



What to do with home sovereign exposure?

Reducing risks to make the EU Banking Union stronger

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The sovereign-bank nexus proved to be a vicious circle of banks and governments weakening each other during the euro-area sovereign debt crisis. Ultimately, it threatened the very existence of the monetary union.

Sovereign risk on bank balance sheets has still not been tackled, in contrast to other risk mitigation measures introduced by the Banking Union. It remains the elephant in the room. The current pandemic with its surge in public debt highlights the need for reform. A solution would be a big leap forward but would require some honest acknowledgements by supervisors and entail new, inconvenient restrictions for banks and politicians.

Total sovereign exposure of banks in the euro area currently amounts to EUR 2.9 tr, i.e. a substantial 9% of total assets, according to the ECB. Claims on domestic governments account for the bulk of that, EUR 2.1 tr, other euro-area governments only for EUR 493 bn and the rest of the world for EUR 316 bn.

Debt securities represent two thirds of total exposure and loans one third. While banks hold domestic claims in the form of bonds and loans in almost equal parts, they have a clear preference for bonds in their non-domestic sovereign portfolio. With respect to government levels, two thirds of total claims on euro-area public entities are on central governments – mostly in the form of bonds. Exposure to local authorities – a fifth of the total – consists almost entirely of loans, exposure to state governments (14%) of both bonds and loans.

National banking sectors differ significantly. Among the largest countries, banks in Italy hold the most domestic sovereign debt relative to capital (194%), followed by Spain (105%), Germany (67%), France (60%) and the Netherlands (46%). However, on top of such differences in concentration risk, there are also differences in sovereign credit risk.

French and Italian banks strongly prefer domestic debt, which accounts for over 90% of their total euro-area exposure. In Spain, the home bias is 82%, in Germany 74% and in the Netherlands only 59%.

Given such differences, sovereign risk mitigation must precede further risk sharing mechanisms such as a mutualisation of deposit insurance (EDIS). Capital requirements for sovereign exposure should be introduced, based both on credit risk according to the sovereign rating and on concentration thresholds which would penalise excessive credit provision to a single government. Capital charges would help to reduce risk, contribute to a level playing field for banks and strengthen fiscal discipline across the euro area.



What to do with home sovereign exposure?



Domestic sovereign exposure and the Banking Union

Banks' exposure to their home government through bond holdings and loans is at the core of the sovereign-bank nexus, the interdependent relationship between banks and national governments. While this nexus exists everywhere, in recent years it has become a focal point for investors and policymakers in Europe, especially in the euro area, due to the unique setup of independent fiscal policy within a monetary and banking union with a common monetary policy and joint banking supervision and resolution. This paper, therefore, will look at the particular sovereign-bank nexus in the European Monetary Union (EMU), recent developments and the likely way forward after the pandemic crisis has triggered a surge in public debt.

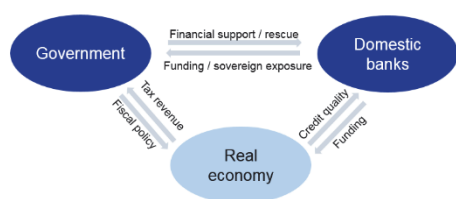
Banks typically hold bonds issued by their home government in domestic currency for funding, liquidity, regulatory and profitability reasons. To obtain central bank funding, banks sell or pledge sovereign bonds to the ECB. Such bonds also serve as so-called "risk-free" collateral in private money markets. To manage liquidity and to meet the regulatory Liquidity Coverage Ratio (LCR)¹, sovereign bonds with deep liquid markets are essential. Banks also hold sovereign bonds to act as primary dealers. Especially in difficult economic situations, sovereign bonds can serve as a "safe haven" or as a carry-trade investment (with yields on the "risk-free" asset higher than funding cost at the central bank for corresponding maturities). In addition, bank *loans* are an important source of funding for local public entities and regional governments.

Banks' exposure to euro-area domestic sovereign debt – including loans² – is essentially excluded from capital requirements, which frees up capital that banks can use otherwise to increase their profitability. The exemption also improves access to funding for governments. Likewise, governments (via regulators) exclude their own debt from concentration limits on bank balance sheets. However, the leverage ratio does apply to banks' public exposure as to any other asset and sets an equity-based ceiling on their capacity to fund governments.³

Sovereign-bank nexus

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Sovereign-bank nexus fuelled euro-area debt crisis



Source: Deutsche Bank Research

During the euro-area sovereign debt crisis, the sovereign-bank nexus proved to be a vicious circle of banks and governments weakening each other which ultimately threatened the very existence of the monetary union. In some peripheral countries, sovereign rating downgrades and surging borrowing costs in the wake of the bankruptcy of Lehman Brothers hit banks' bottom lines as their domestic sovereign bond holdings lost in value, while expensive bank rescues added to public debt. In addition to this direct financial link, the economic health of banks and public finances are also indirectly connected as they both depend on the well-being of the real economy. In the end, the EU and especially the Eurogroup agreed on large rescue loans and austerity measures to overcome the crisis, supported by unorthodox expansionary monetary policy.

The vicious circle can start either in the banking sector or in the public sector. In Ireland, the downward spiral began with a banking crisis caused by a bursting real estate bubble. Public guarantees and recapitalisation measures for the

¹ According to Basel standards, a bank's volatile liabilities (e.g. wholesale funding) have to be covered by liquid assets, most of which are sovereign exposures or central bank assets.

² In this study, "debt" refers to both debt securities and loans.

³ In the EU, a bank's regulatory capital (Tier 1) divided by its total nominal exposure (unweighted by risk) must be equal to or higher than 3%.



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banking sector strained government finances to the point that Ireland's credit rating was downgraded and the state backing for the country's banks lost credibility. The economic downturn aggravated banks' situation and eroded the government's tax base. The government agreed to enter into a bailout programme funded by the EU, the euro area and the IMF. A further round of mutual contagion was avoided and the economy started to recover gradually but Ireland had to undergo strict austerity measures.

In Greece, on the contrary, unsustainable government finances destabilised otherwise profitable domestic banks. The Greek government, with a history of high public debt levels and misreporting of economic statistics, lost investors' confidence in the aftermath of the global financial crisis. Between 2010 and 2015, the government required three bailouts in the form of loans from the EU, the euro area and the IMF. Also, in 2012, Greece became the first industrialised country after the Second World War to default: holders of Greek bonds were bailed-in with a mandatory haircut of 53.5% on the face value and a massive extension of maturities. Hence, Greek banks had to shoulder hefty write-downs on their extensive domestic sovereign bond holdings and required a recapitalisation with bailout funds. Dire economic conditions, political conflict about austerity measures and a looming Greek euro exit in 2015 caused a massive capital flight. The government imposed capital controls and limits on cash withdrawals which were not fully lifted until 2019.

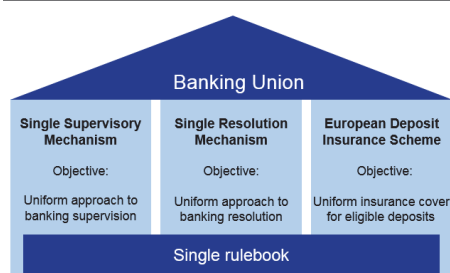
Also, Portugal, Spain and Cyprus entered into bailout programmes. In total, the five distressed countries drew down EUR 477 bn of EUR 616 bn in rescue loans committed. Over 70% (EUR 348 bn) of the funds disbursed were provided or guaranteed by euro-area countries, 17% by the IMF and 10% by all EU countries.⁴

The ECB also played an important role. It overhauled its monetary policy to support ailing governments and banks in the EMU. Specifically, it started to buy euro-area sovereign bonds to push down refinancing costs for embattled countries and loosened collateral rules to give banks in those countries access to (emergency) funding as well as providing longer-term funding to all banks.

