



## Public and private French debt securities are among the most held by non-residents

France is the fifth largest issuer of debt securities, far behind the United States (39% of the world total), Japan and China. Its share of the world total (5%) is close to that of the United Kingdom, but higher than that of Germany (4%).

French debt is highly international, as it accounts for 8% of the liabilities recorded in the world's external positions, i.e. the second most held by non-residents, still far behind the United States. Between 2008 and 2019, France's share of total recorded global liabilities, including intra-euro area liabilities, remained more or less stable (between 8.7% at end-2008 and 8.2% at end-2019), unlike Germany and the United Kingdom, whose shares fell from 10.5% and 9.4% respectively at end-2008 to 6.0% and 7.5% at end-2019.

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Securities Division

JEL codes  
F21, F36,  
G15

**8.1%**

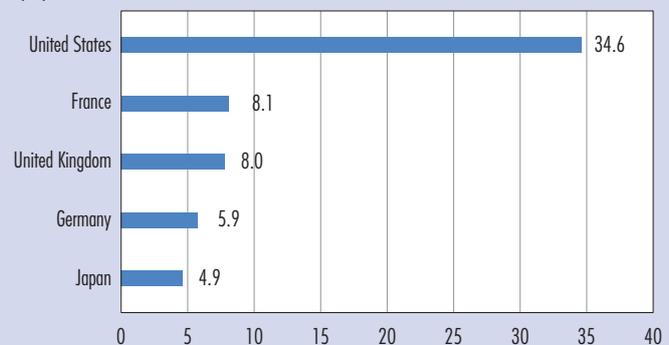
France's share of total global liabilities on debt securities (second, behind the United States)

**54%**

share of French public and private debt securities held by non-residents

Countries' share in global liabilities in 2019

(%)



Source: IMF.



### 1 French debt securities, both public and private, represent a significant share of international portfolios

#### France is one of the world's largest issuers

France is the fifth largest issuer of both sovereign and non-sovereign debt securities, far behind the United States (39% of the world total), Japan and China (13%). Its share of the world total (5%) is close to that of the United Kingdom but greater than that of Germany (4%). It is therefore the largest issuer in the euro area.

France's share of world debt is higher than its share of world GDP in value. The other major issuing countries share this characteristic, with the exception of China. The largest gap is observed for the United States.

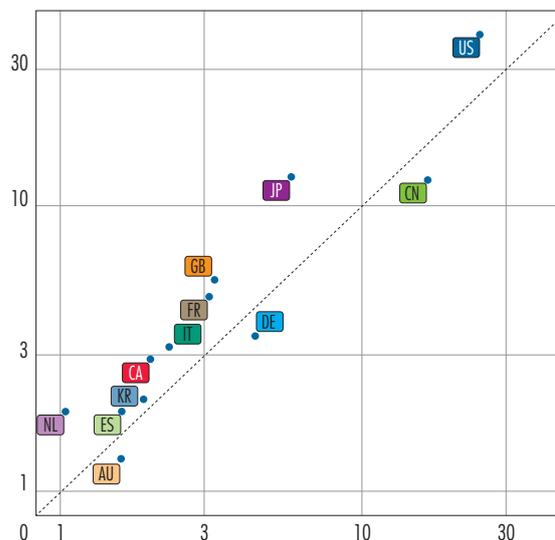
#### French debt is very present in international portfolios

The share of a country's issues held by non-residents (i.e. liabilities in balance of payments terminology) does not correspond to its world share of securities issues. In particular, French debt accounts for 8% of global balance of payments liabilities, the second highest share of debt acquired by non-residents, still far behind the United States

### C2 Shares in world GDP and world debt at end-2018

(%; x-axis: share in world debt, y-axis: share in world GDP, in value)

AU: Australia DE: Germany GB: United Kingdom JP: Japan  
CA: Canada ES: Spain IT: Italy NL: Netherlands  
CN: China FR: France KR: South Korea US: United States

