Basel Paper On Banks' Sovereign Exposures: Not Enough To Undo The Doom Loop

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*(**Editor's Note:** The following is S&P Global Ratings' response to the Basel Committee on Banking Supervision's discussion paper, "The regulatory treatment of sovereign exposures," issued on Dec. 7, 2017. The views expressed in this response represent those of S&P Global Ratings and do not addess, nor do we intend them to address, the views of any other affiliate of Standard & Poor's Financial Services LLC. We intend our comments to address the analytical needs and expectations of our credit analysts, as well as the questions we receive from investors. Our comments on the discussion paper do not affect our ratings criteria.)*

Lending to sovereign borrowers is not risk-free, as the sovereign debt crisis in Europe recently demonstrated. The current regulatory capital treatment of banks' sovereign exposures does not take full account of this, however, and in practice, banks typically have to hold little to no capital to cover credit risk from lending to their home sovereign in local currency. These capital rules and other regulatory incentives encourage many banks to retain bulky exposures to their home sovereign, which amplifies the interconnectedness between sovereigns and their banking systems.

The negative feedback loop of a financial shock to either sector was demonstrated when Greece went through its deep economic crisis at the beginning of this decade, leading to a downturn of the banking system. Tackling this "doom loop" between sovereigns and domestic banks is a key priority for regulators and policymakers around the world. It is a difficult task, however, in light of the important role that sovereign exposures play in different markets and jurisdictions.

Key Takeaways

- The Basel Committee on Banking Supervision published a discussion paper on the regulatory treatment of sovereign exposures in December 2017.
- We think the suggestions in this paper are a step in the right direction to resolve the sovereign-bank nexus.
- At the same time, the illustrative risk weights on domestic sovereign exposures and risk weight add-ons for single country concentrations are not sufficiently large, in our view.
- In our framework for assigning bank ratings, typically significant domestic sovereign exposure is one of the main impediments for rating banks higher than the sovereign.

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The Basel Committee on Banking Supervision (BCBS) published a discussion paper on the future regulatory treatment of sovereign exposures, along with the final Basel III capital standards, on Dec. 7, 2017. The published report aims to collect feedback on the suggestions compiled by

Basel's high-level Task Force on Sovereign Exposures. We understand that there has not yet been any formal consultation and consensus among the 28 member jurisdictions in the BCBS on the suggestions. All the quantitative ideas in the discussion paper serve for illustrative purposes only.

S&P Global Ratings views Basel's ideas on the regulatory treatment of sovereign exposure as steps in the right direction. The suggested additional Pillar 2 guidance and Pillar 3 disclosure requirements are helpful for prudent supervisors and transparency-seeking investors, in our view. That said, we think that the magnitude of the Pillar 1 measures, namely an overly soft introduction of positive risk weights for domestic sovereign exposures and light marginal risk weight add-ons for single-country concentrations, does not go far enough to undo the doom loop between sovereigns and banks. Therefore, we think that if the ideas were implemented as presented in the Basel document, they would likely fail to address one of its key purposes.

Current capital rules encourage banks to retain bulky exposures to their home sovereign, so amplifying the interconnection between sovereigns and their banking systems.

Banks' Capital Ratios Would Be More Comparable And Transparent

In general, Basel's ideas on sovereign exposures go hand in hand with the objectives of the finalized Basel III standards to reduce excessive variability of risk-weighted assets, facilitating the comparability and transparency of banks' risk-sensitive capital ratios. They also address all three of the pillars of the Basel capital framework (see table 1).