Banking Union: Building blocks

2

Banking Union



Sources: European Parliament (EGOV), Deutsche Bank Research

In view of these large bailouts for governments and banking systems, the European Council proposed a "Banking Union" in 2012 to protect the monetary union against future crises and to deepen financial integration. One objective is to avoid financial distress to spread from banks to public finances, i.e. to prevent bank failures and costly public rescues. To this end, a Single Rule Book for stringent bank supervision and stricter capital requirements were implemented. All euro-area banks are now supervised by the Single Supervisory Mechanism (SSM) which combines the ECB and national supervisors. Large banks are subject to direct ECB supervision. If a bank nevertheless gets into trouble and cannot recover, the Single Resolution Board has been established to resolve the ailing bank with a minimal burden on taxpayers and the economy.⁵

As the final building block of the Banking Union, the European Commission proposed a European Deposit Insurance Scheme (EDIS) in 2015, which ended in a political deadlock, though. EDIS aims at loosening the link between banks and their national sovereigns by mutualising deposit insurance across the euro area. Depositor confidence in a bank shall no longer depend on the country

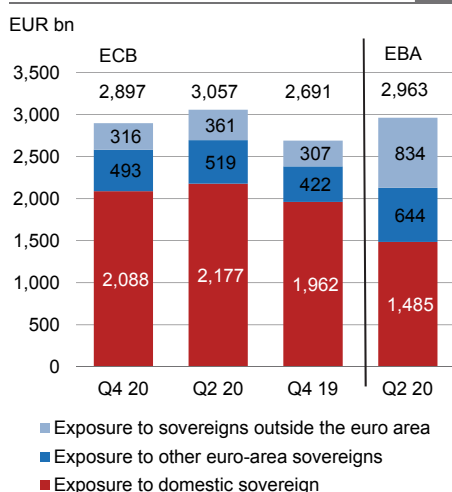
⁴ For a comprehensive overview of rescue programmes for European countries, please see https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/financial-assistance-eu_en.

⁵ For a detailed description of Banking Union regulation and bodies, please see https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union_en.



What to do with home sovereign exposure?

Euro-area banks' total sovereign exposure



Sources: ECB, EBA, Deutsche Bank Research

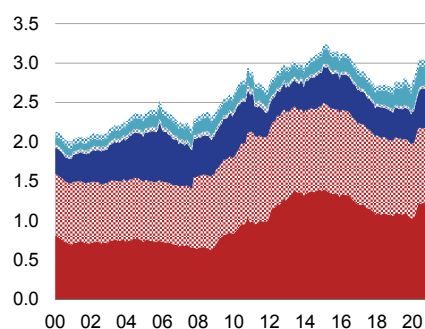
where it is domiciled. Such risk sharing faces opposition from financially stronger member states which do not want to be a payer to EDIS because they deem other countries' banks, national deposit insurance systems and public finances as riskier than their own. Consequently, these member states push for further risk reduction, like divestment of non-performing loans (NPL), harmonisation of rules on business insolvency and loan recovery procedures, harmonisation of bank insolvency law⁶ and uniform taxation of banks.

Also, domestic sovereign debt held by national banking systems is in focus. The higher banks' exposure to their sovereign, the more likely are bank failures and pay-outs from EDIS if the sovereign runs into fiscal problems. Such pay-outs would be transfers to this country from all others. Moreover, strained sovereigns "could exercise moral suasion over domestic banks so that these would buy unlimitedly large quantities of their debt, funded by deposits protected by EDIS (...) without the due accompanying disciplines".⁷

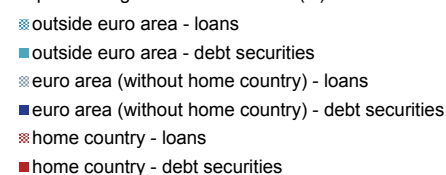
Given the economic crisis and surge in public debt caused by the coronavirus pandemic, the Banking Union and the fundamental debate on risk sharing and risk reduction is back on the political agenda. So are the calls to implement EDIS and to mitigate risks from banks' domestic sovereign exposure, respectively. In this publication, we will i) analyse the different dimensions of euro-area banks' sovereign exposure, ii) present potential measures to mitigate risk and iii) exemplify the capital impact for banks if regulatory charges on sovereign exposure were introduced.

2020: Sovereign exposure first surges, then drops back below EUR 3 tr

Exposure of euro-area banks to general government in EUR tr until December 2020



Exposure to governments located (in) ...



Sources: ECB, Deutsche Bank Research

How large is the sovereign exposure of euro-area banks?

The short answer is: a fairly substantial EUR 2.9 tr, or 9% of the banking system's total assets in December 2020. The details, however, vary a bit, depending on the statistical source.

- i) ECB figures. ECB statistics on the aggregated balance sheets of monetary financial institutions (MFIs) deliver mostly monthly, sometimes quarterly information on a country-by-country basis comprising all euro-area banks.⁸ This will be our main data source.
- ii) EBA figures. We will enhance our analysis by using semi-annual data from the European Banking Authority's (EBA) transparency exercise. 108 banks from the euro area participated in the latest round (June 2020), accounting for 82% of total banking assets in the monetary union.

Both sources look at banks' exposure to general government, i.e. all levels of government. The most important difference is the degree of bank consolidation. While balance sheet statistics refer to banks' operations in the reporting country only, on a legal-entity basis, EBA data is based on banking groups' consolidated balance sheets, i.e. all bank and financial subsidiaries (except insurance companies) in all countries worldwide are consolidated into the headquarter.⁹

⁶ European Parliament, Economic Governance Support Unit (EGOV) (2020). A roadmap to completing the Banking Union. June, p. 9.

⁷ Véron, Nicolas (2017). Sovereign Concentration Charges: A New Regime for Banks' Sovereign Exposures; provided at the request of the Economic and Monetary Affairs Committee. November, p. 12.

⁸ We have corrected MFI statistics for money market funds (MMF) in order to analyse bank balance sheets only, except for the breakdown by government level where such a correction is not possible.

⁹ Please refer to paragraph "ECB statistical reporting differs from EBA transparency exercise" for a more detailed description of both statistical sources.

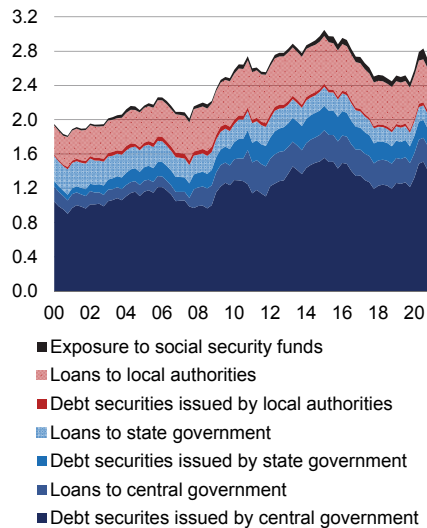


What to do with home sovereign exposure?

Banks mostly hold central government bonds and local authority loans

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Exposure of euro-area banks* to euro-area governments in EUR tr until December 2020



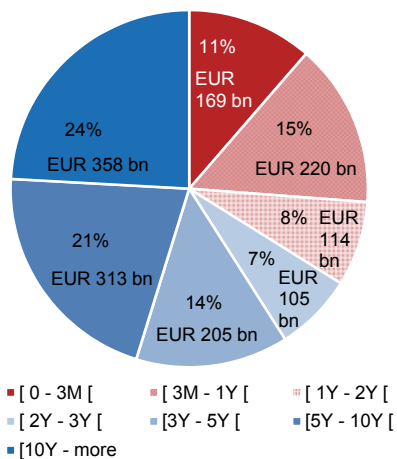
* Includes claims held by MMFs; EUR 116 bn in December 2020.

Sources: ECB, Deutsche Bank Research

Half of banks' claims are long-term

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Euro-area banks' domestic sovereign exposure by maturity, June 2020



Sources: EBA, Deutsche Bank Research

Size and structure of euro-area banks' sovereign exposure

In December 2020, according to the MFI statistics, sovereign exposure of the euro-area banking sector amounted to EUR 2.9 tr, a significant asset on its total balance sheet of EUR 33.8 tr. The lion's share were claims on the respective domestic government (EUR 2.1 tr, 72% of total sovereign exposure). Exposure to other euro-area governments accounted for EUR 493 bn (17%), whereas public debt from the rest of the world stood at EUR 316 bn (11%).

