

# Covered Bonds: Differences among some European countries and main challenges ahead

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**Primary and Secondary CB markets are crucial for the stability of the European financial markets. However, future regulatory changes are expected and their potential impact can be relevant for investor confidence.**

*The attractiveness of Covered Bonds has increased over the recent years and we expect both issuers and investors to continue using these instruments compared to other financial alternatives due to favorable market technical factors and regulatory considerations. However, we believe some relevant factors will have a significant impact on the Covered Bond market in the near future. As the correlation between sovereigns and Covered Bonds increases – particularly in peripheral Europe– any policy towards normalizing this situation will affect the primary and secondary CB markets. Implementation of important regulatory changes will also affect existing legal frameworks for CBs in Europe. From their part, investors will continue demanding more transparency and information that goes beyond public accounting standards, particularly related to the cover pool. How these factors are addressed in the near future will be key to generate the necessary confidence in CB markets.*

## Covered Bonds: A brief overview

Covered Bonds (CBs), or securities backed by dedicated collateral, are one of the largest asset classes in the European bond market, offering an alternative to sovereign debt for potential investors willing to invest in high rated securities. At the end of 2011, the overall volume stood at 2.7 trillion euros (ECBC, 2012). Currently there are active CB markets in 25 different European jurisdictions.

The dual protection that investors receive when investing in a CB explains a significant part of

their success and the existence of a wide range of instruments within the same category. CBs backed by mortgages, on which investors have a priority claim, are called Mortgage Bonds, with significant differences also among European Union countries. Within the CB market, those covered with mortgage pools represent 75% of the overall amount. The other 25% are based on pools created from public sector loans. There is also a third kind of CB, backed by large projects, such as the construction of ships, but nowadays this type of CB is insignificant compared with the others. Throughout the article, we will focus on CBs backed by mortgages.

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The common factor to all CBs is the existence of a double recourse –the issuer’s creditworthiness and the pool of collateral–, which increases the guaranty for the investor in case of default, and therefore the rating of the instrument<sup>2</sup>.

In fact, the dual protection offered by CBs accounts for the main difference with respect to senior unsecured bonds and asset backed securities. As a consequence, the price of a CB should be higher than unsecured bonds of the same issuer –due to the existence of the cover pool– and also than that of Mortgage Backed Securities (MBS). Since there is double recourse on the issuer of CBs, there is no prepayment risk and there is also a potential replacement of non-performing loans from the cover pool. In fact, the lower the correlation between the value of the cover pool

and the issuer, the higher the price difference between CBs and other instruments should be.

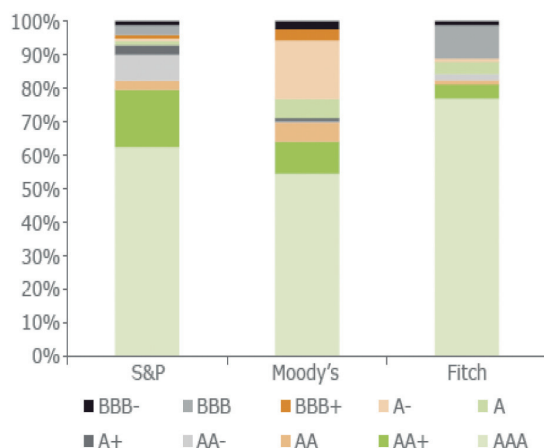
Even though there are significant differences between them, from an empirical point of view, CBs and MBS rely on their high credit profile (and rating), usually better than their respective senior unsecured debt. Thus, CBs and MBS are quite attractive to investors looking for high quality assets and low credit risk products. On the other hand, these instruments provide an efficient low-cost way for lenders to expand their business and enlarge their funding duration.

Whereas in the case of CBs, the covered pool remains on the balance sheet, for ABS (and MBS as a special type of ABS), credit risk is transferred to the investor. Since the originator can transfer

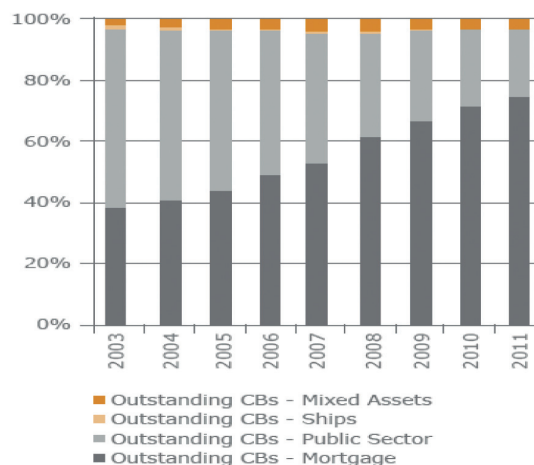
Exhibit 1

### 34 European Covered Bond market: Distribution by collateral and rating

Rating distribution of European Covered Bonds



European Covered Bonds market by collateral



Source: EBCB (2012).