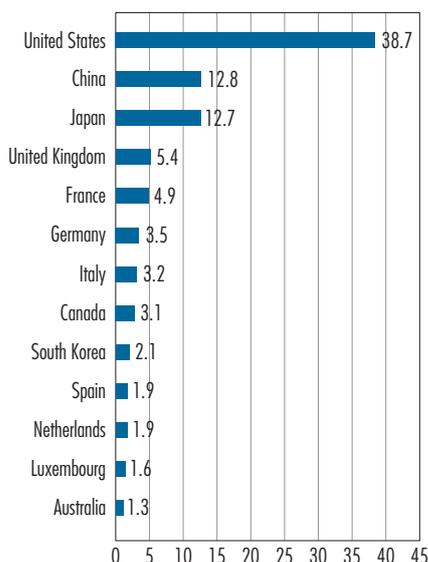


Sources: UN and Eurostat for the debt of euro area countries, IMF for GDP at purchasing power parity, via DBnomics. Note: Logarithmic scales.

(about 35% of total outstanding debt liabilities at end-2019).

### C1 Countries' share in world debt in June 2019

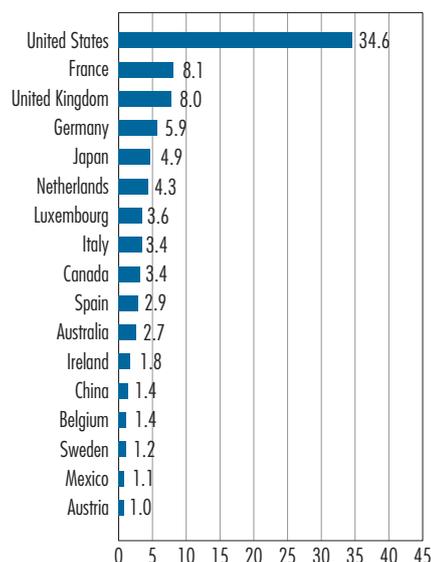
(%)



Sources: UN and Eurostat for euro area countries via DBnomics.

### C3 Countries' share in international liabilities at end-2019

(%)



Source: IMF via DBnomics.

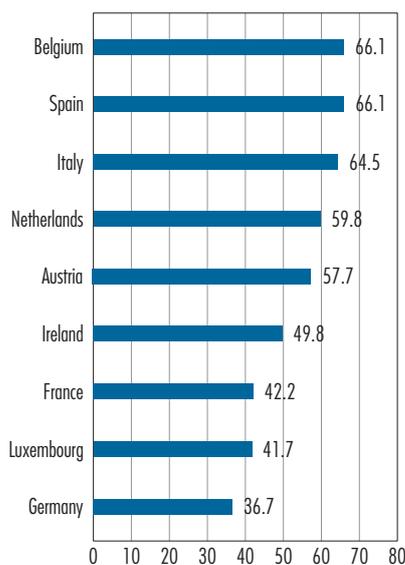


Among the 18 countries whose liabilities represent more than 1% of the world total, 9 are euro area countries. The sum of the liabilities of the euro area Member States (34% of total international liabilities at the end of 2019) is indeed close to the share of the United States (35%).

However, almost half of the euro area's liabilities are actually held by other Member States. This average proportion reflects very different situations depending on the issuing Member States. For example, German and French debt is mostly held by non-euro area residents, while almost two-thirds of the debt issued by Italy and Spain is held by euro area investors.

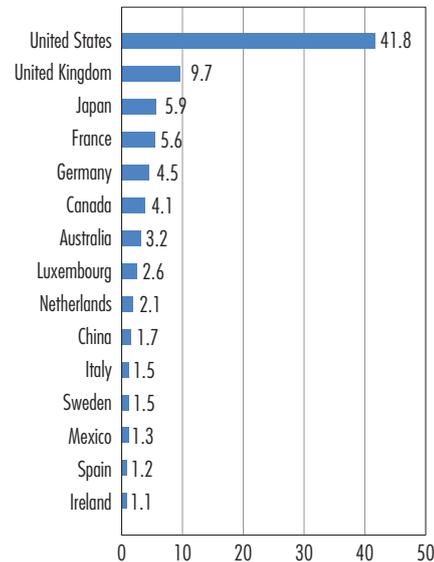
Portfolio transactions between euro area countries thus take place within the same monetary area. At the global level, there are therefore grounds for not taking these operations into account, especially because they include monetary policy operations. This lowers France's world ranking in terms of liabilities. It is nonetheless significant and ranks fourth, after the United Kingdom and Japan, but only by a small margin for the latter. On the other hand, France is ahead of Germany. The weight of the United States in global liabilities stands out even more clearly.