Split by instrument, debt securities account for two thirds of banks' total sovereign exposure and loans for one third. While banks hold domestic sovereign debt in the form of bonds and loans in almost equal parts, they have a clear preference for bonds in their non-domestic sovereign debt portfolio.

MFIs provide finance to different levels of government. Central governments are the largest debtor group representing 63% of all claims on euro-area public entities. Most of the exposure to central governments is in bonds. Local authorities follow with 20% of the euro-area sovereign exposure, almost entirely loans. State governments account for 14%, both as bonds and loans. MFIs hardly hold any debt issued by social security funds (4%).

EBA data (June 2020) reveals the remaining maturities of banks' domestic sovereign exposure. One third will mature within the next 2 years, one fifth is mid-term debt and almost half of it has maturities over 5 years. The EBA does not provide a breakdown by instrument, but a rough overview by valuation method.¹⁰ Assets at fair value or market value, i.e. bonds, account for about one third of total claims on home governments. They carry an interest rate risk that can impact banks' balance sheets immediately. Assets valued at amortised cost make up the remainder. Amortised cost is used to value loans, but can also be applied to bonds, depending on the portfolio in which they are held.

Euro-area banks add domestic sovereign debt in times of crisis

Since 1999, the EMU allows banks to diversify into non-domestic government debt issued in "domestic" currency, i.e. in euro. Nevertheless, banks have turned to domestic sovereign debt every time when things got rough.

After inception of the EMU, according to the MFI statistics, banks initially increased their total sovereign exposure by adding debt issued by other euro-area sovereigns, while keeping their domestic exposure flat. As a result, the home bias – the ratio of banks' domestic to all euro-area sovereign exposure – dropped to 66%. But starting with the financial crisis in 2008, banks invested more heavily in domestic sovereign debt, while keeping the size of their euro-area engagement largely unchanged. Throughout the following euro-area debt crisis, banks continued to take on more and more domestic sovereign debt, but they shed other euro-area sovereign exposures. The home bias rose to a record 87%. When the economic situation improved, banks slowly divested some domestic sovereign debt starting in 2016. However, they kept roughly one third (EUR 500 bn) more on their balance sheets than before the financial crisis.

¹⁰ The EBA reports the breakdown by valuation method for most, but not for the entire sovereign exposure. Hence, the figures are only indications.

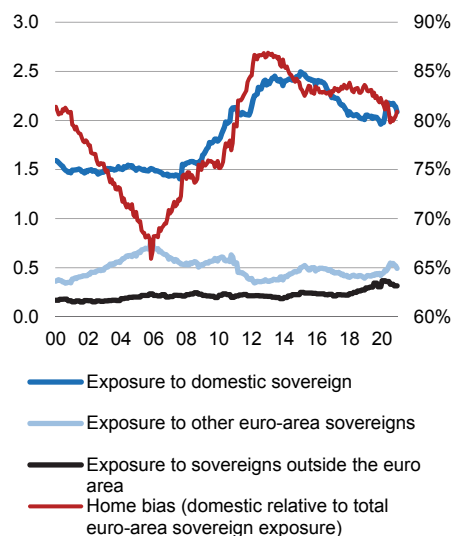


What to do with home sovereign exposure?

2008, 2011, 2020: Banks finance their home governments in times of crisis

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Euro-area banks' exposure in EUR tr (left), home bias in % (right), until December 2020

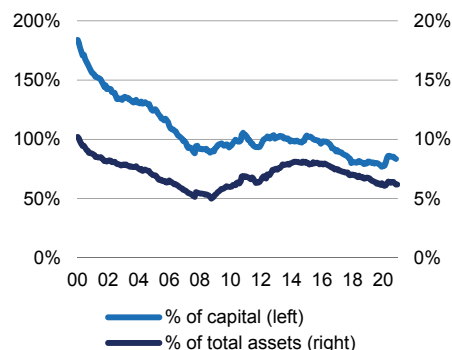


Sources: ECB, Deutsche Bank Research

Financing governments has become less important for banks

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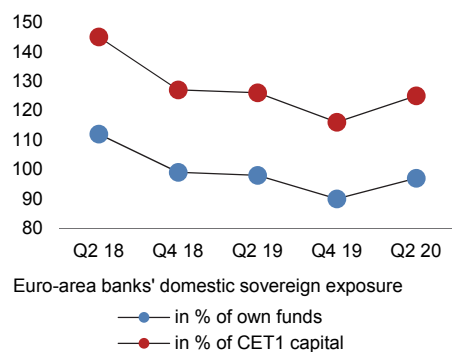
Euro-area banks' exposure to respective domestic government until December 2020



Sources: ECB, Deutsche Bank Research

Corona crisis reverses trend of falling sovereign debt relative to capital

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Sources: EBA, Deutsche Bank Research

From March to June 2020, banks absorbed a considerable part of soaring public debt, issued to finance large relief packages, before reducing their holdings in the fourth quarter. But domestic and other euro-area exposures remain above pre-corona levels (+ EUR 110 bn and + EUR 46 bn, respectively).

Contrary to the previous crises, banks invested both at home and in the rest of the euro area. Nevertheless, the biggest increase in absolute terms has been in domestic exposure. Thus, the sovereign-bank nexus has tightened again.¹¹ The home bias has come down slightly to 81% by the end of 2020.

Investments in extra-euro area public debt have been on an upward trend for 20 years, albeit from a very low level. Growth picked up in 2018 and did not halt when the pandemic crisis hit.

Bonds issued by central governments accounted for over 70% of MFIs' additional investments in euro-area sovereign paper in the second and third quarter. Remarkably, a quarter of the increase went into social security funds, while there was only a small uptick in state and local public debt on MFI balance sheets. With respect to instruments, bond holdings rose across all government levels while loans mostly decreased slightly.

Domestic sovereign debt relative to banks' capital and total assets

The tightening and loosening of the sovereign-bank nexus over the past years also shows up in the ratio of banks' domestic sovereign exposure to total assets and capital.

Before the financial crisis, domestic sovereign exposure declined as a share of total assets because of strong asset growth. Thereafter, banks virtually froze their balance sheets and the ratio rose and receded in line with public debt holdings. In 2020, higher domestic sovereign debt was fully compensated by the surge in total assets and the ratio stayed almost flat (6.2% in December).

Banks' total equity rose significantly between 2000 and 2014, and has grown slowly since then. Thus, domestic sovereign exposure as a percentage of total equity dropped until 2008 to around 100%. It then lingered around this mark with corresponding increases in capital and public debt. From 2016 on, exposure reductions brought down the ratio to 77%. The coronavirus crisis initially pushed up the ratio substantially, before it fell back to 81% in December 2020.

Instead of balance sheet (i.e. accounting) figures, the EBA looks at regulatory capital. By June 2020, domestic sovereign exposure of euro-area banks equalled 97% of own funds and 125% of CET1 capital. Even though these figures differ from the ratio derived from ECB balance sheet data, both sources show falling sovereign exposure relative to capital in 2018 and 2019 and a surge after the onset of the coronavirus crisis.

For a comparison of domestic sovereign exposure as reported by ECB and EBA, please see table 11.

So far, banks have reacted more prudently to the pandemic than in previous crises. Their claims rose not just on their home, but also on other euro-area sovereigns. Moreover, banks quickly started to cut back on the increased exposure. Of course, this is a preliminary picture, as the economic impact of the crisis will be felt for much more time to come.

¹¹ See also Mai, Heike (2020). Corona crisis: The sovereign-bank nexus is tightening. Chart in Focus. Deutsche Bank Research. July.

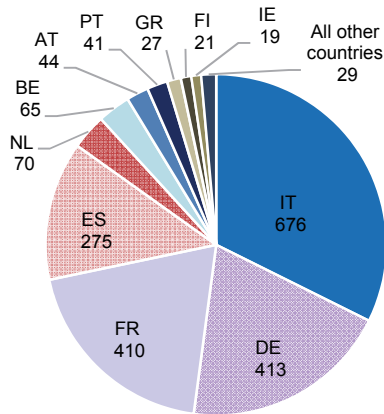


What to do with home sovereign exposure?

