Covered Bonds

A Research Publication by DG HYP

Pfandbriefe – Quality the path out of the crisis



Bonds

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Pfandbriefe - Quality the path out of the crisis

Market overview - where we have come from, where we are now

Structurally, it feels right now as if no stone has been left standing on another in the covered bonds market. Pfandbriefe have been suffering a deep crisis of confidence ever since the financial-market turmoil erupted. The article of faith that has been most called into question is the protection afforded to creditors in the issuer-insolvency scenario through the ringfencing of the cover assets—historically one of the main marketing arguments for covered bonds and pfandbriefe. And the downturn of several key property markets (first and foremost the USA of course, but also the UK, Spain and Ireland among others) has also suddenly hung a question mark over the quality of cover assets and therefore the very safety of covered bonds. Initially, pfandbriefe were spared the spreading loss of trust that found expression in rocketing swap spreads. But now even German pfandbriefe, the original covered bonds, have also caught the infection – with unjustified severity, as we will see.

Deep-rooted skepticism towards covered bonds

Dwindling trust and a more critical attitude towards covered bonds on the part of investors are now likely in the long term to produce a total re-think in the way pfandbriefe are valued and treated, and by extension also cause a step-increase in the swap spreads investors demand to compensate their risk. And this development should also be welcomed: we pointed out on many occasions before the crisis erupted that investors' previous – in our view superficial – analysis of covered bonds, which essentially added up to blind faith in ratings, had brought about a market situation that was anything but healthy. The exceptional homogeneity of pre-crisis swap spreads was not the only evidence of this neglect.

Valuations being fundamentally rethought

The current market phase will blaze a new trail into the future for covered bonds. We need to set the points now to create a sound foundation for the sustained healthy operation of both the secondary and primary markets. Issuers, investors and covered bond dealers (the word market maker no longer seems quite adequate to us) need to create an environment that restores confidence – on every front simultaneously. And even if some in the market do not wholly share our view: it is to be hoped that the market does not return to normal too quickly. If it did, a sudden explosion of issuing and trading activity could well cause the so desperately needed reorganisation of the market to be tackled half-heartedly so that all involved ended up falling back into their old ways. If this happened, it would probably be only a question of time until the covered bonds market – and by extension also the pfandbrief segment – slid into another crisis of confidence.

Restoring trust the most important objective

In the years gone by, many investors treated covered bonds and especially pfandbriefe as Bund surrogates – principally because of the outstanding liquidity they offered thanks to market making. They ignored covered bonds' inherent credit risk (arising from their cover pools) when valuing issues. This attitude also caused them to regard all the issues that came to the market as "cut from the same cloth" without any in-depth analysis, and find almost every offering acceptable. The consequence was swap spreads that were virtually identical from one segment to another. As Bund surrogates, all covered bonds benefited from the strength of demand that the supply of fresh bonds was never enough to satisfy. This meant that when the crisis broke out, the markets' negative reaction was all the stronger as the realisation gradually spread that investors should have paid more attention after all to cover pool quality and issuer ratings. Having said that, we do believe the reaction was excessive; it frequently appears to us to be the case that the issuer rating is now almost the only factor considered, with say the cover pool's quality characteristics and the underlying legal framework now playing no part in the decision-making process.

Credit risk was previously ignored...

... but now is becoming top-priority

This pattern of behavior is likely to remain in evidence in the months to come. The perception that covered bonds are a credit product will therefore presumably become accepted as the standard view. This turnaround of the thinking processes is getting assistance from the rating agencies, which are currently overhauling their methodologies and specifically asking critical questions about liquidity bottlenecks in issuers' cover pools. However, this process of adjustment on the part of the agencies and investors should not overshoot the target; we too see covered bonds as belonging more on the credit side rather than as Bund surrogates, but we are also aware of the need to remember that the features structured into most covered bond programs and the separating-out of their cover assets offer a level of protection that is significantly superior to "run of the mill" credit products. The safety dimension, where pfandbriefe are still in the vanguard – especially after the latest revision of Germany's pfandbrief legal regime – needs to feature strongly in all analysis.

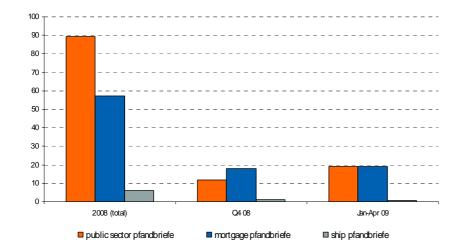
Pfandbriefe still out in front in terms of safety

Primary market

Despite the difficult market environment, the first four months of the current year have seen total pfandbrief issuance of EUR 38.6bn. The deals have included three EUR 1bn jumbo pfandbrief new issues and four taps of existing bonds worth a total of EUR 1bn. Although this means that the jumbo-segment issuance of EUR 4bn is only around one-tenth of all the pfandbriefe placed during the period, these few issues still make up one-third of all the jumbo covered bonds issued worldwide year-to-date.

Total new issuance of EUR 39bn year-to-date ...

Total gross sales of pfandbriefe



Source: vdp

It follows that traditional pfandbriefe account for the lion's share of bond sales at EUR 35bn, almost all of which was privately placed. The advantages of this over public deals are that the issue's maturity and structural features can be tailored to the individual needs of the predominantly institutional investors and that pfandbriefe can be issued as registered paper rather than only in the form of bearer bonds.

..., with traditional pfandbriefe accounting for EUR 35bn

While the issuance of mortgage pfandbriefe (EUR 18bn) clearly dominated that of public-sector pfandbriefe (EUR 12bn) as recently as the fourth quarter of 2008, new issues of both pfandbrief categories have run basically neck-to-neck since the beginning of this year. The

Sales volume down year-on-year

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volumes of ship pfandbriefe issued remain small – EUR 1.3bn in the fourth quarter of 2008 and EUR 650m in the first four months of the current year. Extrapolating the total sales volume of all pfandbriefe to date of EUR 36bn to the full year, 2009 issuance will fall well short of last year. Pfandbrief sales totalled EUR 153bn in the full 2008 year.

Secondary market

To talk of a functioning secondary market would be stretching the point at the moment. Active trading is absent, and the few small-size deals done are almost exclusively concentrated in the pfandbrief segment – and even here involve only the handful of perceived "good" names. Seen through the prism of history, the spread levels where many covered bond segments now find themselves are in the realm "beyond good and bad". The secondary-market levels of quite a few pfandbriefe have also now climbed above the magic level of 100 basis points. Nevertheless: what we are currently seeing is the reality that market participants are going to have to adjust to in the medium and long term. Spreads are an expression of the market environment – as they were before the crisis – and this just happens to be in worse shape than it was even relatively recently.

The pfandbrief segment specifically is also facing new difficulties following the recent vote to extend the guarantee program for unsecured bank bonds in Germany. The previous limitation of guarantees to a maximum term of three years had at least given covered bonds with longer maturities a certain advantage (the five-years band being the biggest beneficiary). There was and still is plenty of investor demand for maturities that go beyond the comparatively short dates. We would see even ten-year pfandbriefe promising good sales potential – however, issuers are still being ultra-cautious this far out.

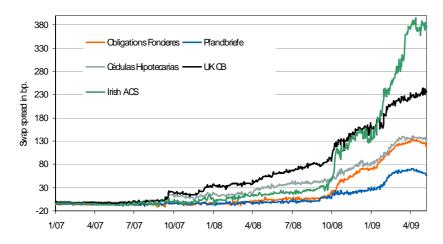
It follows that a sharp narrowing of swap spreads is not very likely in the short term, even though the recent announced ECB plans to buy covered bonds worth EUR 60bn already had a positive effect on the segment. There is still a marked swap-spreads discrepancy between outstanding covered bonds and newly-issued paper, partly because of the relative lack of secondary-market liquidity. It has been interesting to see, however, how the jumbo pfandbriefe issued so far this year have all tightened so much in their first few days of trading that at times they have been dearer than many of the comparable bonds that have been on the market for some time. One almost gets the impression that psychology might be playing a role in this, namely that the perception of newly-issued bonds as so much more attractive *per se* might be boosting demand.

Spreads landscape rearranged

Competition from state-guaranteed bank bonds

Strong spread tightening not likely

Pfandbriefe have held up relatively well



Sources: DZ BANK, Bloomberg data

For all their widening bias, pfandbrief swap spreads have held up the best out of all the big covered bond segments. This probably reflects the fact that this market segment is still credited as offering the highest quality. Even so, pfandbrief market spreads are now at levels that require further analysis.

Spread determinants

What factors are currently influencing the evolution of spreads? In times of crisis, investors' appetite for risk – as expressed by the swap spreads they demand – is no longer so closely guided by the quality of the cover assets or the national legal regimes that underpin covered bond issues. Instead, when making their investment decisions investors tend to concentrate on the issuer's credit quality – the fundamental characteristics that distinguish pfandbriefe from other asset classes are largely overlooked. A sort of herd mentality takes over that leads pfandbriefe to be seen as "of a kind" with other covered bond segments, and punished equally severely. The sharp rise of swap spreads appears to be telling investors that things have fundamentally taken a serious turn for the worse in the covered bonds world. They do not probe any deeper, and a whole segment then experiences much greater pressure than is actually justified in our opinion.