**C4 Share of liabilities vis-à-vis the euro area at end-2019 (%)**



Source: IMF (BOP and CPIS databases for intra-euro area liabilities).

**C5 Countries' share in international liabilities at end-2019 (%)**



Source: IMF (BOP and CPIS) via DBnomics.

**2 France's share of global liabilities has been roughly stable since 2008**

Between 2008 and 2019, France's share of total global liabilities, including intra-euro area liabilities, has remained roughly stable (between 8.7% at end-2008 and 8.2% at end-2019). This second place contrasts with the steady decline in the shares of Germany and the United Kingdom, which dropped from 10.5% and 9.4% respectively at end-2008 to 6.0% and 7.5% at end-2019. In contrast, the weight of US debt in global liabilities has steadily increased over the period (from 33% at end-2008 to 35% at end-2019). Japan's share has also risen (from 3.5% to 4.9%).

The changes in the countries' relative weight can be explained by comparative changes in exchange rates, debt securities issuance and non-resident holding rates.



BOX 1

**Contributions to growth in liabilities between 2008 and 2019**

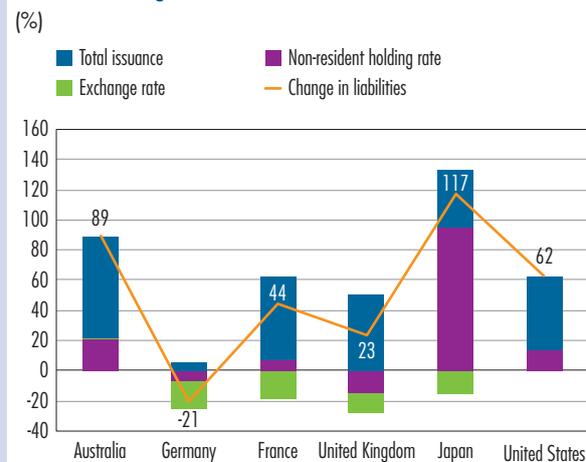
A country's dollar-denominated liabilities (L) are equal to the product of the total amount of domestic currency issues valued at market prices (I), the share of these issues held by non-residents (NRH – non-resident holding rate) and the exchange rate of the domestic currency against the dollar (EXR):  $L = I \times NRH \times EXR$

The chart below breaks down the change in liabilities over the period into three components:

- the effect of the change in the defined exchange rate: this corresponds to the change in liabilities brought about by the change in the domestic currency exchange rate between 2008 and 2019, while the amounts of issues in domestic currency and the holding rate are assumed to be set at the 2008 level;
- the effect of the change in non-residents' holding rate: this corresponds to the change in liabilities brought about by the change in the holding rate between 2008 and 2019, while the amounts of issues in domestic currency and the exchange rate are assumed to be set at the 2008 level;
- the impact of the change in total issuance: by convention, this is the balance between the total change in liabilities and the effects of the change in the exchange rate and in the holding rate, as described above. It includes the impact of valuation effects linked to changes in interest rates over the period, which are a priori positive.

In the countries with the highest liabilities, the increase in issuance explains most of the growth in liabilities, except in Japan. In Germany, the growth in total issuance is explained solely by the increase in the value of outstanding amounts (see below). The rise in the share held by non-residents, observed everywhere except in the United Kingdom, played a determining role only in Japan. The impact of exchange rates was almost systematically negative, except in Australia, where it was slightly positive.

**Contribution to growth in liabilities from Q4 2008 to Q2 2019**



Sources: IMF, United Nations and Eurostat for euro area countries (via DBnomics).

