Covered bonds

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As financial intermediaries create and hold financial assets, they search for variety of ways to refinance them. Corporate bonds are the most traditional form of capital market-based refinancing. However, corporate bonds are a direct exposure on the issuer and are directly affected by the financial strength of the issuer. The issuer's rating determines the rating of corporate bonds. Obviously, over period of time till maturity, these bonds are affected by the changes in the rating of the issuer, as also its probability of default.

A country's financial system may, for variety of reasons, want financial instruments which are either unaffected, or less severely affected by the credit and rating of the issuer. Assume an issuer creating or holding standard financial assets, such as prime mortgage loans. If a system of refinancing these mortgages allows investors legal access to the portfolio of assets, investors will prefer a claim over a pool of healthy assets over a claim over the issuer. From a policy perspective, if an issuer is allowed to issue bonds that are either solely based on the strength of the asset pool, or at least derive from the same, the issuer may hopefully issue better rated bonds, and therefore, raise relatively cheaper financing to be able to create and hold the pool of assets in question. If an issuer had to depend on corporate bonds, a low-rated issuer would not be able to raise cheaper financing, and therefore, hold healthy assets. This leads to a self-sustaining cyclicality whereby a weaker bank must hold inferior quality assets, and therefore, remain weak or become weaker.

In the world of fixed income securities, markets have been searching for instruments that are asset-backed, rather than entity-backed. Mortgage-backed and asset-backed securities are instruments that seek to detach completely from the rating of the issuer and depend entirely on the quality of the pool of assets and the structural credit enhancements, mostly to reach highest ratings. Covered bonds are alternative instruments that may be perceived as mid-way between corporate bonds and mortgage-backed securities, in the sense that they depend both on the quality of the issuer and the quality of the assets underlying the funding.

Covered bonds: from Europe to the rest of the World

In an environment of institutional investing which is so heavily reliant on ratings of investment options, both mortgage-backed securities and covered bonds are devices to uplift the rating of the instrument above the rating of the issuer. In case of mortgage-backed securities, under an assumption of complete independence of the funding from the risks of the issuer, the securities often get highest ratings. These ratings, and the strength of the security that they evidenced, came under acute challenge during the Subprime Crisis of 2007-8, making mortgage-backed securities at least periodically unpopular. The search for an alternative ended at covered bonds, which have been used in Europe over

decades. Covered bonds do not have the fascination of mortgage-backed securities, but in environment prevailing during and after the Subprime Crisis, the historical strength of covered bonds was far more appealing than the attractiveness of mortgage-backed securities.

Covered bonds, as an instrument of mortgage funding, have a long history. They are first said to have been issued in Germany, then Prussia, in 1769. The first issuance in Denmark happened in 1797 after the fire of Copenhagen in 1795. They are known by variety of names over Europe – pfandbriefe in Germany, realkreditobligationer in Denmark, obligations fonciers in France, pantbrev in Spain, etc. Covered bonds have been essentially a European instrument, mostly backed by specific laws, until recently when countries outside Europe either started enacting legislations to promote covered bonds, or structurers used combination of securitization-type structuring devices using common law to create covered bonds.

In the USA, Washington Mutual became among the first to come up with US covered bonds in Sept 2006, followed by Bank of America in the next year. Post the subprime crisis, US Treasury Secretary Paulson came out with the Treasury's plan to promote covered bonds, including a statement of Best Practices. This created a promise that the USA, with its vast, and unarguably, the world's largest, mortgage finance market, would join the list of countries that use covered bonds. Other countries to take legislative measures to promote covered bonds include Australia, New Zealand, Canada, etc.

Understanding covered bonds:

There is no uniformity in the structure of covered bonds – there are reasons why these differences exist. Before we come to the nuances of their structure, let us understand the philosophy behind covered bonds. Corporate bonds, whether secured or unsecured, have the probability of default dictated by that of the issuer. If the issuer defaults, even secured bonds will default, though one may expect a significantly higher recovery rate based on the value of the collateral. Mortgage-backed securities, on the other hand, are presumably structured to insulate the pool of assets from the risk of bankruptcy of the issuer. Mortgage-backed securities typically attain highest ratings on the basis of credit enhancements sized up to absorb the losses of such insulated pool, to an extent that justifies the highest rating.

