Bulletin
de la Banque de France
216/2 - MARCH-APRIL 2018

BANQUE DE FRANCE
EUROSYSTÈME

Economy and international financing

Investment funds in the euro area: an uneven dynamic since 2009

Non-money market collective investment undertakings (investment funds) are highly dynamic: outstanding amounts under management have more than doubled in value since 2009 to just over EUR 11,000 billion at the end of 2017 – an amount equivalent to the gross domestic product (GDP) of the euro area. This overall dynamism disguises pronounced differences between countries, with Ireland and Luxembourg reporting the most substantial growth. In addition, breakdowns between fund types and the categories of underlying investments also vary depending on the euro area country, as does the profile of the investors (financial or non-financial) who subscribe to the funds. This study compares the aggregated balance sheet data for nine major euro area countries.

Maxime Ponsart and Alessandra Salvio
Banque de France and Banca d'Italia

JEL codes
G11, G23

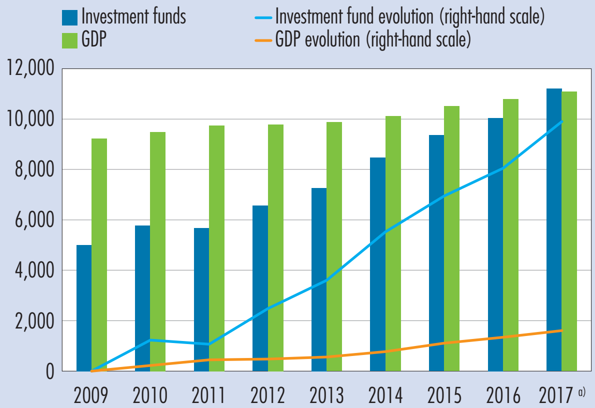
EUR 11,200 billion
outstanding amounts managed by euro area investment funds in 2017 (average annual growth of 11% since 2009)

EUR 1,300 billion
outstanding amounts managed by investment funds in France in 2017 (average annual growth of 5% since 2009, 4th ranking country in terms of market share)

EUR 870 billion
total net flows in the euro area in 2017

EUR 55 billion
total net flows in France in 2017

Investment fund outstanding amounts and GDP in the euro area
(amounts in EUR billions; indexed evolution, 2009 = 100)



a) Provisional figure for 2017.
Sources: Banque de France, ECB and Eurostat.

1 Dynamic but uneven growth in investment funds in the euro area since 2009

A sustained growth rate

The value of outstanding amounts managed by non-money market investment funds[1] has more than doubled in the euro area since 2009, increasing at an annual average rate of 11% during the period. It came to just over EUR 11,000 billion in December 2017 – an amount equivalent to the gross domestic product (GDP) of the euro area (see Chart 1).

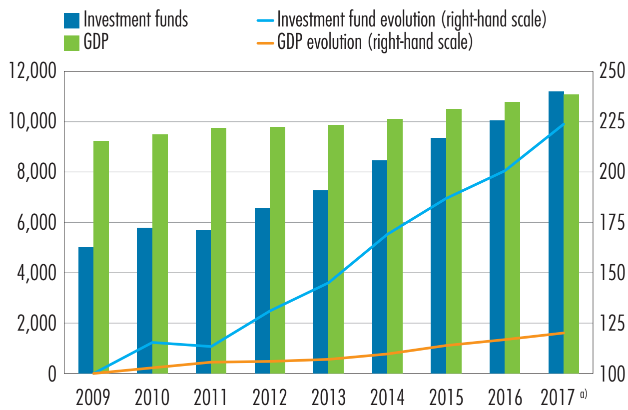
The sums placed in these funds are invested in a variety of products, such as equity, debt securities and real estate assets. Even though their investment policy tends to target a particular asset class, investment funds enable subscribers to diversify their risk. A wide range of investors, including banks, insurance undertakings, non-financial corporations, general government and households, are attracted by these funds because of the broad variety of investment possibilities available, with different risk and yield profiles. As a result of the diversity of investors on the one hand, and the considerable amounts involved on the other, these funds play a major role in financial intermediation.

