Non-bank financial intermediation in Spain

Financial year 2018

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This report on non-bank financial intermediation (NBFI) in Spain describes the most recent trends of the entities and activities that form part of the process and assesses their most important risks. This report is an update of the first issue of this publication, which is available in the quarterly newsletter of the Spanish National Securities Market Commission (CNMV) for the first quarter of the year.

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1 Executive summary

This publication represents the first update of the analysis of the entities that form part of non-bank financial intermediation (NBFI) in Spain, which was published in the bulletin for the first quarter of 2019.[1] This update, which will be published twice a year, aims to illustrate the most recent trends of NBFI in terms of its main magnitudes as well as the assessment of its most important risks. In this edition, which presents information until the end of 2018, the following elements should be highlighted:

– The size of the Spanish financial system stood at 4.47 trillion euros, 1.7% less than in 2017. This fall was due both to the decrease in banking assets (-3.6%), within a context still marked by the reduction of the outstanding credit balance, and the drop in assets of entities known as OFIs (other financial institutions), which stood at 5.2%.

– OFI assets (a figure that is usually adopted as a comprehensive measure of NBFI) stood at 780.6 billion euros at the end of 2018, representing 17.4% of the assets of the Spanish financial system (18.1% in 2017). 37.2% of these assets corresponded to investment funds, 23.6% to securitisations and 20.9% to captive financial institutions and money lenders. The credit intermediation activity of these entities remained constant in 2018 according to the absolute value of their credit assets, which stood at 285 billion euros. This figure represents 36.5% of the total assets of these institutions. Furthermore, wholesale financing of these entities, in decline since 2009, was 294 billion euros in 2018, 90% of which is long-term. In relative terms, wholesale financing is more relevant for OFIs (almost 40% of total assets in 2018) than for banks (slightly over 10%).

– Using the methodology of the Financial Stability Board (FSB) to delimit the NBFI assets from OFI entities,[2] it is estimated that the size of this sector stood at 504 billion euros in 2018 (5.3% less than in 2017). The decrease in NBFI assets is explained by the reduction in the outstanding balance of securitisations and the decrease in the equity of investment funds, affected by the turbulence of the financial markets at the end of 2018 and by the increase in redemptions by unit holders. The narrow definition of NBFI excludes entities that form part of the consolidation scope of banking groups, and in Spain amounted to 296 billion euros, representing 6.7% of the total financial system.

– The composition of NBFI, which is determined by belonging to one of the five economic functions described by the FSB, reveals that the entities under functions 1 and 5 (EF1 and EF5), which correspond to certain types of investment

1 See Ispierto, A. (2019). "Non-bank financial intermediation in Spain". *CNMV Bulletin*, Quarter I, pp. 79-122.

2 See *Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities* (2013).

funds and securitisation vehicles, represent a higher percentage, with 50.2% and 36.6% of total NBFI (broad sense) in 2018, respectively (49.5% and 38.9% in 2017). Financial credit institutions (EF2) are the third most important, with a weight of 12.1%. Entities belonging to EF3 (broker-dealers) and EF4 (mutual guarantee societies) have a relative importance of less than 1%. These figures, which correspond to the total number of entities, change substantially if entities included in the consolidated balance sheets of banking groups are eliminated: investment funds (which are not consolidated) gain weight, reaching 85.5% of the total, while the weight of securitisation vehicles and credit financial institutions, with a very high fraction of the total sector consolidated by banks, falls to 9.4% and 4.2%, respectively.

– The assessment of the risks associated with NBFI reveals that, in general terms, there is currently no relevant threat to financial stability. In the case of Spanish investment funds, the indicators analysed are not high, except for credit risk, due to the significant percentage of credit assets in their portfolios. This would also be the case for financial credit institutions and securitisation funds. The liquidity risk of investment funds, which has recently been cause for concern due to the possibility that in times of turbulence some of these institutions could find themselves in difficulty due to significant redemptions, remains contained within a slightly bullish trend. Lastly, the maturity transformation risk of securitisation funds, i.e., the temporary imbalance between assets and liabilities, which is the most relevant risk for these vehicles, was at a moderate level at the end of 2018.

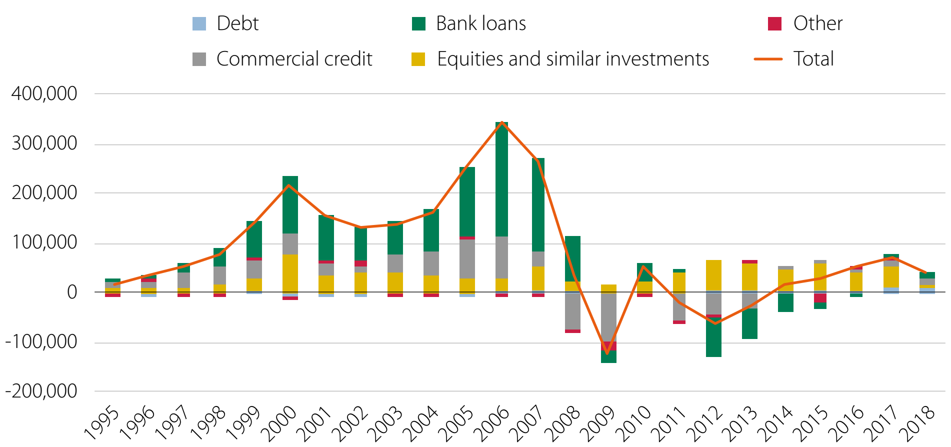
– In summary, the non-bank financial intermediation sector in Spain is mainly represented by investment funds and securitisation vehicles. Both types of entities are subject to demanding regulations and supervision. Subsequently, the risks identified for these are not related to the absence of an appropriate regulatory or supervisory approach, as may occur in some jurisdictions, but are those that emerge naturally in financial market operations and intermediation activities. In the particular case of investment funds, the CNMV has been paying special attention to the monitoring of the liquidity conditions of the assets of these institutions (which is facilitated by the especially demanding level of reporting imposed by Spanish regulations) and the management of this risk by management companies, as well as the strengthening of existing tools aimed at the preservation of financial stability. As previously mentioned, these actions are framed within an international context of concern regarding the ability of these institutions to handle an abrupt increase in redemptions during times of stress in the financial system.

2 Trends in main indicators

Non-bank financing is an alternative to banking, beneficial both for companies accessing it and for the economy as a whole. It gives companies more access to financing, which increases their transparency, indicating that they have achieved a certain degree of professional management of their business, and may lead to associated improvements in terms of prestige and reputation. It is reasonable to assume that an economy with more balanced financing structure between the banking sector and capital markets can achieve higher long-term growth rates, as well as less abrupt fluctuations in its economic cycle.

The stabilising nature of financing provided by financial markets to companies at a time when other alternative sources are significantly reduced or decreased has been observed in recent years, especially in the worst moments of the banking credit crunch between 2012 and 2014. As shown in figure 1, the financing of non-financial corporations was severely affected during the crisis years, both in absolute and relative terms. Until 2008, this financing was based mostly on bank loans and, to a lesser extent, on inter-company loans (commercial credit). The weight of bank loans as a portion of total company liabilities decreased from 43% to below 30%, while financing through shares and other equity stakes (which also includes the profit retained by the entities) showed great strength and stability during the years of the crisis and its relative significance grew from 40% to close to 60% of total liabilities.

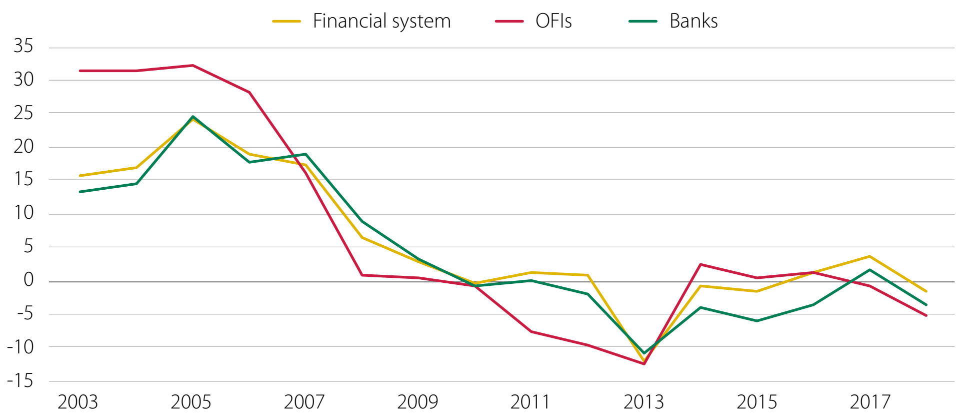
Financing of non-financial institutions FIGURE 1



Source: Bank of Spain.

Despite the changes that occurred during the crisis period, the composition of the financial system in our country shows that banks continue to be the most relevant entities due to their size, with assets of 3.2 trillion euros in 2018,including central bank assets (see table 1), which represents 70.9% of the system's total assets. This percentage has decreased very slightly since 2012, the year in which the high of 73.9% was reached, although if the central bank's assets (which have increased significantly since that year) are excluded, the reduction is much greater: in the first years of the crisis, bank assets exceeded 65% of the total, a figure that gradually contracted to 54.2% in 2018. There are different factors that explain this decrease. Of particular note, the contractionary effects on the outstanding credit balance derived from the intense restructuring process of the financial system in 2012, in a recessive economic context that fuelled this decrease, as well as the prolongation over time of an environment of very low interest rates, which encouraged the development of new investment and financing models as an alternative to the banking channel.

Annual growth of financial system assets FIGURE 2



Source: Bank of Spain.

In relation to non-bank financial intermediaries, pension funds continuously increased in size between 2008 and 2017, reaching 139 billion, and then experienced a slight 1% decrease in assets in 2018, while insurance companies also experienced progressive expansion, which in this case has continued in 2018, with an increase in assets of 0.6%.

Structure of the Spanish financial system TABLE 1

Million euros

	Central bank	Banks	Insurance	Pension funds	Financial auxiliaries	OFIs	Total
Size in 2018 (million)	748,807	2,426,298	306,297	138,025	76,486	780,627	4,476,538
Size in 2017 (million)	696,644	2,515,992	304,483	139,447	75,369	823,263	4,555,198
% of total (2018)	16.7	54.2	6.8	3.1	1.7	17.4	100
Growth 2018 (%)	7.5	-3.6	0.6	-1.0	1.5	-5.2	-1.7
Cumulative growth 2002-2009	125.8	153.7	54.6	73.2	261.3	243.4	157.2
Cumulative growth 2009-2017	217.4	-22.9	24.1	35.0	61.1	-24.9	-8.5

Source: CNMV and Bank of Spain.

Other financial institutions (OFIs), which include non-bank financial intermediaries, excluding pension funds, insurers and financial auxiliaries accounted for 17.4% of the financial system at year-end 2018, with assets valued at 781 billion euros. In the international context, OFIs have been considered as a broad approximation or measure of NBFI, partly because of the similarity of the regulations governing these entities between the different jurisdictions. However, it should be remembered that most of them are subject to regulation and supervision (which in some cases, such as in Spain, is very strict) and that these functions are carried out mostly by securities regulators and supervisors.

Structure of the other financial institutions TABLE 2

Million euros

	Non-monetary investment funds	Monetary investment funds	Captive financial institutions	SFVs: securitisation	Broker-dealers	Financial cred. institutions	REITs	Other	Total
Size in 2018 (million)	290,041	6,810	163,048	184,576	4,563	60,50	28,493	42,592	780,627
Size in 2017 (million)	298,372	7,122	167,756	206,816	3,695	57,265	27,660	54,577	823,263
% of total (2018)	37.2	0.9	20.9	23.6	0.6	7.8	3.6	5.5	100
Growth 2018 (%)	-2.8	-4.4	-2.8	-10.8	23.5	5.7	3.0	-22.0	-5.2
Cumul. growth 2002-2009	33.3	-74.7	967.9	917.4	14.3	49.0	·	·	243.4
Cumul. growth 2009-2017	59.5	-47.3	-47.7	-57.2	-72.0	5.4	309.1	212.0	-24.9

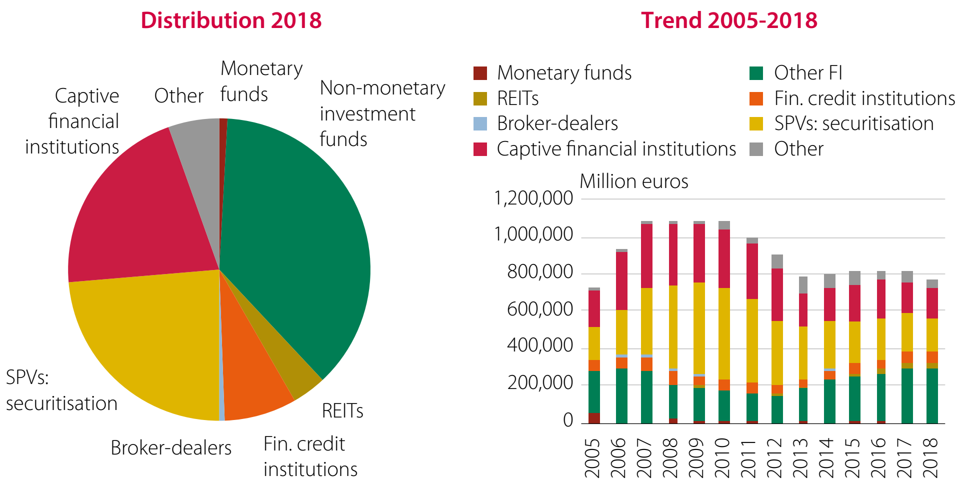
Source: CNMV and Bank of Spain.