Covered bonds borrow from securitization framework, as also from the age-old secured bonds. Secured corporate bonds are the obligation of the issuer, and are backed by security interest in the collateral. To what extent this collateral is available in the event of bankruptcy of the issuer, and what are the prioritized or parallel claims on this collateral, is a function of bankruptcy law that differs from country to country. In case of securitization, the presumption is that the collateral pool will remain completely aloof from the issuer and would be unaffected by the bankruptcy of the issuer, thus allowing investors undeterred access to its full value. Covered bonds strike an "approximate" midway, by creating a structure that combines at least the following:

- A recourse both against the issuer and the collateral pool, such that, like corporate
 bonds, the bond is still the obligation of the issuer, yet backed by claim over a
 collateral pool which is expected to withstand competing or overriding claims in
 the event of bankruptcy of the issuer; therefore, there is no complete isolation of
 the collateral from the issuer as in case of securitization, yet a structure in place
 that will protect the collateral and preserve it for payment to covered bonds
 investors on a first-priority basis;
- Presence of credit enhancements that are expected to absorb losses, at a stress level to attain the best ratings, is common in covered bonds too. However, the credit enhancement structures used in covered bonds have traditionally been simpler than they are in securitization.
- Thus, covered bonds lean both on the credit of the issuer as also the strength of the asset pool.

Structure of covered bonds:

Covered bonds are on-balance sheet securitizations. If by "securitization" is meant the transfer of a pool and its transformation into securities, then covered bonds are not securitization: they are closer to a secured bonds issuance. In a mainstream covered bonds transaction, there is no transfer of the assets to a special purpose entity. On the other hand, the assets are identified, and collateral rights are created on the assets as per local secured lending law, and are placed as a security for the bonds. In the event of bankruptcy of the mortgage originator, a general secured lending law or a special law relating to the assets grants the bondholders recourse against the pool of mortgages over which security interest had been created. More often than not, there are overriding and parallel claims, arising out of bankruptcy laws or other laws, that erode a part of the value of the assets attributable to payment to the secured bondholders. In other words, the secured assets are prone to the bankruptcy risk of the issuer.

Securitization structures intend to eliminate this risk by relying on "true sale" – the asset pool itself is sold using a legally defensible sale, generally to a special purpose entity (SPE). The SPE itself is, in legal presumption, bankruptcy remote – that is, it is so structured as to be free from risk of being called into bankruptcy. Thus, securitization transactions may be taken to have insulated the asset pool from the bankruptcy risk of the issuer. That having been done, the only risk to be concerned about is the risk of credit losses in the asset pool. If there are credit enhancements present to absorb that risk to a sufficient degree, the resulting securities may attain highest rating.

The need for securitization structures to depend on isolation or true sale resulted into some consequential features. One of the most significant consequences is the correlation between the cash inflows from the asset pool and the cash outflows to repay investors. This is commonly known as the *pass through* nature of the transaction, implying that what is received, and whenever it is received, is the paid out to investors. The pass-through feature leads to several implications:

• The maturity of the mortgage (or asset) backed securities is the same as that of the asset pool. For example, if the mortgage pool pays off in 20 years, the last dollar

to flow to the securities will also take 20 years. There are, of course, several modifiers that come into play – for example, there may be tranches of securities, with some tranches paying before others. There may also be a *clean up call option* that allows the seller to complete the redemption once outstanding pool value becomes insignificant. However, on a holistic basis, there are no asset-liability mismatches in the transaction – the repayment of the liability, viz., the bonds, is driven by the repayments on the assets.