Very strong growth in Luxembourg and Ireland

Four countries (Luxembourg, Germany, Ireland and France) account for 80% of total euro area outstanding amounts (see Chart 2). The remaining 20% is broken down among fifteen other countries.[2,3] The average annual growth rate of investment funds varies from 4% to 20% (see Table 1) depending on the country. The funds located in Luxembourg and Ireland are particularly significant in terms of outstanding amounts (EUR 3,900 billion and EUR 1,900 billion, respectively, at end-December 2017), and report very robust annual growth rates of 12% and 20%. Their euro area market share has also increased since December 2009 by 4 percentage points and 8 percentage points, respectively, at the expense of all the other euro area countries. France, with an average annual growth rate of 5%, recorded the greatest decrease in market share, slipping from 18% in 2009 to 12% in 2017.

C1 Investment fund outstanding amounts and GDP in the euro area

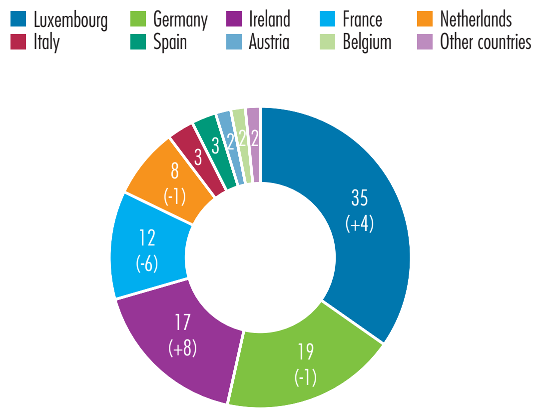
(amounts in EUR billions; indexed evolution, 2009 = 100)



a) Provisional figure for 2017.
Sources: Banque de France, ECB and Eurostat.

C2 Market shares of euro area countries in investment fund outstanding amounts at end-December 2017

(shares in 2017, change compared with 2009 in %)



Sources: Banque de France and ECB.
Note: Variations are in brackets.

1 Or collective investment undertakings (CIUs).
2 The study is based on national central bank data that may be either publicly accessible at https://sdw.ecb.europa.eu/ or restricted to national central banks, researchers, etc. Data by country is available from 2009.
3 The study focuses on the nine major euro area countries in terms of outstanding amounts.

T1 Change in net assets in the euro area from 2009 to 2017

(net assets in EUR billions, average annual growth in %)

	December 2017	December 2009	
		Change	Average annual growth
Luxembourg	3,893	+2,348	12
Germany	2,107	+1,092	10
Ireland	1,909	+1,468	20
France	1,302	+397	5
Netherlands	843	+438	10
Italy	323	+136	7
Spain	298	+108	6
Austria	183	+47	4
Belgium	175	+82	8
Other countries	177	+87	–
Euro area total	11,212	+6,203	11

Sources: Banque de France and ECB.

Variable concentration levels from country to country

In December 2016, the average outstanding amounts under management by euro area funds had almost doubled to EUR 216 million since December 2009 (EUR 111 million) – see Chart 3. Over the same period, the number of funds remained relatively stable, up only 12%, for a total of 52,000 funds.

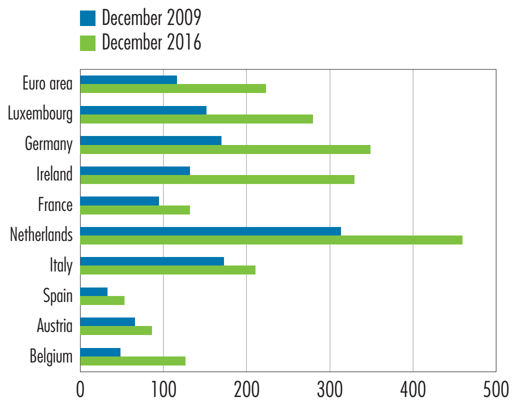
Concentration levels differ significantly from country to country. In 2016, the Netherlands market demonstrated the greatest concentration with average outstanding amounts under management of EUR 450 million per fund, nine times higher than in Spain (EUR 50 million per fund). The concentration level in each country is also unrelated to the total value of outstanding amounts. For example, the ratio in Luxembourg is in line with the average of the countries under review, despite having the largest market in terms of value.

Contrasting flow levels among countries

During the period from December 2009 to 2017 (see Chart 4), 60% of the EUR 6,200 billion increase[4] in euro area fund outstanding amounts was the direct result of net subscriptions, while the remaining 40% was due to changes in valuation.

