Update on Asset management and Non-bank financial intermediation in Belgium

January 2025

FSMA
FINANCIAL SERVICES AND MARKETS AUTHORITY

NationalBank OF BELGIUM
Eurosystem

Table of contents

Table of contents 1

Executive summary and conclusion 3

Introduction 7

I. Vulnerabilities and policies to enhance resilience 8

1.1 Financial stability concerns about NBFI 8

Box 1 FSB framework to enhance NBFI resilience 9

1.2 Liquidity mismatch in open-ended funds 11

1.3 Vulnerabilities from money market funds and short-term funding markets 13

1.4 Leverage in NBFI 14

1.5 Margin and collateral calls 15

1.6 Interconnectedness 17

Box 2 Focus on some recent regulatory developments in Europe 18

1.7 Private finance 19

1.8 Commercial real estate 20

Box 3 Real estate within NBFI in Belgium 21

II. Developments in NBFI in Belgium 25

2.1 Delineation of the Belgian NBFI sector and international comparison 25

2.2 Thematic focus on the private finance market in Belgium 27

Box 4 Private finance legal frameworks in Belgium 28

III. Developments in asset management in Belgium 32

3.1 Belgian asset management sector 32

3.1.1 Belgian investment funds 32

3.1.2. Belgian asset managers 34

3.2 Foreign asset management entities active in Belgium 35

3.2.1 Foreign investment funds publicly offered in Belgium 35

3.2.2. Foreign asset managers active in Belgium 36

3.3 Other Belgian financial entities and asset management activities 36

3.3.1 Belgian banks 36

3.3.2 Belgian investment firms 37

3.3.3 Belgian insurance companies 37

3.3.4 Belgian institutions for occupational retirement provision 38

IV. Risk assessment and policy development for Belgian NBFI 39

4.1 General considerations 39

4.2 Risk metrics of the Belgian NBFI sector 39
4.3 Interconnectedness of the Belgian economy with NBFI entities worldwide 40
4.3.1. Banking sector 40
4.3.2. Insurance companies 41
4.3.3. Public sector 41
4.3.4. Households 42
4.3.5. Non-financial corporations 42
4.4 Policy initiatives and supervisory activities 42
Statistical annex 45

Executive summary and conclusion

The National Bank of Belgium (NBB) and the Financial Services and Markets Authority (FSMA) are committed to monitoring and, where relevant, addressing risks arising from non-bank financial intermediation (NBFI) and asset management, within an international context. The publication of this joint report is part of that commitment, in a context of continuous monitoring arrangements between the NBB and the FSMA. It is part of a series of recurring reports, of which the first edition was published in 2017[1]. The importance of continued efforts to monitor NBFI and the asset management sector was a key policy conclusion of the 2017 Monitoring Report, and has been reaffirmed by subsequent update reports. The goal of this report is to discuss recent developments in NBFI and asset management in Belgium. The report presents an update of key metrics that have been published in previous editions[2].

A well-developed, diverse and resilient financial sector is vital to ensure stable financing of the real economy and to meet the needs of savers and investors. For companies, governments and households, financial intermediation outside the banking system may provide a source of funding that is a valuable alternative to credit supply by banks. At the same time, it offers investment opportunities beyond bank savings and more classic investment products. A deepening of the Capital Markets Union (CMU) plan may lead to the transfer of savings from bank accounts to capital markets, reinforcing the importance of enhanced resilience and investor protection in non-bank financial intermediation.

Because NBFI and asset management often involve cross-border activities and because there are generally similarities in the main vulnerabilities across jurisdictions, international cooperation is crucial. Therefore, the FSMA and the NBB participate in the work of various international organisations and that of EU authorities. International work aimed at mitigating the financial stability risks of NBFI focuses on identifying the vulnerabilities specific to NBFI and developing policies to address these vulnerabilities. In this regard, the March 2020 market turmoil marked a turning point in the financial stability debate around NBFI. Subsequent stress episodes in other countries, notably in the UK gilt market, in the commodities market and at the time of the failure of Archegos have provided additional evidence of vulnerabilities associated with NBFI leverage. The Financial Stability Board (FSB)[3], in collaboration with the International Organization of Securities Commission (IOSCO)[4] and other standard setting bodies, developed a framework and a comprehensive work programme to enhance the resilience of NBFI. In Europe, the European Systemic Risk Board (ESRB) and European Securities and Markets Authority (ESMA), among others, have carried out or coordinated analytical and policy work on NBFI to support financial stability. In addition, the European Commission launched a targeted consultation to seek views on the adequacy of the macroprudential framework for NBFI.

The main risks of NBFI that have been identified at the international level relate to liquidity, the use of leverage and interconnectedness. Recent work conducted by the FSB and IOSCO has focused on the specific vulnerabilities of money market funds and short-term funding markets, liquidity mismatches in open-ended funds, margin practices, liquidity preparedness for margin and collateral calls, and leverage in NBFI. Chapter I of this report summarises recent developments in the international work on NBFI vulnerabilities and policies to enhance resilience. Where relevant, this chapter also seeks to illustrate the extent to which this is relevant to Belgian entities.

---

1 The first edition and its subsequent updates are available on the websites of the NBB and FSMA.

2 The current edition focuses on data from 2019 until 2023, where available.

3 The FSB is an organisation created by the G20 that coordinates work on financial stability at the global level. In 2011, the FSB established a framework to monitor NBFI. For more information, see Chapter I and Box 1.

4 IOSCO is the international body that brings together the world's securities regulators and is recognised as the global standard setter for financial markets regulation.

The NBB and the FSMA adopt a risk-based approach to monitoring NBFI. NBFI may refer to a very diverse set of entities and activities outside the banking system, each with their own function in the financial system. In a broad context, NBFI may refer to entities such as insurance companies, pension funds, investment funds, broker-dealers, central counterparties and less regulated entities, such as family offices. In line with the monitoring framework of the FSB, this report focuses on a narrow, risk-based, subset of NBFI: entities involved in credit intermediation activities that may pose bank-like financial stability risks. These risks involve maturity transformation, liquidity transformation, leverage or imperfect credit risk transfer. Several methods can be used to determine which entities fall under this definition. When using the method proposed by the FSB, the narrow NBFI measure covered € 172 billion in Belgium at the end of 2023. Based on the method determined in the EU regulatory framework, this was € 23.4 billion. Chapter II of the report provides a detailed overview of recent development in NBFI in Belgium.

Table 1: Narrow measure of NBFI in Belgium

(€ billion, year-end)

	2019	2020	2021	2022	2023
Narrow NBFI measure (FSB)	144	149	171	163	172
Narrow NBFI measure (EU regulation)	12	18	18	29	23

The asset management industry has an important role in financial intermediation through capital markets. In this report, asset management refers to the segment of the financial industry that is involved in the management of financial assets on behalf of investors. The focus is on collective management through investment funds, although asset management may also comprise the discretionary management of an individual investor's portfolio. The main entities in this industry are investment funds and their managers. As cross-border activities are important in this industry, the size is different for Belgian investment funds and Belgian asset managers. At the end of 2023, Belgian investment funds accounted for € 215 billion in net assets, while Belgian asset managers had € 208 billion in assets under management. In Chapter III, the report discusses recent developments in asset management in Belgium.

Table 2: Asset management in Belgium

(€ billion, year-end)

	2019	2020	2021	2022	2023
Belgian investment funds (net assets)	185	191	243	212	215
Belgian asset managers (assets under management)	182	193	239	236	208
Foreign investment funds held by Belgian residents	236	250	300	282	349
Assets generating fee and commission income for Belgian banks	617	639	728	640	723
Investments of Belgian insurance companies in investment funds	56	60	71	68	72
Investments of Belgian institutions for occupational retirement provision in investment funds	30	33	37	31	36

The risks within the Belgian NBFI and asset management sectors and the risks of potential spill-overs to other sectors of the Belgian economy are analysed in Chapter IV of this report. For the part of the NBFI sector that overlaps with the asset management sector, the main risk is liquidity risk, and particularly the risk of sudden, large-scale redemptions. In Belgium, these liquidity risks are already partly addressed by existing legislation, through, for example, rules on asset diversification and the introduction of additional liquidity management tools for asset managers. That Chapter also provides an overview of the links between Belgian residents and potential NBFI entities worldwide. Overall, while links with the sector of other financial intermediaries (OFI) can be important in some cases, the interconnectedness with entities belonging to the narrow measure of NBFI is limited and concentrated in activities that are generally part and parcel of normal business affairs.

For the Belgian asset management sector, policy initiatives and supervisory activities in this area have focused mainly on liquidity and leverage, which are the factors most likely to jeopardise financial stability. In 2023, potential liquidity risks of Belgian investment funds were assessed by both the International Monetary Fund (IMF) and the FSMA. The IMF subjected the Belgian investment fund sector to a liquidity stress test. The FSMA performed a Liquidity Risk Assessment based on quantitative and qualitative analysis. Both entities concluded that the Belgian investment fund sector would be able to withstand severe but plausible redemption shocks. In addition, in accordance with European legislation, the FSMA also regularly assesses the systemic risk arising from the use of leverage by alternative investment fund managers. The FSMA has not identified any immediate systemic risks requiring the adoption of measures specific to leverage, such as imposing limits on the use of this technique.

A specific focus of this report is the commercial real estate (CRE) sector, which has been subject to challenges from increased interest rates and shifts in demand for certain segments and types of properties. Noting these developments, the ESRB has recommended EU and national authorities to improve the monitoring of systemic risks stemming from this sector. In 2023, ESMA found that real estate funds pose low risks on an individual basis, due to their limited use of leverage or size in most jurisdictions, but that they could be more systemically relevant in jurisdictions where groups of funds own a large share of the real estate market on aggregate. Box 3 discusses legal frameworks that may be applicable to physical real estate investing in Belgium and assesses the size of some parts of this market. In Belgium, investing in physical real estate via financial vehicles is subject to specific legal frameworks (e.g., Real Estate Investment Companies, Specialised Real Estate Funds). In Belgium, potential leverage-related systemic risks from real estate funds appear to be contained, although risks from CRE continue to be an area requiring attention by the FSMA and NBB. The closed-ended nature of the Belgian financial vehicles investing in physical real estate and the limited footprint of real estate investment funds strongly mitigate the potential financial stability risks stemming from these vehicles. Yet, they are part of a broader ecosystem that results in an overall sizeable exposure of the Belgian financial system to commercial real estate. Therefore, these entities and their links with Belgian banks and insurance companies are also part of the NBB's macroprudential monitoring framework, which was enhanced in light of the challenging market conditions, in line with the ESRB Recommendation of 2022.

Another specific focus of this report is private finance, which generally encompasses activities relating to capital raising and lending provided by non-bank investors to companies through bilateral transactions, such as private equity and private credit. It is a key funding source for companies without access to public markets and provides additional investment opportunities for long-term investors, but may also entail investor protection and financial stability risks. In Europe, private finance activities arranged through investment funds are subject to the AIFMD framework. In Belgium, private finance activities are often structured within the national framework of the 'Private Pricaf'. Many of those vehicles also qualify as alternative investment funds according to the AIFMD, which means that their managing body is generally subject to a registration or authorisation requirement. Box 4 provides an overview of the relevant legal frameworks for private finance, while Chapter II provides an overview of the composition and size of the (broadly defined) private investment sector in Belgium. This analysis points to 347 companies that are classified as private investment companies, with € 48 billion total financial assets at the end of 2022. However, almost half of these assets are within a small number of listed companies, while the aggregate size of the Private Pricafs identified is limited to 5%. Overall, the picture is relatively reassuring from a financial stability point of view, as a substantial part of the investment risk from this sector is borne by participants in public financial markets, leverage is low and there are limited funding links with the banking sector.

The analysis underlying this report did not result in the identification of material financial stability risks relating to the NBFI and asset management sectors in Belgium. However, the NBB and the FSMA remain committed to continuing their joint monitoring of these sectors. Both institutions remain vigilant in particular about risks arising from the use of leverage, structural liquidity mismatches, interconnectedness with other financial institutions and linkages with the real economy. In this respect, they continue to consider new developments and potential risks, such as those emanating from CRE and private finance. Given the cross-border nature of NBFI and asset management, they will also continue to do so within an international context. This entails an active participation in relevant international work. Where necessary, they will contribute to the strengthening of the regulatory framework and supervision. The NBB and the FSMA intend to publish an update of the monitoring report every two years from now on.

Introduction

Resilient capital markets that are able to provide a stable source of funding and diversified investment opportunities with safeguards for retail investors are crucial to support real economic activity. For companies, governments and households, financial intermediation outside the banking system may provide a source of funding that is a valuable alternative to credit supply by banks. At the same time, it offers investment opportunities beyond bank savings and more classic investment products. A deepening of the Capital Markets Union (CMU) plan to strengthen the single market is a priority of the EU. This may lead to the transfer of savings from bank accounts to capital markets. To support the policy objectives of the CMU, financial stability and investor protection are a prerequisite.

Recent events, in particular in other countries, have highlighted a number of vulnerabilities in non-bank financial intermediation (NBFI) and have given rise to various international work streams to address those vulnerabilities and enhance resilience. Those events include the market turmoil at the onset of the COVID-19 pandemic, the collapse of Archegos Capital Management and the stress episode in the UK gilt market. Key vulnerabilities relate to liquidity and leverage.

In Belgium, the International Monetary Fund (IMF) conducted a Financial Sector Assessment Program (FSAP) in Belgium in 2023 and concluded, among other things, that non-bank financial intermediaries are resilient against adverse shocks[5]. This was the conclusion of the insurance solvency stress test and the investment fund liquidity stress test conducted by the IMF.

The policy recommendations in the 2017 Monitoring Report have been implemented or have been embedded in the organisation and functioning of the FSMA and NBB. The general recommendations included closing data gaps and enhancing information sharing between the two institutions, monitoring NBFI within Belgium and monitoring NBFI within an international context, including contributing to the work of international or supranational institutions. These recommendations are embedded in the organisation and functioning of the FSMA and NBB. In 2023, the NBB started sharing with the FSMA the portfolio data it collects from Belgian investment funds. In addition to the general recommendations, the 2017 Monitoring Report also contained two specific recommendations. The first specific recommendation related to the mitigation of liquidity risks of investment funds by making liquidity management tools available for Belgian funds. The second specific recommendation involved the mitigation of concerns related to interconnectedness by ensuring that step-in risks are covered, assessed and integrated in the risk management of financial groups and conglomerates. Both recommendations have been implemented, while both liquidity risk management (and liquidity management tools in particular) and interconnectedness warrant continued attention. Regulations and supervisory expectations to address liquidity mismatch in open-ended funds, including the availability and use of liquidity management tools, continue to evolve in line with international developments (as discussed in chapter I).

This report has been revised from earlier editions. Key changes include:

- In light of the progress made at the global and European levels in the assessment of NBFI vulnerabilities and resulting policy work, the addition of a chapter discussing these NBFI vulnerabilities and the recent policy work to address these vulnerabilities. This new chapter combines vulnerabilities and recent and ongoing policy work.
- The restructuring of the chapter on the developments in asset management relevant for the Belgian financial sector.
- The inclusion of key findings and conclusions in the executive summary instead of in the final chapter.

---

5 IMF, *Belgium: Financial Sector Assessment Program-Financial System Stability Assessment*, December 2023.

I. Vulnerabilities and policies to enhance resilience

1.1 Financial stability concerns about NBFI

The size of non-bank financial intermediation (NBFI) at the global level, its sustained growth since the global financial crisis (GFC) of 2008 and the increased importance of non-bank funding for the real economy, as well as recent incidents that exposed NBFI vulnerabilities, have led to financial stability concerns about NBFI. NBFI now constitutes around 47% of the total financial assets globally[6] and 41% of the EU financial sector[7]. The size of this non-banking part of the global financial sector has more than doubled since 2008. Furthermore, the growth of capital markets as a source of funding for the real economy is a key policy objective of the Capital Markets Union (CMU) plan.

The March 2020 market turmoil marked a turning point in the financial stability debate around NBFI. The start of the COVID-19 pandemic was characterised by a flight to safe investments and a 'dash for cash', as investors attempted to sell both more risky and less risky assets to generate cash. This resulted in an unprecedented sell-off across different markets. Several markets, including certain segments of the money market, came under pressure due to a lack of liquidity, resulting in a liquidity imbalance. Certain vulnerabilities in NBFI may have contributed to this liquidity imbalance. For instance, vulnerabilities of money market funds (MMFs) and structural liquidity mismatches of some open-ended funds (OEFs) may have contributed to the spike in liquidity demand. Unanticipated margin calls may also have played a role in generating liquidity demands[8].

Subsequent stress episodes in the UK gilt market, in the commodities market and at the time of the failure of Archegos have provided additional evidence of vulnerabilities associated with NBFI leverage. Archegos Capital Management was a US-based family office that used derivatives to build up large concentrated exposures in a number of US stocks. In March 2021, price decreases in some of the underlying stocks led to margin calls for Archegos. The family office was unable to meet these margin calls and defaulted. Its counterparties had to unwind their derivatives positions, including by selling securities they held to hedge the exposure of these positions. This led to significant losses for Archegos' prime brokers and an additional market impact for the underlying securities[9]. Vulnerabilities associated with the use of leverage were also exposed by the events in the UK gilt market in September 2022. At that time, a historically sharp increase in long-term UK government bond yields led to a sharp price decrease. UK pension funds following liability-driven investment (LDI) strategies are important investors in this market. Some of these pension funds invest via dedicated LDI funds, which often increase their exposure by using repo borrowing. Because of the sharp decrease in the price of gilts in September 2022, the value of LDI funds' assets also dropped sharply, threatening the funds' solvency. Moreover, the funds were also subject to collateral calls and margin calls, requiring them to raise cash, which created additional selling pressure on the underlying market[10]. The commodities market shock

6 FSB, *Global Monitoring Report on Non-Bank Financial Intermediation*, December 2023.

7 Other financial institutions (OFIs) and investment funds, see ESRB, *EU Non-bank Financial Intermediation Risk Monitor 2024 (No9)*, June 2024.

8 For more information on the March 2020 market turmoil, see FSB, *Holistic Review of the March Market Turmoil*, November 2020.

9 For more information on the failure of Archegos, see ESRB, *EU Non-bank Financial Intermediation Risk Monitor 2022 (No7)*, July 2022.

10 For more information on the UK gilt market stress episode and the role of LDI funds, see Bank of England, *Letter to the Chair of the Treasury Committee of the House of Commons by Sir John Cunliffe*, October 2022, and ESRB, *EU Non-bank Financial Intermediation Risk Monitor 2023 (No8)*, June 2023.

of 2022 also exposed some vulnerabilities within this sector, including a high degree of concentration, the widespread use of leverage and opacity[11].

The term NBFI is used to refer to very diverse activities and entities operating within the financial sector. In the monitoring framework of the FSB the broad measure of NBFI consists of all financial institutions that are not central banks, banks, or public financial institutions. This includes regulated entities, such as insurance corporations, pension funds and investment funds, as well as less regulated entities, such as family offices. The FSB also defines a narrow measure of NBFI, which focuses on NBFI activities that may be more likely to give rise to vulnerabilities. This narrow measure is based on the economic functions or activities performed by NBFI entities. It captures those entities that are engaged in activities that may involve liquidity/maturity transformation, imperfect credit risk transfer, or the use of leverage. Chapter II of this report focuses on the narrow measure of NBFI, adopting the FSB approach to delineating the narrow measure of NBFI, as well as an alternative delineation method proposed by the EU regulation.

Investment funds are an important part of NBFI and are therefore often the focus of measures aimed at enhancing financial stability. Investment funds have a specific function within the financial sector. They are investment products that pool the capital of different investors and invest it according to a defined investment policy. Investment funds are connected to financial and non-financial entities both through their assets and their liabilities. They may be subject to vulnerabilities that could contribute to spikes in the demand for liquidity during stress periods. One of the economic functions that is part of the narrow measure of NBFI is the management of collective investment vehicles with features that make them susceptible to runs. Most types of investment funds would be captured by this economic function, with funds investing mainly in listed equities and most closed-ended funds being a notable exception. Investment funds also constitute the most important part of NBFI globally. Their assets amount to 74% of the assets within the NBFI narrow measure as of 2022[12]. In Belgium, investment funds represent almost 90% of the narrow NBFI measure proposed by the FSB and almost 11% of the narrow measure used in the EU regulatory framework. Chapter III describes the asset management sector and the role of investment funds in Belgium.

Following the March 2020 market turmoil, the FSB, in collaboration with the International Organization of Securities Commission (IOSCO) and other standard setting bodies, developed a framework and a comprehensive work programme to enhance the resilience of NBFI. The framework, which is described in more detail in Box 1, builds on the observation that, in a system in which NBFI plays an increasing role, resilience is crucially dependent on the availability of liquidity and its effective intermediation under stressed market conditions.

Box 1

FSB framework to enhance NBFI resilience

The initial focus of the FSB's NBFI work was on creating a monitoring framework for the part of the financial system that grants credit but is outside the regular banking sector, and on developing policies to strengthen its oversight and regulation. The goal was to deal with 'fault lines' that were exposed during the 2008 Global Financial Crisis (GFC). Since 2011, the FSB has been publishing its global monitoring report on an annual basis, for which the focus is on NBFI entities that authorities have assessed as being involved in credit intermediation activities that may pose bank-like financial

[11] For more information on commodities markets, see FSB, *The Financial Stability Aspects of Commodities Markets*, February 2023.

[12] For more information, see FSB, *Global Monitoring Report on Non-Bank Financial Intermediation*, December 2023.

stability risks and/or regulatory arbitrage[13]. The initial focus of the FSB's policies was on five areas[14]: mitigating spill-over effects with the banking system, reducing susceptibility of MMFs to large scale redemptions, assessing and aligning securitisation incentives, dampening financial stability risks and pro-cyclical incentives of securities financing transactions, and assessing and mitigating systemic risks posed by other NBFI entities and activities.

Following the March 2020 market turmoil, the FSB, in cooperation with IOSCO and other standard-setting bodies, developed a framework and work programme to enhance NBFI resilience. While the initial NBFI work of the FSB mainly reflected the vulnerabilities that emerged during the GFC, the current work programme mainly reflects lessons learnt from the March 2020 market turmoil and other episodes of market stress. This encompasses a further move away from focusing on the credit intermediation aspect. The FSB's NBFI work programme includes assessing and addressing a broad set of vulnerabilities related to the 'NBFI ecosystem'.

The premise of the FSB's framework is that the functioning and resilience of the NBFI ecosystem depends on the availability of liquidity and its effective intermediation under stressed market conditions. Large and unexpected peaks in liquidity demand and an insufficient supply of liquidity during stress periods may create liquidity imbalances. Large and pervasive liquidity imbalances may deteriorate liquidity conditions and create financial stability risks. The interaction between spikes in liquidity demand and insufficient liquidity supply could lead to fire sales, while interconnectedness between market participants could propagate shocks through the financial system.

The FSB has identified certain so-called key amplifiers, that is activities and types of entities that may particularly contribute to aggregate liquidity imbalances and the transmission and amplification of shocks, due to their size, structural characteristics and behaviour in stress. Factors that could contribute to peaks in liquidity demand include activities that could give rise to liquidity mismatches in certain entities such as money market funds and open-ended funds, as well as unexpectedly large margin calls, and the excessive build-up of leverage. Factors that may cause insufficient supply in liquidity include factors that reduce the ability of liquidity suppliers to absorb spikes in liquidity demand, and issues within the structure of 'core funding markets'.

The FSB's policy proposals to enhance NBFI resilience are aimed at reducing excessive spikes in liquidity demand, enhancing the resilience of liquidity supply in stress, and enhancing risk monitoring and the preparedness of authorities and market participants. To date, the main focus of the policy work has been on reducing excessive spikes in liquidity demand by addressing vulnerabilities that drive such spikes, or by mitigating their impact on financial stability. The FSB's policy proposals have also largely involved 'repurposing' existing policy tools. This approach has been favoured over the creation of new policy tools because of the extensive micro-prudential and investor protection toolkit already available.

The main NBFI vulnerabilities relate to aspects of liquidity, the use of leverage and interconnectedness. International work aimed at mitigating the financial stability risks of NBFI focuses on identifying the vulnerabilities specifically related to NBFI and developing policies to address these vulnerabilities. Within this context, the work programme that the FSB developed in response to the March 2020 market turmoil has focused on the specific vulnerabilities of money market funds and short-term funding markets, liquidity mismatches in open-ended funds, margin practices, liquidity preparedness for margin and collateral calls, and leverage in NBFI. In Europe, the European Systemic Risk Board (ESRB) and European Securities and Markets Authority (ESMA), among others, have carried out or coordinated analytical and policy work on NBFI to support financial stability. The European

13 See FSB, *Global Monitoring Report on Non-Bank Financial Intermediation*, December 2023.

14 FSB, *Strengthening Oversight and Regulation of Shadow Banking: An Overview of Policy Recommendations*, December 2023.

Commission identified interconnectedness as one of three key NBFI vulnerabilities. In addition, during recent years, potential risks from private finance activities and the commercial real estate sector have received ample attention, in Europe as well as at the global level.

In May 2024, the European Commission launched a targeted consultation on macroprudential policies for NBFI[15]. Macroprudential policies are aimed at maintaining financial stability by increasing the resilience of the financial system and limiting the build-up of vulnerabilities. The consultation follows the publication of a report by the Commission on the macroprudential review for credit institutions, the systemic risks relating to NBFIs and their interconnectedness with credit institutions[16]. The objective of the consultation was to seek public authorities' and other stakeholders' views on the adequacy of the macroprudential framework for NBFI. The consultation aimed to identify key vulnerabilities and risks from NBFI, map the existing macroprudential tools and supervisory architecture for NBFIs in the EU legislation, gather feedback on the current challenges to macroprudential supervision and discuss areas for further improvement. Box 2 discusses the consultation as well as some other recent initiatives within a European context, in particular the recent revisions of the AIFMD and the UCITS Directive. These directives set out the European legislative framework for investment funds. The revised directives now also contain a number of new provisions aimed at addressing financial stability risks.

1.2 Liquidity mismatch in open-ended funds

Liquidity mismatch in open-ended funds (OEFs) could lead to structural vulnerabilities within NBFI. A structural liquidity mismatch occurs when there is a difference between the redemption terms offered by an OEF to its investors and the amount of time it may take the fund manager to liquidate the fund's investments in an orderly manner to meet redemption requests. Such liquidity mismatches may lead to a first-mover advantage. If investors do not bear the full costs associated with their redemptions, they may be incentivised, in particular in stress circumstances, to redeem ahead of other investors. Although the materiality of this effect is difficult to quantify, first-mover advantages may lead to redemptions in excess of what could be expected in the absence of such incentives, in turn impacting financial markets through additional asset sales to satisfy redemptions.

IOSCO and the FSB have published revised versions of their recommendations and guidance to address vulnerabilities from liquidity mismatch in OEFs. In 2017, the FSB published its first set of policy recommendations to address liquidity mismatch in OEFs[17]. These recommendations, addressed to authorities, were further operationalised by IOSCO through the publication of its own recommendations on liquidity risk management[18]. As part of the NBFI work programme, in 2022, both IOSCO and the FSB reviewed their respective recommendations[19,20]. Among other things, IOSCO and the FSB noted that there was scope to further improve the availability, use and consistency in the use

---

15 European Commission, Targeted consultation assessing the adequacy of macroprudential policies for non-bank financial intermediation (NBFI), May 2024.

16 Report from the European Commission to the European Parliament and the Council *on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions, under Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012*, January 2024.

17 FSB, *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*, January 2017.

18 IOSCO, *Recommendations for Liquidity Risk Management for Collective Investment Schemes: Final Report*, February 2018.