Euro-area banks: Domestic sovereign exposure

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EUR bn, December 2020



Sources: ECB, Deutsche Bank Research

Euro-area banks: Large claims on domestic government

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	Dec 20	Jun 20	
	ECB	ECB	EBA
Domestic sovereign exposure (EUR bn)	2,090	2,177	1,485
in % of			
total euro-area sovereign exposure (home bias)	80%	81%	70%
of total assets	6.2%	6.4%	6.3%
of capital*	81%	86%	97%

* capital and reserves (ECB), own funds (EBA)

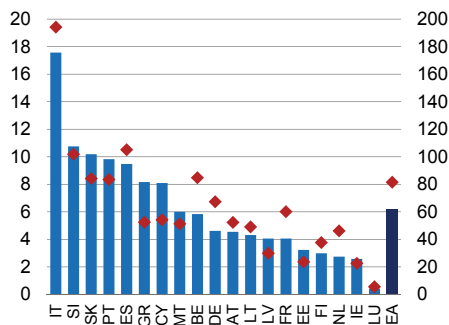
Sources: ECB, EBA, Deutsche Bank Research

Sovereign exposure differs across countries

Bank claims on home sovereign higher in South & East than in North & Centre

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Euro area, December 2020



Domestic sovereign exposure in % of
■ total assets (left) ◆ capital (right)

Sources: ECB, Deutsche Bank Research

A look at individual EMU countries reveals significant differences in local banks' domestic sovereign exposure and its relative weight on balance sheets.

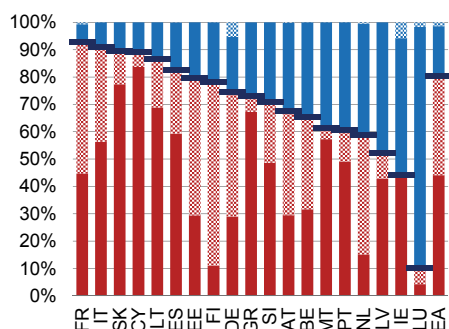
The largest national banking systems are also holding the largest portfolios of domestic sovereign debt – France, Germany, Italy, Spain and the Netherlands. This is no surprise, but relative to total assets, only the banking systems in Italy and Spain rank among the top five. In general, in countries where exposure is high as a share of total assets, it is also high relative to capital. In such countries, spill-overs from distressed sovereigns to banks and vice versa are more of a financial stability risk.

The home bias in EMU member states ranges between 52% and 95%, except for Ireland (44%) and Luxemburg (11%) whose (relatively small, but international) banking sectors hold less domestic than other euro-area sovereign debt. In addition, there are substantial cross-country differences regarding the preferred debt instrument. In Germany and the Netherlands, banks fund domestic authorities mostly through loans, whereas in Italy and Spain, it is mostly through bonds. In France, banks' exposure is almost equally in loans and bonds. However, in all countries, debt from other euro-area governments consists almost exclusively of securities.

Pronounced home bias in most countries

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% of total bank exposure to EMU governments, December 2020



Exposure to general government located in...
 ■ euro area (without home country) - loans
 ■ euro area (without home country) - debt securities
 ■ home country - loans
 ■ home country - debt securities
 — Home bias

Sources: ECB, Deutsche Bank Research

Five largest markets represent 80% of euro-area banking sector

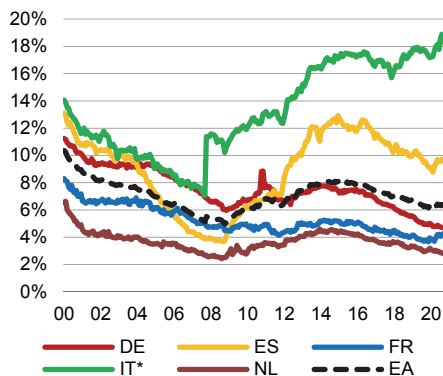
In the following, we will take a closer look at the five largest national markets which make up over 80% of the euro area's banking sector, reflecting their economic weight and population share. These countries largely shape the aggregates for the euro area. Because of their size, a potential risk sharing would be most serious in times of crisis. In Italy and Spain, e.g., banks purchased large amounts of government bonds during the euro-area debt crisis. In France, Germany and the Netherlands – the non-crisis, core countries – investment in home sovereign debt increased less in absolute terms and relative to total assets. In all five countries, though, the increase in sovereign exposure was mostly driven by bond purchases and only to a small extent by loans.



What to do with home sovereign exposure?

Banks in distressed countries: Helping out their home government 14

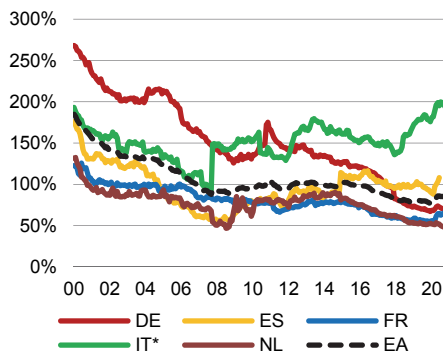
Domestic sovereign exposure in % of total assets, until December 2020



* Surge in 2007 due to a statistical reclassification of loans.
Sources: ECB, Deutsche Bank Research

Most exposed: Once German, now Italian banks 15

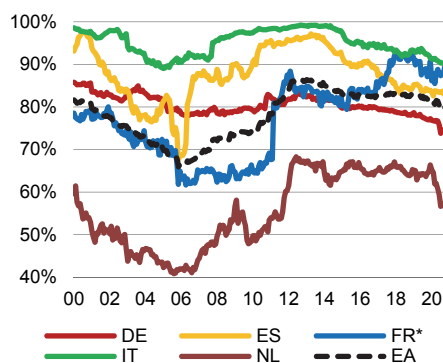
Domestic sovereign exposure in % of capital, until December 2020



* Surge in 2007 due to a statistical reclassification of loans.
Sources: ECB, Deutsche Bank Research

Home bias differs considerably 16

Domestic relative to total euro-area sovereign exposure, until December 2020



* Surge in 2011 due to a statistical reclassification of other euro-area bonds.
Sources: ECB, Deutsche Bank Research

France is the largest banking market in the EMU with EUR 10.1 tr in total assets.¹² Despite holding the third-largest portfolio of domestic government debt, the exposure is below the euro-area average, relative to total assets or equity. Both ratios have mostly been falling or trending sideways since 2000, because a steady rise in domestic public debt holdings was accompanied by at least equally strong growth in assets and capital. Between 2015 and 2019, French banks reduced other euro-area sovereign debt more than their domestic sovereign debt, which let the home bias rise to over 90%. In the current crisis, investments again increased more in the domestic segment.

German banks have total assets of EUR 8.9 tr. Until the financial crisis, they held by far the most domestic public debt in absolute terms, and also in relation to total assets, they were well above the euro-area average. Due to relatively low equity, the ratio over capital surpassed that of other countries by far. While the financial crisis did not trigger investments in domestic sovereign exposure, the euro-area debt crisis in 2010-11 did, at least temporarily. It may have been a flight to security as German sovereign bonds are the European benchmark. Banks kept their public portfolio stable afterwards, but they started to divest domestic sovereign exposure in 2016 when yields on German bunds turned negative. German banks also reduced their claims on other euro-area sovereigns. Indeed, their home bias remained almost constant at approximately 80% for 20 years. When the pandemic hit, banks initially invested in domestic as well as other euro-area debt, however, they reduced the former to the pre-crisis level by the end of the year. The home bias therefore dropped to 74%.

Italian banks, with total assets of EUR 3.8 tr, hold the largest amount of domestic sovereign debt in absolute terms and in relation to total assets. Since 2008 and especially since the euro-area debt crisis, this portfolio has grown, while banks' balance sheets have expanded less or stagnated. The high ratio relative to capital is also explained by the large exposure, not by weak capitalisation. During the debt crisis, Italian banks engaged in carry trades which became attractive due to rising yields on Italian government bonds and possible due to the ECB's expansionary monetary policy (cheap funding via LTROs). Italian banks have always had a strong preference for domestic over other euro-area debt. During the debt crisis, they sold almost all other euro-area paper. In 2020, by contrast, Italian banks expanded both their domestic and other euro-area debt portfolio. The home bias remained at 91%.