C3 Average outstanding amounts under management, by investment fund and by country

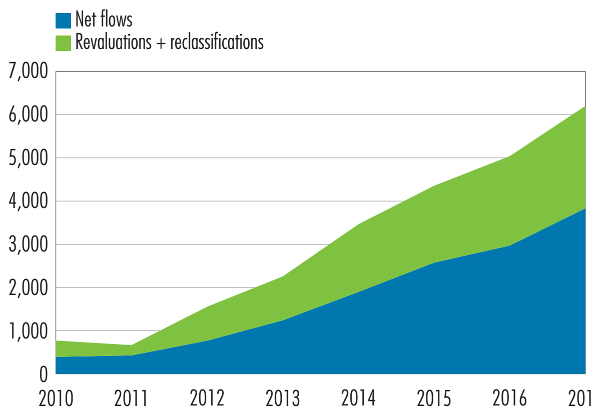
(EUR millions)



Sources: Banque de France and ECB.
Note: Average outstanding amounts correspond to the outstanding amount divided by the number of funds for each country.

C4 Breakdown of the change in outstanding net assets in the euro area

(EUR billions)

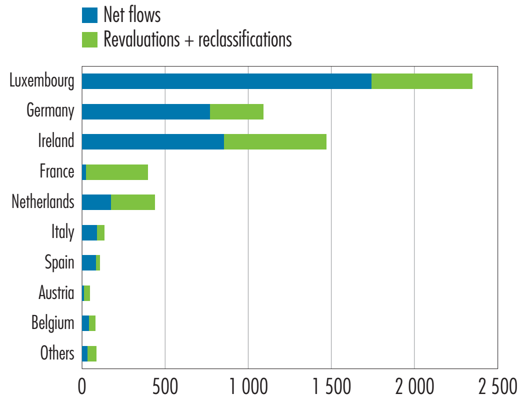


Sources: Banque de France and ECB.

4 The change (increase or decrease) in a fund's outstanding amounts under management is the sum of: (i) net investment flows recorded during the period (subscriptions less redemptions of fund shares/units), (ii) portfolio revaluations during the period; and (iii) reclassifications (mainly population modifications).

C5 Change in outstanding amounts by country (2010-17 cumulative total)

(EUR billions)



Sources: Banque de France and ECB.

The funds located in Luxembourg, Ireland and Germany (see Chart 5) accounted for 88% of net flows, of which almost 45% were carried out in Luxembourg alone. Despite a significant weight in terms of outstanding amounts (12%), France recorded lower net flows during the period (a positive EUR 17 billion). The increase in total outstanding amounts is almost exclusively due to changes in valuation.

As the figure for net flows represents the difference between subscriptions and redemptions, it provides no indication of amounts subscribed or redeemed. Total cumulative subscriptions and redemptions of euro area fund units or shares, which reflect overall transaction volumes measured since the end of 2014, range from EUR 6,000 billion to EUR 7,000 billion per year, or approximately two-thirds of total outstanding amounts under management in the euro area.

BOX 1

2017: a year of record flows

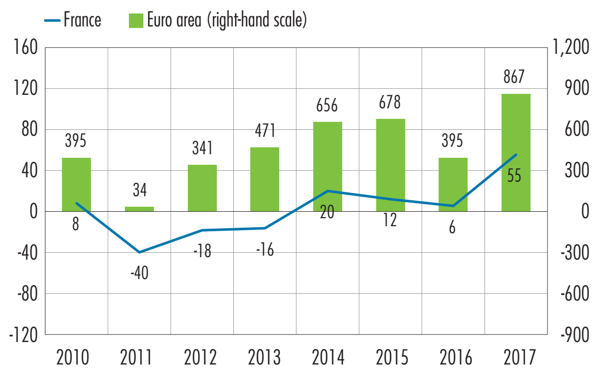
Annual net fund inflows in the euro area as a whole for 2017 were at their highest since 2001,[1] at EUR 867 billion.

For the period under review (2009 to 2017), 2017 was also a record year for Luxembourg, Ireland and France. Following a less productive year in 2016 (EUR 115 billion), levels in Luxembourg returned to the extremely strong pace reported for the 2012-15 period, with 42% of total net subscriptions in 2017 (EUR 365 billion). In Ireland, the already robust pace of annual net subscriptions doubled in 2017, with inflows of EUR 255 billion. Lastly, France also recorded substantial inflows of EUR 55 billion, compared with the cumulative outflow for the 2010-16 period of EUR 28 billion.

