"Covered bonds and investor protection: too safe to fail?"

Master thesis

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I. Introduction

Covered bonds have been around for many centuries and are an important method of obtaining financing for banks. The current covered bond market is in fact a global market with vast amounts of capital circulating in it. That is why a lot of jurisdictions felt the need to regulate these covered bonds and thus have put legislation in place to regulate the issuance of those financial instruments and, most important, the protection of investors in these instruments. Belgium joined these jurisdictions on 3 August 2012 with the new Law on Belgian Covered Bonds. This master thesis was written in response to this new law. Since this law is relatively new, not a lot has yet been written on it. This provides for a great opportunity to investigate how good a job the Belgian legislator has done, and to what extent he has been diligent in constructing the legislative framework.

Covered bonds are viewed by many as one of the safest ways to invest money. The reason for this is that the repayment of the principal amount and the interest is covered by a pool of high quality assets[1], hence the name 'covered' bonds.

The latter sounds a bit familiar. Did the financial crisis not start like that, with "high quality assets" covering securities?

When the financial crisis unfolded in 2007 – starting with the collapse of the first giant, namely Lehman Brothers – people started to wonder how all this could have happened, how a decline in the real-estate market in one country can have such an effect on a global scale. The answer they found was: because of securitization of subprime mortgages. But what is securitization? Securitization basically meant that the mortgages are being sold to a securitization bank or an SPV, which will subsequently issue bonds in order to finance the purchase of those assets. This was a convenient way for banks to grant loans to people who would never be able to pay them back and move them off the balance sheet, thus eliminating their exposure to those risky assets and passing them on to the investors.

[1] Schwarcz 2011, p. 562.

Obviously, when the housing market collapsed, the recovery value of the property of the borrowers plummeted, thus leading to massive losses. Investors in the notes lost tons of money and these practices pushed the world into the abyss. Result? Investors lost confidence in the banks and the banks had to be bailed out by the taxpayers. Consequently, and completely understandable, investors adopted a hostile mindset towards those complex securitization operations. Seen as how investors have adopted such a hostile mindset, the question then turns to: what about covered bonds?

The answer to that question is relatively simple. As will be shown in Section III.b.1 of this thesis, covered bonds do indeed share a couple of similarities with securitization but, more importantly, they differ substantially in many ways. Most importantly, legislative covered bond issuances are traditionally less complex and heavily regulated. Does this mean that the investors are completely safe? This paper analyzes the different investor protection mechanisms installed by regulations and tries to determine how safe investors really are. The analysis will demonstrate that investors in these covered bonds basically have almost nothing to fear due to the extensive protection offered by covered bond regulations. But, what about others? How do covered bond issuances interplay with the market as a whole? Is it yet another way a crisis can emerge? This paper will analyze an aspect of covered bonds in view of the safety of the market. As will be shown in Section III.b.2 covered bond issuances might lead to systemic risk creation. Thus although there has not been a single default on covered bonds so far, the market might have good reason to become a bit more careful when it comes to covered bonds and start scrutinizing issuers more closely.

The structure of this paper is as follows. Section II provides an introduction to covered bonds. This section will discuss what covered bonds are, how the issuance is structured, what the benefits are of covered bonds, what the difference with standard securitization is and finally, provide a brief overview of the covered bond market in order to give the reader a clue on how important covered bonds actually are. In the latter part, the situation in the U.S. will be discussed. The reason for spending some time on the U.S. is simple. The U.S. is one of the jurisdictions that is contemplating a legislative covered bond regime, but still has to pass the bill. Section III will provide the reader with an overview of the risks related to investing in covered bonds and consequently, how the investor is protected. Section IV concludes.

Since this thesis is written as a response to the new Belgian Law on Covered Bonds, the new Belgian legislation regulating covered bonds will be the main focus of this paper. However, some parts – such as providing a definition of covered bonds and an overview of certain risks related to covered bonds – are general and thus makes the analysis applicable in other jurisdictions as well.

II. What are covered bonds?

Before elaborating on investor protection it is important to understand what covered bonds are. This section is structured as follows. Part a. will provide the reader with a description of what covered bonds are. Part b. will go into detail on the basic characteristics of covered bonds and how the issuance is structured. This part will focus primarily on the situation in Belgium, but some characteristics such as over-collateralization, are general and apply in other jurisdictions as well. Part c. will provide a brief analysis of the similarities and differences between covered bond structures and securitization. Part d. will provide the reader with an overview of the benefits of covered bonds. Finally, part e. will provide a brief analysis of the covered bond market and the situation in the U.S.

a. Description of covered bonds

When writing a thesis on covered bonds, it is quite essential to start with elaborating a bit on what covered bonds actually are. As mentioned in the introduction, covered bonds have been around for centuries, mostly in Continental Europe. Even though they have existed for quite some time, a globally accepted definition of 'a covered bond' still has to be created.

A lot of legislative pieces and official institutions offer a definition of covered bonds, yet a uniform definition cannot yet be found. A reason for this is that the issuance of covered bonds is subject to the legislation of the country of the issuer and not regulated by one

single regime. Thus every country has its own regime which can differ substantially in some aspects, such as how the cover-pool is constituted.

One definition is offered by the European Central Bank, which defines covered bonds as " '*dual recourse' bonds issued by (or offering recourse to) a credit institution and with priority recourse to a cover-pool of collateral*". Although this definition is provided by the European Central Bank itself, they acknowledge that there is no universally accepted definition of covered bonds.[2]

In the Undertakings for Collective Investment in Transferable Securities Directive ("UCITS" Directive), another definition of covered bonds is mentioned, be it indirectly, in art. 52 (4). Article 52 contains the investment limits in certain securities by undertakings for collective investment in transferable securities. Art. 52 (4) refers to bonds issued by a credit institution which is by law subject to special public supervision and where the bonds are related to assets that are capable of covering the claims attached to those bonds, and which, in the event of failure of the issuer, will be used on a priority basis to reimburse the bondholders.[3]

As can be seen from the aforementioned, a universally accepted definition does not exist and it is merely a description of certain characteristics of a covered bond. This led the European Covered Bond Council (ECBC) to draft a document containing what they believe to be minimum standards. In order to be able to speak of 'covered bonds' these minimum standards have to be present.[4] This is also recognized by the European Central Bank which refers to these minimum standards.[5] It is important to note that these minimum standards must be read independently from any other definition or interpretation of covered bonds.

The ECBC mentions in its document the following as minimum standards[6]:

- The bonds are issued by a credit institution, subject to public supervision and regulation.

[2] ECB, "Covered bonds in the EU Financial system", December 2008, p. 6.
[3] Art. 52 (4) of Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), L302/32.
[4] ECBC, "ECBC essential features of covered bonds", available at www.ecbc.hypo.org.
[5] ECB, "Covered bonds in the EU Financial system", December 2008, p. 6.
[6] ECBC, "ECBC essential features of covered bonds", available at www.ecbc.hypo.org.

- They provide a claim against a cover-pool, consisting of financial assets, in priority to unsecured creditors.
- The credit institution is under an obligation to maintain sufficient assets in the cover-pool.
- The obligations related to the cover-pool are supervised by public or other independent bodies.

Thus, while there is no general definition, there are certain elements that have to be present and which are consequently used to provide a description of what covered bonds are. These quintessential characteristics (such as the cover-pool, the over-collateralization obligation, the dual-recourse feature, etc.) will be discussed in the next part (part b.) together with an oversight of the structure of a covered bond issuance.

b. Characteristics and structure of covered bonds

In this part, the basic characteristics of covered bonds will be explained. These are[7]:

- The required qualification of the issuer.
- The existence of a cover-pool with high quality ring-fenced assets.
- The over-collateralization requirement.
- The on-balance sheet nature.
- The dual-recourse right granted to bondholders.

Before starting to elaborate on these characteristics and explaining the structure of a covered bond issuance, a distinction has to be made. There are basically two types of covered bond issuances: a legislative covered bond issuance and a structured covered bond issuance. The distinction between the two lies in the question on whether or not the issuance is based on a specific legal framework regulating covered bonds or not. When there is a specific legal framework in place regulating the issuance of covered bonds, the latter are called "legislative covered bonds". When no such legal framework exists, or when covered

[7] Anand, Chapman and Gai 2012, p. 2; Packer, Stever and Upper 2007, p. 43-44; PwC, "Uncovering covered bonds", June 2012, p. 5; Schwarcz 2011, p. 562.

bonds are issued outside of the legislative framework, the covered bonds are called "structured covered bonds".[8] It is important to stress that, even when there is a legislative framework in place, issuers can still choose to issue structured covered bonds.[9]

1. Legislative covered bonds

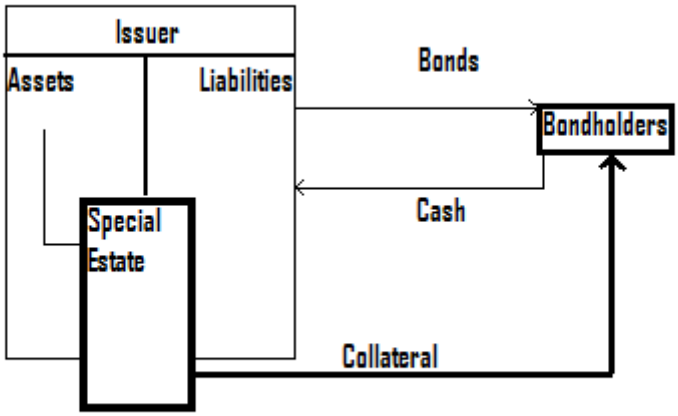
In this section, the typical characteristics and the basic structure of a legislative covered bond issuance will be demonstrated by means of two issuances of covered bonds under the new Belgian Law of 3 August 2012 on covered bonds, namely the covered bond issuance by Belfius Bank in November 2012 and the covered bond issuance by KBC Bank in January 2013.

It is important to note that the aforementioned issuances, which will be used as an example, are governed by the Belgian Law and therefore the structure or characteristics might differ from other jurisdictions. Generally speaking however, the Belgian law is akin to most other legislative regimes regulating covered bonds.

