
- Largest daily drop of 0.46% on 3 December 2015, when the ECB did not announce an expected extension of quantitative easing.
- Largest daily increase of 0.98% on 9 March 2012, based on recovery of Greek bonds – non-investment grade bonds are reflected in BM, so main driver for outperf
- Further largest increases and decreases generally in line with benchmark changes

CEF	
Largest 1 day drop	-0.26%
Largest 1 day increase	0.17%
Largest 30 day drop	-0.71%
Largest 30 day increase	0.70%

CEF 10 largest daily changes up and down

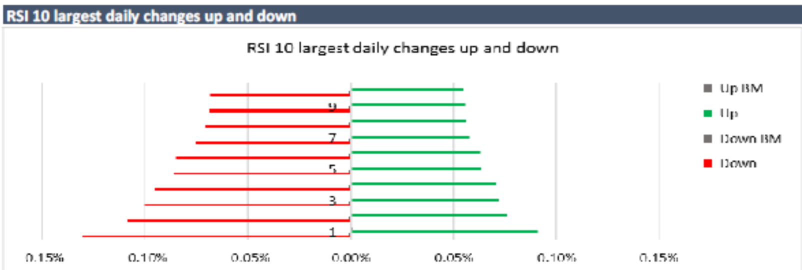


Notes

- Daily performance data since 2016
- Largest increases and decreases generally in line with benchmark changes

RSI	
Largest 1 day drop	-0.13%
Largest 1 day increase	0.09%
Largest 30 day drop	-0.32%
Largest 30 day increase	0.25%

RSI 10 largest daily changes up and down

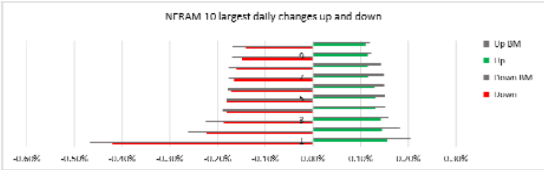


Notes

- Daily performance data since 2013
- Short duration fund (April 2019 duration is 0.38). Benchmark performance close to 0.

NERAM		Performance	
Largest 1 day drop	-0.42%	2008	
Largest 1 day increase	0.16%	2009	
Largest 30 day drop	-0.59%	2010	
Largest 30 day increase	0.62%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	0.16%	2013	-0.06%
		2014	1.88%
		2015	0.50%
		2016	1.24%
		2017	0.10%
		2018	-0.09%
		2019 Q1	0.52%

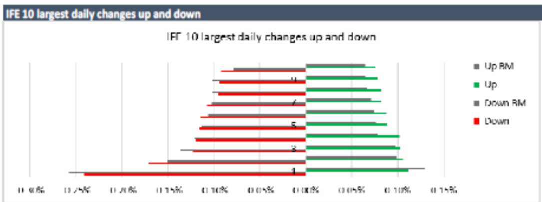
NERAM 10 largest daily changes up and down



Notes
- Daily performance data since 30 November 2013
- Largest increases and decreases generally in line with benchmark changes

IFE		Performance	
Largest 1 day drop	-0.24%	2008	
Largest 1 day increase	0.11%	2009	
Largest 30 day drop	-0.46%	2010	
Largest 30 day increase	0.38%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	0.14%	2013	
		2014	
		2015	0.16%
		2016	0.78%
		2017	0.07%
		2018	-0.13%
		2019 Q1	

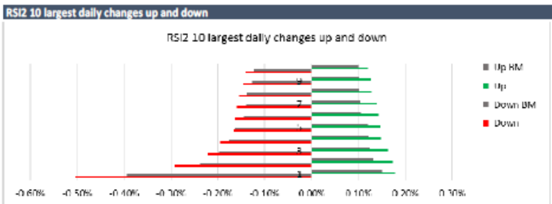
IFE 10 largest daily changes up and down



Notes
- Daily performance data since October 2015
- Largest increases and decreases generally in line with benchmark changes

RSI2		Performance	
Largest 1 day drop	-0.51%	2008	
Largest 1 day increase	0.18%	2009	
Largest 30 day drop	-0.71%	2010	
Largest 30 day increase	0.76%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	-0.17%	2013	
		2014	0.31%
		2015	0.51%
		2016	0.44%
		2017	-0.12%
		2018	-0.16%
		2019 Q1	

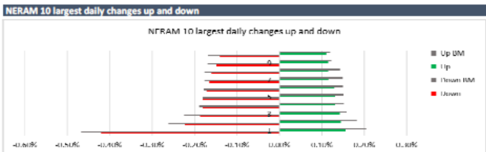
RSI2 10 largest daily changes up and down



Notes
- Daily performance data since 28 August 2014
- Largest daily drop of 0.51% on 3 December 2015, when the ECB did not announce an expected extension of quantitative easing.
- Largest increases and decreases generally in line with benchmark changes

NERAM		Performance	
Largest 1 day drop	-0.42%	2008	
Largest 1 day increase	0.16%	2009	
Largest 30 day drop	-0.59%	2010	
Largest 30 day increase	0.62%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	0.16%	2013	-0.06%
		2014	1.88%
		2015	0.50%
		2016	1.24%
		2017	0.10%
		2018	-0.09%
		2019 Q1	0.52%