As seen on the right of figure 3, OFI assets peaked in the years between 2007 and 2010, a period in which they exceeded one trillion euros. During the years prior to 2007, this financial subsector experienced very high and sustained growth, which resulted in a cumulative increase of 241.4% in its financial assets between 2002 and 2009. From 2010, with the effects of the crisis already very palpable in Spain, OFIs declined gradually until 2013, at which time their assets once again experienced growth, although at a much lower pace than in previous years, which was interrupted in 2017 and 2018. OFI assets contracted by 25% between 2010 and 2013, falling to below 800 billion euros, and from then until December 2016 grew 4.6% to 831 billion euros, and went on to fall in the last two years (-1.7% and -5.2%, respectively) to levels below those of 2013.

It is also worth mentioning that the significant growth of the sector in Spain to 2010 was higher than that seen in other economies around the globe,[3] mainly due to the rise of special financial vehicles (SFV) for securitisation and captive financial institutions, in addition to money lenders (see table 2). Since then, while these assets have declined in Spain (albeit with some fluctuations), growth has continued in many jurisdictions, although at a slower pace than before. For example, between 2011 and 2016, OFIs grew by more than 9% in the euro area, and this figure stood at 53% in the sample of countries in the analysis performed by the FSB (see footnote 2).

3 In the *Global Monitoring Report on Non-Bank Financial Intermediation* published by the FSB, cumulative growth between 2002 and 2010 in the countries included in the study was approximately 143%. 22 jurisdictions are included in the FSB sample for 2017: 21 individual jurisdictions, plus another that includes the group of countries belonging to the euro area. The 21 individual jurisdictions are: Argentina, Australia, Brazil, Canada, Cayman Islands, Chile, China, Korea, Hong Kong, Indonesia, India, Japan, Mexico, Russia, Saudi Arabia, Singapore, South Africa, Switzerland, Turkey, the United Kingdom and the United States. If the euro area jurisdictions are quantified separately, the total number rises to 29.

Distribution and trends of the OFI sector in Spain FIGURE 3



Source: CNMV and Bank of Spain.

Within the scope of OFIs there are different subsectors, according to the activity they carry out. The first subsector includes entities that make up NBFI and these are described in more detail in section 3 of this document. This group includes investment funds,[4] SFVs for securitisation, broker-dealers and financial credit institutions. The OFI subsectors that do not belong to the scope of NBFI are captive financial institutions and money lenders, funds and real estate investment companies (REITs),[5] central counterparties (CCPs), venture capital firms and the SAREB (Asset Management Company for Assets arising from Bank Restructuring).

Regarding institutions that do not form part of NBFI, it is worth noting from the volume of their assets, that captive financial institutions and money lenders, which are defined as entities that provide investment services with assets or liabilities that are not traded, for the most part, in open financial markets.[6] At the end of 2018, the financial assets of these entities amounted to 163 billion euros, approximately one fifth of the total of OFI assets (see table 2), despite the 2.8% reduction experienced during the year. The trend marked by this subsector during the last 15 years has been very uneven: it experienced almost exponential growth until 2007, when its assets multiplied by 10 in just 5 years, and gradually fell from that moment on, with a cumulative decrease of more than 50%. The sharp growth of this sector originates partly from the high levels of issuances of preferred units made by many companies, mostly banks or savings banks.

The financial assets of REITs, a sector that includes both real estate investment funds and Spanish real estate investment trusts (better known as SOCIMIs), represented 3.6% of OFI assets in 2018 with 28.5 billion euros. In this subsector, SOCIMIs have accounted for the highest percentage since the creation of the first entity at the end of 2013, with more than 95% of the total. Since that year, both the number and

4 Not all investment funds are part of NBFI, although the majority are. Those that are excluded are basically equity funds, which represent approximately 11% of total equity.

5 Real Estate Investment Trusts.

6 This subsector essentially includes the subsidiaries of a group of companies or entities that provide loans from their own funds through a single source. In Spain, a great many of these institutions are companies specially set up for the issuance of preferred stock and other negotiable securities.

the assets managed by the SOCIMIs have increased significantly, from 4.5 billion to more than 27 billion in 2018, with a growth of 2.9% in the last year. To the contrary, funds and real estate investment companies, which reached historic high in 2017 with a assets of nearly 10 billion euros, have since progressively fallen, especially funds, to close 2017 with assets of less than one billion euros. In 2018, however, there was a slight rebound of 7%, which placed the assets of these vehicles at 1.058 billion euros at the end of the year.

Credit intermediation and financing of OFIs

The objective of this subsection is to provide an overview of the involvement of non-bank financial intermediaries in credit intermediation and the granting of loans within the financial system, as well as their use of wholesale financing and repurchase agreements, better known as *repos.*

In 2018, credit intermediation in the financial system as a whole (excluding deposits) shank 2.5% as a result of the contraction registered in banking entities (-3.7%, to 1.68 trillion euros). With regard to OFIs, the figures were practically the same as in 2017, with 285 billion euros in credit assets, which represents 36.5% of the total value of their financial assets (see table 3).

Credit intermediation in the Spanish financial system TABLE 3

Million euros

	Banks	Insurance	Pension funds	OFIs	Total
Credit assets[1] 2018 (million)	1,680,868	228,304	65,301	284,741	2,259,215
Credit assets[1] 2018 (% of assets)	70.4	74.5	47.3	36.5	62.6
Growth 2018 (%)	-3.7	2.9	0.7	0.0	-2.5
Loans 2018 (million)	1,269,820	2,421	15	155,088	1,427,344
Loans 2018 (% of assets)	53.2	0.8	0.0	19.9	39.5
Growth 2018 (%)	-2.1	3.4	-21.1	0.8	-1.8

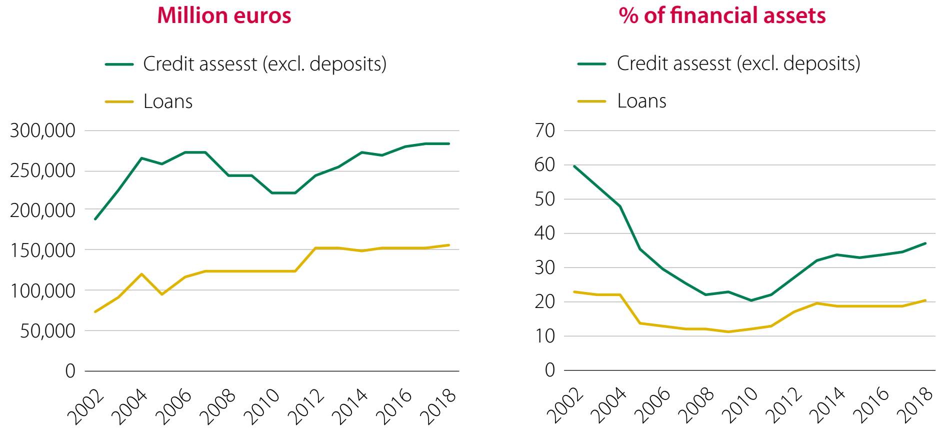
Source: CNMV and Bank of Spain.

1 Excluding deposits.

Between 2002 and 2018, credit assets of OFIs grew, in cumulative terms, by 51.1%, representing an annual average of 2.6%. However, in relative terms, i.e., in relation to the total financial assets of these entities, the percentage decreased from 59.0% to 36.5% (see right-hand panel of figure 4). More importantly, this performance was not sustained throughout the period: up until 2007 there was a gradual increase in the volume of credit assets on the balance sheets of OFIs (reaching 272 billion euros), while thereafter and until 2011, it progressively contracted to stand at 221 billion,[7] to increase again in recent years, reaching 285 billion in 2018 (see left-hand panel of figure 4). Loans (one of the different types of credit assets) increased gradually in these years, although there were some exceptions. More than half of the loans granted have traditionally corresponded to securitisation vehicles.

7 The decrease in credit assets caused by the reduction in outstanding loans and debt was partially offset by the increase in deposits.

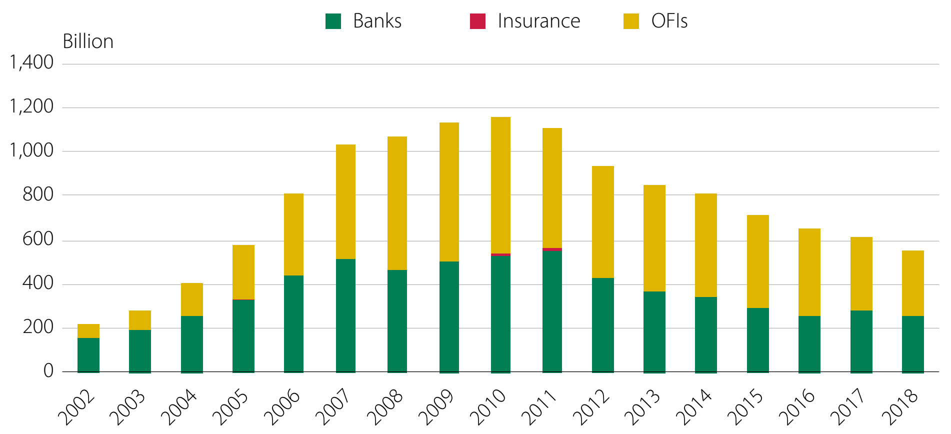
Credit intermediation in OFIs FIGURE 4



Source: CNMV and Bank of Spain.

In relation to the financing received by OFIs, wholesale financing is one of the most important sources of funds. Although these instruments are positive for price formation and liquidity in secondary markets, they can also generate short-term obligations and consequently create risks associated with maturity transformation and liquidity outside the banking system. Likewise, wholesale financing could increase the interconnectedness between different financial institutions and contribute to increasing the procyclicality of the system.

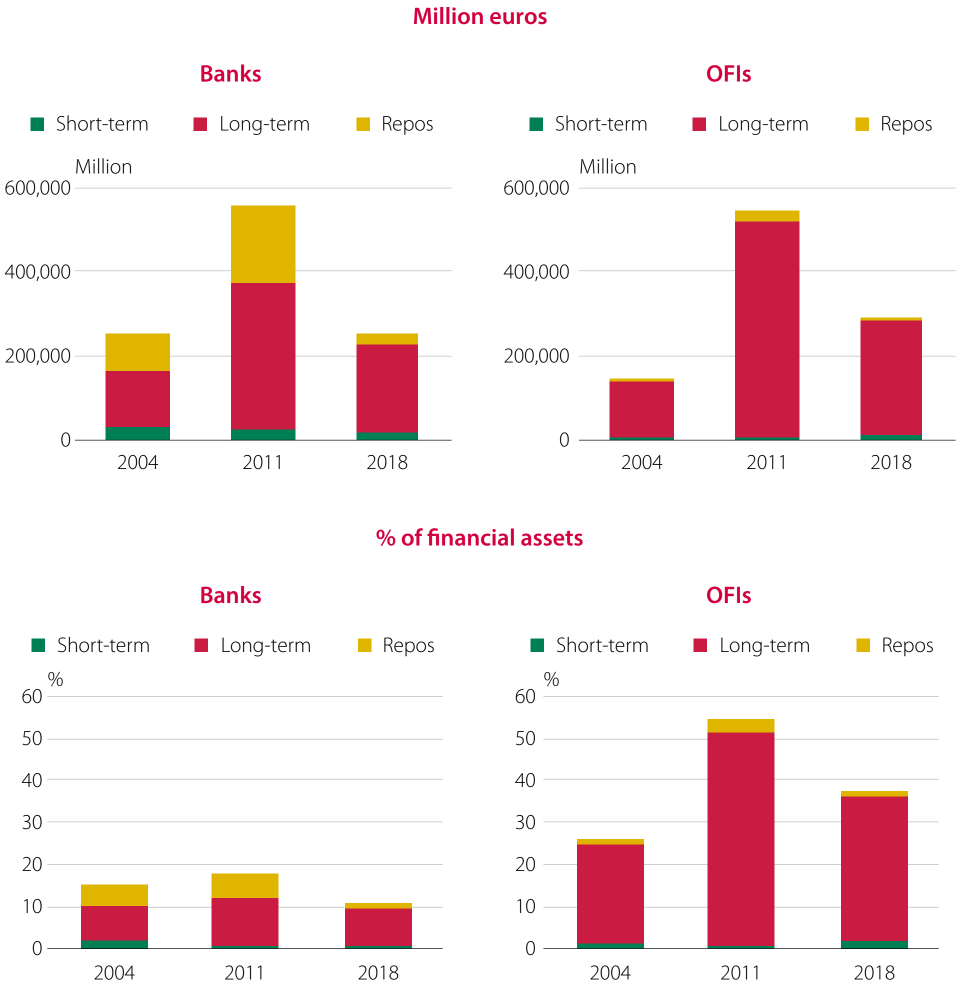
Wholesale financing[1] of financial system entities FIGURE 5



Source: Bank of Spain.
1 Wholesale financing is understood as financing through bond issuances, promissory notes and repos.