Inflows on bond funds (60% of net euro area subscriptions) and equity in France were particularly high in 2017, mainly thanks to Exchange-Traded Funds (ETFs) – see Box 3. The main flows in the majority of countries relate to mixed and bond funds, while all countries recorded net inflows on equity funds. This is particularly remarkable in France, where net subscriptions to this type of fund were positive for the first time since 2010.

Annual net flows in France and the euro area since 2010

(EUR billions)



Sources: Banque de France and ECB.

1 Aggregated data at the euro area level only became available in 2001.

Depending on the location of the funds, there can be as much as a threefold variation in investor rotation.[5] In the case of funds in Spain, Ireland, Luxembourg and France for example, investors are highly mobile and total annual entries and exits are comparable in value to the outstanding amounts under management in each country. Rotation is significantly less in the Netherlands and Germany, where fund entries and exits amount to the equivalent of only 30% of annual outstanding amounts under management. The reduced mobility in these two countries can be explained by the significant relative weight of domestic pension funds[6] in investor sectors, potentially pointing to investors who are more interested in the longer term, which mechanically results in a lower rate of subscriptions and redemptions of shares/units.

2 Contrasting investments and investors

The breakdown between fund categories varies from country to country

On average, equity, bond and mixed funds in the euro area are similar in size and together account for 80% of total outstanding amounts. The breakdown by fund category remained practically unchanged on average between 2009 and 2017 (see Table 2).

Bond funds account for 30% of total outstanding amounts but only 16% of the total number of funds, demonstrating the significant outstanding amounts in each bond fund. By contrast, the relationship is reversed for "Other funds".

Equity, bond and mixed funds continue to account for the vast majority of investment funds in every country (at least 70%, cumulatively).

BOX 2

Classification criteria for funds that are not harmonised at the European level

For the purposes of European statistical requirements, investment funds are classified under six categories: equity, bond, mixed, real estate, hedge and other funds. The breakdown is based on the nature of the underlying assets. For example, an "equity" fund has to "primarily" invest in equity. Mixed funds invest in equity and bonds, with no prevalent policy in favour of one instrument or the other. "Other funds" are those funds that do not belong to any of the other five categories. In France, it includes employee saving funds, risk funds and formula funds in accordance with the classification defined by the *Autorité des marchés financiers* (AMF – French financial markets authority).

Ultimately, the European statistical definitions of investment fund categories are not particularly restrictive, leaving a certain degree of leeway at the national level when setting investment thresholds. In France, for example, in accordance with the AMF's regulatory framework, 60% of a fund's exposure must be to equity for it to be classified as an equity fund, whereas this figure increases to 85% for the same category in Luxembourg. Thus, two funds belonging to the same category but issued from different countries may have a substantially different portfolio structure. Therefore, this article analyses (i) the respective weight of each fund category and (ii) the aggregated portfolio structure of the funds, independently of the fund categories, in order to improve comparability between countries.

T2 Change in euro area investment funds by category from 2009 to 2017

(shares and changes in %)

	Equity	Bond	Mixed	Real estate	Hedge	Other
Outstanding amounts in 2017	29	30	26	5	3	8
Change since 2009	-1	-2	1	0	1	0
Number in 2017	22	16	26	9	3	23
Change since 2009	-1	-3	-2	8	0	2

Sources: Banque de France and ECB.

5 Ratio of total annual investors' subscriptions and redemptions and average outstanding amounts under management.

6 Pension funds in the Netherlands and Germany accounted for EUR 1,400 billion and EUR 630 billion, respectively, in third-quarter 2017, representing 80% of the total euro area market (ECB figures).

T3 Breakdown of investment funds by country and by category in 2017

(%)

	Equity	Bond	Mixed	Real estate	Hedge	Other
Luxembourg	33	35	24	2	4	2
Ireland	38	33	12	1	8	8
Germany	15	21	47	9	0	8
France	27	22	28	7	0	17
Netherlands	38	31	2	12	3	15
Italy	11	35	37	15	2	0
Spain	14	28	22	0	1	35
Belgium	28	11	56	0	0	6
Austria	15	39	41	4	0	0

Sources: Banque de France and ECB.