The question of "what everyone else is doing" is also an important factor. Why would anyone make an investment now if they suspect that spreads might blow out even further in the next few days? Nobody wants to be the first to jump back in. On the other hand of course, investors are also unwilling to realise losses by selling – even though they expect spreads to widen further. In this climate, wait-and-see and buy-and-hold both appear to be better alternatives for some market participants.

Ultimately however, swap spreads are finding their level at present almost without any input from investors. The few small sales that take place are not enough to trigger substantial movements. The prices that the banks quote on their trading screens are essentially derived from the primary market; the consequence is that spreads are driven higher with every new issue (not only of pfandbriefe and other covered bonds, but also state-guaranteed and even unsecured bank bonds). Also, the prices displayed are still no more than indications and are mostly far removed from what is really achievable.

Headline risk one dominant factor

"What are the other guys doing?"

Customer orders a secondary factor

In the medium to long term, analysis expense will be one of the key determinants of the spreads demanded by investors. Investors' trust in the rating agencies has been holed below the water-line, with the result that investors (or at least the biggest investors) are now using their own models to identify what they consider to be a fair value against swaps. As far as pfandbriefe are concerned, this analysis is likely to show that the quality of issuers' cover pools is as high as ever. The concerns they feel with regard to the issuers will then need to be related to what they know about the cover pools. This makes us confident that once the covered bond market recovers to any extent, pfandbrief swap spreads will be back below their current level again. Further widening cannot be ruled out in the meantime, however.

Spreads will tighten again long-term

Banks as liquidity providers – Does market making have a future?

In the past, functioning market making has always been an essential prerequisite of secondary-trading liquidity – especially as far as investors were concerned. This raises the question whether market making can be expected to resume at all, or whether it is alternatively conceivable that a degree of secondary-market liquidity might build up even in the absence of market making. For there is no doubt that with the end of market making, the pfandbrief market has also lost an important marketing tool.

First things first, though: we do not expect any banks to materialise in the near or medium-term future that will be willing to promise to quote binding bid and ask prices in anything like the way that was standard practice just eighteen months ago. In a worst-case scenario, this could result in them taking on positions, i.e. ending up with more holdings on their books, a thing that many banks wish to avoid at all costs. In any case, market making in its familiar form is no longer a viable alternative since the world has seen that it stops functioning in crisis situations – precisely when it is most urgently needed – and what is worse, even reinforces negative market trends.

Banks in general will no longer be prepared in future to make their balance sheets available in order to supply liquidity to the market – and in specific cases, possibly even provide liquidity that mainly benefits other market participants with smaller balance sheets behind them. The decision to provide liquidity – or not – will be weighed up much more carefully in future, and should this course not provide the banks concerned with clear advantages, we expect most to decide no. We need to bear in mind that the very lack of transparency that prevails in illiquid markets will provide an opportunity for some banks to book much bigger benefits than they could in an efficiently functioning and highly liquid market.

Electronic trading systems possible routes out of illiquidity

The realisation that market making can cease to function in times of crisis has led some market participants to consider how trading might be transferred onto a completely electronic platform. Liquidity arguments would not be the only benefits that mattered in this decision; actors see a good chance that the opportunity to boost transparency that this form of trading offers might help to overcome the market's loss of trust.

Various suggestions have now been put forward for how trading could be moved online. The ideas range from a daily auction of covered bonds (divided into different maturity bands), via the transfer of telephone trading onto an electronic system, through to a full electronic B2B trading system. Without wishing to go into the details too deeply, we see the routing of more trading onto an electronic system as the right way forward. Naturally, the scale of the switch needs to be discussed, as telephone trading does offer clear advantages. The important thing to bear in mind in our view is that something needs to be

Historically, an important marketing tool

Avoiding increased holdings

Balance sheets will no longer be made available

Liquidity and enhanced transparency the goals

Proposals range from auction through to B2B platforms

done – and any idea that could help to boost secondary trading activity is therefore welcome.

The proposals under debate would not advantage or disadvantage pfandbriefe relative to the covered bonds of other countries and jurisdictions. That said however, we are confident that German covered bonds along with French *obligations foncières* would be amongst the first issues that investors would be looking to trade on an electronic platform.

Will the ECB ride to the rescue of the covered bonds market?

At its May meeting, the European Central Bank (ECB) announced that it intends to buy in a total of EUR 60bn worth of covered bonds in order to support the market. The ECB will not release further details until its next meeting on 4 June. The only other thing we have been told for sure is that the ECB will restrict its purchases solely to euro-denominated covered bonds issued in the eurozone. Will this central-bank initiative have the potential to restore a higher level of market activity?

EUR 6obn worth of covered bonds to be bought

We see this news, which is an extremely positive development in our opinion, initially having a primarily psychological benefit – it will have to, seeing that the promised volume of purchases of EUR 60bn is not going to be enough on its own to significantly move the market. The ECB has previously bought covered bonds for its own account. The pending buying will be qualitatively different however, since the principal objective will be to stabilise the market. And the initiative will work – to an extent, at least. By not revealing any more, the ECB has created a situation where every segment of the CB market is still hoping to get help.

Psychological benefit above all

At this stage of the proceedings however, there are more questions than answers. Here is just a short list:

- Which covered bond segments will benefit from the ECB's buying, which types of cover assets will be affected, which maturities will the ECB buy, and from which groups of investors will it buy covered bonds?
- > At what price will the ECB buy in covered bonds?
- How will the central bank define the term "covered bond"? Might the demarcation include RMBS?
- ➤ How will the purchases be effected? If the main objective is to stabilise the market, the ECB is likely to intervene in the secondary market, either through direct purchases and/or through auctions; if stabilising the banks' funding operations and by extension the property market is the ECB's main or a secondary objective, it is likely to act more through the primary market to boost issuance or through a combination of primary and secondary activity.
- Over what period will the ECB buy covered bonds? Will the ECB retain the paper it acquires on the books through to maturity, or will it engage in some sort of "active portfolio management" involving earlier sales?

We do not expect the ECB announcement to trigger a rally that causes swap spreads to instantly tighten significantly. That said however, the positive effect of the initiative should at least ensure the market stabilises for a while at the current level and allow swap spreads to at least show the first signs of a tightening trend.

Swap spreads to stabilise or tighten slightly

The news will probably have a relatively smaller positive effect on pfandbriefe. In the absence of scheme details, we believe the anticipation of any central-bank involvement in the market will initially benefit the covered bonds that have suffered much more than pfandbriefe (such as Spanish cédulas).

Pfandbriefe will benefit relatively less

Do state-guaranteed bank bonds present serious competition?

The recent months have seen many countries vote through bank-sector rescue packages that in a few cases, such as Sweden and Ireland, also include covered bonds in the new government guarantees. Germany's Financial Markets Stabilisation Act leaves pfandbriefe out in the cold. However, the wording of the law includes a passage to the effect that the federal government will ensure that the German pfandbrief's 200-year-old track record (not a single default in its history) will be preserved into the future. This represents a strong commitment by parliament to the German pfandbrief and by implication, holds out the prospect of action to protect pfandbrief creditors. We consider that this adds up to an implicit state guarantee for German pfandbriefe.

Pfandbriefe have an implied government guarantee

The most immediate outcome of the Financial Markets Stabilisation Act however is to create a window of opportunity for German banks to raise wholesale-market funding by issuing bank bonds that carry a guarantee from the federal government. So far, six German banks have taken advantage of this new option and issued state-guaranteed bank bonds worth a total of EUR 25.5bn. These new issues have not failed to impact on pfandbriefe. The high level of safety that both bond categories provide is not the least of the factors that cause overlaps in the investor groups they appeal to. The result is that to survive the competition from state-guaranteed bank bonds, pfandbriefe now need to offer a premium that is keeping swap-spread levels trending higher.

Investors in state-guaranteed bank bonds and pfandbriefe partly overlap

Comparison of covered bonds and state-guaranteed bonds

	Pfandbriefe	State-guaranteed bank bonds
Rating	AAA	AAA
Risk weighting	10%	0%
Term	No limit	Maximum 5 years
Security	Cover pool	State guarantee
ECB-eligible	Yes	Yes
Haircut	Category II (jumbos), III	Category IV
Liquidity	Low	Relatively high
Rating stability	High	Very high
Analysis expense	Average	Minimal

Source: DZ BANK

While there is no difference between these two funding instruments in terms of their ratings and ECB-eligibility, there is every chance that on its own, the 0% risk weighting enjoyed by state-guaranteed bonds will have a decisive impact on the decision to invest. But that is not the only edge that state-guaranteed bank bonds have – their lower analysis costs (the potential buyer only has to look at the T&Cs of the government guarantee) are another advantage that clearly feeds through to the yield demanded by investors. It follows that pfandbriefe have to offer a premium to be competitive against state-guaranteed bank bonds.