Table 1

BCBS' New Ideas On Regulatory Treatment Of Banks' Sovereign Exposures

Pillar 1	Pillar 2	Pillar 3
- Removal of internal ratings-based (IRB) approach - Revised standardized RWAs for foreign currency sovereign exposures - Non-zero RWAs for domestic currency sovereign exposures - Non-zero haircuts for sovereign repo-style transactions - Marginal risk-weight add-on for country concentration	- Guidance on monitoring sovereign risks - Stress test for sovereign risks - Supervisory response to mitigate sovereign risks	- Additional disclosure requirements on sovereign exposures and RWAs by: ·country breakdown ·currency breakdown ·accounting classification

Regarding Pillar 1, we think removal of internal models to calculate risk-weighted assets for

sovereign exposures would help make banks' capital ratios more comparable. The set of information for modelling sovereign risks should more or less be the same for all banks, given that for this asset class modelling credit risk is based on high-level data and generally publicly available information. Also, exposures are more standardized. This removes the rationale for applying internal models that incorporate a bank's specific portfolio characteristics. Such an approach is suitable for more granular asset classes for which banks might have a private and more robust set of historical data reflective of their specific clientele and underwriting standards.

The Pillar 2 guidance and the stricter Pillar 3 disclosure requirements for sovereign exposures would also help avert excessive concentration risks that would otherwise not be fully visible to investors. The monitoring and stress testing of sovereign risk is already a part of many banks' internal calculations of economic capital, but we think that the new Pillar 2 guidance will enable supervisors to pinpoint sovereign risks in a more structural and consistent manner. The enhanced, stricter Pillar 3 requirements on sovereign exposure promote transparency and enable investors to identify risks arising from sovereign debt holdings. One of the key stress amplifiers during the sovereign debt crisis in Europe was the opacity of the sovereign-bank nexus in the affected countries.

Basel's ideas on sovereign exposures would help improve the comparability and transparency of banks' risk-sensitive capital ratios.

Additional disclosure requirements on sovereign exposures suggested in the BCBS discussion paper include a breakdown by country and by currency as well as an accounting classification of loans and debt securities. We think these pieces of information build on existing standards because they pave the way for investors and other stakeholders to make their own risk assessments with regards to concentration. We also consider that additional disclosure information on residual maturities of sovereign debt securities, in the form of a breakdown into short-term and long-term debt holdings, would add to transparency. Under our ratings criteria, for example, we apply a lower haircut on government debt securities with one-year residual maturity (35% haircut) than for those with longer maturity (60% haircut), when assessing whether a bank's capital base can withstand a sovereign default. This reflects different valuation effects on government bonds in case of sovereign stress.

New Sovereign Risk Charges Would Be A Drop In The Ocean

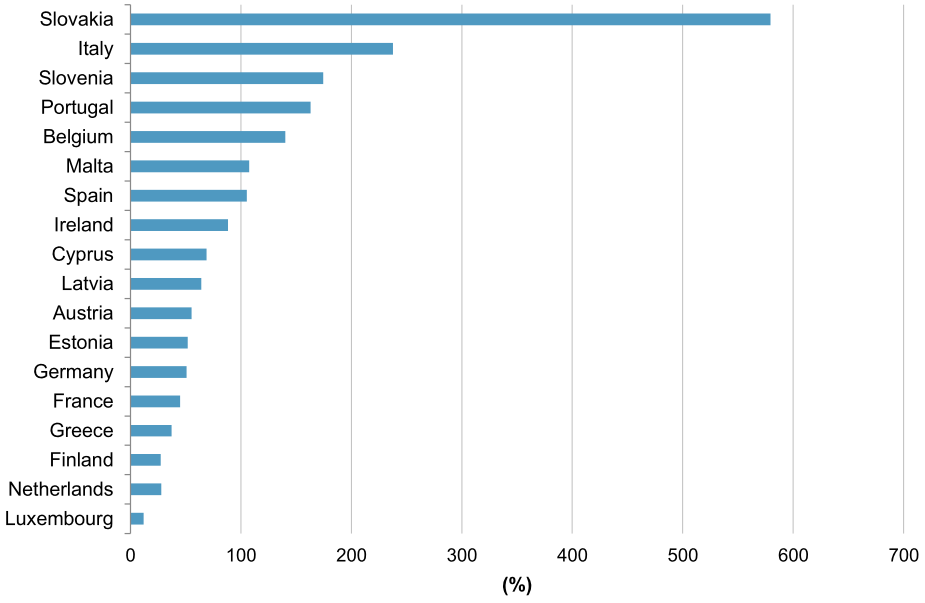
The main ideas in Basel's discussion paper affect the Pillar 1 requirements with respect to sovereign exposures. The BCBS presents a standardized approach for all sovereign-defined exposures with a low but non-zero percent risk charge on domestic-currency sovereign exposures. It also raises the concept of a marginal risk weight add-on that would apply if a specific bank's exposure to a single sovereign were to exceed certain thresholds relative to regulatory capital. The BCBS discussion paper includes examples of such risk weights, which it labels as "for illustrative purposes" only. Nevertheless, assuming they broadly reflect the BCBS's current thinking, we believe that risk weights would be too low to substantially strengthen banks' resilience to a home sovereign default.