- As the mortgage loans prepay, the investors get prepaid too. Therefore, the much-discussed prepayment risk gets completely shifted to investors. Once again reallocation devices that differentially reallocate the prepayment risk to different classes of investors may be used.
- The repayment of the liabilities flows from a *static pool*. Static pool refers to the mortgages that were there in the pool when it was sold to the SPE. Hence, the mortgage backed securities will be affected by the expected behaviour of a static pool behaviour of key variables, such as prepayment rate, default rate, average rates of return, as a function of time to maturity.
- Since securitisation is based on true sale of the asset, questions arise to whether what is sale in law is also a sale in accounting parlance leading to questions of off-balance sheet treatment of the assets, and if sale treatment is attainable, there is obviously related question of acceleration of the profit/loss and upfront recognition thereof.

Let us now take the case of covered bonds. Given the fact that covered bonds are the obligations of the issuer, they do not have to exactly derive the cashflows from those of the asset pool. In other words, covered bonds are not passed on pass-through cashflows of the asset pool. There may be mismatches (however, within limits – see discussion below) in the cashflow structure. As such, all the consequential features of securitization depending on the pass-through nature of the transaction can be avoided, or at least, mitigated, in case of covered bonds.

But here comes the key question – if covered bonds are nothing but obligations of the issuer, then what is the difference between secured corporate bonds and covered bonds? As discussed before, the genesis of covered bonds lies in giving to the bondholders bankruptcy-proof access to the assets. Hence, covered bonds have to create a legal structure that may allow investors to use the collateral assets, even if the issuer goes into bankruptcy. The basis of this bankruptcy-protected right lies in either a legislation granting them a special privilege, or in the design/structure of the transaction. Accordingly, covered bonds structures, based on nature of jurisdictions, may be classified into:

- Legislative covered bonds
- Structured covered bonds

Legislative covered bonds:

A legislative covered bonds structure is one where a special legislation gives bankruptcy protection to the investors. This goes with the very genesis of covered bonds – they were

created to allow investors in the bonds to have the strength of the assets, not just the strength of the issuer. In most European jurisdictions, covered bonds legislations grant a special immunity to the assets backing the covered bonds – that the bankruptcy trustee shall not take over these assets.

Take, for instance, the German pfandbriefe. Under German law, pfandbriefe can be issued only by banks, also on the strength of a specific license issued on satisfaction of several conditions. These pfandbrief issues are expected on a regular and consistent basis, rather than on an opportunistic or sporadic one.

There are several different types of pfandbriefe permitted by the German Pfandbrief Act – mortgage pfandbriefe, public pfandbriefe, ship pfandbriefe, and more recently, aircraft pfandbriefe, each backed by the type of assets that the name implies. Public pfandbriefe are those backed by claims against public sector authorities.

The key feature of pfandbriefs is "covered assets," the collateral backing up the pfandbriefe. Depending on the type of pfandbriefe, the covered assets should be qualifying mortgages, public sector financial claims or mortgages on ships. In addition, within specific limits, claims against central banks, credit institutions and derivatives transactions are also recognized as covered assets.

The key to the bankruptcy remoteness of pfandbriefe lies in Sec. 30 of the Pfandbrief Act. This section provides that if insolvency proceedings are opened in respect of the Pfandbrief bank's assets, the assets recorded in the cover registers shall not be included in the insolvent estate. The claims of the Pfandbrief creditors must be fully satisfied from the assets recorded in the relevant cover register; they shall not be affected by the opening of insolvency proceedings in respect of the Pfandbrief bank's assets. Pfandbrief creditors shall only participate in the insolvency proceedings to the extent their claims remain unsatiated from the covered assets.

There are independent administration provisions for the covered assets. Sec. 30.2 provides that the court of jurisdiction shall appoint one or two natural persons to act as administrators, whereupon the right to manage and dispose of the covered assets shall be transferred to the administrator. Thus, the administrator either continues to collect cashflows from the assets or dispose it off and pay down investors at once.

Similar provisions exist in other legislations dedicated to covered bonds. Thus, in legislative covered bonds jurisdictions, the protection from the bankruptcy risk of the issuer is attained by special provisions of the legislation.

