Andreas Jobst / John Kiff

Capital markets-based funding in German banking – securitization and covered bonds

As banks struggle to secure sufficient long-term funding in the wake of the recent crisis there is a risk of a vicious feedback loop into the real economy as banks curtail credit to offset declining net interest earnings. In terms of capital marketsbased funding, European banks have recently been switching away from senior unsecured to covered bonds, while securitization volumes remain fairly marginal. However, concerns are being expressed with regard to the potential impact of covered bonds on issuer balance sheets and on the efficacy of bank failure resolution frameworks and deposit guaranty schemes. Hence, a broad range of funding tools, including securitization, is needed to help banks cope with considerable refinancing need going forward.

Doubts about counterparty risk

German securitization volumes have always been small compared to that of other forms of capital markets-based funding such as unsecured and covered bonds (see Figure 1).²⁾ Furthermore, in the wake of the financial crisis, whereas covered bond issuance has remained fairly steady, securitization volumes and unsecured bond issuance have declined significantly. In fact, more recently, this reflects a more general trend, with European senior unsecured bond issuance decreasing by eleven percent in the first half of 2011 relative to a year earlier. while covered bond issuance rose by 19 percent.3) In addition, most of the 2008-09 securitization issuance was not placed with final investors, but instead "retained" by issuers to post as collateral against central bank repo facilities. However, the market's dependence on central bank repos has tailed off somewhat since 2009.

Going forward, the recovery of both securitization and unsecured debt markets is

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being hampered by legacy problems. The collapse of interbank markets and the perceived role of securitization in the global credit crisis led to serious doubts about counterparty risk in unsecured funding and structured finance techniques aimed at the unbundling, transforming, and redistributing of credit risk. In particular, in some markets, most notably the U.S. private-label mortgage-backed securities (MBS) market, by substituting securitization for intermediated lending facilitated excessive risk-taking to a point where the inability of issuers to gauge actual default risk and the flexibility of asset managers to subvert investment mandates intensified the potential of systemic vulnerabilities to credit shocks (Jobst, 2010).4)

While the German securitization market performed very well during the credit crisis, issuance placed with final investors has since tailed off, as it has elsewhere

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Während sich Banken in der gegenwärtigen Krise insbesondere den Covered Bonds zuwenden, bleibt das Verbriefungsvolumen weiterhin gering. Mit Blick auf die Bilanzen der begebenden Institute sowie Bankenund Einlagensicherungssysteme fordern die Autoren eine breitere Nutzung von Finanzierungstools, um den wachsenden Finanzierungsbedarf abzudecken: Gerade in der Verbriefung sehen sie einen alternativen und flexiblen Finanzierungskanal, um eine stabile Kreditversorgung in einem Banken-dominierten Finanzsystem sicherzustellen – nicht anstatt, sondern zusätzlich zu Pfandbriefen. (Red.)

(Figure 2). As opposed to U.S. private-label residential mortgage securitization, the German securitization market has not experienced a situation that calls for a fundamental rethinking of certain modes of securitization. The performance of German securitization through the credit crisis has proven very resilient -both at the collateral and product level - which can be explained by several structural factors beyond traditionally conservative loan origination standards with high equity participation under the same credit law as non-securitized loans (see table). For instance, most securitization structures in Germany have been more closely associated with the funding needs of the real economy, which is reflected in the dominance of small and medium enterprise (SME) loans and car lease receivables as the main collateral types, rather than speculative transactions aimed at regulatory arbitrage. Despite the relative resilience of the German securitization market, the retention of transactions for collateralized lending far outweighed the actual placement until recently.