We think risk weights on sovereign exposures would have to be quite high to substantially strengthen banks' resilience to a home sovereign default.

As we explore further below, the additional capital that banks would need to hold will likely be marginal. This compares with an average haircut of about 40% to private creditors for defaulted sovereign debt holdings globally since the 1970s, as shown in the discussion paper. Considering the home sovereign bias of banks' government bond holdings, credit losses or mark-to-market valuation losses of such securities during times of financial crisis can easily wipe out banks' equity buffers. Even in the eurozone, where it would be easier for banks to diversify into foreign sovereign debt without introducing foreign exchange risk, we find that banks' exposure to their home sovereign comprises more than half of their Tier 1 capital for the majority of countries (see chart 1).

Chart 1

Home Sovereign Exposure In The Eurozone
Home general government securities exposure (% of domestic banking Tier 1 capital)



Note: General government sector and Tier 1 Capital according to European System of National and Regional Accounts 2010. Source: European Central Bank. Data as of Q3 2017, excluding Lithuania.

Non-zero risk weights for local-currency sovereign exposures are still near to zero

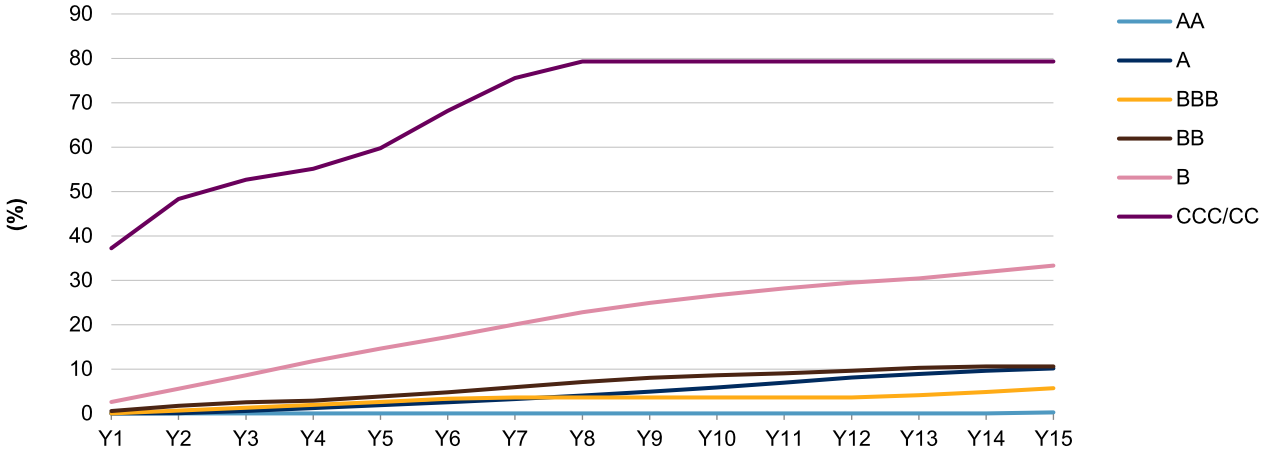
Existing regulatory rules give national authorities (or regional jurisdictions in the case of the EU) the discretion to allow their supervised banks a zero-percent risk weight assignment for sovereign exposures denominated and funded in the domestic currency. By contrast, the new BCBS discussion paper uses examples of sovereign risk weights for local currency exposures of up to 9%, depending on external ratings. At the same time, it moots the idea of reducing the rating buckets to three from six.