Total assets of the banking sector in Spain amount to EUR 2.9 tr. Between 2008 and 2013, banks more than tripled their claims on the domestic sovereign, mostly by bond purchases. Similarly to their Italian peers, they absorbed rising public debt at attractive yield. Sovereign exposure reached 12% of total assets, while banks cut back lending to private households and companies. From 2014 until early 2020, though, Spanish banks steadily reduced their absolute domestic sovereign exposure, bringing down the home bias from 97% to 83%. During the coronavirus crisis, it stayed around this mark as banks returned to increase their domestic as well as other euro-area public bond holdings.

Dutch banks (EUR 2.5 tr in total assets) almost doubled their claims on the domestic sovereign between 2008 and 2015. The ratios relative to total assets and capital grew accordingly but remained below the euro-area average. Since 2016, the absolute and relative exposure has been trending downwards. The Dutch banking system was the only one among the top five to keep its domestic sovereign portfolio flat in summer 2020 and to even shrink it below the pre-crisis

¹² Corrected for EUR 400 bn in MMF assets in December 2020.

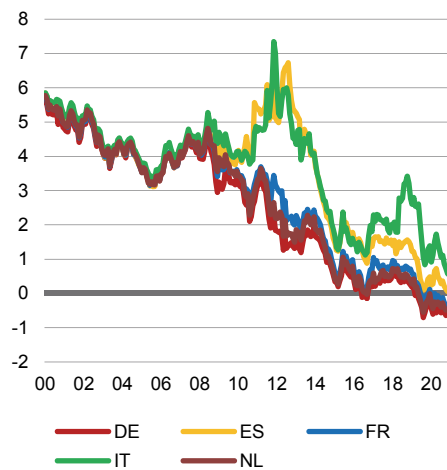


What to do with home sovereign exposure?

Italian and Spanish bonds offer highest yield

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10-year government bond yield in %



Sources: WEFA, Deutsche Bank Research

level towards the end of the year. Investments in other euro-area debt rose in 2020 though, hence the home bias has declined to 59%.

ECB statistical reporting differs from EBA transparency exercise

In contrast to these ECB statistics, the EBA supervisory data shows less difference between the five large countries as regards their domestic sovereign exposure relative to total assets and capital. Put differently, such risks are broadly similar for the national banking systems, according to the EBA. It reports worse (i.e. higher) or unchanged exposure ratios than the ECB for France, Germany and the Netherlands and better (lower) ratios for Italy and Spain.

Domestic sovereign exposure in June 2020: ECB vs EBA

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	total, in EUR bn		in % of total assets		in % of capital*		home bias, in %	
	ECB	EBA	ECB	EBA	ECB	EBA	ECB	EBA
DE	433	200	5	5	73	91	76	68
ES	280	231	10	6	108	104	83	79
FR	426	498	4	6	65	103	88	74
IT	703	254	18	10	195	130	91	70
NL	78	134	3	6	52	88	59	64

* capital and reserves (ECB), own funds (EBA)

Sources: ECB, EBA, Deutsche Bank Research

Differences arise from the distinct methodologies of statistical and supervisory reporting. The MFI balance sheet statistics serve the ECB as a basis for its monetary policy. Supervisory reporting, though, aims at assessing risks at individual institutions and at industry level. The EBA transparency exercise builds on banks' supervisory reports (Financial Reporting and Common Reporting).¹³ The most important differences are: i) the degree of consolidation, ii) the reporting population and iii) accounting and valuation methods.

i) EBA data is on group level, i.e. based on consolidated bank balance sheets across borders and financial sub-sectors (except for insurance companies). This means the figures include banks' foreign operations and other financial businesses – globally. ECB data, however, refers to the national banking business only.

Cross-border consolidation, however, is a somewhat technical view. A parent bank does not always have full control over a subsidiary, which is managed locally, subject to national supervisors and law and possibly co-owned by third parties. National authorities are interested in strong banks within their jurisdiction in order to prevent a possible burden on their deposit insurance scheme or economy. Even within the EU, national political interference must be expected, as politicians are accountable to their national voters and taxpayers. A globally consolidated balance sheet does not reflect such national influence.

Cross-border consolidation leads to higher total assets and capital at the parent bank. But it may not alter significantly its domestic sovereign debt holdings because the foreign subsidiaries' sovereign debt will probably be mostly "domestic" from the subsidiaries' perspective. As a consequence, EBA data is likely to show lower domestic exposure in relation to total assets and capital

¹³ Since 2018, data on sovereign exposures in the EBA transparency exercise stems from CoRep (before, from FinRep).

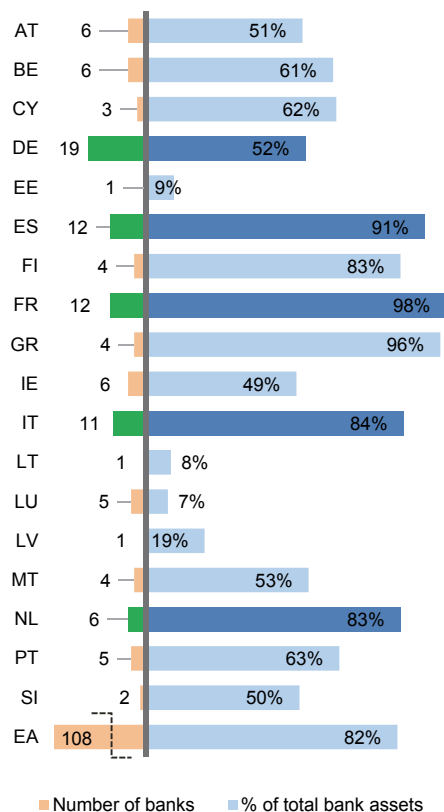


What to do with home sovereign exposure?

Significant differences in EBA coverage of national banking markets

19

EBA transparency exercise, June 2020



Dark colours: Five largest countries which account for 82% of euro-area bank assets.

Sources: EBA, ECB, Deutsche Bank Research

than ECB data. This effect might be reinforced by the consolidation of non-bank financial subsidiaries into the parent which is not allowed for ECB statistical reporting.

ii) The ballooning effect from cross-border and cross-industry consolidation on total assets, however, is countered by the fact that the EBA transparency exercise only uses a sample of banks which lowers absolute figures. ECB statistics, by contrast, encompass all banks of a country (plus money market funds, which are excluded from calculations in this study). The EBA sample size is also different for each country. In Germany, only 52% of banking assets are in scope, versus 98% in France. Possibly, the smaller institutions, which are not covered, hold systematically higher or lower shares of sovereign debt (or capital), depending on their business model.

iii) Accounting and valuation rules underpinning statistical (ECB/MFI) and supervisory (EBA) reporting also differ. In supervisory reporting, loans are mostly valued at amortised cost, net of provisions and valuation adjustments. MFI statistics, however, show the full amount the debtor is obliged to repay, i.e. bad loans are not recorded separately from loans. In addition, EBA data presents securities at market value or amortised cost, depending on the portfolio, and classifies them by remaining maturity. But MFI statistics report securities always at market value and by original maturity.¹⁴ In a 2015 survey, the Italian and Spanish central banks observed material differences between banks' supervisory and statistical reporting; the German central bank indicated some differences. No substantial discrepancies were found in France and the Netherlands.¹⁵

How to reduce risk from domestic sovereign exposure?