The Belgian law makes it possible in theory for credit institutions to issue two types of covered bonds. The first type are basically covered bonds that comply with the requirements of the Capital Requirements Directive and with the Undertakings for Collective Investment in Transferable Securities Directive. This first type is called the 'Belgian Pandbrieven'. The second type are covered bonds that comply with the UCITS-directive, but not with the Capital Requirements Directive. The latter are just called "Belgian covered bonds". The second type is rather theoretical and due to the way the regulations are constructed, only the first type can be issued in practice by Belgian credit institutions.[10] In order to keep it simple and avoid confusion, whenever I talk about the Belgian law, I will use the term "covered bonds" instead of Pandbrieven.

The Belgian law envisages a complete on-balance sheet structure, where assets are separated by law into a Special estate, to which the bondholders have a preferential claim in case of insolvency. The basic structure can be presented as follows.

[8] Kothari, year unknown, p. 3.
[9] ECB, "Covered bonds in the EU Financial system", December 2008, p. 9.
[10] Wandels 2012, p. 240.



The issuer

In order to be able to issue covered bonds under the Belgian law, the issuer has to meet a couple of requirements.

Firstly, the issuer has to be a credit institution.

According to the Belgian law, only credit institutions which have obtained a license granted by the National Bank of Belgium (NBB) are allowed to issue covered bonds.[11] On the moment of writing of this thesis, only two Belgian credit institutions had been granted the general license to issue covered bonds, namely Belfius Bank SA/NV and KBC Bank NV. The National Bank of Belgium has to publish a list on its website with all the banks that have been granted the general license.[12]

If a credit institution obtained the general authorization of the National Bank of Belgium to issue covered bonds, it still has to obtain a specific authorization. This specific authorization has to be obtained for every individual covered bond program. The issuer will have to compile a file with amongst others, the impact of the program on the liquidity position of the issuer. This file then has to be submitted to the National Bank of Belgium. The National

[11] Art. 10 of the law of 3 August 2012 on Belgian Covered Bonds.
[12] This list is available at http://www.nbb.be/pub/cp/domains/ki/li/covered-bonds-institutions.htm?l=nl&id=cb. This list is only available in French and in Dutch.

Bank of Belgium will grant this specific authorization once it has been assured that the particular program meets all the requirements set forth in the legislation.[13]

Both KBC Bank NV and Belfius Bank SA/NV obtained the required authorizations to issue covered bonds and to launch their respective programs on 6 November 2012.[14]

The cover-pool

One of the more typical characteristics of covered bonds is that they are collateralized by a cover-pool of assets. These assets that serve as collateral are ring-fenced into a special estate. Quintessentially, according to the Belgian law, the assets still remain on the balance sheet of the issuer. They are transferred to a special estate by fiction of the law. The transfer occurs when the assets are registered in a special Register of Cover Assets.[15] Likewise, when the assets are removed from the register, they are no longer part of the special estate.

On this particular point, the law of other jurisdictions might differ. Some jurisdictions separate the assets of the cover-pool from the general estate by transferring them to a Special Purpose Entity (SPE).[16]

One of the typical aspects of a legislative covered bond structure, is that not all assets are eligible to be part of the cover-pool. Only the assets that are explicitly mentioned in the specific covered bond regulation are eligible for transfer to the special estate.

The question then turns to which assets are considered eligible to form part of the cover-pool. In Europe, the Capital Requirements Directive describes in Annex VI, par. 68 the types of assets and the standards they must meet in order to be eligible collateral for covered bonds.[17] In Belgium, article 3 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds defines the assets that are considered eligible to form part of the cover-pool.[18]

[13] Art. 10 of the law of 3 August 2012 on Belgian Covered Bonds.
[14] KBC Bank NV prospectus, p 51-52; Belfius Bank SA/NV prospectus, p.7-8; www.nbb.be.
[15] Art. 9, §1 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[16] ECBC, "Essential features of covered bonds", www.ecbc.hypo.org.
[17] Annex VI, par. 68 of the Capital Requirements Directive; ECB, "Covered bonds in the EU financial system", December 2008, p.7.
[18] Art. 3 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.

Before going into detail on the eligible assets, it needs to be mentioned that the assets listed in art. 3 coincide with assets listed in the Capital Requirements Directive, thus explaining the fact that Belgian credit institutions *de facto* can only issue 'Pandbrieven' (which, as mentioned before are both UCITS and CRD compliant). This was done intentionally – as stated by the Belgian minister of Finance, S. Vanackere in his report to the King – so that investors would be able to invest more easily in the bonds and the bonds would be eligible for monetary support by the European Central Bank.[19]

There are five categories of assets mentioned in the Royal Decree that are eligible to form part of the cover-pool:

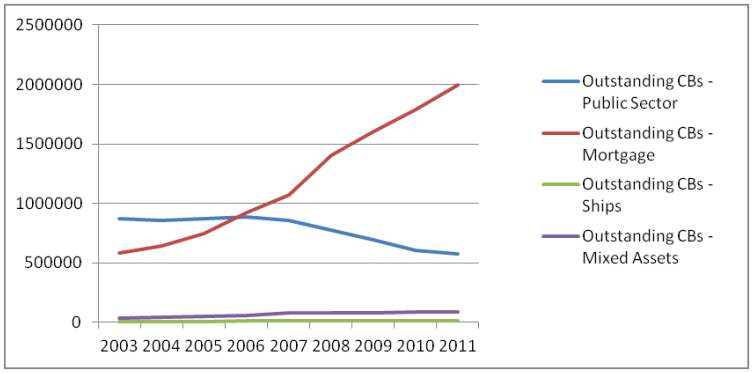
- Category 1: Residential mortgage loans, provided that it is a first lien mortgage[20], and residential mortgage-backed securities.
- Category 2: Commercial mortgage loans and commercial mortgage-backed securities.
- Category 3: Exposures to public entities.
- Category 4: Exposures to other credit institutions.
- Category 5: Plain vanilla hedging instruments such as currency swaps and interest rate swaps.

The five categories are also subject to a geographical limitation. Assets falling into categories one and two are only eligible for transfer to the special estate if the mortgage relates to an estate situated in the European Economic Area. Assets falling into the third and fourth category are only eligible for transfer to the special estate if the public entities or the credit institutions reside under the jurisdiction of a member state of the OECD. Regarding the fifth category, i.e. the derivatives, the counterparty has to be a credit institution residing under the jurisdiction of a member state of the OECD.

Belgian issuers are further limited in their choice of assets by the 85% Asset Coverage Test mentioned in art. 5 of the Royal Decree. This test will be explained more thoroughly when discussing the investor protection.

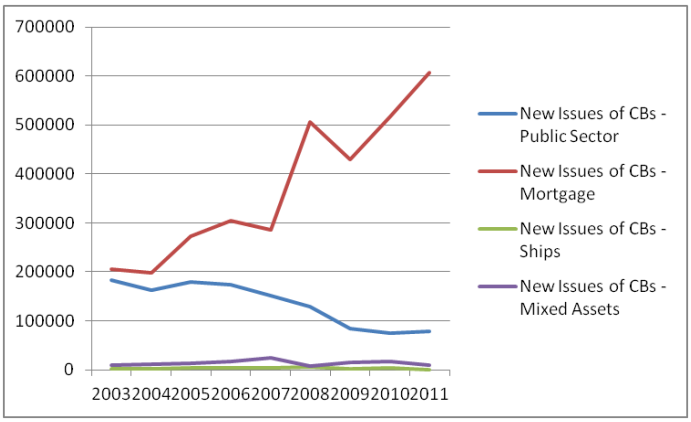
[19] Report of S. Vanackere to the King of Belgium on the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds, published in *Belgisch Staatsblad* of 18 October 2012, p. 63448.
[20] Wandels 2012, p. 241.

These are the theoretical possibilities, but out of which assets is the cover-pool in practice constituted? In practice, the asset type that is used most as collateral for covered bonds are mortgages. According to statistics on outstanding covered bonds created by the European Covered Bond Council (see graph 1), the share of mortgages in covered bond markets increased from 72% in 2010 to 75% in 2011. Public sector exposures on the other hand dropped from 24% in 2010 to 21% in 2011.[21] This drop might be related to and can be explained by the emergence of the Sovereign Debt crisis in Europe.



Graph 1. Source Data: 2012 ECBC European Covered Bond Fact Book.

The increasing use of mortgages as collateral for covered bonds is also exemplified by statistics on type of collateral used in new issuances. Mortgage backed covered bonds went up to 87% of new issuances in 2011, compared to 84% in 2010.[22] Graph 2 shows the evolution in type of collateral chosen in new issuances.



Graph 2. Source Data: 2012 ECBC European Covered Bond Fact Book.

[21] Eichert 2012, p. 552-553.
[22] Eichert 2012, p. 552-553.

The issuances of Belfius Bank SA/NV and KBC Bank NV followed this trend. The cover-pool of both programs contains almost exclusively residential mortgage loans. Belfius even took on the commitment to make sure that the cover-pool will not contain residential mortgage-backed securities, commercial mortgage loans, commercial mortgage-backed securities and other asset-backed securities.[23] The special estate of Belfius Bank SA/NV also contains Belgian government bonds.[24] The latter are qualified as liquid bonds, for the purpose of the liquidity test contained in art. 7 of the Royal Decree, which will be elaborate upon further when discussing investor protection mechanisms.

Interestingly, none of the two programs contain derivatives to hedge interest rate risk. This can be explained by the fact that there is almost no interest rate risk and even if there is, it is hedged naturally due to the fact that the majority of the cover-assets and the covered bonds all have a fixed interest rate.