19 FSB, *Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds*, December 2022.

20 IOSCO, *Thematic Review on Liquidity Risk Management Recommendations: Final Report*, November 2022.

of liquidity management tools (LMTs), in particular anti-dilution LMTs. Those are tools aimed at passing on the explicit and implicit costs of subscriptions and redemptions to subscribing and redeeming investors. The FSB also found that greater clarity could be provided on the redemption terms that OEFs could offer to investors based on the liquidity of their asset holdings. Based on the findings of the assessments, the FSB published a revised version of its policy recommendations to address structural vulnerabilities from liquidity mismatch in OEFs[21], while IOSCO operationalised a part of these recommendations by publishing guidance on anti-dilution liquidity management tools[22]. In November 2024, IOSCO took a further step to operationalise the revised FSB recommendations by publishing consultation reports on a revised version of its own recommendations on liquidity risk management and complementary guidance for the effective implementation for OEFs[23].

The European legislative framework for investment funds has been revised to harmonise the availability and use of LMTs. In Europe, investment funds are subject to the requirements either of the UCITS Directive[24] or of the AIFMD[25]. In 2024, both Directives were amended[26]. As a result, a harmonised set of LMTs will be available to all open-ended funds in Europe, both UCITS and open-ended alternative investment funds (AIFs): suspensions of subscriptions, repurchases and redemptions, redemption gates, extension of notice periods, redemption fees, swing pricing, dual pricing, anti-dilution levy, redemption in kind, and side pockets. Managers of those funds will need to select at least two[27] appropriate LMTs, in addition to suspensions and side pockets (which are available to all funds). ESMA is currently developing draft regulatory standards to specify the characteristics of the LMTs[28] and guidelines on the selection and calibration of LMTs[29].

21 FSB, *Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds: Final Report*, December 2023.

22 IOSCO, *Anti-dilution Liquidity Management Tools – Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes: Final Report*, December 2023.

23 IOSCO, *Revised Recommendations for Liquidity Risk Management for Collective Investment Schemes: Consultation Report*, November 2024; IOSCO (2024), *Guidance for Open-ended Funds for Effective Implementation of the Recommendations for Liquidity Risk Management: Consultation Report*, November 2024.

24 Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS).

25 Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010.

26 Directive (EU) 2024/927 of the European Parliament and of the Council of 13 March 2024 amending Directives 2011/61/EU and 2009/65/EC as regards delegation arrangements, liquidity risk management, supervisory reporting, the provision of depositary and custody services and loan origination by alternative investment funds.

27 Except for MMFs, for which only one LMT needs to be selected.

28 ESMA, *Draft Regulatory Technical Standards on Liquidity Management Tools under the AIFMD and UCITS Directive: Consultation Paper*, July 2024.

29 ESMA, *Guidelines on Liquidity Management Tools of UCITS and open-ended AIFs: Consultation Paper*, July 2024.

In Belgium, liquidity risks of investment funds are mitigated by a general alignment between the liquidity of fund assets and redemption terms and the broad availability of LMTs. Public investment funds offering frequent redemptions, such as UCITS (which represent the bulk of Belgian investment funds by net assets, as discussed in section 3.1), are subject to detailed asset eligibility rules. Investment funds that invest mainly in less liquid or illiquid assets are closed-ended based on their specific regulatory framework, or are closed-ended in practice. In addition, almost all Belgian publicly offered open-ended funds have at least one LMT available or had other risk mitigating features, next to the possibility to suspend subscriptions/redemptions of the fund. As part of its 2023 FSAP, the IMF also conducted a liquidity stress test of the Belgian investment fund sector and concluded that the sector would largely be able to withstand severe but plausible redemption shocks.

1.3 Vulnerabilities from money market funds and short-term funding markets

MMFs are particularly prone to liquidity risks. MMFs are funds that aim to offer capital preservation and daily liquidity. Such features often cause them to be considered as cash-like. In turn, this causes some types of MMFs to be used as cash management tools, while in periods of stress, some types of investors may have incentives to redeem. At the same time, MMFs may also face challenges in selling assets, notably under stressed market conditions. This is particularly the case for those MMFs investing in commercial paper (CP) and negotiable certificates of deposit (CD). Such instruments are traditionally held until maturity, and secondary market liquidity is therefore relatively limited.

The FSB, in cooperation with IOSCO, proposed a toolkit of policy options to enhance MMF resilience[30]. The objectives of these policy options are to reduce the likelihood of redemptions that could be destabilising, to mitigate the impact of large redemptions, or both. The policy options work through a number of mechanisms to address MMF vulnerabilities, including passing on redemption costs to redeeming investors, reducing threshold effects, or reducing liquidity transformation. The use of swing pricing, for instance, is a policy option that allows MMFs to impose the costs associated with redemptions on redeeming investors. Threshold effects arise when investors face incentives to redeem before a certain threshold is breached. Such effects could be mitigated by the removal of the stable NAV calculating mechanism or by removing ties between regulatory thresholds and the imposition of fees and gates. Other policy options, such as requirements to invest in more liquid instruments or shorter-term instruments, or to have a minimum holding in certain instruments deemed to be more liquid, would reduce liquidity transformation. In 2023, the FSB conducted a peer review to take stock of the measures adopted or planned by FSB member jurisdictions in response to its policy proposals[31].

In Europe, the ESRB and ESMA have published a recommendation[32] and an opinion[33], respectively, on MMF reforms. The ESRB recommended (1) reducing threshold effects by removing the possibility for MMFs to use amortised cost valuation for the calculation of their net asset value (low-volatility net asset value or LVNAV) by only allowing them to rely on a fluctuating NAV, and by repealing certain regulatory thresholds linked to the possible imposition of fees and gates; (2) reducing liquidity transformation by incorporating new liquidity requirements and by permitting MMF managers to use their liquidity buffers in case of certain market-wide developments; (3) requiring MMFs to adopt at least one anti-dilution LMT; and (4) enhancing monitoring and stress testing. ESMA made similar policy

---

30 FSB, *Policy Proposals to Enhance Money Market Fund Resilience: Final Report*, October 2021.

31 FSB, *Thematic Review on Money Market Fund Reforms: Peer review report*, February 2024.

32 ESRB, *Recommendation of the European Systemic Risk Board of 2 December 2021 on reform of money market funds (ESRB/2021/9)*, January 2022.

33 ESMA, *ESMA opinion on the review of the Money Market Fund Regulation: Final Report (ESMA34-49-437)*, February 2022.

proposals to review the MMF Regulation[34], while also suggesting new disclosure requirements on ratings and a clarification on the requirements on external support. The European Commission may publish a proposal to review the MMF Regulation[35].

In Belgium, the size of the MMF sector is relatively small, while risks are mitigated due to their variable NAV (VNAV) and specific use by their main investors. The size of the sector appears limited, both when compared to the main European MMF jurisdictions and in proportion to the Belgian investment fund industry. All Belgian MMFs are VNAV MMFs. The main types of investors and their use of the MMFs further mitigate financial stability concerns[36].

As a complement to the MMF policy proposals, the FSB, in consultation with IOSCO, also analysed the functioning and resilience of the CP and CD markets and explored potential market reforms[37]. The analysis confirmed that CP and CD markets tend to generally function well in normal times but are susceptible to illiquidity in times of stress. Vulnerabilities in these markets are related to the buy-and-hold behaviour of investors, due to the short-term nature of these instruments, resulting in limited secondary market liquidity. In times of stress, dealer intermediation does not sufficiently increase to accommodate the rise in selling requests. Other vulnerabilities within these markets include investor and dealer concentration, market opacity (leading to information asymmetries), lack of digitisation and high interconnectedness with other global funding markets. The FSB suggested that improving market microstructure, enhancing regulatory reporting and public disclosures, and expanding private repo markets for CP and CD collateral are potential market reforms to be considered by authorities or the industry. At the same time, the FSB noted that significant variation across jurisdictions presents a challenge for formulating a uniform policy response. The FSB concluded that potential market reforms may have a positive impact on CP and CD market functioning in normal times, but that such reforms would likely not, on their own, significantly enhance the resilience of these markets.

1.4 Leverage in NBFI

If not properly managed, the build-up of leverage creates a vulnerability that may cause shocks to be amplified and propagated through the financial system. In 2023, the FSB published an analytical report on the financial stability implications of non-bank leverage[38]. The report identifies two mechanisms through which leverage can propagate shocks: the 'position liquidation channel' and the 'counterparty channel'. The first mechanism relates to large or unexpected liquidity demands to meet margin or collateral calls, which, in particular under stressed market conditions, could lead to fire sales, contributing to market volatility, price pressure and adverse feedback loops. The second mechanism relates to the default of a leveraged entity that is unable to meet margin or collateral calls, or that has seen its capital being wiped out due to losses. Such a default or eminent default may lead to financial distress for counterparties that are unable to absorb losses, with potentially a further propagation of

---

34 Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds.

35 In 2023, the European Commission published a Report from the Commission to the European Parliament and the Council on the adequacy of Regulation (EU) 2017/1131 of the European Parliament and of the Council on money market funds from a prudential and economic point of view. In that report, the European Commission identified certain vulnerabilities in the market for MMFs and areas which would merit further assessment.

36 As discussed in Box 4 of the 2021 update of the joint monitoring report, see FSMA and NBB (2022), *Update on Asset management and Non-bank financial intermediation in Belgium*, April 2021.

37 FSB, *Enhancing the Functioning and Resilience of Commercial Paper and Negotiable Certificates of Deposit Markets*, May 2024.

38 FSB, *The Financial Stability Implications of Leverage in Non-Bank Financial Intermediation*, September 2023. In that report, leverage is defined as a financial technique used to increase exposure, boost returns or take positions that can offset potential losses from other exposures (hedging).

the shock, as well as liquidation of certain assets in response to the default. In addition, the report identifies a number of amplification factors, notably a high degree of interconnectedness, concentrated positions, opacity (in particular towards counterparties) and liquidity imbalances. The report also presents aggregate trends in NBFI leverage across a broad range of non-bank investors, and finds that leverage in NBFI is highly uneven across the sector. The report is looking at on-balance sheet as well as off-balance sheet leverage, and synthetic as well as financial leverage, and pays particular attention to 'hidden leverage', which is defined as leverage that is difficult to identify or measure by market participants or public authorities. Similarly, the report also identified a number of data gaps.

As a follow-up to this analytical report, the FSB, in cooperation with IOSCO, launched policy work on leverage, which focuses on improving the monitoring of and addressing financial stability risks arising from leverage in NBFI. The FSB has published a consultation report with proposed policy approaches[39]. To improve the monitoring of leverage in NBFI, the FSB has worked on toolkit metrics that authorities could consider using to monitor leverage in NBFI within their domestic frameworks. In addition, the FSB has assessed a wide range of tools (that authorities generally already have available) to mitigate vulnerabilities from leverage in NBFI. The focus is on tools aimed at addressing the above-mentioned propagation mechanisms or amplification factors. These could include public disclosure (which could encourage market discipline), supervisory guidance setting out expectations for firm behaviour, and activity-based and entity-based measures restricting the provision and use of leverage.

In Europe, leverage risks of investment funds are principally addressed by the imposition of leverage limits and borrowing limits for UCITS, and the possible imposition of leverage limits or other restrictions by competent authorities for AIFs. On the basis of Article 25 of the AIFMD, AIFMs are required to demonstrate to their competent authorities that the leverage limits they set for AIFs are reasonable; the competent authorities are required to assess the risks that the use of leverage could entail, and may impose leverage limits or other restrictions to limit system risks. National competent authorities report at least annually to ESMA on the results of their risk assessment. Based on these assessments and data available to ESMA, ESMA also performs a risk assessment[40].

In Belgium, most funds are UCITS with limited leverage, while the use of leverage by AIFs has not created immediate systemic risks that would require the adoption of measures specific to leverage, such as imposing limits on the use of this technique. The FSMA's assessment of systemic risk arising from the use of leverage by authorised AIFMs is discussed in section 4.4.

1.5 Margin and collateral calls

Market participants using certain forms of leverage may be subject to margin or collateral calls, which, in turn, could lead them to face liquidity risks. Margin is collateral that serves to protect against risk exposures from price changes or counterparty default. Unexpected margin calls may make it difficult for some market participants to manage their liquidity, leading to forced asset sales and associated impacts on financial markets. During the March 2020 market turmoil, for instance, some markets witnessed substantial increases in margin requirements.

---

39 FSB, *Leverage in Non-bank Financial Intermediation: Consultation Report*, December 2024.

40 ESMA, *Assessing risks posed by leveraged AIFs in the EU: ESMA TRV Risk Analysis Financial Stability*, January 2024.

In response, the Basel Committee on Banking Supervision (BCBS), the BIS Committee on Payments and Market Infrastructures (CPMI) and IOSCO conducted a joint review of margining practices, concluding that further policy work was needed in several areas[41]. The BCBS, CPMI, IOSCO and the FSB are conducting follow-up policy work in the following areas: increasing transparency in centrally cleared markets, enhancing liquidity preparedness of market participants as well as liquidity disclosures, identifying data gaps in regulatory reporting, streamlining variation margin processes in centrally and non-centrally cleared markets, and evaluating the responsiveness of centrally cleared and non-centrally cleared initial margin models to market stresses.

The BCBS, CPMI and IOSCO undertook follow-up policy work on margining practices in centrally cleared and non-centrally cleared markets. In January 2024, the BCBS, CPMI and IOSCO published a consultation on transparency and responsiveness of initial margin in centrally cleared markets, containing policy proposals that aim to increase the resilience of the centrally cleared market ecosystem in times of market stress[42]. The BCBS and IOSCO also published a consultation report on streamlining the variation margin processes and initial margin responsiveness of margin models in non-centrally cleared markets, containing recommendations to participants in non-centrally cleared markets to encourage widespread implementation of good market practices[43]. Finally, the CPMI and IOSCO published a discussion paper with examples of effective practices covering several aspects of the variation margin process in centrally cleared markets[44].

In addition, in 2024, the FSB published a consultation with policy recommendations to enhance the liquidity preparedness of non-bank market participants for margin and collateral calls[45]. The goal of these recommendations is to reduce the excessive procyclical behaviour of some non-bank market participants in response to margin and collateral calls during times of market-wide stress. These recommendations are cross-sectoral and therefore apply to all non-bank market participants that may face margin and collateral calls, including insurance companies, pension funds, investment funds and family offices, and should be applied proportionately. They build on existing rules and cover aspects of liquidity risk management and governance, stress testing and scenario design, and collateral management practices.

In Europe, managers of investment funds are expected to include margin calls in their liquidity stress tests when appropriate[46]. The ESRB recently suggested that leveraged funds could increase their preparedness for margin and/or collateral calls by holding appropriate liquidity buffers calibrated on the basis of stress testing results[47].

In Belgium, following an examination of liquidity stress tests conducted by Belgian fund managers, the FSMA has noted that the incorporation of margin calls or collateral calls in stress test scenarios is a point requiring attention[48].

---

41 BCBS-CPMI-IOSCO, *Review of margining practices*, September 2022.

42 BCBS-CPMI-IOSCO, *Transparency and responsiveness of initial margin in centrally cleared markets – review and policy proposals: Consultative report*, January 2024.

43 BCBS-IOSCO, *Streamlining VM processes and IM responsiveness of margin models in non-centrally cleared markets: Consultative report*, January 2024.

44 CPMI-IOSCO, *Streamlining variation margin in centrally cleared markets – examples of effective practices*, February 2024.

45 FSB, *Liquidity Preparedness for Margin and Collateral Calls: Consultation report*, April 2024.

46 ESMA, *Guidelines on liquidity stress testing in UCITS and AIFs*, July 2020.

47 ESRB, *Issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective*, September 2023.

48 FSMA, *Findings regarding the liquidity stress tests conducted by Belgian fund managers*, August 2024 (available in French and Dutch).

1.6 Interconnectedness

Interconnectedness is key to generating efficiencies in financial markets, but it can exacerbate the negative impact of shocks. Financial stability risks from interconnectedness are closely related to the provision of leverage (see section 1.4). In 2024, the European Commission published a report on the macroprudential review for banks and NBFI, in which it identified the interconnectedness risk within NBFIs and between the banking sector and NBFIs as one of three key vulnerabilities from NBFIs (see Box 2)[49].

Risks from interconnectedness can materialise in two different ways. The first way is a shock that spreads across the NBFI sector or from one sector to the other. A recent example of such a contagion is the default of Archegos, where some of its counterparties in the banking sector suffered heavy losses, as discussed in section 1.1. Conversely, after the failure of Lehman Brothers during the GFC, many of its prime brokerage clients (including funds) lost access to their collateral assets. The second way in which the interconnectedness risk can materialise is when NBFIs and banks invest in the same assets or have the same counterparties. In this respect, the success of passive investment could be a factor strengthening the shared exposure of some NBFIs and banks. In case of stress, banks and NBFIs could be exposed simultaneously, which increases the likelihood of a systemic crisis. Moreover, if NBFIs and banks react by decreasing their exposure to these common assets, this may trigger a cycle of fire sales of these assets. Commercial real estate, discussed in section 1.7, is an example of assets to which banks, as financing providers, and NBFIs, as equity or financing providers, may be similarly exposed.

The European Commission consultation on macroprudential policies for NBFI seeks to explore the benefits and costs and potential arrangements of EU-wide stress tests that may be held across the NBFI sector and between NBFIs and banks to identify vulnerabilities stemming from these linkages[50]. Such a stress test could simulate the impact of different scenarios on various sectors[51].

Counterparty credit risk management from leverage providers could mitigate risks from interconnectedness. In April 2024, the BCBS published a consultation on guidelines for counterparty credit risk management, which include key practices critical to resolving long-standing industry weaknesses in counterparty credit risk management[52]. They provide the supervisory response to shortcomings that have been identified in banks' management of counterparty credit risk, including lessons learned from the previously discussed episodes of NBFI distress. The greatest potential benefits are expected for banks having high-risk exposures to (non-bank) counterparties. They include key practices on due diligence, credit risk mitigation strategies, counterparty credit risk metrics and governance.

---

49 European Commission, *Report from the Commission to the European Parliament and the Council on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions, under Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012*, January 2024.

50 European Commission, *Targeted Consultation Document Assessing the Adequacy of Macroprudential Policies for Non-Bank Financial Intermediation (NBFI)*, May 2024.

51 In the UK, the Bank of England launched, in 2024, its System-Wide Exploratory Scenario (SWES) exercise. The goal of the exercise is to improve the understanding of the behaviours of banks and NBFIs during stressed market conditions, and how those behaviours might interact to amplify shocks in certain UK financial markets. Bank of England (2024), *The Bank of England's system-wide exploratory scenario exercise*.

52 BCBS, Guidelines for counterparty credit risk management: Consultative Document, April 2024.

Box 2

Focus on some recent regulatory developments in Europe

The ESRB's issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective

In 2023, the European Systemic Risk Board (ESRB) published an issues note describing a high-level approach to addressing risks in investment funds that invest in assets which are either inherently illiquid or might become illiquid in times of stress, with a particular focus on corporate debt and real estate funds[53]. The note outlines a number of proposals and options for further policy work aimed at improving the resilience of the funds. While focusing on the funds with large exposure to corporate debt and real estate, reflecting a priority previously identified by the ESRB[54], the proposals and policy options could also be applicable to other funds investing in assets that are inherently illiquid or might become illiquid in times of stress.

The issues note outlines potential adaptations to existing policy tools, as well as some potential new tools, that could improve the resilience of these funds. Adaptations to existing policy tools include a better alignment of the fund's redemption terms with the investment strategy, including the use of longer notice periods, the use of anti-dilution liquidity management tools such as swing pricing and, for funds using leverage, the increase of their preparedness to face margin or collateral calls. Potential new policy tools outlined by the issues note include building on the 'liquidity bucketing' approach (classification of fund investments in so-called liquidity buckets, varying from highly liquid to illiquid investments) and the development of ex-ante policy instruments aimed at mitigating liquidity risk (in the same way as what is currently provided for leverage under Article 25 of AIFMD). Finally, the issues note reflects on the role that the authorities could play in applying certain policy tools in times of stress.

Consultation by the European Commission on macroprudential tools for NBFI

In January 2024, the European Commission (EC) published a report on the macroprudential review for credit institutions, the systemic risks relating to NBFIs and their interconnectedness with credit institutions[55]. On the framework for NBFIs, the EC identified three key vulnerabilities of NBFIs: unmitigated liquidity mismatch, excessive leverage and interconnectedness. One additional point requiring attention the EC identified is the lack of consistency and coordination among macroprudential frameworks across the EU, which could exacerbate the negative impact of the vulnerabilities.

As a follow-up to this report, in May 2024, the EC launched a targeted consultation assessing the adequacy of macroprudential policies for NBFI[56]. The objective is to seek public authorities' and other stakeholders' views on the adequacy of the macroprudential framework for NBFI. The consultation focused on three aspects: (1) an evaluation of the current framework, (2) the review or repurposing of existing tools and (3) the possibility for introducing new macroprudential tools and improving coordination within the EU.

ESMA's response to the consultation highlights key proposals[57]. First, ESMA considered that some liquidity mismatches are not sufficiently addressed and that funds investing in assets that are not liquid should use sufficiently long notice periods, keep a minimal allocation to liquid assets or be structured as closed-ended funds. Second, ESMA reiterated its call for a review of the MMF Regulation (see section 1.3). Finally, ESMA argued in favour of a more data driven supervision with a harmonised framework to assess risks and greater coordination between competent authorities.

Amendments to the legal framework for investment funds

In March 2024, Directive (EU) 2024/927 amending the AIFM Directive and the UCITS Directive was published.

The AIFMD was amended to introduce requirements and restrictions for managers of loan-originating AIFs. Managers of loan-originating AIFs will be required to have policies, procedures and processes for assessing the credit risk and for administering and monitoring the credit portfolio. Measures will aim to reduce the potential conflicts of interest and moral hazard. Restrictions on leverage, lending to specific entities and liquidity mismatch will apply.

The directive also establishes a reporting framework under the UCITS Directive and harmonises the rules on the use of LMTs for open-ended funds, both UCITS and AIFs. Open-ended funds will have to select at least two LMTs[58] from the following list: redemption gates, extension of notice periods, redemption fees, swing pricing, dual pricing, anti-dilution levy, or redemptions in kind. ESMA is developing Regulatory Technical Standards on the characteristics of the LMTs and Guidelines on the selection and calibration of these LMTs.

1.7 Private finance

Private finance provides an additional source of funding for companies without access to public markets and investment opportunities for long-term investors. Private finance generally encompasses activities relating to the funding by non-bank investors to companies through bilateral transactions, such as private equity and private credit, often arranged through investment funds. It is a key funding source for start-ups and other small and medium-sized enterprises (SMEs). Most investors active in private finance are long-term professional investors, such as insurance companies and pension funds, or other qualified investors. The capital that is raised is usually invested in equity and/or debt securities issued by unlisted companies. At the global level, the market size was estimated to be around $ 12.8 trillion in mid-2022[59].

Private finance may also entail investor protection and financial stability risks. In its thematic analysis of emerging risks of private finance, IOSCO notes that the inherent opacity of these markets jeopardises the availability of information for investors and regulators[60]. IOSCO's analysis discusses private finance risks arising from conflicts of interest, the use of leverage and interconnectedness with other parts of the financial system. Leverage is an essential feature of some private finance, such as leveraged buy-outs (LBO). There could be potential risks associated with interconnectedness, mainly for banks providing leverage, as well as for institutional investors providing capital. IOSCO's report also points to near-term risks from tightened funding amid changing macro-financial conditions, notably the higher interest rate environment. Both the FSB and the ESRB have also paid attention to the risks

---

53 ESRB, *Issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective*, September 2023.

54 ESRB, *Recommendation of the European Systemic Risk Board on liquidity risks in investment funds*, June 2020.

55 European Commission, *Report from the Commission to the European Parliament and the Council on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions, under Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012*, 24 January 2024.

56 European Commission, *Targeted Consultation Document Assessing the Adequacy of Macroprudential Policies for Non-Bank Financial Intermediation (NBFI)*, 22 May 2024.

57 ESMA, *ESMA's response to the EC consultation on the review of the EU macro-prudential policy framework for NBFI*, November 2024.

58 By way of derogation, MMFs will have to select at least one LMT.

59 IOSCO, *Thematic Analysis: Emerging Risks in Private Finance*, September 2023.

60 IOSCO, *Thematic Analysis: Emerging Risks in Private Finance*, September 2023.

from private finance activities in their monitoring reports[61,62]. Liquidity risks are generally limited within private finance, as private equity funds and private credit funds are usually set up as closed-ended structures or have lock-up periods preventing early redemptions.

In Europe, private finance activities arranged through investment funds are subject to the AIFMD framework. Managers of those funds are subject to an authorisation and supervision requirement, as well as to several risk management, valuation, conflicts of interest, transparency and reporting requirements, among other things. They are subject to the leverage requirements of Article 25 of the AIFMD, and could potentially face the imposition of leverage limits or other restrictions with a view to limiting system risks. Managers whose assets under management do not exceed a certain threshold are exempted from most AIFMD requirements, except a registration and annual reporting requirement. In Europe, the total private finance market size is estimated to be around € 2.4 trillion at end-2022[63], while private equity funds represent around € 0.7 trillion[64]. These funds are mainly closed-ended and generally exhibit low levels of direct leverage[65].

In Belgium, private finance activities are often structured within the often used national framework of the 'Private Pricaf'. Many of those vehicles also qualify as AIFs according to the AIFMD, which means that their managing body is generally subject to a registration and reporting requirement and in some cases a full scope authorisation and supervision requirement (see Box 4).

1.8 Commercial real estate

The commercial real estate (CRE) sector has been subject to challenges from increased interest rates and shifts in demand for certain segments and types of properties. Demand shifts may be the result of cyclical factors, as well as of structural changes, such as an increased focus on energy efficiency, the growth of e-commerce and the rise of hybrid working models. Higher interest rates reduce the scope for CRE firms to refinance existing debt and take on new loans[66].

The ESRB has recommended EU and national authorities to improve the monitoring of systemic risks stemming from the CRE sector[67]. The ESRB notes that developments in the CRE sector may have a systemic impact, as the sector is of a substantial size and has important linkages to the real economy and to the financial system, although this may vary between segments and member states of the EEA. In addition to recommending a close monitoring of emerging CRE vulnerabilities, the ESRB also issued a recommendation to authorities about prudent risk management practices for financial institutions providing financing for CRE, a recommendation to authorities about addressing risks and vulnerabilities related to the CRE sector, including liquidity mismatch and leverage risks for funds holding material CRE-related exposures, and a recommendation to the European Commission about activity-based macroprudential tools to avoid regulatory arbitrage.

In 2023, the focus of ESMA's AIF leverage risk assessment on the basis of Article 25 of the AIFMD was on real estate funds, where relevant. ESMA found that real estate funds pose low risks on an individual basis, due to their limited use of leverage or size in most jurisdictions, but could be more

61 FSB, *Global Monitoring Report on Non-Bank Financial Intermediation*, December 2023. Some private credit and private equity funds are included in the narrow measure of NBFI, some are outside the narrow measure (related to the focus on credit intermediation), and others are not included at all due to data limitations.

62 ESRB, *EU Non-bank Financial Intermediation Risk Monitor 2023 (No9)*, June 2024.

63 ESRB, *EU Non-bank Financial Intermediation Risk Monitor 2023 (No9)*, June 2024.

64 ESMA, *EU Alternative Investment Funds 2023: ESMA Market Report*, January 2024.

65 Indirect leverage is not reported for private equity funds under the AIFMD framework.

66 ESRB, *Vulnerabilities in the EEA commercial real estate sector*, January 2023.

67 ESRB, *Recommendation of the European Systemic Risk Board of 1 December 2022 on vulnerabilities in the commercial real estate sector in the European Economic Area*, December 2022.

systemically relevant in jurisdictions where groups of funds own a large share of the real estate market on aggregate[68].