The idea for non-zero risk weights for sovereign exposures is an important milestone in regulatory efforts to reflect the risk of home sovereign exposures in banks' regulatory capital requirements, in our view. We agree that no exposure is absolutely risk-free. In our risk-adjusted capital analysis when rating banks, we assign non-zero risk weights to all local and foreign currency sovereign exposures, depending on their credit rating (see table 2). That said, the reduction of rating buckets would materially hamper the risk sensitivity of the Basel framework, in our view, given the significant discrepancies between default rates for different rating categories (see chart 2). This is particularly relevant for non-investment-grade rated sovereigns. The estimated average cumulative default rates after five years vary from approximately 3.5% for sovereigns rated in the 'BB' category to almost 60% for sovereigns rated in the 'CCC' and 'CC' categories. A standardized

risk weight of 7%-9% for any sovereign with a credit rating lower than 'BBB-' does not reflect these disparities, in our view.

Chart 2

Sovereign Foreign-Currency Cumulative Average Default Rates Without Rating Modifiers (1975-2016)



Sovereign foreign-currency cumulative average default rates for 'AAA' rated sovereigns historical at 0% and not illustrated here. Source: 2016 Annual Sovereign Default Study And Rating Transitions, S&P Global Ratings.

Furthermore, we also do not support the view that foreign currency sovereign exposures shall have risk weights that are approximately 10 times higher than local currency exposures. In most cases, our local currency and foreign currency ratings on a given sovereign are the same. The sovereign local currency rating can be one notch above the sovereign foreign currency rating if we believe that the default risks (even if remote) apply differently to foreign and local currency debt. As domestic capital markets deepen and the share of local currency debt has increased for many sovereigns, the relative likelihood of default on local currency instruments has become more similar to the likelihood of a default on foreign currency debt.

On the one hand, improved access to foreign currencies due to the continuous liberalization of global capital markets tends to give sovereigns more flexibility to service their foreign currency debt. On the other, we find that foreign investors increasingly hold local currency debt in some countries, which reduces governments' incentive to distinguish between a default to domestic investors and a default to foreign investors. We reflect this also in our risk-adjusted capital framework for banks, where we apply risk weights to sovereign exposures depending on the foreign and local currency rating of the sovereign entity.

Given the maximum one-notch differential between the local and foreign currency ratings, we do not penalize foreign currency exposure as much as the BCBS would do with its quantitative examples. By benchmarking the new BCBS ideas, we see significant differences to our approach for sovereigns with a rating below 'A-' (see table 2). To give an extreme example, our risk weight for sovereign exposures in the 'CCC' categories ranges from 257% to 340%, whereas the BCBS paper outlines risk weights of 7%-9% and 100% for local and foreign currency exposures, respectively.

Our risk weights are calibrated according to historical default and loss statistics of sovereign entities.

Table 2

Risk Weights For Local- And Foreign-Currency Central Government Exposures

Sovereign long-term credit rating	S&P Global Ratings risk weights for risk-adjusted capital framework (%)	Illustrative BCBS' standardized risk weights for local-currency exposures (%)	Illustrative BCBS' standardized risk weights for foreign-currency exposures (%)
AA- and above	3	0-3	10
A+	5	0-3	10
A	9	0-3	10
A-	15	0-3	10
BBB+	26	4-6	50
BBB	40	4-6	50
BBB-	57	4-6	50
BB+	76	7-9	100
BB	99	7-9	100
BB-	125	7-9	100
B+	153	7-9	100
B	185	7-9	100
B-	219	7-9	100
CCC+	257	7-9	100
CCC	297	7-9	100
CCC-	340	7-9	100
CC	386	7-9	100
SD/D	428	7-9	100

Sources: S&P Global Ratings, Basel Committee on Banking Supervision.

Marginal risk weight add-ons is a good idea, but they are too low

While regulatory risk-weights and our risk-adjusted capital model for banks consider the diversification benefits from granular portfolios, the key concern about home sovereign exposures is their concentration risk. The BCBS paper therefore discusses concentration charges for sovereign exposures that are above a certain threshold of Tier 1 capital. This represents progress on the existing bank capital framework, which excludes sovereign exposures from the large exposure regime. The existing rule limits banks' exposure to a single non-sovereign client or group of connected counterparties at a maximum of 25% of Tier 1 capital.