Spanish OFIs reached their greatest dependence on wholesale financing in 2009, with 629 billion euros, at which point, this type of financing began to decrease sharply year after year to stand at 294 billion at the end of 2018 (see figure 5 and the right-hand panel of figure 6). Last year the decrease was 12.9%. In this area, long-term financing is the predominant source of funding for OFIs, accounting for more than 90% of the total, and has never fallen below 80%. However, short-term financing, excluding repos (these will be analysed in more detail below), accounted for only 1.9% in 2018, despite an increase of more than 1 percentage point compared to 2017.

Trend in wholesale financing FIGURE 6



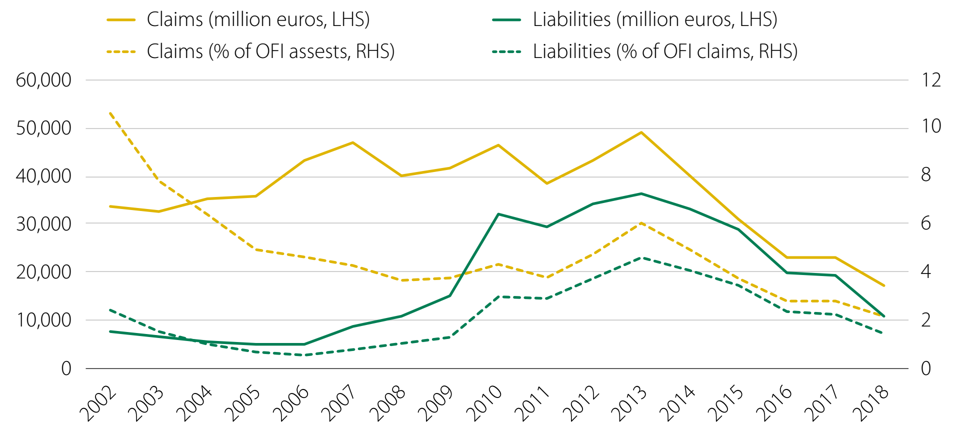
Source: CNMV and Bank of Spain.

If these figures are compared with those for banks, some differences and similarities arise. In the first place, the trend in wholesale financing for both sectors has been very similar over recent years, marking a significant increase up until 2009 or 2010 and a subsequent decrease to levels seen in 2004 or 2005. In relative terms, i.e., as a proportion of the financial assets of each of the sectors, it can be seen that the aforementioned trend is much less evident in the case of banks than for OFIs (see the lower panels of figure 6): between 2002 and 2010 wholesale financing increased from 12.7% to 16.9% for banks and from 13.3% to 56.8% for OFIs, while in 2010-2018 period the reduction was around 6 and 19 percentage points, respectively.

Second, although long-term wholesale financing is the most important source of funding for both banks and OFIs, the preponderance is different between the two sectors, and so too is the trend seen over the years. In 2018, this type of financing represented approximately 80% of total wholesale financing in the case of banks, compared to the aforementioned 90% for OFIs. This difference became much greater, given that although short-term financing for OFIs has always been relatively residual, the volumes (including repos) in banks fell into line with those for long-term financing.

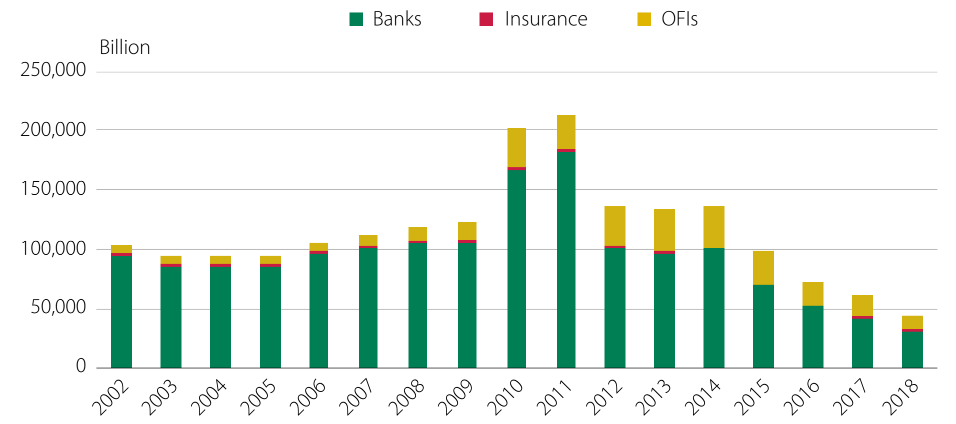
Repos deserve a separate analysis in the area of wholesale financing, as they have shorter repayment terms and, therefore, the associated risks may be higher in terms of financial stability. In the case of Spanish OFIs, financing through repos has fallen, although it has not exceeded 8% of total wholesale financing (see lower right-hand panel of figure 6) at any time. The highest level was reached in 2013, with 36.5 billion euros, which represented 7.7% of the wholesale financing of these entities (4.6% of total financial assets, see figure 7). In the case of banks, this type of financing through repos accounting for over 50% of wholesale financing in 2002 (see lower left-hand panel of figure 6) and remained at around 30% in 2010 and 2011, with liabilities of 180 billion euros. From 2012, this kind of financing began to fall until it stood at 12% last year.

OFI repos FIGURE 7



Source: Bank of Spain.

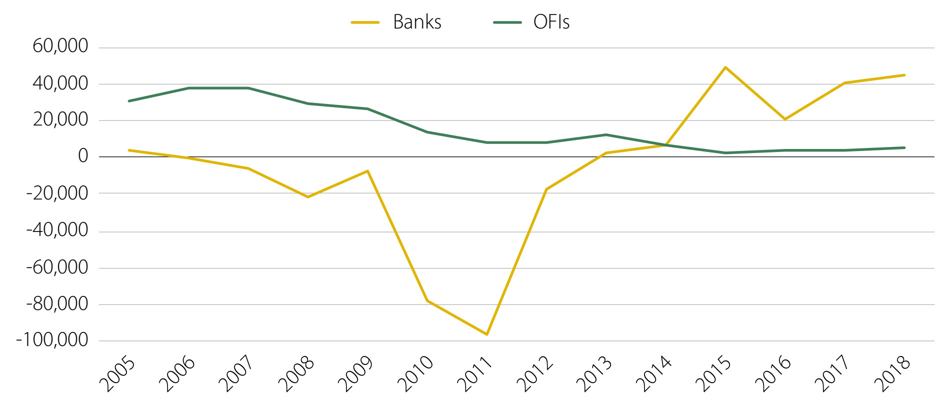
Financial system repos (liabilities) FIGURE 8



Source: Bank of Spain.

In net terms, i.e., taking into account the difference between repo transactions in which the entity is a liquidity provider and those in which the entity receives financing, it can be observed that banks were liquidity recipients until 2013, at which point they became net liquidity providers for the economy (see figure 9). OFIs, on the other hand, have been net liquidity providers for the last 15 years.

Net position – repos FIGURE 9



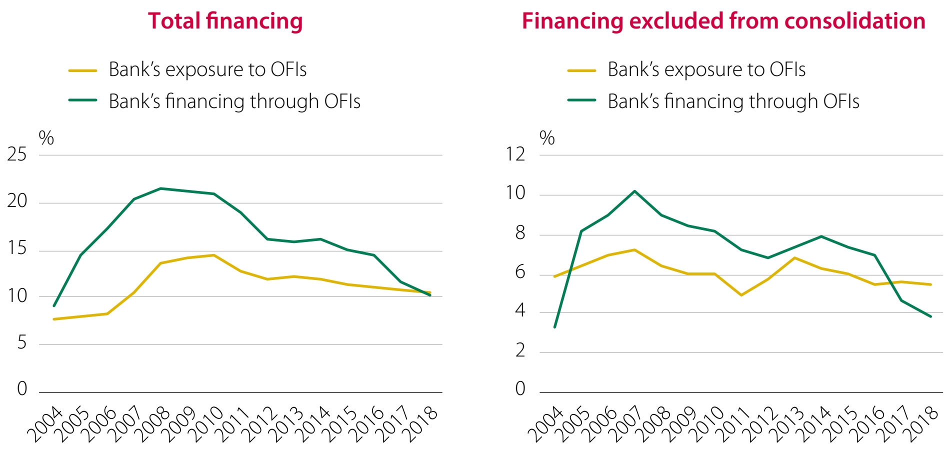
Source: Bank of Spain.

Interconnectedness between financial system entities

During periods of stress or financial difficulties, not only is the size of the different financial subsectors important, but also the interrelations between them, as they are channels that of risk contagion. These connections can occur both directly (through credit financing, for example) and indirectly, as when two entities have common assets or share prices, or debt securities that perform in a similar manner. In order to determine the direct interrelation, data have been obtained on bilateral exposures in the financial sectors. For example, banks' exposure to OFIs is calculated as the assets they hold in OFIs as a portion of their total assets (figure 10).

Therefore, as shown in the left-hand panel of figure 10, in 2018, banks' claims on OFIs (banks' exposure to OFIs) accounted for 10.4% of bank assets,[8] a figure that has been decreasing progressively since 2010, when it was close to 15%. Banks' liabilities to OFIs (bank financing through OFIs) were very similar, specifically 10.3% of banks' assets, after having decreased by 30 basis points in one year and around 3 percentage points since 2008. In relation to OFI assets, liabilities were 31.6%, representing a fall of 140 basis points in one year and about 10 percentage points since 2008.

Interconnectedness between banks and OFIs FIGURE 10



Source: CNMV and Bank of Spain.

8 This same figure accounted for 31.8% of OFI assets.

In absolute terms, in 2018, these figures were around 248 billion euros and 247 billion euros respectively (see table 4). If the claims or liabilities of OFIs that are consolidated in the banking groups themselves are excluded,[9] the aforementioned percentages decrease, in the case of claims, up to 5.5% of banks' assets, while banks' liabilities to OFIs stand at 3.8%. Based on the trend of this exposure in recent years, the greatest interrelation (in net terms) between the two subsectors mentioned occurred in 2007, when banks' claims on OFIs exceeded 7% of total bank assets and their liabilities were 10%. The latter figure was a consequence of the significant increase that occurred between 2002 and 2007, after these liabilities went from just over 33 billion euros to almost 300 billion euros. In the case of claims, although there was also an increase during the same period, this was much less abrupt, going from 19 billion euros to just under 98 billion euros.

Interconnectedness between banks and OFIs TABLE 4

Million euros

	Banks' exposure to OFIs		Banks' liabilities to OFIs	
	Total	Consolidated in banking groups	Total	Consolidated in banking groups
2010	457,816	268,473	660,106	403,366
2011	406,899	250,245	598,897	370,374
2012	362,028	187,775	493,815	283,068
2013	337,648	149,577	436,948	234,354
2014	316,976	149,456	426,657	215,894
2015	282,351	132,153	373,979	189,633
2016	270,198	138,837	354,353	185,805
2017	265,077	128,099	289,733	176,149
2018	248,333	117,349	246,989	156,837

Source: CNMV and Bank of Spain.

The interconnectedness of OFIs with the other sectors in the financial system is much lower than with banks, and the relationship with other entities belonging to the same subsector is the strongest, followed by the relationship with the insurance companies. Therefore, claims of entities belonging to the OFI subsector with others of the same group amounted to around 25 billion euros in 2018, while claims with insurance companies amounted to 14 billion and liabilities to around 20 billion.

9 In Spain, interconnectedness data for banks and OFIs that are consolidated into banking groups are only available for the SFV subsector.

3 Non-bank financial intermediation

To identify and evaluate the risks associated with NBFI, the criteria developed by the FSB in 2013 based on five economic functions were used.[10] The aim was for the competent authorities of the different jurisdictions to categorise non-bank financial institutions not only based on their legal form, but also on the basis of their economic substances, to therefore achieve international consistency when identifying the risks associated with these entities to ensure financial stability. Table 5 shows a summary of the five economic functions described by the FSB and the entities of the Spanish financial system that belong to each one.[11]

Classification of NBFI according to economic functions TABLE 5

Economic functions	Definition	Member entities
EF1	Management of collective investment schemes with features that make them susceptible to runs	Monetary funds, fixed income funds, mixed funds,[1] hedge funds and SICAVs
EF2	Loan provision that is dependent on short-term funding	Financial credit institutions[2]
EF3	Intermediation of market activities that is dependent on short-term funding or on secured funding	Broker-dealers
EF4	Entities that perform the *facilitation* of credit creation	Mutual guarantee companies, crowdfunding platforms (CF)
EF5	Securitisation-based credit intermediation for funding financial entities	SFVs, whose purpose is the securitisation of assets

Source: CNMV and Bank of Spain.