<sup>2</sup> In several countries, CB legislation is very recent. Those countries without specific CB legislation (e.g., USA) have developed structured covered bonds. In these cases, although they also offer investors double recourse –issuer and collateral pool– they achieve this through contractual arrangements and creation of Special Purpose Vehicles, instead of through legislation. For a detailed analysis of the US case, see Surti (2010).

Table 1

**Main differences between covered bonds and asset-backed securities**

	Covered bonds	Asset-backed securities
Motivation of issuer	Refinancing	Risk reduction, regulatory arbitrage, refinancing
Who issues	Generally originator of loans	Special entity
Recourse on originator	Yes	Generally no
Structure	Assets generally remain on balance sheet, but are identified as belonging to cover pool	Assets are transferred to special entity
Impact on issuer's capital requirements	None	Reduction
Legal restrictions on issuer or eligible collateral	Yes (if issued under covered bond legislation)	Generally none
Management of asset pool	Generally dynamic	Predominantly static
Transparency of asset pool to investors	Limited (but quality regularly controlled by trustees or rating agencies)	Generally high
Prepayment of assets	No pass-through as assets are replaced	Generally full pass-through
Tranching	None	Common
Coupon	Predominantly fixed	Predominantly floating

Source: Packer et al., (2007).

the ownership of a pool of assets to another investor, the former has no responsibility for the insolvency of the asset pool. Thus, in principle, the credit quality of any ABS security is solely based on the characteristics of the asset pool and not related to the rest of the pool that is not directly covering the bond, or the creditworthiness of the originator. Furthermore, CBs are usually over-collateralized, which means that the face value of the pool of assets backing the CB is larger than the issued amount, and therefore there are more assets backing the securities than bonds issued.

Another significant difference comes from the structuring and origination. Every single CB investor has the same credit rank in the event of default. However, MBS are “tranching” structures, in which normally there exist many bonds—equity, mezzanine and senior—with different subordinations and claiming priorities in case of default (ECB, 2007).

### Legal framework for Covered Bonds: Main differences among large European countries

The main factor that differentiates CBs from other instruments is the double recourse and whether or not the cover pool will retain its value in the event of bankruptcy of the originator. As a result, the credit quality of the pool and the bankruptcy remoteness of the cover pool become two of the most important issues in any legislative framework, with many differences among European countries.

As a consequence, one of the variables often quoted as the main driver explaining differences in legal frameworks is the bankruptcy remoteness of the cover pool. This becomes especially important when analyzing the Spanish case, which differs from the other three large European countries, as can be seen in Table 2. However, there is no empirical evidence of the real impact it has. Since there has never been a failure of an issuer of

CBs, there is no evidence of what type of resolution regime would be more effective in case of default, and therefore it has not been possible to test whether the Spanish singularity works better or not.

In Spain, the legal framework for Mortgage Covered Bonds (so called *Cedulas Hipotecarias* – CHs-) is defined by the Law 2/1981, subsequently modified by the Law 41/2007. Finally, in 2009, the Royal Decree 716/2009 developed certain aspects of the Law 2/1981 that were still pending. The main aspects to be highlighted are the following:

- There is special treatment for the holders of CHs in case of insolvency of the issuer, since they have special privileged claims (Law 22/2003). By this, in case of issuer insolvency, all the capital and interest payments of the issued CHs and substitution assets will have a special privilege. Furthermore, what becomes even more important when analyzing the real protection that investors have, is that claims against the insolvency estate have to be paid on their respective due dates, without delay of payment regardless of the status