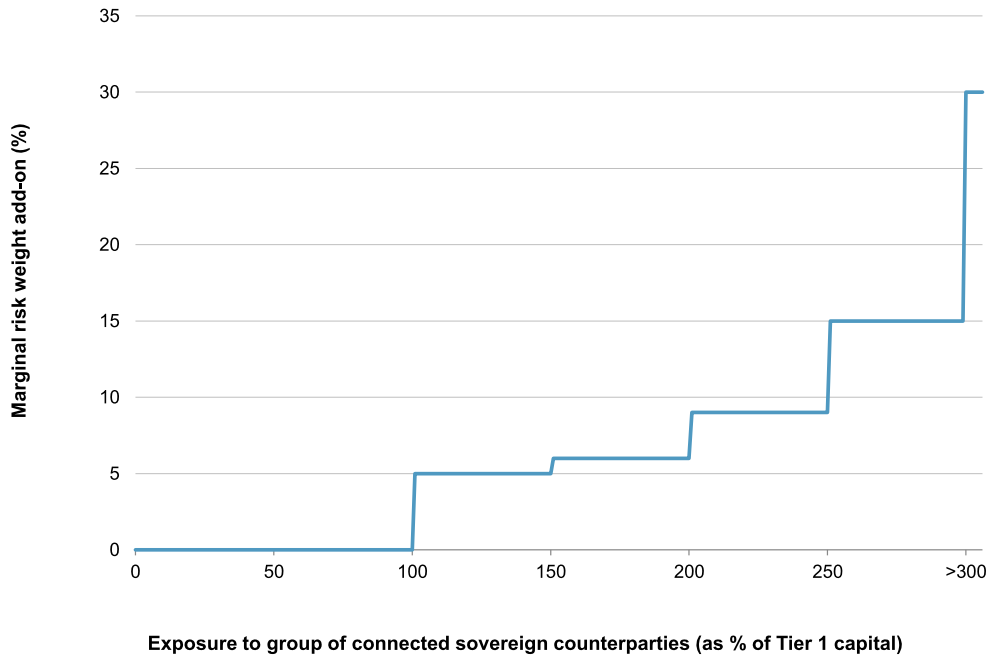
We think a concentration charge or some kind of exposure limit is key to mitigating the home sovereign bias. Equally, we understand that the BCBS will have to strike a compromise. Many banks might find it difficult to diversify their sovereign bond holdings to foreign sovereigns without introducing other risks, such as currency mismatches or curtailing available collateral with their home central bank. Many banks in emerging market economies, for example, do hold a significant amount of domestic sovereign bonds to avoid foreign currency risks or because there are tax

incentives that lead to higher aftertax returns if banks hold domestic instead of foreign sovereign debt securities.

The risk-weight add-ons discussed in the BCBS paper mean that the capital a bank needs to hold to a group of connected sovereign exposures increases incrementally with its size relative to Tier 1 capital (see chart 3).

Chart 3

BCBS Marginal Risk Weight Add-On As A Function Of Sovereign Exposure To Tier 1 Capital



Source: Basel Committee on Banking Supervision.

To assess the size of these potential risk-weight add-ons for banks in individual countries and illustrate the mechanics, we have used the aggregate home sovereign exposure data of eurozone banking sectors underlying chart 1, and compared it with the systems' aggregate Tier 1 capital. We have further assumed that the general government debt shown in chart 1 represents a group of connected sovereign counterparties (such as Germany and its federal states). With these simplified assumptions, German banks on aggregate would get a 0% risk weight add-on to their exposure to the German sovereign, as of September 2017, because it is below 100% of their aggregate Tier 1 capital. Italian banks, by contrast, would be affected by the concentration charge with an average 3.73% add-on to the standard risk charge (see table 3). This reflects 0% for the amounts up to 100% of Tier 1 capital, a 5% add-on for subsequent exposure amounts between 100% to 150%, 6% for the subsequent exposure between 150% to 200%, and 9% for the remaining exposure amount being above 200% but below 250%. The effective average risk-weight add-on of 3.73% is the average of these add-ons relative to the overall exposure.