**A stronger dollar raises the US share of liabilities, all other things being equal**

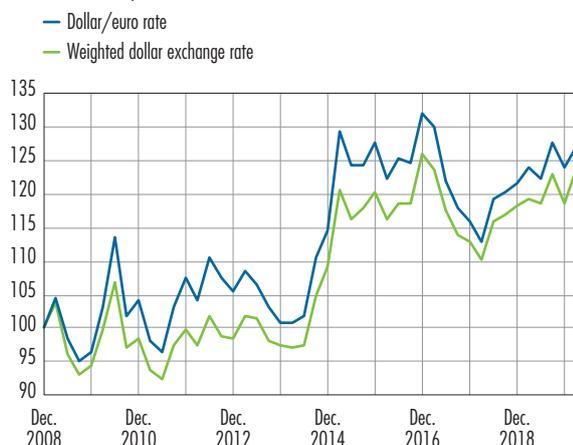
In the International Monetary Fund (IMF) statistics from which the data on liabilities are drawn, liabilities are denominated in US dollars. However, the exchange rate of the US dollar has risen against the euro and the

currencies of the other countries issuing liabilities due to a sharp revaluation of the dollar in early 2015. Between 2008 and end-2019, the dollar rose by an average of 23%, weighted by the liabilities of the largest countries. All other things being equal, this has increased the share of US securities and reduced that of France and other euro area issuers.



### C6 Exchange rates

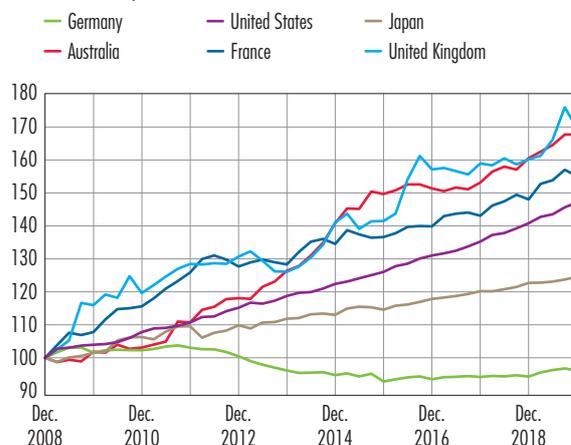
(100: end-2008)



Sources: Banque de France for exchange rates and IMF (BOP) for liability weightings (via DBnomics).

### C7 Debt growth

(100: end-2008)



Sources: BIS and Reserve Bank of Australia for Australia's issuance (via DBnomics).

### Debt securities issuance by major countries has grown at an overall rapid pace

Outstanding debt, expressed in national currency and in nominal terms, rose sharply in the United Kingdom and Australia between 2008 and 2019 (by 71% and 68% respectively), followed by France (+54%), the United States (+46%) and Japan (+24%). In contrast, German outstanding debt remained relatively stable over the same period (-3%).

### The French debt holding rate has come close to that observed for German debt

The last factor to be taken into account to explain the evolution of the ranking of countries according to their liabilities is the change in **non-residents' debt holding rate**. These rates followed rather divergent paths between 2008 and 2019. Two groups of countries stand out (see Chart 8).

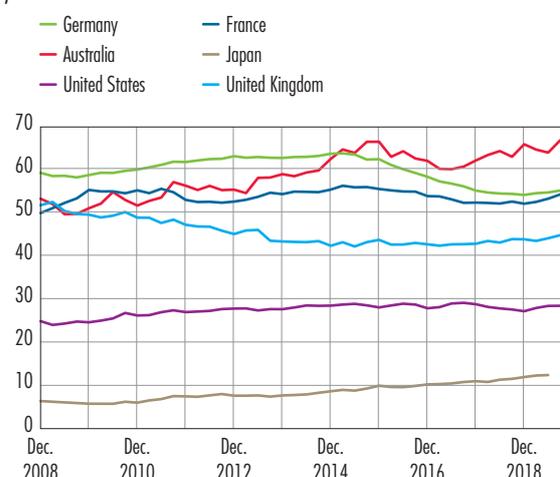
For the United States and Japan, the share of non-residents is rather low (less than a third), but it nevertheless tends to increase over the period, quite significantly in Japan (from 6% in 2008 to 12% in 2019) and more moderately in the United States (from 25% to 28%).

At end-2008, the other four countries issuing internationalised debt – Australia, France, the United Kingdom and

Germany – posted similar non-resident holding rates, slightly above 50%. In 2019, they stood at significantly different levels. The relative size of non-resident holdings of UK debt fell steadily between 2008 and 2014, before stabilising at around 43%. Conversely, the internationalisation of Australian debt increased between 2008 and 2015, with the holding rate rising from 53% to 66%, a level that was reached again in 2019 after a slow decline and then a recovery.