1 According to the criteria established by the FSB, only mixed funds with a percentage of variable income below 80% of the total portfolio are included in the EF1 category. In Spain, according to current legislation, the exposure of mixed funds to equity cannot exceed 75% of the portfolio, so all of them are considered as NBFI.

2 Discussions are currently under way on how to treat vehicles that carry out direct lending (this will be explained in more detail below).

To obtain a figure for the volume of assets included in NBFI, financial entities that do not fulfil any of the economic functions described in table 5 must be identified and withdrawn. Firstly, pension funds, insurance companies and financial auxiliaries must be excluded from the MUNFI[12] (financial system entities that do not perform bank intermediation). This results in the OFIs, which, as already mentioned, have been used on many occasions as a broad measure or approximation of non-bank financial intermediation. Entities that do not meet any of the economic

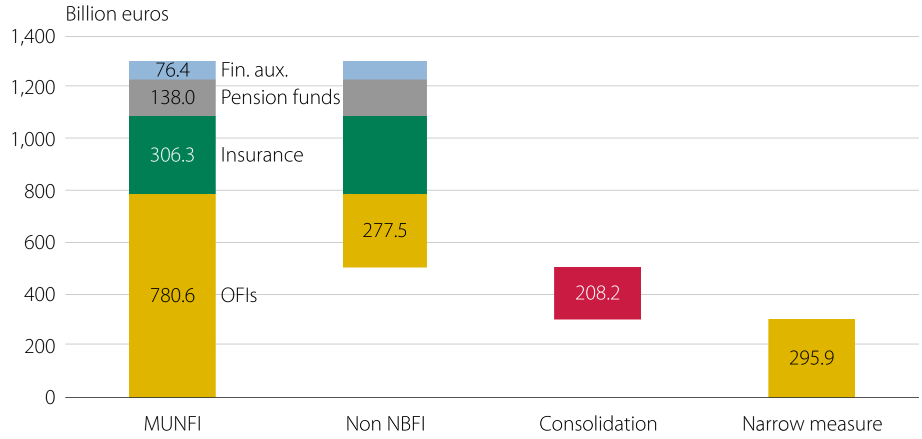
10 *Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities*.

11 For more detail, see Ispierto (2019) (*op. cit.*).

12 Monitoring Universe of Non-bank Financial Intermediation.

functions to reach a more narrow definition of NBFI are then excluded[13] (see figure 11). In addition, some entities that are not OFIs can be included under NBFI, although, in general, they are quite small. This is the case in Spain, where mutual guarantee companies, which are not OFIs but form part of NBFI, since they fulfil one of the economic functions mentioned. Finally, to obtain a figure that is as accurate as possible from the section of the financial system that carries out financial intermediation activities, but does not belong to the banking sector, the entities that are consolidated in banking groups are excluded, even though they belong to one of the described economic functions.[14] A strict definition of non-bank financial intermediation is obtained with this calculation.

From MUNFIs to the narrow measure of NBFI. 2018 FIGURE 11



Source: CNMV and Bank of Spain.

In Spain, the assets of non-bank financial intermediation in the broad sense, i.e., without eliminating those that are consolidated in banking groups, amounted to 504.116 billion euros at the end of 2018, 5.3% less than in 2017 (see table 6), bucking the growth trend that began in 2014. Therefore, NBFI (in the broad sense) represents 11.3% of the national financial system, one tenth of a point less than in 2017, and 64.6% of the OFI subsector, a figure similar to that of the previous year.

Once the fraction that is consolidated in banks has been eliminated, the NBFI figure (in the strict sense) stood at 295.9 billion euros at the end of 2018, representing 6.7% of the national financial system and 37.9% of the OFI subsector. As observed in figure 12, these percentages, as well as that of the broad measure, are slightly lower than those seen in 2017 and far from the highs reached between 2002 and 2004, when NBFI represented approximately 12% of the Spanish financial system. As explained below in greater detail, the causes of the decline in 2018 were securitisation vehicles, which had already been contracting for some years, and investment funds. The fall in investment funds was partly a consequence of the fall in value of

13 OFIs that are not part of NBFI are, in order of importance, captive financial institutions and money lenders, equity investment funds, funds and REITs, the SAREB, CCPs and venture capital firms.

14 As described in each section of this chapter, bank consolidation occurs for two main reasons: either the entity in question is controlled by a bank or the assets belonging to the entity are on the bank's balance sheet (and therefore subject to banking regulations). The latter case would relate to securitisation vehicles, whose assets must remain on the bank's balance sheet if their associated risks and returns have not been substantially transferred to third parties.

the assets making up their portfolios that occurred during the markets turmoil seen at the end of 2018. This interrupted the growth registered since 2013.

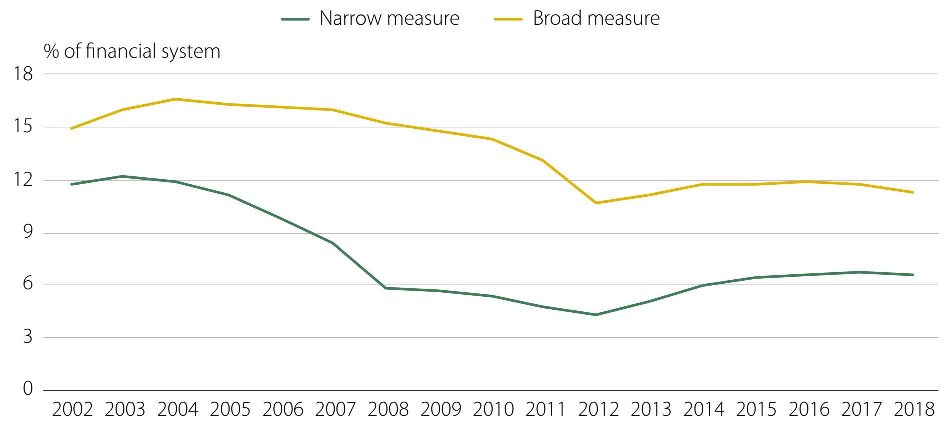
Structure of non-bank financial intermediation TABLE 6

Million euros

	EF1	EF2	EF3	EF4	EF5	NBFI (broad)	NBFI (narrow)
Size in 2018 (million)	253,074	60,873	4,563	1,029	184,576	504,116	295,900
Size in 2017 (million)	263,118	57,520	3,695	1,028	206,816	532,177	306,831
% of total (2018)	50.2	12.1	0.9	0.2	36.6	100	-
Growth 2018 (%)	-3.8	5.8	23.5	0.1	-10.8	-5.3	-3.6
Cumulative growth 2002-2007	48.7	79.1	78.4	115.6	647.0	151.9	66.3
Cumulative growth 2007-2017	-8.7	-11.9	-82.0	43.7	-41.7	-27.0	-19.1

Source: CNMV and Bank of Spain.

Relative weight of non-bank financial intermediation FIGURE 12

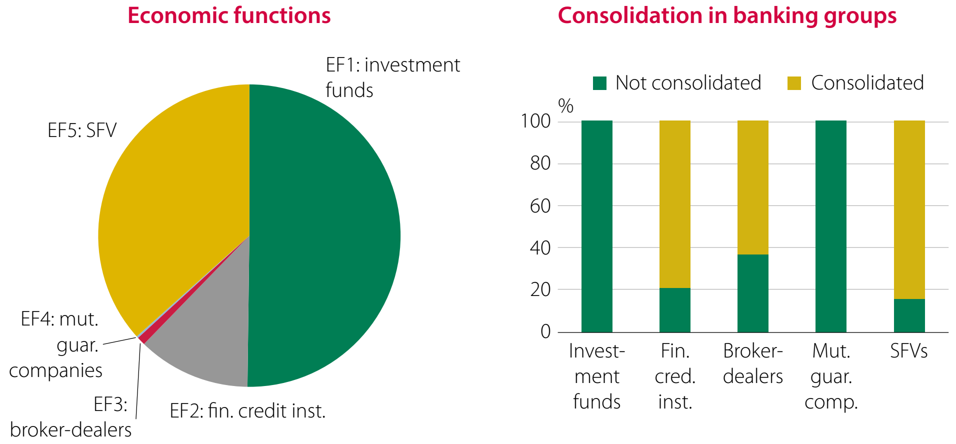


Source: CNMV and Bank of Spain.

The growth of NBFI up until 2007 was high and sustained, as reflected by the fact that between 2002 and 2007 accumulated growth was 66.3%, in the strict sense, and 151.9%, in the broad sense (see table 6). From 2007 onwards, with the onset of the crisis, the assets managed by entities belonging to NBFI began to decrease, especially in 2008, only to recover steadily (at least compared to the growth seen in the first years analysed) from 2013 onwards. It is worth mentioning that despite the growth in assets of this type of intermediation in the years prior to the crisis, in relative terms, as a fraction of both the financial system as a whole and the OFI subsector, these activities substantially lost weight. It follows that the increase in NBFI was lower than that registered by the financial system as a whole, especially by banks.

According to the different types of entities that make up NBFI (which will be developed in detail in the following subsections), those belonging to economic functions 1 (EF1, certain types of investment funds) and 5 (EF5, securitisation vehicles) represent a higher percentage of the total, at 50.2% and 36.6%, respectively (see left-hand panel of figure 13). For EF1, despite having reduced its size in absolute terms, its relative importance in 2018 increased by eight tenths of a point, while the weight of EF5, with a fall in total financial assets, dropped 2.3%. During the core years of the crisis, when the collective investment industry contracted substantially, the weight of EF1 fell below 30% of total NBFI, whereas the relative significance of EF5 came to exceed 60% (see figure 14). Financial credit institutions, which make up economic function 2 (EF2), follow these two subsectors, accounting for 12.1% of the total, with those corresponding to economic functions 3 and 4 (broker-dealers and mutual guarantee companies) trailing behind.

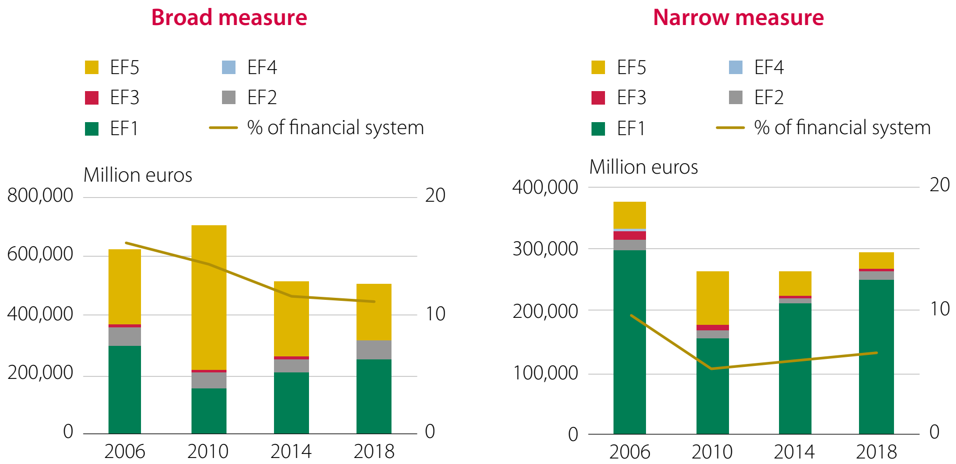
Distribution of non-bank financial intermediation. 2018 FIGURE 13



Source: CNMV and Bank of Spain.

If the entities that are consolidated in banks are excluded, these values change significantly. Investment funds, which are not consolidated, gain weight, accounting for 85.5% of total NBFI. Further, the weight of securitisation vehicles and credit financial institutions, with a very high portion of the total of the sector that is consolidated in banks (see right-hand panel of figure 13), drops to 9.4% and 4.2% of NBFI, respectively.

Trends of non-bank financial intermediation FIGURE 14



Source: CNMV and Bank of Spain.

Risk assessment of non-bank financial intermediation

The ultimate objective of the definition and delimitation of entities that make up NBFI is the identification and monitoring of the potential risks that these may pose to financial stability. This section sets out an initial approximation to the assessment of these risks. A specific analysis is carried out of credit risk, maturity transformation, liquidity risk and leverage in the area of investment funds,[15] financial credit institutions, broker-dealers and SFVs.[16]

Table 7 shows the intensity of the risks analysed according to established thresholds that have taken into account the debate existing in international forums about these issues adapted for the characteristics of each type of entity.[17] They have been established using purely qualitative criteria that can be reviewed in the future, if deemed necessary. The absence of colour indicates low risk, while purple colours indicate a moderate, medium or high risk depending on the intensity of the colour (light, medium or dark).