Table 3

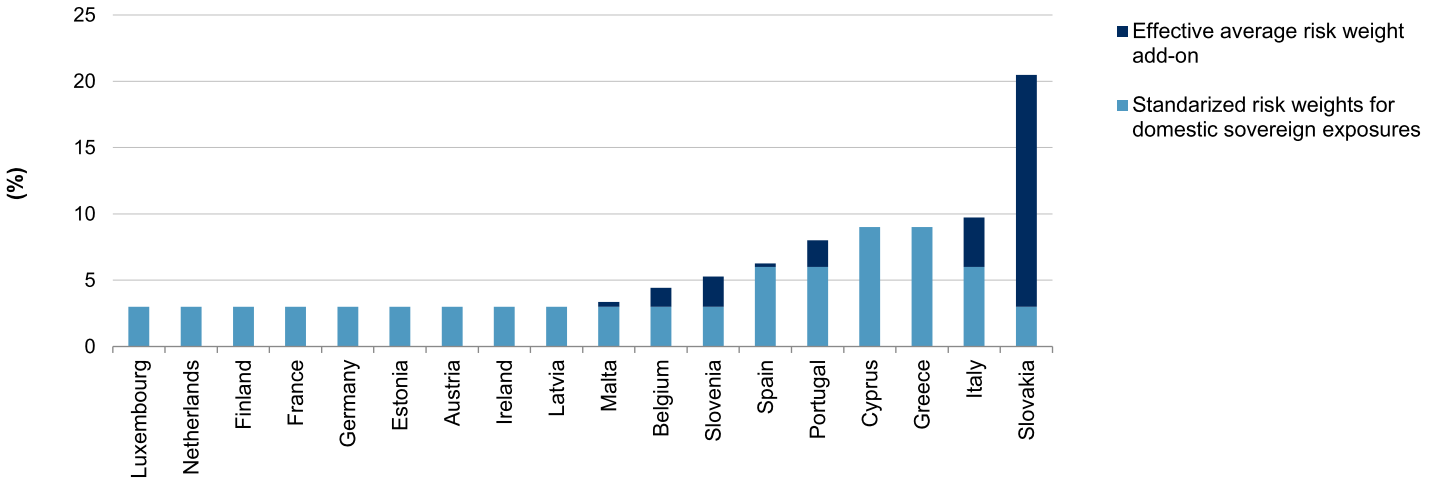
Illustrative Example Of The Effective Average Marginal Risk Weight Add-On For The German And Italian Banking Sector

Exposure to group of connected sovereign counterparties (% of Tier 1 Capital)	<100%	100%-150%	150%-200%	200%-250%	250%-300%	>300%	Effective average risk weight add-on
Germany	0.0%	--	--	--	--	--	0.0%
Italy	0.00%	1.05%	1.26%	1.42%	--	--	3.73%

Combining the risk charge add-on with the suggested non-zero risk weights for domestic sovereign exposures in table 2, using our current local currency sovereign ratings, we estimate in chart 4 the combined average capital charge on risk-weighted assets for banks in the eurozone. The results show that, similar to the non-zero risk weights, the concentration charges are too low to make a real difference for most of the banking systems. The total average risk weight would be below 10% in each country except Slovakia. Let us assume for illustration purposes that banks may target a relatively high regulatory Tier 1 ratio of 15%. This means, at a 10% aggregate risk weight, they would be holding €1.5 of capital for each €100 of sovereign exposure. As mentioned earlier, the historical average haircuts to private investors in case of a sovereign default are about €40 for each €100 of sovereign exposure.

Chart 4

Average Risk Weight For Sovereign Exposures By Eurozone Country Applying The Two BCBS Proposals



Note: We use the more conservative higher-end of the suggested standardized risk weights in the Basel dicussion paper for this estimate, i.e. 'AAA' to 'A-' = 3%, 'BBB+' to 'BBB-' = 6%, Below 'BBB-' = 9%. Long-term local currency ratings as of Feb. 8, 2018. Aggregate banking system data as of Q3 2017 according to European System of National and Regional Accounts 2010. Source: S&P Global Ratings' estimates.