Structured covered bonds:

There are several covered bonds jurisdictions that do not have any specific laws to supply the bankruptcy protection. In these countries, issuers have been using a combination of special purpose entities and a transfer of the assets, presumably to attain bankruptcy proofing. These may be called *structured covered bonds* jurisdictions. A typical structure of a structured covered bond runs as shown in Diagram below.

The mechanics of a typical structured bond can be described in the following steps:

Parties involved:

- Originator: the bank/entity that wanted to raise funding
- SPE: the special purpose entity that is interposed in the picture, to hold legal title over the pool of assets and to provide bankruptcy protection. The SPE should be so structured as to be free from the risk of consolidation with the originator.
- Cover pool monitor: an entity to ensure that the cover pool satisfies the minimum credit enhancement required by the transaction.
- Administrator: an entity that will take over the assets in the event of bankruptcy of the originator.
- Bond investors.
 - 1. A structured covered bond will typically have an independent SPE which will hold title to the assets or the cover pool. Note the significant difference in normal securitization structures, the bonds are issued by the SPE. In case of structured covered bonds, while the collateral or cover pool is legally sold to the SPE, the issue of bonds is done by the originator or the bank that wanted to raise funding. Hence, the bonds are the direct and unconditional obligation of the originator. The role of the SPE is to provide a secondary recourse. Hence, in structured covered bonds, the SPE is typically a guarantor.
 - 2. The proceeds raised through the issue of covered bonds will be on-lent to the SPE. In turn, the SPV uses these proceeds to purchase from the originator the cover pool on a true sale basis¹. Thus, the SPE becomes the legal owner of the pool. In other words, from a legal perspective, the sale from the originator to the SPE must satisfy the legal features of a true sale. The sale, however, is not a sale from accounting viewpoint see discussion below. Also, note that the loan given by the originator to the SPE is subordinated to the obligations of the SPE to the bondholders.
 - 3. Backed by the cover pool, the SPE provides a guarantee to covered bondholders for the payment of interest and principal on the covered bonds, which becomes enforceable if the issuer defaults. The guarantee represents an irrevocable, direct and unconditional obligation of the SPE and is secured by the cover pool.
 - 4. The originator continues to collect and service the cashflows from the mortgage loans. As there is a mismatch between the payments from the mortgage pool and the payments on the bonds, the originator is allowed to (a) retain the collections from the pool; and (b) make payments towards

¹ As an alternative, the SPE buys the assets but the price for the same is kept unpaid – by way of a deferred purchase price.

the bonds in excess of collections from the pool. As the originator repays the mortgage bonds, the inter-company loan and the purchase of assets by the SPE are squared off – that is, the SPE's obligation to repay the inter-company loan is taken to have been satisfied.

- 5. Though the originator holds the collateral pool and may use the cashflows therefrom, and may replace assets in the collateral pool or add new assets in place of those amortised or prepaid, the originator needs to ensure that the credit enhancement levels are maintained at all times. Usually, an independent cover pool monitor monitors the compliance with this requirement.
- 6. While the originator may add further loans to the collateral pool, or withdraw loans from the pool, the aggregate amount of collateral "sold" to the SPE must have a minimum amount of credit enhancement.
- 7. If originator bankruptcy event takes place, the SPE's guarantee to the bondholders kicks-in. At this stage, the SPE attaches the collateral lying with the originator, and passes it on to the administrator.
- 8. The claims of the bondholders are paid from the cover assets. In case of a deficiency, the bondholders will have an unsecured receivable from the issuer.