For years, there has been a discussion about different measures to reduce financial stability risks arising from banks' sovereign debt holdings. Nevertheless, proposals such as the one from the Basel Committee on Banking Supervision in 2017 to cut the preferential regulatory treatment did not find sufficient political support and did not lead to any action.¹⁶ The European Commission recognised that changing regulation could help to loosen the sovereign-bank nexus, but cautioned that all elements of the Banking Union and Capital Markets Union needed to be completed before any such reform. This would essentially put risk sharing before risk reduction.¹⁷

Measures to improve the transparency of banks' sovereign portfolios have met with less resistance and have been implemented to some degree – in the EU, for instance, through the biannual EBA transparency exercise. As the coronavirus crisis has triggered both renewed calls to finalise the Banking Union and a surge in public debt, regulation of banks' sovereign exposure may soon be back on the political agenda.

¹⁴ ECB (2019). Manual on MFI balance sheet statistics. January.

¹⁵ ECB (2015). Survey of national practices regarding MFI balance sheet statistics. November.

¹⁶ Basel Committee on Banking Supervision (2017). The regulatory treatment of sovereign exposures. Discussion paper. December.

¹⁷ European Commission (2017). Reflection paper on the deepening of the Economic and Monetary Union. May 31.

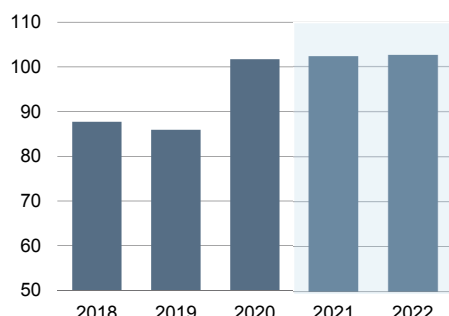


What to do with home sovereign exposure?

Government debt in the euro area

20

% of GDP



Source: European Commission

Risk weights based on credit risk

The prudential requirements adopted after the financial crisis, Basel III, did not introduce new rules for banks' sovereign exposures but, in principle, maintained risk weights between 0% and 150%, depending on the sovereign's credit rating. In this case, euro-area banks would need EUR 53.6 bn in additional capital to back their domestic exposure alone.¹⁸ Italian banks would have to shoulder most of the burden due to a large exposure and a relatively low rating. Banks in highly rated France, Germany and the Netherlands would not need new equity, though they would still have to hold capital against claims on other euro-area governments.

Capital charges for sovereign exposures according to Basel III (standardised approach)

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Credit rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	0%	20%	50%	100%	150%	100%

Example: Spanish banks hold domestic sovereign exposure of EUR 279 bn. As Spain is rated "A", this would result in risk-weighted assets of EUR 56 bn. Assuming banks aim at a capital ratio of 12%, they would need additional equity of EUR 6.7 bn.

Sources: BIS, ECB, S&P Global, Deutsche Bank Research

However, the Basel Accord grants the option to apply lower risk weights for exposures to domestic government denominated in domestic currency. In fact, all jurisdictions take full advantage of this and assign a risk weight of 0%. This means that such exposures do not count at all into banks' risk-weighted assets (RWA) and thus are not backed by equity.

In the EU, the Capital Requirements Regulation (CRR) transposes Basel rules into law and assigns banks' exposure to central governments and central banks in domestic currency a risk weight of 0%. The same is true for claims on regional governments and local authorities as well as on public-sector entities if these have tax-raising powers or if they benefit from institutional arrangements to reduce the risk of default or from government guarantees. These rules apply under the standardised (STA) approach to calculate a bank's RWA and capital requirements. Under the internal ratings-based (IRB) approach, banks use their own models. In the EU, they are also allowed a 0% risk weight for domestic sovereign exposure under certain conditions.

In fact, due to widespread use of the zero risk weight option globally, banks' average risk weight for central government exposures (domestic as well as in foreign currency) was only 3% under the STA approach and 6.5% under the IRB approach in 2016 for a sample of internationally active banks.¹⁹ Hence, it was way below the "regular" risk weights stipulated by Basel III.

In its discussion paper of 2017, the Basel Committee sought a compromise between the original rules and their current application. It proposed much lower risk weights (0-9%) for sovereign exposures in domestic currency in return for removing the option of preferential risk weights at national discretion.

Even though the proposed risk weights are fairly low, they can be a starting point for further discussion and calibration. They would require euro-area banks to increase their equity by EUR 5.9 bn to capitalise their *domestic* sovereign exposure, a simple back-of-the-envelope calculation shows. Italian banks would have to raise EUR 4.1 bn, banks in Spain EUR 660 m and banks in France EUR 492 m. Given a 0% risk weight for AAA-rated sovereigns, capital requirements

¹⁸ Assuming that banks aim for a core capital ratio of 12%.

¹⁹ Basel Committee (2017), p. 19.



What to do with home sovereign exposure?

Simulation I

22

Additional capital banks would need for EMU sovereign exposure in case of credit risk weights as proposed by BIS (2017), as of December 2020

	S&P rating	Domestic exposure		Other EMU exposure	
		Risk weight	Capital (EUR m)	Risk weight	Capital (EUR m)
AT	AA+	1%	53	1%	210
BE	AA	1%	78	1%	346
CY	BBB-	6%	38	1%	7
DE	AAA	0%	-	1%	1,423
EE	AA-	1%	1	1%	3
ES	A	2%	660	1%	584
FI	AA+	1%	25	1%	58
FR	AA	1%	492	1%	323
GR	BB-	7%	230	1%	102
IE	AA-	1%	23	1%	245
IT	BBB	5%	4,056	1%	684
LT	A+	2%	4	1%	3
LU	AAA	0%	-	1%	309
LV	A+	2%	2	1%	9
MT	A-	3%	9	1%	15
NL	AAA	0%	-	1%	493
PT	BBB	5%	244	1%	266
SI	AA-	1%	6	1%	20
SK	A+	2%	23	1%	11
EA			5,943		5,109

Risk weights according to table below.

Example: French banks' domestic exposure of EUR 410 bn would be risk-weighted with 1%, resulting in RWA of EUR 4 bn. Assuming banks aim at a capital ratio of 12%, French banks would need additional equity of EUR 492 m.

Due to a lack of data, we assume an AA rating for all claims on other euro-area governments.

Credit rating	AAA	AA	A	A-
Risk weight	0%	1%	2%	3%
	BBB+	BBB	BBB-	BB
	4%	5%	6%	7%

Sources: BIS, ECB, S&P Global, Deutsche Bank Research

would not change for banks in Germany, the Netherlands and Luxemburg. However, claims on *other euro-area* governments – so far also exempt from capital requirements – would have to be capitalised, too. As there is no data on the nationality of banks' foreign debtors, we assume a 1% risk weight on average (AA rating). In this case, banks would need another EUR 5 bn. Nonetheless, the additional capital of EUR 10.9 bn in total would only correspond to a 0.4% increase in euro-area banks' current capital of EUR 2.6 tr. For comparison, this figure has risen by 49% or EUR 849 bn since the onset of the financial crisis.

Sovereign debt of non-euro governments, in foreign currency, would be subject to substantial risk weights between 25% and 100%. The reason for these debt holdings is usually foreign subsidiaries, trade finance or capital markets businesses. According to EBA data, banks in France, Spain and Germany have the largest such portfolios.

Credit risk weights for sovereign exposures have been criticised for relying on ratings provided by private companies. Moreover, sovereign ratings can be difficult to model because sovereign defaults are rare but dramatic events. As with other financial assets, the strongest argument against risk weights under Basel rules, though, is pro-cyclicality. In a stressed financial situation, sovereign rating downgrades would trigger higher capital requirements, in addition to losses caused by falling prices of sovereign bonds.

Risk weights based on concentration thresholds

As an alternative, there have been proposals to introduce risk weights based on concentration thresholds.²⁰ Large exposures to private counterparties are capped by a regulatory limit fixed at 25% of capital. Bank claims on governments and public entities, however, are exempt from this limit²¹ and exceed it by far in most euro-area countries.

The new risk weights should not affect the entire sovereign exposure. To some extent, it should continue to be exempt from large exposure limits, because banks need to hold such portfolios to meet liquidity requirements, and for many financial market activities. Therefore, below a certain threshold, a risk weight of 0% would remain in place, but above that, risk-weighted assets would need to be capitalised according to existing capital requirements. The larger the claims on an individual sovereign, the higher the "concentration risk weight" assigned.

