

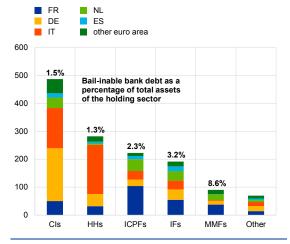
avoiding contagion effects on the broader financial system.⁵⁴ On the one hand, if a bank were to struggle, high financial sector concentration of its bail-inable debt could lead to concerns over spillover effects. On the other hand, if the bail-inable instruments were held mainly by the household sector, the use of bail-in tools in a bank resolution process may have negative effects on the economy resulting from effects on spending and potential political tensions.

Chart A

Some heterogeneity of bank debt holdings across sectors and by country of issuance

Holdings of bail-inable bank debt securities by euro area holding sector and by country of issuance





Sources: ECB Securities Holdings Statistics by Sector and ECB calculations. Notes: Bail-inable debt includes senior unsecured and subordinated bank debt securities. Breakdowns in the chart show issuance by domicile of the issuing bank and holdings by euro area sectors. Percentages on top of columns show debt holdings relative to total assets (for financial sectors) and relative to financial assets (for households).

For macroprudential, supervisory and resolution authorities, such financial stability concerns underscore the importance of assessing the distribution of such bail-inable debt and monitoring its evolution over time. With a view to examining the sectoral holdings of debt issued by euro area banks in a cross-sectional and time dimension, the ECB's Securities Holdings Statistics (SHS) can be used for this purpose and can be combined with information from the Centralised Securities Database (CSDB) on the type of debt and the seniority level, allowing a granular view of the holdings also by seniority type.

At the euro area level, there is some heterogeneity in the holdings of bail-inable bank debt across sectors and by country of issuance (see Chart A). For instance, bail-inable debt issued by French banks is held predominantly by insurance corporations and pension funds (ICPFs), whereas debt issued by

German banks is held predominantly by credit institutions (CIs). A large share of the bail-inable debt issued by Italian banks is held by households (HHs), while that held by credit institutions is lower but also significant. For other countries, the share of households is much smaller, although it is non-negligible for debt issued by German banks. Sectoral exposures are relatively minor when compared with the amount of total assets held by each sector. Only money market funds (MMFs) have notable exposures to bail-inable bank debt relative to the size of their balance sheets (8.6%) due to their distinct business model. ⁵⁵

Cross-country differences also exist in the investor base of bail-inable bank debt when distinguishing between the domiciles of investors at the national, euro area and international levels (see Chart B). Much of the bail-inable debt of the two largest issuing countries, i.e. Germany and France, is held either domestically or outside the euro area. The large share of non-euro area holdings may indicate that bail-in operations on euro area banks can also

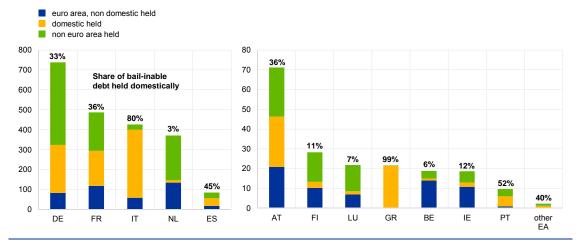
The bail-in tool as prescribed by the EU Bank Recovery and Resolution Directive (BRRD) enables the resolution authority to write down and to convert into equity the claims of a broad range of bank creditors, according to a predefined creditor hierarchy. For more details, see the special feature entitled "Systemic implications of the European bail-in tool: a multi-layered network analysis", *Financial Stability Review*, ECB, May 2016.

⁵⁵ For a more detailed analysis of the who-to-whom holdings, see Hüser, A.-C. and Kok, C., "Mapping bank securities across euro area sectors: comparing funding and exposure networks", *ECB mimeo*.

have non-negligible effects on the rest of the world. There is a more limited share of non-domestic euro area holdings, except for issuances by Dutch banks, and to some extent French banks, which are held by a geographically more diversified investor base. Italy stands out with a relatively high share of domestic investors. Overall, the large share of intra-bank holdings reflects a high degree of interconnectedness in the euro area banking sector.⁵⁶

Chart BHome bias present in most countries, but a relatively high share of non-euro area investors

Bail-inable debt by country of issuance and domicile of investor (Q1 2016; EUR billions)



Sources: ECB Securities Holdings Statistics by Sector and ECB calculations.

Notes: Bail-inable bank debt includes senior unsecured and subordinated debt issuances and excludes secured issuances (e.g. covered bonds) and issuances for which a seniority flag was not available in the database.