In Belgium, real estate funds managed by authorised AIFMs represent only a small part of the asset management sector, while other specific regulatory frameworks for real estate investments are more popular. Potential leverage-related systemic risks from real estate funds appear to be contained, although risks from CRE continue to be an area of attention for the FSMA and NBB (see also section 4.4). Unlike the limited importance of real estate funds in Belgium, investments in real estate are often held through Regulated Real Estate Companies or through Specialised Real Estate Funds (see Box 3).

Box 3

Real estate within NBFI in Belgium

In Belgium, investing in physical real estate via financial vehicles is subject to specific legal frameworks. The regulated statuses include Regulated Real Estate Investment Companies (comparable to REITS, and sometimes referred to as BE-REITs), Specialised Real Estate Investment Funds, and alternative investment funds investing in real estate.

In addition to vehicles that fit into a specific legal regime, unregulated private real estate investment companies investing in physical real estate are not authorised or registered by the FSMA and do not report to the FSMA (see *infra*).

Real Estate Investment Companies

A Regulated Real Estate Investment Company (RREICs) can take the form of a Public RREIC or an Institutional RREIC[69]. Public RREICs are publicly listed companies with a fixed number of shares (i.e. a closed-ended structure) that own and manage real estate portfolios. The legal status requires compliance with conditions relating *inter alia* to minimum diversification, accounting standards, independent valuation, distribution of profits, a debt limit, conflicts of interest and supervision by the FSMA. Institutional RREICs are companies with a fixed number of shares (closed-ended) that are consolidated within Public RREICs. Unlike Public RREICs, their securities are not traded on a regulated market.

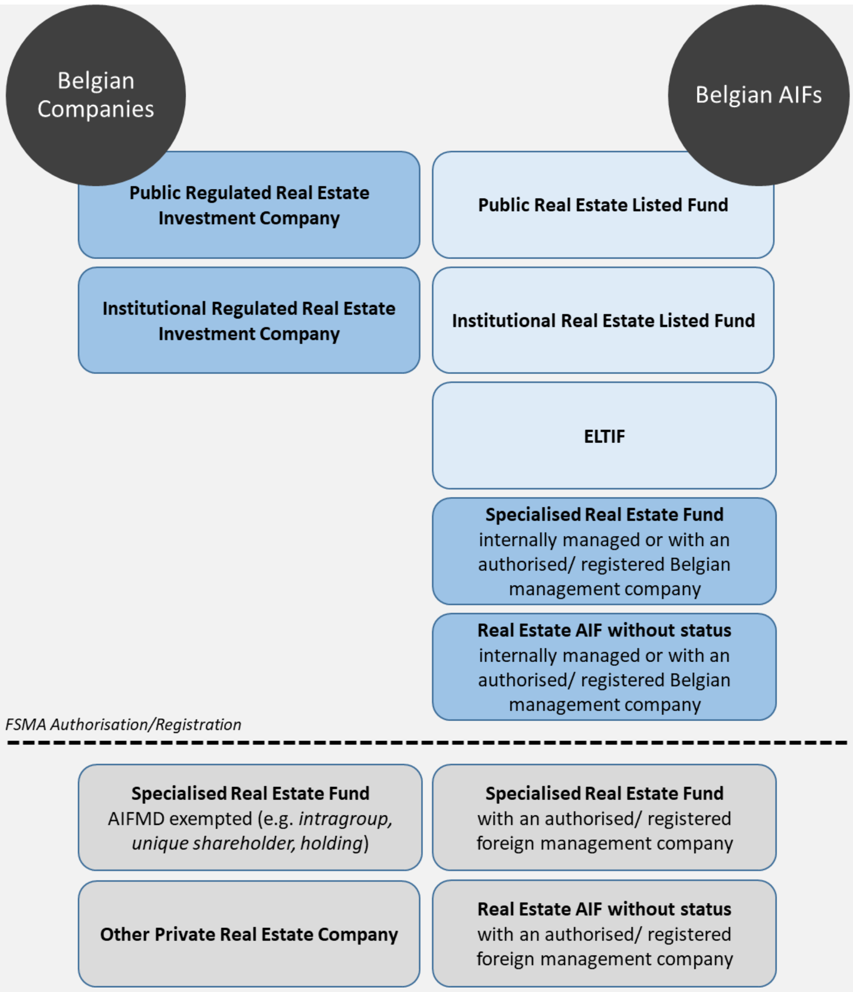
The RREIC is by far the most successful regime to invest in physical real estate via regulated financial vehicles. At the end of 2023, there were 16 Public RREICs and 10 Institutional RREICs with a total market value of more than € 18 billion. Both the number of RREICs and their total market value have decreased somewhat recently: at the end of 2021, there were 17 Public RREICs and 14 Institutional RREICs, respectively, with a total market value amounting to more than € 20 billion.

The fixed number of shares and exchange-listed features, as well as the debt ratio – which is limited to 65% of total assets - mitigate both the liquidity and the leverage risks of RREICs.

---

68 ESMA, *Assessing risks posed by leveraged AIFs in the EU: ESMA TRV Risk Analysis Financial Stability*, January 2024.

69 Subject to the provisions of the Law of 12 May 2014 and the Royal Decree of 13 July 2014 on regulated real estate companies. *Gereglementeerde vastgoedvennootschappen* (*GVV*) in Dutch and *Sociétés immobilières réglementées* (*SIR*) in French.



Specialised Real Estate Funds

Specialised Real Estate Funds (SREFs) are closed-ended investment vehicles available to qualifying investors only and are registered with the FPS Finance[70]. The legal status requires compliance with conditions relating *inter alia* to minimum accounting standards, reporting, independent valuation and conflicts of interest.

The legal framework for SREFs was created at the end of 2016, with one of its objectives being to reposition Brussels as a financial centre. Since then, the number of SREFs has increased considerably. At the end of 2023, there were 197 SREFs registered at the FPS Finance[71]. Creating a legislative framework that is more flexible than that of the RREIC and the listed real estate fund (see below), for qualifying investors, was aimed at making Belgium more attractive to real estate fund managers. SREFs are not subject to diversification requirements, allowing these structures to be more tailored to the investment objectives of their investors.

[70] Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers and the Royal Decree of 9 November 2016 on specialised real estate funds. *Gespecialiseerde vastgoedbeleggingsfondsen* (*GVBF*) in Dutch and *fonds d'investissement immobiliers spécialisés* (*FIIS*) in French.

[71] Available at https://financien.belgium.be/en/control-financial-instruments-and-institutions/compliance/collective-investment-undertaking.

For a SREF that qualifies as an alternative investment fund (AIF) according to the AIFMD[72], its manager (AIFM, which could be the SREF itself if it is internally managed) is subject to the provisions of the AIFMD. This means that the manager needs to be authorised or registered by its competent authority. Some SREFs may not meet the definition of an AIF under the AIFMD or may be exempted according to the AIFMD (e.g., if they may only have one investor and therefore do not raise capital from a number of investors; if all shareholders, as a collective, have day-to-day discretion or control; if the only investors are the manager or the parent undertakings or the subsidiaries of the manager or other subsidiaries of those parent undertakings)[73].

Other funds investing in real estate

Within the investment fund space, only some types of funds may invest in physical real estate. Belgian investment funds are either UCITS or AIFs (see Chapter III). UCITS are subject to detailed eligible assets requirements that do not include physical real estate[74]. They are generally allowed to invest only in listed financial instruments, deposits, units of other investment funds subject to similar (asset eligibility) rules, and derivatives, subject to certain restrictions. Depending on their investment policy and subject to minimum safeguards, this could encompass investments in (listed) securities issued by real estate companies. Investment funds managed or marketed in Europe that are not authorised as UCITS are AIFs. AIFs include fund types with a specific regulatory framework, as well as funds without such a specific regulatory framework. AIF managers are subject to the provisions of the AIFMD. Belgian AIFs that have opted for the following statuses are allowed to invest in physical real estate: Public Real Estate Listed Fund[75], Institutional Real Estate Fund[76], European Long-Term Investment Fund[77] or the previously discussed SREF.

Public Real Estate Listed Funds are closed-ended publicly listed AIFs that own and manage real estate portfolios. This legal status requires compliance with specific rules governing, among other things, the depositary, legal documentation, investment policy, maximum leverage, accounting, periodic reporting, charges and conflicts of interest. Since 2015, no public real estate funds have been registered in Belgium.

Institutional Real Estate Funds are closed-ended AIFs available to qualifying investors only and registered with the FSMA. This legal status requires compliance with conditions relating *inter alia* to minimum accounting standards, reporting, independent valuation and conflict of interest requirements. No institutional real estate funds are registered in Belgium.

European Long-Term Investment Funds (ELTIFs) are AIFs that aim to invest long-term capital in unlisted companies and projects, and may also invest in physical real estate assets.

---

72 Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers, transposed by the Law of 19 April 2014 on alternative investment funds and their managers.

73 Depending on (i) the qualification of a SREF as an AIF as defined by the AIFMD and (ii) (for SREFs qualifying as an AIF subject to the AIFMD) whether the AIFM of a SREF is domiciled in Belgium (which is always the case for internally managed funds, but not necessarily for funds with an external manager), the AIFM must be authorised or registered by the FSMA, and the AIFM must report to the FSMA at least annually. In other words, the FSMA will not have data on SREFs that do not meet the definition of an AIF according to the AIFMD, SREFs whose manager is exempted from the AIFMD, and SREFs with a foreign manager.

74 With the exception of buildings essential for the direct conduct of its business.

75 Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers and the Royal Decree of 7 December 2010 on real estate funds. *Openbare vastgoedbevak* in Dutch and *sicafi publique* in French.

76 Subject to the provisions of the Law of 19 April 2014 and the Royal Decree of 7 December 2010 on real estate funds. *Institutionele vastgoedbevak* in Dutch and *sicafi institutionelle* in French.

77 Subject to the provisions of the Law of 19 April 2014 and Regulation (EU) 2015/760 of the European Parliament and of the Council of 29 April 2015 on European long-term investment funds.

The harmonised European regulatory framework for ELTIFs was created in 2015, and amended in 2024, with one of its objectives being to boost European long-term investments in the real economy. ELTIFs are intended to provide long-term financing to infrastructure projects, unlisted companies, or certain listed small and medium-sized enterprises (SMEs), and to provide a steady income to certain long-term investors. The framework requires ELTIFs to comply with a number of provisions on, among other things, authorisation, eligible investments, conflicts of interest, diversification and concentration limits, limits on cash borrowing, redemptions, distribution of proceeds, disposal of assets, transparency and marketing. No ELTIFs are currently registered in Belgium.

In addition to the above-mentioned AIFs that have specifically opted for a regulated status, non-public AIFs that have not opted for such a status may also invest predominantly in real estate. In that case, their AIFM would generally report those AIFs as "real estate funds" to their competent authority. The FSMA is the competent authority for Belgian AIFMs. Real estate funds with a foreign AIFM are reported to the competent authority of another member state of the EEA.

At the end of 2023, Belgian authorised and registered AIFMs reported data on 44 Belgian and foreign AIFs that are classified as real estate funds, accounting for total net assets of almost € 2 billion. Should the investment manager of the AIF not be registered/authorised by the FSMA, because the investment manager is foreign, the AIF is not reported to the FSMA.

23% of real estate AIFs' net assets are managed by Belgian authorised AIFMs[78] the remainder are managed by sub-threshold AIFMs. The majority of the latters' assets are managed within internally managed AIFs, which means that the fund and the manager are the same legal entity. 20 of the 44 real estate AIFs are also registered with the FPS Finance as SREFs, and are thereby subject to the specific provisions applicable to this regulatory regime. In addition, 1 fund of funds reported to the FSMA is also registered as a SREF. At the end of 2023, all real estate AIFs managed by authorised AIFMs were closed-ended or had specific arrangements to mitigate liquidity risk. Real estate AIFs managed by sub-threshold AIFMs generally do not offer redemption rights exercisable during a period of 5 years following the date of initial investment. In practice, most of these funds are closed-ended structures[79].

The closed-ended nature of the Belgian financial vehicles that invest in physical real estate and the limited footprint[80] of real estate investment funds strongly mitigate the potential financial stability risks stemming from these vehicles. Yet, they are part of a broader ecosystem that results in an overall sizeable exposure of the Belgian financial system to commercial real estate. The market participants described in this text box and the exposures of Belgian banks (through loans, for example) and insurance companies to them (through investments) are therefore also part of the NBB's macroprudential monitoring framework for commercial real estate developments in Belgium. This monitoring framework was enhanced in light of the challenging market conditions, in line with the above-mentioned ESRB Recommendation[81] to this effect.

---

[78] Belgian AIFMs are required to obtain an authorisation from the FSMA before they are allowed to manage AIFs, except when their assets under management do not exceed a threshold of € 100 million or € 500 million. The latter threshold applies when the portfolios of AIFs consist of AIFs that are unleveraged and have no redemption rights exercisable during a period of 5 years following the date of initial investment in each AIF. These sub-threshold AIFMs still need to register with the FSMA. They also have an annual reporting requirement to the FSMA.

[79] This may allow them to apply the € 500 million threshold based on article 3 (2) of the AIFMD.

[80] By way of comparison, the total value of real estate investments in Belgium owned by Belgian resident individuals, as estimated by the NBB at the end of 2022, amounted to € 1,876 billion.

[81] See also the thematic article on commercial real estate published in in the NBB *Financial Stability Report*, May 2024.

II. Developments in NBFI in Belgium

2.1 Delineation of the Belgian NBFI sector and international comparison

Different definitions of the Belgian NBFI aggregate can be used; this report focuses on the definitions of the FSB and EU regulation. The FSB defines the narrow measure of NBFI[82] as entities "*being involved in credit intermediation activities that may pose bank-like financial stability risks (i.e. credit intermediation that involves maturity/liquidity transformation, leverage or imperfect credit risk transfer) and/or regulatory arbitrage*". This definition does not mean that NBFI escapes from regulatory requirements; rather, given the different functions of these entities in the financial system, it is regulated in a different manner than banks. The main difference between the FSB and EU regulation methodologies is the narrowing down which is interpreted in different ways and thus leads to a diverging magnitude of the NBFI aggregate.

As the NBFI aggregate as such is not defined in the financial accounts, it is delineated using the financial assets of several entity types. This delineation of the Belgian NBFI aggregate starts from the broad FSB-defined "NBFI sector"[83] which is the sum of the financial assets of all non-bank financial entities, including pension funds and insurance companies. This broad Belgian NBFI sector amounted to € 1,279 billion at the end of 2023 (Chart 2.1). The financial assets of the banking sector[84] are of roughly similar size, amounting to € 1,260 billion. However, this broad NBFI sector consists of a wide variety of financial entities and not all of them should be considered as posing bank-like financial stability risks. Therefore, the FSB narrows down this concept to non-bank credit intermediation that poses bank-like risks to the financial system and is undertaken by entities that are *not* part of the prudential consolidation scope of a banking/insurance group. These bank-like risks are maturity transformation, liquidity transformation, leverage, and credit risk transfer.

The narrowing down of the Belgian broad NBFI measure according to the framework developed by the FSB is based on five economic functions (EF)[85]. If non-bank financial entities and activities are assessed by authorities to present bank-like risks (e.g. maturity/liquidity transformation and/or leverage), they are classified in an economic function (see the 2017 report for more details about the economic functions and the methodology underlying the process of narrowing down to the Belgian NBFI aggregate).

The Belgian narrow NBFI measure, delineated according to this FSB methodology, amounted to € 163 billion at the end of 2022 and € 172 billion at the end of 2023, an amount equivalent to 14% of the size of the Belgian banking sector. The financial assets of Belgian money market and non-equity investment funds (€ 152 billion at the end of 2023) constitute the bulk of this Belgian NBFI narrow measure (Chart 2.2). These funds are classified under EF1 and are almost all open-ended and hence susceptible to run risks. Charts 2.3 and 2.4 provide further details about the development of EF1. The second category of the narrow NBFI measure is EF2 (loan provision that is dependent on short-term

---

[82] Since the 2019 FSB Global Monitoring Report on Non-Bank Financial Intermediation, this has become the new term for the former FSB term *shadow banking*.

[83] Previously called "MUNFI", i.e. the Monitoring Universe of Non-bank Financial Intermediation. For the 2020 FSB Global Monitoring Report on Non-Bank Financial Intermediation, the FSB decided to modify this terminology to be less technical and more readily accessible to the public.

[84] Excluding central banks.

[85] The five economic functions are defined as follows: EF1: Management of collective investment vehicles with features making them susceptible to runs; EF2: Loan provision that is dependent on short-term funding; EF3: Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets; EF4: Facilitation of credit creation/insurance or guarantees of financial products; EF5: Securitisation-based credit intermediation and funding of financial entities.

funding). This bank-like loan intermediation is performed by financial entities such as leasing and factoring companies, lenders in consumer and mortgage credit and other entities that are not consolidated in a banking/insurance group. Their financial assets amounted to € 14.1 billion at the end of 2023. The third and last category of the narrow measure is classified under EF5 and consists of securitisation activities by financial vehicle corporations (FVCs) that are not retained on the balance sheets of Belgian banks. At the end of 2023, this EF amounted to € 6.8 billion.

The FSB conducts annual monitoring exercises to assess global trends and risks in non-bank financial intermediation and publishes the results in its annual *Global Monitoring Report on Non-Bank Financial Intermediation*. The NBB has contributed since 2016 to this international exercise, which makes it possible to assess where Belgium stands in the global landscape. The latest edition of this report was published on 16 December 2024 and describes broad trends in financial intermediation across 29 jurisdictions that account for around 88% of global GDP, on the basis of data for 2023[86].

Using data from this report, Chart 2.5 compares the (relative) size of the Belgian NBFI sector with the average for advanced economies. At the end of 2023, advanced economies (including Belgium) accounted for slightly more than 80% of the financial assets held by the global narrowed-down NBFI sector ($ 50.7 trillion out of $ 70.2 trillion). The US alone represents more than 30% of this global aggregate. EU countries (excl. the United Kingdom and Switzerland) follow with a share of around 20%, driven, in particular, by the narrowed-down NBFI sectors of Luxembourg and Ireland, followed by Germany and France.

The narrowed-down NBFI sector in Belgium accounts for only 0.3% of the global aggregate and around 1% of the total for EU countries. As shown in Chart 2.5, the size of the narrowed-down NBFI sector is also significantly smaller in Belgium (29% of GDP) than in other advanced economies (98% of GDP) when compared to the size of the economy. This confirms, on the one hand, that credit intermediation in Belgium is, to a large extent, still dominated by banks and by NBFIs excluded from the narrow measure that are part of banking groups (many leasing or consumer credit companies are subsidiaries of banks and hence part of the regulatory perimeter of consolidated bank supervision). Yet it also suggests that non-Belgian NBFIs (for example, investment funds incorporated in Luxembourg) play a relatively bigger role in the provision of financial services in Belgium than in other advanced economies, on average.

Under the EU regulation[87] framework, the Belgian NBFI narrow measure amounted to € 23.4 billion at the end of 2023 compared to € 28.8 billion at the end of 2022 and to € 18.3 billion at the end of 2021. This is lower than the FSB narrow measure, since only Belgian money market funds and AIFs with a leverage that exceeded 300% or that were granting/purchasing loans[88] are included in EF1 of the EU regulation framework measure.

---

[86] FSB, *Global Monitoring Report on Non-Bank Financial Intermediation*, 16 December 2024. This and all previous reports are available at https://www.fsb.org/publications/key-regular-publications/.

[87] Commission Delegated Regulation (EU) 2023/2779 of 6 September 2023 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards specifying the criteria for the identification of shadow banking entities referred to in Article 394(2) of Regulation (EU) No 575/2013

[88] The NAV of AIFs with a leverage that exceeded 300% amounted to € 0.135 billion in 2023, € 0.134 billion in 2022 and € 0.002 billion in 2021.

2.2 Thematic focus on the private finance market in Belgium

Stepping away from the FSB definition of NBFI, this section provides a thematic focus on the market of private equity and debt finance in Belgium. Box 4 provides an overview of the legal and regulatory frameworks that may be applicable to private finance activities and the various types of financial vehicles that can be used to undertake such activities.

This section complements Box 4 with an overview of the composition and size of the (broadly defined) private investment sector in Belgium using the definition of the European System of Accounts that defines private investment companies primarily as venture and development capital firms. These specialised financial entities provide non-bank finance to other firms, mainly through equity investment and, in some cases, through lending. The sample of companies was drawn from the enterprise register used for compiling Belgium's national accounts. Within this register, private investment companies are classified as a residual category consisting of firms that are not identified as any other specific type of financial corporation within the national accounts framework. This list of companies was supplemented by membership data from the Belgian Venture Capital & Private Equity Association. From the initial sample, mortgage and consumer loan companies were excluded and only companies with a financial-to-total assets ratio exceeding 60% and/or whose name suggested involvement in private investment activities were retained. The final sample consists of 347 companies, which may seem large but also reflects the fact that a significant proportion of the companies (about 25%) are subsidiaries of other companies within the sample (data used are on a non-consolidated basis). The sample is then classified as follows for the purposes of this analysis:

- Listed companies (6 companies): these are companies whose shares are traded on regulated stock exchanges.
- Private Pricafs (120 companies): these are closed-ended private collective investment vehicles that mainly invest in financial instruments issued by unlisted companies. The framework for Pricafs is discussed in Box 4 and was established in 2003 with the aim of encouraging investment in SMEs, particularly in unlisted companies that cannot easily access capital markets.
- Others (221 companies): this diverse category includes private investment companies that do not fall under any of the previous two categories. It comprises a wide range of entities that may be involved in private investment. Some are linked to the traditional financial sectors, while others are government-controlled.

Chart 5.1 shows that listed firms account for approximately 48% of the total financial assets of private investment companies, which amount to € 48 billion in 2022. This figure represents nearly half of the total financial assets (€ 103 billion at the end of 2022[89]) held by companies classified as "other financial intermediaries" in Belgium's financial accounts. However, these financial assets are highly concentrated, as the sector shows a very high heterogeneity in the size of intermediaries that comprise it. The chart also provides an overview of the total assets held by the three categories of private investment companies, broken down into equity investment, credit claims (primarily loans to other companies), cash, real estate and other real assets, and other assets. It shows that all categories of private investment companies have a relatively similar asset structure, with equity investments consistently representing a large proportion (always over 60%) and credit claims being much lower (always below 25%). Other asset categories remain marginal.

Regarding the financing structure of private investment companies (Table 5.1), several observations can be made. First, debt liabilities are concentrated among a limited number of companies. This concentration is especially strong for other financial debt issued by publicly listed firms (mainly through

[89] This figure excludes assets held by securitisation vehicles, real estate investment funds and stockbroking firms.

corporate bonds) and for the bank debt of private companies in the residual category ("Others"). Second, across all categories, private investment companies exhibit low leverage, with a median debt-to-assets ratio of less than 20%. Third, the financing structure of private investment companies varies by category. For instance, Pricafs rely more on bank debt than other categories. Overall, however, the funding connections of private investment companies with the traditional financial sector remain extremely limited.

In sum, the analysis of Belgium's private investment sector presents a relatively reassuring picture from a financial stability point of view. The fact that listed corporations account for a substantial share of Belgian private investment companies' assets suggests that much of the investment risk is borne by participants in public financial markets. Furthermore, private investment companies tend to have low leverage and maintain limited funding links with the banking sector, reducing potential contagion risks in times of financial stress.

Box 4

Private finance legal frameworks in Belgium

Private finance generally encompasses activities relating to the funding by non-bank investors to companies through bilateral transactions (see section 1.6)[90]. This is often arranged through private investment funds, such as private equity and private credit funds, but investors may also engage in bilateral transactions with target companies. This box discusses legal frameworks that may be applicable to private finance activities in Belgium.

In Belgium, financial vehicles investing in securities issued by unlisted companies are generally subject to specific legal frameworks. Some of these vehicles qualify as investment funds, while others are companies that cannot be considered investment funds under the legislation. A particularly successful framework in Belgium is that of the Private Pricaf. Investors may also invest in unlisted securities by purchasing shares of listed holding companies. In addition, investors may also engage in bilateral financing transactions with target companies on an individual basis, for instance through (unregulated) private companies.

Private Pricaf

Private Pricafs are investment companies with a fixed number of shares (i.e. closed-ended structure) available to qualified investors only, and registered with the Federal Public service (FPS) Finance[91]**.** Their legal framework requires them to invest mainly in financial instruments issued by companies of which the shares are not admitted to trading on a regulated market. The legal framework, which offers a broad degree of flexibility, was created in 2003 and has seen been amended in 2007 and 2018. In recent years, the number of Private Pricafs has significantly increased. At the end of 2023, there were 193 (compartments of) Private Pricafs registered at the FPS Finance.

A Private Pricaf would generally be expected to qualify as an alternative investment fund (AIF) according to the AIFMD[92]**.** In that case, the Private Pricaf or its manager is subject to the provisions of the AIFMD, including an obligation to obtain an authorisation or registration from its competent authority, as well as an obligation to report information to its competent authority, at least on an

---

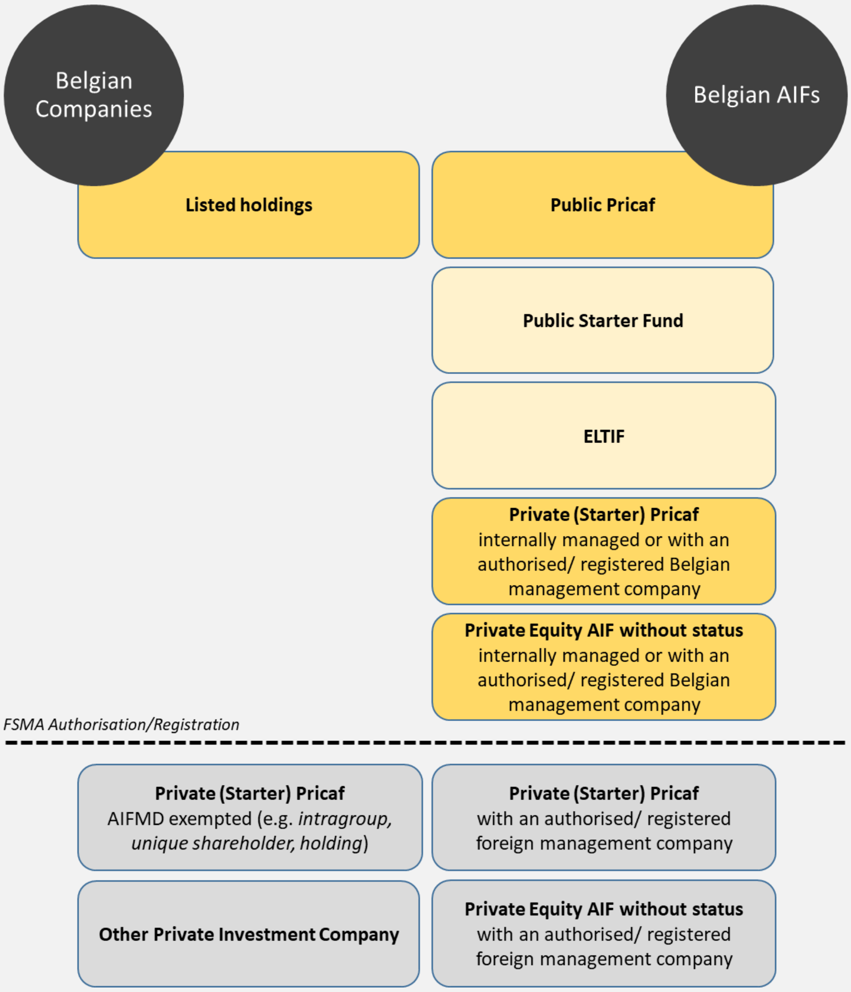
90 IOSCO, *Thematic Analysis: Emerging Risks in Private Finance*, September 2023.

91 Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers and the Royal Decree of 23 May 2007 on the private equity closed-ended investment company. *Private privak* in Dutch and *pricaf privée* in French.