Table 2

### Legal framework in main European countries

Factor	France	Germany	Italy	Spain
Name	Obligations Foncières	Hypotheken-Pfandbrief	Obbligazioni Bancarie Garantie	Cedulas hipotecarias (CHs)
Specialist bank principle	Yes	No	No	No
Issuer	Specialized Bank	Originator	Originator but guaranteed by a special entity	Originator
Cover assets structure	Registered and remain on balance sheet	Registered and remain on balance sheet	Transferred to a special entity	No designated cover pool. All eligible assets serve as cover <sup>1</sup>
Max. LTV of the mortgage pool (residential)	80%	60%	80%	80%
Max. LTV of the mortgage pool (commercial)	60%	60%	60%	60%
Pool monitoring	Independent trustee appointed by the regulator	Independent trustee appointed by the regulator	Bank of Italy (special supervision)	No
Bankruptcy remoteness of cover pool	Cover assets are segregated in case of insolvency	Cover assets are segregated in case of insolvency	Transfer to a special entity remote	No, but CH investors have priority to all eligible pool in balance sheet <sup>2</sup>

<sup>1</sup> The Spanish mortgage law determines that only the mortgages originated with the characteristics described below can be considered eligible, and therefore used as cover pool for the issuance of CH.

<sup>2</sup> Excluding those mortgages used in Asset Backed Securities or Bonos Hipotecarios.

of the bankruptcy proceedings. By this, the mortgage law supersedes the insolvency law.

- The capital and interests of the CH are secured by the entire mortgage loan book of the issuer, with the exception of those loans used in securitizations or loans securing mortgage bonds.
- Cover assets are the entire mortgage loan book registered in favor of the issuer, which is the relevant pool when analyzing the special privilege claims of CH investors.
- However, for issuance purposes (capacity and limits), the eligible assets must be considered. These assets must comply with the following (most relevant) characteristics (ECBC, 2012):
  - The mortgage that guarantees the loan or credit must be a first-ranked mortgage.
  - The loan or credit guaranteed may not exceed 60% (art. 5 Law 2/1981 modified by Law 41/2007) of the mortgage lending value of the mortgaged asset, except for the financing of the construction, reconstruction or acquisition of residential premises, in which case it may reach 80% of such value. The 80% limit can be exceeded (but never more than 95%), if the mortgage loan or credit has a bank guarantee provided by a different credit institution to the creditor or is covered by credit insurance, covering, at least, the amount of the guaranteed loan or credit which exceeds 80% of the valuation of the mortgaged asset and interests (Art. art. 5 RD 716/2009).
  - A dynamic valuation can be considered. As a consequence, loans that initially exceed these percentages can be used when the values do not exceed said LTV,

in relation to the initial or revised valuation of the mortgaged asset.

- The cover asset pool is defined as a dynamic cover pool (very important difference with other legal frameworks). ABS/MBS or other assets are not allowed in the cover pool, but mortgages are allowed.
- The mortgaged properties must have been valued previously by appraisals.
- The mortgaged assets must be insured against damages.
- The institution issuing the CHs will keep a special accounting register of the loans and credits that serve as collateral and, if any, of the substitute assets fixed that cover them, as well as the derivative financial instruments linked to each issue. The issuers have to provide the Bank of Spain with a monthly cover pool report.

### Supply and demand: Main investors and issuers of Covered Bonds (CBs)

In the first half of the last decade, the CB market was dominated by core euro country issuers, which accounted for more than 90% of the total amount outstanding. Since then, there has been a significant increase in the amount of CBs issued by peripheral countries, as a consequence of the increasing funding needs of the banking sector. Even though since 2008, the total amount of bonds issued in the market has still been significant, these bonds were issued with lower durations. The increase in CB spreads during the crisis allowed for financial institutions to maximize their funding strategies, keeping a relevant issuing amount but with lower duration<sup>3</sup>.

<sup>3</sup> In some countries, like Spain, during the crisis the only instrument that has still been used by the banking sector in their wholesale funding strategies has been CB. There has not been any MBS issue and the amount of new unsecured bonds has been very small compare to the previous period.

In addition, CB issuance has slightly decreased during the crisis with respect to previous activity because of the issuance of Government Guaranteed Bonds, which in some jurisdictions were highly used as a result of their lower cost. However, the liquidity policy approved by the ECB and their 'Covered Bond Purchases Programs'

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played a relevant role in keeping CBs as a broadly-used funding vehicle for financial institutions<sup>4</sup>.