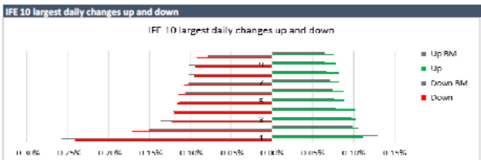
NERAM 10 largest daily changes up and down



Notes
- Daily performance data since 30 November 2013
- Largest increases and decreases generally in line with benchmark changes

IFE		Performance	
Largest 1 day drop	-0.24%	2008	
Largest 1 day increase	0.11%	2009	
Largest 30 day drop	-0.46%	2010	
Largest 30 day increase	0.38%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	0.14%	2013	
		2014	
		2015	0.16%
		2016	0.78%
		2017	0.07%
		2018	-0.13%
		2019 Q1	

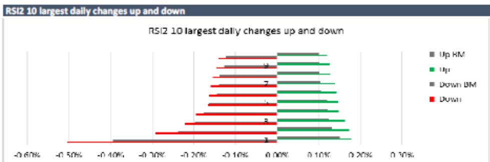
IFE 10 largest daily changes up and down



Notes
- Daily performance data since October 2015
- Largest increases and decreases generally in line with benchmark changes

RSI2		Performance	
Largest 1 day drop	-0.51%	2008	
Largest 1 day increase	0.18%	2009	
Largest 30 day drop	-0.71%	2010	
Largest 30 day increase	0.76%	2011	
		2012	
Performance p.a. 12/04/16 - 31/03/18	-0.17%	2013	
		2014	0.31%
		2015	0.51%
		2016	0.44%
		2017	-0.12%
		2018	-0.16%
		2019 Q1	

RSI2 10 largest daily changes up and down

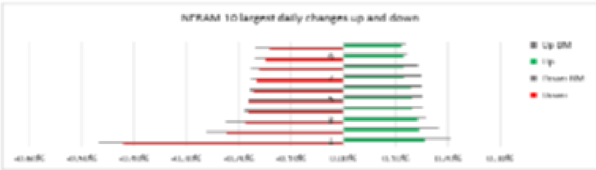


Notes
- Daily performance data since 28 August 2014
- Largest daily drop of 0.51% on 3 December 2015, when the ECB did not announce an expected extension of quantitative easing.
- Largest increases and decreases generally in line with benchmark changes

NERAM	
Largest 1 day drop	-0.42%
Largest 1 day increase	0.16%
Largest 30 day drop	-0.59%
Largest 30 day increase	0.62%
Performance p.a. 12/04/16 - 31/03/18	0.16%

	Performance
2008	
2009	
2010	
2011	
2012	
2013	-0.06%
2014	1.88%
2015	0.50%
2016	1.24%
2017	0.10%
2018	-0.09%
2019 Q1	0.52%

NERAM 10 largest daily changes up and down



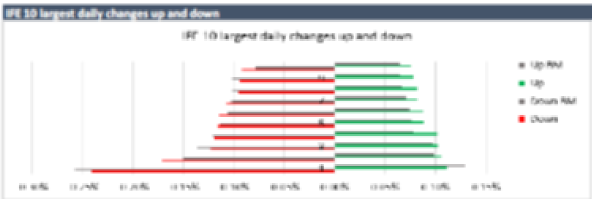
Notes

- Daily performance data since 30 November 2013
- Largest increases and decreases generally in line with benchmark changes

IFE	
Largest 1 day drop	-0.24%
Largest 1 day increase	0.11%
Largest 30 day drop	-0.46%
Largest 30 day increase	0.38%
Performance p.a. 12/04/16 - 31/03/18	0.14%

	Performance
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	0.16%
2016	0.78%
2017	0.07%
2018	-0.13%
2019 Q1	

IFE 10 largest daily changes up and down



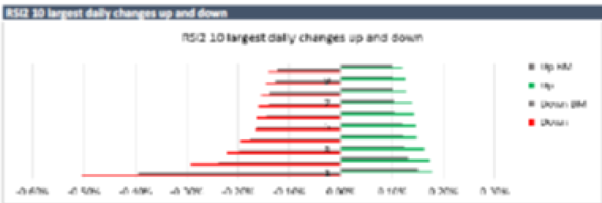
Notes

- Daily performance data since October 2015
- Largest increases and decreases generally in line with benchmark changes

RSI2	
Largest 1 day drop	-0.51%
Largest 1 day increase	0.18%
Largest 30 day drop	-0.71%
Largest 30 day increase	0.76%
Performance p.a. 12/04/16 - 31/03/18	-0.17%

	Performance
2008	
2009	
2010	
2011	
2012	
2013	
2014	0.31%
2015	0.51%
2016	0.44%
2017	-0.12%
2018	-0.16%
2019 Q1	

RSI2 10 largest daily changes up and down



Notes

- Daily performance data since 28 August 2014
- Largest daily drop of 0.51% on 3 December 2015, when the ECB did not announce an expected extension of quantitative easing.
- Largest increases and decreases generally in line with benchmark changes

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