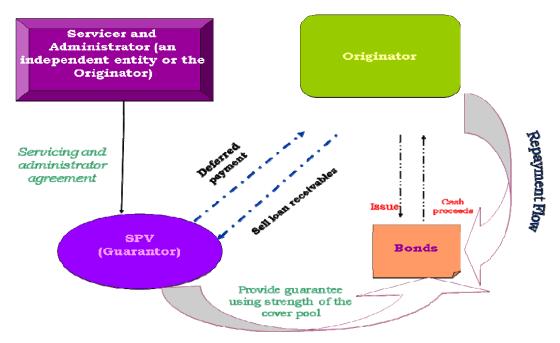


Figure 1: Structure of structured covered bonds

Cover assets and Credit enhancements:

Since covered bonds rely both on the asset pool and on originator credit, it is important to ensure that the credit risk of the asset pool is absorbed by credit enhancements. While securitisation transactions have used a variety of forms of credit enhancements, covered bonds have traditionally used *over-collateralization*. That is to say, the originator needs to ensure that the "cover" assets over-collateralize the outstanding bonds by the required minimum degree of over-collateralization. For example, if the required over-collateralization is 10%, for outstanding bonds of \$ 100, there need to be covered assets of at least \$ 110. As the bonds are amortized over time, this over-collateralization ratio has to be maintained at all times.

In addition to this, the cover assets, that is, assets forming part of the cover pool, must also satisfy certain features laid down by either legislation or regulation, for example, the LTV ratio in case of each loan. In other words, the quality of the underlying loans in the cover pool is carefully guarded by regulators.

Asset liability mismatches and liquidity risk:

Covered bonds are repaid independent of the cashflows of the cover pool. So, they are paid from the regular cashflows of the originator. Likewise, the cashflows received from the asset pool go and become part of the regular cashflows of the cover pool. This clearly implies an asset-liability mismatch underlying a covered bond.

If this asset-liability mismatch was completely uncontrolled, then the obligation to repay covered bonds would have been no different from an obligation to repay any secured or unsecured bond issued by the originator. Hence, the strength of a covered bond depends on how wide is the asset-liability mismatch. The asset liability mismatch reflects the liquidity risk of the transaction. If the asset liability mismatch is too wide, a covered bond leans too heavily on the liquidity strengths of the issuer, and therefore, is no different from corporate bonds. If the asset liability mismatch is negligible, a covered bond leans towards being a mortgage-backed security. Hence, usually, covered bonds issuers keep the asset liability mismatch under control. The extent of asset liability mismatch also affects the likely rating upliftment that a covered bond may receive – see below.

Table below shows a computation of the asset liability mismatch done by rating agency Standard and Poor's. In this table, Col A shows the likely balances in the asset pool, and Col B shows the likely balances outstanding of the covered bonds. As one may notice, at the inception, the cover pool value is \$ 120, while the bonds outstanding add to \$ 100, implying an over-collateralization of 20%. There is a mismatch between Col A and Col B – as is apparent. The outstanding balances of the assets are based on the amortisation of the mortgage loans, incorporating assumptions of prepayment and default. The outstanding balances of the bonds in Col B are based on the contracted repayment of the bonds – this may be seen in Col D. It may also be noted that while the asset pool will

take several years to fully pay down, the bonds are scheduled to be fully paid down at the end of 10 years.

The gap between the cash inflows and outflows is given in Col E. Col F applies a scalng factor, giving more weight to a mismatch in earlier years, and lesser to those in later years. The scaling factor is array of scales used by the rating agency in question.

Finally, in Col G we accumulate the asset liability mismatches, and find the highest level of mismatch. This is defined as the asset-liability mismatch of the transaction. Higher the mismatch, more the dependence of the transaction on the rating of the issuer.

Table 1: Computation of Asset liability mismatch in covered bonds (S&P)