In early January, Commerzbank became the first German bank to accept the assistance of the government's rescue package when it placed a three-year EUR 5bn state-guaranteed bond at midswap + 30 basis points. The premium paid to attract buyers was well above the

State-guaranteed bank bonds' o% risk weighting an advantage

State-guaranteed bank bonds putting pfandbriefe under pressure

levels of German government bonds and comparable bonds from government-sector institutions. The consequence was that the spreads of state development banks and later also pfandbriefe came under pressure in anticipation of further state-guaranteed issues.

As a result, when LBBW marketed its five-year public-sector pfandbrief in early February it was obliged to offer a yield spread of 75 basis points over the swap curve. By way of a comparison: as recently as August – but admittedly before the Lehman bust - Münchner Hypothekenbank had been able to issue a three-year public-sector pfandbrief at midswap minus one basis point.

While pfandbriefe initially had to compete with state-guaranteed bank bonds only in the maturities range up to three years, the maximum permitted term of government-guaranteed bonds has now been extended to five years. This means that the maturities range beyond five years is now the only exclusive preserve of pfandbriefe. While two French issuers have so far got ten-year covered issues away, no pfandbrief issuer has yet dared to test these waters.

The period during which banks can issue state-guaranteed bonds will expire at the yearend. Even if the government can theoretically extend this window, the time will eventually come when banks will only be able to issue unsecured bonds again. Then – if not before pfandbriefe will reassert their funding edge and covered bonds will once again be an increasingly important long-term funding instrument.

The rating agencies factor – methodological changes

The fate of covered bonds as automatic AAA products seems to be sealed. The explanation lies in the proposals announced by now all three big credit rating agencies to either radically overhaul or simply modify their methodologies for rating covered bonds. Pfandbriefe are likely to be negatively impacted too.

■ S&P

S&P started the ball rolling back in February. Alongside the innovation that its future covered bond ratings will be explicitly tied to the issuer rating, an investigation of maturity mismatches in the two-way cash flows on cover-pool assets and liabilities will form the cornerstone of S&P's proposed modified rating methodology. The following is a brief summary of the key changes:

- A categorisation structure will be developed on the basis of which some covered bond ratings will be explicitly linked to the issuer's rating;
- The new methodology will attach more weight to maturity mismatches between the cover pool's cash inflows and outflows;
- Individual covered bond jurisdictions will be scored on the probability of support they offer;
- S&P will use stricter stress scenarios in future to establish the accurate market value of cover assets.

S&P has said that if its rating methodology is revised in line with its original proposals, up to 60% of the covered bonds it rates could lose their top-grade rating. Although pfandbriefe are unlikely to figure amongst the hardest-hit national covered bond segments, both mortgage-backed and public-sector-loans-backed pfandbriefe are bound to be affected. Now that the consultation phase has closed at the end of March, it remains to be seen what changes S&P will eventually make to its rating methodology. Whatever compromises it agrees to, the

Covered bonds will regain their core role as long-term funding instruments

S&P planning radical changes to rating methodology

Up to 60% of covered bonds could forfeit their best-of-breed ratings

new rating methodology is going to take affect sooner or later and that means rating downgrades are in the pipeline.

■ Fitch

Fitch is also intending to modify its methodology for rating covered bonds and therefore also pfandbriefe, as it announced in March. It will focus in particular on cover pool liquidity risks that arise from the tendency for cover assets to be longer-dated than the issuer's outstanding covered bonds. This would be especially problematic if the issuer were to default immediately before a covered bond falls due for repayment. Another aspect is that market conditions will make it more difficult to liquidate cover assets should a firesale become necessary. Fitch has accordingly decided to adjust the way it calculates its discontinuity factor to reflect these changes in the framework conditions. The agency will also assume in future that the achievable sale proceeds will be smaller than before the financial crisis, and this is likely to be reflected in the extra overcollateralisation it will require.

Fitch planning to pay more attention to liquidity risk

In Fitch's rating approach, the discontinuity factor (D Factor) acts as the link between the issuer and covered bond ratings; it expresses the probability of continuing timely servicing of the covered bonds in the issuer-insolvency scenario. In summary, Fitch's proposed changes, which will further strengthen the linkage between the issuer and covered bond ratings, are as follows:

Tighter link between covered bonds rating and issuer rating

- The weighting attached to liquidity gaps in calculating the D Factor will be raised from 30% to 35% (in return, the cover-assets-ring-fencing component will only be weighted at 45% instead of 50% at present);
- The liquidity-gap calculation will make more allowance for the cover assets' reduced liquidity in future.

Should the 104 covered bond programs that Fitch rates increase their overcollateralisation as required to obtain their highest achievable rating, but fail to take any action to rectify their liquidity gaps, the agency predicts that this will result in downgrades for a maximum of 5% of public-sector-assets-backed covered bonds and a maximum of 10% of mortgage-loans-backed CBs. Fitch says most of the rating cuts would be limited to one notch and would therefore be more moderate overall than S&P's anticipated downgrades.

Maximum one-notch downgrades seen

Like S&P, Fitch has also given participants an opportunity to criticise its proposed changes. The consultation phase ended on 30 April.

Moody's

Moody's was the last of the big three rating agencies to react to cover pools' increased refinancing risk. In contrast to S&P and Fitch, who respectively radically overhauled and further modified their covered bonds rating methodology, Moody's has not changed its rating methodology but only adjusted the variables that feed into its computations. We expect most issuers to comply with the rating agency's demand for extra overcollateralisation and thereby keep the downgrades of covered bond ratings at a "tolerable level".

Determinants modified

That said, investors will now need to adjust to the fact – especially in the light of the changes that S&P and Fitch are proposing to make to their rating methodologies – that few future issues are going to be able to boast top-grade ratings from all three agencies.

End of the AAA era

Naturally, we should stress at this point that a double-A rating is also still a very good grade that continues to imply minimal probability of default. Sovereign Spanish and Irish bonds for instance no longer carry best-of-breed ratings from all three agencies.

The rating downgrades are likely to impact on the spreads of the pfandbriefe concerned however, once we know for certain which issues are going to be affected. The loss of the best-possible rating, should the investor's house rules make AAA ratings mandatory, could even force investors to divest their holdings of the issues concerned and further intensify the pressure on the spreads.

Spread widening very probable

Investor sentiment

The main problem that the covered bond market as a whole and pfandbriefe specifically see themselves facing at the moment, is the extreme negativity of investor sentiment. Although the pfandbrief market was the last covered bonds segment to hit the skids, the damage it has suffered appears to be relatively severe. The biggest difficulty in rebuilding trust in German paper is the lack of empirical experience. In the past (before the crisis), investors' attitude towards pfandbriefe was clear: a quality product that can look back on an over two-hundred-year history with not a single default or case of arrears, and which got a further massive boost with the introduction of the jumbo segment in 1995, is like Caesar's wife – beyond criticism. As a result, demand mostly ran far ahead of supply, and swap spreads knew only one direction – down and down.

Positive attitude of investors towards pfandbriefe...

This perception of the market has not only changed, it has swung to the opposite. The financial world's problems are being projected 1:1 onto the pfandbrief market, and Germany's version of covered bonds is taking such a caning that the protective mechanisms built into the programs are now being completely overlooked.

..has swung to the opposite

To counter this change, the other market participants now need to focus on responding to investors' demands – to the extent that investors and their wishes can be channelled at all. To allow the investor community an opportunity to speak with one voice, the Covered Bond Investor Council (CIBC) was established just a few weeks ago to enable investors to express anonymous criticism of the market structure. This council is intended to provide the necessary counterweight to the bodies that already represent the interests of issuers and dealers (market makers). We all have to remember that at the end of the day, it is investors who drive the market and breathe life into trading in the first place.

Investor Council – the voice of investors

Over the recent months, we have observed a clear shift in investors' expectations of what needs to change in the covered bonds market to make them even consider investing again. Whereas at the beginning of the crisis it was deficient liquidity they complained about, investors are now more critical of the market's lack of transparency, especially on the part of issuers. Their accusation is that the information available to the market and therefore to investors is not sufficient to enable them to get a full picture of the risks inherent in specific covered bonds or pfandbriefe.

Transparency and liquidity called for

Demand for more transparency

But what should this enhanced transparency actually deliver? In general, most investors' first instinct will presumably be to get their hands on all the information they possibly can. This includes detailed cover-pool data on for instance the origin and nature of cover assets and their LTVs, plus data on maturity transformation in the pool. They also want to know the ins and outs of the insolvency regime – including naturally a focus on the statutory basis.

As much information as possible

Starting from what could rapidly turn into a mountain of raw data, the question we want to ask is how this information can be processed for the benefit of customers. The sheer mass of numbers reminds us of the old saying: "Data is not necessarily information, it is what information is gleaned from". This is the weakness that could quickly make the call for "all the data" a self-defeating proposition for many investors who do not have the resources or know-how to turn the raw data into usable insights.