To conclude the analysis of the cover-pool, It needs to be stressed that there can be more than one special estate.[25] A first issuance can be covered by a completely different cover-pool than a second issuance. This is not necessary however, as can be seen by the two Belgian covered bond programs. Both KBC and Belfius have only one special estate for their entire program.[26] What is prohibited however, is putting assets which already form part of a cover-pool into another cover-pool. In other words, one single asset cannot be part of two cover-pools.[27]

Over-collateralization

One of the reasons why covered bonds are considered to be a very safe investment is because of the over-collateralization requirement. This means, as the name already suggests, that the issuer has the legal obligation to make sure that the cover-pool has sufficient collateral. To put it in other words, the issuer has to make sure that the value of

[23] Belfius Bank SA/NV prospectus, p. 79.
[24] Presentation on Belfius Mortgage Pandbrieven Programme, www.belfius.be/financial/NL/Debt/index.aspx.
[25] Art. 16 of the law of 3 August 2012 on Belgian Covered Bonds.
[26] Belfius Bank SA/NV prospectus, p. 8; KBC Bank NV prospectus, p. 65.
[27] Art. 9, §1 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.

the cover-assets exceeds the principal amount outstanding of the covered bonds by a certain degree.

This obligation thus implies that the cover-pool is not static, but instead subject to continuous change in constitution. After all, the assets do not always maintain their initial value. In order to meet the over-collateralization requirement, the issuer might have to add additional assets. The over-collateralization requirement thus implies an obligation for the issuer to replace weak or non-performing assets when those assets threaten to push the over-collateralization level under the threshold set in the covered bond regulation.[28]

The law of 3 August 2012 on Belgian Covered Bonds did not specify the specific threshold of over-collateralization. The law provides the King with the competence to determine this threshold.[29] The level was determined in the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds, which set the level of over-collateralization at 105%.[30] This means that the value of the assets in the cover-pool should be at least 5% more than the principal amount outstanding of the covered bonds issued by the credit institution.

The obligation to keep the value of the cover-pool at least at this level, and thus de obligation to replace or add assets to the cover-pool, is mentioned in art. 15 of the law of 3 August 2012 on Belgian Covered Bonds.[31]

The cover-pool dynamics can be seen clearly in the investor reports on the covered bond programs published by Belfius Bank SA/NV and KBC Bank NV. In these investor reports, one can clearly see the level of over-collateralization fluctuating over time. Table 1 shows the percentages of over-collateralization of the cover-pools of KBC and Belfius.

Table 1.

	December 2012	January 2013	February 2013	March 2013	April 2013	May 2013
KBC	150, 75%	57,56%	58,46%	178,38%	179,63%	
Belfius		86,54%	32,62%	32,67%	45,26%	45,08%

Source Data: Investor reports of KBC Bank NV and Belfius Bank SA/NV[32]

[28] Schwarcz 2011, p. 567.
[29] Art. 15 of the law of 3 August 2012 on Belgian Covered Bonds.
[30] Art. 5, §2 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[31] Art. 15 of the law of 3 August 2012 on Belgian Covered Bonds.

When looking at the evolution of the over-collateralization levels, we can see a couple of strange evolutions which can be explained by the fact that the cover-pool is not static but dynamic and that the issuer can add new assets. I will demonstrate this with a couple of examples.

Firstly, when looking at the evolution of the over-collateralization level of KBC Bank NV, we can see a significant drop in over-collateralization in January 2013. This might seem odd, but it can be explained by the fact that KBC's covered bond program only has one special estate covering all the issuances in the program. The drop is thus caused by the fact that KBC issued a second series of covered bonds. As the principal amount of outstanding covered bonds increased, the value of the assets remained the same thus leading to a lower over-collateralization level. Secondly, we see a sharp rise between February 2013 and March 2013. This is explained by the fact that KBC registered a new portfolio of residential mortgages in the cover-pool. The value of the assets rose from approximately €3 billion to €5,5 billion, while the principal amount of the outstanding covered bonds remained the same.[33]

The same reasoning goes for the evolution of the level of over-collateralization of Belfius Bank SA/NV. The first drop from January 2013 to February 2013 can be explained by the issuance of 3 new series of covered bonds, while the value of the assets in the cover-pool remained relatively stagnant at €2,5 billion.[34]

These statistics reveal one odd element. The issuers both seem to be very keen on keeping over-collateralization levels well above the legal threshold. This can be easily explained by looking at the rating agencies' requirements. In the case of Belfius, the covered bonds are rated AAA. When looking at the rating methodology, we can see that over-collateralization plays an important role. For example, Fitch stated that the AAA-rating is, amongst others, contingent on maintaining an over-collateralization level of at least 30%.[35] The same reasoning goes for KBC. Both Moody's and Fitch require a certain level of over-

[32] KBC Bank Investor Reports, www.kbc.com; Belfius Bank SA/NV Investor Reports, www.belfius.be.
[33] KBC Bank Investor Reports, www.kbc.com.
[34] Belfius Bank SA/NV Investor Reports, www.belfius.be.
[35] FitchRatings Covered Bonds, Presale Report on Belfius Bank SA/NV Mortgage Pandbrieven of 12 November 2012, www.belfius.be.

collateralization in order for KBC to be able to maintain the Aaa- and AAA-rating respectively of the covered bonds.[36]

Dual-recourse

One of the most important features of covered bonds, and a feature that sets it apart from certain other financial instruments, is the fact that the holders of those covered bonds are granted a dual-recourse right in case of insolvency of the issuer. They have a preferential claim against the special estate and should the special estate be insufficient to repay the covered bondholders, then the bondholders will have a claim for the residual amount against the general estate.[37]

Ultimately, the special legal regime for issuing covered bonds is set up to give investors legal protection is case of insolvency of the issuer.[38] The ring-fenced assets are shielded from the general estate of the issuer by operation of the law and are maintained solely for the benefit of the covered bondholders, with a couple of exceptions.[39] The bankruptcy proceedings are thus limited to the general estate only[40] and, in principal, do not affect the covered bondholders.

Since the dual-recourse right relates to investor protection, Section III will discuss how it operates in practice and what the implications are more elaborately.

2. Structured Covered Bonds

In this section, a structured covered bond issuance will be discussed briefly. Since the focus of this thesis is primarily on legislative covered bonds – after all, this thesis focuses on the Belgian law regulating covered bonds – this paper will not go into too much detail. But in order to give the reader a comprehensive overview, some attention must be paid to structured covered bonds.

[36] KBC Bank Investor Reports, www.kbc.com.
[37] Art. 19 of the law of 3 August 2012 on Belgian Covered Bonds.
[38] Kothari, year unknown, p.7.
[39] Art. 19 of the law of 3 August 2012 on Belgian Covered Bonds.
[40] Art. 18 of the law of 3 August 2012 on Belgian Covered Bonds.

As stated before, covered bonds can also be issued in jurisdictions where no specific legal framework regulating the issuance of covered bonds exists, or, even when there is a legislative framework, outside of this legislation.[41] These covered bonds are then called structured covered bonds.

These types of transactions are very similar to covered bond issuances under a specific legal regime. The difference is that the structured covered bond issuance is based on a contractual framework with reference to general principles of law, instead of on a specific legal framework.

The absence of a legal framework regulating the issuance of covered bonds thus means that investors who invest in these structured covered bonds can only rely on the contractual terms of the issuance, in combination with the general commercial and insolvency regulation of the jurisdiction applicable to the issuance.[42] In terms of investor protection, the latter obviously means that the covered bondholders find themselves in a more precarious situation than when a specific legal framework exists, and will thus have a harder time making their claims stick. This increased risk is evidenced by the fact that the yield spread is higher for structured covered bonds compared to legislative covered bonds.[43] The increased spread represents the risk premium attached to the structured covered bonds, i.e. the market's demand for a bigger return to compensate for the increased risk.[44]

Although structured covered bond issuances are considered more risky for the investors, there are a couple of advantages as well.

Firstly, in the absence of a legal regime, all provisions have to be provided for in the contractual terms. This means that the parties have a larger discretionary competence to tailor the transaction to the specific needs. Or in other words, a structured covered bond issuance is somewhat more flexible than legislative covered bonds.[45] The downside of this increased flexibility from an economic point of view – besides the lower level of investor

[41] Packer, Stever and Upper 2007, p. 44.
[42] Schwarcz 2011, p. 569-570.
[43] Schwarcz 2011, p. 570.
[44] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 14.
[45] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 14.

protection – is that transaction costs increase. After all, everything has to be negotiated and the assets have to be sold to a Special Purpose Entity (see *infra*).[46]

Secondly, since everything is provided for on a contractual basis *ex ante*, it is possible to renegotiate the terms of the contract when the market conditions have changed.[47]

Thirdly, legislation regulating covered bond issuances usually states that the issuer has to be a credit institution. Structured covered bonds on the other hand can also be issued by others.[48]

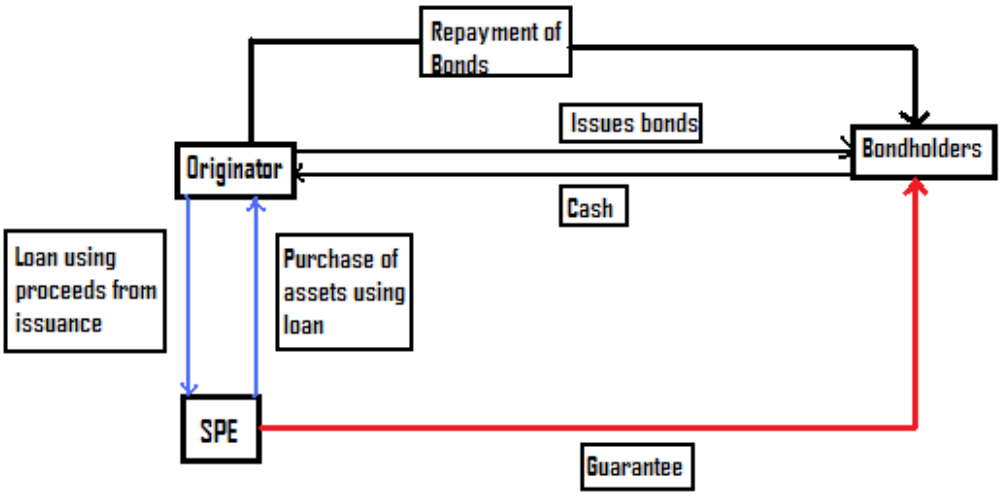
Last but not least, with regards to the cover-pool the structured covered bond issuer can choose to use assets which do not meet the criteria set forth by the Capital Requirements Directive as collateral.[49]

The basic structure of a structured covered bond issuance is obviously somewhat different than an issuance of legislative covered bonds. As stated before, in a legislative covered bond structure, the ring-fencing of assets is achieved by registration of those assets in a register. By operation of law, those assets then form part of the special estate, thus shielding them from inclusion in the general estate when bankruptcy proceedings are opened.