The evolution of sectoral holdings of bail-inable bank securities shows some notable patterns coinciding with the introduction of the BRRD (see Chart C). The BRRD was introduced at the beginning of 2015 and the bail-in tool came into force in January 2016. Against this background, given the increased likelihood of being bailed in, some investors may have been incentivised to reduce their holdings of bank securities lower in the creditor hierarchy, while increasing holdings of securities with higher seniority (or disposing of holdings of bank debt and equity altogether). The decrease in bank debt holdings of credit institutions stands out in particular. This decline in exposures to bail-inable debt was accompanied by a relative increase of secured debt holdings between the fourth quarter of 2014 and the first quarter of 2016. Households have also decreased their holdings of bank debt overall, but – unlike banks – they have increased their share of subordinated debt.

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For a more detailed analysis of the cross-country, cross-sectoral differences in bank debt holdings, see Pigrum, C., Reininger, T. and Stern, C., "Bail-in: who invests in non-covered debt securities issued by banks", *Oesterreichische Nationalbank Financial Stability Report*, forthcoming.

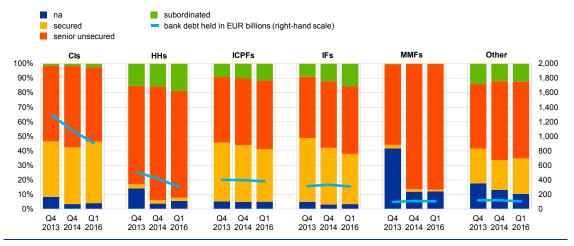
If the bail-in is triggered, shareholders will be bailed in first, followed by subordinated and then senior unsecured creditors. See also Special Feature B, Financial Stability Review, ECB, May 2016.

Chart C

The non-bank sectors have shifted their holdings from higher to lower seniority levels, while banks have reduced their exposures to bail-inable debt

Share in nominal bank debt securities holdings by sector and seniority

(Q4 2013, Q4 2014, Q1 2016; percentages (left-hand scale), EUR billions (right-hand scale))



Sources: ECB and ECB calculations

Notes: Seniority levels are classified into subordinated debt, senior unsecured debt (both bail-inable) and secured debt (not bail-inable). The residual "na" includes securities for which a seniority flag was not available in the database. The calculations are based on the nominal amounts of euro and foreign currency-denominated securities, including "alive" and "non-alive" securities. The investment fund (IF) sector excludes money market funds. "Other" includes financial vehicle corporations, other financial intermediaries, non-financial corporations, governments and holdings not classified elsewhere.

Another important observation is the clear shift in asset allocation by the non-bank sectors from debt securities with higher to lower seniority levels over the last two years. Such a shift is more pronounced for investment funds (IFs), but it can also be observed for ICPFs and households. These patterns seem to be in line with the general trend of increased risk-taking by investment funds and ICPFs observed in their portfolio shifts towards lower-rated debt securities. Based on market values, there are indications that exposures of most sectors to bank equities have declined, most notably for investment funds, credit institutions and households, reflecting falling bank stock prices as well as portfolio shifts within the securities holdings. Overall, it appears that exposures to unsecured bank debt have partly shifted from the banking sector to households, ICPFs and investment funds. Tighter risk-taking constraints for banks compared with other sectors may have played a role in these shifts of bail-inable bank debt.

These shifts of bail-inable debt holdings to sectors outside the core financial system may appear desirable from a financial stability perspective, because risks are borne by investors that are potentially of less systemic relevance. However, there are diverging views as to who should optimally be invested in bail-inable debt securities. Should the risk of losses materialise for a broader set of investors, including private savers, this could have a detrimental effect on spending and the economy. Moreover, the sophistication of investors should matter as the market-disciplining effect of bail-in could be limited, for instance, if households were not demanding adequate risk premia. Ultimately, the observed shifts in bail-inable debt holdings also lend support to concerns

Given that equity holdings are measured at market value, it is not possible to fully disentangle the share of the decrease due to the shedding of assets and the share due to lower equity prices, which have been falling over the same period.

⁵⁹ See also the discussion in Special Feature B, *Financial Stability Review*, ECB, May 2016.

about the growing susceptibility of non-bank financial intermediaries ⁶⁰ and political considerations associated with any bail-in decision which would affect a broader investor base.

For an analysis of the possible role of institutional investors in bank debt securities markets, see Oprică, S. and Weistroffer, C., "Institutional presence in secondary bank bond markets – How does it affect liquidity and volatility?", Working Paper Series, ECB, forthcoming.