Raw data needs to be transformed into useful information

As yet, we have not formed a consistent view or list of what summary data should be made available to investors – but also analysts – as genuinely relevant. We can be fairly certain, however, that their requirements will go beyond the paragraph 28 provisions – even the modified rules of the revised Pfandbrief Banks Act. True, the legislators have written into the revision a new stipulation that the data provided on, say, the maturity structure of outstanding pfandbriefe compared with their cover assets must be broken down into significantly smaller time units in order to boost the value of the information provided. But this can only be the start. We believe it would be a step in the right direction for issuers to all use the same template to present their data, for example. The comparability of the information provided is also an important factor in processing (issuers currently present their paragraph 28 data in a wide range of formats).

Paragraph 28 data too sparse in our view

While it goes without saying that issuer transparency on its own should not be seen as the panacea that cures all ills, one thing that can be stated with certainty in our view is that too much information is not the answer either; or at least, not for investors who have no way of processing the data. What is more, true transparency surely involves more than information on cover pools, it extends to data on the market itself, such as actual traded prices and volumes. This means taking account of another interest group, pfandbrief dealers, so that progress on this front will involve all three camps – and the more interests that need to be accommodated, the more difficult it is to find a unanimous solution.

Transparency also needed on market data front

How important is liquidity?

Liquidity is an absolute prerequisite for investors to return to the pfandbrief market in numbers. Admittedly, this line of argument has been somewhat undermined recently when it became clear that the generous liquidity maintained at least *pro forma* by the continuation of market making, had actually made the market situation worse. To be specific, liquidity in combination with growing investor reticence produced a situation where swap spreads were shooting higher purely because market makers were playing pass the parcel with positions that management had ordained should be cleared off the books.

Liquidity was a (co-)trigger of the spreads explosion...

In this narrow sense, it is just possible to say that the high liquidity guaranteed solely by market making accelerated the widening of swap spreads in a market dominated by fierce selling pressure and in the process helped to trigger the loss of confidence. So liquidity was genuinely (one) cause of the crisis – but in a completely different way than many like to claim.

...but not in the way most people think

We believe that liquidity will probably be defined completely differently after this crisis has ended (or at least, once the situation has improved considerably). One key factor will be whether the market re-thinks its perception of covered bonds and pfandbriefe as Bund surrogates and accepts that they are more credit products. The issue of whether they will be seen more as buy-and-hold or as trading products in future, will also assume more significance with time. It also remains to be seen whether the jumbo pfandbrief has a future in the new environment, or whether small issues will take over as the new benchmarks.

Liquidity parameters changing

Many of these questions are currently still impossible to answer – but since (high) liquidity has always been one of the pfandbrief segment's most important marketing arguments, issuers and dealers will need to consider how they are going to address this issue in the future. Liquidity is going to remain a central focus – even if the parameters are markedly different.

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To the landscape for issuers

What are the prospects for the German pfandbrief issuers? How is their landscape changing or going to change? The shortest "answer" we can give is an irredeemable oversimplification: things are tough, and tough in various ways. We do not intend to risk a blasé attempt to provide any sort of an "exhaustive" response to this question but the following section will at least put forward a few (necessarily) speculative propositions for discussion; our hypotheses are interwoven in a complicated way.

A difficult environment

■ Proposition 1:

The uncertain outlooks for the future of the two sector heavyweights (Hypo Real Estate and Eurohypo) together with the imminent radical restructuring of the Landesbank sector are acting like millstones around the neck of the German pfandbrief banks and are having a significant (negative) influence on public perceptions of the pfandbrief. The extent to which this will have a (purely negative) signal effect is ultimately bound to depend on how this structural change in the German banking landscape is realised in concrete practical terms. In the short term however, we see the uncertainty factors that appear to stem from this complex of problems as predominant.

Problems at individual banks are weighing on the entire segment

The first thing that stands out when one looks at the situation of the German pfandbrief issuers as a whole is the biggest casualty of the crisis Hypo Real Estate (HRE); it has only been rescued from insolvency by emergency aid totalling over EUR 100bn, most of it paid by the federal government. The German government is aiming a complete takeover of the shares in HRE through a capital increase and a so called squeeze-out procedure. The HRE case is undoubtedly having an enormously negative spillover effect on the entire pfandbrief market. HRE is one of Germany's most active pfandbrief issuers. Meanwhile Düsseldorfer Hypothekenbank, more of a "minnow" compared with the "great whale" that is HRE, has only escaped closure (for the time being) through the mechanism of a "rescue sale" to the private-sector banks' collective support fund, and is only being kept alive through injections of emergency assistance from the private banks while a new buyer is sought. As part of the agreements with EU Commission regarding the state injection of equity capital, Commerzbank will dispose of Eurohypo within the next five years. In addition WestLB has also to dispose its mortgage bank subsidiary Westdeutsche Immobilienbank in the near future on behalf of the EU Commission.

HRE the biggest potential victim of the crisis...

Although Eurohypo's problems are not on the same scale as HRE's, one cannot escape the impression that either the equilibrium of the German pfandbrief issuers as a whole has been badly disturbed – to put it positively – which conflicts with the image of the pfandbrief market as essentially a stable structure, or else – to put it negatively – the issuers have feet of clay, an idea that only reinforces the uncertainty felt by all market participants about the future of the German pfandbrief market and its issuers. The present shape of the German Landesbank sector (which is home to many respected and household-name pfandbrief issuers and some of whose members have also needed to be "rescued" with the help of their regional owners and the government) looks set to change radically in the next few years. Anything other than an orderly, which means state moderated or guided, concentration process would be inconceivable in our view.

...but all the issuers have feet of clay

■ Proposition 2:

The pfandbrief issuers' earnings will continue to be marked by the financial and economic crisis in 2009.

Their reported 2008 numbers have made it evident that the visible scars from the financial crisis, though different issuers have been affected differently, generally go deep. The issuers' mostly negative trading and investment results, due to valuation losses and losses on divestments of both straight assets and derivatives, have either resulted in annual net losses or have decimated what positive earnings there were. In other words the pfandbrief issuers have shared the same "fate" as most other banks that do not hold pfandbrief licenses. We expect the earnings of banks that specialise in pfandbrief operations to remain pressurised in 2009 as they are forced to make big write downs and take heavy impairment charges as the negative feedback from the financial crisis continues to hit the real economy and specifically the commercial property markets.

Difficult mortgage markets as a burden for 2009

Proposition 3:

Their business models will generally change gradually, but not fundamentally.

It is certainly still too early to provide a definite answer to the question of the extent to which the financial crisis has already changed the pfandbrief banks' business models and strategies, or is going to change them in future. What is clear at this point is that the crisis has forced the typical pfandbrief issuer to scale back new mortgage and state-sector lending.

Searching for the sustainable business model

Taking the new-business data reported by the member banks of the vdp (Verband deutscher Pfandbriefbanken) as our yardstick, their overall new loan commitments during 2008 were around 37% lower year-on-year in the mortgage credit business line and around 41% down in the state-finance segment. Commercial property lending suffered the biggest drop, around 43%. The changes look much less dramatic at the lending book level (total credit extended). While the stock of outstanding mortgage loans has even increased by 2.7%, there has been a decline of around 10% in state-sector loans. This is explained by the difference in the average maturities of the assets concerned.

Declining new loan commitments

We take the view that these changes are not so much the product of a proactive choice to pursue a particular course of action, but more a passive adaption to the dramatic deterioration of the issuers' funding options and risk tolerance capacity. Among the causative factors we would cite are firstly the worsening of the available funding conditions, but more importantly investors' reduced absorption capacity and appetite, plus all the uncertainty over the future fate of the funding markets. On the other hand, internal factors are also in play that have to do with risk tolerance and capitalisation. The range of business options open to banks, their scope of discretion, has narrowed drastically during 2008, especially after the failure of Lehman. Since it went under, if not before, the funding side has been dictating the options available to the lending side – it now takes priority ahead of the lending side's business potential, whereas the dominance in the relationship was probably the other way round in the past. These factors have largely prevented the German pfandbrief issuers from taking advantage of the present substantially wider margins on both mortgage and state-sector lending to the extent they would have wished.

Higher refinancing costs and changes in the risk tolerance are in play

Will the pfandbrief issuers now abandon the state finance business after the catastrophe experienced by DEPFA, whose reliance on short-term funding went way too far? We believe that many pfandbrief issuers will choose to remain in this business. Lending to the

Pfandbrief issuers will remain in the public sector business

SPECIAL 1

government sector is just too lucrative, albeit in phases. All the same, they will probably write less business and their strategic decision-making will be based even more on opportunistic considerations than it has been in the past. When making investment decisions, investors will focus much more closely in future on the pfandbrief issuers' interest-rate and funding risk, which leads us to predict that maturity transformation will generate less income in future. The view from here is that banks that focus exclusively on state finance, such as Hypothekenbank in Essen (now part of Eurohypo), will soon be history. This business model is unlikely to be acceptable to the market in future since local-authority lending is a low-margin business where players are exceptionally dependent on maturity transformation and are therefore inevitably exposed to interest-rate-change risk.