In structured covered bond transactions however, the assets have to be separated from the general estate by means of a sale of those assets to a Special Purpose Entity, sometimes also called Special Purpose Vehicle. (SPE or SPV). This SPE is a separate legal entity. Through this sale of assets, the assets are shielded against inclusion in the bankrupt estate and thus bankruptcy remoteness is achieved.[50] It is important to note that in order to achieve bankruptcy remoteness, the transaction has to be structured in a certain manner in order to avoid consolidation of the SPE with the bankrupt originator.[51] Important as well is the fact that although the sale of the assets to the SPE constitutes a legal sale, it is not considered to be a sale in accounting terms. This thus means that the assets remain on the balance sheet of the originator (which is also a difference with standard securitization transactions).

[46] Schwarcz 2011, p. 570.
[47] Schwarcz 2011, p. 570.
[48] Schwarcz 2011, p. 570.
[49] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 14.
[50] Kothari, year unknown, p. 9.
[51] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 18; Kothari, year unknown, p. 9.

The basic structure of a structured covered bond issuance can be depicted as follows:



Source: Kothari, year unknown, p. 10[52]

Firstly, the originator will issue covered bonds. The cash proceeds derived from the issue are subsequently offered to the SPE in the form of a loan. The SPE will then use that loan to purchase the assets which will be part of the cover-pool, but the assets still remain on the balance sheet of the issuer.[53] That loan still has to be repaid to the originator, but in a structured covered bond issuance, the loan is considered to be repaid when the covered bondholders have been reimbursed.

Since the originator issued the bonds, he is still bound by the obligations relating to those bonds. The SPE functions solely as a guarantor towards the covered bondholders.[54] It is the issuer that still services the assets and collects the revenues derived from those assets to repay the bondholders.[55]

When the issuer would become insolvent, the guarantee offered by the SPE will kick in and the assets are shielded from the bankrupt estate. The covered bondholders will then have a preferential claim against the SPE. The SPE will then have to pass on the cover-pool to a cover-pool administrator, which will continue servicing the assets and reimburse covered

[52] Kothari, year unknown, p. 10.
[53] Kothari, year unknown, p. 17; Schwarcz 2011, p. 571.
[54] Packer, Stever and Upper 2007, p. 44.
[55] Kothari, year unknown, p. 9-10.

bondholders. Should the assets be insufficient, the covered bondholders still have a claim against the general estate of the issuer. [56]

c. Covered bonds versus securitization

A common misconception regarding covered bonds is that it is just an ordinary securitization operation. This is not true however. There are a couple of similarities but, more importantly, there are a lot of differences which set covered bonds apart from standard securitized financial products. This section will discuss some of the more important differences between covered bonds and securitization which will demonstrate that covered bonds are indeed a safer investment than securitized financial instruments.

As stated above, covered bond structures and securitization structures are a bit similar in some aspects. One of those aspects is the fact that the aim of both structures is to establish bankruptcy remoteness with respect to certain assets.[57]

Although the aim of both structures is the same, there are significant differences.

Firstly, covered bondholders have a dual-recourse right attached to the bonds. This means that in case of insolvency of the issuer, only the covered bondholders – with certain exceptions (see *infra* Section III on investor protection) – have a preferential claim on the assets in the cover-pool. In the event that the cover-pool is insufficient to redeem the bonds, the bondholders have an unsecured claim against the general estate of the insolvent issuer. In a securitization operation on the other hand, assets are usually sold to an SPE which issues the bonds. The investors in securitized financial products only have a claim against the assets in the estate of the SPE that issued the bonds. Should those assets be insufficient to cover the claims of the bondholders, then the latter have no luck. There is no recourse to the originator.[58]

Secondly, the assets belonging to the cover-pool serving as collateral for covered bonds remain on the balance sheet of the issuer. Covered bonds, even structured covered bonds, are commonly on-balance sheet structures. Securitization on the other hand is mostly an off-

[56] Kothari, year unknown, p. 9-10.
[57] Schwarcz 2011, p. 571-573.
[58] ECBC, "Essential features of covered bonds", www.ecbc.hypo.org; Schwarcz 2011, p.571-573.

balance sheet transaction. This means that while in covered bond transactions the risk is retained by the issuer, this is not the case for securitization. The risk related to the assets is transferred to an SPE and thus passed on to investors.

Thirdly, in a covered bond structure there is an obligation for the issuer to replace weak or non-performing assets to maintain the required (legal or contractual) level of over-collateralization. Furthermore, it is usually required by law (or contract) that the assets are of high quality (for example CRD-compliant assets). In a securitization structure, there is no such replacement obligation. Investors just have to make do with the assets in the cover-pool and just hope they are of good quality and do not decrease in value.[59] This leads to the fact that securitization is often used by banks in the area of risk management.[60] Covered bonds on the other hand are not suited for this, since the risk is retained by the issuer and the latter is under the obligation to maintain a certain level of over-collateralization. Covered bonds are consequently mostly used for liquidity purposes.[61]

The abovementioned differences already signal the more risky nature of securitization. Securitization transactions are often very complex as well. In a covered bond structure, all assets in the cover-pool have been originated by the issuer himself. In securitization however, the originating bank almost never securitizes itself. Often, the assets are sold to a securitizing bank, which implies that the cover-pool might consist out of assets from other banks as well.[62] On top of that, the cover-pool can be divided into different tranches, each consisting out of different securities. For each tranche, a separate bond or note can be issued to investors. One of the risks here is that a tranche can get a better rating due to the presence of some high-quality assets, while other assets are of pretty poor quality.[63] In covered bond structures, no tranches can be created due to the fact that the cover-pool is dynamic, which consequently means that they are a less complex and safer investment.[64]

[59] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p. 4; ECBC, "Essential features of covered bonds", www.ecbc.hypo.org; Schwarcz 2011, p. 581.
[60] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p. 20-21.
[61] Kothari 2008, p. 3.
[62] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p. 6.
[63] Schwarcz 2011, p. 581.
[64] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p. 10.

d. Benefits of covered bonds

Seen as how covered bonds are often subject to quite strict regulation, one might wonder what benefits can be derived from issuing those covered bonds and thus subjecting oneself to the burdensome regulation.

Covered bonds are traditionally issued by banks who want to refinance at the market without it being too costly. Thus covered bond issuances offer banks a low-cost access to capital, since banks have to pay lower interest rates on covered bonds than on unsecured debt. This can be explained by the fact that covered bonds are safer, due to the cover-pool of high-quality assets serving as collateral for investors.[65] In this respect, covered bonds are even safer than sovereign debt – especially during the sovereign debt crisis in Europe covered bonds outperformed government debt – because of the fact that covered bonds are backed by a physical pool of assets, while sovereign debt is only backed by a promise that the investors will be paid back.[66] The presence of actual collateral also leads to the fact that covered bonds often receive a higher rating than the issuer's rating, thus making financing cheaper, leading to increased profits.[67]

With the cash proceeds of the issuance, the issuer can provide more loans. Thus covered bonds play an important role. Deposit levels at the banks are relatively stable over time, while the demand for mortgage loans is ever growing. The stable level of deposits means that banks can only provide loans up to a certain point. After all, they need money in order to give it to others in the form of a loan. Covered bonds thus provide the banks with a possibility to attract additional capital in the market and enables them to provide loans.[68] Covered bonds thus make banks less constrained by deposit levels.

Furthermore, issuing covered bonds helps banks increase their liquidity. This was demonstrated in a study performed by Carbó-Valverde, Rosen and Rodríguez-Fernández (2012). They discovered that banks with low liquidity are more likely to issue covered bonds.[69] The Capital Requirements Directive – which implements Basel III in the EU – created

[65] Schwarcz 2011, p. 573-574.
[66] Dierks and Somerville 2012, p. 39-40.
[67] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p.21; ECB, "Covered Bonds in the EU Financial System", December 2008, p.7; Packer, Stever and Upper 2007, p. 51.
[68] ECB, "Covered Bonds in the EU Financial System", December 2008, p.11; Schwarcz 2011, p. 573-574.
[69] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p.3.

2 additional ratios: the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). Both ratios were introduced to mitigate default risk. The liquidity coverage ratio focuses primarily on short-term liquidity risk and was constructed to try and prevent banks from having to sell assets to cover cash outflows.[70] Covered bonds can help to meet the liquidity ratios, but they do not reduce risk-weighted assets or leverage ratios.[71]

