

New legal and regulatory framework for the German securitisation and Pfandbrief market

Numerous changes to the legal and regulatory framework for credit institutions in Germany entered into force last year. They include the abolition, effective July 2005, of government guarantees which ensured the solvency of public institutions and the guarantors' uncalled liability,¹ the revision of the legal framework for the issuance of Pfandbriefe (Pfandbrief Act), effective May 2005, and the adoption of the Act Reorganising the Federal Financial Administration and Creating a Refinancing Register in September 2005. In addition, the EU adopted the Capital Requirements Directive (CRD) in October 2005, which will form the basis for the transposition of the new international capital rules (Basel II) into national law and will enter into force at the beginning of 2007.

These changes may be expected to have a considerable impact on German banks' decisions on their use of securitisation and Pfandbriefe in their refinancing or capital management strategy. The present article will discuss the changes to the legal and regulatory framework and their implications.

¹ Pursuant to Part Two of the Commission Decision of 27 March 2004, instead of the maintenance obligation, the financial relationship between the guarantor and the public credit institution will not differ from a normal private sector relationship. Following a transitional period, the guarantee obligation will be abolished.

German securitisation and Pfandbrief market: an overview

Pfandbriefe and securitisations as refinancing alternatives

The issuance of Pfandbriefe and the securitisation of exposures are mutually complementary refinancing instruments. Securitisation is also used as a risk or capital management instrument or to provide customer-oriented financing solutions.

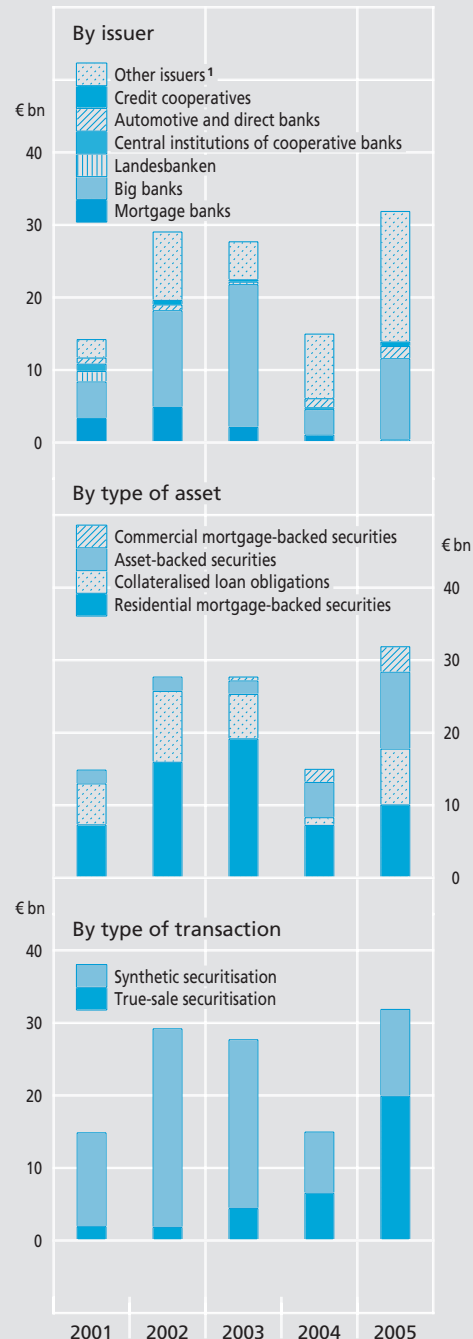
Whereas defining the Pfandbrief is relatively straightforward owing to the Pfandbrief Act (*Pfandbriefgesetz*), for securitisation there is no legal definition nor any generally accepted market definition. This article will therefore use a definition of securitisation based on the new framework adopted by the Basel Committee on Banking Supervision (Basel II).² This article will also refer only to transactions in which exposures generated in Germany are securitised and fixed-term securities have been placed on the public capital market.³ By this definition, the outstanding volume of the German securitisation market was around €39 billion⁴ at the end of 2005, while the

² The Basel II definition of securitisation, as distinct from other structured products, includes both true-sale and synthetic securitisations (see also Glossary in Annex II, pp 58–59).

³ This potentially understates the actual volume. Consequently, OTC deals, German banks' transactions in foreign or mixed asset pools, transactions within certain credit institution associations or the issuance of asset-backed commercial paper (ABCP) programmes are not captured. The underlying transaction volume often corresponds to the securitised portfolio.

⁴ Only instruments with a funding character were used here for comparison with the size of the Pfandbrief market (source: Bloomberg). The reason their volume is so small relative to the volume of Pfandbriefe is that, in the past, synthetic securitisation transactions – in which securities are not always issued – predominated in Germany.

Volume of new issues in the German securitisation market



Sources: Standard & Poor's, Moody's and Bundesbank calculations. — ¹ Building and loan associations (*Bausparkassen*), Bundes-Pensions-Service special pension fund for the Deutsche Post, other enterprises and credit institutions.

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concurrent outstanding volume of German Pfandbriefe was a substantial €976 billion.⁵

Structural change in the securitisation market regarding originators ...

The securitisation market in Germany has been undergoing a structural transformation over the past few years (see chart on page 38). Whereas big German banks and mortgage banks were the main market players in the 2000-03 period, the big banks' volume dropped off distinctly in 2004 and 2005. In 2004, the volume of new issues, at around €16 billion, fell well short of the previous year's volume of around €28 billion. The figure rebounded in 2005, rising to an estimated €33 billion.

... and the underlying assets ...

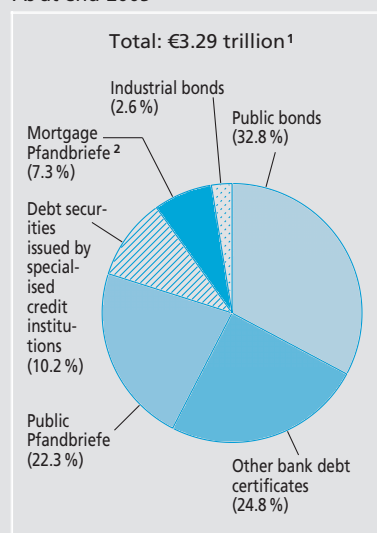
While securitisation of private housing loans (residential mortgage-backed securities (RMBS)) declined in 2004 and 2005, there was growth in securitisation of commercial mortgage loans (commercial mortgage-backed securities (CMBS)) and the issuance of asset-backed securities (ABS), especially the securitisation of auto loans. The rise in ABS in 2005 was due, in particular, to one large-volume securitisation transaction. Moreover, in 2005 there was an increase in the number of transactions involving loans to small and medium-sized enterprises (SMEs) in the form of collateralised loan obligations (CLOs). The securitisation of mezzanine financing for SMEs deserves particular mention here.

... and the structures used for securitisation

Along with the shifts noted above, the securitisation structures have also changed, with the predominant synthetic transactions in Germany being complemented or replaced increasingly by true-sale structures.

Volume of outstanding fixed-interest securities issued by domestic issuers

As at end-2005



¹ Including registered bank debt certificates outstanding. — ² Including ship Pfandbriefe.

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To date, German banks have been using securitisation chiefly to manage their regulatory capital. Refinancing using true-sale securitisation has played a much less prominent role, because German banks, unlike institutions in other countries, have always had convenient direct or indirect access to the capital market, *inter alia* by being able to issue Pfandbriefe. This enabled Pfandbriefe to take up a position alongside public bonds as one of the German capital market's most important instruments. Even though the Pfandbrief's share of the total volume of fixed-rate instruments outstanding issued in Germany has fallen off somewhat in the past few years, it still stood at a considerable 29%⁶ in December 2005.

Pfandbriefe the preferred refinancing instrument

⁵ The total includes bearer and registered Pfandbriefe.

⁶ Including bearer and registered debt instruments.