92 Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers, transposed by the Law of 19 April 2014 on alternative investment funds and their managers.

annual basis. However, similar to SREFs (see Box 3), some Private Pricafs may not meet the definition of an AIF according to the AIFMD, or may be exempted from the AIFMD[93].

A specific regulatory framework that builds on the framework of the Private Pricaf is that of the Private Starter Pricafs[94]. A Private Pricaf may specifically opt for the status of Private Starter Pricaf. In that case, it is required to invest mainly in start-up companies. The framework was created in 2017. At the end of 2023, there were six (compartments of) Private Starter Pricafs registered at the FPS Finance. Like other Private Pricafs, they may or may not be subject to the provisions of the AIFMD.



Investment funds investing in securities issued by unlisted companies

In Belgium, various frameworks exist under which funds can be created to invest in securities issued by unlisted companies. Given their detailed asset eligibility rules, as well as rules with respect to minimum liquidity safeguards, UCITS generally do not invest in securities issued by unlisted

---

93 The FSMA does not have data on Private Pricafs that do not meet the definition of an AIF according to the AIFMD, Private Pricafs whose manager is exempted from the AIFMD, or Private Pricafs with a foreign manager. It should be noted that it is less likely that Private Pricafs do not meet the definition of an AIF according to the AIFMD on the basis of having only a single shareholder, because, with some exceptions, Private Pricafs are required to have at least six shareholders.

94 Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers, the Royal Decree of 23 May 2007 on the private equity closed-ended investment company, and the Royal Decree of 5 March 2017 on public starters' funds and private starters closed-ended investment companies. *Private startersprivak* in Dutch and *pricaf privée starter* in French.

companies. By contrast, AIFs that take the form of a Public Pricaf, a Public Starter Fund or the previously discussed Private (Starter) Pricaf are required to invest in such assets. With regard to European Long-Term Investment Funds, securities issued by unlisted companies are among their eligible assets.

Public Pricafs are publicly listed closed-ended investment funds that invest in securities issued by unlisted companies and high-growth companies[95]. Their shares are admitted to trading on a regulated market. Their regulatory framework requires them to comply with a number of provisions on, among other things, fees and costs, depositary, minimum diversification, eligible assets, accounting standards, distribution of profits, debt limit, conflicts of interests and supervision by the FSMA. There is currently one Public Pricaf registered in Belgium.

Public Starter Funds are publicly offered closed-ended investment funds that invest in securities issued by start-ups[96]. Contrary to Public Pricafs, these funds are not listed and have a limited duration. Their regulatory framework requires them to comply with a number of provisions on, among other things, minimum diversification, eligible assets, accounting standards, transparency, distribution of profits, debt limit, conflicts of interest and supervision by the FSMA. There is currently no Public Starter Fund registered in Belgium.

European Long-Term Investment Funds (ELTIFs), which have a long-term investment objective and which were also discussed in Box 3, are AIFs that are suitable for investing in securities issued by unlisted companies[97]. As discussed, ELTIFs aim to provide long-term financing to infrastructure projects, unlisted companies, or certain listed SMEs, and they are subject to provisions on, among other things, authorisation, eligible investments, conflicts of interest, diversification and concentration limits, limits on cash borrowing, redemptions, distribution of proceeds, disposal of assets, transparency and marketing. No ELTIFs are currently registered in Belgium.

Non-public AIFs that have not opted for one of the above specific regulatory regimes may also invest predominantly in securities issued by unlisted companies. They would likely be reported as "private equity funds" [98] to the FSMA or to the competent authority of another EEA member state, depending on the domicile of the AIFM.

At the end of 2023, Belgian authorised and registered AIFMs reported data on 209 Belgian and foreign AIFs that are classified as private equity funds, accounting for total net assets of more than € 6 billion. No data are reported to the FSMA for AIFs of which the manager is not registered or authorised by the FSMA, i.e., foreign managers.

33% of private equity AIFs' net assets are managed by six Belgian authorised AIFMs; the remainder is managed by sub-threshold AIFMs. Unlike real estate AIFs (see Box 3), the majority of the latter's assets is managed by designated AIFMs, and not within internally managed AIFs. 121 of the 209 private equity AIFs are also registered with the FPS Finance as Private Pricafs. In addition, 28 other AIFs that reported to the FSMA (e.g., funds of funds or other funds) are also registered as Private Pricafs. In practice, most of these funds are closed-ended structures.

---

95 Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers and the Royal Decree of 10 July 2016 on alternative investment funds investing in unlisted companies and in high-growth companies. *Openbare privak* in Dutch and *pricaf publique* in French.

96 Subject to the provisions of the Law of 19 April 2014 on alternative investment funds and their managers and the Royal Decree of 10 July 2016 on alternative investment funds investing in unlisted companies and in high-growth companies. *Openbare privak* in Dutch and *pricaf publique* in French.

97 Subject to the provisions of the Law of 19 April 2014 and Regulation (EU) 2015/760 of the European Parliament and of the Council of 29 April 2015 on European long-term investment funds.

98 Private equity funds include the following strategies: venture capital, growth capital, mezzanine capital, multi-strategy private equity fund and other private equity fund strategy. The current AIFMD classification does not provide a separate category for private credit funds.

Companies investing in securities issued by unlisted companies

Unregulated private companies investing in securities issued by unlisted companies are not authorised or registered by the FSMA and do not submit a reporting to the FSMA. These companies may have links with regulated financial companies, public institutions or private individuals.

III. Developments in asset management in Belgium

3.1 Belgian asset management sector

This chapter discusses the asset management sector and its 'ecosystem' in Belgium, with a focus on key developments in 2022 and 2023. The chapter reviews the size and composition of the Belgian investment fund sector, the assets under management of the Belgian asset managers and Belgian residents' investments in foreign investment funds. It further discusses the importance of asset management for Belgian banks, insurance companies and institutions for occupational retirement provision. While the former interact with the asset management sector in a variety of ways, the latter two types of institutions invest significant amounts of their assets in investment funds[99]. Table 3.1 presents gross statistics on the assets involved in the different asset management entities and activities from 2019 to 2023, as discussed in the following sections.

3.1.1 Belgian investment funds[100]

The net asset value of Belgian investment funds decreased from € 243 billion at the end of 2021 to € 215 billion at the end of 2023. The market correction of 2022 partially explains this decrease. In addition, some asset managers have relocated their activities to other countries[101].

3.1.1.1. Belgian public open-ended investment funds

Public open-ended investment funds represented € 203 billion, or about 94% of the net asset value of the Belgian investment fund sector, at the end of 2023. These include both undertakings for collective investment in transferable securities (UCITS) and public open-ended alternative investment funds (AIFs) (Table 3.2 b and Chart 3.2)[102]. The size of the public open-ended investment funds at the end of 2022 decreased by 13% compared to 2021 and subsequently increased by 10% in 2023. UCITS represent 99% of the segment of Belgian public open-ended investment funds. The number of UCITS sub-funds decreased from 659 sub-funds at the end of 2021 to 581 at the end of 2023. At the same time, the number of public open-ended sub-funds that qualify as AIFs has not changed (17).

At the end of 2023, the public open-ended investment funds segment was dominated by mixed funds (41%), with equity funds being the second largest category (36%). Pension savings funds and bond funds are respectively the third and fourth largest categories within the public open-ended investment funds segment (12% and 8%, respectively). Net assets of money market funds increased from € 4 billion in 2021 to € 7 billion at the end of 2022, driven by net inflows following turbulence in the market before declining to € 2 billion in 2023 (Table 3.3 and Chart 3.3).

Mixed funds often invest indirectly in several asset classes by investing in units of other investment funds. Overall, funds of funds and feeder funds account for 42% of the total net asset value of Belgian public open-ended investment funds (€ 85 billion out of € 203 billion in 2023).

---

99 The data used in this chapter to measure different aspects related to asset management in Belgium are a combination of financial accounts data of the National Accounts Institute (NAI), data reported to the FSMA by the entities under its supervision and prudential supervisory data available at the NBB for banks and insurance companies.

100 The different types of Belgian investment funds are recalled in Chart 3.1.

101 As a result, the FSMA is no longer the competent authority for the Belgian AIFs that they manage and therefore no longer has data regarding some of these Belgian non-public AIFs.

102 The reported total size of the Belgian investment fund sector is an estimated lower bound, because for some Belgian non-public AIFs, statistics are not reported to the FSMA. However, the total size of the industry corresponds to the Belgian investment fund industry within the supervisory perimeter of the FSMA.

Fund exposures are in line with their investment policy. Table 3.4 and Chart 3.4 shows asset class exposures of Belgian public open-ended investment funds at the end of 2023 by fund category[103,104]. At sector level, 39% of exposures are to equities, while another 39% of exposures are to units in other open-ended investment funds. Mixed funds are mainly exposed to units of other investment funds (80%). Equity funds and bond funds are respectively, as expected, highly exposed to equities (88%) and bonds (74%). Money market funds are exposed to cash and cash equivalents (98%). Pension savings funds are mixed funds, with the majority invested in equities (56%) and the remaining part of the portfolio largely invested in bonds (40%). Structured funds have significant exposure to derivatives (37%), which are used to generate a potential return at the funds' maturity dates.

At sector level, the exposure to derivatives remains limited (6%), with the largest exposures pertaining to foreign exchange derivatives (3%), which are primarily used for hedging purposes. Together, fixed income derivatives and equity derivatives account for 3% of exposures. Across all funds, the proportion of cash and cash equivalents in the portfolio is 2%, ranging between 1% for equity and pension savings funds and 3% for bond funds, with an outlier of 98% for money market funds.

Belgian public open-ended investment funds, which make up the bulk of the Belgian investment fund industry by net assets, are subject to detailed asset eligibility rules, in order to ensure that they mainly invest in liquid assets. In addition, these funds are subject to strict diversification requirements. Their managers are also subject to due diligence requirements before carrying out investments: where it is appropriate after taking into account the nature of a foreseen investment, managers should formulate forecasts and perform analysis concerning the investment's contribution to the fund's portfolio composition, liquidity and risk and reward profile.

The availability and use of liquidity management tools (LMTs) within Belgian public open-ended investment funds allows for mitigation of any first mover advantage and a reduction of potential liquidity mismatches. As discussed in section 1.2, LMTs make it possible to better align the liquidity profile on the redemption side with the liquidity profile on the portfolio side. LMTs could help fund managers to deal with redemption pressures, in particular during stressed market conditions, and allow fund managers to ensure the fair and equal treatment of investors. The FSMA has strongly urged fund managers to make LMTs available for the majority of the Belgian publicly offered open-ended funds[105]. Chart 3.5 shows the types of LMTs that were available, at the end of 2023, for the Belgian publicly offered open-ended funds. 99% of all funds (representing 99% of net assets) had LMTs available or had other risk mitigating features. The funds mainly have price-based (anti-dilution) tools available, an anti-dilution levy (42% of net assets) or swing pricing (30%), while redemption gates can be used for 2% of funds. 16% of the funds have multiple LMTs available.

---

103 Asset classes are based on those included in the AIFMD reporting scheme (see Annex IV of Commission Delegated Regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2001/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage, transparency and supervision). Asset classes have to be reported for all Belgian public open-ended funds. Classification into asset classes is based on self-assessment by the entity responsible.

104 For derivatives, specific conversion methods are used to calculate the exposure of the funds. For foreign exchange derivatives and interest rate derivatives, notional amounts are reported. For other derivatives, conversion methodologies are applied. As a result, total fund exposures are generally above the total net asset value. For short exposures, the absolute value is used.

105 For more information, see also the 2021 Update on Asset management and Non-bank financial intermediation in Belgium 2021, Chapter V.

3.1.1.2. Other Belgian AIFs

Belgian non-public AIFs within the scope of the FSMA's supervisory perimeter represented € 27.7 billion at the end of 2022 and € 12.4 billion at the end of 2023. Both figures are lower bounds for the total net assets of Belgian non-public AIFs[106]. Some asset managers have relocated their activities to other countries, which explains this decline.

There are a number of specific regulatory regimes under which AIFs can be established in Belgium, of which the institutional open-ended AIFs, the specialised real estate fund and the private Pricaf are the most successful. The number of institutional open-ended AIFs (at sub-fund level) registered by the FPS Finance slightly decreased from 105 at the end of 2021 to 98 at the end of 2023 (Table 3.2). Specialised real estate funds and private Pricafs registered by the FPS Finance experienced an opposite trend, as their numbers increased from 170 to 197 and from 150 to 193 respectively over the same period. Some Belgian closed-ended AIFs (with a listing requirement) can also be offered publicly in Belgium. Of these fund types, currently only one public Pricaf is authorised, while there are at present no public real estate funds anymore (nor are there any institutional real estate funds). A number of AIF types have been designed against the background of the CMU: EuVECAs, EuSEFs, ELTIFs, public starter funds and private starter Pricafs. 6 EuVECAs and 6 private starter Pricafs were registered in Belgium at the end of 2023. No Belgian investment funds of the other types have been registered or authorised in Belgium.

3.1.2. Belgian asset managers

3.1.2.1 Authorised managers

The number of Belgian asset managers (UCITS management companies and authorised AIFMs) has grown from 16 in 2021 to 19 in 2023. 6 of the 19 authorised Belgian asset managers hold a double authorisation (Chart 3.6). Since 2019, the number of authorised AIFMs has more than doubled.

The total assets under management (AuM) by Belgian asset managers[107] amounted to € 228 billion at the end of 2022 and € 200 billion at the end of 2023. This decline is generally explained by the relocation of asset managers' activities to other countries (Chart 3.7).

The number of AIFs managed by Belgian authorised AIFMs increased from 161 at the end of 2021 to 272 at the end of 2023, while net assets decreased from € 32 billion to € 28 billion over the same period. The majority of these AIFs (153) were domiciled in another European Economic Area (EEA) member state, representing around 73% of net assets (Chart 3.8). More than 90% of net assets are in funds of funds or "other" funds (e.g. equity, bond or mixed funds), while 7% are in private equity funds (Chart 3.9).

---

106 Not all entities that take the legal form of an institutional open-ended AIF, a specialised real estate fund, or a private (starter) Pricaf under Belgian law are classified as AIFs under the provisions of AIFMD. In addition, Belgian AIFs may have a manager for which the FSMA is not the competent authority. The FSMA only receives reports for Belgian AIFs classified as AIFs under the provisions of the AIFMD, provided that the FSMA is the competent authority of the manager of the AIF. As such, the estimated volume of the net assets of these types of AIFs comprise only those that qualify as AIFs under the provisions of the AIFMD, and which are managed by a manager for which the FSMA is the competent authority to which they report, and it is thus a lower bound. See also Box 3 and Box 4.

107 AuM is measured as the assets of the funds for which the management company is designated as the management company. In previous reports, AuM was measured as the assets of the funds for which the management company was acting as portfolio manager.

3.1.2.2 Registered sub-threshold managers

Sub-threshold managers are alternative investment fund managers (AIFMs) managing alternative investment funds (AIFs) whose assets under management (AuM) do not exceed a threshold. As a general rule, this threshold is set at € 100 million, while a € 500 million threshold can be applied when the AIFs are unleveraged and have no redemption rights exercisable during a period of 5 years following the dates of initial investment. Sub-threshold managers are exempt from the provisions of the AIFMD, with the exception of registration and reporting obligations[108]. Hence, sub-threshold managers are also referred to as 'registered' managers, as opposed to 'authorised' managers. Registered sub-threshold managers are not allowed to manage publicly offered AIFs.

Most of the sub-threshold managers (55%) are internally managed funds, which means that the manager and the fund are the same legal entity. A subset of these sub-threshold managers, or the funds they manage, is registered by the FPS Finance as a private Pricaf or specialised real estate fund (see Box 3 and 4 and Table 3.2 of this report).

Both the number of managers and the AuM have increased during recent years, but its size remains relatively limited compared to other segments of the asset management sector. The number of managers rose from 176 at the end of 2021 to 223 at the end of 2023, while their AuM increased from € 7 billion to € 8 billion over the same period (Chart 3.10).

The number of AIFs managed by Belgian registered sub-threshold AIFMs modestly increased from 233 at the end of 2021 to 256 at the end of 2023. The vast majority of those AIFs at the end of 2023 (235) were Belgian non-public AIFs (Chart 3.11). Net assets in these funds have increased from € 6 billion at the end of 2021 to € 7 billion at the end of 2023. 56% of the net assets are in private equity funds and 21 % in real estate funds (Chart 3.12).

3.2 Foreign asset management entities active in Belgium

3.2.1 Foreign investment funds publicly offered in Belgium

At the end of 2023, 4,761 UCITS sub-funds from other member states of the EEA were notified and subsequently registered by the FSMA. This figure represents a slight increase compared to 2021 (Table 3.5)[109]. Investment funds from other member states of the EEA that can be publicly offered in Belgium consist of UCITS and, in some instances, AIFs. For UCITS, there is a passport regime to facilitate the trading of units in these funds across borders. UCITS from other member states of the EEA need to be notified to the FSMA before their units can be publicly distributed in Belgium. Open-ended AIFs from other member states of the EEA that intend to offer units to the public in Belgium need to be registered with the FSMA. These AIFs need to comply with the relevant Belgian legislation, and the FSMA monitors their activities. There are no longer any such AIFs offered to the public in Belgium.

Although the net asset value (NAV) of foreign investment funds distributed in Belgium is not available as such, the securities holdings statistics (SHS) make it possible to identify the amount of foreign investment funds held by Belgian residents (Table 3.6 provides a breakdown by holding sector and by issuing country). According to this data source, holdings of foreign funds by Belgians increased between 2022 and June 2024, rising from € 282 billion to € 351 billion, with households making up a significant proportion of these holdings (€ 148 billion at the end of June 2024).

---

[108] Sub-threshold managers are also subject to AML/CTF supervision.

[109] Since the supervisor of the home country is the competent authority for these funds, no exact statistics on these foreign UCITS' net assets are available in the present report.

Another contribution of the SHS data is that they make it possible to identify the source of foreign investment funds held by Belgian residents. These funds are mainly concentrated in six issuing countries (of which five are European), and this has been stable over time. Luxembourg is by far the biggest source of foreign investment fund holdings, with € 270 billion at the end of June 2024. It is followed by Ireland with € 45 billion, France with € 25 billion and Germany with € 7 billion.

Based on estimates using the Centralised Securities Database (CSDB), Belgian households hold at least € 12 billion of savings in the form of Exchange Traded Funds (ETFs). All of these are foreign ETFs (most are registered in Ireland and Luxembourg) and the large majority are linked to an equity market index. The holdings are very diversified across many different ETFs.

3.2.2. Foreign asset managers active in Belgium

At the end of 2023, there were 174 foreign UCITS management companies active in Belgium. Asset managers from other member states of the EEA can operate in Belgium through branches or under the freedom to provide services. The number of registered Belgian branches from foreign UCITS management companies increased from 17 at the end of 2021 to 20 at the end of 2023. This increase is partly due to the conversion of some Belgian UCITS management companies into branches of management companies based in other member states. The number of foreign UCITS management companies operating in Belgium under the freedom to provide services regime increased from 157 to 163 over the same period (Chart 3.13).

175 foreign authorised AIFMs were registered to be active in Belgium at the end of 2023, partially overlapping with UCITS management companies for some entities holding a double authorisation. As with the branches of UCITS management companies, the number of authorised AIFM branches registered in Belgium is on the increase (from 13 at the end of 2021 to 16 at the end of 2023), partly due to the conversion of some Belgian AIFMs into branches. At the end of 2023, 167 AIFMs authorised in another member state were operating in Belgium under the freedom to provide services regime (Chart 3.14). Foreign registered sub-threshold AIFMs may also carry out activities in Belgium, but only a limited number (6) actually do so by the end of 2023 (Chart 3.15).

3.3 Other Belgian financial entities and asset management activities

3.3.1 Belgian banks

Belgian banks deploy different types of asset management-related activities. First, Belgian banks, including their subsidiaries worldwide, provide portfolio management for assets belonging to their customers (including in the form of investment funds). Second, they also distribute investment funds which are issued by asset managers outside the bank. Besides that, Belgian banks also provide some services for the asset management sector, such as custodian services and central administration services for investment funds. These activities generate fee and commission income for the banks, which amounted to € 3.3 billion in 2023 (Table 3.7).

The amount of client assets involved in these activities is sensitive to changes in the market value of these assets, so that developments between periods can be volatile. The total of all client assets reached € 723 billion at the end of 2023 and € 673 billion in June 2024. Around three quarters of the amount at the end of June 2024 relates to assets managed by Belgian banks (€ 524 billion), which can be broken down into € 327 billion of assets under collective management and € 177 billion of assets under discretionary management. Over the last 5 years, the share of collective management has increased.

Belgian banks also earn fee and commission income on asset management-related custodian and central administrative services. The income earned on these services totalled € 362 million in 2023.

3.3.2 Belgian investment firms

At the end of 2023, there were 29 investment firms authorised in Belgium. Investment firms are firms whose regular occupation or business is the provision of one or more investment services to third parties and/or the performance of one or more investment activities on a professional basis. They may perform portfolio management services and they may be involved in the distribution of investment fund units. Depending on the services they provide and the activities they perform, investment firms can be authorised either as a portfolio management and investment advice company or as a stockbroking firm.

18 of those investment firms were authorised as portfolio management and investment advice companies. 14 of those companies were authorised to provide portfolio management services, 13 were authorised to provide investment services, and 13 were authorised to receive and transmit orders. Their assets under portfolio management amounted to € 13 billion, while their assets under advice amounted to € 2 billion.

3.3.3 Belgian insurance companies

Belgian insurance companies invest significant amounts in investment funds, be it as covering assets for the unit-linked life insurance business (the so-called "class 23" contracts in Belgian law) or as part of non-unit-linked investment portfolios (Tables 3.8 and 3.9). Insurers can also give a (discretionary) investment mandate to a bank or asset manager in order to manage a certain portfolio of assets, which can be the case, for example, for some of the internal insurance funds offered in class 23 contracts.

I**n unit-linked life insurance contracts, insurers offer a non-guaranteed return to their policyholders, which is linked to the performance of an internal or external investment fund**. As regards the Belgian unit-linked insurance business, Belgian insurers' technical provisions for class 23 contracts amounted to € 51.1 billion at the end of 2023 on an unconsolidated basis (€ 54.8 billion by the end of June 2024), covered almost entirely by units of investment funds (€ 49.4 billion) and a small amount of (mainly term) deposits (€ 0.6 billion) and corporate bonds (€ 0.6 billion).

Class 23 premiums reached € 3.4 billion in 2023 (Chart 3.16). Although statistics on class 23 premiums are not yet available for the full year 2024 at the cut-off date of this report, indications based on quarterly Solvency II reporting suggest that gross premiums collected for unit-linked contracts have been decreasing slightly since 2022. This trend is mainly due to the rising interest rate, which increases the attractiveness of class 21 products that offer guaranteed rates of return (with profit-sharing).

Besides their investment funds in the context of their class 23 business, Belgian insurers also invest in funds as part of their covering assets for life (other than class 23) and non-life insurance products or as free investments. At the end of 2023, these investments amounted to € 23.1 billion. Broken down by type of funds, the largest shares of investments by the end of 2023 were in debt funds (€ 6.4 billion), money-market funds (€ 3.3 billion), asset allocation funds (€ 2.3 billion), real estate funds (€ 2.3 billion) and equity funds (€ 1.4 billion). Around € 8.1 billion of these funds were located in Luxembourg, € 5.5 billion in France, € 4.4 billion in Ireland, € 2.4 billion in Belgium and € 1.3 billion in the Netherlands.

3.3.4 Belgian institutions for occupational retirement provision

At the end of 2023, 150 Belgian institutions for occupational retirement provision (IORPs) reported to the FSMA[110], accounting for about € 46 billion total assets. Belgian IORPS, or 'pension funds', invested 79% of those assets (€ 36.2 billion) in investment funds (Table 3.10).

[110] Including 5 that were in liquidation or were already liquidated.

IV. Risk assessment and policy development for Belgian NBFI

4.1 General considerations

This section uses the mapping and sizing of the Belgian NBFI and asset management sectors to undertake an analysis — as allowed based on the available data — of the risks *within* these sectors of the Belgian financial system *and in terms of potential spill-overs to other sectors* of the Belgian economy due to *interconnectedness with them*. The asset management and the NBFI sectors form part of a market-based financial system, where part of the financial intermediation takes place outside the banking sector. This method of financing offers a valuable alternative to bank financing, and thus creates greater diversity in credit sources and investment opportunities for investors. Yet, it may also create systemic risks, particularly if it is involved in bank-like activities — such as liquidity and maturity transformation and/or creation of credit and leverage — and may raise points requiring attention as regards investor protection.

For the part of the NBFI sector that overlaps with the asset management sector, the main risk is liquidity risk, and particularly the risk of sudden, large-scale redemptions. While most of these funds are open-ended, the associated liquidity risks are already partly addressed by existing legislation through, for example, rules on asset diversification and the introduction of additional liquidity management tools for asset managers.

Apart from the direct risks, the asset management sector and the NBFI sector may also generate (systemic) risks indirectly, notably via their links with other financial institutions and the real economy. Those links, which may take the form of both contractual and non-contractual debts and claims, tend to be limited for households and non-financial corporations (for example, through investment funds). However, in the case of financial institutions they are larger and more complex, particularly as regards links within conglomerates.

4.2 Risk metrics of the Belgian NBFI sector

Table 4.1 documents several risk metrics recommended by the FSB to monitor risks in the NBFI sector, which have been relatively stable over time and which are consistent with those observed internationally. These risk metrics for the Belgian NBFI sector are provided for EF1 (money market and non-equity investment funds) and EF2 (finance companies).

The risk metrics calculated for Belgian investment funds (EF1) confirm that liquidity transformation remains the most important risk for them, in line with metrics from previous editions and those observed internationally. This is essentially a redemption risk, as the funds' liabilities are mostly composed of units redeemable daily, which are not (fully) covered by liquid assets. The second most significant risk for these investment funds is maturity transformation, given that they invest to some extent in long-term assets financed with short-term liabilities. Those two risks remain relatively low as long as the sector remains closely monitored and has access to efficient liquidity management tools to mitigate the risk of fire sales (see also supra and section 4.4.).

For finance companies (EF2), the risk metrics show that these entities' positions with respect to liquidity transformation are rather comfortable, and the maturity structure on both sides of the balance sheet is relatively balanced.

4.3 Interconnectedness of the Belgian economy with NBFI entities worldwide

Chart 4.1 provides a first broad — though incomplete — overview of the links between Belgian residents and potential NBFI entities worldwide according to the financial accounts data for the second quarter of 2024. These financial accounts are established based on unconsolidated and territorial financial reports (thus also showing "links" that are in fact links within consolidated financial groups, while not capturing links with Belgian entities' foreign subsidiaries and branches). Moreover, they make it possible to capture connections to potential NBFI entities residing in euro area countries but do not allow for a detailed sectoral breakdown of counterparties located outside the monetary union[111]. It should also be noted that the financial accounts data only capture the size of on-balance sheet exposures at the time of the reporting date (leaving out off-balance sheet links and potential future exposures in the case of derivative transactions).

By supplementing the aggregates shown in Chart 4.1 with various complementary sources of information, it is possible to distil an informed assessment of the orders of magnitude of the extent of Belgian residents' links with NBFI entities and of the nature of the financial transactions involved. The updated analysis for the Belgian banks, insurance companies, government entities, households and non-financial corporations in the subsections below reconfirms the main findings of the previous reports as regards this interconnectedness: while links with the OFI sector can be important in some cases, the interconnectedness with entities within the narrow NBFI measure is limited and concentrated in activities that are generally part and parcel of normal business affairs.

4.3.1. Banking sector

Due to its central role in the payment system and the financial intermediation chain, the banking sector has traditionally been characterised by a high degree of interconnectedness with other financial institutions, including banks and non-banks, and in line with the development of the CMU in the EU, it can be expected that this interconnectedness with non-bank financial institutions could expand further in the future.