As shown in table 7, the major risks affecting NBFI are currently related to credit risk and liquidity risk. Most entities have a medium or high level of credit risk,[18] and liquidity transformation risk is also the same for all entities except broker-dealers, for which it is practically null.

Risks associated with non-bank financial intermediation. 2018 TABLE 7

	Investment funds			Financial credit institutions	Broker-dealers	SFVs: securitisation
	Monetary	Fixed income	Mixed			
Credit risk	●	●	●	●	●	●
Maturity transformation	○	●	○	○	○	●
Liquidity risk	●	●	●	●	○	●
Leverage	○	○	○	●	●	●
Interconnectedness with the banking system	○	○	○	○	○	●
Relative importance[1, 2] (%)	1.4	12.9	29.9	12.1	0.9	36.6

Source: CNMV.

1 The weights of each of the entities presented in this table do not add up to 100%, since mutual guarantee companies and some types of funds that also belong to NBFI are not represented.

2 These percentages are calculated according to the total size of the sector, without discounting the entities that are consolidated in banking groups.

3.1 Economic function 1

As seen in table 5, economic function 1 (EF1) is defined as the management of collective investment schemes with features that make them susceptible to runs. Taking these considerations into account, due to the differing criteria of the existing investment vehicles in our country it is considered that these belong to this economic

15 The risks associated with monetary funds, fixed income funds and mixed funds are analysed separately.

16 Mutual guarantee companies are not included in the analysis, since their weight in the sector is less than 0.5%.

17 See Ispierto (2019) (*op. cit.*) for further details on the thresholds defined for each risk and type of entity.

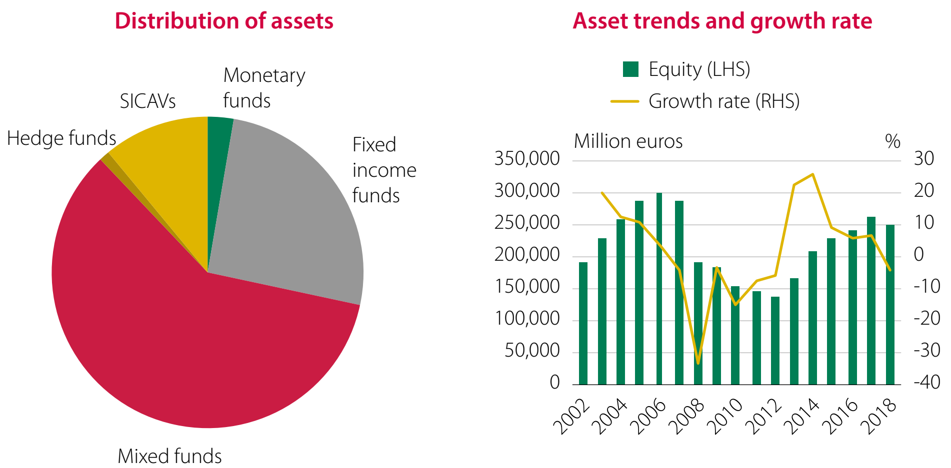
18 This risk has been calculated as the ratio between credit assets and total financial assets. Credit assets are made up of cash, deposits and fixed income securities, both domestic and foreign.

function and, consequently, monetary funds, fixed income funds, mixed funds,[19] hedge funds[20] and SICAVs form part of NBFI.

As described previously, investment funds belonging to EF1 represented 85.5% of the total of NBFI in Spain at the end of 2018. This percentage has been increasing over recent years (in 2010 it was 60%) because of the growth experienced by this industry. As can be seen in the right-hand panel of figure 15, the equity of these funds fell sharply during the period 2008-2012, to recover strongly from 2013 onwards, experiencing annual growth rates of above 10% since then. In the last year, however, it has fallen by 3.8% to 253 billion euros.

As can be seen in the left-hand panel of figure 15, mixed funds represented almost 60% of the total CISs included in NBFI at the end of 2018; nearly two thirds of these correspond to mixed fixed income funds. Fixed income funds, however, which have the second highest weight and accounted for approximately 25% of the total, unlike the mixed funds, have seen a fall in assets, both in absolute and relative terms, from the highs of close to 50% in 2011. SICAV assets represented 11% of the total, a percentage that was slightly lower than in previous years. Lastly, at the end of 2018, monetary funds and hedge funds accounted for 2.7%, a percentage that has been decreasing progressively, and 1%, respectively.[21]

Distribution of investment funds belonging to NBFI FIGURE 15



Source: CNMV.

19 See footnote 1 to table 5.

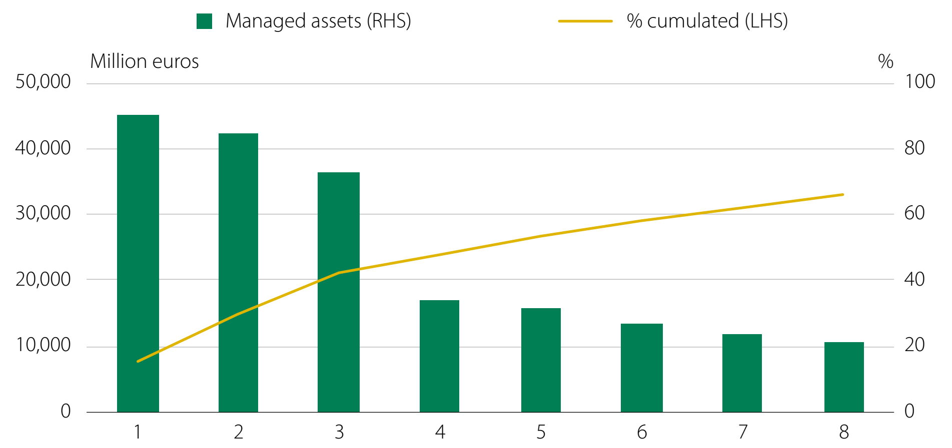
20 These institutions may be subject to runs in their liquidity windows, if they have any. The four types of hedge funds that exist in Spain are included under this name: Hedge funds (funds and companies) and funds of hedge funds (funds and companies).

21 During the first quarter of 2019, a new CNMV circular entered into force amending Circular 1/2009 of 4 February, on the categories of collective investment schemes based on their investment criteria, partially amended by Circular 3/2011 of June 9. This new circular was required to comply with Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017, on money market funds, which establishes common standards in the European Union in relation to the maturity, composition and liquidity of the portfolio of monetary funds to avoid disparities in levels of investor protection. In the case of Spain, because of the new legislation, investment fund managers with the monetary criteria should establish whether they can remain as such or, given that the new conditions are more restrictive, they should align their criteria with that of short-term fixed income (newly created). At the end of the second quarter of 2019, two funds remained as monetary funds, while the rest had changed their criteria.

The Spanish investment fund sector has mostly been traditionally managed by collective investment scheme management companies (UCITS) belonging to banking groups, which has caused the concentration in the sector to be high. At the end of 2018, the three largest UCITS – all belonging to banks – accounted for around 40% of the total assets of investment funds and the seven largest, 60% (see figure 16).

Non-bank financial intermediation

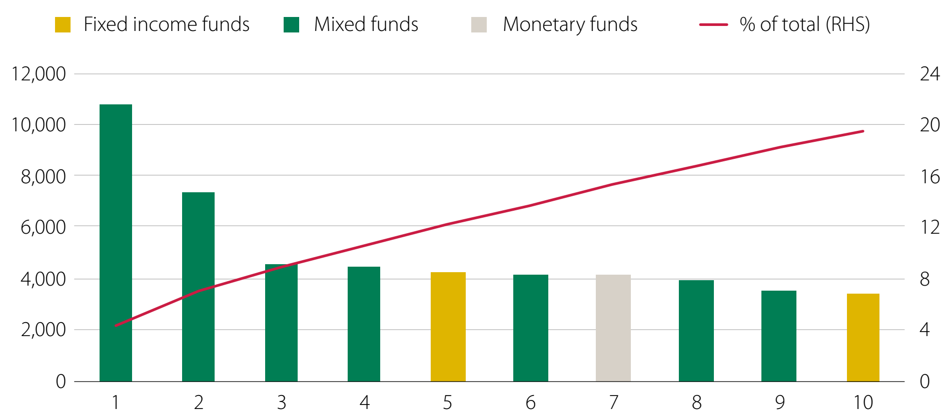
Managed assets of the eight largest UCITSs FIGURE 16



Source: CNMV and Bank of Spain.

In Spain, at the end of 2018 there were a total of 4,133 active investment vehicles belonging to EF1, 1,374 of which corresponded to investment funds, 2,704 to SICAVs and 55 to hedge funds. In terms of size (managed assets), investment funds, in general terms, managed a greater volume of assets: there were 41 funds that managed assets of more than one billion euros, whereas only 1 SICAV and no hedge fund exceeded this figure. Taking into account only investment funds, it can be seen that the 4 largest vehicles accounted for just over 10% of total assets (see figure 17), 3 of which were global funds and 1 was a mixed fixed income fund (all of them included in the category of mixed funds). Additionally, the 10 largest funds accounted for around 20% of the total, among which there were 7 mixed funds, 2 fixed income funds and 1 monetary fund.

Managed assets of the ten largest investment funds FIGURE 17

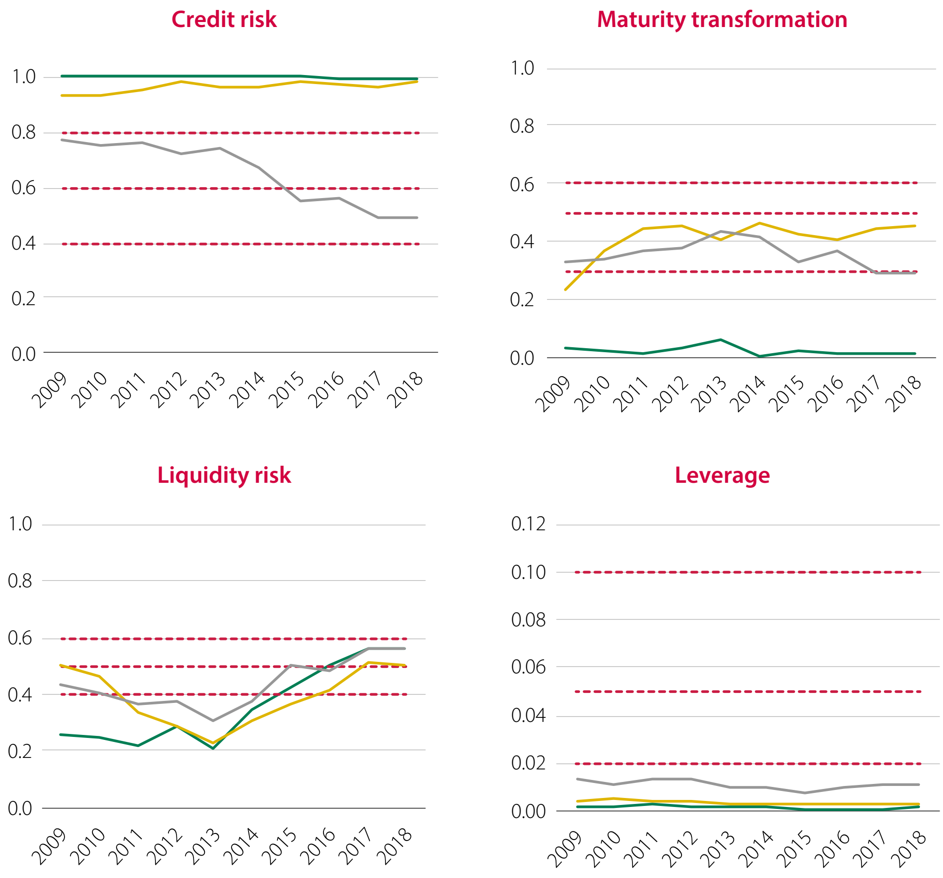


Source: CNMV.

The analysis of the risks associated with Spanish investment funds is facilitated by the level of reporting imposed by Spanish regulations, which is especially demanding.

In addition to the Europe-wide duty of disclosure, as detailed in three informative blocks[22] (UCITS Directive, AIFM Directive and ECB Regulations), there are the requirements of Spanish regulations, which are set out in CNMV Circular 3/2008 of 11 September, on accounting rules, financial statements and confidential information statements of CISs and CNMV Circular 1/2006 of 3 May on hedge funds. In relation to the confidential information established in Circular 3/2008 (which applies to all CISs except hedge funds), the availability of daily information on the assets of the CISs and on the volume of subscriptions and redemptions made by the unit holders should be highlighted, in addition to monthly information on their investment portfolios, including investments in derivative financial instruments.