### C8 Non-resident debt holdings

(%)

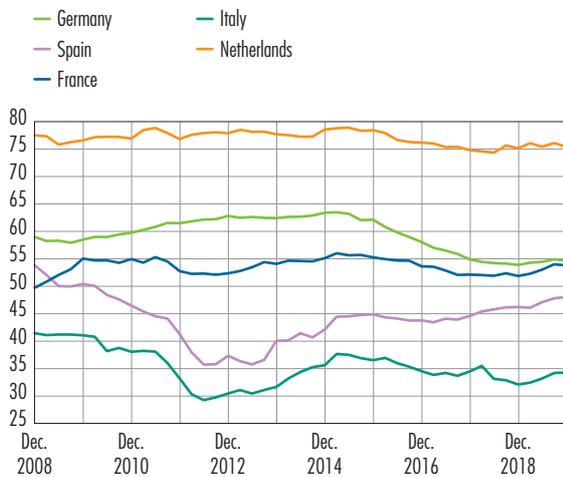


Sources: IMF (BOP), United Nations and Eurostat for euro area countries (via DBnomics).



### C9 Non-resident debt holdings for the main euro area countries

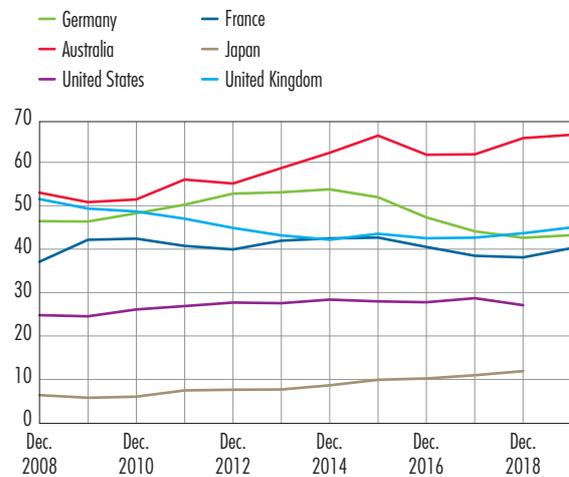
(%)



Source: Eurostat for euro area countries (via DBnomics).

### C10 Non-resident debt holdings excluding intra-euro area liabilities

(%)



Sources: Eurostat and IMF (CPIS) for liabilities vis-à-vis the euro area (via DBnomics).

Since end-2008, non-residents' holdings of German debt has exceeded those of French debt. They have declined significantly since 2015, in line with the development of the Eurosystem's net purchases, which were accompanied, at least at the beginning, by net sales by non-resident holders of German debt (see Chart 9).

Non-resident holdings of French debt also dropped for the same reasons from 2015 onwards, but to a lesser extent. In 2019, following the pause in the Eurosystem's net purchases, non-residents returned to French debt such that their holding rate of French debt (54% at end-2019) was significantly closer to that observed for German debt (55%).

The significant decline in the holding rates of Italian and Spanish debt in the early 2010s was one of the manifestations of the markets' distrust of the public debt of some euro area countries at that time; it eased off in 2015. Since then, holding rates of Spanish debt have continued to recover, while those of Italian debt have been eroded.

### Excluding intra-euro area transactions changes the evolution of French and German debt holding rates at the margin

As the euro area is an integrated monetary area, it makes sense to remove liabilities vis-à-vis the euro area from both the numerator and the denominator in the calculation of the holding rates. This reduces the French and German debt holding rates by 13 and 11 percentage points respectively at end-2019. They are brought down to the level of the UK debt holding rate (see Chart 10). On the other hand, the evolution of the holding rates of the two countries remains close to that observed when intra-euro area liabilities are included.

### 3 Foreign holdings of French debt are more dispersed than for other major issuing countries

When holdings are geographically diversified, they are likely to be more stable in the face of idiosyncratic shocks. In this respect, the dispersion of French debt holdings, as measured by the Herfindahl index, appears



### BOX 2

#### Share of national central banks' holdings in domestic debt

Since the early 2000s, central banks' holdings of debt securities issued by their residents have increased significantly due to the development of non-standard monetary policies. Their impact has been particularly strong in Japan, where over 30% of outstanding debt was held by the monetary authorities in mid-2019. It is less marked in the United Kingdom and the United States, where the central bank held around 10% of outstanding debt at the end of the period.