Focus on non-mortgage assets

Moreover, securitization has become ever more focused on non-mortgage assets as structural underpinnings of real estate finance - which makes up a considerable share of bank balance sheets - are stacked up against securitization in Germany. As a result of a combination of a conservative credit culture and mortgage underwriting practices, loan books are more cost effective to fund with deposits and Pfandbriefe (covered bonds). Although structural constraints associated with the Pfandbrief model have limited the diversity of mortgage products, mortgage securitization has been sporadic and mainly motivated by regulatory capital relief.5)

Against this background, German securitization volumes have historically been small using a synthetic securitization platform.^{6),7)} While in most other countries, securitization is driven by cash transactions on mortgage assets, there have been only four German cash residential mortgagebacked securities (RMBS) transactions since 2000, one of which was done using the True Sale International (TSI) platform.⁸⁾ Only in 2003 was the trade tax (Gewerbesteuer) law, a major obstacle to true sale securitization in the past, amended by the Act to the Support of Small Businesses (Gesetz zur Förderung von Kleinunternehmen und zur Verbesserung der Unternehmensfinanzierung), which exempts special purpose vehicles (SPVs) purchasing certain receivables originated by banks in (true sale) securitization transactions from income tax. Also in 2004, value-added tax (VAT) on receivables servicing was removed.9)

General resilience to stress events

In any case, German mortgage funding is very much bank deposit-based, with capital markets-based funding (which amounted to about 20 percent of outstanding loans) comprised mostly of Pfandbriefe. These onbalance sheet obligations are viewed as ultra-safe investments because they are secured by a dedicated ("cover") pool of loans, with the issuer being fully liable for all interest and principal payments. Hence, if the issuing bank defaults, Pfandbrief investors get preferential access to the pool of high-quality assets, according to statutory laws that also ensure the high quality of the loans, and substantial overcollateralization.

Furthermore, the Pfandbrief market has demonstrated general resilience to stress events and enjoyed official support during the recent crisis.¹⁰⁾ For example, the European Central Bank actively supported the market from June 2009 to June 2010 with its 60 billion euro covered bond purchase program. Also, some German bank bailouts involved large Pfandbrief issuers,11) leading to perceptions that the authorities are prepared to support the Pfandbrief brand.12)

A confluence of regulatory developments - actual and potential - in the wake of financial crisis further supports the recent trend toward post-crisis prominence of

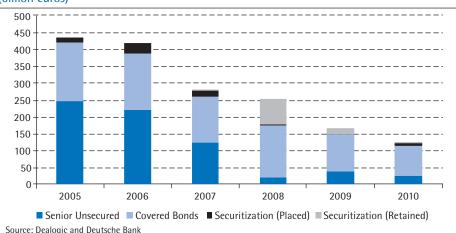


Figure 1: German bank capital markets-based medium- and long-term funding (billion euros)

covered bonds (Kiff et al., 2011). Cover bonds rated "AA-/Aa3" or higher will be allowed to count towards the liquidity coverage ratio (LCR) under the proposed Basel III liquidity requirements while securitizations are excluded. Also, Solvency II assigns a lower capital charge for covered bonds compared to other non-government and/ or unsecured assets. Furthermore, covered bonds will likely be exempted from resolution-related "bail-in" initiatives that will subject unsecured senior debt of failed banks to forced write-downs or conversion into equity.

However, on an even playing field, covered bonds and securitization should be viewed as complementary rather than competing funding vehicles. During normal times, they both increase the range of available financial products, benefiting borrowers, financial intermediaries, and savers. During periods of market stress, covered bonds provide the time-tested funding backstop, albeit mainly for investment-grade banks (rated "BBB-/Baa3" and better). In contrast, for lower-rated banks, securitization may be the best funding option, because it isolates the credit quality of the collateral from that of the issuer and provides issuers with more flexibility regarding collateral assets, security design, and payment structure than do covered bonds. For example, eligible Pfandbriefe cover pool assets are restricted to mortgage-, public sector-, ship- and aircraft-backed loans.