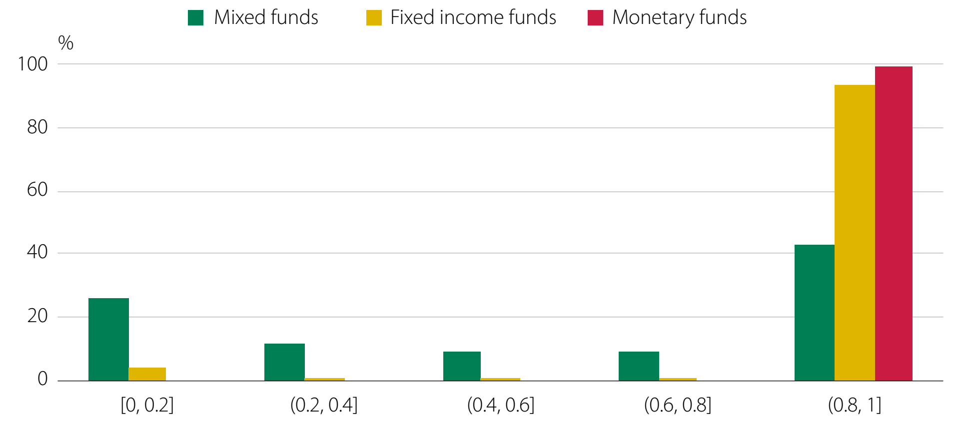
Risk trends in investment funds FIGURE 18



Source: CNMV.

22 These three blocks are: i) the UCITS Directive (2009/65 / EC) and its implementing regulations, applicable to harmonised CISs or UCITS; ii) the AIFM Directive (2011/61/EC) and its implementing regulation, applicable to alternative investment funds; and, lastly, iii) the regulation of the European Central Bank (Regulation No. 1073/2013) concerning the reporting of statistics on the assets and liabilities of investment funds, both UCITS and AIF, to the European Central Bank.

Distribution of credit risk in the different types of investment funds FIGURE 19



Source: CNMV.

According to individual data, it can be observed in figure 19 that all Spanish monetary funds that existed at the end of 2018 had a percentage of credit assets greater than 80%, whereas in fixed income funds this threshold was exceeded in more 90% of cases.[23] In mixed funds, there was a certain degree of polarisation, since more than 40% were at a high risk level, whereas 38% were at a low level (less than 40%).

In relation to the maturity transformation risk, i.e., the entity's capacity to meet its short-term obligations, in the case of investment funds, the ratio between long-term assets and assets managed by the fund has been used, rather than the relationship between the short-term liabilities and assets, as in other entities. The reason for this difference is that in investment funds the unit holders can redeem their equity stakes with a high frequency, therefore, the short-term liability would not represent all the possible *obligations* of the fund.

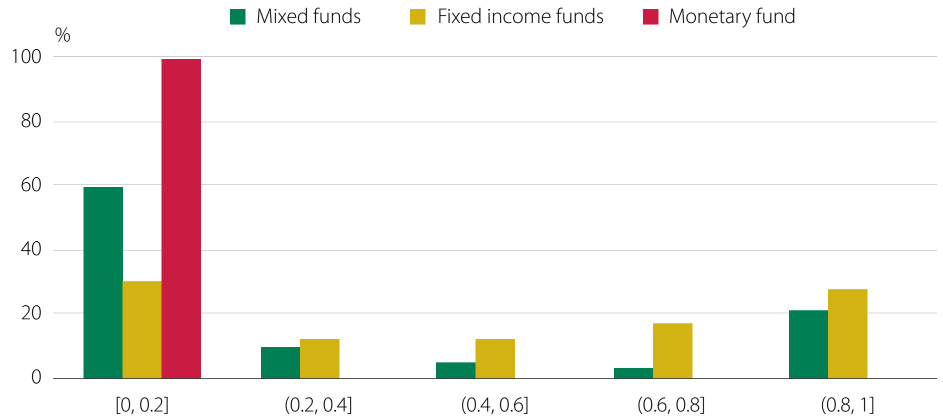
Using the aforementioned ratio, only fixed income funds have a moderate level of risk (see upper right-hand panel of figure 18), with a proportion of long-term assets of 46%. The risk is low in the other criteria, although in the case of mixed funds this risk was above 30% to 2016 (moderate level), to fall in 2017 and 2018 to 29%. In monetary funds, with significant long-term investment restrictions,[24] maturity transformation risk is practically nil.

Based on the individual distribution of the ratio between funds, as shown in figure 20, the percentage of long-term assets at the end of 2018 was below 20% in all monetary funds. Regarding fixed and mixed income funds, although in global terms there seems to be no high risk of maturity transformation (45% and 25%, respectively), they are at high levels, i.e., holding a percentage of long-term assets greater than 60%.

23 It should be noted that 6% of fixed income funds have a proportion of credit assets of less than 40% due to the fact that they invest almost all of their assets in other CISs. Although in most cases these CISs are other fixed income funds, this is considered an investment in equities.

24 In monetary funds, the average duration of the portfolio must be less than or equal to 60 days and the average maturity cannot exceed 120 days.

Distribution of maturity transformation risk among the different types of investment funds FIGURE 20



Source: CNMV.

The analysis of liquidity risk is complex, to the extent that there is no single and unequivocal definition of liquid assets. In general, the liquidity of an asset is related to the possibility of it being bought or sold in a short period of time without incurring high losses. Therefore, this depends both on the nature of the asset and the situation of the financial markets, as well as the present uncertainty. The assets that are usually considered more liquid due to their nature are cash and deposits, followed by repos and generally, public debt instruments. This is followed by equities and, finally, private fixed income assets. However, these may all experience a decrease in liquidity during times of stress, just as they may not present problems in normal situations.

Taking these considerations into account, this report presents a liquidity risk analysis based primarily on asset categories, although information is also provided on the degree of liquidity of private fixed income assets, which takes into account other considerations such as maturity or price availability. In this way, liquidity risk has been calculated as the total assets less liquid assets (total financial assets – liquid assets) in relation to total financial assets, including deposits, public debt, guaranteed issuances, repos and 50% of the value of the equity portfolio as liquid assets. This risk is shown at an average level for the three criteria analysed (proportion of assets less liquid assets between 50% and 60%),[25] where in all cases they have increased continuously since 2013 (see lower left-hand panel of figure 18). Accordingly, in that year the values were between 20% for monetary funds and 34% for mixed funds, while in 2018 this figure was between 51% and 60% in the three categories.[26]

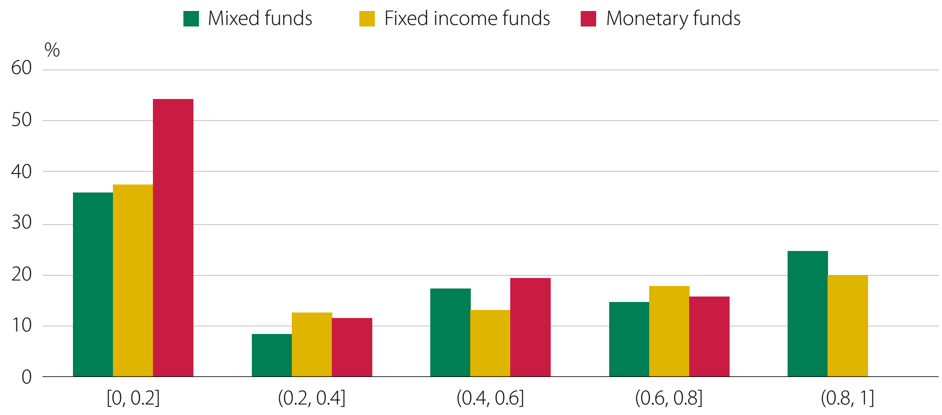
In a more detailed analysis of the assets that make up the private fixed income portfolio, which in the aforementioned year were considered non-liquid, the maturity (they are considered liquid if they have a duration of less than 1 year) and the availability of firm quotes offered by different contributors is considered. This report reveals that in 2009 the non-liquid assets of investment funds accounted for 30% of

25 The liquidity risk thresholds of investment funds are lower than those of other entities as a result of their particular characteristics. Specifically, the possibility of runs by unit holders creates an additional need for liquidity, which in this case was considered at 20%.

26 If liquidity risk is analysed individually based on these premises, it can be observed that at the end of last year the proportion of funds with high risk (non-liquid assets above 60%) was 15.4% for monetary funds, 37.5% for fixed income and 38.9% for mixed funds.

the fixed income portfolio, while at present and over the past few years, this figure has stood at around 7%.

Distribution of liquidity risk in the different types of investment funds FIGURE 21



Source: CNMV.

Lastly, in relation to the leverage of CISs, Spanish legislation establishes that transferable CISs (with the exception of hedge funds) can only be temporarily indebted and for a specific reason[27] and debt can never exceed 10% of their assets. In Spain, no category exceeded 2% in 2018 and had not exceeded this level since 2009.[28] Additionally, at an individual level, no fund exceeded 10% at the end of last year.

There is a second way in which CISs can raise leverage: through the use of derivatives. According to the legislation governing UCITS, the maximum leverage assumed through transactions with derivative financial instruments cannot exceed 100% of the assets.[29] The information available on the use of derivatives by Spanish CISs does not suggest the existence of relevant vulnerabilities in any of the possible risks that this operation may generate (counterparty, market[30] or contagion).

3.2 Economic function 2

Economic function 2, defined as the granting of loans dependent on short-term financing, can comprise a wide variety of entities and, depending on the jurisdiction, with very different legal frameworks. In the case of Spain, this includes financial

27 Royal Decree 1082/2012 of 13 July approving the implementing regulations of Law 35/2003 of 4 November on Collective Investment Schemes.

28 To calculate the leverage of investment funds the ratio between the liabilities of these vehicles and their assets has been estimated.

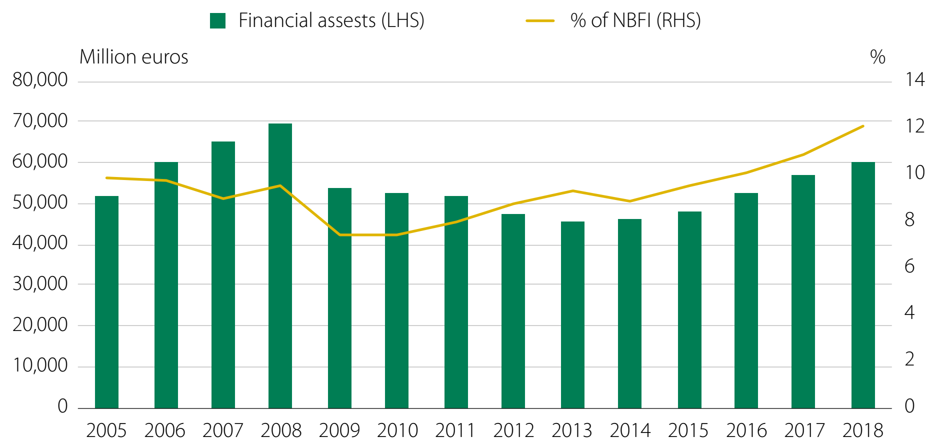
29 It imposes additional requirements on transactions with derivatives not traded on organised markets: it also limits the risk assumed with a single counterparty to 10% of its assets.

30 In the case of market risk, the information received for all UCITS and quasi-UCITS that follow the commitment approach (used by institutions that represent 98.8% of the sector's assets) reveals that the average level of exposure to market risk accounted for 26% of the assets of the CISs, well below the maximum allowed by the regulations (100%).

credit institutions. However, it is being discussed in international forums whether the activity known as direct lending[31] should be included within the scope of NBFI.

In Spain, and as already mentioned, the financial assets of financial credit institutions represent 12.1% of the total NBFI (in its broad sense), with just over 60.5 billion euros at the end of 2018, having reached 70 billion in 2008 (see figure 22). If the amount consolidated in banking groups, which is around 80%, is discounted, the financial assets of these entities fall to 12 billion euros, representing 4.2% of NBFI in its strict sense. It is important to take this into account when analysing the risks of these entities, given that in principle, regardless of their level, the effects in terms of financial stability would not be significant.