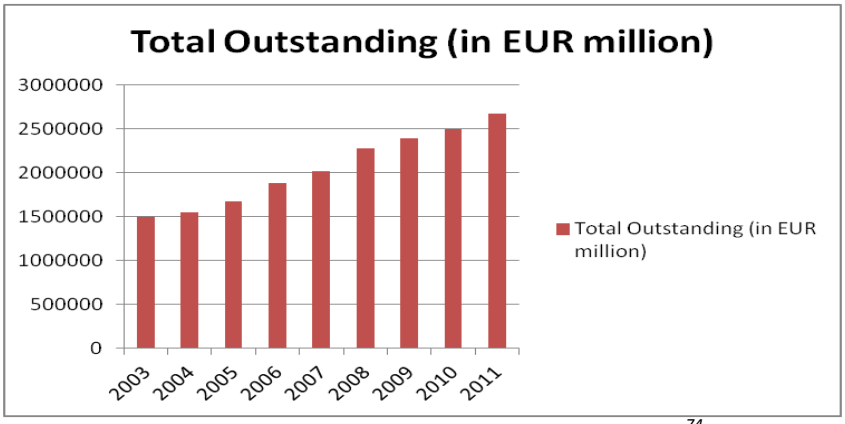
Finally, while it may appear that a legislative regime regulating the issuance of covered bonds is a bit rigid and strict, there is still some room for flexibility. This flexibility might make covered bonds an even more attractive way to raise capital at low cost, since banks can tailor the transaction a bit more. For example, Belfius implemented a regime where some covered bonds may be issued with a call-option for the issuer (thus an optional redemption right for the issuer) or a put-option for the bondholders (whereby bondholders can thus get repaid at certain set periods).[72]

e. The importance of covered bonds: the covered bond market

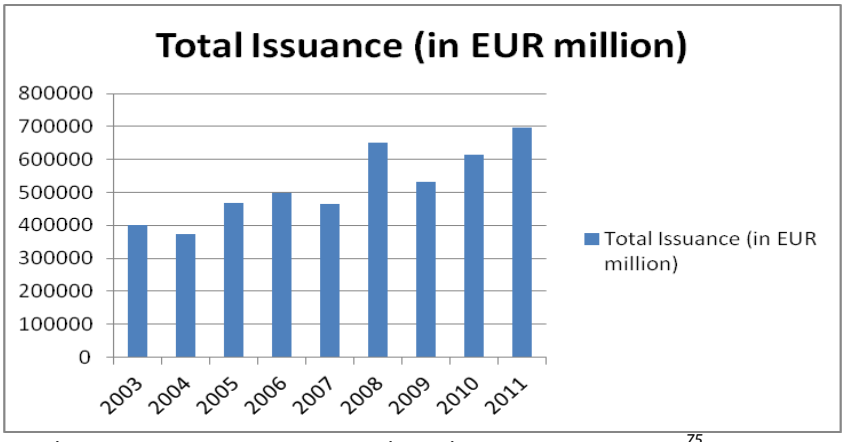
In order to give the reader a clue on the importance of covered bonds, this section will provide a brief overview of the covered bond market. It will provide the reader with a couple of key statistics (amongst others: the amount outstanding, new issuances,..) and will also describe which investors usually invest in these covered bonds.

The covered bond market is a vast market. Graph 3 and 4 provide a pretty clear picture of how immense the market actually is. Graph 3 shows the evolution of outstanding amounts of covered bonds. Strikingly, the outstanding amount nearly reached €2,7 trillion in 2011, a dazzling amount which is almost unimaginable. Graph 4 depicts the evolution of new issuances of covered bonds. As can be seen on the graph, the issuance of covered bonds is on the rise. New issuances rose with 13% from 2010-2011.[73]

[70] Eichert, Engelhard and King 2012, p. 53 and 75.
[71] Anand, Chapman and Gai 2012, p. 2; Kothari 2008, p. 2; PwC, "Uncovering Covered Bonds", June 2012, p.4.
[72] Belfius Bank SA/NV prospectus, p. 30.
[73] Eichert 2012, p. 553.



Graph 3. Source Data: ECBC Covered Bond Statistics 2003-2011.[74]



Graph 4. Source Data: ECBC Covered Bond Statistics 2003-2011.[75]

Where do all these covered bonds come from? Or, to put it in other words, where are the covered bond hotspots in the world? Covered bonds have been around for a long time, mostly in Continental Europe.[76] Germany, Spain and France are the 3 countries where the covered bond market is biggest.[77] Globally speaking, around 33 countries have put legislation in place regulating covered bond issuances.[78]

One of the countries with the largest capital markets however, still has to pass covered bond legislation. The U.S. has been contemplating implementing a regulatory framework for issuing covered bonds for quite some time now, but the process seems to be very slow. In March 2012, there even was a proposal to include covered bond regulation in the JOBS-act but that did not fell through. The key issue holding back the establishment of a legal regime seems to be the role the Federal Deposit Insurance Corporation (FDIC) has to play in the

[74] Available at www.ecbc.hypo.org.
[75] Available at www.ecbc.hypo.org.
[76] Schwarcz 2011, p. 564-565.
[77] Eichert 2012, p. 552.
[78] Grossmann and Stöcker 2012, p. 149.

event the issuer goes bankrupt.[79] The FDIC has not assured bondholders that covered bonds have priority in case of insolvency of the issuer. This thus means that the cover-pool might be used to the benefit of others than bondholders.[80] Furthermore, discussions have been going on about whether the FDIC or the investors themselves would become owner of the cover-pool in case of issuer insolvency.[81]

This does not mean however, that there are no covered bond issuances in the U.S. In 2006, Washington Mutual issued covered bonds, and in 2007, Bank of America followed suit. Other active issuers are Australian banks, large European banks and Royal Bank of Canada.[82] Establishing a legal framework however, would make the U.S. market even more vibrant and enable it to grow even more.

Finally, what about the investors? Who typically invests in covered bonds? Covered bonds appeal to a lot of investor groups. There are 5 big investor groups who account for around 95% of the total investor base: banks, central banks, funds (excl. hedge funds or corporate funds), pension funds and insurers.[83] Which investor group will invest in a certain issuance mostly depends on the maturity of the bonds. Banks, for example prefer covered bonds that mature in the medium or short term.[84]

Why do they invest in covered bonds? From the point of view of investors, covered bonds are a very attractive investment. Covered bonds are relatively low-risk since the investors are not fully dependent on the income stream of the cover-pool.[85] They can be repaid out of other resources of the issuer as well.[86] After all, covered bonds are obligations of the issuer and the assets merely serve as collateral in case of insolvency of the issuer. Furthermore, they often generate higher yields than high-quality agency or government debt.[87]

Last but not least, several regulations make it attractive to invest in covered bonds. For example, the UCITS-directive states in art. 52 (4) that member states can decide to raise the

[79] PwC, "Uncovering Covered Bonds", June 2012, p. 3.
[80] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p.9.
[81] Article by P. Natarajan, "RBC tries a European Import. Covered Bonds, long shunned in the U.S., get a fresh look", Wall Street Journal 7 April 2010, available at www.wsj.com.
[82] Caris and Barua 2012, p. 110-111; Kothari 2008, p. 1.
[83] Eichert, Engelhard and King 2012, p. 66.
[84] Eichert, Engelhard and King 2012, p. 67.
[85] Schwarcz 2011, p. 574.
[86] Kothari, year unknown, p. 7.
[87] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 7.

5% investment limit to 25% in case the investment is made in covered bonds.[88] This thus means that undertakings for collective investment in transferable securities – depending on jurisdiction where they reside – may invest up to 25% of their assets in covered bonds. Likewise, Solvency II provides for a beneficial system for investments in covered bonds.[89] The capital charges – i.e. the amount of capital insurance companies have to hold to compensate for the risk of an investment – is lower when an insurance company invests in high-rated covered bonds than for example unsecured debt.[90] Thus covered bonds are attractive because of the lower risk-weighting when one compares it with other debt instruments with the same maturity and rating.[91]

III. Covered bonds: how safe are investors?

After having provided a general overview of covered bonds in the previous section, we now turn to one of the most important aspects of this thesis: investor protection. As stated before, covered bonds have traditionally been perceived as one of the safest investments. This does not mean however, that there is no risk related to covered bonds. This section will commence with an overview of the risks related to covered bonds. After that, an analysis of the protection offered to investors will be provided. Since this thesis is based upon Belgian law, the latter part will often involve the specific system designed in that law. The first part is general and goes for all covered bond issuances.

a. Covered bonds: not risk-free

There are a couple of risks related to investing in covered bonds. These risks include: interest rate risk, FX-risk, credit risk, liquidity risk and a set-off risk. This paper will elaborate on each of these in the coming pages.

Before explaining the particular risks, it is important to note that the former list is not exhaustive. When investing in covered bonds, there are certain other, more general risks

[88] Art. 52 (4) of Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), L302/32.
[89] Prokopczuk, Siewert and Vonhoff 2012, p. 1.
[90] Eichert 2011, p. 43-50.
[91] PwC, "Uncovering covered bonds", June 2012, p. 3.

that have to be taken into account. For example, when the cover-pool consists out of residential mortgage loans, a decline in the value of real-estate can have an adverse impact on the recovery value of the collateral. This is a risk that has to be taken into account. However, it will only be threatening to covered bondholders in the event that borrowers are not capable of repaying their loans and thus the property has to be sold to pay back the bank.[92] Another risk, which is often not thought of, relates to the over-collateralization. As stated before, the over-collateralization requirements implies the obligation for the issuer to replace weak or non-performing assets. However, there is no absolute guarantee that the issuer will be able to do so.[93]

1. Interest rate risk

A risk that is inherent to investing in bonds is interest rate risk. The interest is the remuneration the investors get for being willing to provide a loan to the bank in the form of subscribing to the bonds. Interest rate risk is basically the risk that the interest rate evolves in such a manner that is detrimental to investors and thus they incur a loss.

Interest rate risk is mostly found in covered bonds that have been issued with a fixed interest rate or when the bonds are zero coupon covered bonds.[94] When the bonds are issued with a fixed interest rate and the market rates go up, investors will thus incur a loss in the sense that if the interest rate was a floating interest rate, they would have enjoyed the upward movement and thus would have received a higher return. The same goes for zero coupon bonds. Zero coupon bonds are bonds to which investors subscribe at a discount and when the bonds reach maturity, they get the principal amount of the bonds. When interest rates rise and thus exceed the amount of the discount the investors received when subscribing to the bonds, the investors will have lost money.

While this risk is inherent to bonds, it also has to be mentioned that obtaining bonds with a fixed interest rate also means that investors have certainty about the return they will get. Thus when interest rates drop, they are better off. All in all, interest rate risk is one of the less dangerous ones.

[92] Belfius Bank SA/NV prospectus, p. 22-23; KBC Bank NV prospectus, p. 9.
[93] Belfius Bank SA/NV prospectus, p. 22-23; KBC Bank NV prospectus, p. 16.
[94] Belfius Bank SA/NV prospectus, p. 21; KBC Bank NV prospectus, p. 28-29;

There is also a risk of a mismatch between interest rates of cover-pool assets and interest rates of covered bonds, especially when the assets have floating interest rates and the covered bonds are fixed interest bonds. Decreasing interest rates on cover-pool assets may lead to less income for the cover-pool. This is not a problem however, because of the over-collateralization requirement and the fact that bondholders can be paid out of general cash flows of the issuer and not solely from cover-pool cash flows. Furthermore, the amortization test (see *infra*) mitigates this risk as well.