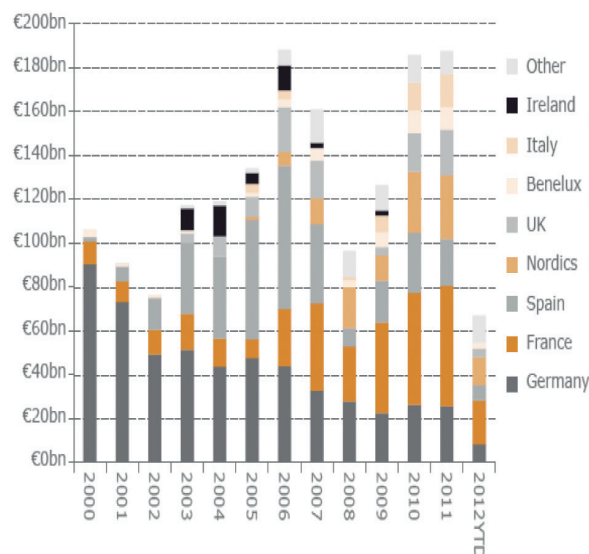
On the investor side, as stated before, CBs are a very attractive financial investment because of their top credit quality, large choice of maturities, vast liquidity and their solid legal framework. As a result, they offer interesting diversification opportunities to investors with respect to pure unsecured debt. Recently, the debate regarding the "burden sharing" (or bail-in) of investors in subordinated debt and also senior unsecured debt, has contributed to a greater attractiveness of investors for CB.

The largest holders of this kind of asset are Monetary Financial Institutions. Besides the benefits already mentioned, the lower capital charges for investing in CBs and the favorable treatment regarding the Eurosystem's liquidity-providing operations (ECB, 2010) are the two main reasons behind these strategies. Second tier investors are mutual funds,

Exhibit 2

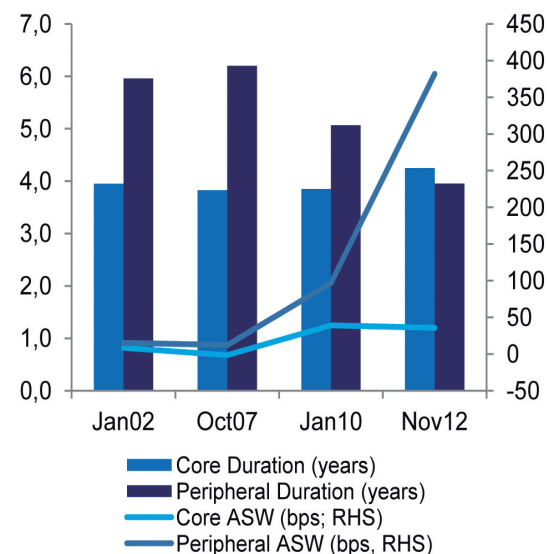
## 38 Breakdown of European Covered Bonds issuers

Issuance of Covered Bonds in EUR by country (€ bn)



Source: ECBC (2012).

Asset swap spread (bps) and duration (years) in the CB market



Source: Afi based on Merrill Lynch data.

<sup>4</sup> Given the lack of market access, the issue-to-retain strategy has remained a key way to obtain liquidity for peripheral issuers throughout 2010 to 2012, using the discount policy of the ECB. This has been especially the case in Spain, being one of the reasons that explain the significant level of new issues during these years.



pension funds, insurance companies, central banks and, in some countries, also retail investors. In any case, it must be noted that most of these investors are located within Euro countries, with only residual participation from outside the Euro Area. In fact, as a consequence of the crisis, this “home bias” at a national level has been even more important.

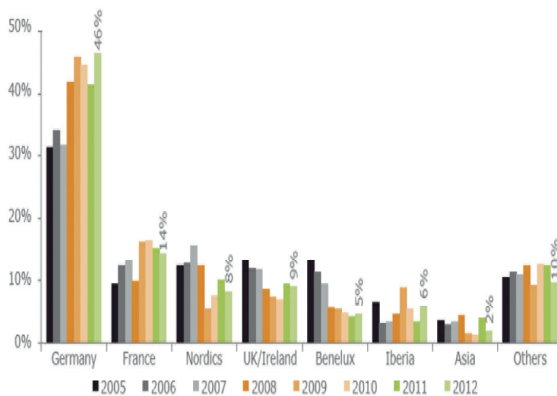
## Market evolution: Differences among main European Covered Bonds