As regards the links on the asset side, the exposure of the Belgian banking system to NBFI entities according to the financial accounts data amounted to € 47 billion at the end of the second quarter of 2024. This figure includes intraconglomerate transactions and is close to the exposure to the so-called "other financial institutions" (OFIs) obtained using the consolidated supervisory data (FINREP). This OFI exposure[112] is the best proxy that is available based on consolidated data and it has remained stable in the past years around € 45 to 50 billion (or 4% to 5% of total assets). The composition of this FINREP exposure has somewhat evolved in the past years towards a larger share of loans and a lower share of debt securities. Currently, around two thirds of the € 50 billion exposure is constituted of loans and advances (€ 33 billion in June 2024), representing around 4% of the total loan portfolio of Belgian banks. The majority of these loans to other financial institutions are to Belgian financial intermediaries (€ 24 billion). To a certain extent, these loans are related to securities financing transactions (SFTs), such as repurchase agreements and securities lending with investment funds, (related) insurance companies or CCPs. Belgian banks also held about € 9 billion in debt securities issued by other financial institutions at the end of June 2024. The bulk of these exposures are to foreign counterparties (€ 2.8, 1.0, 0.8, 0.7, 0.4 for UK, FR, NL, LU and US OFIs respectively). Some of these securities are securitisations or structured products issued by FVCs. As the majority of the NBFI or OFI exposure of

---

111 Nonetheless, the Belgian financial accounts data make it possible to isolate monetary financial institutions from other institutional units located outside the euro area.

112 It has a somewhat different scope, as it excludes intra-group exposures but includes insurance companies among NBFIs.

Belgian banks consists of loans to domestic non-bank financial intermediaries, the central corporate credit register (CCCR) can be consulted to obtain further details on the type of counterparties in this specific portfolio of loans (Chart 4.2). The available data (with again a slightly different scope than the other two data sources) show an exposure that had been close to € 30 billion between 2017 and 2021 before rising to around € 40 billion at the end of 2023. The breakdown by NACE code shows that the exposure consists of loans to various types of OFIs, such as leasing, factoring, consumer credit on other finance companies. The amount of loans to investment funds is very limited.

As regards the liabilities side, the consolidated supervisory data (Chart 4.3) show a sharp fall in funding from OFIs in the most recent period. Still, with € 98 billion at the end of June 2024, funding from OFIs — including entities such as insurance companies or other financial intermediaries that are excluded from the narrow NBFI sector — remains an important source of funding (9% of total liabilities and 10% of total deposits according to FINREP). The majority of this funding from OFIs in the Belgian banking sector consists of deposits (€ 89 billion at the end of June 2024, of which more than half are sight deposits, Chart 4.4). Deposits from *related* asset management entities declined from € 6 billion in 2018 to less than € 1 billion in June 2024. Using an additional data source (i.e. Schema A), it is possible to have a more detailed view on the type of counterparties. These data – available for around € 42 billion of OFI deposits on territorial (non-consolidated) basis – show a variety of counterparties, including insurance companies, captive financial institutions, financial auxiliaries, investment funds, FVCs, etc. (Chart 4.3, right-hand panel). Nevertheless, the OFI deposits included in this data source are significantly lower than in FINREP, due to differences in scope and accounting basis.

4.3.2. Insurance companies

According to Solvency II prudential data (Chart 4.6), the exposure of insurance companies to NBFI amounted to € 20.3 billion at the end of 2023 (or 6 % of insurance companies' total assets). Out of the € 20.3 billion of NBFI exposures, approximately € 3.7 billion corresponded to assets covering class 23 contracts. Investment funds accounted for a significant share of the NBFI exposures and amounted to € 9.3 billion in 2023, while the remaining € 11 billion in NBFI exposures mainly represented holdings of debt securities and equity issued by NBFI entities.

4.3.3. Public sector

Assets with NBFI counterparties held by Belgian government entities amounted to € 5 billion at the end of the second quarter of 2024. The largest part (€ 2.8 billion) consists of shares in investment funds and the remainder (€ 2.2 billion) is made up of participations in, or lending to, investment companies. Often managed in partnership with the private sector, these companies are classified as OFIs in the national accounting framework because they are not considered part of the government perimeter according to the definitions of the ESR 2010.

Belgian governments' liabilities with NFBI entities, on the other hand, are likely to be much greater, although they cannot be accurately identified. This is because of the above-mentioned limitations in the available data, namely the fact that institutional units within the NBFI perimeter cannot be distinguished from others if they are situated outside the euro area. By way of example, it is not possible to separate government bonds held by investment funds in a jurisdiction outside the euro area from those included in the portfolios of insurance companies that are also located in non-euro area countries. With this caveat in mind, the broad estimate for the Belgian government's funding obtained from NBFI entities, virtually entirely through government bonds, is € 212 billion. The government bonds concerned represent approximately 40% of the total outstanding debt securities issued by the Belgian government and are mainly held by non-euro area entities.

4.3.4. Households

The first report published in 2017 documented the importance of domestic and foreign investment funds in the total financial assets held by Belgian households, in particular the wealthiest among them, and it appears that the volume of this type of asset has followed a rising trend over the last ten years. As chart 4.7 illustrates, the market value of households' participations in investment funds can also be strongly affected by changes in stock and bond prices. This was particularly the case in the wake of the Russian invasion in Ukraine, which led to a stock market dip in 2022 and, consequently, a depreciation of the net asset value of the investment fund shares held by Belgian households. The losses incurred in 2022 were, however, almost entirely compensated for by the rise in asset prices in 2023 and in the first half of 2024. Nevertheless, households' net acquisition of investment fund shares has been declining in 2023 (€ 1.0 billion compared to € 6.1 billion in 2022). In the first half of 2024, withdrawals exceeded new acquisitions, which translated into a net decline, by € 2.6 billion, in households' holdings in investment funds. This development can be partly explained by other investment opportunities brought about by the recent rise in interest rates. In that regard, the most notable example is the one-year State note issued by the federal government in September 2023. At the end of the second quarter of 2024, the amount of households' holdings in investment funds reached € 258 billion or 16.2% of their total financial assets. That amount consists of € 150 billion in participations in domestic funds and € 108 billion in foreign funds. As such, participations in investment funds constitute the bulk of the assets held by Belgian households with NBFI counterparties, which totaled € 269 billion at mid-2024.

The amount outstanding of households' liabilities with NBFI is estimated at € 11 billion, which represents 3.2% of their total debt. This relates essentially to loans granted by consumer credit institutions. On the other hand, a large volume of loans granted by credit institutions to Belgian households (€ 28 billion) was securitised. These loans might be considered part of the NBFI perimeter, but it appears that most of them remain linked to the traditional banking sector. Indeed, virtually all of them are retained on the balance sheets of the banks from which they originate.

4.3.5. Non-financial corporations

The links between non-financial corporations (NFCs) and the NBFI sector remain limited. Participations in domestic and foreign investment funds represented only 2% of their consolidated financial assets at the end of the second quarter of 2024. Equity and intragroup loans to corporations included among the OFIs accounted for 3% of that same total. Their liabilities with NBFI are estimated at € 84 billion, or 5.5% of their total liabilities. The main components of this funding link are the corporate bonds issued by a limited number of NFCs and held by foreign investment funds, equity obtained from domestic private investment companies, and loans received from OFIs, consisting mainly of leasing and factoring. A large part of these originates from subsidiaries of the four major credit institutions (see the report of 2017 for more details).

4.4 Policy initiatives and supervisory activities

For the asset management sector, the factors likely to jeopardise financial stability are above all liquidity and leverage. The supervisory activities relating to liquidity crisis simulations carried out by managers and the Liquidity Risk Assessment of the Belgian sector carried out by the FSMA are part of the monitoring of liquidity-related issues. Within the European regulatory framework, the FSMA also assesses the potential systemic risk related to the use of leverage by AIFMs.

In 2023, potential liquidity risks of Belgian investment funds were assessed by both the IMF and the FSMA. The IMF subjected the Belgian investment fund sector to a liquidity stress test as part of its FSAP. One of the recommendations made by the IMF as part of the FSAP and following the liquidity stress test was for the FSMA to develop and adapt a stress test framework to assess structural vulnerabilities and risks in the investment fund sector. Alongside the FSAP, the FSMA has set up a Liquidity Risk Assessment framework, of which a first exercise was conducted in 2023. The methodology is aligned with the methodologies developed by ESMA[113] and the IMF[114]. However, the IMF liquidity stress test and the FSMA Liquidity Risk Assessment have different objectives: the IMF exercise seeks to study the systemic vulnerabilities of the financial sector, whereas the FSMA exercise seeks to identify investment funds that could pose a liquidity risk.

The IMF concluded that the Belgian investment fund sector would be able to withstand severe but plausible redemption shocks. However, a few non-public alternative funds, representing less than two percent of the investment funds analysed, would not have enough highly liquid assets to meet investors' redemption requests in a market stress situation and thus present liquidity shortfalls[115].

The FSMA's Liquidity Risk Assessment framework takes place in two steps: a quantitative examination, followed by a qualitative assessment. During the first, quantitative, step the FSMA (i) calibrated redemption shocks on the basis of the historical distribution and computed the weighted expected shortfall; (ii) assessed the liquidity of each asset in fund portfolios using the high quality liquid assets (HQLA) approach founded on the portfolio data for Belgian funds provided by the NBB; (iii) computed the redemption coverage ratio through the comparison of the size of the redemption shocks with the liquidity of the assets. Within the second step, the qualitative analysis, the funds with a redemption coverage ratio below 1 were subject to an in-depth analysis.

The Liquidity Risk Assessment showed that Belgian funds are overall resilient to a severe, but plausible redemption shock. At the reference date of 31 December 2022, all Belgian non-equity open-ended funds were within the scope of the risk assessment. The 436 funds represented net assets of around € 132 billion, or 64% of the total net assets of all Belgian funds reporting to the FSMA. The Belgian sector's resilience is the result of multiple drivers, such as an overall high level of cash, low leverage, few illiquid assets in funds' portfolios and the presence of LMTs. The Liquidity Risk Assessment is an additional tool contributing to the supervision of the liquidity risk of investment funds and the management of this risk by their management companies.

European legislation[116] requires national competent authorities to assess the systemic risk arising from the use of leverage by authorised AIFMs. On the basis of this assessment, they may impose limits on the use of leverage or other restrictions on the management of AIFs. The risk assessment takes place in two steps[117]. In the first step, competent authorities identify, on the basis of a certain number of criteria, the funds most likely to pose risks to the financial system. In the second step, they assess, using a series of indicators, the potential systemic risks associated with leverage within the AIFs identified in the first step. In this respect, competent authorities assess the risks of both individual AIFs and groups of AIFs. The systemic risks they assess are the risk of market impact, the risk of fire sales, the risk of direct contagion effects on financial institutions and the risk of interruption of direct credit intermediation.

The FSMA has not identified any immediate systemic risks requiring the adoption of measures specific to leverage, such as imposing limits on the use of this technique. At the reference date of 31 December 2022, the number of AIFs falling within the scope of the FSMA's leverage risk assessment was 287. They represented net assets of around € 40 billion, most of which were held by non-public Belgian AIFs. The FSMA selected 26 Belgian and foreign AIFs that met the criteria used in the first step.

---

113 ESMA, *Stress simulation for investment funds: ESMA Economic Report (ESMA50-164-2458)*, September 2019.

114 Bouveret, A., *Liquidity Stress Tests for Investment Funds: A Practical Guide: (IMF Working Paper) (WP/17/226)*, October 2017.

115 IMF, *Belgium: Financial Sector Assessment Program-Financial System Stability Assessment*, December 2023.

116 Article 25 of the AIFMD.

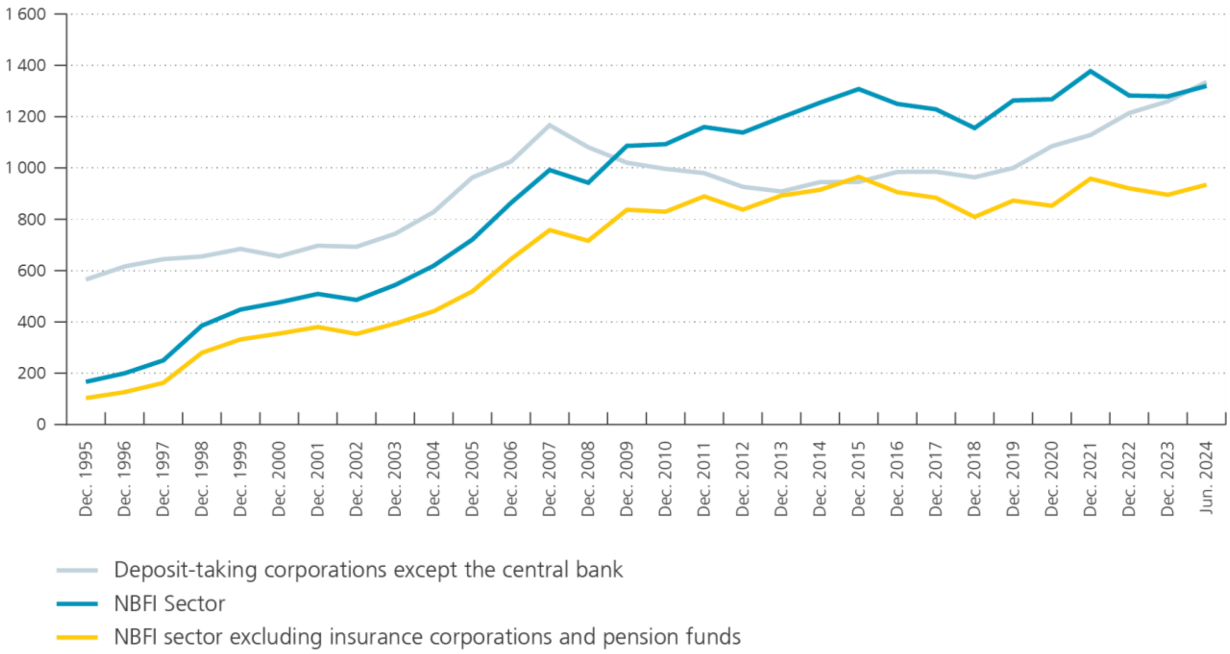
117 ESMA, *Guidelines on Article 25 of Directive 2011/61/EU (ESMA34-32-701)*.

These AIFs were selected because of their level of leverage or their size. They represent 26% of the total net assets of the AIFs included in the scope. They are mainly funds of funds, equity funds, bond funds, mixed funds and structured funds, which were also divided into eight partially overlapping groups on the basis of their investment policy, portfolio, manager and nationality. For each of those funds and groups of funds, the FSMA assessed a number of indicators to assess the risk of market impact, the risk from fire sales, the risk of direct spill-overs to financial institutions and the risk of interruption in the direct credit intermediation, as appropriate. The FSMA did identify a limited number of points requiring attention: some AIFs could have a potential market impact because of their size; there is a link between some AIFs and financial institutions, mainly through the investment by certain financial institutions in these AIFs; and some AIFs may face margin calls or collateral calls. The latter risk is inherent in the use of derivatives, the main source of leverage within the selected AIFs.

Statistical annex

II. Developments in NBFI in Belgium

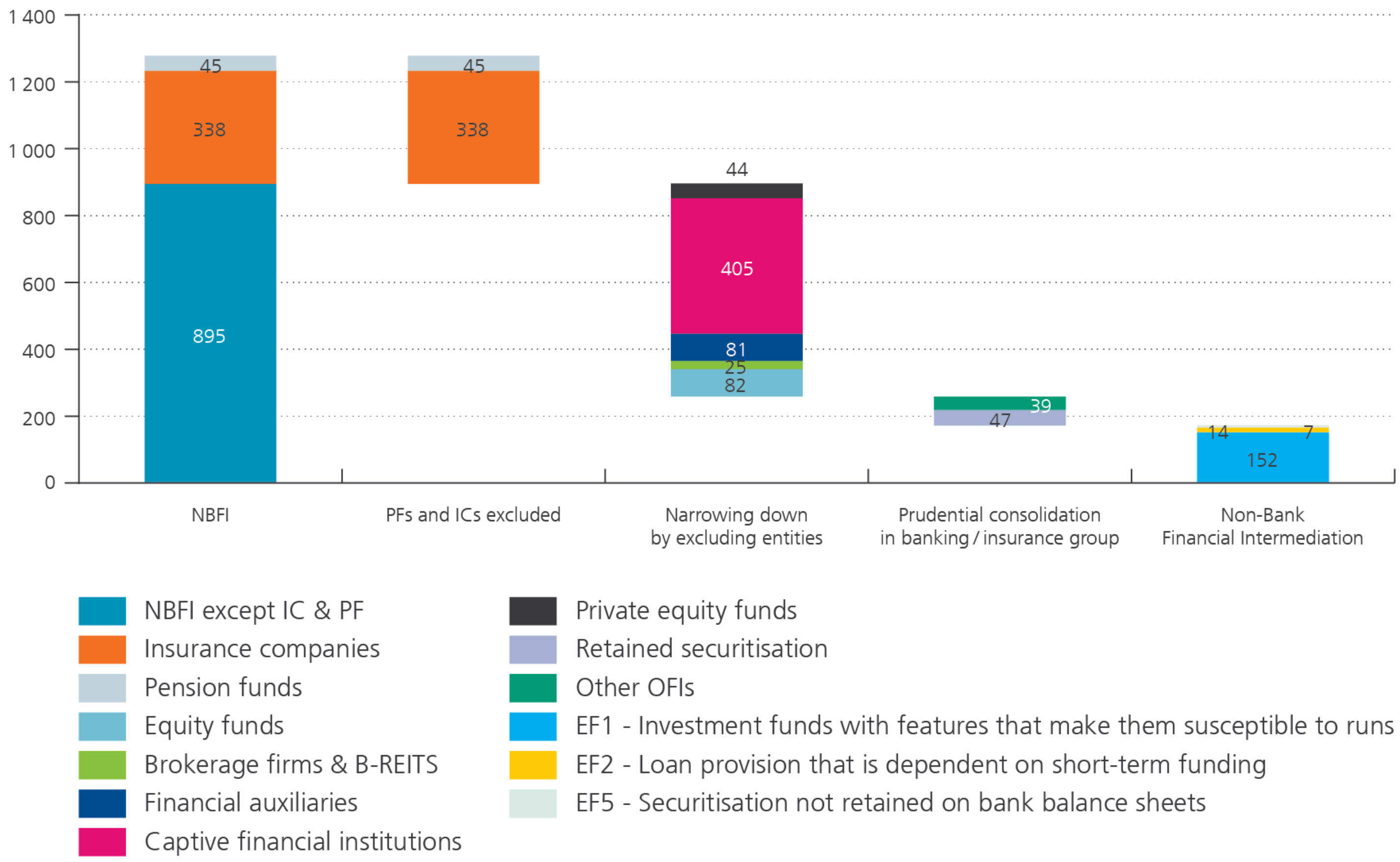
Chart 2.1: Total financial assets of the Belgian financial sector (in € billion)



Source: NBB calculations based on NAI data.

Notes: NBFI = Non-bank financial intermediation.

Chart 2.2: Delineation of the Belgian NBFI sector according to the narrow FSB definition (€ billion, end 2023)

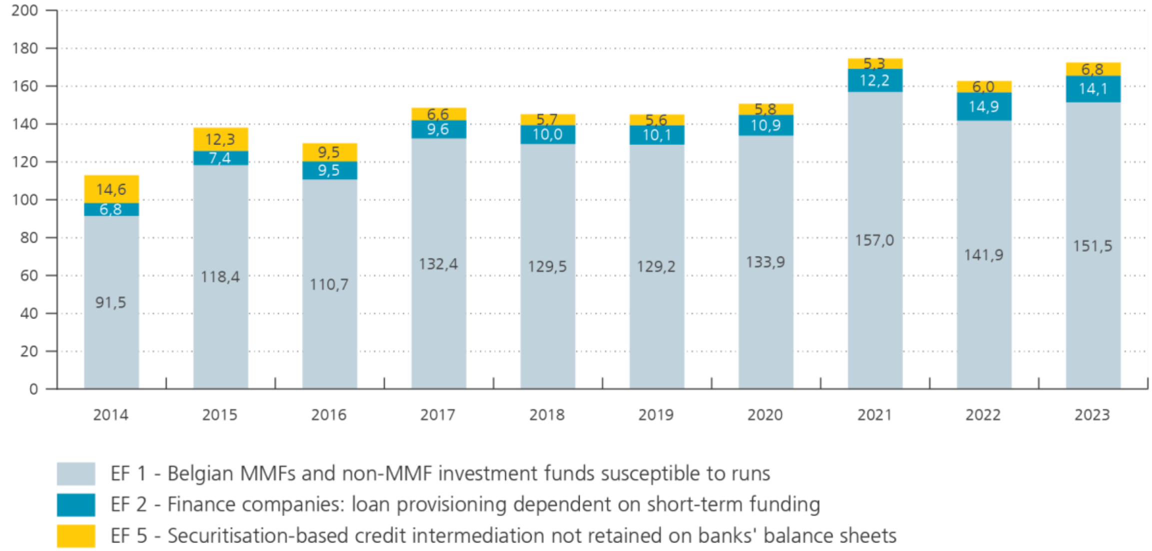


Source: NBB calculations based on NAI data.

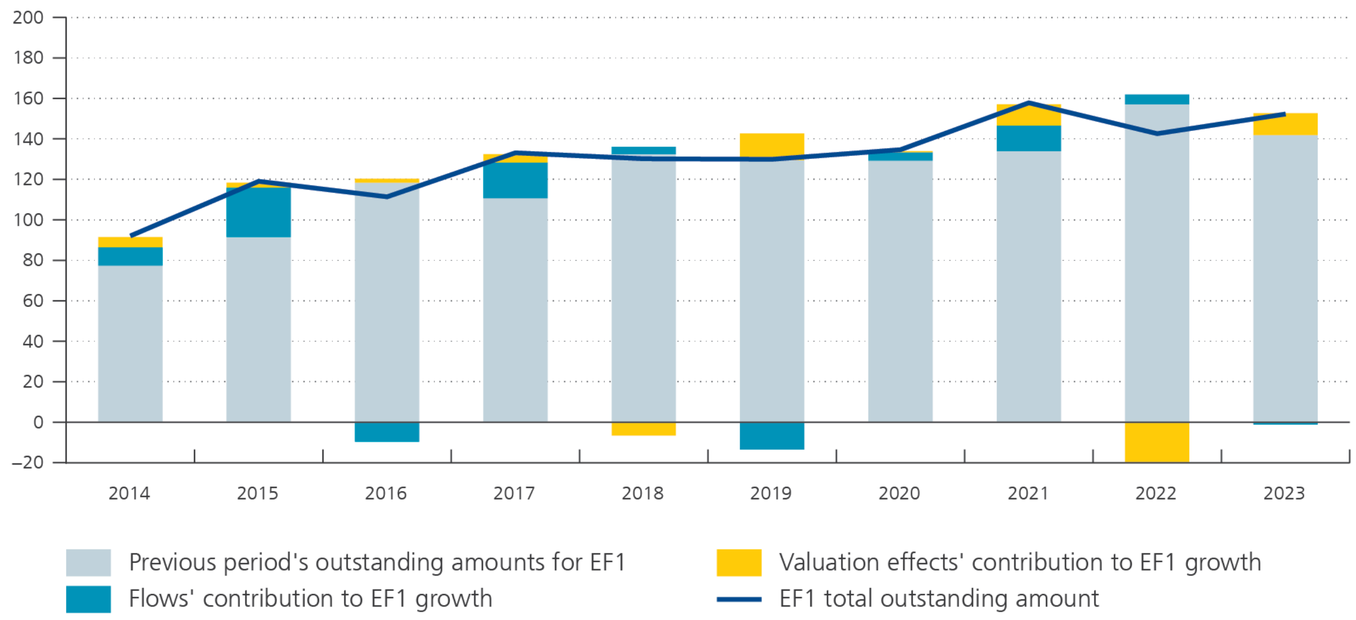
Notes: NBFI = Non-bank financial intermediation; PF = Pension fund; IC = Insurance company; OFIs = Other financial intermediaries; B-REIT = Belgian Real Estate Investment Trust

Chart 2.3: Belgian NBFI sector, broken down by economic function, according to the narrow concept of the FSB (€ billion)

(a) End-of-period outstanding amounts



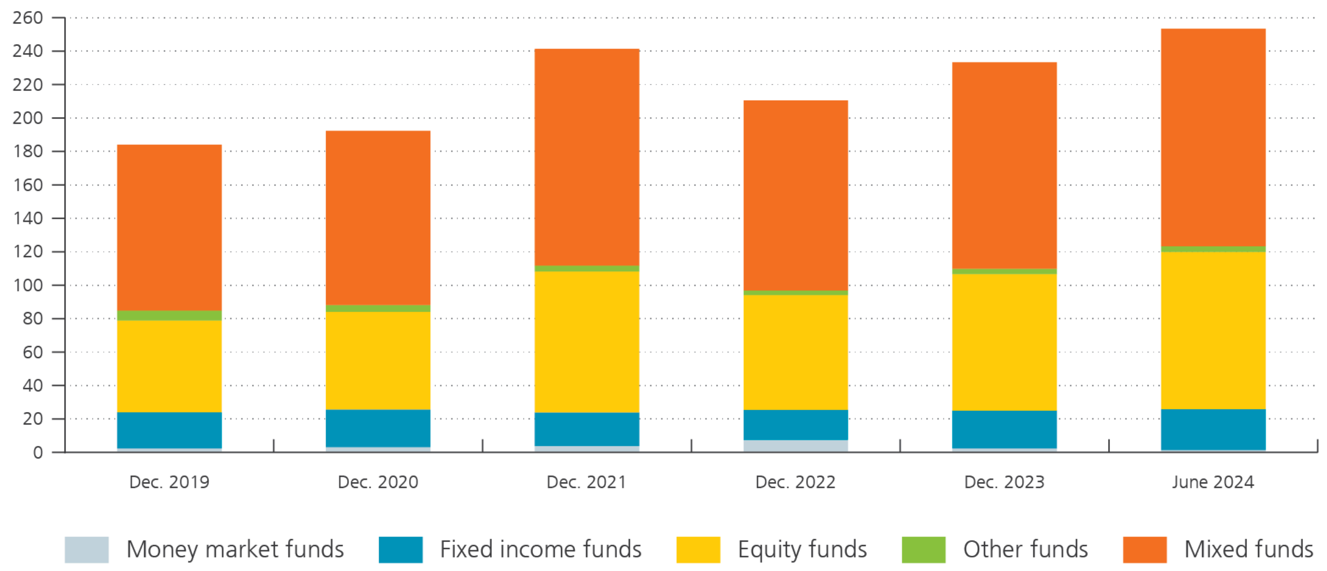
(b) End-of-period outstanding amounts and distinction between flows and price effect for EF 1



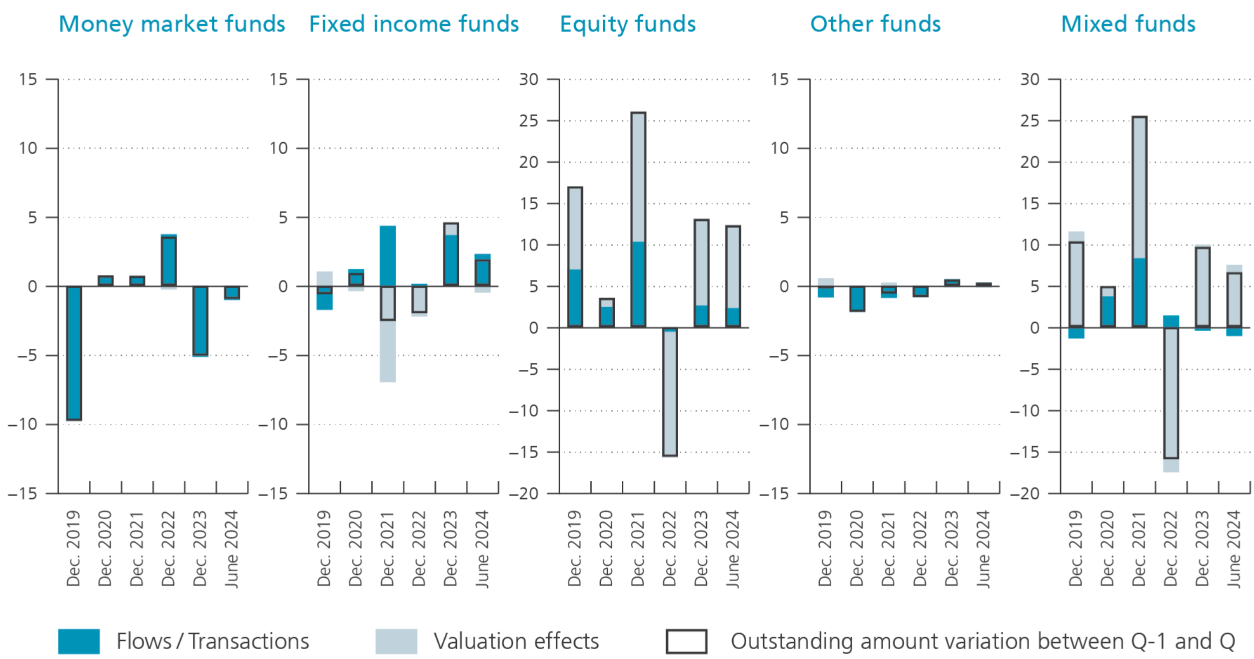
Source: NBB calculations based on NAI data.

