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Unlocking SME finance through market-based debt: Securitisation, private placements and bonds

by
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Small and medium-sized enterprises (SMEs) are key contributors to economic growth and job creation. The current economic and financial crisis has reduced bank lending and has affected SMEs in particular. Capital markets will have to play a bigger role in financing SMEs in order to make them more resilient to financial shocks. This article reviews the spectrum of alternative market-based debt instruments for SME financing. It focuses on securitisation and covered bonds and also addresses issues regarding small/mid-cap bonds and private placements. It reviews the current state of the market for these instruments and identifies associated risks; analyses the barriers for issuers and investors alike; and provides best practices and high level recommendations to help alleviate barriers without hampering the overall stability of the system.

JEL classification: G1, G2, G23, G28

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I. Background, overview and policy implications

In the years since the crisis, the credit transmission channel in a number of jurisdictions has been impaired as regards quantity, price and distribution of credit. The effects of such malfunctioning are particularly felt by small and medium-sized enterprises (SMEs), especially in Europe. **Being heavily reliant on traditional bank lending, SMEs are faced with important financing constraints in an environment characterised by widespread bank deleveraging.** As credit sources tend to dry up more rapidly for small firms than for large companies during economic downturns, broadening the range of non-bank debt financing instruments for SMEs should help to make them more resilient to financial shocks. Given SMEs' importance in all economies, this is also essential for economic recovery from the current economic and financial crisis.

Non-bank market-based financing can improve the flow of credit to SMEs, while enhancing diversity and widening participation in the financial system. This study reviews the spectrum of alternative non-debt market-based instruments for SME financing, focusing in particular on securitisation (off-balance sheet) and covered bonds, but also addressing issues regarding small-/mid-cap bonds and private placements. These financing instruments could complement bank lending, help repair the credit channel and ease SMEs' financing constraints, while also facilitating a better distribution of risk amongst market participants.

The study builds on various sources spanning academic literature, market research and discussions with practitioners in private institutions active in SME debt markets. It reviews the current state of the market for these instruments and identifies associated risks; analyses the barriers for issuers and investors alike; and provides policy conclusions to help alleviate such barriers without hampering the overall stability of the system.

Section II reviews securitisation as a financing instrument in general and identifies structures and techniques relevant for SMEs. It also provides an overview of SME covered bonds as an alternative to securitisation, illustrating its characteristics and similarities to securitisation and its relevance for SMEs. The double recourse offered by covered bonds and the consequent preferential treatment from a legal and regulatory standpoint is the main difference between securitised SME loans and SME covered bonds. Recourse to the originator bank improves liquidity for the instrument, but the regulatory treatment seems to be the main reason for the popularity of covered bonds. Despite its attractiveness as a financing instrument, covered bonds cannot be the sole form of capital market finance for SMEs, not least due to asset encumbrance considerations.

Section III discusses the benefits of SME securitisation to all stakeholders, with a particular focus on its impact on SMEs themselves. The **recent financial crisis has strongly impacted securitisation and covered bond markets** as showcased in Section IV that gives an overview of the past and current developments, and an asymmetric rebound of the respective markets in the US compared to Europe and Japan can be observed.

Section V illustrates the **impact of ongoing regulatory reforms on the revival of the securitisation market**. It presents different approaches to high-quality securitisation and

analyses the existence of an unlevel playing field for the instruments reviewed, making the case for a co-ordinated regulatory approach at all levels. The revival of a healthy, safe and high quality securitisation market could be a way to generate additional capital market funding for SMEs, while providing banks with capital relief that allows for the unlocking of resources and further on-lending to the real economy. Securitisation can act as a credit risk transfer mechanism potentially resulting in a deeper and sounder financial system.

While regulatory reforms are required to improve financial stability and avoid pitfalls of the recent past, some of these reforms may also unduly dis-incentivise originators and investors and thus potentially inhibit the revival of a healthy securitisation market. Complex and sometimes conceptually contradictory regulation may have unintended consequences that should be considered when designing new rules. Clarity over ongoing regulatory work streams is also important for originators and investors, especially institutional investors, to fully engage in these markets that could benefit from their search for yield in the current low interest rate environment. A sensible calibration of ongoing regulatory workstreams (e.g. liquidity ratios of Basel III, capital charges in Solvency II, retention rate requirements) can be important for the revitalisation of the securitisation market.