To see how this might impact banks' capital needs, we devise a hypothetical rule based on rising risk weights for brackets of sovereign exposure relative to capital. Below a threshold of 33%, there would be a 0% risk weight. This would allow banks to meet liquidity requirements and still avoid any risk weights by diversifying into three euro-area sovereigns.²² Between 33% and 100%, a risk weight of 5% would apply, and so on beyond that.

Total claims would be broken up into these brackets and the resulting RWA amounts would be added up, similarly to a progressive income tax system. In such a scenario, euro-area banks as a whole would need an additional EUR 8.6 bn to capitalise their domestic sovereign exposure. Again, Italian banks would

²⁰ See e.g. Basel Committee (2017), p. 28 f.; Véron (2017), p. 21 f.

²¹ Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012, Part IV Large Exposures, Article 400.

²² On average, a bank needs high-quality liquid assets (mostly sovereign claims) of about 100% of capital to meet the Liquidity Coverage Ratio. Basel Committee (2017), p. 30.



What to do with home sovereign exposure?

Simulation II

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Additional capital banks would need for EMU sovereign exposure in case of concentration risk weights, as of December 2020

	Domestic exposure/ capital	Capital for domestic exposure (EUR m)	Other EMU exposure/ capital*
AT	52%	97	25%
BE	85%	238	45%
CY	54%	12	7%
DE	67%	1,261	23%
EE	24%	-	6%
ES	105%	1,147	22%
FI	38%	15	11%
FR	60%	1,108	5%
GR	52%	61	19%
IE	22%	-	28%
IT	194%	4,313	20%
LT	49%	3	8%
LU	6%	-	49%
LV	30%	-	27%
MT	51%	5	32%
NL	46%	119	33%
PT	83%	147	55%
SI	102%	20	42%
SK	84%	35	10%
EA		8,582	

* No capital requirement, as exposure to individual sovereigns is assumed to be below 33% threshold.

Risk weights according to table below.

Example: German banks hold domestic exposure of EUR 413 bn which equals 67% of their capital. Exposure below 33% of capital (EUR 203 bn) is risk-weighted with 0%, between 33% and 100% (EUR 210 bn) with 5%. This would result in RWA of EUR 11 bn. Assuming banks aim at a capital ratio of 12%, German banks would need additional equity of EUR 1.3 bn.

Sov. ex./ cap.	<33%	33-100%	100-150%
Risk weight	0%	5%	6%
	150-200%	200-250%	>250%
	9%	15%	30%

Sources: ECB, Deutsche Bank Research

have to bear half of the total increase (EUR 4.3 bn), followed by German (EUR 1.3 bn), Spanish and French banks (EUR 1.1 bn each). Overall, these are still very modest figures though. Given Italian banks' EUR 348 bn in capital, the increase would only amount to 1.2%. In Spain, it would be 0.4%, in Germany and France 0.2% and in the Netherlands 0.1%.

Probably no capital would be required for claims on other euro-area sovereigns, because these are below the 33% threshold in most banking systems. Even in the few countries with higher ratios, such exposures will usually not be concentrated on one issuer.

As regards risk reduction, however, a mere focus on concentration risk could have little impact. Banks with lower-rated sovereigns might reduce their domestic debt holdings to avoid capital charges but choose to keep the yield profile by investing instead in debt issued by other, similarly rated sovereigns. Indeed, EBA data suggests that this has happened since 2015.²³

There are practical limits to diversification though. Almost half of euro-area banks' domestic public-sector exposure is in loans and loans cannot easily be sold. When granting new loans, diversification across different EMU countries would also be difficult especially for smaller banks with a national or regional focus. Therefore, diversification would need to be achieved primarily through the bond portfolio. However, bond markets could simply be too narrow to avoid concentration charges. In order to maintain the risk profile of their sovereign portfolio, banks would have to sell domestic and buy similarly rated euro-area paper instead. Banks in Germany (AAA), for example, would have to divest all of their domestic bonds worth EUR 160 bn and shift those funds into Dutch or Luxemburgish paper. But total bonds outstanding of these two countries amount to "only" EUR 358 bn and EUR 12 bn, respectively. Banks in France (AA) would have to reshuffle EUR 185 bn, banks in Spain (A) EUR 188 bn and banks in Italy (BBB) EUR 419 bn.²⁴ Hence, particularly banks domiciled in large countries would struggle to avoid an RWA increase.

Pooling of risks: Next Generation EU, SURE & sovereign bond-backed securities

Fiscal policy, in principle, is the sole competence of individual EU member states, except for the relatively small EU budget which also has to be approved unanimously. Nevertheless, there have been more and more attempts in recent years by the Commission and some countries to (partly) mutualise fiscal funding or at least allow weaker states to benefit from the better ratings of the strongest sovereigns. While securitisation of government bonds did not take off, debt issuance by the EU did. Such EU bonds represent a supranational type of sovereign exposure for investors, including banks.

²³ Hussain, Monsur, Rankeskog, Erik (2020). Coronavirus Relief Reinforces the EU Sovereign-Bank Nexus. Fitch Ratings. July 31.

²⁴ Even if they sold all their bunds and BTPs, banks in Germany and Italy would not be able to get below the 33% threshold, because their loans to domestic government alone exceed it.



What to do with home sovereign exposure?

In 2018, the Commission proposed a regulation on “sovereign bond-backed securities” (SBBS) which would help banks to reduce the home bias in their sovereign exposure and improve financial integration in Europe by offering investors a new low-risk, liquid asset.²⁵ As a securitised instrument, SBBS would be issued by private special purpose vehicles and backed by pools of government bonds from the entire euro area, according to the ECB capital key.²⁶ The Commission proposes the same preferential regulatory treatment as for bonds issued by individual countries, with regard to capital requirements, eligibility for liquidity coverage and as collateral. Regulators expect SBBS to be AAA-rated but rating agencies have raised doubts due to correlation and concentration risks in the cover pool.²⁷

There are two main problems with SBBS.²⁸ First, it is highly questionable whether banks would invest in them rather than in domestic debt. Banks have long had the option to diversify away from their home sovereign into other euro-area debt but hardly did so. Second, SBBS do not aim at reducing risk. Capital charges or concentration limits are explicitly excluded, i.e. there is no incentive for banks to look at sovereign risk. Instead, the goal is to spread risks from highly indebted sovereigns so that banks across the euro area would have to stomach potential losses from a downgrade or even default in small, manageable amounts. Unsurprisingly, given these shortcomings and inherent contradictions, the SBBS concept led nowhere.

However, with the major recession triggered by the coronavirus pandemic, EU member states agreed on sizeable bond issuance by the EU in 2020. Whereas some emphasise its exceptional nature and the condition that all such debt be paid back by EU funds (including new resources for the EU) in the end, others see it as the start for establishing a permanent fiscal capacity and thus a major breakthrough towards a real “federal state of Europe”. In the past, when the EU issued bonds directly, volumes were considerably smaller. And it did so only for narrowly defined purposes, like the sovereign rescue packages during the debt crisis, provided through the European Stability Mechanism (ESM) and its predecessors, the European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM).

The latest programmes will help member states to mitigate the pandemic crisis. Their size is much larger and the money can be spent more freely. What has not changed are the basic mechanics of the issuance: the EU borrows in capital markets with the bonds guaranteed proportionally by the member states through the EU budget and potentially new resources (no joint liability). The EU then disburses the funds both in the form of grants and, if requested by national governments, loans. The latter benefit from the low interest rate paid by the AAA-rated EU. The bonds are zero-risk weighted on bank balance sheets. The new bond issuance has already started under the “Support to mitigate Unemployment Risks in an Emergency” programme (SURE, up to EUR 100 bn).²⁹ European leaders also agreed on the “Next Generation EU” programme (including the Recovery and Resilience Facility), and bond issuance will start

²⁵ European Commission (2018). Enabling framework for sovereign bond-backed securities. Fact sheet, Frequently asked questions. May 24. For more details, see Deslandes, J., Dias, C., Magnus, M. (2018). Are Sovereign Bond-Backed Securities (‘SBBS’) a ‘self-standing’ proposal to address the sovereign bank nexus? European Parliament, EGOV. September.