However, there are pronounced differences between categories depending on the country (see Table 3):

- mixed funds show the widest dispersion: with an average weight of 25% of total outstanding amounts, they predominate in certain countries such as Belgium and Germany (56% and 47%, respectively) but are poorly developed in others, including the Netherlands and Ireland (2% and 12%);

- the weight of equity funds also varies considerably from country to country: at 38%, the share represented by equity funds in Ireland is two to three times greater than the share in Germany or Italy (15% and 11%, respectively);

- real estate funds are more marginal in most countries, but account for a more significant share of outstanding amounts in Italy and the Netherlands (15% and 12%, respectively);

- French funds fall in line with euro area averages, although "Other funds" represent a more substantial weight with 17% due to the relative importance of employee saving funds.

BOX 3

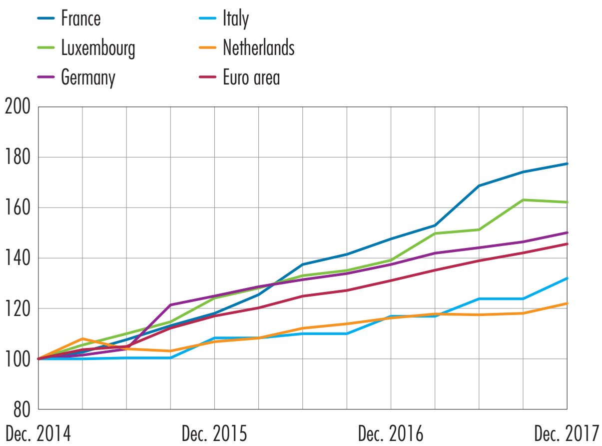
The popularity of real estate funds and Exchange-Traded Funds in France

Real estate funds and Exchange-Traded Funds (ETF) are particularly buoyant in France and account for 60% of the EUR 73 billion of cumulative flows since 2015 for all French domiciled funds.

French real estate funds rank second in terms of net subscriptions over the past three years (inflows of EUR 27 billion, behind Germany's EUR 44 billion) with an 80% growth in net assets under management (see Chart a), and third in terms of outstanding amounts in the euro area (EUR 100 billion), behind the Netherlands (EUR 115 billion) and Germany (EUR 201 billion).

Ca Growth in real estate funds in the euro area

(December 2014 = 100)

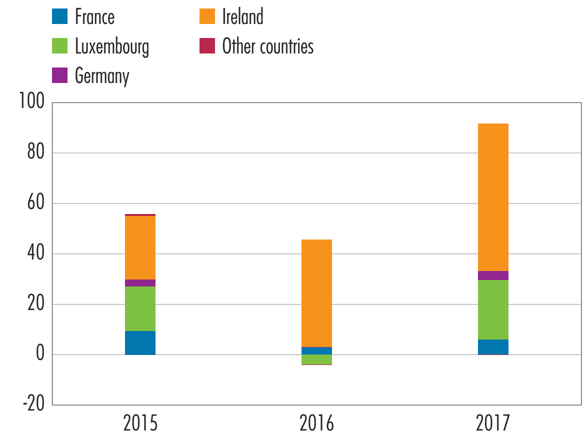


Sources: Banque de France and ECB.

…/…

ETFs are designed to track the performance of a benchmark index such as the CAC40 or EUROSTOXX and have lower management fees than other investment funds. They are particularly widespread in Ireland, and to a lesser extent in Luxembourg and France. These three countries account for 90% of total ETF outstanding amounts. In France, ETF outstanding amounts come to EUR 82 billion, 75% of which is in equity funds. Since 2015, the dynamic between ETF and non-ETF equity funds has reversed: ETFs have recorded net inflows of EUR 13 billion, while non-ETF equity funds have seen net redemptions of EUR 15 billion (see Chart b).