The valuation of CBs is complex, and in most cases it is only weakly related to differences in legal frameworks or portfolio quality. In fact, during

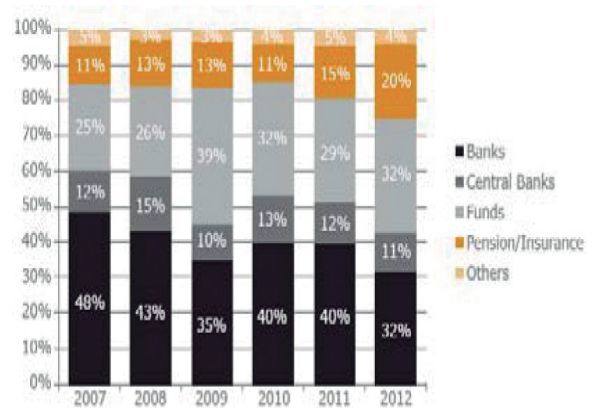
Exhibit 3

### Investors in Covered Bonds

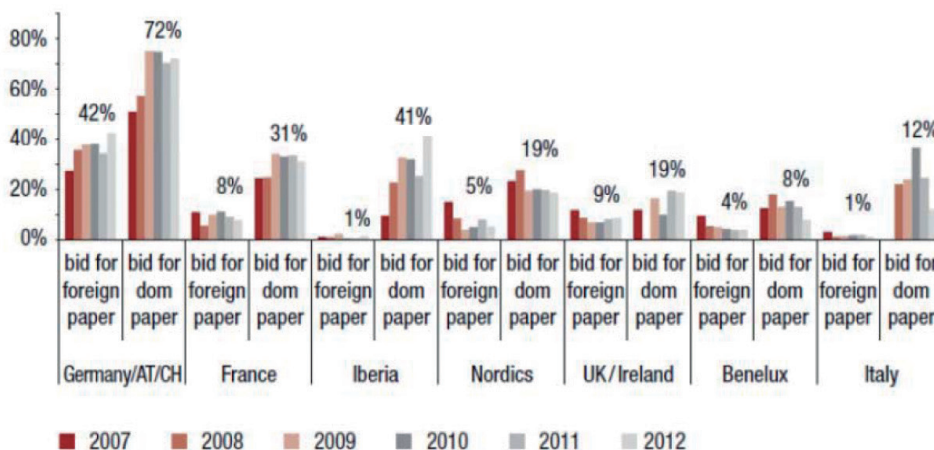
Covered Bond investors by Country



Covered Bond investors by institution



Home-bias in European Covered Bond market



Source: ECBC (2012) and RBS.

the last semesters, the yield levels across different CB markets do not appear to be trading in the secondary market according to fundamentals, and therefore affecting also new issuances. Macroeconomic, banking sector and even political factors have been extremely relevant when trying to explain this bond's performance.

Although the ECBC (2012) determines that there are many factor affecting the evolution of CB spreads, such as: (i) sovereign risk, (ii) lower supply than originally expected, and (iii) the credit quality of the issuing bank and the cover pool, during the crisis it is clear that the most relevant one has been sovereign risk. In fact, since the inception of the crisis in 2008, spreads have remained extremely heterogeneous and volatile, especially in those countries that have been more severely hit by the sovereign crisis.