²⁶ European Commission (2018). Proposal for a regulation of the European Parliament and of the Council on sovereign bond-backed securities. May 24. This draws on an earlier working paper by the European Systemic Risk Board (ESRB) (2016). ESBies: Safety in tranches. September.

²⁷ S&P Global Ratings (2017). Wie S&P Global Ratings “sichere” europäische Bonds (ESBies) bewerten würde. May 2, 2017.

²⁸ For a detailed discussion, please see Wall, Mark, Koerner, Kevin (2018). European safe bonds – politically contentious, difficult to implement. Deutsche Bank Research. January 29.

²⁹ For more information, please see https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/financial-assistance-eu_en.



What to do with home sovereign exposure?

after ratification by national parliaments or other competent authorities.³⁰ With up to EUR 750 bn, it will become by far the biggest EU issue in history which markets tend to perceive – although technically wrongly – as a major step towards more common debt in Europe.

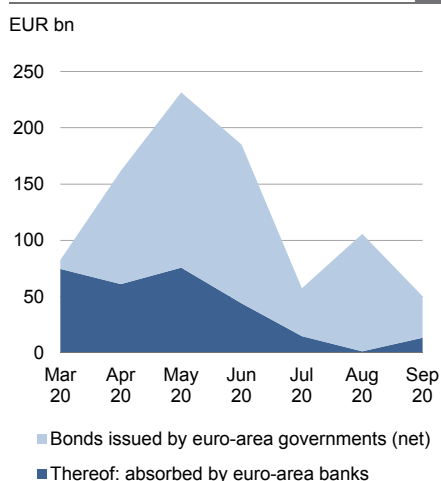
Other measures to contain sovereign risk

- **Basel III/IV, pillar 2:** Supervisors may ask individual banks to hold more capital against their sovereign portfolio, or they can impose qualitative restrictions when they review a bank's risk profile. However, the EBA's guidelines for the Supervisory Review and Evaluation Process (SREP) and for stress testing are not very explicit with regard to sovereign exposures, as called for by the Basel Committee in 2017.
- **Basel III/IV, pillar 3:** The disclosure of banks' public-sector exposure has significantly improved thanks to the EBA transparency exercise which provides bank-by-bank and aggregate information. However, the review does not comprise all banks and is carried out only twice a year. Mandatory and more detailed reporting have been recommended by the EBA as well as the Basel Committee.
- **Government level:** For banks to hold more capital against sovereign exposures, the exemption from risk weighting could be strictly limited to claims on central government only. So far, the interpretation of "government" has been very comprehensive.
- **Accounting:** Market-based valuation for all public bonds as well as value adjustments for loans would reflect actual sovereign risk more accurately. However, more market-based pricing would also reinforce potentially destructive feedback loops between banks and sovereigns.

Conclusion

Banks in the corona crisis: Important investors in public-sector bonds

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Sources: ECB, Deutsche Bank Research

The current crisis underscores the positive short-term aspects of the close relationship between governments and banks. Large fiscal relief packages to fight the pandemic and mitigate its economic impact led to a surge in public debt in the euro area. Banks absorbed a third (EUR 284 bn) of the bonds issued by governments between March and September 2020, before governments reduced their outstanding debt and banks reduced their bond holdings in the last quarter of 2020. Banks also bought over a quarter of the EUR 53.5 bn issued by the EU until January 2021 under the SURE programme.³¹

Obviously, demand from banks gives governments much-needed financial leeway in times of crisis and is a strong argument in favour of a preferential regulatory treatment. In fact, the EU recently even eased some of the few existing capital requirements for sovereign exposure in order to facilitate government funding. Also, these relaxations shall prevent a negative impact on banks' capital position, which would hamper their ability to finance the economy.³²

³⁰ For more information, please see https://ec.europa.eu/info/strategy/recovery-plan-europe_en.

³¹ Four tranches of bonds have been issued up to date, all as "social" bonds, which are attractive to institutions with ESG (Environment, Social, Governance) investment guidelines.

³² The EU temporarily reintroduced a prudential filter to eliminate a potential negative impact on capital from volatility in central government bond prices, and temporarily exempts holdings of



What to do with home sovereign exposure?

At the same time, though, large debt holdings make banks vulnerable to fiscal problems of their domestic government, which can result in a vicious circle that is hard to stop and can have severe economic and social implications. In the current situation, banks' sovereign exposure is not only growing directly but also indirectly through publicly guaranteed bank loans to private companies. In France, Spain, Italy and Germany, these amounted to EUR 320 bn between April and August 2020.³³

In the EMU, the sovereign-bank nexus is even more complicated, because fiscal power is national, but the consequences of national decisions can fall on citizens and taxpayers in all member states. For the same reason, bank competition is distorted. Banks with large holdings of low-rated and high-yielding sovereign debt do not have to hold costly capital to mitigate the risk. If risks materialise in a severe crisis though, risk-sharing mechanisms (or ad-hoc political decisions) mean that banks across the euro area will participate in the losses. Risk-sharing elements, which are funded by all banks in the Banking Union, are the Single Resolution Fund and (in future probably) EDIS. The problem can be compounded by banks "doubling down" rather than de-risking in times of crisis: during the euro-area debt crisis, banks in distressed countries did not flee to safety but invested even more in domestic sovereign debt. Reasons may have been the search for yield but also political/supervisory persuasion. The lack of capital requirements for sovereign exposures thereby facilitates weak fiscal discipline.

The Banking Union will deepen European integration and will make banks less vulnerable, but only if rigorous risk reduction – including but not confined to sovereign risk – precedes further risk sharing, like EDIS. Otherwise, a race to the bottom could loom. Elevated NPL ratios remain a concern and, after years of progress, are expected to rise again. Harmonised loan recovery processes are needed. Laws on bank insolvency and taxation must not be an obstacle to a level playing field.

Risks emanating from sovereign exposures should be reduced by capital charges based on both credit risk and concentration thresholds. Although capital requirements will never be able to shield banks from a sovereign default, they can i) force banks to weigh bond yields against their cost of capital (via credit risk weights) and ii) prevent excessive exposure and therefore limit adverse effects caused by temporary fiscal distress (via concentration charges). The latter are important not least because even highly rated countries can run into problems and see their creditworthiness suddenly deteriorate. A careful calibration of such capital charges (including exemption thresholds) is definitely needed, including a lengthy timeframe for implementation. The calculations in this study are a useful illustration, but the figures chosen are only exemplary and fairly low.

sovereign debt denominated in the currency of any EU country from capital requirements and the large exposure limit. See Regulation (EU) 2020/873 of the European Parliament and of the Council of 24 June 2020 amending Regulations (EU) No. 575/2013 and (EU) 2019/876 as regards certain adjustments in response to the Covid-19 pandemic, recitals 15 and 21.

³³ Falagiarda, Matteo, Prapiestis, Algirdas, Rancoita, Elena (2020). Public loan guarantees and bank lending in the Covid-19 period. ECB Economic Bulletin. Issue 6/2020. September. According to the EBA ("First evidence on the use of moratoria and public guarantees in the EU banking sector", November 2020), EUR 181 bn in publicly guaranteed loans had been granted until June 2020 by 99 EU banks.



What to do with home sovereign exposure?

In the end, regulation should discourage banks from building up excessive risks on their balance sheets through accumulation of assets which are low in risk, but certainly not risk-free. In the worst case, outsized claims can be a ticking time bomb, as the default of Greece in 2012 has shown in a drastic way. Moreover, “such a reform, if implemented wisely and gradually, could increase incentives for governments to reduce the risk profile connected to their own bonds”.³⁴ Thus, in the long run, risk-sensitive regulation – and pricing – of sovereign bonds and loans could contribute to more sustainable public finances. Fiscal soundness and discipline enables governments to act more forcefully in a crisis. Therefore, containing home sovereign exposure would not only increase the resilience of the banking sector in Europe, but also strengthen the European Monetary Union as a whole.

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³⁴ European Commission (2017), p. 22.



What to do with home sovereign exposure?



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