Year	Performing asset balance (€ Mil.)	Liability balance (€ Mil.)	Stressed periodic asset cash inflows (€ Mil.)	Stressed periodic liability cash outflows (€ Mil.)	Net stressed periodic cash flows (€ Mil.)	Scaling factor (%)	Scaled net stressed periodic cash flow (€ Mil.) G = E * F	Cumulative scaled net stressed cash position (€ Mil.) H = Cumulative of G
Outstanding								
balance	120.00	100.00	-	-	-	-	-	-
1	114.00	90.00	6.00	10.00	-4	100	-4	-4.00
2	108.30	70.00	5.70	20.00	-14.3	95	-13.585	-17.59
3	102.89	40.00	5.41	30.00	-24.59	90	-22.131	-39.72
							-	
4	97.74	20.00	5.15	20.00	-14.85	85	12.6225	-52.34
5	92.85	20.00	4.89	0.00	4.89	80	3.912	-48.43
6	88.21	20.00	4.64	0.00	4.64	75	3.48	-44.95
7	83.80	20.00	4.41	0.00	4.41	70	3.087	-41.86
8	79.61	20.00	4.19	0.00	4.19	65	2.7235	-39.14
9	75.63	20.00	3.98	0.00	3.98	60	2.388	-36.75
10	71.85	0.00	3.78	20.00	-16.22	55	-8.921	-45.67
Maximum Al	LMM (€ Mil.)							-52.34
ALMM percentage = maximum ALMM / outstanding liability balance (%)						-52.34%		

With the discussion above on asset liability mismatches, it would be apparent that the maturity of covered bonds may be unconnected with the repayment of the assets. Usually, covered bonds may have *soft bullet maturity* – that is, they have an indicative payment date, but the issuer is allowed an extension of time to repay the bonds after maturity. In the example above, Col D shows payments to the bonds in 5 different years. This would

most likely not be 5 payment dates on a single bond, but 5 different tranches of bonds with single bullet maturity dates each.

Ratings of covered bonds:

As we have discussed earlier, the desire of a covered bond issuer is to raise funding by an instrument that pierces the rating of the issuer. That is, rating upliftment is a significant objective of every issuer.

All the major rating agencies have come up with criteria to give ratings, in fact, rating enhancements to covered bonds transactions. These criteria have been evolving over time, and as volatility spikes occur within the financial system, rating agencies become more conservative.

We do not intend to discuss the rating criteria of each of the agencies here, but we need to observe that unlike in case of securitization, ratings of covered bonds are not completely detached from the rating of the issuer. In fact, the rating of the issuer significantly controls the ratings of covered bonds. Hence, rating agencies typically lay down a matrix of factors, on consideration of which they will notch-up the rating of the covered bonds by specified level of notches.

Covered bonds and securitisation:

As we have stated before, covered bonds are though historically grounded into secured bonds, but in the recent past, transactions have been enriched by securitization methodology, particularly in countries which do not have specific covered bonds legislation. Hence, they are a hybrid between securitization and secured bonds. The few points of similarity between the two are: both result into creation of securities; both are methods of funding from the capital markets; both involve creation of a pool of assets; both have trustees overseeing the implementation of the transaction covenants; etc. The structure of covered bonds would look very similar to the master trust structure of securitization, particularly if the structure is used in case of residential mortgages. However, there are significant points of dissimilarity, as follows:

	Covered bonds	Securitization
Purpose	Essentially, to raise	Liquidity, off balance sheet,
	liquidity	risk management,
		Monetization of excess
		profits, etc.
Risk transfer	The borrower continues to	The originator does not
	absorb default risk as well	absorb default risk above
	as prepayment risk of the	the credit support agreed;
	pool. To achieve a partial	prepayment risk is usually
	transfer of prepayment risk,	transferred entirely to
	there may be a call option	investors.
	embedded in the bonds.	
Legal structure	A direct and unconditional	True sale of assets to a