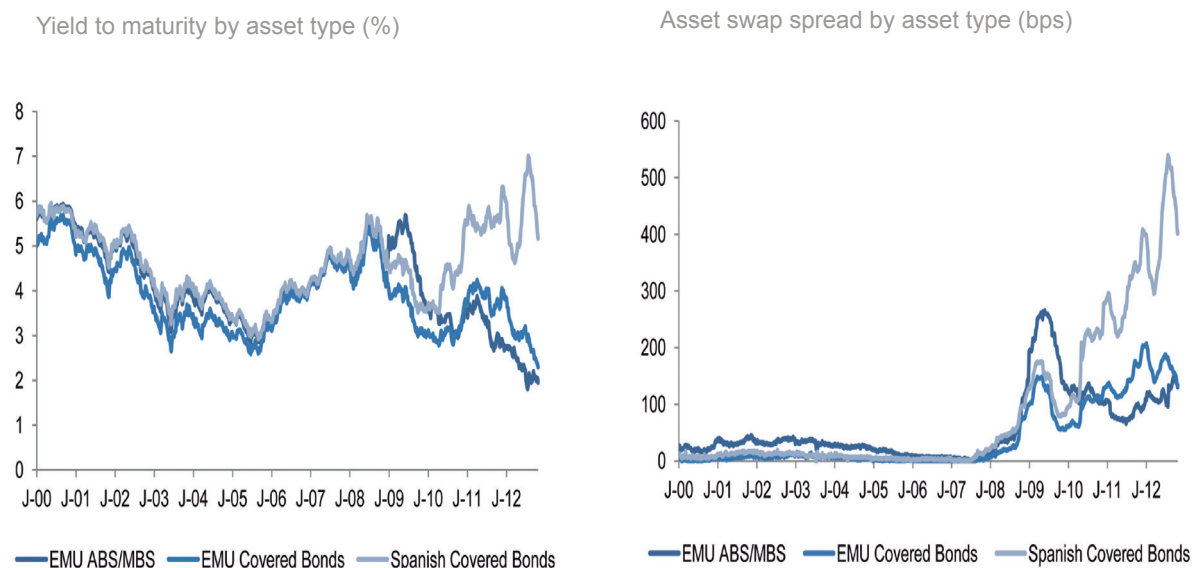
A good example has been the evolution of Spanish *Cedulas Hipotecarias*<sup>5</sup>. Their yields and spreads have surged in recent years as a result of the high correlation with their sovereign peers, explaining a significant part of the different evolution of CHs and other European CBs since 2010, as can be seen in Exhibit 4.

But this has not only been a Spanish CB stand-alone phenomenon. In Exhibit 5 it can be seen that the correlation between Spanish and Italian bonds with their sovereign peers has been very significant, and very low with the IRS curve. On the other hand, French, German and Dutch CBs are much more linked to the evolution of IRS than to the evolution of their Treasuries.

Another way of seeing the relationship between CBs and sovereign bonds is by analyzing the

Exhibit 4

#### Evolution of European MBS, Covered Bonds and Spanish Cédulas Hipotecarias



Source: Afi based on Merrill Lynch data.

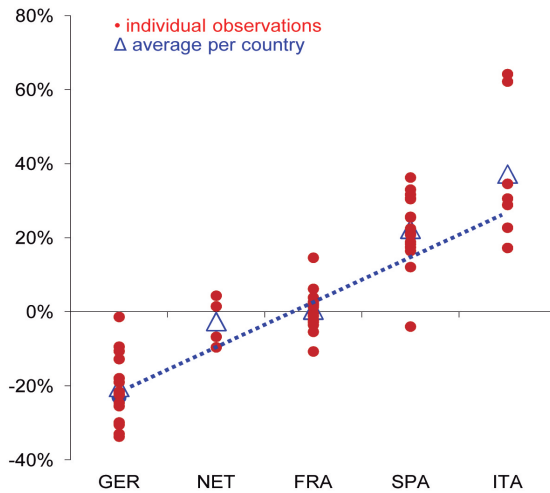
<sup>5</sup> However, Spanish CH have outperformed Spanish debt during 2012. The difficulty of establishing a haircut on CB holders, as seen in Greece, is one of the main reasons. Besides, the final exposure to real assets that any investor in CBs would have compared to sovereign bonds has also been quoted as a relevant factor.