Systemic problems under stressed conditions

Nonetheless, it is also important to recognize that both products create systemic

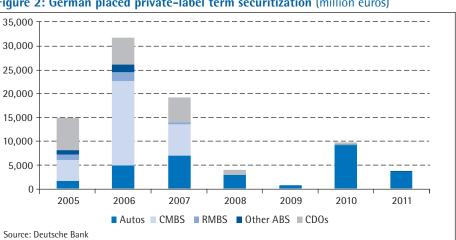


Figure 2: German placed private-label term securitization (million euros)

Table: U.S. private-label versus german m	ortgage loan securitization business
models	

	United States (private-label)	Germany
Credit origination	Break-up of the value chain and commission-driven origination and servicing (quantity rather than quality; moral hazard problems).	Loan origination and servicing remains with the financial institution.
	No regulation.	Securitized loans are subject to the same credit law.
Credit quality	Low credit standards: high loan to value, interest-free teaser periods, exotic payment options.	Traditionally conservative loan origination with high equity participation (e.g., mortgage loans).
Funding purposes	Securitization of third-party originated loans (off-balance).	Securitization part of ongoing balance sheet operations (with seasoned loans only)
Risk sharing	Separation of risk between securitizer and investor (principal agent problem).	First loss position usually retained by securitizer.

problems under stressed conditions, which also impact unsecured funding. The main impact of securitization gone wrong is through investors, as was so clearly evident during the recent credit crisis. For covered bonds, the extensive legal protections granted to debt holders present potential vulnerabilities for the issuer's unsecured creditors, including depositors. In this regard, depositors will have a smaller pool of unencumbered (and possibly lower quality) assets to fall back on in the event of a default. Weaker recovery rates on unsecured senior unsecured debt could in turn result in heavier reliance on covered bonds, whose privileged position (regarding the seizure and foreclosure of collateral assets) only further weakens unsecured debt credit strength and so on. The impact of this structural subordination may also be amplified by rising levels of over-collateralization required to maintain the bonds' high credit ratings. Also investor preference for covered bonds could make funding via unsecured senior debt more costly (and, thus, delay the exit from current crisis support measures).

Furthermore, to the extent that covered bond funding replaces unsecured funding,

Beilagenhinweis

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the effectiveness of bank failure resolution frameworks and deposit insurance programs could be adversely impacted.13) For example, in the new banking resolution framework, depositors will continue to be treated as subordinated to Pfandbrief investors. This may increase moral hazard, because authorities - recognizing the systemic relevance of this important funding channel - might find it difficult to resist calls for the bailout of a covered bond issuer that gets into difficulties. However, this risk is mitigated in the German case to some extent by strong Pfandbrief legislation that ensures that the bonds are well over-collateralized.¹⁴⁾

In any case, promoting securitization as an alternative and flexible funding channel to *Pfandbriefe* contributes importantly to ensuring a stable and comprehensive supply of credit in a bank-dominated financial system amid rising regulatory challenges and large refinancing needs of German banks over the next five years (about 250 billion euros annually until 2015).

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Footnotes

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ity. ²⁾ Securitization transactions involve the transfer of the risk associated with portfolios of credits into off-balance sheet special purpose vehicles funded with the issuance of one or more "tranches" of securities. Tranche holders are paid in specific order, starting with the "senior" tranches (least risky) working down through one or more levels to the "equity" tranche (most risky). In contrast, covered bonds are on-balance sheet debt obligations secured by a dedicated reference (or "cover") portfolio of assets, with the issuer being fully liable for all interest and principal payments. In the case of German covered bonds (or *Pfandbriefe*), all obligations related to the bonds are backed by an exclusive claim on the cover pool that is recorded in the cover register.

³⁾ Issuance in 2010 came close to the 2006-07 precrisis peaks, and 2011 European volumes are looking even stronger with 131 billion euros worth of benchmark bonds (more than 500 million euros) issued in the first six months of 2011 (Schönwälder, 2011; Volk, 2011).

⁴⁾ Private-label securitization products comprise those not issued or backed by governments and their agencies, that is, excluding those of government-sponsored enterprises (e.g., Fannie Mae and Freddie Mac in the United States), and public sector entities (e.g., Canada Mortgage and Housing Corporation in Canada).

⁵⁾ For example, such constraints tend to preclude the offering of prepayment options, because they can undermine asset-liability matching and result in breaches of over-collateralization conditions. Almost all *Pfandbrief* issuance is in the form of fixedrate bullet maturities, but *Pfandbrief* regulations stipulate that cover assets must always exceed outstanding securities, and sudden shortfalls could result from prepayments.