2. FX-risk

Foreign exchange risk (generally referred to as FX-risk) is the risk that an investment loses some of its value due to changes in the currency exchange rates.[95] This risk is of course only relevant when the investment is made in covered bonds denominated in another currency than the one where the investor lives.[96]

3. Credit risk

Credit risk can be defined as the risk of loss of principal amount or loss of a financial reward, stemming from a borrower's failure to pay back a loan or otherwise meet a contractual obligation.[97]

In a covered bond issuance, credit risk is also present. The only question is who bares the risk. Covered bonds are somewhat different from standard securitization in this respect. In a securitization structure, credit risk is transferred upon the investors: they are dependent on the cover-pool.

In a covered bond structure, there is credit risk as well. This credit risk for investors however is mitigated to a large extent. Covered bonds are obligations of the issuer.[98] The covered bondholders are not dependent on cash flows deriving from the cover-pool, but instead are paid back out of the general income stream of the issuer. Thus a default on loans that are part of the cover-pool does not directly affect covered bondholders. The cover-pool will only become relevant when the issuer goes bankrupt. Then the covered bondholders are paid back with the cash flows generated by the special estate. Since there are eligibility

[95] Definition from www.investopedia.com.
[96] ECBC, "Essential features of covered bonds", www.ecbc.hypo.org.
[97] Definition from www.investopedia.com.
[98] Kothari 2008, p. 3.

requirements to ensure that the assets are of high quality, combined with an over-collateralization requirement, credit risk is mitigated to some extent.[99] After all, the value of the cover-pool must exceed the principal amounts of the covered bonds. Furthermore, should the cover-pool be insufficient, the bondholders still have an unsecured claim in the bankrupt estate for the residual amount of the bonds.

In conclusion, while there still is some credit risk for investors in covered bonds, it is mitigated to a large extent by the presence of a cover-pool subject to an over-collateralization requirement and because of the dual-recourse feature.[100] This leads to the fact that economically speaking, the credit risk is retained by the issuer.[101]

How do investors perceive credit risk in practice? A study performed by Prokopczuk, Siewert and Vonhoff focused on credit risk and tried to determine which elements are important to investors and how these reflect in the price of covered bonds. They found that the composition of the cover-pool has a significant impact on the price of covered bonds. Their results showed that covered bonds backed by a cover-pool of high-quality assets had lower yields than when the cover-pool was viewed as composed out of assets of lesser quality.[102] For example, their results showed that during the sovereign debt crisis, covered bonds that were backed by a cover-pool of public sector loans were considered more risky and were thus priced accordingly.[103]

Interestingly, while in theory the over-collateralization requirement is considered to be an important element in mitigating credit risk, they discovered that the level of over-collateralization does not play a significant role. Investors do not seem to attach a lot of importance to it. The legally required amount seems to be sufficient and any "extra" collateral in the cover-pool does not seem to be that important.[104] This is rather strange, since logic would dictate that more collateral in the cover-pool leads to less risk for investors not to be reimbursed.

[99] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 16.
[100] Belfius Bank SA/NV prospectus, p. 21; ECB, "Covered Bonds in the EU Financial System", December 2008, p. 16; KBC Bank NV prospectus, p. 15.
[101] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p.10.
[102] Prokopczuk, Siewert and Vonhoff 2012, p. 25-26.
[103] Prokopczuk, Siewert and Vonhoff 2012, p. 18.
[104] Prokopczuk, Siewert and Vonhoff 2012, p. 25-26.

4. Liquidity risk

One of the other risks that is present is a liquidity risk. The liquidity risk arises from the fact that the maturities of the cover-assets and the maturities of the covered bonds and their cash flows might differ. In other words, the duration of the assets might not match the duration of the covered bonds. Their cash flows – i.e. repayment of for example the residential mortgages to the bank and repayment of the bondholders – might not be perfectly tuned to one another. This can create temporary excesses or shortages of liquidity.[105]

One thing has to be made clear. While it is true that there is an inherent liquidity risk in a covered bond structure, this only becomes problematic when the issuer becomes insolvent. After all, only in that scenario the covered bondholders become dependent upon the cover-pool itself. When the issuer is not insolvent however, the bondholders can be repaid out of the general income stream of the issuer.

There are a couple of ways liquidity risk can be mitigated.

Firstly, in Belgium, issuers have to meet the so-called liquidity test. This test will be explained further on in this thesis when discussing the investor protection.

Secondly, the constitution of the cover-pool and the choice of covered bond maturities can mitigate the liquidity risk to a large extent.[106] By composing the cover-pool out of assets that do not mature all at once but instead using a varied set of maturities, combined with covered bond series that mature gradually over time decreases the liquidity risk since there will not be one single moment where all amounts have to be paid back at once.

Thirdly, liquidity risk can be mitigated to a large extent by the specific repayment structure of the covered bonds. Covered bonds can be issued as hard-bullet or soft-bullet bonds. Hard-bullet bonds are basically covered bonds where it is guaranteed that the principal amount will be paid back at the maturity date. Soft-bullet covered bonds are covered bonds without a guarantee that the principal will be paid at the maturity date. Instead, upon the insolvency of the issuer they offer an additional period (an "Extended Maturity Date") to pay back the

[105] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 17; Rudolf, Hillenbrand and Langer 2012, p. 131-132.
[106] Packer, Stever and Upper 2007, p. 49.

bondholders. It is clear that soft-bullet covered bonds mitigate the liquidity risk by granting an additional period to generate the required funds to repay bondholders.[107] Thus soft-bullet covered bonds grant the cover-pool administrator some extra breathing room and prevents the latter from having to sell assets quickly, thus avoiding losses due to a fire sale. Both Belfius Bank SA/NV and KBC Bank NV issued covered bonds with a soft-bullet feature. The additional period granted is one year.

Normally, covered bonds are not of a pass-through nature. A pass-through structure basically means that bondholders are dependent upon the cash flows of the cover-pool and are paid back accordingly. The fact that covered bonds are not of a pass-through nature creates an additional benefit for investors. When there would be a prepayment of the assets in the cover-pool, the investors do not incur any losses[108] since the prepayment does not "pass through" the structure into the pockets of the investors.[109] Since bullet covered bonds thus eliminate prepayment risk, pass-through covered bonds have long been shunned. Recently however, some came to see merit of pass-through structures especially when the issuer becomes insolvent. Changing the repayment structure into a pass-through structure upon the insolvency of the issuer cancels out the liquidity risk and eliminates losses due to a fire sale of the assets.[110] True, the bondholders have to wait a bit longer to get their money back but this does not weigh up to the benefit of not incurring possibly substantial losses.

5. Set-off risk

There is an additional risk related to the cover-pool, namely the set-off risk. Set-off risk is the risk of there being cross-claims between the debtor of a mortgage loan in the cover-pool and the issuer. These cross-claims can have an impact on the covered bondholders, since that claim can reduce the value of the asset in the cover-pool. That is why policymakers have opted to provide legal protection in order to avoid this scenario. In Belgium the Mobilisation

[107] Rudolf, Hillenbrand and Langer 2012, p. 133-134.
[108] When for example a mortgage is paid back early, the borrower avoids having to pay larger interest amounts in total. This means that the bank receives less income, thus incurring a loss.
[109] Kothari 2008, p. 3; Packer, Stever and Upper 2007, p. 47.
[110] Article "Pass-through takes a seat at the table", *The* Cover 27 March 2013, available at www.coveredbondnews.com; Rudolf, Hillenbrand and Langer 2012, p. 134.

Law dictates that a set-off is only possible when the claim arose – or when certain conditions were met – prior to the earlier of:[111]

- The notification of the registration of the loan in the special estate;
- Opening of bankruptcy proceedings against the issuer

The abovementioned conditions are: the debt should

1. Exist
2. Be fungible
3. Be liquid
4. Be due

If these conditions are met prior to the earlier of the two abovementioned points in time, a set-off can occur.[112]

b. Investor protection: what's out there and is it enough?

After having discussed the risks inherent to covered bonds, it is time to take a look at the investor protection regime. Covered bonds have traditionally been perceived as one of the safest investments. This part will examine what protection mechanisms for covered bondholders are out there and how they work. This paper focuses primarily on the Belgian law, but again certain aspects can be applied to other jurisdictions as well, be it with small adjustments due to differences in regulation. Most importantly, while the focus has always been on how safe investors in covered bonds are, the question that has to be asked as well is "what about the market as a whole"? How safe are covered issuances? Given the recent global financial crisis, where a lot of banks either went under or had to be bailed out, this question is of particular importance. This paper will argue how the over-collateralization requirement can be dangerous and might even lead to systemic risk creation.