Aspects of various types of securitisation and of Pfandbriefe

	Synthetic securitisation	True-sale securitisation	Pfandbrief
Originators'/issuers' motivation	Management of risk and of regulatory and economic capital; refinancing, where appropriate	Management of risk and of regulatory and economic capital; balance sheet structure management; refinancing	Refinancing
Independent legal basis	No	No	Pfandbrief Act
Basic structure	Hedging of a pool of exposures by means of guarantees or credit derivatives with or without a refinancing function as well as with or without a special-purpose vehicle	Legally binding transfer of a pool of exposures to a special-purpose vehicle	Formation of a pool of exposures (cover fund) to additionally hedge debt certificates (covered debt certificates)
Transformation into risk positions with different loss participation in the pool (tranching)	Yes	Yes	No
Recourse to the originator	Generally, no recourse	Generally, no recourse	Yes, cover fund serves as additional collateral
Balance sheet effect	No	Generally, contraction	No
Capital relief on the underlying exposures for the originator	Possible	Possible	No
Risk weighting pursuant to Principle I and the Solvency Regulation ¹	Principle I weighting of securitisation positions: generally, 100%; Solvency Regulation: Standardised Approach, at least 20%; IRB Approach, at least 7%, where appropriate 6%		Principle I: 10%, Solvency Regulation: Standardised Approach, 10%; IRB Approach, LGD of 11.25% as appropriate
Requirements for the underlying pool of exposures	No restrictions; quality is factored into the credit rating issued by the rating agencies	No restrictions; quality is factored into the credit rating issued by the rating agencies	Legal requirements and requirements imposed by rating agencies
Exchange of assets after the beginning of the transaction/issue	Consequence: potentially no regulatory capital relief on securitised assets for the originator	Consequence: potentially no regulatory capital relief on securitised assets for the originator	Yes
Requirements for the originator/issuer	No restrictions; quality is factored into the credit rating issued by the rating agencies	No restrictions; quality is factored into the credit rating issued by the rating agencies	Legal requirements (banking business pursuant to Banking Act, BaFin approval required, strict qualitative requirements) and requirements imposed by rating agencies

¹ See also the section on the supervisory environment for securitisations and Pfandbriefe, pp 44–47.

The securitisation of exposures and Pfandbriefe: a comparison

Special quality features of the Pfandbrief ...

In the securitisation of exposures and Pfandbriefe, investors' claims are backed by collateral. Unlike securitisations, where the payment to investors depends on the performance of the underlying asset portfolio ("limited recourse" criterion), the collateral underlying a Pfandbrief constitutes an additional hedge against the issuing bank's default risk ("full recourse" approach). All the same, rating agencies base their credit assessments mainly on the quality and the performance of the underlying exposures, much as in the case of securitisations.⁷

... explain low spreads

One major difference between Pfandbriefe and securitisation is that the cover fund and issuers of Pfandbriefe have to meet high legal standards. It is particularly these quality features,⁸ in conjunction with the long and problem-free track record of the German Pfandbrief market and the ready availability of liquidity,⁹ which explain why yields are relatively small compared with those on securitisations. The Jumbo Pfandbrief¹⁰ is a particular case in point: in January 2006, the asset swap spread (ASW Spread)¹¹ on traditional Pfandbrief instruments stood at 2 basis points (bp), whereas for Jumbo Pfandbriefe it was -1 bp (M: 3-5 years). The asset swap spread on unsecured bonds issued by European financials rated AAA was roughly 10 bp (M: 3-5 years) while, for instance, German AAA RMBS were simultaneously trading at around 21 bp (M: 3-5 years).¹²

New framework for securitisation and Pfandbrief business

The abolition of government guarantees which ensured the solvency of public institutions and the guarantors' uncalled liability prompted a revision of the legal basis for the issuance of Pfandbrief instruments. It was deemed no longer necessary to maintain the specialised bank principle for the issuing of Pfandbrief instruments. Instead, the new Pfandbrief Act¹³ now enables all credit institutions which are willing and able to meet the statutory quality requirements¹⁴ for Pfandbrief business to issue Pfandbriefe. This has considerably ex-

New Pfandbrief legislation owing to abolition of government guarantees ensuring solvency of public institutions and guarantors' uncalled liability

⁷ The reduced credit rating of one mortgage bank at the end of 2005 showed clearly that the instruments' rating is largely independent of the issuer's credit rating. Even though this issuer's unsecured long-term debt was downgraded, the ratings of its mortgage and public Pfandbriefe remained constant at a high level.

⁸ Low regulatory capital requirements are an additional indicator of the Pfandbrief's quality.

⁹ The different liquidity of Pfandbriefe and securitisations is also a major factor affecting their eligibility as collateral for refinancing operations with the national central banks in the ESCB. Pfandbriefe are placed in a better liquidity category than securitisations and are therefore subject to smaller "haircuts" (see also ECB, The implementation of monetary policy in the euro area, February 2005).

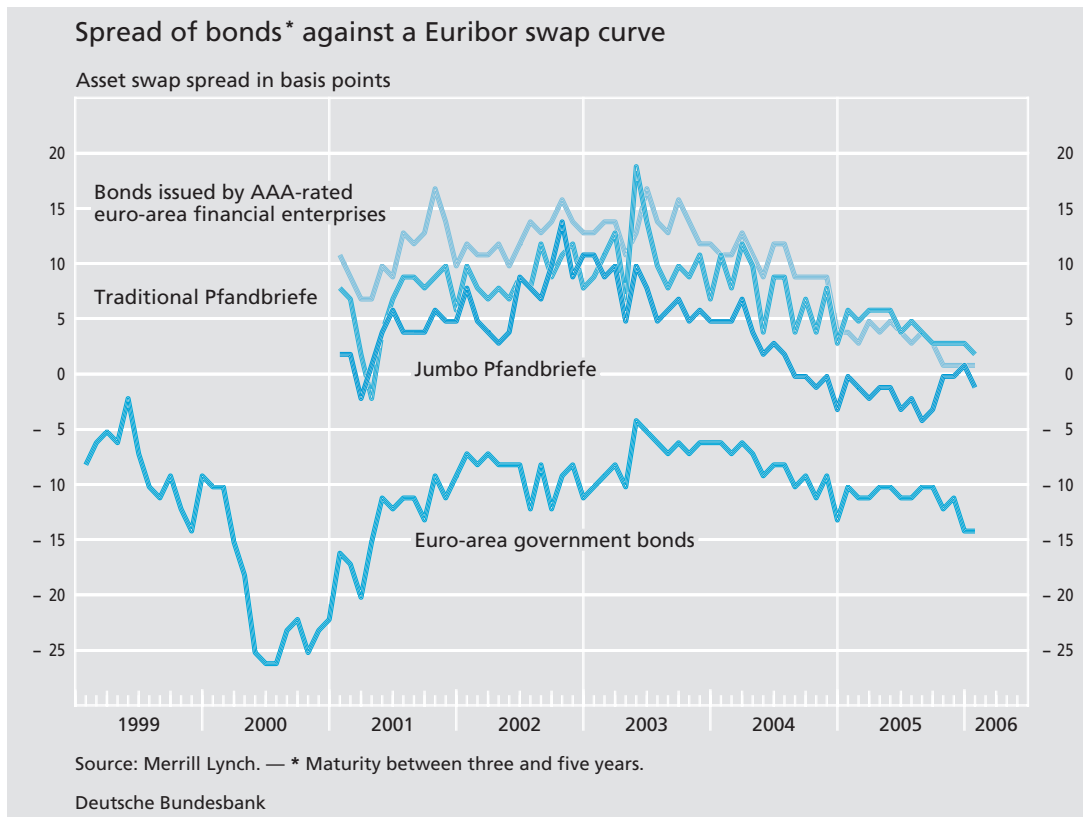
¹⁰ Its defining feature is a minimum volume of €1 billion and the existence of at least three market makers. These market makers undertake to simultaneously provide bid and ask prices for deals of up to €15 million during normal trading hours. These arrangements are designed to provide a market liquidity which classic Pfandbriefe and, in particular, securitisations are unable to offer, thereby further reducing the refinancing costs of the Jumbo Pfandbrief.

¹¹ The asset swap spread is the mark-up on a variable interest rate, which the investor in a fixed-coupon bond receives as part of an asset swap package valued at par in exchange for the interest payments from the fixed-coupon bond. The mark-up depends on the bond issuer's default risk and is deemed to be a suitable measure with regard to assessing credit risk.