⁶⁾ Since 2001, 15 partially-funded synthetic residential mortgage-backed securities (RMBS) transactions have been issued via KfW's Provide securitization platform.

⁷⁾ In a "cash" securitization, a special purpose vehicle (SPV) buys the loans outright (i.e., a "true sale"). In a synthetic securitization, credit derivatives are used to transfer the risk associated with the loans from the bank's balance sheet to the SPV. The proceeds from the sale of securities are used to buy liquid high-quality collateral to fund contingent payments on the credit derivatives, and pay interest and principal on the securities.

⁸⁾ There have been 14 TSI-certified securitization transactions going back to 2005, seven of which were auto loan-backed ABS, and two each of consumer loan-backed ABS, commercial mortgage-backed securities, and collateralized loan obligations (CLOs) backed by loans to small- and medium-sized enterprises (SMEs).

⁹⁾ The VAT exemption applies only if servicing rights are retained by the lender, as is typically the case in Germany. In addition, the Refinancing Register was introduced in 2005 (Schöniger, 2007); prior to that, mortgage transfers had to be recorded in the respective land register, which was expensive and had to be done for each individual loan (amounting to thousands in a typical securitization transaction).

¹⁰⁾ If the reference asset portfolio fails to generate sufficient cash flows, or if its market value drops below the notional value of the issued securities, covered bond investors have an unsecured senior claim on the bankruptcy estate of the issuer. The only covered bond issuer bankruptcy was in 1883 - the Austrian issuer Böhmische Bodencredit. In that case, the failed bank's covered bond obligations were transferred to another bank two years later, interest payments were reduced, and the bonds redeemed in full in 1901 (Engelhard and Seimen, 2010; Engelhard et al., 2011).

¹¹⁾ However, these bailouts were not related to funding problems caused by covered bonds but large investment losses from cross-border exposures.

¹²⁾ The banks in question included Allgemeine Hypothekenbank Rheinboden AG (October 2005), Düsseldorfer Hypothekenbank (April 2008), Hypo Real Estate (October 2008), and Euro Hypo AG (May 2009). For example, in the case of Hypo Real Estate, the covered bonds were seen as being sufficiently collateralized, but there were questions regarding the ability to liquidate it in the wake of the Lehman Brothers bankruptcy (Wookey, 2008).

¹³⁾ Greater transparency about the underlying assets, as evidenced by the recent start of regular disclosures of the cover pool composition by *Pfandbrief* issuers, can reduce these systemic concerns.

¹⁴⁾ In some countries, such as Germany, covered bond legislation imposes a special law principle and/or regulatory caps on issuance with a view towards protecting (retail) depositors and/or representing the interests of (retail) depositors. However, current regulations falls short of imposing covered bond issuance caps, which could benefit both covered bond holders and unsecured creditors. These limits can preserve the economic value of full recourse to covered bond investors in the event of issuer insolvency. Also, they reduce the risk of rising cover pool dilution if covered bond issuance increases faster than total liabilities (as a smaller pool of assets is available to meet unsecured credit claims) and/or unencumbered assets on the balance sheet decline in credit quality.



57. Kreditpolitischen Tagung

am 4. November 2011, 11.00 – 13.00 Uhr, im Hermann J. Abs-Saal der Deutschen Bank AG, Junghofstraße 11, Frankfurt am Main, Empfang ab 10.00 Uhr

",Der Euro, die Märkte, die Banken – wie weit reicht die Solid(ar)ität?"

Dr. Jürgen Stark

Mitglied des Direktoriums, Europäische Zentralbank, Frankfurt am Main

Gerd Häusler

Vorsitzender des Vorstands, Bayerische Landesbank, München

Prof. Dr. Jan Pieter Krahnen

Lehrstuhl für Kreditwirtschaft und Finanzierung Fachbereich Wirtschaftswissenschaften, Johann Wolfgang Goethe-Universität Frankfurt am Main, House of Finance, Frankfurt am Main

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