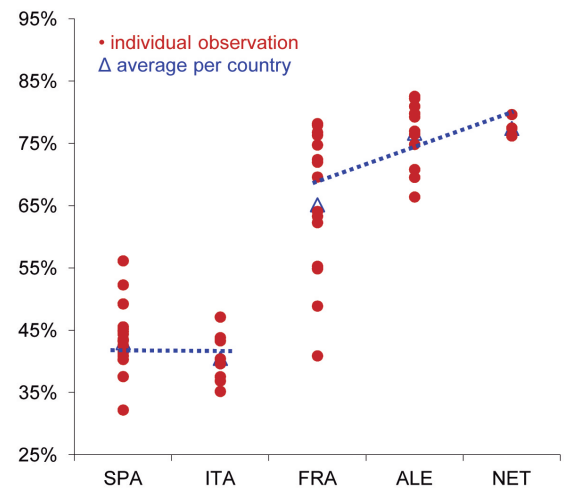
Exhibit 5

### Relationship between Covered Bonds and Sovereign Bonds some Europe countries

Correlation between Covered Bonds and Sovereign Bonds yield<sup>1</sup>



Correlation between Covered Bonds and IRS<sup>1</sup>

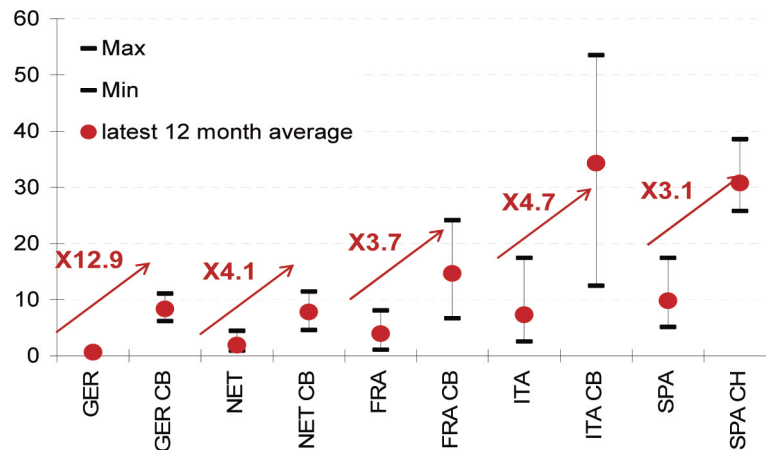


<sup>1</sup> Based on a selection of references with 5 years residual life.

Source: Afi based on Reuters data.

Exhibit 6

### Bid-Ask spread of Covered Bonds and Sovereign Bonds (in basis points)<sup>1</sup>



<sup>1</sup> Basis Points (bps). Analysis done with 5 years residual life references. The graph shows the maximum, minimum and average of the last 12 months. Red numbers refer to the number of times the bid-ask spread of CB is higher than the one of its Sovereign benchmark.

Source: Afi based on Reuters data.

evolution of bid-offer spreads in both markets. Exhibit 6 shows that the Spanish and Italian CB spreads have widened significantly. But, the same trend can be observed with the sovereigns. The wider the sovereign bid-ask spreads, the wider the CB bid-ask spreads. In fact, the Spanish CB spread has widened but to a lesser extent with respect to the sovereign. Exactly the opposite has happened in core jurisdictions. The difference in bid-ask spreads between Spanish CBs and Spanish Treasuries is 3.1x, which is much lower than in other core European countries. This situation could reflect a higher volatility in the CBs in core countries rather than in the Spanish CB market.

## What's next? Regulatory changes and covered bonds

Even though there are many factors that should be considered when valuing these instruments, and in some cases these are very related to the sovereign, during the coming years, there will be important regulatory changes that could have a significant impact on both, primary and secondary CB markets.

First, the Capital Requirements Directive IV (CRD IV) is the legal text that transposes the Basel III regulatory framework into enforceable EU legislation<sup>6</sup>. In the specific case of the CB, there are some differences

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between Basel and CRD, the latter giving a more favorable treatment to CBs in contrast to unsecured debt when determining capital charges.

According to current regulation, the two existing methodologies to determine capital charges—Standardized and the IRB approach—use the issuer risk as the main driver rather than the rating of the CB itself. This creates confusing situations in which a CB issued by different banks but with similar characteristics, could have different risk weighting depending on the issuer. If it has an A- or lower rating, risk weighting would be 20%; but if the issuer rating is AA- or higher, the risk weighting would be 10%.

Under CRD IV, the standardized approach methodology to determine risk weighting will be based on the CB itself and no longer on the rating of the issuer, which makes a significant difference with respect to the current situation. Only in those cases in which CBs are not rated, the risk weighting will be linked to the senior unsecured debt of the issuer, as can be observed in Table 3. As a consequence, it is expected that CB capital consumption will benefit from the application of CRD IV.

However, the IRB methodology will not have the same positive impact on CBs. Unlike the standardized approach, IRB does not change from the previous regulatory framework, and therefore it does not have an explicit direct link to CB ratings. The IRB approach uses Probability of Default (PD) and Loss Given Default (LGD) as the main variables explaining the rating. Since there is no historical data on CB issuer's defaults, PDs are approximated with the issuer PD, leading to an overestimation of the real numbers that CBs should have<sup>7</sup>. As a result, IRB banks only benefit from this more sophisticated approach when

<sup>6</sup> This process is taking more time than initially expected. It was supposed to be effective by January 1<sup>st</sup>, 2013, but there has been a significant delay in the approval process that will probably delay the initial timeline.