As illustrated in Section VI, post-crisis **public intervention** has played a significant role in the securitisation market, particularly in Europe, where the eligibility of asset-backed securities (ABS) as collateral for monetary operations has been driving a large part of the market, but has not led to a revival of private market-based SME securitisation. Although such intervention is undoubtedly considered as important for banks' funding, it has not fostered further on-lending to the economy. Such effects and other potential unintended consequences of public intervention (particularly when such intervention does not foster further on-lending to the economy if it provides no capital relief to benefiting banks) should be taken into account in relevant policy making.

Section VII discusses **non-regulatory impediments** to the revival of securitisation. Various challenges in disintermediation of SME finance exist, especially the lack of sufficient economic viability of SME securitised products (mismatch of yield required by investors and return on the underlying asset for the issuer). This, in part, reflects problems regarding transparency of information, data availability and standardisation.

While capital markets can complement the role of bank lending, the **challenges of SME financing (especially due to the heterogeneity of SMEs – which at the same time is an important source of attractiveness to private investors – and typically scant credit information) do not allow for a complete disintermediation** of banks when it comes to the origination of SME loans, given the fixed-cost nature of sourcing and monitoring rather small and mostly local firms. The limited economic viability of SME CLOs (collateralised loan obligations) is one of the potential impediments to the revitalisation of that market, since prevailing underlying spreads do not provide for an attractive economic proposition, not least because of the riskiness and relatively weak performance of the underlying loans. At the same time, the performance of securitisation in Europe has remained robust in most segments throughout the years of the crisis. Understanding the structural strengths and weaknesses of and differentiating among various types of securitisations would be a step forward in revitalising the market. The recent European regulation identifying high-quality securitisations (European Commission delegated acts on LCR and Solvency II) could be seen as such a step, as could be the Prime Collateralised Securities (PCS) initiative.

Transparent and standardised data warehouses can be an effective way to resolve the information asymmetry problem associated with SME lending, with credit information on smaller firms collected and shared with market participants (as is already done by the Banque de France for French SMEs). Such transparency allows institutional investors to make their own assessment as to the creditworthiness of the underlying loans. Views differ over the desirability of standardisation of products, with some arguing that the capacity to have various degrees of credit enhancement is consistent with the different characteristics of SMEs, while at the same time aggregating large pools of SME loans allows for the smoothing out of idiosyncrasies. Contrary to other capital market products, standardisation of SME-related issuance could be counter to the very nature of SMEs, which are inherently diverse, to the extent it takes away the flexible terms on which many small firms rely.

Section VIII compares securitisation and covered bonds. Apart from these two categories, **the case for non-bank debt instruments is more limited in the SME space** as briefly discussed in Section IX which covers small-/mid-cap bonds and private placements. It makes the case for **mini-bonds** as one of the most promising and well-suited types of SME bonds, and presents **private placements** as an alternative to publicly placed instruments. In highlighting the German Schuldschein as a successful case of such instrument it makes the case for more standardisation and harmonisation in the private placement market. The potential for growth in the European private placement (PP) market for SMEs is widely accepted, and could be supported by standardisation of documentation and processes along the lines of the US PP market, as a way to foster this nascent market. Similar to the positive role of Government-sponsored enterprises (GSEs) for the US securitisation market, the credit scoring ("NAIC designation") assigned by the US National Association of Insurance Commissioners (NAIC) to private placements acquired by US insurers can be regarded as an important enabling factor of a substantial PP market in the United States, although such initiatives could also be led by the private sector.

The concluding Section X provides **implications for policy makers** that are summarised in Box 1 below. Policies concerning regulation, market infrastructure and

Box 1. **Implications for policy makers and recommended action**

Policy makers widely agree on the potential **benefits of alternative, non-bank debt financing for SMEs**, and there are many arguments in favour of the development of SME loan securitisations, covered bonds and other corporate bond and private placement markets. To this effect, a wide range of policy measures may be warranted, in various areas as listed in the following in terms of general principles.

A. Regulation

1. Carefully designing and overseeing markets for SME debt financing instruments for SMEs can help to foster the use of alternative financing instruments without putting at stake the overall resilience of the financial system. Sensible and balanced calibration of the existing regulatory frameworks affecting such instruments may provide further support, particularly given the potential role of institutional investors in providing alternative sources of SME financing.
2. A holistic and co-ordinated approach on regulation on a relative basis can help avoiding distortions in risk pricing by unduly favouring specific instruments over others with similar characteristics, and stimulate investor appetite.