We should also state in conclusion that despite the crises that are roiling a whole series of property markets, property finance has not reached the end of the road. The banks active in this business segment will adapt their business models to incorporate the lessons they have learned from the financial crisis so far. Their responses will lead them to focus even more on the key themes of risk-responsive margins, adequate capitalisation, liquidity security, and macroeconomic crisis diagnosis. However, we would interpret these changes as fine-tuning of their business models rather than a wholesale switch to a new business strategy. They will behave even more opportunistically in the state-finance business line than now, but they will be lending less in the foreseeable future even as government borrowing swells in response to the crisis.

Evolution not revolution in business models

Legal framework

Germany's Pfandbrief Banks Act

The legal basis for issuing pfandbriefe encompasses market practices/conventions and supervisory structures, as well as rules and regulations specific to the issuer, which constitute the core elements of the institutional framework in which pfandbriefe are enshrined. Even more: the pfandbrief would not exist without the Pfandbrief Banks Act. In recognition of the significant ability of the pfandbrief legal regime to promote confidence and increase ratings, we will present in more detail below the most important elements of the current applicable legal framework – including the recent revision that was only passed into law a few weeks ago. We will supplement this by discussing the areas that we consider still need improving, even after the recent revision.

Aside from the detailed regulations of insolvency law included in the 4th Financial Markets Promotion Act, the legislative changes that came into force in 2005 are undoubtedly the most remarkable of all the changes in the last decade. Strictly speaking, this revision was not an "ordinary" amendment of the existing pfandbrief, but rather introduced a new law that for the most part follows the proven German Mortgage Banks Act (Hypothekenbankgesetz - HBG) that was in place prior to that. The Pfandbrief Banks Act (PfandBG) came into force on 19 July 2005 and amalgamated the previous separate regulations governing the issuance of pfandbriefe by specialist ship and mortgage banks as well as public sector banks, and abolished the former "specialist banks principle" with its positive connotations.

Pfandbriefe – subject to numerous conditions

PfandBG combines three laws

Before Juli 2005 today HBG ÖPG "Ship-pfande" Pfandbrief Act (PfandBG)

HBG = Mortgage Banks Act; ÖPG = Law on Pfandbriefe and related bonds of public-sector banks; Schiffspfande = Pfandbriefe based on ship pfandbrief law

Source: DZ BANK

Issuing license replaces specialist banks principle

The definition of pfandbrief business as proprietary banking business in the German Banking Act (Kreditwesengesetz – KWG) will permit all banks that have a license to conduct banking business to issue pfandbriefe. A bank must apply to the Federal Financial Services Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin) for a license to transact pfandbrief operations. The license will be granted provided the credit institution meets certain minimum requirements, which are listed below:

■ The bank must have core capital of at least EUR 25 million.

BaFin grants licenses

Minimum requirements

- The credit institution must have a license to engage in lending business.
- The pfandbrief bank must have at its disposal suitable risk management systems, which the PfandBG specifies in more detail.
- The credit institution's business plan to be submitted to the supervisory authority must state that the credit institution will engage in pfandbrief business regularly and on a sustained basis.
- The credit institution's organisational structure and resources must designed with the pfandbrief business in mind.
- The management must have sufficient theoretical and practical knowledge in the fields of mortgage lending, public sector and/or ship finance and their respective refinancing.

BaFin is empowered to restrict the license to issue pfandbriefe to a specific pfandbrief category, so that one credit institution for example can issue only mortgage pfandbriefe, public-sector pfandbriefe, ship pfandbriefe or (through the recent revision) aircraft pfandbriefe. The PfandBG provides the supervisory authority with the opportunity to revoke an existing pfandbrief license if the bank no longer meets the requirements. This is also possible if the pfandbrief bank has not issued any pfandbriefe for more than two years and it is not foreseeable that pfandbrief business will resume within the next six months. However, the Pfandbrief Banks Act does not stipulate any minimum issuing volume in relation to the sum of issued pfandbriefe as a prerequisite for obtaining a license. In the event that the license is revoked, BaFin is authorised to appoint a collateral manager/receiver (Sachwalt) to administer the cover pool(s) through to winding-up if applicable.

License can be revoked

Cover calculation

All assets that serve as cover for a bank's outstanding pfandbriefe must be recorded in the cover register maintained for the respective pfandbrief type - mortgage pfandbrief, public sector pfandbrief, ship pfandbrief or aircraft pfandbrief – and deleted again in the event that the asset no longer qualifies. This facilitates the unique identification of the assets that are part of the cover pool. Details on the form and mandatory content of the cover register and on the entries to be made are determined by a separate regulation (Cover Register Statutory Order – Deckungsregisterverordnung).

The PfandBG gives the issuers of covered bank bonds the option to include insolvency-proof land charges held in trust by third parties in the cover pool. Credit institutions can for example, transfer loans secured by land charges to pfandbrief banks while continuing to manage the land charges themselves and report them in their balance sheet. However, to ensure that the collaterals and loans held in trust are not included in the bankrupt estate in the event of the insolvency of the collateral manager/receiver, but are recognised as the pfandbrief bank's land charges, it was necessary to change the insolvency law. At the same time, parliament also created the legal foundations for a refinancing register in 2006 by means of a Funding Register Statutory Order (Refinanzierungsregisterverordnung).

Separate cover pools for each pfandbrief class

Fiduciary cover

Matching cover in market-value

terms

The PfandBG does not explicitly limit the permitted volume of an issuing bank's outstanding pfandbriefe. Instead, the universal capital-adequacy regulations that apply to banks indirectly limit its lending business – and by extension limit the cover assets it has available and implicitly cap the permitted amount of its pfandbriefe in circulation.

The provisions governing matching cover and excess cover have been carried over from the previously applicable laws. The Pfandbrief Banks Act as revised now stipulates that the respective total volume of the pfandbriefe outstanding of one type must at all times be covered at their market value by assets of at least the same amount and with at least the same interest yield. The cover calculation, which is based on the net present value of the pfandbriefe compared with the cover assets, is subject to special regulatory requirements that are defined in the Net Present Value Statutory Order (Barwertverordnung). According to this regulation, the pfandbrief bank has to ensure that the net present value cover is also maintained in so-called stress scenarios based on big changes in interest and exchange rates.

2% minimum overcollateralisation

The PfandBG still requires the issuer to maintain 2% overcollateralization in relation to the total volume of its pfandbriefe in circulation in market-value terms, which must be invested in liquid assets. Voluntary overcollateralisation that exceeds this statutory minimum requirement is possible. In this context, the PfandBG clearly states that the assets that exceed the legally required minimum overcollateralization are there to satisfy the claims of pfandbrief creditors in the insolvency scenario. The minimum market-value overcollateralization of 2% can also be held as deposits with Deutsche Bundesbank or with the European Central Bank (ECB), or with all other central banks of European Union member states.

Permitted substitute cover for pfandbriefe

Substitute cover assets

- 1.1 Claims on central or local governments in the European Union (EU), European Economic Area (EEA), Japan, Canada, Switzerland and USA (with the proviso that the risk weighting of the claims does not exceed 20%).
- 1.2 Bonds guaranteed by a central or local government listed under 1.1..
- 2 Countries that are full members of the Organization for Economic Cooperation and Development (OECD) and that were not listed under 1.1.
- 3 Supranational institutions: European Investment Bank (EIB), International Bank for Reconstruction and Development (IBRD), Development Bank of the European Council (CEB), European Bank for Reconstruction and Development (EBRD).
- 4 Deposits with the European Central Bank or another central bank within the EU.
- 5 Claims on suitable credit institutions (for example, uncovered bank bonds). The share of the substitute cover assets of any individual (suitable) credit institution may not exceed 2% of the volume of pfandbriefe outstanding.

Source: PfandBG

In addition to the ordinary cover assets, the PfandBG also allows substitute cover assets to be included in pfandbrief cover pools. The bonds and loans permissible (see table) are the same for the four pfandbrief classes, although their allowed share of the outstanding volume of the covered bonds differs for the four pfandbrief categories. Unlike the cover pool for public sector pfandbriefe, the share of substitute cover assets in the cover pool for mortgage, ship and aircraft pfandbriefe is allowed to be up to 20% of the outstanding

Permitted substitute cover assets

SPECIAL MAY

mortgage, ship or aircraft pfandbriefe. The share of substitute cover for public sector pfandbriefe is limited to 10% of the volume of public sector pfandbriefe outstanding.

The PfandBG has harmonised the geographical restrictions on ordinary cover assets for mortgage and public sector pfandbriefe. In addition to the European Union (EU) and European Economic Area (EEA) states and Switzerland, claims on the USA, Canada and Japan are now defined as eligible cover assets for public sector and mortgage pfandbriefe.