<sup>7</sup> LGD is uniformly set at 11.25%, and it does not vary among different programs depending on overcollateralization or recovery expectations.

Table 3

**Risk weighting for covered bonds –Standardized approach**

<b>CRD IV - Standardized Method – Rated Covered Bonds</b>						
Covered bond rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC and below
CRD IV risk weight (%)	10	20	20	50	50	100
<b>CRD IV - Standardized Method – Non-Rated Covered Bonds</b>						
Credit institution rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC and below
Credit institution risk weight (%)	20	50	50	100	100	100

Source: CRD IV and Basel III.

a CB issuer rating is rated AA+ or above (Fitch Ratings, 2012). Any bank investor following IRB would have to assign more capital for investing in a CB than those following the standardized methodology. This situation would benefit both, bank investors following the standard approach—since they will have lower capital charges—, and issuers with lower rating—since they will not be penalized by the correlation factor according to the new regulatory framework<sup>8</sup>.

The second factor that has to be analyzed in order to extract relevant conclusions on the impact that new regulatory framework could have on CBs comes from the liquidity side. According to Basel III and CRD IV, the short term liquidity ratio that institutions will have to satisfy—Liquidity Coverage Ratio (LCR)—will determine two levels of assets with different haircuts and caps in order to define the liquid assets needed to cover the ratio. The key issue will be to determine whether CBs will form part of level 1 or 2 assets<sup>9</sup>.

Finally, the European Union is currently defining the framework for the recovery and resolution of financial institutions, under discussion at the FSB and European Commission level. Even though new regulation will not be implemented before 2015, the impact it could have on the market will

have to be considered when analyzing potential risks and therefore returns of these instruments. Resolution regimes could affect the funding costs of financial institutions, resulting in further tiering and differentiation. For instance, depending on the asset encumbrance policy, and the definition of the instruments that could be involved in a bail-in process, the difference between unsecured debt and CBs could change, in favor of the latter<sup>10</sup>.

## Conclusions

Since the beginning of the crisis, but especially during the last three years, the wholesale funding market in the banking sector has been a clear example of the complicated situation of the European financial markets. New bond issuance to the “open-market” has been scarce, and with very different conditions than in the pre-crisis period. In the secondary market, spreads have increased significantly as a consequence of the sovereign debt and banking crises, especially in some peripheral countries. In fact, although there are significant differences among European legal frameworks for CBs, the evolution of these instruments has been much more linked to the sovereign than to CBs characteristics and their underlying cover pools.

<sup>8</sup> Large banks (total assets equal or greater than EUR70bn) will also be penalized by the correlation factor between the issuer's performance and the economic cycle introduced in IRB methodology. As a consequence, according to Fitch (2012), capital charges for CB issued by a large bank can be one third higher than capital charges for CB issued by a small one.

<sup>9</sup> The liquidity level depends on many factors such as the size and depth of the market, volume traded, bid-ask spreads and volatility, rating, etc.

<sup>10</sup> A deep analysis on the implications for CBs of resolution process can be found in Winkler (2012).

Since these instruments will still be very relevant in the future as a result of their lower credit risk

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premium and high attractiveness for both sides-issuers and investors- there are some important aspects that must be considered.

First, investors will demand and require more information regarding the cover pool, with micro data that goes well beyond the public accounting standards. This information should be public and transparent in order to generate the needed confidence. Second, the impact of new regulation will be very relevant. The final version of CRD IV and the Resolution regime within the European Union banking sector will have a significant impact on CBs, both for liquidity and for capital consumption factors. Third, currently the pricing differences of these instruments among jurisdictions are explained by factors that go well beyond the legal framework and cover pool. The correlation between CBs and sovereign issues has increased significantly. Any policy towards normalizing the sovereign situation will have a direct impact on these instruments. Finally, it must be noted that a potential European banking union would have a very significant impact on this kind of instruments. The existence of different legal frameworks within European countries, and the absence of an integrated mortgage market are significant obstacles to be considered, especially if one of the main purposes of the banking union is the existence of pan European institutions. For this to happen, a common legal framework would be required in order to maximize banks' funding strategies and avoid the negative impact of market fragmentation.

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