1. Protection of the covered bondholders

This part is divided into two subsections. The first subsection will discuss the investor protection in general, i.e. when the issuer is in going concern. The second subsection will

[111] Art. 6, §2 and art. 9, §1 of the Belgian Mobilisation Law; Belfius Bank SA/NV prospectus, p. 24; KBC Bank NV prospectus, p. 21-22.
[112] Art. 6, §2 and art. 9, §1 of the Belgian Mobilisation Law; Belfius Bank SA/NV prospectus, p. 24; KBC Bank NV prospectus, p. 21-22.

focus on the protection of investors when the issuer is in financial distress and/or when the issuer is insolvent and bankruptcy proceedings have been opened.

i. Investor protection: general overview

A first line of protection for investors is the fact that the issuer has to be a credit institution and has to obtain a general license and a specific license granted by the National Bank of Belgium. In order to obtain the general license, the National Bank of Belgium has to be satisfied that the accounting and administration of the issuer enables him to act in accordance with the covered bond regulations and that the financial position of the issuer is sufficient to safeguard the interests of its creditors other than covered bondholders or other creditors with a claim against the cover-pool.[113] The specific license – relating to a specific covered bond program – will be obtained after the issuer hands over a file containing information on the cover-pool and an impact analysis of the covered bond program on the liquidity position of the bank. The National Bank will grant the license after it has checked the program and the cover-assets and is satisfied they meet the regulatory requirements.[114]

Generally speaking, one of the reasons why covered bonds have been perceived as safe investment opportunities for investors is because a covered bond issuance is an on-balance sheet operation. Contrary to common securitization transactions, where the assets were taken off the balance sheet of the issuer, the assets in the cover-pool remain on the balance sheet of the issuer.[115] This specific characteristic constitutes a general safeguard for investors since it mitigates a moral hazard risk. It basically aligns the interests of investors and the issuer. In securitization transactions, the assets are moved off the balance sheet of the issuer, which means that almost no risk is retained by the originator (the originator only has to keep a 5% interest).[116] This gives the originator a powerful incentive to use weaker assets to serve as collateral. In covered bond structures, the risk is retained by the issuer and the issuer is under an obligation to replace weak or non-performing assets. This means that the issuer will not deliberately use weaker assets in the cover-pool, since he has to replace

[113] Art. 10 of the Law of 3 August 2012 on Belgian Covered Bonds.
[114] Art. 10 of the Law of 3 August 2012 on Belgian Covered Bonds.
[115] Packer, Stever and Upper 2007, p. 49; PwC, "Uncovering Covered Bonds", June 2012, p. 6.
[116] PwC, "Uncovering Covered Bonds", June 2012, p. 7.

them afterwards anyway. Furthermore, the cover-pool is dynamic and thus cannot be divided into tranches which makes covered bond structures less complex.[117]

The fact that covered bonds are not that complex, brings us to the issue of transparency. An often heard criticism is that transparency towards investors should be ameliorated. Until this day, there are no set standards relating to how the issuers should communicate information to investors regarding the cover-pool. Often the prospectus offers a first clue, but then again a prospectus is outdated relatively quick due to the cover-pool dynamics.[118] Due to this dynamic nature it is often difficult to make a general determination of the quality of the cover-pool. Belgian issuers communicate information about the cover-pool to the market in the form of monthly investor reports. A lot of other issuers however, do not even provide this information, leaving investors with nothing but having to trust that the supervisors will do their job accurately.[119]

While there is certainly some work to be done, all in all the lack of transparency is not that threatening. In legislative covered bond structures, the cover-pool is subject to very stringent requirements and supervision. According to Belgian law, a cover-pool has to meet certain tests, namely the 85% asset coverage test, the amortization test, the liquidity test and of course the over-collateralization requirement. These will be discussed briefly in the following paragraphs except for the over-collateralization requirement since that has already been discussed elaborately in Section I, Part b, 1.

The 85% Asset coverage test

As stated before, only five categories of assets are eligible to be part of the cover-pool. This does not mean however, that the issuer is completely free to compose the cover-pool out of these assets the way he wants. Art. 5, §1 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds states that the value of the assets belonging to one of the first three categories (residential loans, commercial loans and public sector exposures) must represent at least 85% of the nominal amount of the Belgian covered bonds outstanding.[120]

[117] Carbó-Valverde, Rosen and Rodríguez-Fernández 2012, p. 4-10.
[118] KBC Bank NV prospectus, p. 31.
[119] Hillenbrand and Schulz 2012, p. 79-84.
[120] Art. 5, §1 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.

In terms of investor protection, the 85% asset coverage test makes sure that the majority of collateral in the cover-pool are relatively safe assets, thus reducing the possibility of a default. However, should for example the housing market plummet, the recovery value of the assets goes down as well.[121] This is not really problematic in my opinion, since the residential mortgage loans are usually of high quality and as long as people are able to pay back the mortgage loans, a decline in property value will not have a significant impact. Furthermore, should a couple of mortgage loans default, then the issuer will have to replace them with 'healthy' mortgage loans.

The amortization test

The amortization test basically means that the sum of interest and principal of the assets and all other revenues generated by the assets in the cover-pool must be sufficient to cover the sum of all interest, principal and other charges related to the covered bonds.[122]

The liquidity test

The liquidity test entails an obligation for the issuer to make sure that the assets in the cover-pool generate sufficient liquidity or include sufficient liquid assets to allow him to make all unconditional payments on the covered bonds (i.e. interest, principal amount and costs) falling due within a timeframe of the next 6 months.[123] Belfius Bank SA/NV for example included Belgian Government Bonds worth approximately €50 million in its cover-pool. This government bond qualifies as a liquid asset for the purpose of the liquidity test.[124]

The liquidity test is one of the measures taken by the Belgian legislator to tackle the liquidity risk. By making sure that there are assets in the cover-pool that can be liquidated easily and without much loss, a default on covered bond payments can be avoided.

After having discussed the tests the cover-pool should pass, it is time to talk a bit about the cover-pool monitor. So far, the cover-pool monitor has not been mentioned in this paper.

[121] KBC Bank NV prospectus, p. 17.
[122] Art. 5, §3 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[123] Art. 7 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[124] Presentation on Belfius Mortgage Pandbrieven Programme, available at www.belfius.be/financial/NL/Debt/index.aspx.

This has one simple reason: it is a person who supervises the cover-pool and thus fits perfectly in this part on investor protection. Every covered bond issuer has to appoint a cover-pool monitor.[125] The cover-pool monitor has two jobs relating to the cover-pool. Firstly, on an annual basis, he has to make sure that the cover-pool still meets all regulatory requirements.[126] Secondly, on a monthly basis, he has to make sure that the cover-pool still passes the 85% Asset Coverage test, the liquidity test, the over-collateralization test and the amortization test.[127] Thus the fact that these tests are performed on a monthly basis is beneficial for investors. Furthermore, in order to be eligible to perform the task of cover-pool monitor some criteria have to be met. Firstly, only accountants recognized by the National Bank of Belgium can be eligible to be cover-pool monitors. Secondly, he cannot be the statutory or certified auditor of the issuer.[128] The latter requirement is obviously implemented in order to ensure that the cover-pool monitor is independent and not subject to conflicts of interest.

ii. Investor protection in situations of financial distress/bankruptcy of the issuer

The previous subsection discussed the protection offered to covered bondholders in general. There are a couple of other elements in the investor protection spectrum. These elements relate to the situation where the issuer is undergoing financial difficulties and bankruptcy proceedings are opened and will be discussed in this subsection.

One of the typical features of covered bonds, and ultimately the protection of the covered bondholders, is the fact that covered bondholders have a dual-recourse right. When insolvency proceedings are opened, the cover-pool gets separated from the bankrupt general estate and the revenues are used solely to repay covered bondholders. Should the cover-pool be insufficient to repay them, then they have an unsecured claim for the residual amount in the general estate.[129]

This is not completely accurate however. While it is true that the covered bondholders have a preferential claim on the cover-pool towards other creditors of the issuer in general, there can be other creditors who have a claim against the cover-pool as well. Towards these

[125] Art. 32 of the Law of 3 August 2012 on Belgian Covered Bonds.
[126] Art. 11, §5 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[127] Art. 11, §5 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[128] Art. 11, §3 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds; Wandels 2012, p. 243.
[129] PwC, "Uncovering Covered Bonds", June 2012, p. 4.

creditors, the covered bondholders rank *pari passu* or their claims are sometimes even subordinated to the claims of these other creditors. For example, the cover-pool is used to pay the representative of the covered bondholders, the cover-pool monitor and the cover-pool administrator first. Secondly, the cover-pool is used to reimburse the operational creditors who performed services relating to the Special Estate. The latter are for example the legal counsel, the costs that have to be paid to the stock exchange, the auditors, the tax advisors, etc. Thirdly, the covered bondholders are repaid *pari passu* with hedging counterparties and liquidity facility providers.[130] This goes to show that stating categorically that covered bondholders are the sole creditors with a claim on the cover-pool is incorrect.

Time to introduce yet another figure in the covered bond framework: the cover-pool administrator. Upon initiation of bankruptcy proceedings, a cover-pool administrator is appointed.[131] The cover-pool administrator is responsible for managing and servicing the cover-pool and trying to repay covered bondholders.[132] The cover-pool administrator cannot be the same (legal or physical) person managing the bankrupt estate of the issuer. In order to be eligible as cover-pool administrator, a couple of requirements have to be fulfilled (such as expertise and experience in handling assets like the ones in the cover-pool, etc.) and the National Bank of Belgium has to approve the choice of cover-pool administrator.[133]

What happens when bankruptcy proceedings are opened against the issuer? Firstly, the cover-pool gets separated from the insolvent estate and assigned to the cover-pool administrator. The cover-pool administrator keeps servicing the assets and repaying the covered bondholders like normal, so the bonds do not immediately become due and payable.[134] The only difference is that covered bondholders are now dependent upon the cash flows generated by the cover-pool.

The cover-pool administrator however, does have some powers conferred upon him. There are a couple of actions he can take when bankruptcy proceedings have been initiated.

[130] Belfius Bank SA/NV prospectus, p. 83-84; KBC Bank NV prospectus, p. 110.
[131] Art. 21 of the Law of 3 August 2012 on Belgian Covered Bonds.
[132] Art. 4 of the Royal Decree of 11 October 2012 relating to the Cover-Pool Administrator.
[133] Art. 3 of the Royal Decree of 11 October 2012 relating to the Cover-Pool Administrator.
[134] Art. 24 of the Law of 3 August 2012 on Belgian Covered Bonds.

Firstly, if the cover-pool administrator is of the opinion that the interests of the covered bondholders would be better served by transferring the cover-pool to another institution, he can do so. He can only decide to transfer the cover-pool after the representative of the covered bondholders has been consulted and if the National Bank of Belgium consents with the transfer. The entity taking over the cover-pool will then become the debtor of the covered bonds. All rights related to the covered bonds are maintained and the bonds are repaid according to the original program conditions.[135] While this might seem as a drastic measure, this system is rather beneficial to investors. They get paid back according to the original plan and they get an unsecured recourse right against a financially sound institution which is a better situation than having an unsecured claim against an insolvent issuer.