Chart 2.4: Belgian investment funds' total financial assets) (€ billion)

(a) End-of-period outstanding amounts

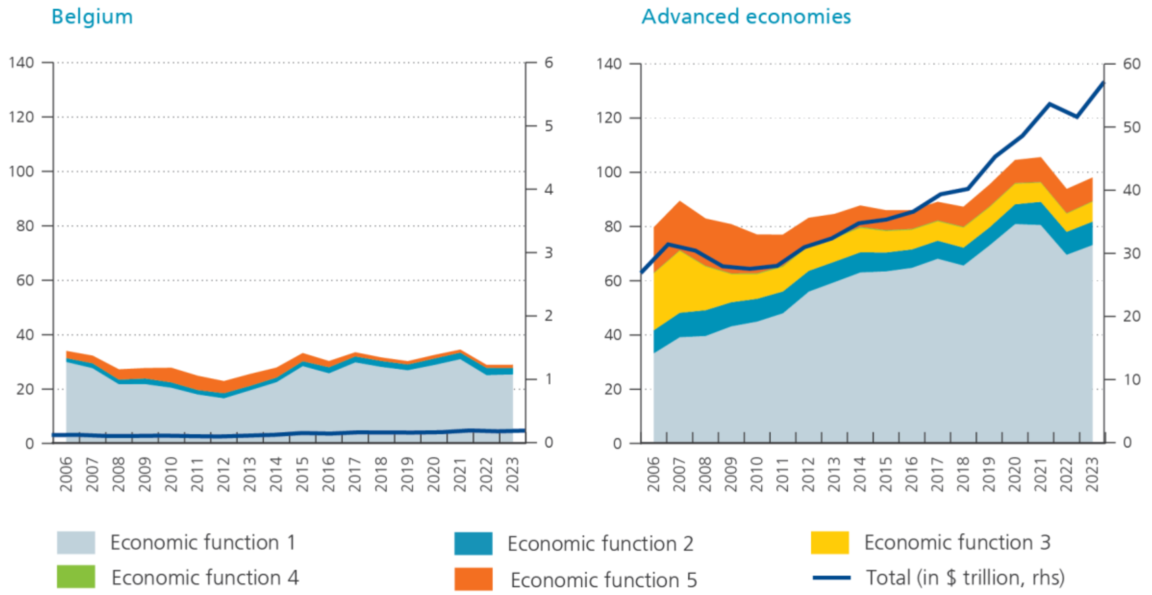


(b) Quarterly outstanding amount variation distinguished between flows and valuation effect



Source: NBB calculations based on NAI data.

***Chart 2.5: International comparison of the NBFI sector: narrow FSB measure** (% GDP)*



Sources: FSB, NBB.

III. Developments in asset management in Belgium[118]

***Table 3.1: Gross statistics of asset management activities relevant for Belgium** (€ billion)*

	(Net) Assets [1]				
	2019	**2020**	**2021**	**2022**	**2023**
Belgian investment funds	**185**	**191**	**243**	**212**	**215**
Public	165	172	212	184	203
Non-public	20	19	31	28	12
Belgian asset managers	**182**	**193**	**239**	**236**	**208**
Authorised management companies	178	187	232	228	200
Sub-threshold managers	4	6	7	8	8
Assets generating fee and commission income for Belgian banks	**617**	**639**	**728**	**640**	**723**
Assets managed in the bank	396	406	455	405	479
Collective management	243	262	307	274	319
Discretionary management	153	144	148	131	160
Collective investment products distributed but not managed	221	233	273	235	244
Foreign investment funds held by Belgian residents	**236**	**250**	**300**	**282**	**349**
Households	107	115	139	127	145
Other investors	129	135	161	155	204
Investments of Belgian insurance companies in investment funds	**56**	**60**	**71**	**68**	**72**
Investments of Belgian institutions for occupational retirement provision in investment funds	**30**	**33**	**37**	**31**	**37**

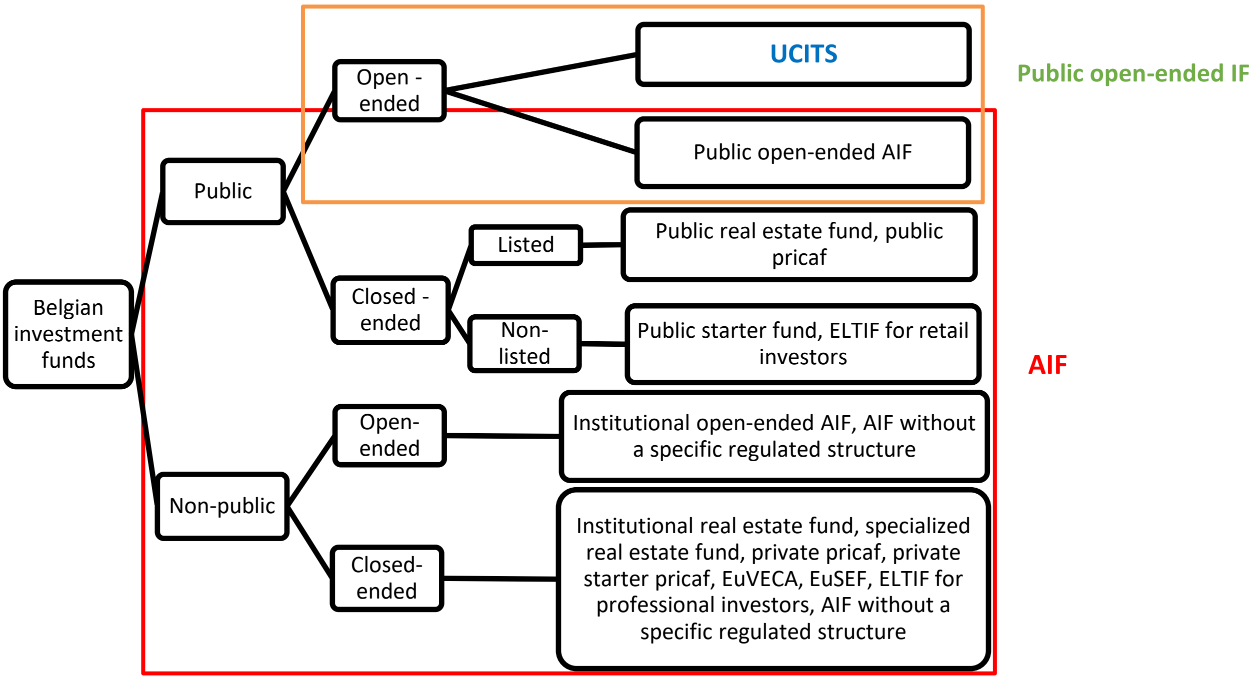
Source: FSMA, NBB.

Notes:

This table presents the gross statistics (€ billion) that are discussed in this report concerning the assets involved in the Belgian asset management sector and asset management related activities in Belgium. **[1]** For the Belgian investment fund sector the net asset value (NAV) is reported. For Belgian asset managers the assets under management (AuM) are reported. For Belgian banks the assets involved in asset management activities that generate fee and commission income are reported. For foreign investment funds held by Belgian residents the size of the holdings by households and other investors is reported; for insurance companies and institutions for occupational retirement provision (pension funds), the size of their holdings of investment funds is reported.

[118] Adjustments to the methodology and amended fillings that change the underlying data could lead to changes in previously reported statistics.

Chart 3.1: Overview of investment fund types in Belgium



Source: FSMA.

Table 3.2: Registered (sub-)funds and NAV of investment fund types in Belgium *(year-end)*

(a) Number of authorised or registered investment funds with a specific regulatory structure (at sub-fund level)

	2019	2020	2021	2022	2023
UCITS	777	740	659	601	581
Public open-ended AIF	76	34	17	17	17
Public privak/pricaf	1	1	1	1	1
Public real estate fund	0	0	0	0	0
Public starter fund	0	0	0	0	0
Institutional real estate fund	0	0	0	0	0
Institutional open-ended AIF	110	114	105	106	98
Private privak/pricaf	86	114	150	222	193
Specialised real estate fund	121	149	170	191	197
Private starter privak/pricaf	0	2	5	5	6
EuVECA	2	2	2	5	6
EuSEF	0	0	0	0	0
ELTIF (retail investors)	0	0	0	0	0
ELTIF (professional investors)	0	0	0	0	0
Total	**1,173**	**1,156**	**1,109**	**1,148**	**1,099**

(b) Net asset value (€ million)

	2019	2020	2021	2022	2023
Belgian public open-ended investment funds					
UCITS	152,373	162,207	209,852	182,379	201,505
Public open-ended AIFs	12,496	9,541	2,619	1,961	1,367
Other AIFs					
Other public AIFs	136	153	180	144	141
Non-public AIFs	19,683	18,652	30,697	27,705	12,408
Total	**184,688**	**190,553**	**243,348**	**212,188**	**215,421**

(c) Number of reporting investment funds (at sub-fund level)

	2019	2020	2021	2022	2023
Belgian public open-ended investment funds					
UCITS	777	740	659	601	581
Public open-ended AIF	76	34	17	17	17
Other AIFs					
Other public AIFs	1	1	1	1	1
Non-public AIFs	207	241	284	345	331
Total	**1,061**	**1,016**	**961**	**964**	**930**

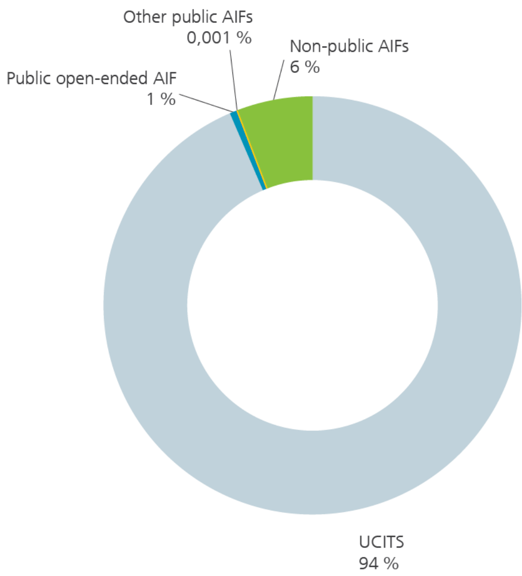
Source: FSMA, FPS Finance.

Notes:

This table presents the number of registered (sub-) funds and their net asset value (in € million) for the Belgian investment fund industry, classified according to the applicable regulatory regime. Panel (a) shows the number of authorised or registered investment funds with a specific regulatory structure (at sub-fund level). These funds are either authorized or registered by the FSMA or registered by the FPS Finance. Panel (b) shows the net asset value of Belgian investment funds for which the FSMA is the competent authority receiving the reports concerning these funds. Panel (c) shows the number of investment funds for which the net asset value is reported and included in Panel (b).

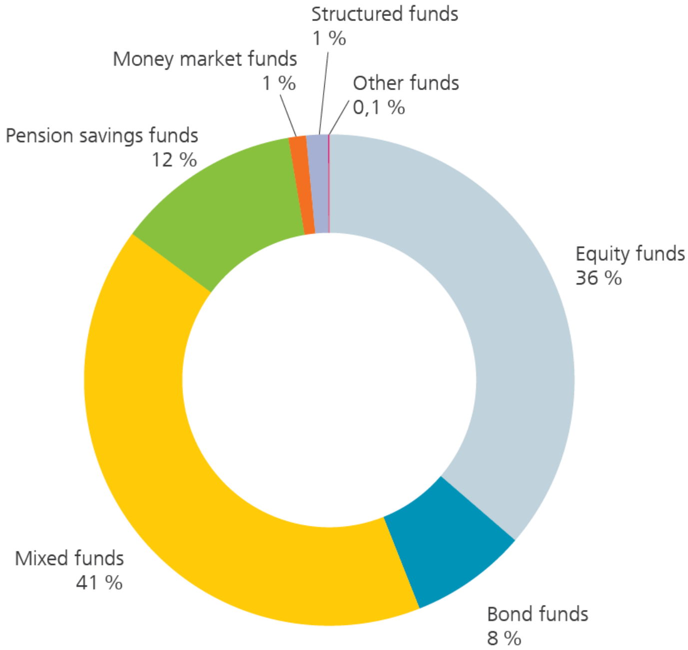
There is a distinction between the number of funds shown in Panel (a) and (c) because not all entities that take the legal form of an institutional open-ended AIF, a specialised real estate fund, a private privak/pricaf or a private starter fund under Belgian law: (1) are classified as AIFs under the provisions of AIFMD, or (2) have a manager for which the FSMA is the competent authority (it is possible that Belgian AIFs have a manager for which the FSMA is not the competent authority).

***Chart 3.2: Breakdown of the NAV of Belgian investment funds according to fund type** (end 2023)*



Source: FSMA.

Chart 3.3: Breakdown of the NAV of public open-ended investment funds by investment policy *(end 2023)*



Source: FSMA.

Table 3.3: Breakdown of the NAV of Belgian public open-ended investment funds according to investment policy and legal form *(€ million, year-end)*

	UCITS					Public open-ended AIF					Total				
	2019	**2020**	**2021**	**2022**	**2023**	**2019**	**2020**	**2021**	**2022**	**2023**	**2019**	**2020**	**2021**	**2022**	**2023**
Equity funds	51,567	54,691	77,285	62,886	73,577	120	121	151	127	142	51,687	54,813	77,437	63,013	73,719
o/w fund of funds or feeder	*3,366*	*4,414*	*4,016*	*5,424*	*6,474*	*120*	*121*	*151*	*127*	*142*	*3,487*	*4,535*	*4,167*	*5,551*	*6,616*
Bond funds	18,271	19,034	13,308	11,666	15,586	14	10	7	4	3	18,285	19,045	13,315	11,670	15,589
o/w fund of funds or feeder	*8,445*	*8,409*	*1,798*	*1,752*	*2,630*	*14*	*10*	*7*	*4*	*3*	*8,459*	*8,419*	*1,805*	*1,756*	*2,633*
Mixed funds	62,736	66,237	86,447	76,320	82,647	2,694	2,360	2,123	1,535	880	65,430	68,598	88,571	77,855	83,527
o/w fund of funds or feeder	*52,153*	*54,725*	*76,633*	*68,269*	*74,300*	*2,578*	*2,239*	*2,090*	*1,502*	*840*	*54,731*	*56,964*	*78,723*	*69,771*	*75,140*
Pension savings funds	12,505	15,246	25,231	21,669	24,378	8,804	6,998	337	294	341	21,309	22,244	25,568	21,963	24,719
o/w fund of funds or feeder			*479*	*435*	*502*	*359*	*400*				*359*	*400*	*479*	*435*	*502*
Money market funds	2,309	3,188	3,932	7,453	2,347						2,309	3,188	3,932	7,453	2,347
Structured funds	4,657	3,756	3,167	2,598	2,937	864	52				5,521	3,808	3,167	2,598	2,937
Other funds	328	54	160	112	128						328	54	160	112	128
Total	**152,373**	**162,207**	**209,531**	**182,704**	**201,600**	**12,496**	**9,541**	**2,619**	**1,960**	**1,366**	**164,869**	**171,749**	**212,150**	**184,664**	**202,966**
o/w fund of funds or feeder	***63,964***	***67,548***	***82,926***	***75,880***	***83,906***	***3,071***	***2,771***	***2,248***	***1,633***	***985***	***67,036***	***70,319***	***85,174***	***77,513***	***84,891***

Source: FSMA.

Notes:

This table presents a breakdown of the net asset value (in € million) of the Belgian public open-ended investment funds, classified according to their investment policy and the applicable regulatory regime (UCITS or AIF). Investment funds investing primarily indirectly in securities or money market instruments, by investing in units of other funds, are first classified according to the asset class(es) in which they intend to gain (indirect) exposure, and secondly labeled as 'fund of funds' and/or 'feeders'. A feeder fund is a (sub-)fund which invests at least 85% of its assets in units of another (sub-)fund (the master fund).

Table 3.4: Breakdown of the exposures of Belgian public open-ended investment funds according to investment policy and investments

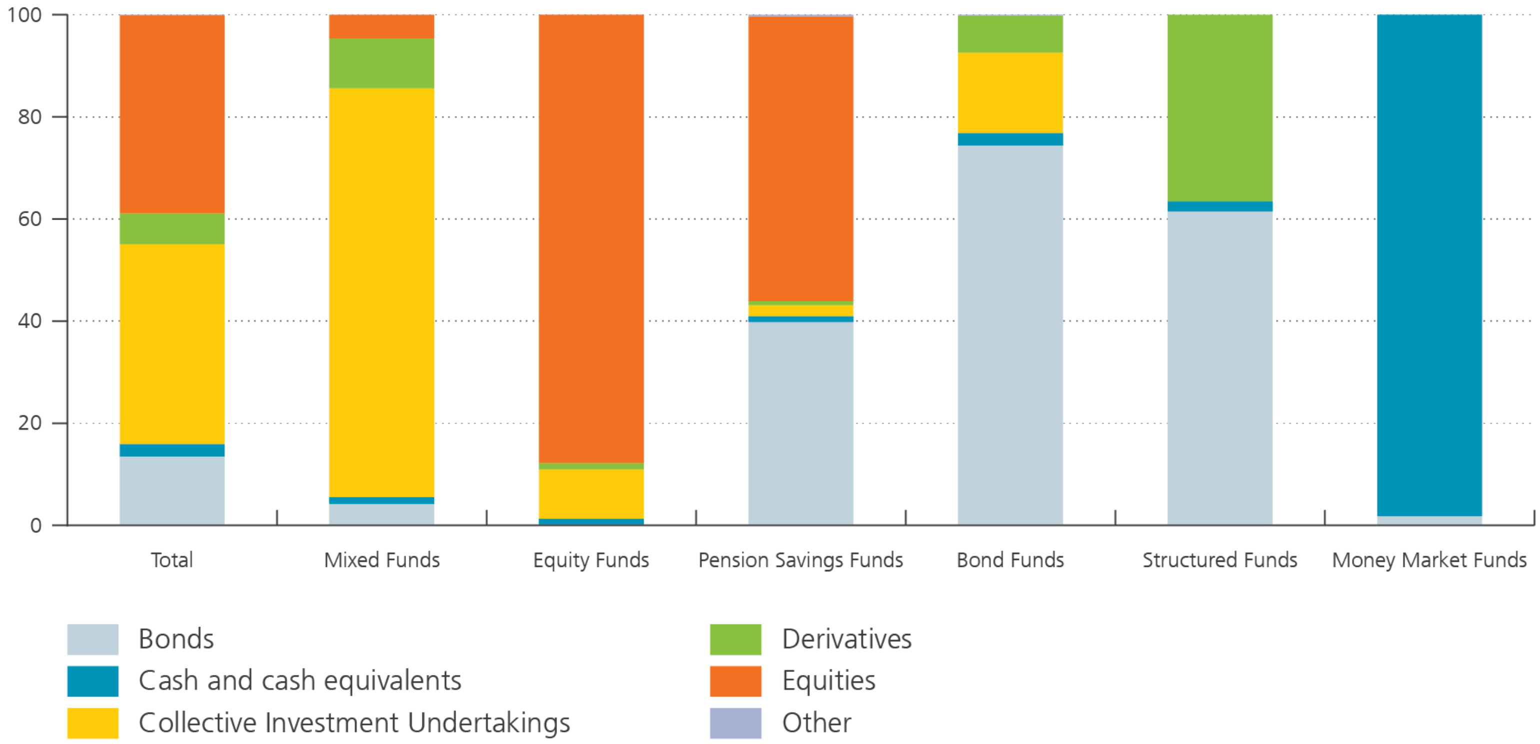
Asset class	Total	Mixed Funds	Equity Funds	Pension savings funds	Bond funds	Structured funds	MMFs
Cash and cash equivalents	2.5%	1.3%	1.2%	1.1%	2.5%	2.0%	98.2%
Equities	38.8%	4.6%	87.8%	55.7%	0.0%	0.0%	0.0%
Bonds	13.5%	4.2%	0.1%	39.8%	74.4%	61.5%	1.8%
Derivatives	6.0%	9.8%	1.2%	0.8%	7.2%	36.5%	0.0%
Collective Investment Undertakings	39.1%	80.1%	9.7%	2.2%	15.7%	0.0%	0.0%
Other	0.1%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%
Total exposures	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: FSMA.

Notes:

This table presents the gross exposures of Belgian public open-ended investment funds. Asset classes are based on the AIFMD reporting scheme. Derivatives exposures are converted based on a pre-specified methodology.

Chart 3.4: Breakdown of the exposures of Belgian public open-ended investment funds according to investment policy and investments *(end 2023)*

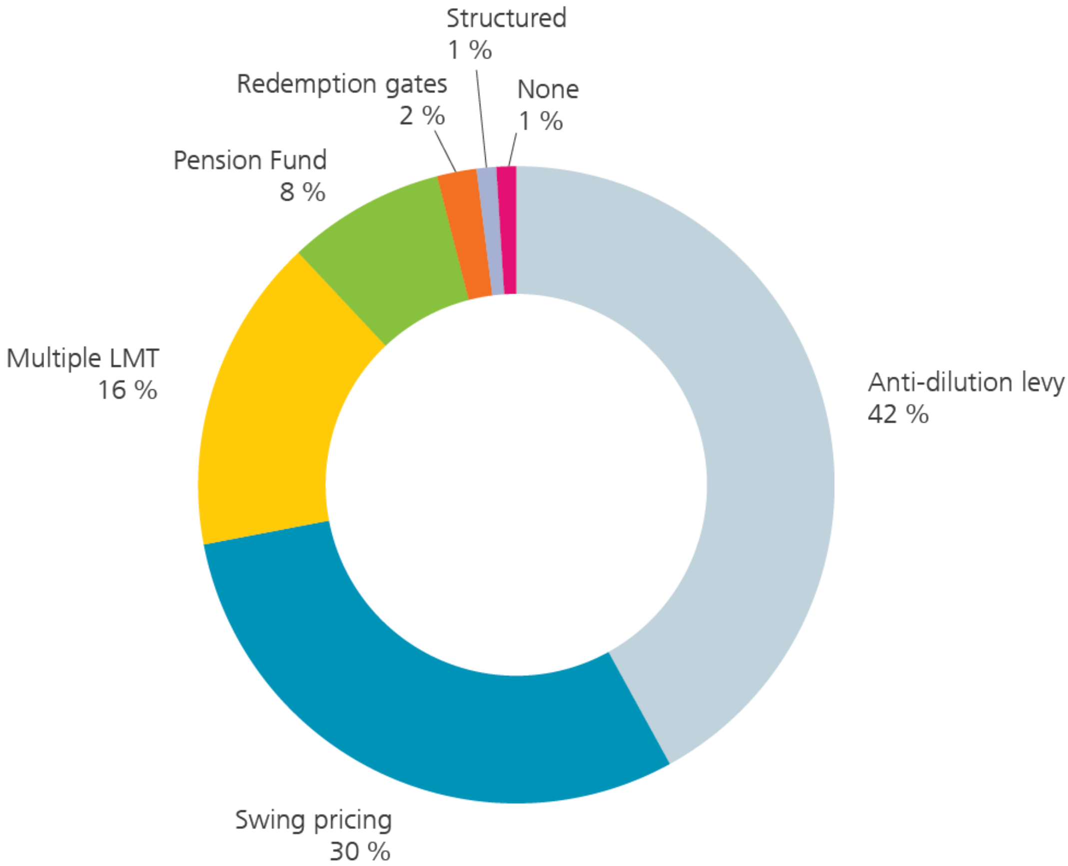


Source : FSMA.

Notes:

This Chart presents the gross exposures of Belgian public open-ended investment funds. Asset classes are based on the AIFMD reporting scheme. Derivatives exposures are converted based on a pre-specified methodology.

Chart 3.5: Liquidity management tools of Belgian public open-ended investment funds *(% of total net asset value, end 2023)*

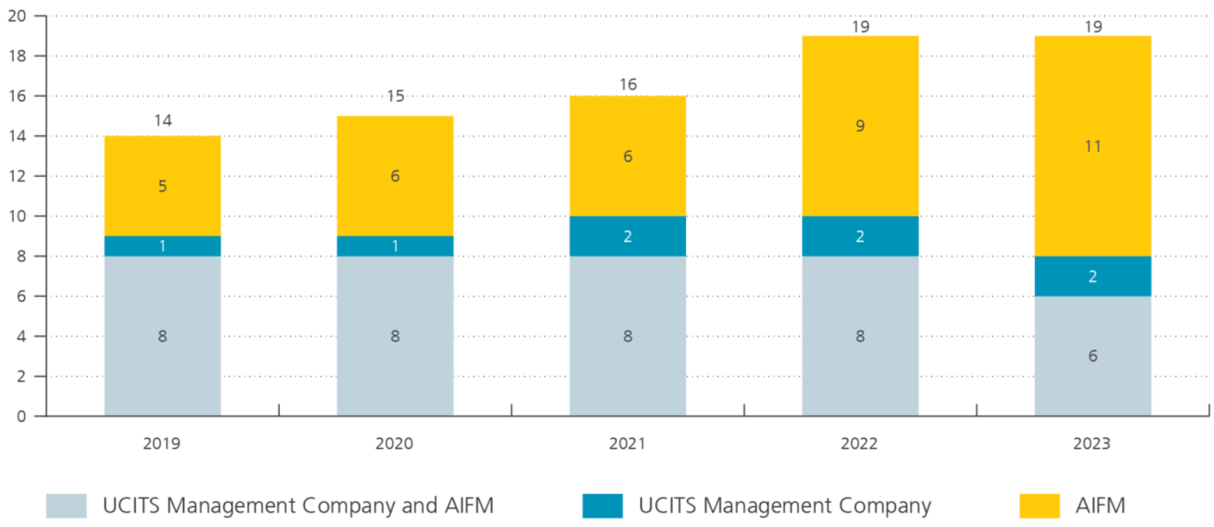


Source : FSMA.