¹² Average of discount margins of various German AAA-rated RMBS calculated in Bloomberg.

¹³ Act to Reform German Pfandbrief Legislation (*Gesetz zur Neuordnung des Pfandbriefrechts*) of 22 May 2005 (Federal Law Gazette I, p 1373).

¹⁴ For details, see the box on the quality features of the German mortgage Pfandbrief on page 43.



panded the scope of the previously tightly constrained business opportunities for mortgage and ship Pfandbrief banks. By contrast, the new legislation is forcing public banks, which had previously not been restricted in the scope of their business, to meet more stringent requirements for Pfandbrief business and the issuance of Pfandbriefe.

Pfandbrief business as banking business within the meaning of the Banking Act

Section 1 of the Banking Act defines Pfandbrief business as banking business which requires approval from the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, hereinafter BaFin). Institutions must demonstrate that they meet indispensable minimum requirements for doing business in Pfandbrief instruments. In addition, the business plan to be presented must indicate that Pfandbrief busi-

ness will be conducted regularly and continuously.

The creation of a refinancing register¹⁵ has also been a major factor in the issuance of Pfandbriefe and the conduct of securitisation transactions. It is now possible to establish an insolvency-proof legal position for the special-purpose vehicle and a Pfandbrief bank without transferring collateral.

Creation of a refinancing register

One problem in connection with securitisation was posed by a court decision in a temporary injunction case which held that an implicit prohibition of assignment could be in-

Implicit prohibition of assignment owing to banking secrecy?

¹⁵ Act on the Reorganisation of the Federal Revenue Administration and the Creation of a Refinancing Register (*Gesetz zur Neuorganisation der Bundesfinanzverwaltung und zur Schaffung eines Refinanzierungsregisters*) of 22 September 2005 (Federal Law Gazette I, p 2809).

ferred from the contractual obligation to banking secrecy.¹⁶ The significance of this judgement for securitisation transactions, however, has been tempered in the jurisprudential literature and by subsequent decisions.¹⁷ In the meantime, a rating agency has also declared that it considers this court decision irrelevant to the evaluation of securitisation transactions. Should this decision be upheld by the German Federal Supreme Court (*Bundesgerichtshof*), however, this would mean that, in practice, the only method of asset transfer in securitisations would be via the refinancing register.

Partial equality of special-purpose vehicles and credit institutions in trade tax legislation

A number of tax law provisions have been changed in the past few years in order to promote securitisation via German special-purpose vehicles. For instance, as early as 2003, special-purpose vehicles to securitise credit institutions' exposures were given equal status to credit institutions in terms of preferential treatment regarding the limited recognition of interest on longer-term debt when calculating profit for trade tax purposes.¹⁸ This eliminated a factor which was imposing a relatively large (by international standards) cost burden on ABS transactions via German special-purpose vehicles in the securitisation of credit institutions' exposures, but not, for instance, of those of leasing enterprises.

¹⁶ Higher Regional Court Frankfurt am Main, Wertpapier-Mitteilungen 2004, p 1386 et seq.

¹⁷ Regional Court Frankfurt am Main: ZIP 2005, p 115, Regional Court Konstanz BB 2005, p 125, Bütter/Tonner, ZBB 2005, p 165 et seq, Engert/Schmidl, WM 2005, p 60 et seq, Cahn, WM 2004, p 2041 et seq, Bruchner, BKR 2004, p 394 et seq.

¹⁸ See Article 4 of the Small Business Promotion Act (*Kleinunternehmerförderungsgesetz*) of 11 July 2003.

Quality features of the German mortgage Pfandbrief

The German Mortgage Bank Act (*Hypothekbankgesetz*), which was enacted at the end of the 19th century, already made the protection of Pfandbrief creditors the focus of statutory provisions. The Act to Reform German Pfandbrief Legislation (*Gesetz zur Neuordnung des Pfandbriefrechts*) of May 2005 also follows this approach by adopting the Mortgage Bank Act's core principles regarding the cover for Pfandbriefe.

Special creditor protection is ensured, in particular, by means of the following provisions.

- Credit institutions must have a core capital of at least €25 million, an appropriate organisational structure and suitable arrangements and instruments for managing, monitoring and controlling risks to the cover funds as well as the issuing business based thereon.
- Only mortgages or similar rights on properties in the euro area, Switzerland, the USA, Canada or Japan are eligible as cover funds.
- Mortgages may be used as cover only up to an amount equivalent to the first 60% of the mortgage lending value to be calculated on the basis of sustainable features.
- In the event of insolvency, assets entered in the cover registers are used solely to satisfy the Pfandbrief creditors' claims.
- The actual value of the assets entered in the cover register must exceed the overall amount of the liabilities to be covered by at least 2%.
- Additional transparency requirements: cover at nominal and actual values including actual values following a stress test, the maturity structures of the cover assets and Pfandbriefe, and the location of the properties.

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The refinancing register

By entering an asset in a refinancing register, an entitled transferee (*Übertragungsberechtigte*) – for example, a special-purpose vehicle or a Pfandbrief bank – wishing to have the asset allocated to an asset pool or to the cover fund, obtains a sufficiently secure legal status in insolvency proceedings without the transfer of ownership requirements under property law having to be fulfilled.

Receivables or collateral against which a transfer claim exists can be entered in a refinancing register. In addition, the following information should be recorded: the entitled transferee, the date of transfer, the legal basis, scope and ranking of the collateral as well as the date on which the contract containing the collateral clause was concluded.

Receivables can also be registered if transfer has been excluded through a verbal or implied agreement with the obligor. This shall not apply solely in the case of a statutory or written prohibition of assignment not affecting commercial claims. Entries can be deleted only with the consent of the entitled transferee and/or the entitled transferee's trustee. Refinancing registers may be kept only by credit institutions or the KfW (*Kreditanstalt für Wiederaufbau*).

Assets which have been properly entered in a refinancing register can, in the event of the obligor's insolvency, be separated from the insolvent's estate by the entitled transferee. Moreover, counterclaims cannot be offset against the entitled transferee's claims for transfer of assets and no rights of retention may be asserted. However, rights of avoidance on the part of the obligor's creditors pursuant to the Creditors' Avoidance of Transfers Act (*Anfechtungsgesetz*) and the Insolvency Code (*Insolvenzordnung*) remain unaffected. Furthermore, entry in the refinancing register does not limit the objections and pleas of third parties with regard to the registered receivables and rights.

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Supervisory environment for securitisations and Pfandbriefe

The Basel II¹⁹ capital rules and the corresponding CRD at the European level have led to innovation in the supervisory framework. They are being transposed into German law through amendments to the Banking Act, the Regulation governing large exposures and loans of €1.5 million or more, and a new Solvency Regulation.

Owing chiefly to the change in the risk weighting for the underlying asset classes in both the Standardised Approach and the Internal Ratings-Based (IRB) Approach, capital requirements prior to securitisation will, in the future, match the banks' needs for economic capital much more closely.²⁰ This will also lessen the incentive to reduce regulatory capital requirements by securitising exposures (regulatory capital arbitrage).

The table on page 45 shows the risk weights for the relevant asset classes (including insurance undertakings) in the Standardised Approach; in the future, these weights will depend on the assessments given by external credit assessment institutions (rating agencies) approved by supervisors.

Change in the originator's capital requirements prior to securitisation ...

... in the Standardised Approach ...

¹⁹ A detailed account may be found in Deutsche Bundesbank, *Monthly Report*, September 2004.

²⁰ For most banks, however, the concept of economic capital is still relatively new or still being developed. Alongside extensive agreement on definitions – the need for economic capital being defined as the largest unexpected loss within a given time horizon at a given confidence level – there are major differences in how the risk-bearing capital resources are defined. There are also differences in methodological reasoning and model approaches to calculating capital requirements and in their application to a comprehensive bank management strategy.