Claims on borrowers in non-EU member states in which the priority rights of the pfandbrief creditors are not recognised in the event of insolvency, may not exceed 10% of the total cover pool assets (10% limit). The privileged treatment of pfandbrief creditors (priority in bankruptcy) is deemed to be securely recognised in all EU member states, so the aforementioned 10% ceiling does not apply to borrowers from the EU.

Geographical restrictions harmonised

"10% ceiling"

Overview of ordinary cover assets for public sector pfandbriefe

	Permissible cover assets: claims against		
Domesti			
С			
1	Central and local governments: federal government, Länder, cities and municipalities,		
	local authority associations (provided risk weighting does not exceed 20%).		
2	Public-sector special purpose institutions		
3	Public law special funds (such as for example the former Bundesbahn or Bundespost)		
4	Religious bodies (provided they are recognised as public entities).		
5	Social insurance institutions		
6	Public sector credit institutions or insurers (however only liabilities subject to guarantee		
	obligation/grandfathering)		
7	Public sector institutions or trusts legally entitled to raise fees, rates or other levies.		
Foreign			
8	Central and local governments from the European Union (EU), European Economic Area		
	(EEA), Japan, Canada, Switzerland and USA (provided risk weighting does not exceed		
	20%).		
9	European states not listed under 8 that are members of the Organization for Economic		
	Cooperation and Development (OECD)		
10	Supranational institutions: European Investment Bank (EIB), International Bank for		
	Reconstruction and Development (IBRD), Development Bank of the European Council		
	(CEB), European Bank for Reconstruction and Development (EBRD)		

Source: PfandBG

Special requirements for public sector pfandbriefe

The potential cover assets for public sector pfandbriefe in the revised Pfandbrief Banks Act are largely in line with the provisions of the HBG and are listed in the table above. The PfandBG clearly states that claims on domestic public law entities can only be used as cover for public sector pfandbriefe provided they benefit from the principles of maintenance obligation (Anstaltslast) and guarantee obligation (Gewährträgerhaftung) or an explicit central or local government guarantee. Examples are claims on public development banks such as Kreditanstalt für Wiederaufbau (KfW) or NRW Bank. Bonds and cash claims on German Landesbanken whose bonds are grandfathered by means of the guarantee obligation continue to qualify as cover assets for public sector pfandbrief cover pools. Claims on Landesbanken originating after 19 July 2005 are no longer eligible as ordinary cover for public sector pfandbriefe due to the abolition of the quarantee obligation.

Ordinary cover

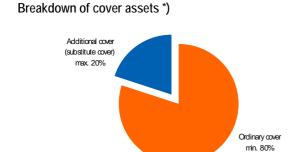
Special requirements for mortgage pfandbriefe

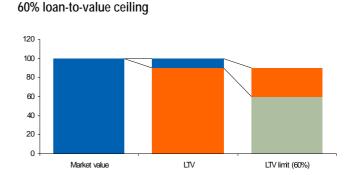
The regulations now governing the ordinary cover assets for mortgage pfandbriefe are largely identical to the provisions of the HGB. Only mortgage loans that meet certain requirements are eligible as cover assets. Hence the mortgages must encumber properties, rights equivalent to real property or such rights under a foreign legal system that are comparable with the rights equivalent to real property under German law.

A duty of insurance and an obligation to calculate lendable values also place additional requirements on mortgage loans. Only the long-term, sustainable net asset value and capitalised earnings of a property can be taken into consideration when determining its lendable value. According to the PfandBG, mortgage loans used as cover for mortgage pfandbriefe may not exceed 60% of the lendable value of a property. This limit applies regardless of whether the building is used for residential or commercial purposes. This regulation, which serves to protect pfandbrief creditors, is very strict compared with other European covered bond regimes. Please refer to the appendix of this study for further information on the calculation of lendable values.

Ordinary cover

60% loan-to-value ceiling





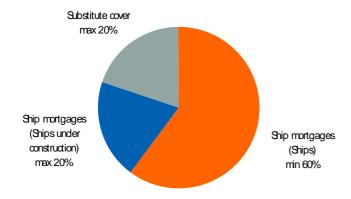
Source: DZ BANK; *) in % of the volume of mortgage pfandbriefe outstanding

Special requirements for ship pfandbriefe

Only loans that are secured by ship mortgages qualify as ordinary cover for ship pfandbriefe. The loan is limited to ships and to ships under construction which are recorded in a public register. The loans may not extend beyond the 20th year of the ship's life. The supervisory authority may allow exceptions in individual cases. Loans secured by ships or ships under construction, which are registered abroad, can also be included in the cover pool provided certain provisions that are defined in the PfandBG are met.

Ordinary cover

Breakdown of the cover assets for ship pfandbriefe *)



Source: DZ BANK; *) in % of the volume of ship pfandbriefe outstanding

Explicit provisions are also in place for calculating the underlying lendable value of the collateral assets for ship pfandbriefe, where the same lending limit of 60% applies to the cover assets as with mortgage pfandbriefe. The lendable value for the ships or ships under construction must be determined by an independent valuer with the requisite experience. The long-term features of the asset must be at the forefront when determining this value, and the loan may not exceed the market value. The ship or the ship under construction must be insured throughout the entire duration of the loan at least in the amount of 110% of the respective loan claim outstanding.

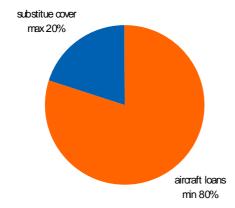
Special requirements for aircraft pfandbriefe

Loans secured by mortgages over aircraft qualify as ordinary cover assets for aircraft pfandbriefe. To be eligible, the aircraft must be recorded in a public register. The registered mortgage or foreign aircraft mortgage must also cover the engines that account for a large part of aircraft value. The loan on the aircraft may not extend beyond 20 years of age. The supervisory authority may allow exceptions in individual cases. Loans secured by aircraft that are registered abroad can also be included in the cover pool provided certain provisions that are defined in the PfandBG are met.

Lending values regulated by law

Ordinary cover

Breakdown of the cover assets for aircraft pfandbriefe*)



Source: DZ BANK; *) in % of the volume of aircraft pfandbriefe outstanding

Explicit provisions are also in place for calculating the underlying lendable value of the collateral assets for aircraft pfandbriefe, where the same lending limit of 60% applies to the cover assets as with ship pfandbriefe. The lendable value of the aircraft must be determined by an independent valuer with the requisite experience. The long-term features of the aircraft must be at the forefront when determining this value, and the loan may not exceed the market value. The aircraft must be insured throughout the entire duration of the loan in the amount of at least 110% of the respective loan outstanding.

60% loan-to-value ceiling

Risk management

The risk management of a credit institution and in particular the cover pool is crucial to the protection of the covered bond creditors. Given that the risks inherent to the pfandbrief business differ from the general risks of other banking business, the legislator imposes specific risk-management requirements on pfandbrief banks. Every pfandbrief bank must have a fitting risk management system in place for pfandbrief business. The system must ensure the identification, assessment, control and monitoring of all risks related to the pfandbrief business, such as default risks, market price risks (interest rate or currency risks) plus operational risks and liquidity risks. Moreover, the risk management system must, amongst other things, meet the following requirements:

Explicit catalog of requirements

■ The concentration of risk must be restricted by way of a limit system.

Risk management requirements

- A procedure must be in place that ensures risk reduction in the event of a pronounced increase in risk; the procedure must ensure early notification of the decision-makers.
- The risk management system must be capable of adjusting to changing conditions at short notice.
- The system must be subject to review at least once a year.
- Regular risk reports must be submitted to the management board at least quarterly.
- The risk management system must be documented in a detailed and transparent manner.

Derivative transactions are concluded for the purpose of managing market risks. According to the PfandBG, the hedging transactions that cushion the fluctuations in the value of the cover pool against for example interest rate and currency volatility, can form part of the insolvency-proof cover assets for pfandbriefe. On the basis of the net present value calculation for the cover pool, the share of derivative transactions relative to total cover assets may not exceed 12% of the outstanding pfandbriefe.

Derivatives in cover pools

Addressing liquidity gaps

The revision of the Pfandbrief Banks Act has introduced stricter liquidity regulations that – according to the drafters of the legislation – are more in harmony with the modern liquidity management approach. The cover pool is now required to cover the liquidity requirement of the coming 180-day period, i.e. six months ahead. However, the new regime only comes into force on 1 November 2009.

Illustrative liquidity-gap calculation

Day	Cover pool cash flow	Pfandbrief cash flow	Daily variance	Cumulative variance
1	50	0	50	50
2	100	50	50	100
3	80	0	80	180
4	50	100	-50	130
5	100	400	-300	-170
6	50	0	50	-120
7	80	0	80	-40
8	70	80	-10	-50
9	50	100	-50	-100
			0	-100
			0	-100
180	110	0	110	10

Source: DZ BANK

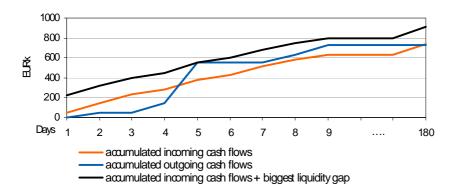
Our understanding of the approach for calculating the minimum necessary liquidity requirement is that the bank determines each day's variances (between cash inflows and outflows) for a 180-day period, and adds these together to give the same number of cumulative daily variances. The resulting biggest negative cumulative daily variance – only the negative totals that stem from a cover shortfall present a risk that requires managing – has to be remedied by cover and overcollateralisation in the form of ECB-eligible assets. Our example shows a liquidity gap of EUR 170,000 on day 5.