	obligation of the issuer, backed by creation of security interest. Assets may or may not be parked with a distinct entity; bankruptcy remoteness is achieved either due to specific law or by common law principles	distinct entity; bankruptcy remoteness is achieved by isolation of assets
Type of pool of assets	Mostly dynamic. Borrower is allowed to manage the pool as long as the required "covers" are ensured. From a common pool of cover assets, there may be multiple issuances.	Mostly static. Except in case of master trusts, the investors make investment in an identifiable pool of assets. Generally, from a single pool of assets, there is only issuance.
Maturity matching	From out of a dynamic pool, securities may issued over a period of time. Usually, covered bonds are "programs", that is, series of issuance from out of a dynamic and replenishing mortgage loan pool.	Typically, securities are matched with the cashflows from the pool. When the static pool is paid off, the securities are redeemed.
Payment of interest and principal to investors	Interest and principal are paid from the general cashflows of the issuer	Interest and principal are paid from the asset pool
Prepayment risk	In view of the managed nature of the pool, prepayment of loans does not affect investors, except to the extent of call option embedded in the bonds.	Prepayment of underlying loans is passed on to investors; hence investors take prepayment risk
Nature of credit enhancement	The cover, that is, excess of the cover assets over the outstanding funding.	Different forms of credit enhancement are used, such as excess spread, subordination, over- collateralization, etc.
Classes of securities	Usually a single class of bonds are issued. There may be multiple time tranches, each having hard or soft bullet maturity.	Most transactions come up with different classes of securities, with different risk and returns
Independence of the ratings from the rating of the issuer	Theoretically, the securities are those of the issuer, but in view of bankruptcy-	AAA ratings are given usually to senior-most classes, based on adequacy

	proofing and the value of "cover assets", usually AAA ratings are given	of credit enhancement from the lower classes.
Off balance sheet treatment	Not off the balance sheet	Usually off the balance sheet
Capital relief	Under standardized approaches, will be treated as on-balance sheet retail portfolio, appropriately risk weighted. Calls for regulatory capital. Regulations provide investors with lower risk weights.	Calls for regulatory capital only upto the retained risks of the seller

Accounting for covered bonds:

Can covered bonds lead to off-balance sheet treatment? Under IAS 39/ FAS 140, true sale is not a precondition for off-balance sheet treatment. Transactions that qualify as pass-through arrangements, even if not backed by true sale, may lead to assets being off the balance sheet. Neither does true sale guarantee an off balance sheet treatment. On the other hand, off balance sheet treatment is based on the substance of the transaction, that is, risks and rewards from the asset pool. If the seller retains significant risks and rewards, the asset continues to be on the books of the seller, and the funding raised is treated akin to a borrowing.

As we have discussed above, several covered bonds transactions rely on true sale to achieve bankruptcy protection. Hence, a question may arise – as the originator sells the pool to an SPE that guarantees the repayment of the bonds, should the assets go off the balance sheet of the issuer? The answer would be clearly no, since the bonds are unconditional obligation of the issuer. Hence, the making of the true sale does not put the assets off the balance sheet of the issuer.

Accounting rules also provide that what is not off the balance sheet of the seller cannot be on the balance sheet of the buyer. In case of structured covered bonds, the SPE is the buyer and guarantor of the bonds. However, the SPE cannot put the assets on its balance sheet. If the SPE prepares any balance sheet as per accounting standards, it may have to make disclosure of the liability on account of guarantee, but neither the asset nor the loan will as such come as on-balance sheet items for the SPE.

The future of covered bonds:

In the opinion of the author, the experimentation of the covered bond structure in traditional domains of securitization implies that the market is searching for a right method of bankruptcy-protected structures. It is a pity that covered bonds, a device that comes from civil law countries which did not have the flexibility of common law, is

being tried in common law countries. The premise of isolation of assets by way of a true sale, on which securitizations are based, will increasingly prove to be too cosmetic to be real. At the same time, traditional secured financings cannot be entirely bankruptcy proof, as bankruptcy, by definition, is intended to provide an equitable distribution of assets of the bankrupt where the assets are not enough to pay everyone. Off balance sheet financing will increasingly become difficult with accounting standards trying to bring the SPVs back on the balance sheet by way of consolidation. If consolidation is the rule for books of account, it will, in long run, motivate courts also to see through the wall of separation between the seller and the SPVs. In fact, the whole device of SPVs may, at some stage, be questioned by law courts.

Therefore, legal systems need to be developed to accommodate the market's need to create asset-backed funding devices. Covered bonds does not look like an ideal solution, but surely, is a step in the search for the right solution in asset-backed funding.