Secondly, the cover-pool administrator can decide to liquidate the special estate and pay back the covered bondholders early.[136] Since this is rather drastic, a couple of requirements have to be met. Firstly, the representative of the covered bondholders has to be consulted. Secondly, the National Bank of Belgium has to agree with this measure. Finally, this measure is only available when the assets in the cover-pool are insufficient to meet the claims of the covered bondholders, or are at risk of becoming insufficient.[137] Thus in essence the measure is in the best interests of the bondholders since it avoids (further) losses.

The covered bondholders can also force the cover-pool administrator to liquidate the special estate or part of it. When a general meeting of covered bondholders is held where at least 2/3rds of the outstanding amount is represented, then they can vote on whether or not to liquidate the special estate or part of it. The cover-pool administrator then has to liquidate the special estate when a majority votes in favor of the measure and after having consulted with the National Bank of Belgium.[138] This goes to show that covered bondholders are not completely dependent upon the actions of the cover-pool administrator.

In practice, not a single issuer default has occurred leading to the liquidation of the special estate. Thus the legislative protection systems remain untested, but they are pretty clear cut and they would probably work efficiently in practice.

[135] Art. 24 of the Law of 3 August 2012 on Belgian Covered Bonds.
[136] ECB, "Covered Bonds in the EU Financial System", December 2008, p. 18-19.
[137] Art. 24 of the Law of 3 August 2012 on Belgian Covered Bonds.
[138] Art. 24 of the Law of 3 August 2012 on Belgian Covered Bonds.

In conclusion, the covered bondholders are heavily protected. Short of giving them their money back immediately, nothing more can be done to protect them. The latter is especially true considering the fact that covered bonds can enjoy special treatment when a bank becomes subject to bail-in measures. A bail-in is a measure taken to save the bank from entering into bankruptcy proceedings. It basically means that investors are asked to take a loss and thus bail-in the bank, before tax payers have to bail-out the bank. Under the European Commission's proposal for a directive establishing a framework for the recovery and resolution of credit institutions and investment firms, Member States are granted the competence to exclude covered bonds from the scope of the bail-in tool.[139] Since covered bondholders can thus be excluded from bail-in measures they are provided with additional protection.[140] While this is certainly beneficial to covered bondholders, it will probably lead to the fact that unsecured debt will become more costly, since investors in unsecured debt can potentially be asked to take a greater hit if the bail-in tool is used.[141]

2. Covered bonds and systemic risk: who would have thought?

While covered bondholders may sleep on both ears, the question becomes: what about the rest of the market? Do covered bonds entail risk in any way? The answer to this question is yes, they do entail a risk.

The problem relates to the over-collateralization requirement and the implied obligation to replace weak or non-performing assets. This over-collateralization requirement, while being a safeguard against deteriorating collateral for covered bondholders, might lead to systemic risk creation. The reasoning is as follows.

The more assets are put in the cover-pool, the fewer assets remain for unsecured creditors. Say for example that the assets in the cover-pool are deteriorating. The over-collateralization requirement implies that the issuer has to replace these non-performing

[139] Art. 38, par. 2 European Commission proposal COM(2012) 280/3 for a Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010.
[140] Eichert, Engelhard and King 2012, p. 64; Article by J. Brunsden, "Covered Bonds will be spared in EU Bail-In Rule, lawmaker says", Bloomberg Businessweek 4 April 2013, available at www.businessweek.com.
[141] Winkler 2012, p. 93.

assets with other high-quality assets. This leads to the situation where unsecured creditors can only fall back on a reduced level of lower-quality assets. This can create fear amongst these unsecured investors, since it substantially increases the risk that when the bank goes bust, they will suffer losses. This in turn leads to the fact that these unsecured creditors will demand higher risk premia to compensate for the increased risk which consequently means that unsecured financing becomes more expensive for banks. When the situation really takes a turn for the worst, this whole reasoning might start a run on the bank, leading to situations as in the financial crisis. If the bank is not able to restore confidence in the market, the bank might go under, potentially creating systemic risk especially where a couple of the major banks are concerned.[142]

This shows that the over-collateralization requirement can lead to systemic risk creation. In my opinion, rating agencies also play a role in this respect and can add to banks going a bit too far. As stated before in this thesis, rating agencies make their rating of the covered bonds in part dependent upon the level of over-collateralization (which is usually far above the legally required level). While there is nothing inherently wrong with that – except maybe that it sounds a bit too much like what happened during the financial crisis: rating agencies providing some guidance on how to obtain a AAA-rating – it does entail a risk. In order to keep being able to obtain secured financing at relatively cheap prices, banks might push themselves to maintain the heightened level of over-collateralization in the cover-pool thus possibly starting a scenario as depicted above.

One way to avoid the abovementioned scenario is to put limits on how much assets can be added to the cover-pool (often called "asset encumbrance"). Asset encumbrance levels differ amongst jurisdictions. In Belgium for example, the level is set at 8% of total assets.[143] The National Bank of Belgium can however force the issuer to lower that threshold in order to protect other creditors[144], which is obviously an important safeguard. Anand, Chapman and Gai propose to implement a variable asset encumbrance level.[145] They state that their results show that it could be beneficial to let the asset encumbrance level fluctuate according to the business cycle. In the event of an economic downturn, the asset

[142] Anand, Chapman and Gai 2012, p. 15-17; Winkler 2012, p. 92-102.
[143] Art. 10, §1 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[144] Art. 10, §2 of the Royal Decree of 11 October 2012 relating to Belgian Covered Bonds.
[145] Anand, Chapman and Gai 2012.

encumbrance level can be decreased such as to ensure unsecured creditors that there are sufficient assets available to them. While this is in essence a good idea, I do not think this is feasible since there are some practical difficulties. First off, an economic downturn or a financial crisis is sometimes hard to predict. Secondly, and more importantly, covered bonds normally have a set maturity. If the asset encumbrance level would be allowed to fluctuate according to the business cycle, this might mean that a bank will issue more covered bonds while the market is healthy thus leading to higher asset encumbrance since the over-collateralization levels have to be upheld. Well then, suppose the economic environment goes south. What about the assets that are already encumbered? The issuer cannot just decrease the level of asset encumbrance and put those assets back in the general estate since that might mean that the required (legal or contractual) level of over-collateralization is not upheld anymore. This goes to show that a fixed level of asset encumbrance is still the best option.

A limit on asset encumbrance can also be beneficial to covered bondholders, since that prevents a decreasing economic value of the full recourse right to the issuer. The less high – quality assets remain in the general estate, the more likely the covered bondholders will have to take losses if the cover-pool is insufficient.[146]

IV. Conclusion

The primary focus of this paper was the new Law of 3 August 2012 on Belgian Covered Bonds. The goal of this paper was to determine the risks related to covered bonds and whether or not the Belgian legislator did a good job implementing sufficient protection mechanisms for investors in these covered bonds.

This paper started with explaining what covered bonds are. While there is no uniform definition, there is a consensus on a couple of key elements that have to be present in order to be able to speak of a covered bond. These requirements also form the basic characteristics of covered bonds, namely the over-collateralization requirement, the dual-recourse right, the qualification of the issuer and the presence of a supervision regime both for the issuer and for the cover-pool.

[146] Winkler 2012, p. 92-102.

When discussing covered bonds, a distinction needs to be made between legislative covered bonds, which are governed by a specific legal framework, and structured covered bonds, which are issued outside or even without a specific legal framework regulating it.

As was argued by this paper, covered bonds offer a couple of advantages. Firstly, they provide the issuer with a low-cost method of refinancing at the market, thus enabling the issuer to grant more loans since it reduces having to depend on deposit levels. Secondly, covered bonds can be used for liquidity purposes. These elements make issuing covered bonds attractive to credit institutions.

Covered bonds do share a couple of similarities with securitization however, leading some to adopt a hostile mindset towards these financial instruments, especially after the financial crisis in 2007. As this paper argued, while there are some similarities with securitization, there are a lot of differences making covered bond issuances less complex and less risky. This thus means that any hostility towards covered bonds, simply because they look like securitization, is based upon a misconception.

However, the fact that covered bonds are less risky than securitization does not mean that covered bonds are completely risk-free. This paper identified a couple of risks related to covered bonds. These are, amongst others, credit risk and liquidity risk. The Belgian legislator implemented a couple of safeguards reducing the impact of these risks thereby effectively protecting the investors. The most important safeguards that are offered to investors are regulatory requirements relating to the composition of the cover-pool such as the over-collateralization requirement, the 85% Asset coverage test and the liquidity test. The issuer and the cover-pool itself are also subject to supervision by the public authorities and the cover-pool monitor, which provides for an additional safeguard. Furthermore, investors are granted a dual-recourse right which basically means that the investors have a recourse right to the insolvent issuer for the residual amount of their claim when the assets in the cover-pool are insufficient to pay them back.

As this paper has demonstrated, the covered bondholders themselves are heavily protected due to different regulatory requirements. The new Belgian law is no exception. But the story does not end there. This paper argued that there is still a general risk for the market as a whole which is inherently present in covered bond regimes. This risk relates to one of the

mechanisms installed to protect covered bondholders, namely the over-collateralization requirement. This requirement implies the obligation for the issuer to replace weak and non-performing assets in the cover-pool. As was explained in Section III.b.2 of this paper, the over-collateralization requirement might lead to high levels of asset encumbrance. When the level of asset encumbrance becomes too high, fear amongst the unsecured creditors might emerge. This fear might instigate a run on the bank if not tackled instantly and can lead to the creation of systemic risk. In order to avoid a scenario like in 2007, regulators have opted to put a cap on asset encumbrance levels thereby reducing possible systemic risk creation. These caps are closely monitored by the supervisors, thus protecting the market as a whole.

In conclusion, while covered bonds do offer a lot of advantages and are indeed very safe for the covered bondholders themselves because of the protection offered by the Belgian regulation, the regulators and the markets still have to be diligent and scrutinize issuers closely. After all, as is demonstrated by the possibility of systemic risk creation by covered bond issuances, a financial instrument that is too safe to fail does not exist.

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