Notes:

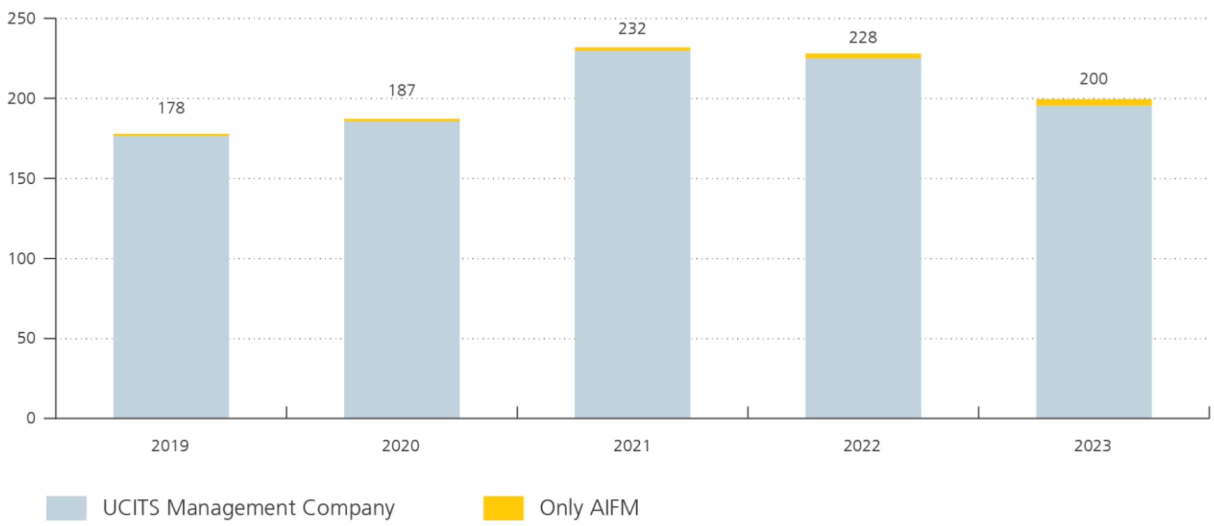
This chart presents the breakdown of liquidity management tools available for Belgian public open-ended investment funds for which the FSMA has recommended that liquidity management tools should be available, according to their constitutional documents and/or pre-contractual information. The breakdown is based on the total net asset value.

Chart 3.6: Number of authorised Belgian asset management companies *(year-end)*



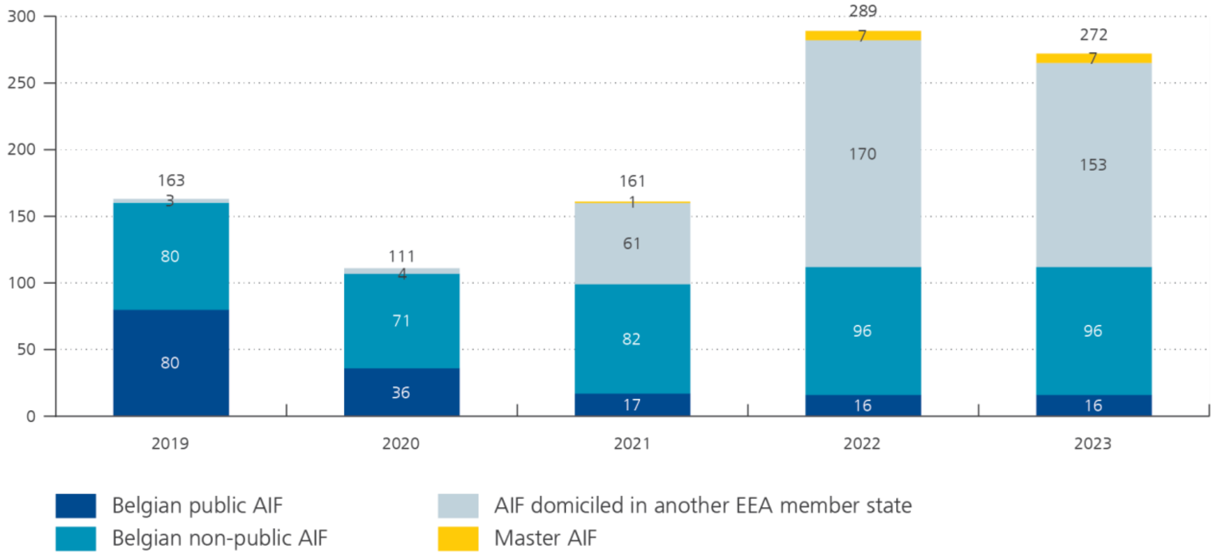
Source: FSMA.

Chart 3.7: Assets under management of authorised Belgian asset management companies *(€ billion, year-end)*



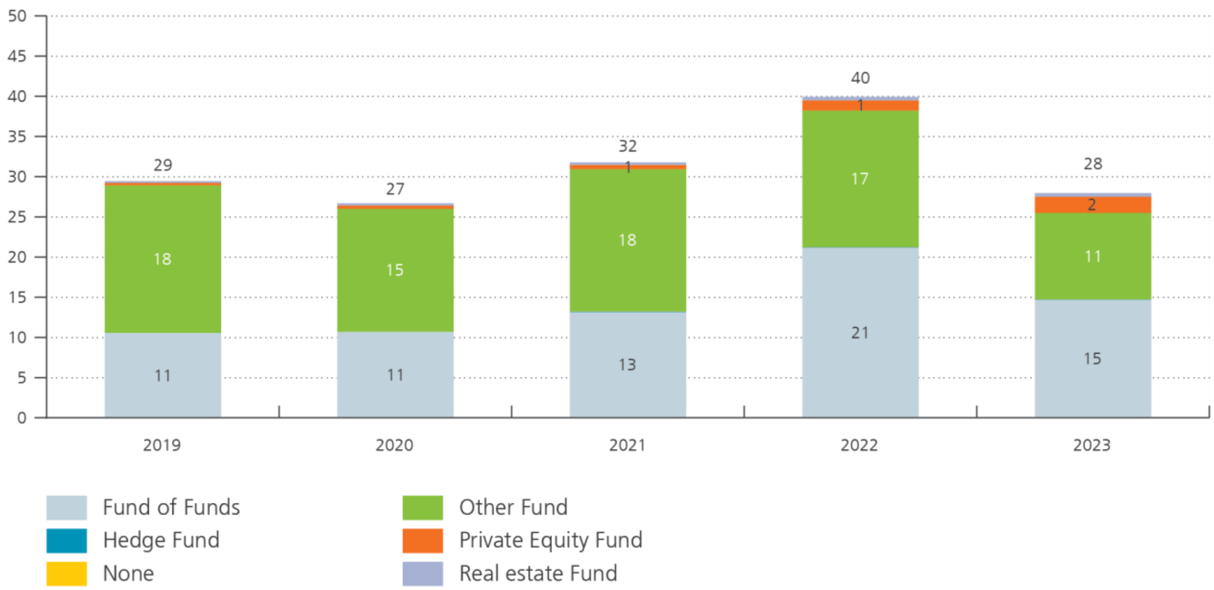
Source: FSMA.

Chart 3.8: Number of AIF reported by Belgian authorised AIFMs *(year-end)*



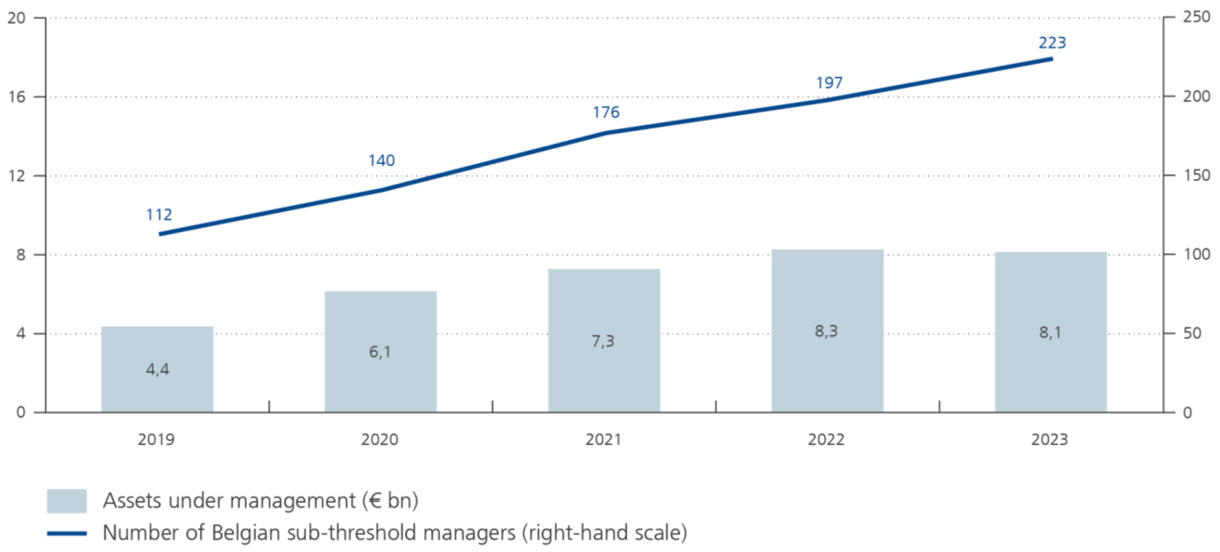
Source: FSMA.

Chart 3.9: Total net assets of AIFs managed by Belgian authorised AIFMs by AIF type *(€ billion, year-end)*



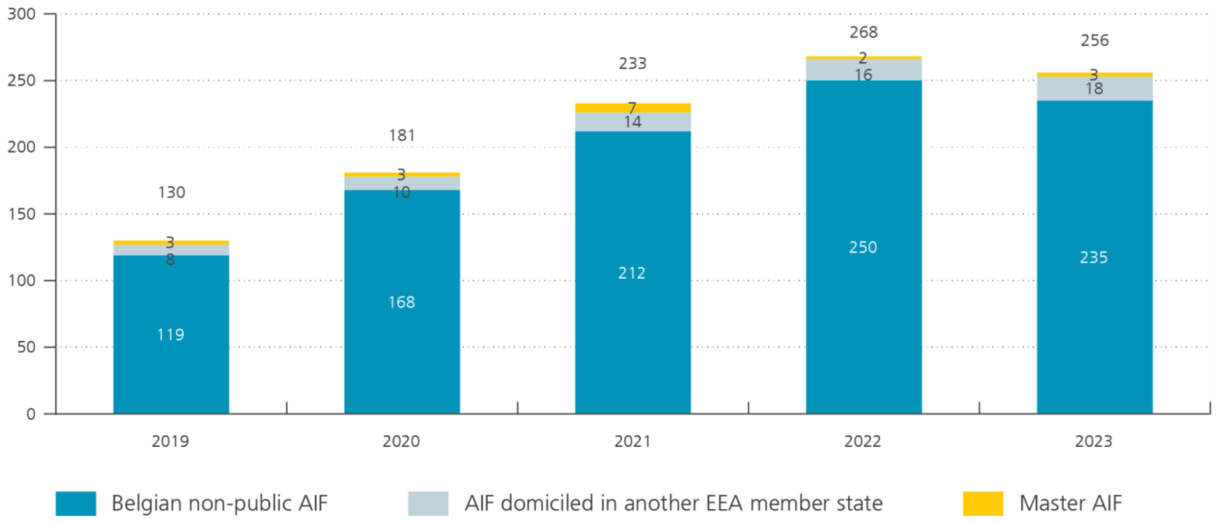
Source: FSMA.

Chart 3.10: Number and assets under management of Belgian sub-threshold managers *(year-end)*



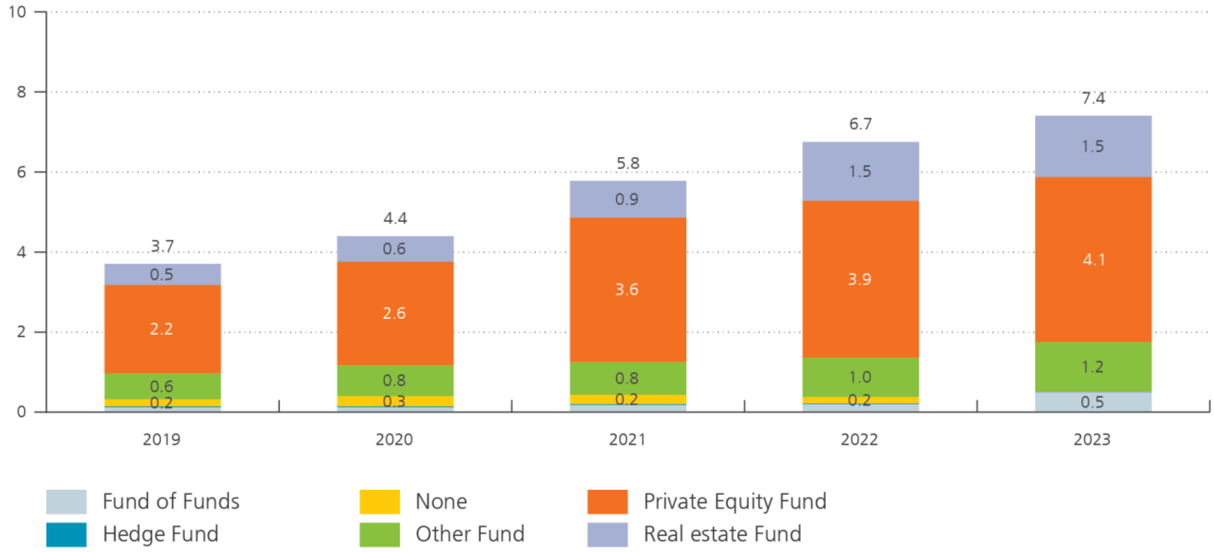
Source: FSMA.

Chart 3.11: Number of AIF reported by Belgian sub-threshold managers *(year-end)*



Source: FSMA

Chart 3.12: Total net assets of AIFs managed by Belgian sub-threshold managers by AIF type *(€ billion, year-end)*



Source: FSMA.

Table 3.5: Number of registered (sub-)funds and net asset value of publicly offered open-ended foreign investment fund types in Belgium *(year-end)*

		Registered/ notified (sub-) funds				Net asset value (€ million)			
		2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
UCITS	Umbrella funds	550	559	560	596	N.A.	N.A.	N.A.	N.A.
	Sub-funds	4,513	4 ,649	4,760	4,761				
Public open-ended AIFs	Umbrella funds	2	2	0	0	427	16	0	0
	Sub-funds	4	3	0	0				
Total	Umbrella funds	552	561	560	596	427	16	0	0
	Sub-funds	4,517	4,652	4,760	4,761				

Source: FSMA.

<u>Notes</u>:

This tables presents the number of registered (sub-) funds and their net asset value (in € million) of the foreign open-ended investment funds publicly offered in Belgium, classified according to the applicable regulatory regime. The table does not contain statistics on foreign investment funds distributed, but not publicly offered, in Belgium.

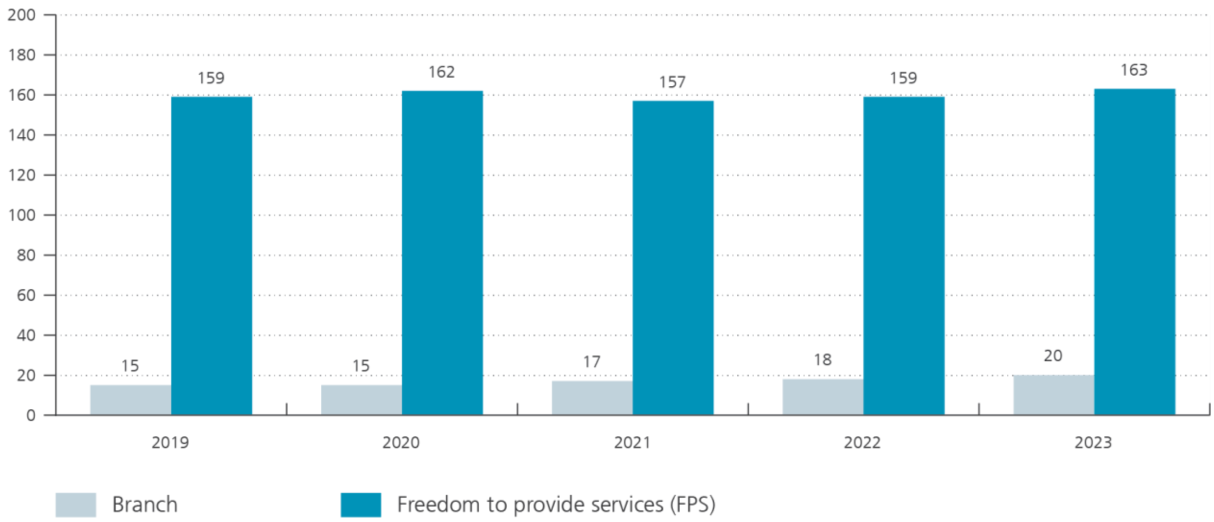
Table 3.6: Investments by Belgian residents in foreign investment funds *(€ billion, end of period)*

	2022			2023			June 2024		
	MMFs	**Non-MMF IFs**	**Total**	**MMFs**	**Non-MMF IFs**	**Total**	**MMFs**	**Non-MMF IFs**	**Total**
Total	**12.0**	**269.5**	**281.5**	**16.2**	**332.7**	**348.9**	**17.4**	**333.9**	**351.4**
By holding sector									
Households	1.3	125.7	127	3.0	142.4	145.4	3.3	144.9	148.3
Other non-financial investors (incl. general government)	3.4	22.5	25.9	8.2	36.9	45.1	7.9	29.4	37.3
Banks	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Non-MMF investment funds	3.5	59.1	62.6	1.9	69.9	71.8	3.1	74.1	77.2
Insurance companies	3.4	41.9	45.3	2.4	60.3	62.6	2.4	57.8	60.1
Pension funds	0.2	18.9	19.2	0.5	21.7	22.2	0.4	22.9	23.2
Other financial corporations	0.1	1.3	1.5	0.3	1.5	1.8	0.4	4.8	5.2
By issuing country									
DE	0.0	6.7	6.7	0.0	7.1	7.1	0.0	7.3	7.3
FR	5.6	10.6	16.2	4.9	17.6	22.5	6.0	19.2	25.2
IE	1.5	26.5	28.0	2.5	36.1	38.6	1.9	43.5	45.4
LU	4.9	222.5	227.4	8.8	268.3	277.1	9.5	260.1	269.6
NL	-	1.2	1.2	-	1.4	1.4	-	1.5	1.5
Other countries	0.0	2.0	2.0	0.0	2.2	2.2	0.0	2.3	2.3

Source: NBB, ECB (CSDB).

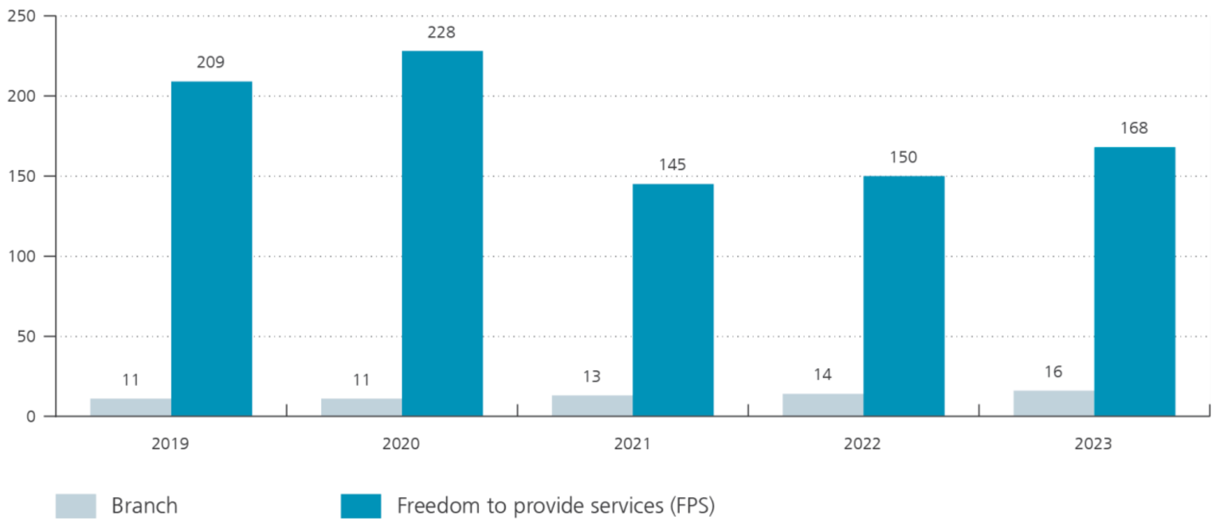
Notes:
This table presents a breakdown, by holding sector and by issuing country, of the investments by Belgian residents in foreign investment funds. The figures are based on the securities holdings statistics (SHS).

Chart 3.13: Number of foreign UCITS Management Companies registered or notified in Belgium *(year-end)*



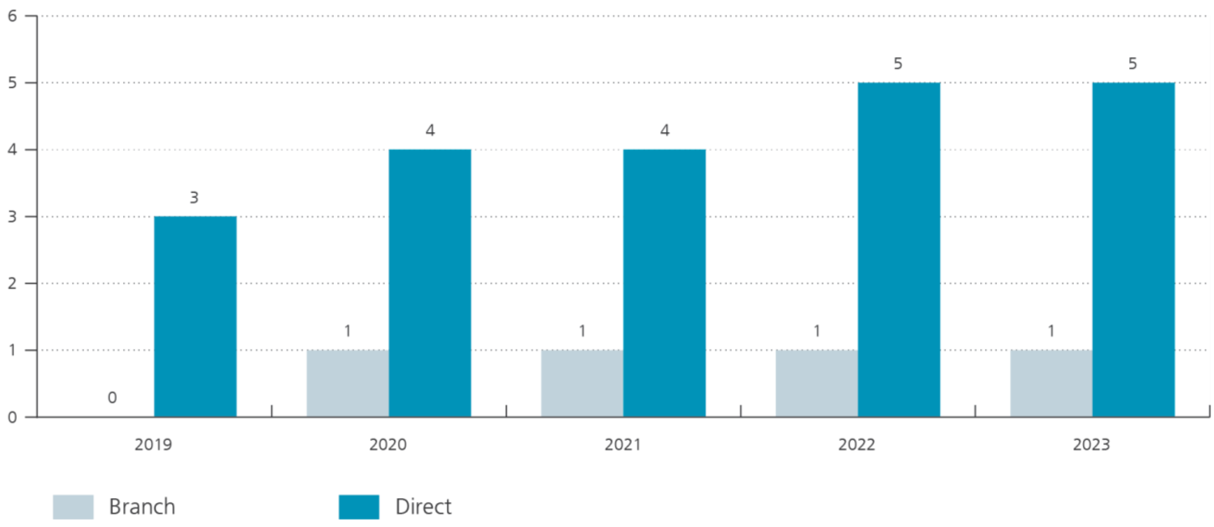
Source: FSMA.

Chart 3.14: Number of foreign AIFMs registered or notified in Belgium *(year-end)*



Source: FSMA.

Chart 3.15: Number of foreign sub-threshold AIFMs notified in Belgium *(year-end)*



Source: FSMA.

Table 3.7: Fee and commission (F&C) income and assets involved in asset management-related activities of Belgian banks

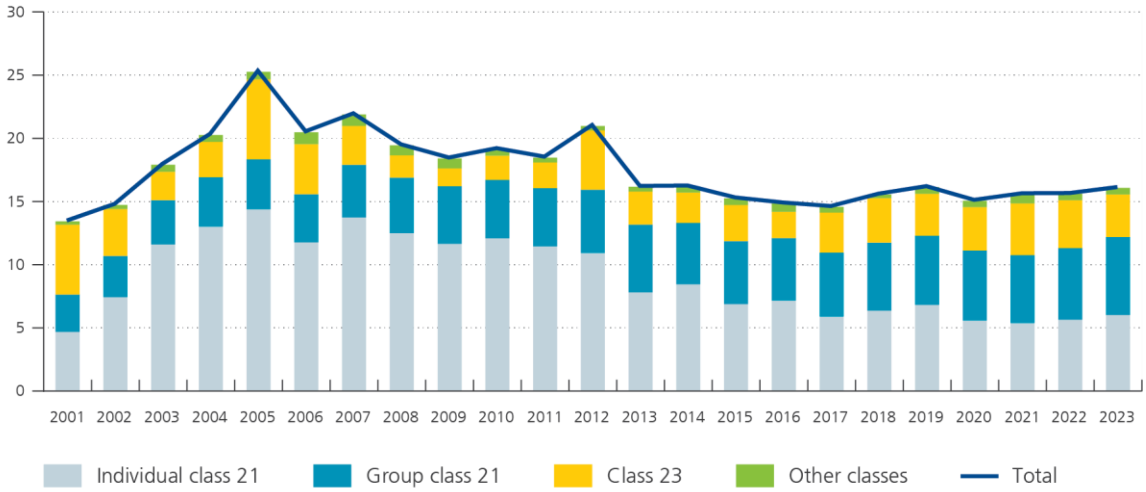
	2022			2023			June 2024		
	Assets involved	**F&C income**	**Average remuner -ation**	**Assets involved**	**F&C income**	**Average remuner-ation**	**Assets involved**	**F&C income**	**Average remuner-ation**
	€ bn, year-end	*€ mn, full year*	*bps*	*€ bn, year-end*	*€ mn, full year*	*bps*	*€ bn, year-end*	*€ mn, half year*	*bps*
Assets managed within the bank **[1]**	405	2,363	*58.4*	479	2,473	*51.6*	524	1,352	*51.6*
Collective management	274	N.A.	N.A.	319	N.A.	N.A.	347	N.A.	N.A.
Discretionary management	131			160			177		
Collective investment products distributed by the bank (but not managed within the bank) **[2]**	235	834	*35.5*	244	797	*32.7*	149	411	*55.2*
Total of the activities above	**640**	**3,197**	***50.0***	**723**	**3,269**	***45.2***	**673**	**1,762**	***52.4***
Custody **[3]**	862	187	*2.2*	1,009	191	*1.9*	1,026	102	*2.0*
Collective investment	289	N.A.	N.A.	328	N.A.	N.A.	359	N.A.	N.A.
Other	573			681			666		
Central administrative services for collective investment **[4]**	196	166	*8.5*	236	171	*7.2*	257	95	*7.4*

Source: NBB, FINREP.

Notes:

This table presents statistics for the asset management-related activities of Belgian banks on a consolidated basis. It shows, by type of activity, the assets involved, the (gross) fee and commission income earned and the average remuneration (calculated as the ratio of the assets involved and the (gross) fee and commission income). These data exclude two banks that are specialised in custodian activities. **[1]** "Assets managed within the bank" refers to assets belonging directly to the customers, for which the institution is providing management. The consolidated figures also include assets managed by subsidiaries of Belgian banks. **[2]** "Collective investment products distributed by the bank (but not managed within the bank)" refers to collective investment products issued by entities outside the group that the institution has distributed to its current customers. **[3]** "Custody" refers to the services of safekeeping and administration of financial instruments for the account of clients provided by the institution and services related to custodianship such as cash and collateral management. **[4]** "Central administrative services for collective investment" refers to the administrative services provided by the institution to collective investment undertakings. It includes, among other things, the services of transfer agent; of compiling accounting documents; of preparing the prospectus, financial reports and all other documents intended for investors; of carrying out the correspondence by distributing financial reports and all other documents intended for investors; of carrying out issues and redemptions and keeping the register of investors; as well as of calculating the net asset value.

***Chart 3.16: Belgian insurers' life insurance premiums** (€ billion)*



Source: NBB.

Table 3.8: Assets covering class 23 contracts' technical provisions of Belgian life insurers *(€ million, end of period)*

	2020	2021	2022	2023	June 2024
Collective investment undertakings	42,093	48,741	43,829	49,369	53,052
Equity funds	11,856	15,878	13,473	13,181	14,624
Asset allocation funds **[1]**	9,355	10,607	14,561	20,845	22,702
Other funds **[2]**	11,906	11,149	9,351	10,007	10,166
Debt funds	7,823	10,045	5,371	4,26	4,517
MMFs, real estate funds and alternative funds **[3]**	1,153	1,063	1,073	1,076	1,043
Cash and deposits	1,368	1,098	894	584	581
Deposits with term longer than 1 year	1,3	977	753	540	514
Transferable deposits and cash	68	121	141	44	67
Corporate bonds	1,091	937	590	660	599
Other **[4]**	477	401	238	503	535
Total	**45,029**	**51,177**	**45,552**	**51,116**	**54,767**

Source: NBB, Solvency II reporting.