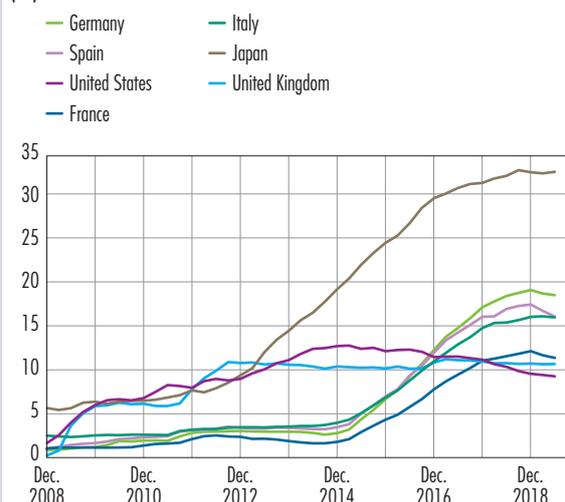
Over the period 2008-2019, purchase programmes were conducted in the euro area between 2015 and end-2018. They led to different debt securities holding rates within the Eurosystem because, on the one hand, they focused on government securities and, on the other, the breakdown was done according to the European Central Bank's (ECB) capital key, which reflects the respective countries' share in the total population and GDP of the EU.

In the end, the Banque de France<sup>1</sup> holds 13% of debt securities issued by its residents, compared to 21% for the Bundesbank. France is the largest issuer in the euro area all categories of issuers combined, but has a smaller share of the ECB's capital (20.3%) than Germany (26.2%).

The fact that euro area national central banks hold domestic debt securities proportionally reduces their free float. It is therefore reasonable to disregard this in the calculation of the holding rates. Adjusted in this way, these rates show an uninterrupted increase in the share of non-residents, on a perimeter that has tended to contract since 2015 and the start of the net purchase programmes.

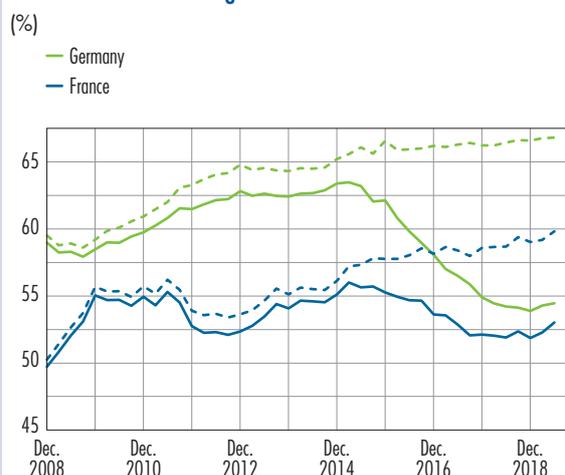
<sup>1</sup> French debt is also held by other Eurosystem central banks.

CA Share of national central bank holdings in the country's debt (%)



Sources: National central banks' websites, IMF, United Nations and Eurostat for euro area countries (via DBnomics).

CB Non-resident holding rates

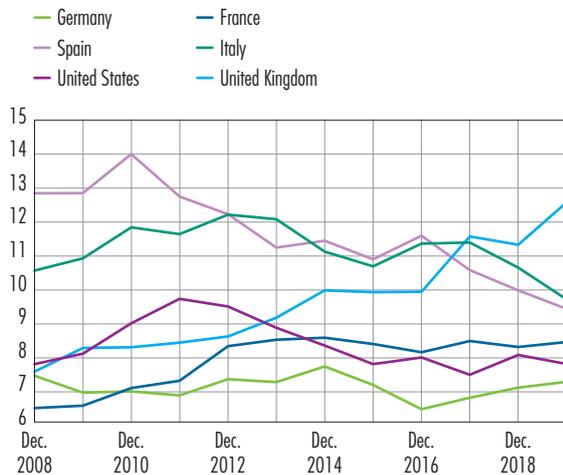


Sources: National central banks' websites, United Nations and Eurostat for euro area countries (via DBnomics).  
Note: Non-resident holding rates with (solid line) and without (dotted line) central bank holdings.