Risk weights in the Standardised Approach *

%

Rating 1 (long-term)	Sovereigns	Bank 2	Non-banks	Retail customers	Exposures secured by mortgages		Loans more than 90 days past due
					"private"	"commer- cial"	
AAA to AA-	0	20	20				
A+ to A-	20	50	50				
BBB+ to BBB-	50	100	100				
BB+ to BB-	100	100	100	75	35	100	150
B+ to B-	100	100	150				
Below B-	150	150	150				
Unrated	100	100	100				

* The Basel risk weights will probably also be included in the future Solvency Regulation. — 1 Standard & Poor's (S&P), for instance. — 2 Option 1 – using the risk weight

of claims on a sovereign to derive the risk weight of the bank based in that country – will be applied in Germany.

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... and in the
IRB Approach

In the IRB Approach, however, the minimum capital requirement will be calculated from supervisory risk-weight functions defined for various asset classes. The capital charge is thus calculated as 8% of the product of exposure at default (EAD) and the value of the risk-weight function, which, in turn, depends on the following risk parameters: probability of default (PD), loss given default (LGD) and effective maturity of the loan (M). In the Foundation IRB Approach, banks internally estimate only PD per rating class for the borrowers; LGD,²¹ EAD and M, by contrast, are set by supervisors. The maturity of exposures to corporates, banks and sovereigns is generally set at 2½ years. Credit institutions using the Advanced IRB Approach estimate all four risk parameters themselves. The imputed ef-

fective maturity is invariably limited to a maximum of five years.

Basel III, the European CRD and the national implementation process mean that an internationally harmonised standard for the supervisory treatment of securitisations has been introduced for the first time.

Uniform international supervisory standard for securitisation exposures

A credit institution that securitises its own exposures in order to obtain capital relief must ensure effective and significant risk transfer. How the criterion of significance is interpreted depends first and foremost on the risk of

Significant risk transfer by originator necessary

²¹ For unsecured exposures, the LGD is generally set at 45%. The use of the relevant collateral reduces this figure, for example, to 35% for residential property.

Risk weights for securitisation exposures in the Standardised Approach

%	
Rating 1 (long-term)	Risk weight
AAA to AA-	20
A+ to A-	50
BBB+ to BBB-	100
BB+ to BB-	² 350
B+ and below/unrated	Deduction

¹ S&P, for instance. — ² Whereas Basel II mandates a deduction for positions rated below BBB-, originators and investors may apply a 350% risk weight under the CRD and in the national implementation process.

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the positions retained by the originator.²² The operational requirements for the effective transfer of risk are nearly identical in both the Standardised Approach and the IRB Approach.

The Standardised Approach for securitisation exposures²³ is generally modelled on the system used in the general Standardised Approach for credit risk and, like the latter, is also based on an assessment by rating agencies recognised by supervisors. For securitisation tranches with a very high credit rating, the risk weighting will be significantly lower than under the current treatment; for tranches rated lower than BBB- or unrated by external agencies, the rating will rise sharply.²⁴ The CRD and national legislation limit the capital requirements for the originator follow-

ing the securitisation to the level prior to securitisation.

In the IRB, if an eligible external credit assessment institution has rated a securitisation exposure, or if a rating for this exposure can be inferred,²⁵ the Ratings-Based Approach (RBA) must be used. Risk weights are determined not just by the external assessment but also include the granularity of the portfolio and the seniority of the tranches.

If this is not possible, the hierarchy of approaches permits the use of the Supervisory Formula (SF). The minimum risk weight in the SF, as in the RBA, is 7%.²⁶ If the SF is not applicable, either, the exposure has to be deducted from capital.²⁷ In the IRB Approach, the originator's capital requirement after

... and in the IRB Approach

Treatment of securitisation exposures in the Standardised Approach ...

²² Pursuant to section 232 of the Solvency Regulation, this should involve, in particular, the transfer of a significant percentage (relative to capital requirements or risk-weighted assets) of the exposures from the interval of the first default (with a risk weight equal to 1,250%) up to and including the A-equivalent securitisation tranche. In addition, the second defaulted exposure in a securitisation cannot be retained in its entirety.

²³ For retained securitisation exposures or the provision of credit enhancements in own transactions, originators are treated identically with investors.

²⁴ Pursuant to the CRD and the relevant national legislation, the "transparency method" may be applied to unrated securitisation tranches: in this method, the risk weight is calculated from the average risk weight of the underlying exposures taking into account the seniority of the tranche. Other exceptions will apply to positions in ABCP programmes and to liquidity facilities; their capital requirements will increase sharply in the future.

²⁵ The rating of the direct junior securitisation tranche is used here.

²⁶ The capital requirements calculated under the SF depend on five bank-supplied inputs: the IRB capital charge had the underlying exposures not been securitised, including expected loss (K_{IRB}), the tranche's credit enhancement level (L) and thickness (T), the pool's effective number of underlying exposures (N), and the pool's exposure-weighted average loss given default (ELGD).

²⁷ However, the Internal Assessment Approach is also available to unrated ABCP programmes exposures.

securitisation is also limited to the amount prior to securitisation.

Excellent credit-worthiness of Pfandbriefe to be recognised by supervisors in future, too

The 10% risk weighting given to Pfandbriefe under the Standardised Approach in the Solvency Regulation is a testament to their excellent creditworthiness. Under the Foundation IRB, Pfandbriefe²⁸ can be assigned an LGD of 12.5%. Under certain conditions, which are met by German Pfandbriefe, LGD may be reduced even further to 11.25% until 31 December 2010.²⁹

The changes in the framework for the German securitisation and Pfandbrief market and their significance

Refinancing

Refinancing instruments dependent on bank-specific factors

A variety of refinancing instruments are at the banks' disposal. The choice of instrument to use depends on numerous factors, including general business policy (especially customer orientation), capital market access, and the institution's overarching strategic goals.

Particular importance of the Pfandbrief to mortgage banks and Landesbanken

A look at the refinancing structure of the various banking sectors shows that savings banks and credit cooperatives refinance themselves mainly through savings deposits, sight deposits and time deposits, owing to their strong orientation towards retail customers and SMEs. For big banks and central institutions of cooperative banks, however, inter-bank business plays a key role, whereas Landesbanken and mortgage banks tend to refinance themselves mainly by issuing Pfandbriefe. A comparison of the issuance volume

Risk weights for securitisation exposures according to the RBA

Rating 1 (long-term)	Risk weights for senior positions and eligible senior IAA 2 exposures backed by granular pools	Base risk weights	Risk weights for tranches backed by non-granular pools
AAA	3	7	12
AA	8	15	25
A+	10	18	35
A	12	20	
A-	20	35	
BBB+	35	50	
BBB	60	75	
BBB-		100	
BB+		250	
BB		425	
BB-		650	
Below BB- 4		Deduction	

1 S&P, for instance. — 2 Internal Assessment Approach. — 3 In the CRD and the national implementation process, as opposed to Basel II, senior securitisation exposures will be given a 6% risk weighting under certain conditions. — 4 And unrated.

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of registered and bearer Pfandbriefe with securitised exposures³⁰ shows that, for mortgage banks, Pfandbriefe account for 113%³¹ of securitised exposures, while the figure for Landesbanken is 73%.

²⁸ German Pfandbriefe belong to the category of covered bonds which comply with the provisions of Article 22 (4) of the UCITS Directive (85/611/EEC).

²⁹ See section 339 (15) of the Solvency Regulation. The IRB exposure must be given the best possible credit assessment by an eligible rating agency. Tier 1 assets are used as collateral. Collateral in the form of residential or commercial real estate may not make up more than 10% of the nominal value of the outstanding issues. Moreover, maritime liens are not eligible for recognition.

³⁰ Securitised liabilities are debt certificates and liabilities for which no-name-bearing, transferable certificates have been issued, irrespective of their eligibility for exchange-trading. These include Pfandbriefe, with the exception of registered Pfandbriefe.

³¹ Since registered and bearer Pfandbriefe are expressed as a percentage of those securitised liabilities not including registered Pfandbriefe, the figure exceeds 100%.