Cb Net flows and outstanding amounts of Exchange-Traded Funds
(EUR billions)

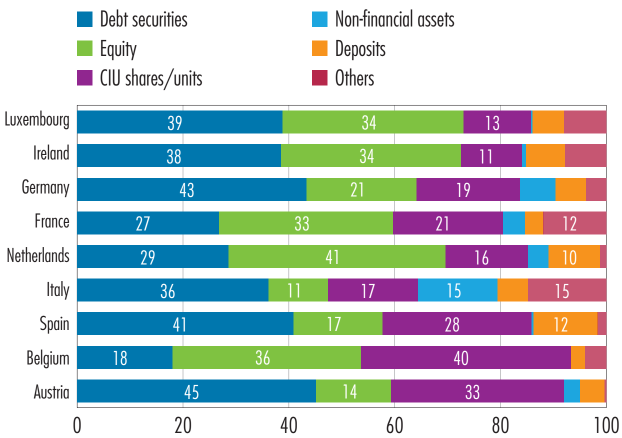


Sources: Banque de France and ECB.

Portfolio structures are equally variable

A breakdown of investments by instrument type and country (see Chart 6) reveals significant differences in terms of structure: Dutch funds invest a large proportion of their assets (41%) in equity, while the exposure of German and Spanish funds to debt securities amounts to over 40%. Investments in France, Luxembourg and Ireland tend to be relatively balanced between debt securities and equity. Funds also hold shares/units in other collective investment undertakings (CIUs), and in relatively significant amounts, ranging from 11% in Ireland to 40% in Italy.

C6 Euro area investment fund assets by instrument type in 2017
(%)



Sources: Banque de France and ECB.

Overall, portfolio structures by underlying asset class quite closely reflect the breakdown by fund category (see Section 2). Nevertheless, Germany and Spain are a little unusual in this respect. Bond funds account for 21% and 28%, respectively, of the total balance sheet of funds but the share of debt securities in fund portfolios is significantly higher at 43% and 41%. This is due to the predominance of debt securities in Spanish and German mixed funds.

Generally, this portfolio instrument breakdown has changed little since 2009 for the euro area as a whole. However, in certain countries, there have been some noticeable shifts in asset allocations during the period, with the proportion of CIU shares/units increasing significantly at the expense of debt securities. This is particularly true for Belgium, Spain and Germany, where the proportion of CIUs has increased by 23 percentage points, 17 percentage points and 9 percentage points, respectively. This is a result of the growth of holdings of funds within the sector, which has consequently led to increased sector interconnectedness and greater performance correlation.

In terms of fund liabilities, an average of 90% of resources comes from investors via the subscription of shares/units. In fact, the balance sheets of CIUs report very little debt, as levels of leverage through debt are restricted by regulation for the majority of fund categories.

Some resident investor financing is channelled towards non-resident agents

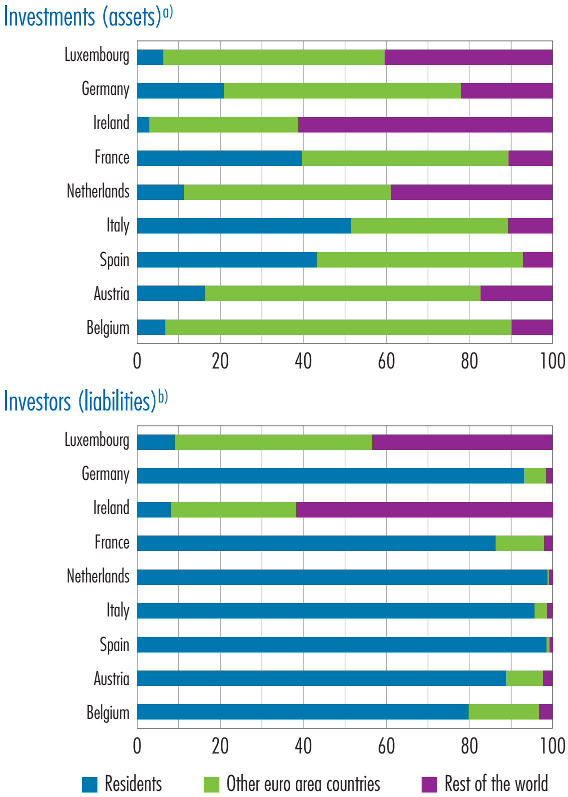
Investments (the fund assets) are geographically more diversified[7] than the investor base (the liabilities) – see Chart 7. At least 80% of investors are residents, with the exception of Luxembourg and Ireland where a large proportion (90%) of investors are non-residents, and 43% and 61%, respectively, of those non-residents are based in non-euro area countries. In France, 13% of investors are non-residents, the majority of whom are euro area nationals.