### C11 Dispersion of liabilities by country

(%, Herfindahl index at end-2019)

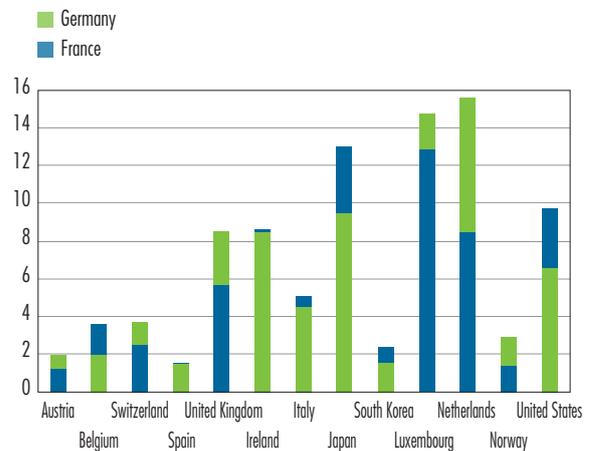


Source: IMF (CPIS), excluding holdings in the form of reserve assets.

to be close to that observed for US debt, but lower than that of Germany (see Chart 11).<sup>1</sup> The relative increase in concentration observed between 2011 and 2013 can be explained by the rise in the weight of German and especially Japanese investments. Over the recent period, the overall stability is accompanied by an upward trend in investment from the United States. Investments in UK debt have tended to become more concentrated, due to the increase in the proportion of Irish holders.

### C12 Breakdown of liabilities from France and Germany by investor country at end-2019

(%)



Source: IMF – CPIS (excluding holdings in the form of reserve assets).

Compared to that of Germany, the structure of French debt holdings by investor country (excluding reserve assets) is characterised by the large amount of investments from the United States and especially Japan. On the other hand, investors from the United Kingdom and Norway represent the bulk of German debt holders. Furthermore, within the euro area, French debt is held significantly less than German debt by investors from the Netherlands and Luxembourg.

<sup>1</sup> The normalised Herfindahl index is defined by the formula  $HI = (H - \frac{1}{n}) / (1 - \frac{1}{n})$  with  $H = \sum_{i=1}^n s_i^2$ , where  $n$  is the number of firms in the market. If the HI tends towards  $1/n$ , the market is competitive and, conversely, if the HI tends towards 1, the market is monopolistic. The index is calculated on the basis of the geographical breakdowns of the CPIS (excluding reserve assets, for which these breakdowns are only available for all holder countries).



## Appendix

### Sources used

For data **on countries' liabilities and holdings**, reference was made to the following statistical databases, provided by the International Monetary Fund (IMF):

- CPIS: The *Coordinated Portfolio Investment Survey* is a biannual survey conducted by the IMF since the early 2000s. It records the participating countries' holdings of foreign securities broken down by country of residence of the issuer. It is supplemented by data from the SEFER survey (Securities held as Foreign Exchange Reserves). This survey covers securities held as reserve assets broken down by country of investment, but the results are aggregated for all countries holding reserves;
- BOP (Balance of Payments): statistics on countries' balance of payments and external position on a quarterly basis.

All data in these two databases are expressed in dollars.

To calculate **holding rates**, the following databases are used:

- in the numerator, the above-mentioned BOP database for non-resident holdings; and
- in the denominator, for residents' total issues at market value:
  - for euro area countries, Eurostat's database on quarterly financial accounts (data expressed in euro);
  - for other countries, the United Nations database on quarterly financial accounts (data expressed in national currency).

When only annual data are available for the calculation of holding rates (the case of Japan between 2008 and 2010), an interpolation is made to obtain quarterly points.

For **debt securities issues**, we used the database made available by the Bank for International Settlements (BIS). This has the advantage over the financial accounts of recording outstanding amounts in nominal value, whose variation is not impacted by changes in valuation linked to changes in interest rates. For Australia, we used the data published by the Reserve Bank of Australia.

Finally, for **central banks' holdings of domestic securities**, we used the publications of these institutions.

These databases cover the period from the fourth quarter of 2008 to the fourth quarter of 2019, except for the one published by the United Nations, which ends in the second quarter of 2019 for certain large countries outside the euro area. The holding rate series used here therefore end in mid-2019.

Almost all of the statistical series used in this article are obtained from the data aggregation site <https://db.nomics.world/>

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