Although the question of liquidity gaps caused by excessive maturity transformation in the cover pool only becomes important when things get serious (the issuer-insolvency scenario with subsequent separation of the cover pool), it is precisely this issue that not only the rating agencies but also investors are zooming in on when rating and analysing covered bonds and specifically pfandbriefe. This new regime has seen the legislators move a long way in the direction of the permanent liquidity reserves that the rating agencies have called for. In the present crisis situation however, even a 180-days cover period can be criticised as inadequate seeing that a broad-based systemic crisis can never be definitely ruled out. In this scenario however, absolutely strict cover matching would be the only way to guarantee real security – and this requirement would be pretty difficult to impose on issuers (mainly, but not solely, on cost considerations).

Cumulative daily variances

Absolute certainty is impossible to guarantee in practice

Possible cash-flow pattern over a 180-day period



Source: DZ BANK

Transparency regulations

The rules governing the provision of information (transparency regime) have been widened significantly by the introduction of the PfandBG and its recent revision. §28 PfandBG obliges pfandbrief banks to publish, on a quarterly basis and in publicly accessible form, information on the total volume of pfandbriefe outstanding as well as their cover assets, though the quarter from which the data is compiled is not specified in more detail. The total volume of the pfandbriefe issued in each pfandbrief category as well as the corresponding cover pools in the amount of the nominal value and net present value (plus the risk-adjusted net present value in the case of stress scenarios) must be stated. In addition, the maturity structure of the pfandbriefe as well as the fixed-interest period of the cover pools (broken down into seven maturity bands) must be published. The share of derivatives included in the cover pools must also be notified.

Regular publication duties...

... specifically for mortgage pfandbriefe:

Breakdown of the cover assets (in nominal-value terms) according to

- the amount of the individual loans in increments up to EUR 300,000, from EUR 300,000 to 5,000,000, and more than EUR 5m;
- the states in which the land is located:
- the type and use of the building;

Source: DZ BANK

- the aggregate value of the arrears (at least 90 days) on the claims in the cover pool;
- Additionally, extensive details on the mortgage-pfandbrief cover pool must be included in the Notes to the Financial Statements; these details include the number of foreclosure sales during the year.

... specifically for public sector pfandbriefe:

- geographical breakdown of the claims (by state) and type (central, regional or local government);
- the aggregate value of the arrears (at least 90 days) on the claims in the cover pool.

Trustees

The PfandBG requires that a trustee and at least one deputy be appointed at every pfandbrief bank. The trustee ensures that the legal requirements in relation to the cover for the pfandbriefe are met and that the provisions for the determination of the lendable value are adhered to by the pfandbrief bank. A pfandbrief bank is not entitled to issue new pfandbriefe without trustee approval. Prior to issue, the trustee must issue a certificate for the pfandbriefe confirming that the prescribed cover exists and has been recorded in the relevant cover register. Moreover, the trustee is responsible for the safekeeping of the assets (and the deeds) recorded in the cover registers, under the principle of dual control.

The trustee of a pfandbrief bank is entitled to inspect the records of the pfandbrief issuer at any time, and to demand information regarding the pfandbriefe and assets recorded in the cover register. The trustee has a duty of disclosure to BaFin but is not bound by its instructions. The Pfandbrief Banks Act also stipulates that trustees and their deputies must possess the relevant expertise and experience necessary to enable them to fulfil their duties. The PfandBG does not explicitly require formal qualifications, such as for example official admission as tax advisor or auditor. The Act merely presumes that the qualification as auditor or sworn accountant suggests that the requisite expertise is given. The trustee must be impartial. This is regarded as given, provided no contractual or business relationship exists with the pfandbrief bank or has existed within the previous three years.

Supervision

Pfandbrief issuers are subject to special supervision by BaFin, which carries out its duties in accordance with the provisions of the Pfandbrief Banks Act and the German Banking Act. BaFin is empowered (§ 3 PfandBG) to give "any instructions that are appropriate and necessary to ensure that the business of the pfandbrief banks complies with this Act and the statutory orders issued in connection therewith." The right of the supervisory authority to carry out random checks every two years at the latest on the cover for the pfandbriefe is particularly important, and hence to examine whether the legal provisions are met. In this way, the checks carried out regularly on mortgage banks up to now by BaFin will be extended to all pfandbrief banks. Furthermore, BaFin can take its own measures, such as for example, issuing instructions to the management or appointing people to oversee the cover pool.

Insolvency of pfandbrief issuers

In the event of the insolvency of a pfandbrief bank, the pfandbrief cover pools are separated off from the bankrupt estate and acquire special fund status. At the same time a collateral manager/receiver (Sachwalter) is appointed by the court at BaFin's request specifically to represent the interests of the pfandbrief creditors. His twin principal functions are to administer the cover pool (winding it up if necessary), and to ensure that the claims of the pfandbrief creditors are satisfied in full. The pfandbriefe are not called for redemption (at this stage). Only when all the claims of the pfandbrief creditors have been satisfied in a full and timely manner and all the issuer's pfandbriefe have been repaid, can any amount remaining from the cover assets be used to satisfy the claims of the other bank creditors.

The big question is whether the available cover assets (including the mandatory overcollateralisation equal to 2% of the total pfandbriefe in circulation required by the PfandBG plus any voluntary overcollateralisation that goes beyond the statutory minimum) is sufficient to support the timely servicing of the pfandbriefe. Should the collateral manager/receiver determine that the pfandbrief creditors' interest and principal entitlements

Checking the cover calculation

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Far-reaching rights to information

Special supervision by BaFin

Cover assets sufficient?

cannot be serviced in a timely manner due to liquidity gaps, he is authorised to furnish cover assets as collateral and take out a loan to bridge the liquidity bottleneck.

If the collateral manager/receiver determines however that the intrinsic value of the assets as a whole is no longer sufficient to permit the full satisfaction of the pfandbrief creditors, separate insolvency proceedings must be opened in respect of the respective special funds (cover pools). This means in plain English that the collateral manager/receiver has to begin to liquidate the cover pool. In a "normal" market environment, the search for potential buyers for the cover assets would probably be a fairly straightforward proposition. In the light of the current banking-sector crisis however, we could see this turning out highly problematic. Heavy mark-downs might be needed even to sell the regular cover assets that back publicsector pfandbriefe considering the present unattractive margins on state-finance business. We see selling mortgage loans as the biggest problem, however, when the financial crisis is badly undermining their market value and potential buyers are short of spare capital anyway. In the context of a pfandbrief bank insolvency, the circle of potential cover pool buyers is likely to be very small indeed. In this worst-case scenario, the buyers could exploit this dire situation to force the price of the loans portfolio even lower. Although the pfandbrief creditors have an equal right to the bank's insolvent estate as the holders of unsecured claims in respect of the value of the claims that cannot be satisfied from the cover-pool liquidation proceeds, full repayment is hardly to be expected in this extreme scenario.

Liquidating the cover pool no easy task in the current market environment

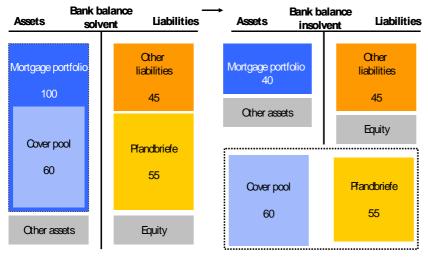
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Pfandbrief regime not designed for extreme cases

Although the German pfandbrief legal regime apparently cannot protect pfandbrief creditors against an (admittedly small) loss in this worst-case scenario, we have to remind readers at this point that the Pfandbrief Banks Act was never originally designed to cope with a systemic crisis. We also believe that, considering the likelihood of mutual support within the pfandbrief community and the implicit government guarantee provided for pfandbriefe in the German rescue package, things are never likely to come an actual liquidation of a cover pool.

Worst-case scenario

Cover pool separated from bankrupt estate in insolvency scenario



Source: DZ BANK

The collateral manager/receiver as the trusty guardian of creditor protection?

In the aftermath of the financial markets crisis that has severely undermined confidence in the whole of the covered bonds market, the last weeks have also seen a new development – a headline debate over the role of the German regime's "Sachwalter" function (collateral manager/receiver) in the scenario of the insolvency of a pfandbrief-issuing bank. The reason why the collateral manager/receiver, historically regarded as appointed to guarantee the timely servicing of the cover pool separately from the failed bank's bankrupt estate and therefore seen as the supreme guardian of creditor protection, has become a topic of discussion is that the various authorities and options assigned to the post to permit the performance of its defined duties have been increasingly called into question. Many market participants believe that the provisions included in Germany's pfandbrief regime still leave too much room for speculation – even after the recent revision of the law.