Consolidation among mortgage banks

With regard to mortgage banks, it must be considered that a majority of mortgage banks in existence when the new Pfandbrief Act was adopted were subsidiaries of other banks. In the past, these parent institutions could obtain finance only indirectly through their subsidiaries' issues of Pfandbriefe. Now, the Pfandbrief Act allows them to issue their own Pfandbriefe. Therefore, some mortgage banks have already merged with their parent institutions. Consolidation in this sector may be expected to make further progress.

Changes in refinancing terms for public credit institutions

Public banks were already faced with a changed refinancing environment when government guarantees were abolished in July 2005. It is true that the rating downgrades of the Landesbanken were moderate owing to structural and strategic adjustments initiated earlier. However, the first-class issuer rating that Landesbanken used to have because of their government guarantee has been replaced by a rating that is more heavily dependent on the individual bank's financial soundness. The yields on Landesbanks' unsecured bonds may also be expected to adjust accordingly.³²

Loss of cover fund eligibility for savings bank bonds ...

The entry into force of the Pfandbrief Act will also cause a change in the refinancing structure for savings banks and Landesbanken. The savings bank bonds (*Sparkassenbriefe*) issued by savings banks are no longer eligible as cover funds under the Pfandbrief Act³³ and, as was already the case for other bank debt securities as well, can thus no longer be used as a cover fund for the public Pfandbriefe issued by Landesbanken.³⁴ Landesbanks' issuance of public Pfandbriefe, which

hitherto accounted for 90% of all of their Pfandbrief issues, may thus be expected to decline.

Issuing mortgage Pfandbriefe, by contrast, makes it possible to use the considerable portfolio of mortgage-backed public sector loans. At end-2005, the volume of housing loans was thus €303 billion for savings banks alone and €63 billion for Landesbanken.³⁵ These loans can, in the future, be used more extensively as a cover fund for issuing mortgage Pfandbriefe. To date, little use has been made of this option; this is shown by the fact that the outstanding volume of savings banks' mortgage Pfandbriefe stood at only €575 million in December 2005.

For the public banking sector, there are two possible options. One is to incorporate the savings banks' mortgage-backed loans into a fiduciary cover fund (intra-Landesbank pool-

... requires new refinancing channels

Two options for issuing mortgage Pfandbriefe

³² No meaningful information on yields is currently available since there are no sufficiently liquid issues launched by Landesbanken without a government guarantee. It was particularly in 2004 that Landesbanken, in anticipation of the abolition of government liability guarantees, began to put aside liquidity and to issue securitised debt. The spreads of credit default swaps cannot be used as a basis for valuation owing to their limited liquidity. The spreads for banks with a rating comparable to Landesbanken have relatively limited information value because the effect of the implied government guarantee on the spread is difficult to gauge. (Here, and below, the term "spread" is used within the meaning of the interbank market.)

³³ Section 20 (1) of the Pfandbrief Act.

³⁴ This is applicable to the other issuers of Pfandbriefe as well, which means that a decline in public Pfandbriefe issued may generally be expected.

³⁵ The volume of housing loans can serve only as a rough indicator of the available cover fund because there is insufficient information on the extent to which the loans are backed by mortgages and on the level at which the loans are valued. The figures do not include commercial real estate financing, either.

ing solutions);³⁶ the other is for the cover fund to remain with a savings bank which itself establishes a market presence as a Pfandbrief-issuing bank.

Loan amounts that are not eligible to be used as a cover fund may, in addition, be securitised as RMBS and placed on the capital market. All the same, this type of refinancing may be regarded as a more cost-intensive variant used only in the absence of more favourable refinancing options.³⁷

Intra-group liabilities an additional option owing to more favourable risk weighting

The more favourable risk weighting of liabilities within mutual institutional protection schemes, as provided for in the national legislation implementing the CRD, is also likely to play a key role in the refinancing policies of the savings bank financial group and the cooperative sector. In this scheme, such intra-group exposures can, under certain circumstances, be given a future risk weight of 0% instead of 20%.

Securitisation a key refinancing instrument for automotive and direct banks

Automotive and direct banks are a special case in terms of their refinancing structure: they refinance themselves mainly through sight deposits and time deposits, yet have also been acting as major originators of true-sale securitisations for several years. Growing business volumes have caused this group of banks to witness a sharp rise in risk-weighted assets. True-sale securitisations are regarded as an instrument for refinancing the growing volume of business while, at the same time, reducing holdings of risk-weighted assets.³⁸ For automotive and direct banks, issuing Pfandbriefe is not an option, as these banks, owing to the method of financing, have hard-

Average ratings of Landesbanken in 2005

Rating agency	Issuers	Public Pfandbriefe	Mortgage Pfandbriefe
Fitch	May	AAA	AAA
	August	A	AAA
Moody's	May	Aa1	Aaa
	August	Aa3	Aaa
S&P	May	AA	AAA
	August	A	AAA

Sources: Fitch, Moody's, S&P.

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ly any assets at their disposal which are eligible as cover funds.

Sluggish economic developments in the 2000-03 period, the attendant decline in earnings, and increasing pressure on ratings and refinancing costs led the big banks shifted their focus to opening up new and cost-effective refinancing sources – such as true-sale securitisations.

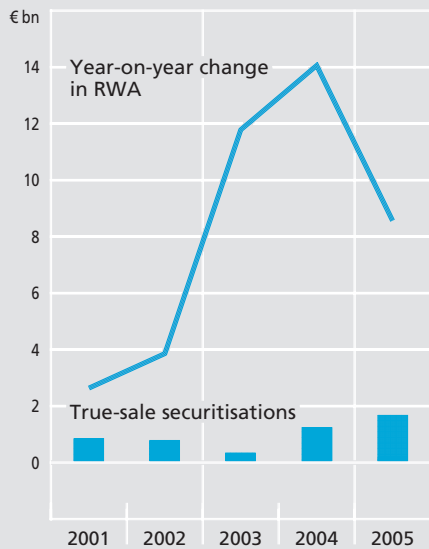
Mainly big banks that stepped up true-sale securitisations in 2000-03 ...

³⁶ A Pfandbrief refinancing model for the entire savings bank sector is currently being discussed and coordinated with the national supervisor. In addition, individual Landesbanken have created their own pooling initiatives.

³⁷ The spreads, as well as the credit improvements demanded by rating agencies in the securitisation of loan amounts that are ineligible for use as a cover fund, may be expected to exceed those of traditional RMBS.

³⁸ ABCP programmes also play a major role here.

Risk-weighted assets (RWA)*) and securitisation volumes for automotive and direct banks



Quelle: Standard & Poor's, Moody's and Bundesbank calculations. — * Pursuant to Principle I.

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This was the main motivation for the establishment, in spring 2003, of the "True Sale Initiative" (TSI). However, the expected increase in big banks' securitisations failed to materialise, one reason being that the economy has since improved.³⁹

One key reason is that, owing to the relatively high yields, it is more expensive to use true-sale securitisations than alternative instruments – especially the Pfandbrief.⁴⁰

One main reason why securitisations earn higher yields is the relative illiquidity of these instruments, which is attributable chiefly to the small volumes and small investor base compared with the Pfandbrief market. A further issue for investors to consider is that securitisations have higher capital require-

ments than Pfandbriefe and, not least, the German securitisation market has a relatively short history compared with the Pfandbrief.

However, the change in the supervisory framework means that capital requirements, especially for highly creditworthy securitisation tranches, will converge with those of Pfandbriefe. The spreads should also converge as a result.⁴¹ The spreads on low-rated securitisation tranches, however, could increase as a result of the higher capital requirements. It remains to be seen whether a new investor base, particularly from the non-regulated sector (such as hedge funds), will develop for mezzanine tranches or first-loss tranches.

Refinancing costs for senior securitisation tranches expected to be reduced

The growing volumes of trading in structured products, which was fostered by the roll-out of iTraxx and standardised tranches on this index, could also contribute to reducing the spreads on securitisation tranches. The development of a contractual standard for credit default swaps on ABS and various ABS indices is having a similar effect. Even though there is no telling yet which index will become the future market standard, the future possibility of trading in derivatives of ABS and hedging is likely to lead to a significant increase in the liquidity of these instruments.

³⁹ In addition to the two transactions by an automotive bank, only one other transaction was concluded, in January 2006, by one big bank on the TSI platform.