Box 1. **Implications for policy makers and recommended action** *(cont.)*

3. The creation of solid frameworks for the SME covered bond and private placement asset classes at national or broader international levels should be encouraged.

B. Market infrastructure

4. The build-up of loan-level data, performance track records, the encouragement of ongoing reporting and data sharing would support market-based financing of SMEs. Pooling of such information in centralised data platforms, set up and maintained through public initiative, should benefit the entire market by increasing the transparency of the SME financing market and allowing an informed decision-making by capital holders. Appropriate balance in the level of disclosure requirements should nonetheless be safeguarded so as to stimulate investor appetite without rendering such issuance or investment overly costly or cumbersome.
5. The development of standardised "off-the-shelf" versions of non-bank debt financing instruments for SMEs could be pursued with a view to lowering the cost of such instruments and increase the efficiency and accessibility of those instruments to SMEs and retail investors. Support for the creation of indices could be envisaged to enhance liquidity and investor participation in publicly traded SME debt.

C. Demand side

6. On the demand side, the public sector could provide support for raising awareness – among SME entrepreneurs as well as smaller local financial institutions traditionally serving SMEs – about the availability and attractiveness of such financing alternatives for SMEs and financial intermediaries.
7. The public sector could co-operate with private sector institutions in improving the visibility of successful transactions and platforms for such instruments.

D. Supply side

8. Public incentives and assistance for investors to set up appropriate internal infrastructures (SME loan due diligence capacity, models, monitoring systems) could create efficiencies in their due diligence and other procedures and facilitate their participation in the SME-debt market.
9. A critical evaluation of the potential impact from the provision of incentive schemes targeted to such instruments, particularly to investors but also to SMEs (e.g. tax incentives), may be warranted.

E. Public intervention

10. Official support for raising the profile of the public debate may help to overcome the barriers identified and encourage the appropriate and safe use of non-bank debt financing instruments for SMEs.
11. Public intervention should be designed in such a way that private sector participation is not crowded out. Specific evaluation and control procedures (beyond a standard impact assessment) would need to be put in place to ensure that the intended (capital, funding) benefit is passed on to the real economy through the provision of additional SME financing.
12. While the size of the SME securitisation market is insignificant in terms of the wider financial system, careful assessment of the riskiness of inappropriate design and use of such instruments in the context of a widely interconnected financial system should be encouraged. The corresponding benefits to the real economy and their materiality to SMEs should be part of such an assessment.

other interventions targeting both the supply and demand side should help to encourage investors and alleviate constraints in SMEs' access to market-based financing through securitisation, covered bonds and other non-bank debt instruments.

Given the complexity of the SME space, it has to be recognised that there is "no magic bullet" for SME financing. **Disintermediation is particularly challenging for the SME segment.** While successful disintermediation of the SME lending space is hard to achieve, there may also be limits to the desirability of disintermediation. Nevertheless, the post-crisis environment still warrants further development of a healthy non-bank debt market for SMEs. To achieve this, a joint effort may be needed, involving all constituents concerned: investors, issuers, intermediaries, regulators and public policymakers. Such financing, when used properly, can play a significant role in the recovery of the real economy by unlocking resources and capacity for further lending, broadening the SME investor base and diversifying their portfolios, as well as assisting in the creation of a sounder financial system through better risk sharing within the economy.