Trends in the assets of financial credit institutions FIGURE 22

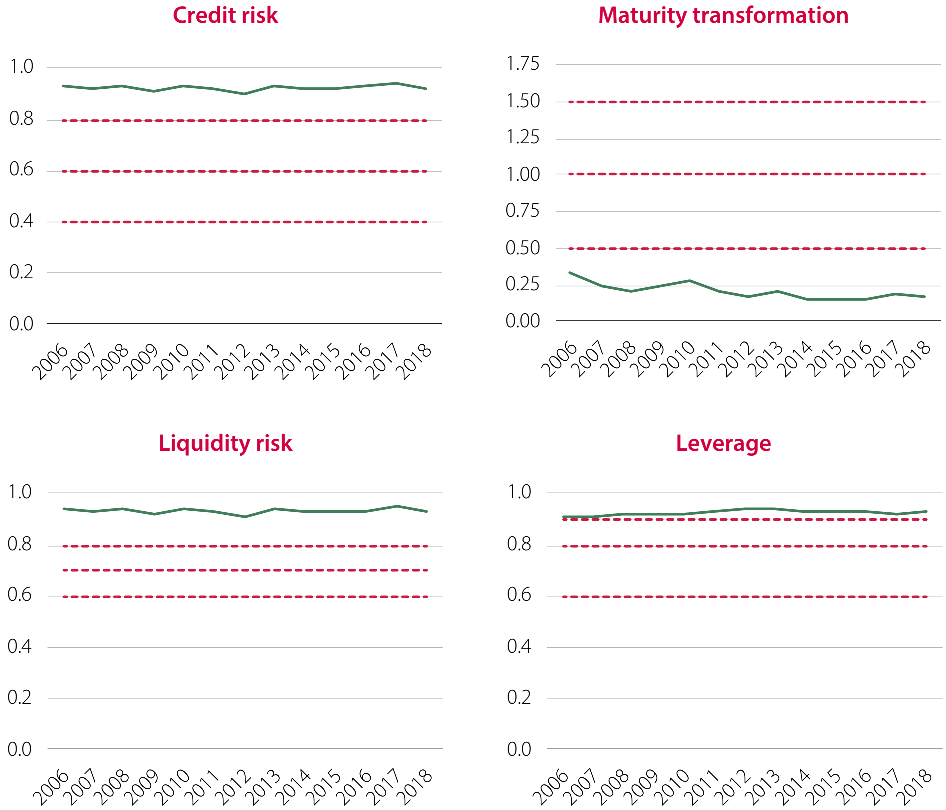


Source: CNMV.

As seen in figure 23, the ratios that determine each of the risks show very little variation over time. Subsequently, credit and liquidity risks and leverage remained high between 2006 and 2018, with indicators around the 90% mark. The indicator related to maturity transformation risk was at substantially low values, almost always below 25%.

31 Direct lending is carried out by entities known as *debt funds*, which provide loans or credits to companies, usually SMEs. In Spain, this activity can be carried out by closed-ended collective investment firms, which are included in Law 22/2014 of 12 November regulating venture capital firms, other closed-ended collective investment schemes and management companies of closed-ended firms. This new legislation opened the door to the field of alternative financing, to other types of vehicles than venture capital firms, the investment policy of which is based on direct participation in the capital of the companies in which they invest. At the end of 2018 there were a total of 31 registered entities, with an aggregate equity of close to 370 million euros.

Trends in the risks of financial credit institutions FIGURE 23



Source: CNMV.

Despite the high values recorded by the indicators, some considerations have to be taken into account. The credit risk assessment is high for these entities due to the nature of their activity, since more than 90% of the financial assets correspond to loans granted. The high liquidity risk and leverage have their origin in the low level of liquid assets and own funds of these entities.

3.3 Economic function 3

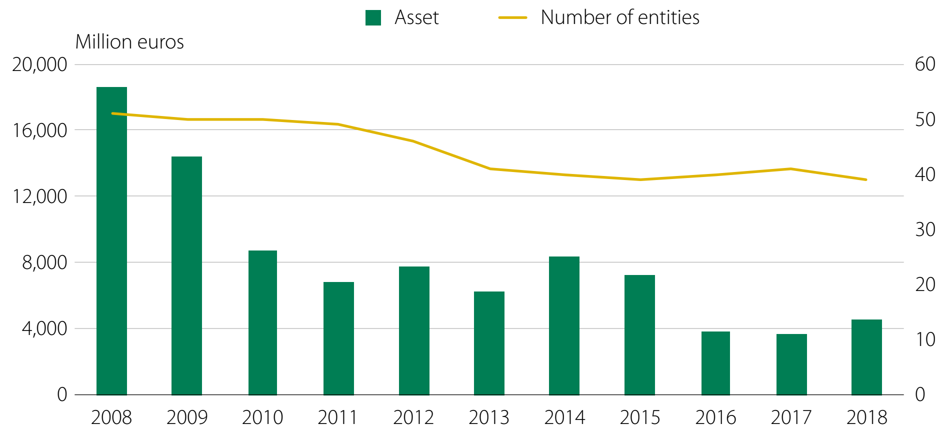
EF3 is defined as the intermediation in market activities dependent on short-term financing or guaranteed financing. In Spain, broker-dealers belong to this category.

At the end of 2018, there were a total of 39 broker-dealers registered with the CNMV, which had total assets worth 4.586 billion euros. This represents a significant increase of 23.3% compared to 2017, especially taking into account the contraction that has been occurring since 2014 (see figure 24). The size of this sector is relatively small compared to that of other jurisdictions, since in Spain investment services are provided mostly by credit institutions. Subsequently, approximately 85% of the fees received for these services correspond to the latter, whereas broker-dealers receive around 10%[32] (the remaining 5% corresponds to securities agencies).

32 It is worth mentioning that these figures correspond to a classification of entities carried out from a legal point of view, taking into account the legal form of each of them. However, there are some entities that have the legal form of a bank, but whose business model is based on the provision of investment services. It is estimated that the amount of income received by these entities related to the provision of investment services in Spain, discounting the volume of fees and commissions that these kick

As mentioned previously, broker-dealers have a very low relative weight within NBFI (0.9%), so the risk of contagion for the rest of the financial system is very limited. Even so, after analysing the risks associated with these companies regardless of their size, it can be observed that at the end of the year the credit risk assessment was high (above 80%), the level of leverage was moderate and liquidity and maturity transformation risk were at a low level.

Assets of broker-dealers and number of entities FIGURE 24

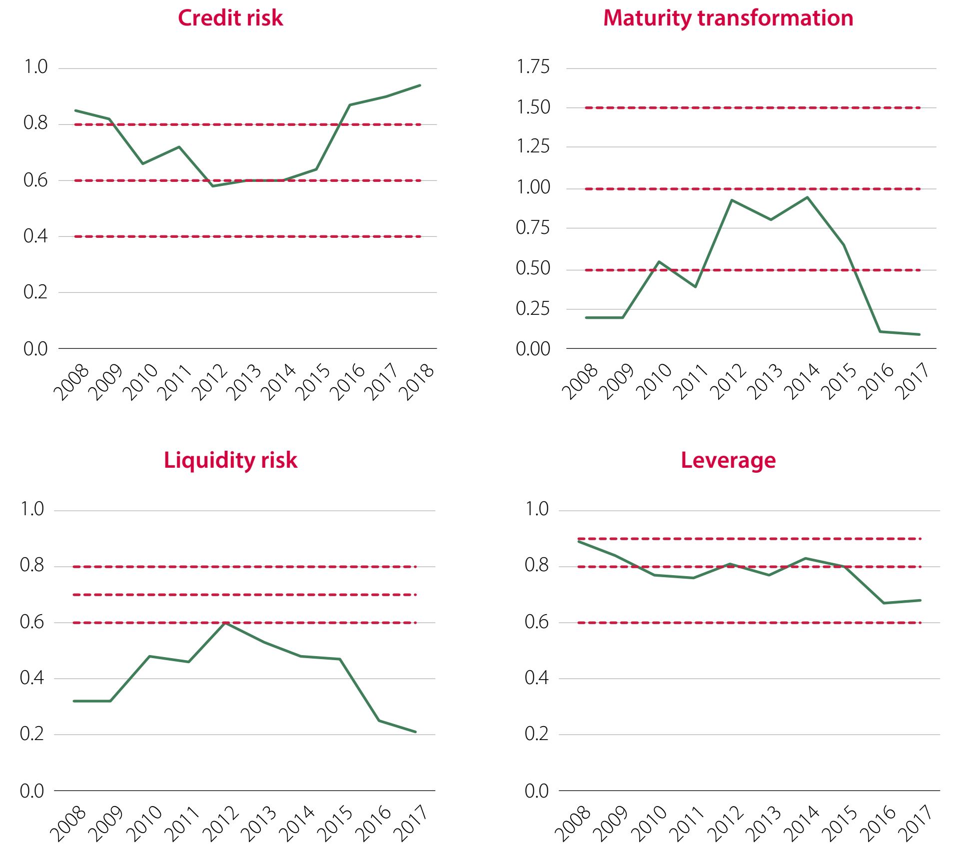


Source: CNMV.

The trend in these risks over time, as seen in figure 25, has been uneven: while the credit risk indicator has gradually increased since 2012, when it was at a moderate level, and the liquidity risk and leverage indicators have been declining, especially the first. The figure corresponding to the ratio between liabilities and short-term assets (maturity transformation) has changed a great deal since 2008, although it must be taken into account that this is mostly due to the small values of both the numerator and the denominator of this ratio.

back to third parties, was somewhat less than 400 million euros in 2018. From a broader perspective, it is estimated that approximately 70% of the business related to the provision of investment services in Spain (including CIS management), assessed through fee and commission income, corresponds to traditional commercial banks or to entities that belong to their groups, while the rest would correspond to financial entities specialised in the provision of investment services and without corporate ties with commercial banks.

Risk trends for broker-dealers FIGURE 25



Source: CNMV.

3.4 Economic function 4

This category includes the entities that carry out a *facilitation* activity for credit creation. In Spain, this class includes the mutual guarantee companies. These companies, which were created in 1978, are defined as financial entities whose main purpose is to facilitate access to credit for SMEs and improve, in general terms, their financing conditions through the provision of guarantees to banks, public administrations or to customers and suppliers. In the same way as with direct lending, the treatment by NBFI of other institutions is being discussed, such as crowdfunding platforms (CP) and, in particular, its possible inclusion in EF4, as these are vehicles that facilitate the contact between the investor and the entity that requires financing. At present, these entities have not been included, taking into account that the data collected by the CNMV is still at a very early phase.[33]

In Spain, mutual guarantee companies account for a very small fraction of NBFI, since their financial assets represent only 0.2% of the total (data from the end of 2017). Consequently, should these entities experience difficulties, it is very unlikely that the risks would spread to the rest of the financial system.

Given that the size of this sector is below the 0.5% threshold, it is considered that it does not present any risks to financial stability; therefore, no analysis of the

33 The most recent estimated information for these platforms represents an insignificant amount (about 60 million euros).

measurement of potential risks has not been carried out, as for the other entities belonging to NBFI.

3.5 Economic function 5

EF5 is defined as securitisation-based credit intermediation for funding financial entities. Special financial vehicles (SFV) belong to this category, whose purpose is the securitisation of assets.

The provision of resources to banks or other financial institutions, whether or not there is a real transfer of assets or risks, may be an integral part of the credit intermediation chains, so the risks associated with NBFI must be taken into account, especially when considering maturity transformation. It is also important to mention that in general terms, securitisation issuances in Spain are structured so that payments are made with the pools of assets that are redeemed, so this problem is not relevant. It can also be considered that in Spain securitisation has been more of a tool for financing than transferring risk, unlike in other jurisdictions, where it was revealed as one of the most significant problems in the last financial crisis due to the reduction or quasi elimination of incentives for risk assessment by the entities granting the original loans.

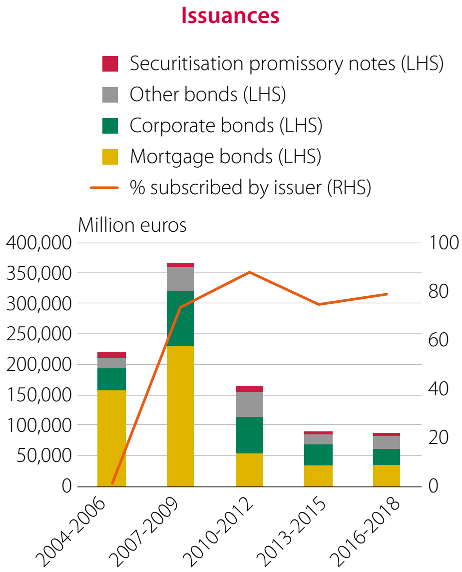
As already mentioned at the beginning of this section, securitisation in Spain represents an important fraction of NBFI, and is the second sector in terms of importance. Thus, the financial assets of SFVs amounted to 185 billion euros at the end of 2018 and accounted for 36.6% of NBFI (broad sense), although in 2010 they reached 489 billion euros. In 2018 alone, they fell by 10.8%. In the same way as for financial credit institutions (FCIs) and as already mentioned at the beginning of this section, a very high percentage of securitisation vehicles are consolidated in banking groups,[34] therefore, although they have a large weight within NBFI in a broad sense, once the assets included in the balance sheets of banking entities are deducted, the figure falls to 13.5%.