⁴⁰ This applies only if the refinancing costs are viewed in isolation. No account is taken of other aspects, such as the potential release of capital.

⁴¹ Whereas the capital charge for Pfandbriefe will remain at 0.08% in the Standardised Approach and could drop to 0.002% in the Foundation IRB Approach (assuming PD of 3bp, LGD 11.25%, M 2.5 years), the risk weights for highly creditworthy securitisation tranches will drop from 8% to 1.6% (RW 20%) and to 0.56% in IRB (RW 7%).

... but Pfandbrief still the more cost-effective alternative ...

... to securitisation

Securitisation as a capital management instrument

A bank's decision to enter into a securitisation transaction for capital management purposes ultimately depends on factors such as the scarcity of regulatory and/or economic capital and the ratio between the capital to be held for regulatory purposes and economic capital, including all the costs thereof.

Synthetic securitisations versus true-sale securitisations for releasing regulatory capital

If capital is not scarce, deciding between a synthetic securitisation and a true-sale securitisation for the purpose of releasing capital hinges mainly on a number of bank-specific factors, most notably the alternative refinancing costs. One reason for preferring a synthetic transaction to a true-sale transaction would be if the refinancing costs for the underlying exposures, plus hedging costs, were lower than the cost of a true-sale securitisation.⁴²

However, it is also possible to create synthetic structures that, by involving an additional guarantor (such as KfW), not only lead to the underlying exposures being given a 0% risk weight but also to the creation, through the guarantee, of assets eligible to serve as a cover fund for public Pfandbriefe, and thus to correspondingly favourable AAA-level refinancing opportunities. This could give synthetic structures an advantage over true-sale securitisations.

Use of synthetic structures mainly at big banks ...

German big banks made particular use of synthetic securitisations in the 2000-03 period in order to reduce their holdings of risk-weighted assets and to release scarce

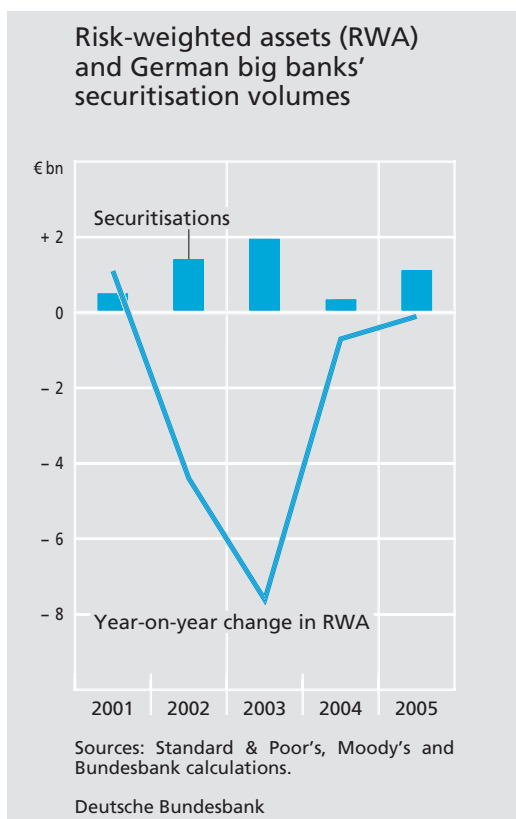
regulatory capital. German big banks accounted for 50% of the volume of new issues of synthetic securitisations in Germany in 2002 and over 60% in 2003. At the same time, large banks' risk-weighted assets fell by €43 billion between 2001 and 2002 and by €75 billion between 2002 and 2003. The securitisation volume accounted for a substantial €14 billion in 2002 and €20 billion in 2003.

... with the goal of reducing risk-weighted assets ...

However, it is not possible to pinpoint the percentage of changes in risk-weighted assets actually attributable to the securitisations conducted during this period. One reason is that the transaction volume of a securitisation does not provide total capital relief, since the originator usually retains positions. Another is that the use of credit derivatives, the sale of parts of a company or of subsidiaries, changes in lending practices or the sale of exposures all change the pattern of risk-weighted assets.⁴³

⁴² This is especially the case if the capital relief, tranching and transaction costs are the same for both structures. For instance, it is possible to obtain a 0% risk weight for the underlying exposures in both a true-sale securitisation and a synthetic transaction on KfW's PROMISE and PROVIDE platforms. In addition, the simplification of the legal framework in Germany and of the future regulatory regime may be expected to lead to a convergence of the transaction costs for the two structures.

⁴³ In the past three years, the sale of portfolios of German banks' non-performing loans (NPLs) have been receiving increased public attention. The estimated volume of sales of NPLs by German banks stood at €3 billion in 2003, €12 billion in 2004 and €18.1 billion in 2005 (*Börsen-Zeitung*, 6 January 2006). Since most of these were private transactions, the actual volume is very difficult to estimate. Moreover, the published figures are extremely inconsistent.



... and managing regulatory capital ...

By reducing their risk-weighted assets, German big banks also improved their tier 1 capital ratios from 8.8% to 10.4%⁴⁴ between 2000 and 2003.

... encouraged by the Basel I rules

In the past, it was particularly the existing (Basel I) capital adequacy rules that provided the incentive for regulatory capital arbitrage.⁴⁵ The more nuanced approaches in Basel III are designed to bring about a convergence between the regulatory capital to be held for credit risks and the economic capital calculated by banks. This will weaken the regulatory incentive for securitisations. One reason is that – at least in part – the capital requirements prior to securitisation will be lower; another is that, for certain positions, the capital requirement will be higher following securitisation, especially for mezzanine

Incentive will be diminished by Basel III

and first-loss positions. The main factor influencing the potential savings on regulatory capital will be the retention of these capital-driving risk positions.⁴⁶ It is therefore to be expected that credit institutions will increasingly place these positions in the capital market and that, depending on overall economic performance, potential demand will arise, particularly from the non-regulated sector.

In the future, however, it is likely, above all, that senior securitisation exposures in synthetic transactions will be retained by the originators themselves as CDS (or also super senior CDS). This is because the risk weight for the protection provider will not be higher than the risk weight the protection seller would have to apply if the senior securitisation exposure is retained.⁴⁷ Moreover, the securitising bank will save the CDS premium on a tranche through which hardly any economic risk is transferred in the first place. However, developments in refinancing or hedging costs will also play a greater role in shaping such structures in the future.

⁴⁴ Median of big banks' tier 1 capital ratios.

⁴⁵ In the decision to subject credit risks to a uniform capital charge of 8%, the creators of Basel I took account of the methods of quantifying risk prevalent at the time and deliberately accepted the possibility that the actual credit risks would not be modelled individually for regulatory purposes.

⁴⁶ See Annex I, pp 54–57.

⁴⁷ In the Standardised Approach, the capital requirement for securitisation positions with a high credit quality is 1.6% (RW 20%). The same capital requirement in the Standardised Approach would also apply if the senior tranche is securitised, ie when concluding a CDS with a bank. In the Foundation IRB Approach, the requirement for the senior tranche would be 0.56% (RW 7%), and the capital requirement for a protection seller bank would be around 0.01% (assuming a PD of 3bp, LGD of 45%, and M of 2.5 years).

Conclusion

Changes to key legal and regulatory framework conditions will have a considerable impact on the German securitisation and Pfandbrief market. The issuance of Pfandbriefe and the securitisation of exposures will both remain relevant to German banks. However, structural shifts within and between these markets may be anticipated.

Owing to its particular features, the Pfandbrief will continue to take precedence over securitisation as German credit institutions' preferred refinancing instrument. Owing to the abolition of government liability guarantees for public banks, however, a shift from public Pfandbriefe to mortgage Pfandbriefe may be expected, especially as the savings bank bonds which have been issued are no longer eligible to serve as a cover fund. Mortgage-backed loans, which have hitherto not been used as cover, represent a possible alternative. In this connection, models for pooling the cover funds of various institutions may take on increasing importance in both the savings bank and cooperative bank sectors.

Growing credit demand and an increase in credit institutions' refinancing requirements owing to the improved outlook for the German economy might generate cyclical volume effects in the Pfandbrief market.