Notes:

This table presents a breakdown of the assets covering the technical provisions for class 23 contracts of Belgian insurers. **[1]** "Asset allocation funds" are collective investment undertakings which invest their assets pursuing a specific asset allocation objective, e.g. primarily investing in the securities of companies in countries with nascent stock markets or small economies, specific sectors or group of sectors, specific countries or other specific investment objective. **[2]** "Other funds" are funds other than equity, debt, money market, asset allocation, real estate, alternative, private equity and infrastructure funds. **[3]** "Alternative funds" are collective investment undertakings whose investment strategies fall within categories such as hedging, event-driven, fixed income directional and relative value, managed futures, commodities, etc. **[4]** "Other" includes structured notes, mortgages and loans, government bonds, equity, etc.

Table 3.9: Belgian insurers' investments in CIUs other than in the context of their unit-linked life insurance business *(€ million, end of period)*

	2020	2021	2022	2023	June 2024
Debt funds	6,995	7,680	6,821	6,396	5,734
Money Market Funds (MMFs)	1,249	2,860	3,508	3,336	2,504
Equity funds	1,885	2,091	1,487	1,359	1,609
Real estate funds	1,828	2,340	2,449	2,321	2,332
Alternative funds	1,002	861	903	899	928
Other funds	2,692	3,710	3,658	3,971	3,708
Private equity funds	955	1,309	2,242	1,267	1,543
Asset allocation funds	556	727	1,894	2,331	2,279
Infrastructure funds	509	807	1,073	1,244	1,419
Total	**17,672**	**22,384**	**24,035**	**23,124**	**22,057**

Source: NBB, Solvency II reporting.

Table 3.10: Total assets and investments by Belgian institutions for occupational retirement provision *(€ million, year-end)*

	2019	2020	2021	2022	2023
Investments	37,819	40,868	44,909	37,722	43,565
Investment fund units	30,007	32,947	36,507	30,761	36,215
Total assets	**40,209**	**42,675**	**47,093**	**40,373**	**45,791**

Source: FSMA.

Table 4.1: Risk metrics for the Belgian NBFI sector according to type of risk and economic function (ratios)

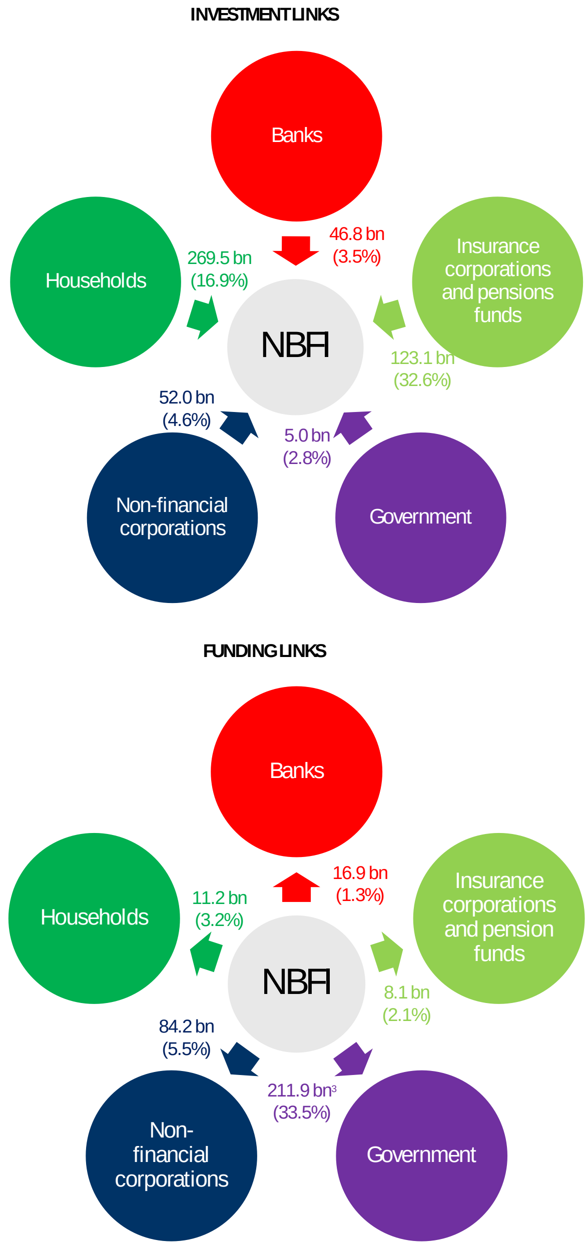
Risk metric for the narrow NBFI sector	Economic function (typical entity types)	2019	2020	2021	2022	2023	Interpretation
Credit Intermediation 1 (CI1) **[1]**	EF1 (All types of funds)	**0,2**	**0,2**	**0,2**	**0,3**	**0,2**	Between 0 and 1 ; Higher values show more involvement in credit intermediation
	EF2 (Finance companies)	**0,9**	**0,9**	**0,9**	**0,9**	**0,9**	
Credit Intermediation 2 (CI2) **[2]**	EF1 (All types of funds)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	
	EF2 (Finance companies)	**0,8**	**0,8**	**0,9**	**0,9**	**0,9**	
Maturity Transformation 1 (MT1) **[3]**	EF1 (All types of funds)	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	Between -1 and +1 ; 0 means no maturity transformation, negative value implies negative maturity transformation
	EF2 (Finance companies)	**-0,1**	**-0,1**	**0,0**	**0,1**	**0,1**	
Maturity Transformation 2 (MT2) **[4]**	EF1 (All types of funds)	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	Value =1 means ST liabilities fully covered by ST assets ; Value >1 means ST funding dependence ; Value between 0 and 1 indicates negative maturity transformation
	EF2 (Finance companies)	**0,6**	**0,6**	**0,7**	**0,9**	**0,9**	
Liquidity Transformation 1 (LT1) **[5]**	EF1 (All types of funds)	**1,9**	**1,9**	**1,9**	**1,9**	**1,9**	Between 0 and 2 ; Value =1 means ST liabilities equal to liquid assets, no liquidity transformation ; Value >1 : substantial liquidity mismatch
	EF2 (Finance companies)	**0,9**	**0,9**	**1,0**	**1,0**	**1,0**	
Leverage 1 (L1) **[6]**	EF1 (All types of funds)	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	1= no leverage ; the higher, the more leverage
	EF2 (Finance companies)	**2,9**	**2,9**	**2,9**	**3,0**	**3,0**	

Source : FSB, NBB.

Notes:

[1] Credit assets/assets under management or total financial assets. Credit assets is the amount of debt securities, loans and cash on deposit. **[2]** Loans/assets under management or total financial assets. **[3]** (Long-term assets of > 12 months – long-term liabilities of > 12 months – equity)/assets under management or total financial assets. **[4]** (Short-term liabilities of ≤ 12 months + redeemable equity of ≤ 12 months)/short-term assets of ≤ 12months. **[5]** (Assets under management or total financial assets – liquid assets (narrow) + short-term liabilities ≤ 30 days + redeemable equity ≤ 30 days)/assets under management or total financial assets. Liquid assets in a narrow definition include cash and cash equivalents. **[6]** For EF1: assets under management/net asset value. For EF2: total financial assets/equity.

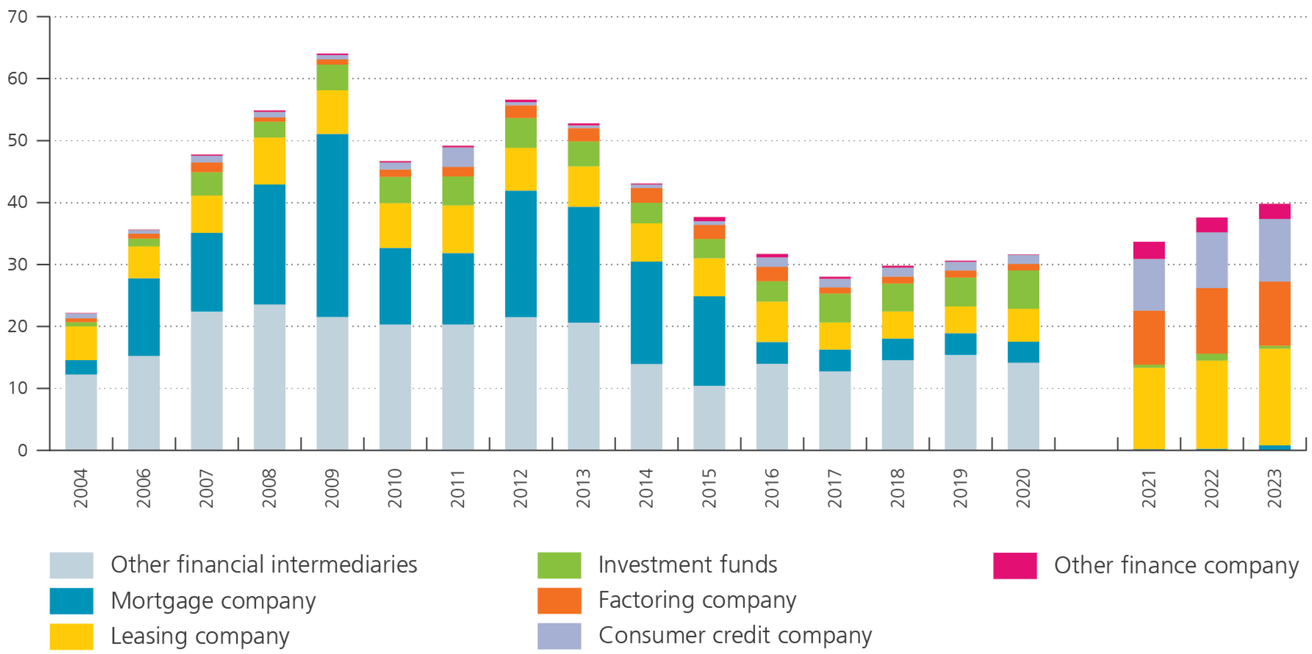
Chart 4.1: Interconnectedness mapping – starting point *[1] (outstanding amount at the end of June 2024, in billions of euros and in % of institutional sectors' consolidated assets/liabilities[2])*



Sources: FSB, NBB.

__Notes:__ **[1]** S.123 + S.124 (excl. equity funds) + S.125-1 (excl. retained securitisation) + S125-4 + S.125-9 + EMU S.123 + EMU S.124 + EMU S.125 + shares/units held by Belgian residents in non-EMU investment funds + debt securities issued by Belgian residents (corporation or government) and held by non-MFI non-EMU entities. **[2]** Data for households are expressed in % of total unconsolidated assets/liabilities. **[3]** This amount includes government bonds detained by non-EMU investment funds, as well as other foreign non-EMU entities that are not part of the NBFI sector, such as insurance companies and pension funds. The available data do not allow, however for a distinction between these various counterparts. Therefore, it should be considered the upper bound of an estimate of the outstanding amount of financing obtained by the general government sector from the worldwide NBFI sector.

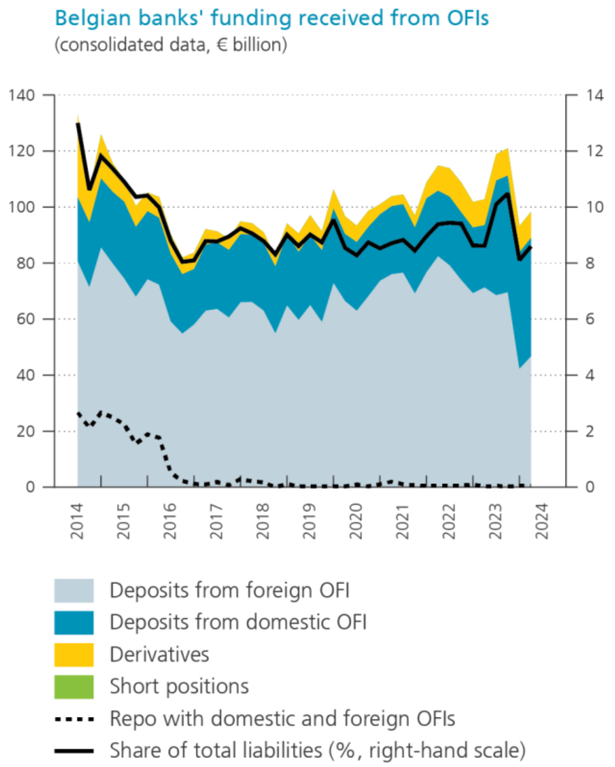
Chart 4.2: Belgian banks' loans to other financial intermediaries*[1] *(€ billion, unconsolidated data)

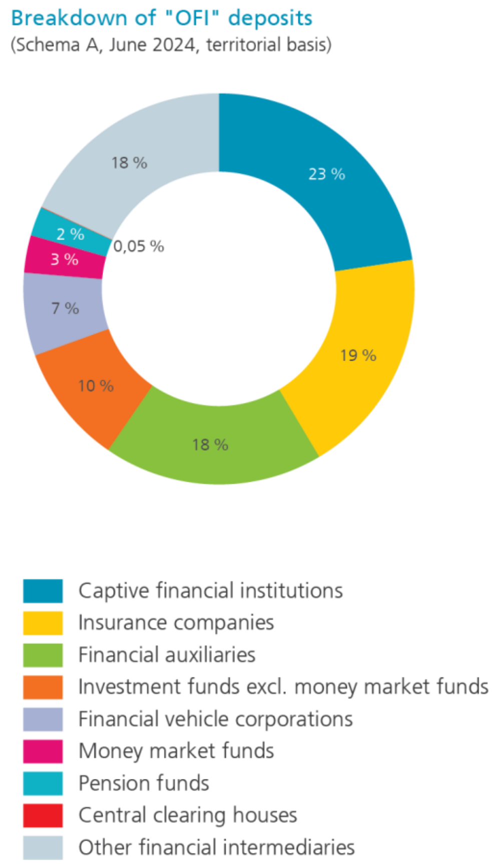


Sources: NBB, Central Corporate Credit Register (CCCR).

<u>Notes:</u> [1] Excluding central banks, deposit-taking corporations, holding companies and investment companies which fall outside of the scope of the NBFI sector. The methodological break in the time series between 2020 and 2021 is related to the replacement of the Central Corporate Credit Register by the new Corporate Credit Register in order align the data collection with the requirements of European Central Bank (ECB) Regulation (EU) 2016/867 on the collection of granular credit and credit risk data (the "AnaCredit Regulation").

Chart 4.3: Belgian banks' funding received from other financial institutions (OFIs)



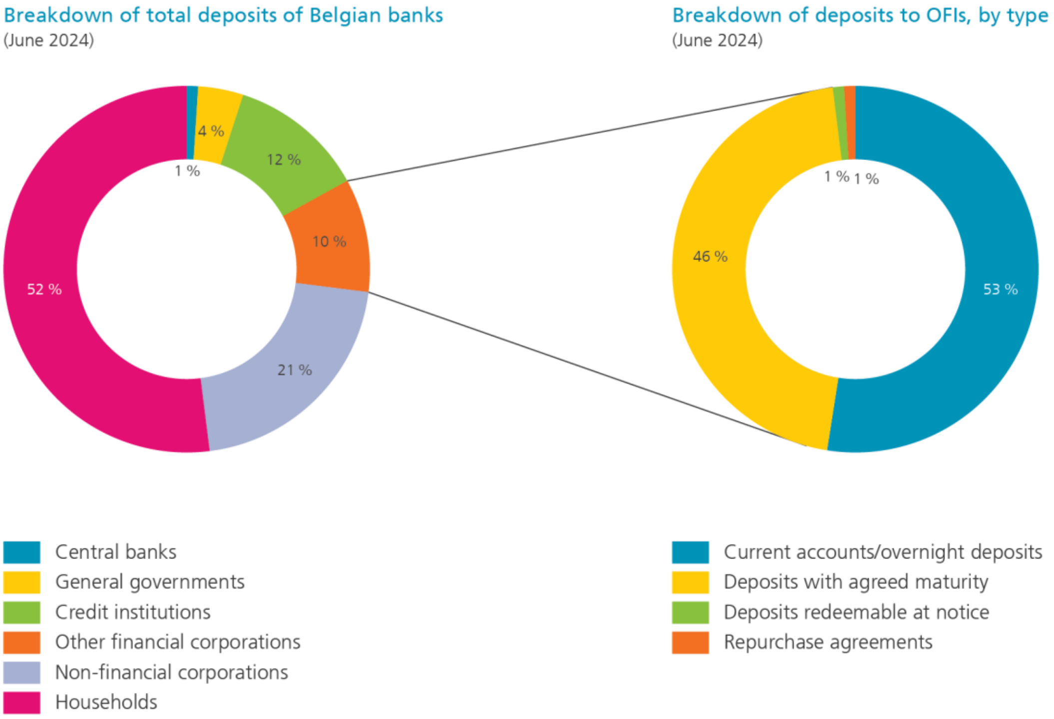


Source: NBB, FINREP, Schema A.

Notes:

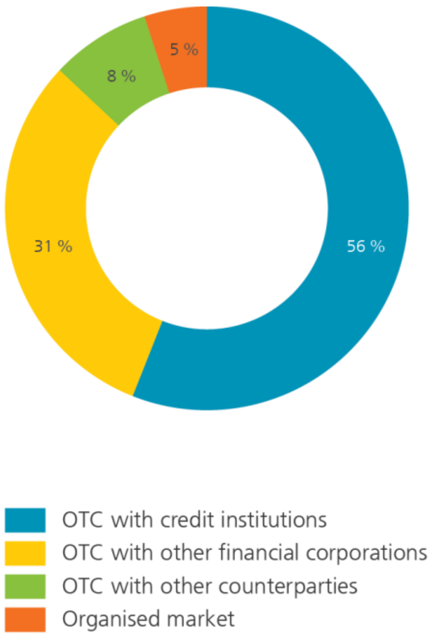
[1] The right-hand chart is based on territorial data from Schema A and encompasses a smaller amount of deposits from other financial institutions than the amount shown in the left-hand chart (which is based on consolidated data from FINREP).

***Chart 4.4: Breakdown of total deposits of Belgian banks** (June 2024, consolidated data)*



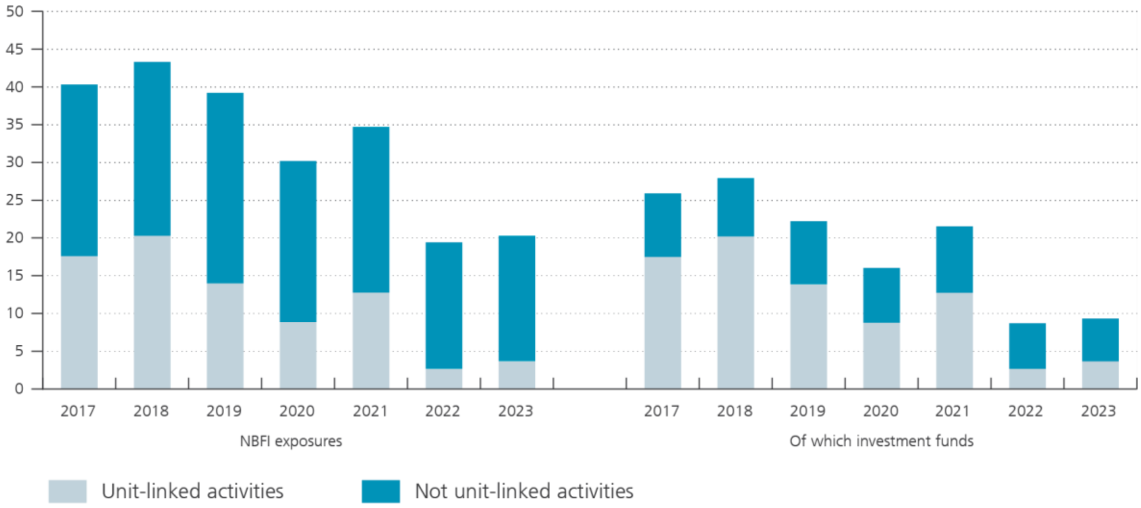
Source: NBB, FINREP.

***Chart 4.5: Breakdown of the notional amount of the derivative portfolio of Belgian banks** (June 2024)*



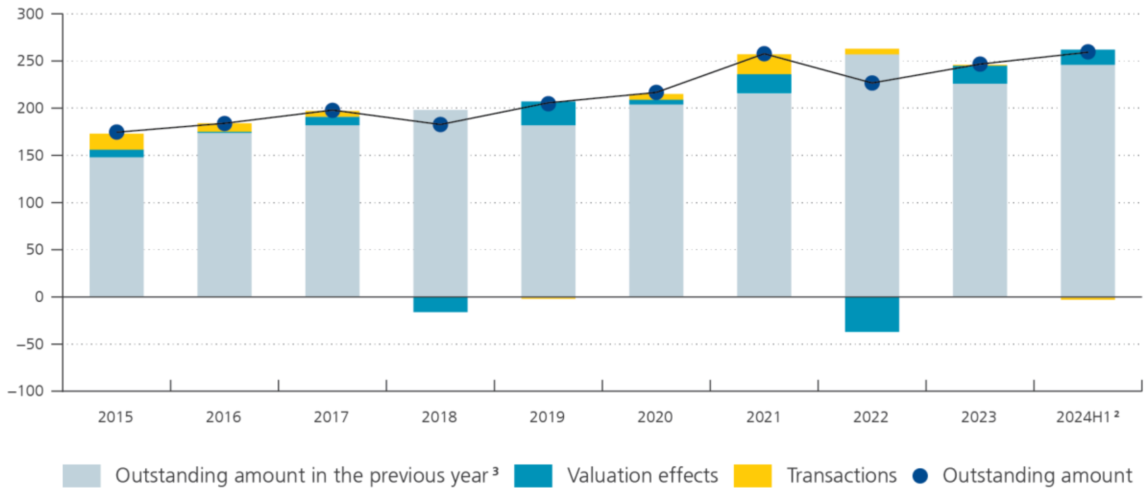
Source: NBB, FINREP.

Chart 4.6: Belgian insurance sector's NBFI exposures *(€ billion)*



Source: NBB, Solvency II reporting

Chart 4.7: Households' holdings of domestic and foreign investment fund shares or units [1] *(outstanding amount at the end of the year, unless otherwise stated)*

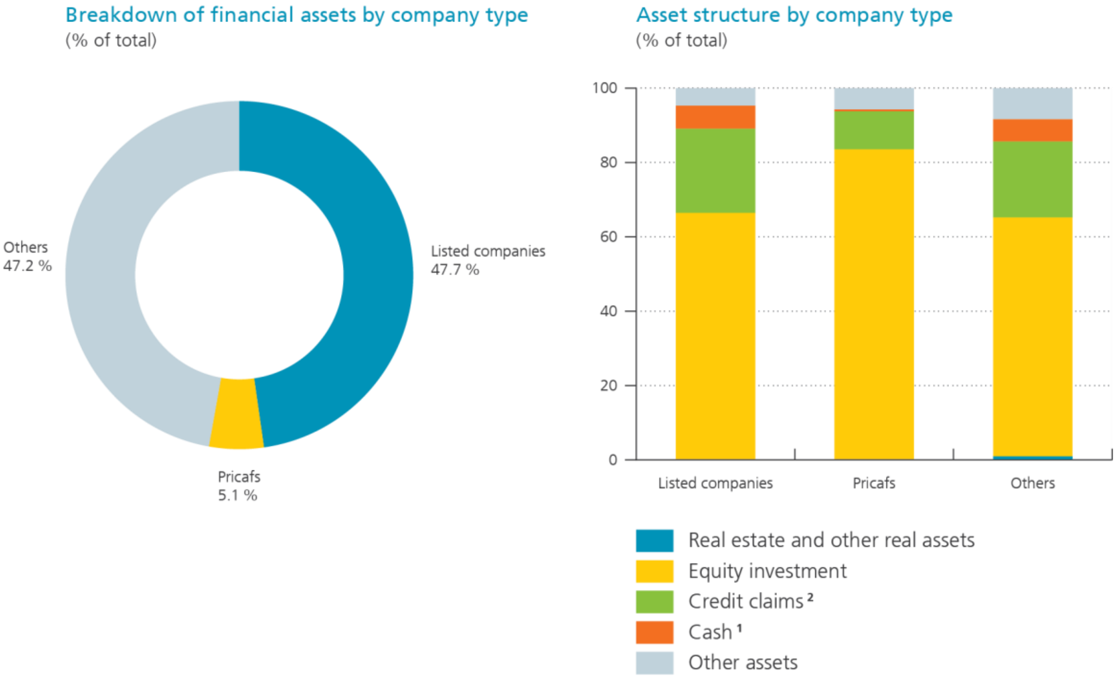


Source: NBB (financial accounts statistics).

<u>Notes:</u> [1] Excluding equity investment funds. **[2]** Data for June 2024. **[3]** Includes also the other changes in volume since the previous year.

2.2 Thematic focus on the private finance market in Belgium

Chart 5.1: Private investment companies' asset structure *(2022)*



Source: NBB

Notes: **[1]** Current investment excluding stocks. **[2]** Amounts receivable mainly from related companies.

Table 5.1: Private investment companies' debt *(2022)*

	# Companies	Total debt (€ million)	Bank debt (€ million)	Other financial debt (€ million)	Debt-to-assets ratio (median, in %)
Listed companies	6	4,832	20	3,721	17.9
Pricafs	120	119	77	0	0.3
Others	221	5,278	1,251	1,766	5.1
Total	**347**	**10,230**	**1,348**	**5,488**	**1.7**

Source: NBB

List of abbreviations

AIF	Alternative Investment Fund
AIFM	Alternative Investment Fund Manager
AIFMD	Alternative Investment Fund Manager Directive
AuM	Assets Under Management
BCBS	Basel Committee for Banking Supervision
CCCR	Central Corporate Credit Register
CCP	Central Counterparty
CIU	Collective Investment Undertakings
CMU	Capital Markets Union
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EF	Economic Function
EIOPA	European Insurance and Occupational Pensions Authority
ELTIF	European Long Term Investment Fund
EMIR	European Market Infrastructures Regulation
EMU	Economic and Monetary Union
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange-Traded Fund
EU	European Union
EuSEF	European Social Entrepreneurship Fund
EuVECA	European Venture Capital Fund
FICOD	Financial Conglomerates Directive
FINREP	Financial Reporing Framework
FSB	Financial Stability Board
FSMA	Financial Services and Markets Authority
FPS	Federal Public Service
FVC	Financial Vehicle Corporation
GDP	Gross Domestic Product
HLEG	High-Level Expert Group
IORP	Institution for Occupational Retirement Provision
IOSCO	International Organization of Securities Commissions
ITS	Implementing Technical Standards
LDI	Liability Driven Investment
LMT	Liquidity Management Tool
MiFID	Markets in Financial Instruments Directive
MIFIR	Markets in Financial Instruments Regulation
MMF	Money Market Fund
MMFR	Money Market Fund Regulation
MUNFI	Monitoring Universe of Non-bank Financial Intermediation

NAI	National Accounts Institute
NAV	Net Asset Value
NBB	National Bank of Belgium
NBFI	Non Bank Financial Intermediation
NFC	Non-Financial Corporation
OFI	Other Financial Institution/Intermediary
PRIVAK/PRICAF	Private equity closed-end investment fund
REIT	Real Estate Investment Trust
SFT	Securities Financing Transactions
SHS	Securities Holdings Statistics
SME	Small and Medium-sized Enterprise
STC	Simple, Transparant, Consistent/Comparable Securitisations
STS	Simple, Transparent and Standardised Securitisations
UCI	Undertaking for Collective Investment
UCITS	Undertaking for Collective Investment in Transferable Securities
WAL	Weighted Average Life
WAM	Weighted Average Maturity