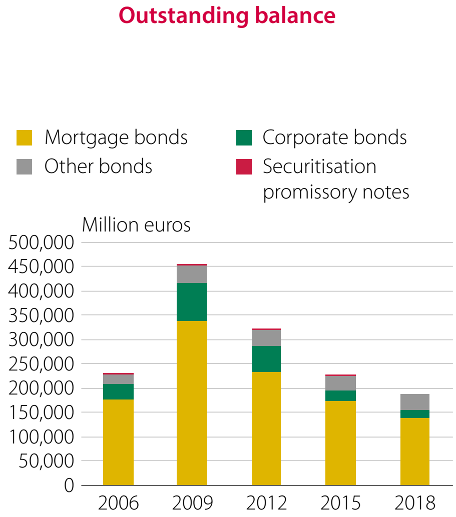
As the left-hand panel of figure 26 reflects, securitisation bond issuances declined substantially between 2009 and 2011, which was the most unfavourable moment for the securitisation market as it was virtually paralysed across the globe. The decrease in issuances was not as abrupt as expected because the financial institutions decided to issue securitisations and subscribe to them themselves in order to use these assets as collateral in financing operations with the Eurosystem (the percentage of the issuances subscribed by the issuer came close to100% between 2008 and 2010). Even so, this decrease caused the outstanding balance of securitisations to decrease progressively from 2009 onwards (see right-hand panel of figure 26). Since 2011, the percentage of issuances subscribed by issuers has fallen but remains at high levels, at close to 80%.[35]

34 The reason why this happens in Spain is that the transferor entity in most situations retains control, in accordance with Bank of Spain Circular 4/2017 and IFRS 10 (Consolidated Financial Statements) as it continues to be exposed to the variable returns of the funds and the securitised assets, either through credit enhancements, or through a swap in which it collects the returns of the securitised portfolio and pays the bond coupons. In these cases, according to the existing accounting standards, the vehicle must remain on the balance sheet of the issuing banks and therefore falls within the scope of *traditional* banking regulations.

35 In January 2011, the amendment of the Capital Requirements Directive, known as CRD II, entered into force. Its article 122, letter a), paragraph 1, includes the obligation of the originator to retain a minimum of 5% of the nominal value of the securitisations.

Trends of securitisation bonds and promissory notes by asset type FIGURE 26

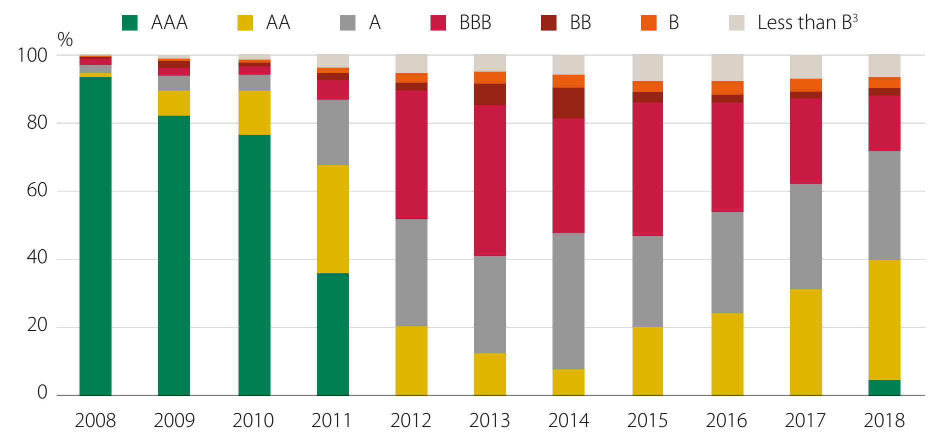




Source: CNMV and Bank of Spain.

By asset type, it can be seen that in Spain most of the securitisation assets have traditionally corresponded to mortgage-backed bonds, with an outstanding balance that has been around three quarters of the total since the first issuances.

Outstanding balance of securitisation bonds and promissory notes by credit rating[1, 2] FIGURE 27



Source: CNMV.

1 Does not include MARF.

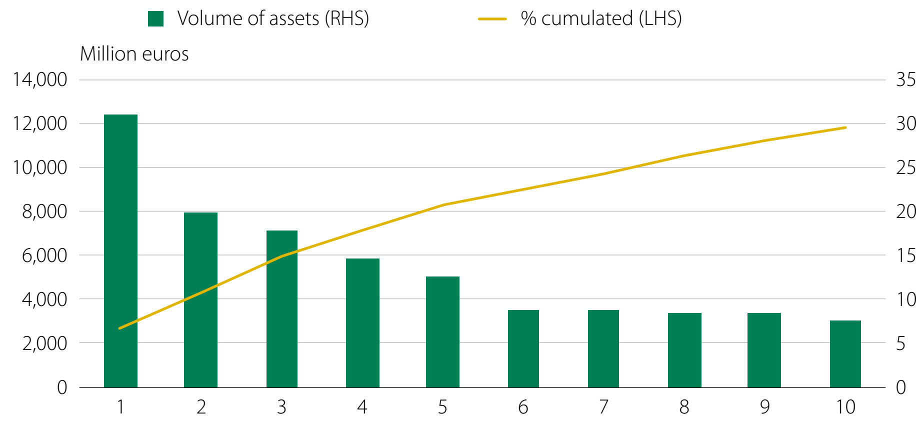
2 Ratings grouped according to their Standard & Poor's equivalent.

3 Includes issuances without a rating.

The credit rating of SFVs, both as a result of the increase in the risk associated with the country and for reasons intrinsic to these vehicles and the assets they held, declined from the start of the crisis, with very significant decreases seen especially in 2011 and 2012. While in 2008 more than 90% of the assets were rated AAA and only 3% were BBB or lower, in 2017 there were virtually no AAA assets and BBB or lower rated assets accounted for just over 37% (see figure 27). In 2018, however, the situation improved substantially, with 5% of AAA-rated assets and 28% of assets rated BBB or lower.

In relation to the structure of the sector, which totalled 266 funds at the end of the year, a high degree of concentration is observed in regard to the balance sheets of entities: the five vehicles with a greater volume of financial assets accounted for around 20% of the total (see figure 28), while 29 vehicles account for 50% of the size of the sector as a whole.

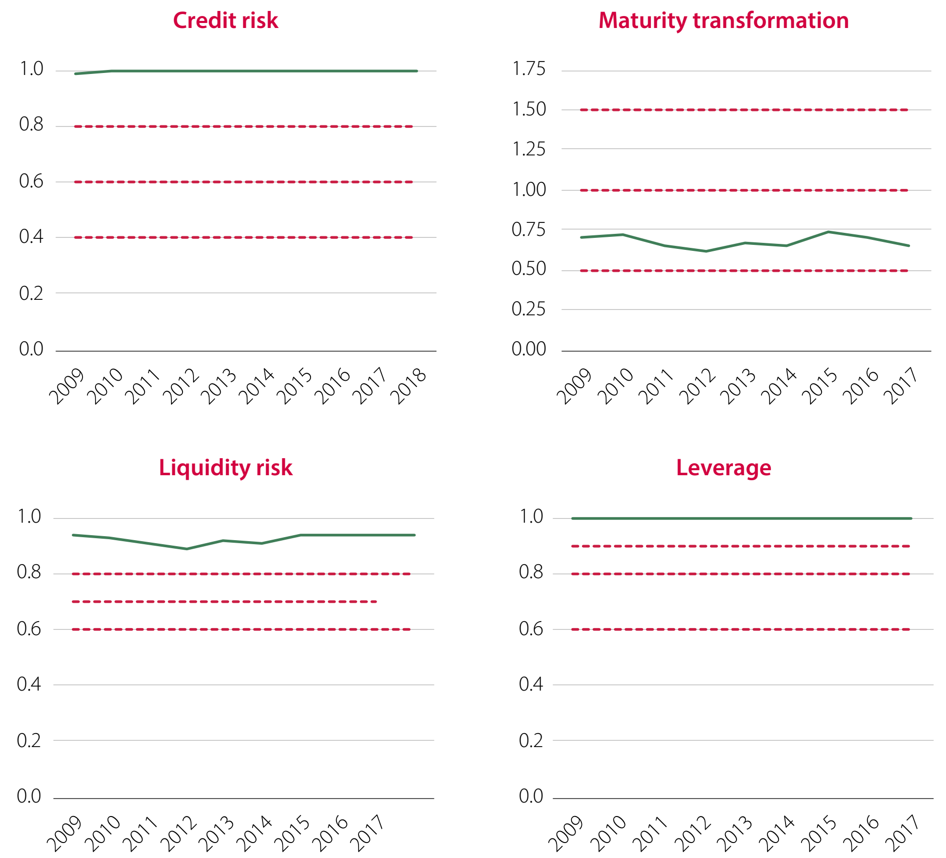
Managed assets of the ten largest SFVs FIGURE 28



Source: CNMV and Bank of Spain.

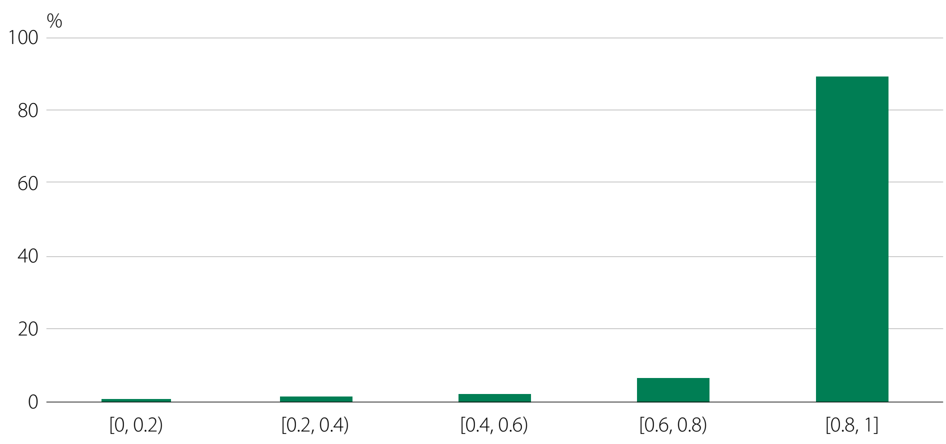
In relation to the assessment of the risks of these entities, only maturity transformation risk is at a moderate level, while the rest of the risks are high for securitisation funds. However, some of the high values obtained for credit and liquidity risks and leverage must be qualified. Firstly, credit risk is practically 100% by definition: all SFV assets are made up of loans transferred by the originator or transferor. Something similar happens with leverage: securitisation funds do not have their own funds, so the ratio, as it is constructed, is always equal to 1. Secondly, liquidity risk stood at 93% at the end of 2018, a figure that has not changed substantially in recent years (see lower left-hand panel of figure 30) as a result of the aforementioned balance sheet composition: almost all the assets are made up of the loans granted and, therefore, there are very few liquid assets. The individual distribution reflects that 89% of the funds, with non-liquid assets of almost 98% in average terms, presented a percentage of non-liquid assets above the 80% threshold (see figure 30). Subsequent editions of this report will address new risk indicators that allow the limitations of some of the current indicators to be overcome.

Risk trends in securitisation funds FIGURE 29



Source: CNMV.

Distribution of liquidity risk in securitisation funds FIGURE 30

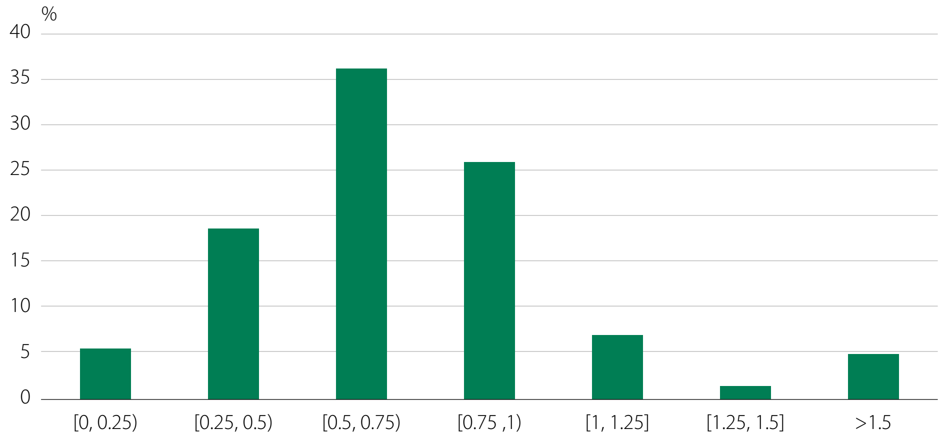


Source: CNMV.

The risk level indicator associated with maturity transformation, which is possibly the most relevant for these vehicles, reached 70%, indicating a moderate asymmetry in the maturities of liabilities compared to assets. This figure has ranged between 62% and 73% in the last nine years, so it is relatively stable. However, there are substantial differences between the different vehicles: as seen in figure 31, the dispersion in the maturity transformation risk values for 2018 was high. For example, in 24% of the funds the ratio between short-term liabilities and assets was less than 50% (low risk), while in 14%, this figure exceeded 100% (medium to high risk).

It must also be borne in mind that in Spain most of the securitised assets come from long-term loans or credits – mostly mortgages – and the same applies to the securities issued (liabilities). Therefore, the short-term assets and liabilities of Spanish securitisation funds represent only 20% and 14% of the balance sheet, respectively, according to the closing data from last year.

Distribution of maturity transformation risk in securitisation funds FIGURE 31



Source: CNMV.