The significance of securitisation as an alternative refinancing instrument is likely to

grow, not least because the elimination of tax and legal hurdles has enhanced the attractiveness of true-sale securitisation in a German market hitherto dominated by synthetic structures. Securitisation, however, will continue to be a complementary instrument to Pfandbriefe owing to the higher refinancing costs. It remains to be seen whether the change in the supervisory framework will lead to a convergence of the terms for securitisation, especially for securitisation tranches with a high credit rating, and those for Pfandbriefe. The strong growth in standardised trade in structured products is also likely to have a positive effect on liquidity, and thus also on spreads.

The implementation of the new supervisory framework will curb the existing incentive to use securitisation for regulatory arbitrage. This will bring economic aspects more to the fore in deciding on whether to securitise. Since the retained risk positions, in particular, will determine the level of the capital requirement, the market for trading in first-loss positions is likely to continue to grow. It is mainly non-regulated market players (hedge funds, to name one) that may see new or extended investment opportunities in this field.

All in all, the new legal and regulatory framework for Pfandbriefe and securitisations mean that German credit institutions will have greater scope to deploy these instruments more flexibly in the future in order to achieve their specific business policy objectives.

Annex I

Examples of the impact of the new capital rules

The following examples illustrate the impact of the new capital rules on securitisation carried out with the aim of obtaining regulatory capital relief.⁴⁸ They show the capital requirements according to Principle I, which is still applicable.⁴⁹ These examples are based on the notional securitisation of a pool of receivables for residential mortgage loans of €1 billion with a 50% risk weight. The first-loss position (FLP) is held by the originator.

In Example 1 (a true-sale securitisation), the pool of receivables is transferred from the bank to a special purpose vehicle (SPV). This SPV refinances the purchase by issuing residential mortgage-backed securities (RMBS).

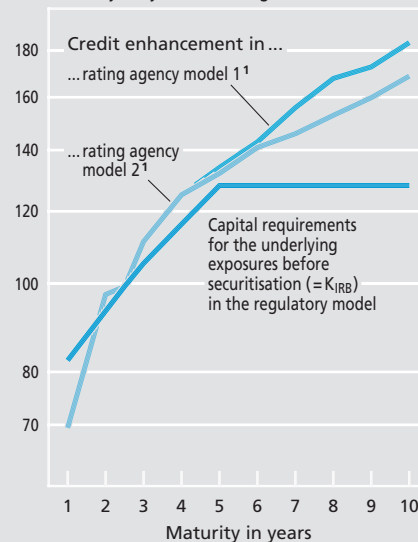
In Example 2 (a synthetic structure), the pool of receivables is secured by a senior credit default swap (CDS) with a bank and a CDS with an SPV. The latter issues credit-linked notes, the proceeds from which are invested in a high-quality securities portfolio.

Example 3 shows a synthetic securitisation structure via the KfW's PROVIDE platform. Interest sub-participation⁵⁰ on the part of the originator is assumed for the FLP.

The table on page 56 compares the capital requirements before and after securitisation pursuant to Principle I and the Basel II rules. Under the Standardised Approach, the originator's portfolio of private mortgage loans is assigned a risk weight of 35% (applicable in future). The results highlight the fact that, on the whole, there is less incentive

Impact of maturity on capital requirements and credit enhancement*

Maturity 2.5 years = 100, log scale



* The calculations are based on a portfolio of corporate exposures with the same features. — 1 Credit enhancement for a (BB-) rating.

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for regulatory arbitrage under Basel II. In some cases, the capital requirements are lower before securitisation, while in others they increase for certain positions after securitisation. The crucial factor influencing regulatory capital savings is the retention and size of the FLP.⁵¹

⁴⁸ Other costs will not be taken into consideration for this reason.

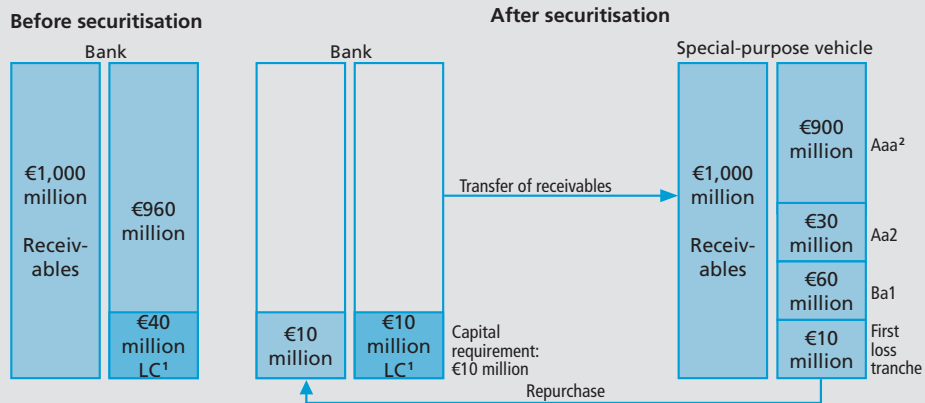
⁴⁹ The treatment of securitisation exposures is not explicitly regulated in Principle I. The general methodology provides for a maximum risk weight of 100%. In line with BaFin's current decision-making practice, first-loss positions, as a rule, lead to a deduction. In addition to Principle I, Circular 4/1997 on true-sale securitisation and Circular 10/1999 regarding credit derivatives, both issued by the former Federal Banking Supervisory Office (*Bundesaufsichtsamt für das Kreditwesen*), still apply.

⁵⁰ This involves an agreement under which the interest income from the credit portfolio on which the securitisation is based is used to cover the first x per cent of the losses from the portfolio.

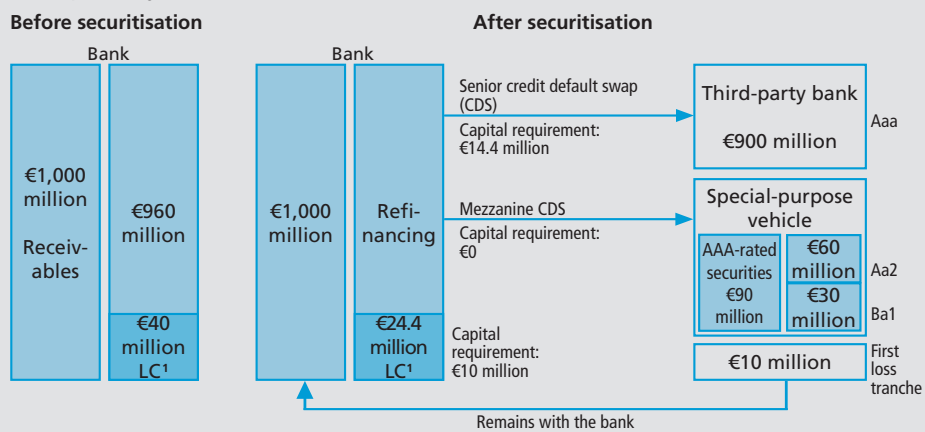
⁵¹ The capital requirements after securitisation are restricted to the level of capital requirements before securitisation, ie in the example: 2.8%.

Effects of securitisation on capital requirements

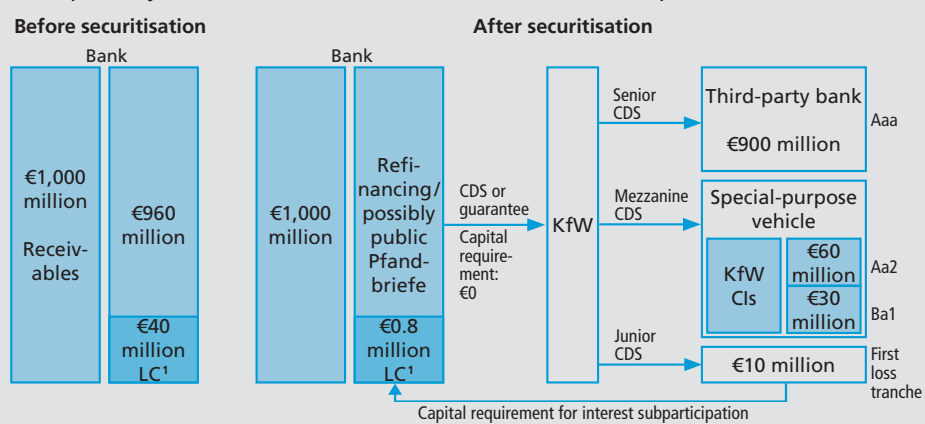
Example 1: true-sale securitisation



Example 2: synthetic securitisation



Example 3: synthetic securitisation via the KfW's PROVIDE platform



¹ Liable capital. — ² Aaa, Aa2 and Ba1 ratings according to Moody's by way of illustration.