S&P Global Ratings reflects material sovereign concentration risks by negatively adjusting the assessment of the risk position in a bank credit rating. We typically use our risk-adjusted capital

ratio after considering concentration or diversification effects as starting point to analyze whether there are significant quantitative indicators of risk concentrations. As mentioned above, we do apply haircuts of 35%-60% on government bond holdings to test whether banks' capital holdings can withstand a home sovereign default. Significant exposure to the domestic sovereign is one of the main impediments for rating banks higher than their home sovereign.

Banks' Decisions Ultimately Rest On Funding Costs And Sovereign Yield

Although the discussed risk weights are low, it could be argued that they would provide a disincentive for banks to build material exposures to their home sovereign in the first place. Determining this, however, is not straightforward. A bank's investment decisions depend on its combined view of the yield of a sovereign investment, the bank's funding costs, and its cost of capital at a given time. And so, even with some light capital charges as discussed in the BCBS paper, banks might still find home sovereign bonds to be an attractive investment. One of the reasons why Italian, Spanish, and Portuguese banks increased their home sovereign exposure during the European sovereign debt crisis is that investing in bonds in very low-yielding European countries like Germany would have resulted in a negative margin over their cost of funding. By contrast, investing in higher-yielding domestic bonds resulted in positive returns. We doubt that the capital charges illustrated in Basel's discussion paper would have provided a material incentive to invest in significantly lower-yielding bonds by other sovereign issuers.

Even with some light capital charges, as discussed in the BCBS paper, banks might still find home sovereign bonds to be an attractive investment.

Another issue is the unchanged treatment of sovereign bonds in the regulatory liquidity standards. The liquidity coverage ratio (LCR), as defined and introduced with Basel III, requires banks to hold a reserve of high-quality liquid assets as a liquidity buffer, and allows them to invest in sovereign debt without setting concentrations limits or assigning haircuts to their market value. This incentivizes banks to hold large buffers of sovereign bonds--home sovereign bonds in particular due to the aforementioned incentives--to meet their minimum LCR. For banks in some emerging market countries, the situation could be even worse because of less-developed capital markets, which do not allow for an investment in a more diversified pool of liquid assets. Banks in emerging countries with weak balance sheets typically carry a significant exposure to the home sovereign given their role as premier financiers for these governments. Egypt and Lebanon are prominent examples of countries where banks are highly exposed to the sovereign risk not only for liquidity purposes but also given the lack of opportunities in the private sector. The scarcity of other LCR-eligible assets like covered bonds or listed corporate debt securities leads them to hold a large stock of domestic sovereign bonds to fulfill liquidity requirements while avoiding foreign currency risks.

Overall, we believe the proposed regulatory treatment of sovereign exposures is a step toward better incorporation of sovereign risks into banks' risk-sensitive capital ratios. We nevertheless believe that the calibration of the quantitative measures needs to be refined. A narrower gap between local and foreign currency exposures, more granularity according to the sovereign risk profile, and higher risk weights for higher-risk exposures and concentrations would allay some of our concerns. Regardless, a definitive solution to these issues is some distance away. Even when the BCBS agrees on final standards, any rule must still be transposed into national law. The particularities of the different banking systems means that, in our view, the "doom loop" will remain a major challenge for years to come.

Related Criteria

- Risk-Adjusted Capital Framework Methodology, July 20, 2017
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011

Related Research

- The Basel Capital Compromise For Banks: Less Impact Than Meets The Eye, Dec. 8, 2017
- European Banking Union 2.0: The Creation Of A True Single Market?, Nov. 6, 2017
- Most Banks Don't Need More Capital, But The Flexibility To Use It In Times Of Stress, Nov. 29, 2016
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- The Proposed Revised Basel Standardized Approach For Credit Risk May Add Complexity Without Improving Standards, March 27, 2015