By contrast, investments are far more international by nature. With the exception of Italy, the majority of portfolio securities are issued by non-residents, mainly located in the euro area. The Netherlands, Luxembourg and particularly Ireland are conspicuous for the fact that a significant share of their portfolios is invested in securities issued outside the euro area (40% in the case of the Netherlands and Luxembourg, and 60% for Ireland). However, investments in resident securities still remain substantial in Italy (50%), Spain (43%) and France (40%).

There is no correlation between this geographical breakdown and the type of security held in the portfolio: in France and Germany, equity makes up the majority of resident issuances, while in other countries, there is an even distribution between debt securities and equity.

Since 2009, there has been an increase in the non-resident share, not only in terms of the securities acquired by the funds (a gain of 1 to 3 percentage points), but also in terms of the subscribers to the funds (a gain of 5 to 10 percentage points). Meanwhile, the expected impact of the European passport and cross-border marketing at the European level appears to be limited, with the exception of the main beneficiaries, Luxembourg and Ireland.

C7 Breakdown by country of investments and investors in 2017
(%)



a) Investments (assets) correspond to the sum of equity, debt securities and non-resident CIU shares/units.
b) Investors (liabilities) correspond to net assets.
Sources: Banque de France and ECB.

7 See the following articles from the *Bulletin de la Banque de France*, No. 205, *"La destination finale des placements financiers des ménages avant et pendant la crise"* (A. Bachellerie, C. Charavel and C. Pfister), and the *Banque de France Bulletin Quarterly Selection of Articles*, No. 48, "Where do French people invest their savings?" (E. Candus, C. Pfister and F. Sédillot).

BOX 4

Investment funds at the heart of financial intermediation

Financial institutions account for two-thirds of investors in collective investment undertakings (CIU), up 4% on 2009, and almost one-third of the securities held by these funds (slightly down on 2009). These interconnections extend the financial intermediation chain and are more or less pronounced depending on the country.

With less than 25% of investors, the weight of the financial sector is limited in Belgium, Italy and even more so in Spain, where investors are mainly, and directly, households. However, the financial sector predominates in the Netherlands and Ireland, where it accounts for more than 85% of investors. As for the investment of funds, the financial sector's share varies from 22% to 37% and has evolved differently from country to country (see Table a).

Ta Change in the financial sector's share in investment funds between 2009 and 2017

(shares and changes in %)

	Investments[a]		Investors	
	Share in 2017	Change since 2009	Share in 2017	Change since 2009
Euro area	32	-0.9	66	4.1
Luxembourg	36	0.7	58	0.8
Germany	35	-4.1	73	4.6
Ireland	37	3.9	87	-4.5
France	25	3.4	68	3.4
Netherlands	22	-4.3	96	3.6
Italy	22	6.2	20	3.8
Spain	27	-24.0	9	-4.9
Austria	35	-2.3	61	0.4
Belgium	35	-12.2	25	16.9

a) Equity and debt securities.
Sources: Banque de France and ECB.

Investment funds also play a role in the financing of the economy as non-financial corporations account for 47% of the securities held by euro area CIUs, up 9% since 2009 (see Table b). In France, non-financial corporations are even more significant, accounting for 63% of securities held, up 5% since 2009, as a result of the increase in market-based corporate financing. Recent European and national provisions allowing funds to grant loans directly to companies (European regulation on European long-term investment funds – ELTIF – in April 2015, and the French decree of 24 November 2016) and the growth of venture capital funds should bolster this trend.

Tb Assets – securities issued by non-financial corporations

(share and changes in %)

	Euro area	Luxembourg	Ireland	Germany	France	Netherlands	Italy	Spain	Austria	Belgium
2017	47	47	43	43	63	32	29	26	28	58
Change since 2009	9	11	-5	14	5	1	14	10	13	11

Sources: Banque de France and ECB.

Published by
Banque de France

Managing Editor
Gilles Vaysset

Editor-in-Chief
Claude Cornélis

Editor
Nelly Noulin

Translator
Scott Oldale

Technical production
Studio Creation
Press and Communication
Directorate

ISSN 1952-4382

To subscribe to the Banque de France's publications
https://publications.banque-france.fr/en
"Subscription"