Comparison of capital requirements from an originator's point of view before and after securitisation pursuant to Principle I and the Basel II Standardised Approach

Item	Before securitisation		Example 1: true sale		Example 2: synthetic securitisation		Example 3: synthetic securitisation via KfW platform	
	Basel I	Basel II	Basel I	Basel II	Basel I	Basel II	Basel I	Basel II
	Exposures secured by residential property		Retention of the first loss position		CDS with bank, CDS with SPV, CDS with originator		KfW guarantee, ISP for first loss position	
€ million	1,000		10		10	10	10	10
Risk weight (RW)	50%	35%	1:1 deduction	1:1 deduction	20% RW for super senior swap, 1:1 deduction for first loss position	20% RW for super senior swap, 1:1 deduction for first loss position	0% RW for KfW guarantee, 100% RW for ISP	0% RW for KfW guarantee, 1:1 deduction for ISP
Regulatory capital requirements (€ million) for securitised exposures	40	28	10	10	24	24	1	10
Regulatory capital ratio for securitised exposures	4%	2.80%	1.00%	1.00%	2.44%	2.44%	0.08%	1.00%
Reduction in capital requirements after securitisation			75.00%	64.29%	39.00%	12.86%	98.00%	64.28%

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In the case of IRB banks, the capital requirements for the underlying exposures should move even more into line with the economically required capital, which means that the incentive for regulatory arbitrage will fall even further in comparison with the Standardised Approach. Nevertheless, reasons may also arise for securitisation from a capital perspective (see Example 4).

Example 4 concerns the securitisation of loans to small and medium-sized enterprises. All of the tranches – except for the FLP (tranches E and F) which are retained by the originator – have undergone a credit rating assessment by a recognised rating agency. According to the RBA, the positions E and F should be deducted from the capital. As the volume of both tranches (€150 million) is below K_{IRB} (€180 million), the application of the SF leads to a deduction of capital. The last column of

the table on page 57 shows that almost 90% of the capital requirements are generated by tranches E and F; these tranches are thus the main capital drivers in this structure. The question of whether or not a transaction can actually lower the capital requirements of the originator when retaining the FLP depends very much on the difference between K_{IRB} and the size of the FLP. As the gap between the two variables narrows, capital savings converge to zero. Here again, the requirements after securitisation are capped at the amount before securitisation (€180 million in the example).

Differences between K_{IRB} and the size of the FLP arise, in particular, from the fact that the capital requirements for securitisation are based very largely on the credit assessments of external rating agencies, which make differing assumptions in defining credit enhancement (CE) and calculating K_{IRB} . For

Treatment of securitisation in the IRB Approach: Example 4

Rating	Tranche	€ million	L	T	Holder of the position	RBA risk weights	Regulatory capital (€ million)
Aaa	Tranche A	2,400	0.2	0.8	Investor	6%	11.52
Aaa	Tranche B	210	0.13	0.07	Investor	12%	2.016
A2	Tranche C	150	0.08	0.05	Investor	20%	2.4
Baa2	Tranche D	90	0.05	0.03	Investor	75%	5.4
NR	Tranche E	60	0.03	0.02	Originator	Deduction	60
NR	Tranche F	90	0	0.03	Originator	Deduction	90
Total		3,000		1			171.336

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example, in the Advanced IRB Approach, the maturity of receivables is limited to five years. By contrast, the models used by the rating agencies, as a rule, do not provide for such a capping.

The chart on page 54 shows that, by capping effective maturity at 5 years in the Advanced IRB Approach, the level of CE required by the rating agencies continues to rise whilst K_{IRB} no longer changes. For example, K_{IRB} increases by 29% if maturity is extended by two and a half years to

seven years; by contrast, the necessary CE in model 2 increases by 47%. This observation suggests that, as maturity increases, the capital requirements for securitisation positions will exceed the requirements before securitisation, and that the transaction will therefore become less attractive from a regulatory capital perspective. However, maturity is only one determinant. The inclusion of correlation effects or loss rates also leads to differences between the size of K_{IRB} and CE determined by the rating agencies.

Annex II

Glossary of terms

ABCP programme (asset-backed commercial paper programme) Issues revolving paper, predominantly with an original maturity of up to one year.

ABS (asset-backed securities) Securities backed by assets in general; used here in the narrower sense as a subcategory of the securitisation market.

ASW spread (asset swap spread) Also par asset swap spread, LIBOR spread or EURIBOR spread. It is the mark-up on a variable interest rate, which the investor in a fixed-coupon bond receives as part of an asset swap package valued at par in exchange for the interest payments from the fixed-coupon bond. The size of the mark-up depends upon the bond issuer's default risk and is deemed to be a suitable measure with regard to assessing credit risk.

Basel III "International Convergence of Capital Measurement and Capital Standards: a Revised Framework" for credit institutions (Basel Committee on Banking Supervision, June 2004).

CDS (credit default swap) Credit derivative without a refinancing function. The collateral provider assumes the credit risk from one or more exposures against payment of a premium by the collateral taker.

CE (credit enhancement) Any contractual agreement to enhance the credit quality of a securitised portfolio or securitisation transaction, tranche or position, in particular, through the subordination of pecuniary claims.

CLO/CDOs (collateralised loan/debt obligations) Securities backed by corporate loans/bonds etc.

CMBS (commercial mortgage-backed securities) Bonds secured by commercial real estate.

CRD (Capital Requirements Directive) European Commission Directive to transpose Basel II into European law.

EAD (exposure at default)

ELGD (expected loss given default) Exposure-weighted average LGD.

E-SolvV (Solvency Regulation) Second draft for discussion (scheduled for publication at the end of March 2006).

FLP (first loss position) Subordinated to all other tranches and the first to bear any losses which occur.

IAA (Internal Assessment Approach) Used to determine the capital requirements for unrated securitisation positions in ABCP programmes.

iTraxx Index reflecting developments in credit default swaps based on the 125 most-liquid enterprises and financial enterprises.

K_{IRB} Capital requirements before securitisation plus expected loss contributions.

L Loss buffer for the securitisation tranche of which the securitisation position is a part.

M (maturity) Residual maturity in years.

N (number) Number of effective exposures in a securitised portfolio.

NPL (non-performing loans) No uniform market definition; generally past due loans.

Originator Institution which sets up a securitised portfolio for its own account or whose portfolio contains purchased receivables for securitisation purposes.

PD (probability of default)

RBA (Ratings-Based Approach) Approach based on external ratings for IRBA securitisation exposures.

RMBS (residential mortgage-backed securities) Bonds secured by receivables of residential mortgage loans.

Securitisation exposure Part of a securitisation tranche.

Securitisation tranche Contractually defined part of the credit risk associated with the securitised portfolio.

Securitisation transaction Transaction involving the transfer of receivables (true-sale securitisation) or not involving the transfer of receivables (synthetic securitisation). In this context, a securitisation transaction is deemed to be any uniformly documented transaction in which, *inter alia*, the credit risk from a portfolio is distributed across at least two securitisation tranches with differing risk profiles and the payments to investors depend upon the performance of the underlying portfolio.

SF (Supervisory Formula) Used to calculate the capital requirements for unrated securitisation positions in the IRB Approach for securitisation exposures.

SPV (special purpose vehicle) Enterprise established for the sole purpose of conducting a securitisation transaction with the intention of isolating the SPV's obligations from those of the originator.

T (thickness) Thickness of the securitisation tranche of which the securitisation exposure is a part.