Powers and potential under discussion

Paragraph 30 (2) of the Pfandbrief Banks Act (PBG) stipulates that in the event of insolvency and when requested to do so by BaFin, the court with jurisdiction over the pfandbrief bank's registered domicile must appoint one or two natural persons as collateral manager/receiver. He or they thereby acquire the right to administer and dispose of the cover assets (as a special fund separate from the bankrupt estate). The collateral manager/receiver must henceforward perform the legally effective transactions required to run down the cover pool while fully and promptly satisfying the claims of creditors. The legal foundation for this function is the fact that despite its insolvency, the pfandbrief bank retains the legal title in the cover pool (see the preamble to the draft revision). The only different feature is that the collateral manager/receiver acts on behalf of the bank rather than its directors.

The collateral manager/receiver performs the legal transactions to run down the cover pool (winding up)

Maintaining payment flows

The general aim of the function is to use the payments flows arising from the cover assets to service the interest and principal payments on the pfandbriefe as they fall due. It is inherent in the nature of the role that any emerging liquidity shortfalls (gaps) will only be detected at the last moment. In this case, the collateral receiver/manager is empowered to "procure liquid funds to permit the timely servicing of the outstanding pfandbriefe", to quote the current (revised) wording of the law. In the light of the preamble to the law, this sentence has to be interpreted as authorising the *Sachwalter* to both take out loans and conduct repo transactions with the Bundesbank. The law also gives the collateral receiver/manager the right to keep going any existing funding register established by the insolvent pfandbrief bank for the benefit of his special fund, or to establish a new funding register for the pfandbrief bank. This funding register makes it easier to sell individual cover assets.

Timely servicing of interest and principal payments

Engaging in repo transactions is unlikely to present a major problem in the case of cover pools that collateralise public-sector pfandbriefe, since most of the cover assets will be repo-qualifying. The situation is different for mortgage pfandbrief cover pools, however. Although the ECB directives define commercial property loans as repo-eligible under specific circumstances, this is not true of private (residential) mortgage loans. In their case, structuring the cover pool to create RMBS and submitting these to the ECB might provide a practicable funding solution. This raises the question however that this structuring is highly complex, so executing the transactions (at short notice) could cause problems.

Some cover assets not repo-eligible

We believe that systemic support from the community of pfandbrief issuing banks could also be a positive help in raising short-term liquidity to close funding gaps. In this connection, we Support from the "pfandbrief system"

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are confident that the "pfandbrief" brand would promote solidarity support – either in the form of other banks declaring their willingness to take over the cover pool lock, stock and barrel, or at the very least assisting the collateral receiver/manager's efforts to bridge last-minute liquidity shortfalls. One has to fear however that this solidarity would be severely constrained should several banks get into difficulty at the same time. The other issuers' absorption capacity or financial discretion would be exhausted beyond a certain level.

Who will sit with whom - and when?

A more technical issue that has been concerning the market for some time in relation to the role of collateral receiver/manager, is what basic conditions need to apply for the appointee to perform the function. The revision of the regime has at least brought some enlightenment. Paragraph 31 (8) says, "the collateral receiver/manager is empowered to call on the pfandbrief bank's personnel and material resources in order to perform his functions. He shall reimburse the bankrupt estate for the actual costs incurred". This new formulation at least makes it clear what resources the collateral receiver/manager has at his disposal when taking up the task. However, it still leaves some questions open (which admittedly are hard for the law to specifically resolve): how long will it take for the collateral receiver/manager to be ready to start work? What happens to the cover pool during this period; especially, when payments are due? It is not known for instance whether BaFin has already drawn up lists of names of potential collateral receivers/managers. And how does one assess someone's suitability for the role of collateral receiver/manager anyway? These questions admittedly appear too trivial at first glance to be truly relevant. However, the eventuality of a jumbo-issuer's insolvency would leaves huge volumes of cover assets needing management; this is just one example of a case where the very suitability of a collateral receiver/manager to perform the task to creditors' satisfaction, would be a central fundamental issue.

It will take a real-life case to teach reliable lessons

To be totally honest: it will only be possible to state definitively whether the appointment of a collateral receiver/manager will really guarantee the prompt servicing of pfandbrief creditors in the issuer-insolvency scenario when we have actually experienced this eventuality. And while we naturally hope never to see this sad day, at the same time we are confident that we will not have to do so within the foreseeable future.

One important issue that we believe was omitted in error from the pfandbrief law revision agenda, is the option of issuing new pfandbriefe – including after the bank has filed for insolvency protection. This option would give the collateral receiver/manager new discretion that goes way beyond the scope of the powers defined in the revised regime. In fact, it is not entirely clear whether the current version of the law might not provide for this already, though the general view is that this is not possible at present. A detailed formulation on this issue would at least have helped the market.

Revision of the Pfandbrief Banks Act

The revised version of the Pfandbrief Banks Act (PfandBG) took legal effect on the promulgation of the Bill to Further Improve Pfandbrief Law in the Federal Gazette of 26 March 2009. The provisions of the new §4.1a PfandBG extending the required liquidity cushion from 90 to now 180 days will only apply from 1 November 2009. The following table recaps the key changes to the PfandBG.

Revision of pfandbrief law brings only limited clarity

New issues – even post-insolvency – would increase flexibility

Key changes (list incomplete)

Introduction of a new pfandbrief category - "aircraft pfandbriefe"	
Abolition of nominal cover calculations and introduction of a duty to maintain a 180-days liquidity cushion	
Simplification of syndicated financing (by addressing conflicts between cover register and funding register)	
Abolition of trustee dual control	
Extending powers of collateral manager/receiver	
Explicit assignment of additional collateral to the cover pool	
Option of subregisters within the cover register	
Use of the funding register to procure liquidity	
Extension the maximum term of ship mortgage loans from 15 to 20 years	

Mandatory insurance cover on ships reduced from 120% to 110% of outstanding loan

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Issuer list

(jumbo issuers)	Public sector pfandbriefe	Mortgage pfandbriefe	Long term rating
	(Moody's/ S&P/ Fitch)	(Moody's/ S&P/ Fitch)	(Moody's/ S&P/ Fitch)
Private- and Mortgage Banks			
Aareal	//AAA	//AAA	/ / A- stab
Berlin Hyp	Aaa/AAA/AAA	Aa1//AA+	/ / A+ stab
DEPFA Deutsche Pfandbriefbank AG	Aaa/AAA/AAA *-	Aaa//	A3 neg/ BBB *+ / A- stab
Deutsche Hypothekenbank Hannover	Aaa/AAA/	Aaa//	Aa3 stab/ /
Deutsche Kreditbank	Aaa//	/	/ /
Deutsche Postbank AG	/	Aaa/AAA/AAA	Aa3 *- / A- pos/ A+
Dexia Kommunalbank Deutschland AG	/AAA/	/	/ /
DG HYP	/AAA/AAA	/AAA/AAA	/ A neg/ A+ stab
Düsseldorfer Hypothekenbank	/AAA/AAA *-	/	/ / A- *-
Eurohypo	Aaa/AAA/AAA	Aaa/AAA/AAA	A1 neg/ A neg/ A stab
HypoVereinsbank (HVB)	Aaa/AAA/AAA	Aa1 *+//AAA	A1 stab/ A stab/ A+ stab
Hypo Real Estate Bank AG	Aaa/AAA/AAA *-	Aa3//AA+ *-	A3 neg/ BBB *+ / A- stab
Münchener Hypothekenbank	Aaa//	Aaa//	Aa3 stab/ / A+ stab
SEB AG	Aaa *-//	Aaa *-//	neg/ / A+ pos
WL-Bank	/AAA/	/AAA/	/ A+ stab/
Landesbanken			(not grandfathered))
Bayerische Landesbank	Aaa/AAA/AAA	Aaa/AAA/	Aa2 *- / BBB+ neg/ A+ stab
DekaBank	Aaa/AAA/	/	Aa2 stab/ A stab/
HSH Nordbank	Aaa//AAA	Aaa//AAA	A2 stab/ BBB+ neg/ A stab
Landesbank Hessen-Thüringen	Aaa/AAA/AAA	//AAA	Aa2 stab/ A neg/ A+ stab
LB Baden-Württemberg (LBBW)	Aaa/AAA/AAA	Aaa//	Aa1 stab/ A- neg/ A+ stab
Landesbank Berlin	Aaa//AAA	Aaa//AAA	A1 stab/ / AA- stab
Norddeutsche Landesbank	Aaa//	Aaa//	Aa1 stab/ A- neg/ A stab
Westdeutsche Immobilien Bank AG	/AAA/	/AAA/	/ BBB+ neg/
West LB AG	Aaa/AAA/		A2 neg/ BBB+ neg/ A- stab

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