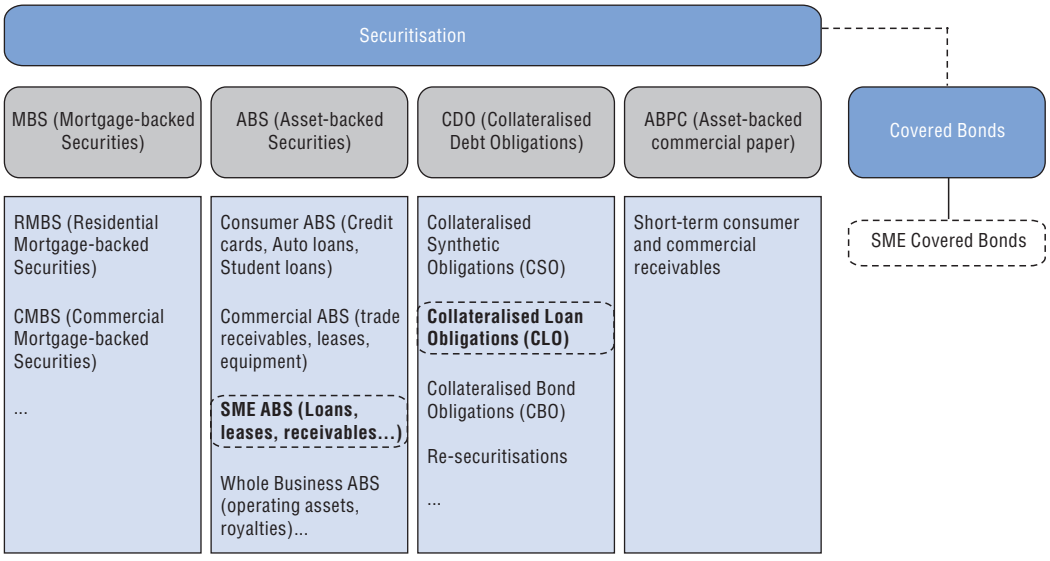
II. Securitisation as a financing instrument for SMEs

A. Defining SME securitisation

Securitisation is a structured finance technique which involves the pooling of assets and the subsequent sale in the capital markets of (normally risk-tranched) claims on the cash flows backed by this pool (OECD, 1999; CGFS, 2005). Investors buying those claims/bonds in the market are entitled to payments of principle and interest on the underlying pooled assets. Through this process, illiquid financial assets (such as mortgages, loans, leases) are bundled together and converted into liquid marketable securities, funded by and tradable in the capital markets.

Depending on the nature of the underlying pool of assets and the resulting securitised cash flows of the portfolio, securitised transactions can be categorised into broad groups of structures typically found in the market (see Figure 1). As implied by their name, mortgage-backed securities (MBS) are backed by pools of mortgage loans (commercial

Figure 1. **Main types of securitisation**



or residential), while the range of collateral that backs asset-backed securities (ABS) is more diverse and includes credit card receivables, auto loans, whole business securitisation, leases and other receivables. Collateralised debt obligations (CDO) are backed by debt instruments (senior secured bank loans, high yield bonds or credit default swaps [CDS]), while collateralised loan obligations (CLOs) are backed by pools of leveraged loans. Asset-backed commercial paper (ABCP) programmes are of short-term nature and are used to finance the acquisition of receivables with the proceeds of short-term commercial notes placed in the capital markets. Covered bonds are on-balance sheet instruments (i.e. they remain on the issuer's balance sheet) with similarities to ABS given they are collateralised by a dedicated portfolio of assets, and are separately discussed below (in subsection D) due to their different characteristics and treatment.

Securitisation techniques that involve SME-related claims may be broadly classified as ABS or CDOs. The majority of SME securitisations involve the pooling of medium and long-term SME credit exposures by financial intermediaries and the issuance of securities backed by cash flows of the underlying SME loan portfolios originated by financial institutions. SME claims are also securitised through ABCP programmes involving the funding of SME trade receivables on a short-term basis, referred to as a "SME Conduit" (Jobst, 2005). Other claims, such as cash flows deriving from the whole operating revenues generated by the entire SME or segmented part of a larger business, are also securitised (whole business ABS).[1]

Prior to the financial crisis, issuers of securitisation instruments became ever more creative in finding innovative ways of "slicing and dicing" the cash flows coming from the pool of assets to fine-tune risk/return profiles and achieve enhancements through risk-modelling techniques. The resulting **instruments became complex and difficult to analyse**, such as re-securitisations and CDO-squareds, backed by pools of CDO tranches. But the models upon which the structuring was based were not sufficiently crisis-tested (e.g. in a crisis correlations increase). Ratings agencies may have contributed to the problem by producing ratings that in hindsight were clearly more positive than they should have been. It is then also not surprising that some investors failed to comprehend the mechanics underlying the most complex structures prior to the crisis, or the disparity/divergence in the performance of different types of structured instruments during the crisis. When the US housing downturn caused unprecedented losses for investors in MBS and CDOs, and the crisis spread more widely causing default rates in related instruments to exceed expectations, this added to the post-crisis stigma surrounding securitisations.

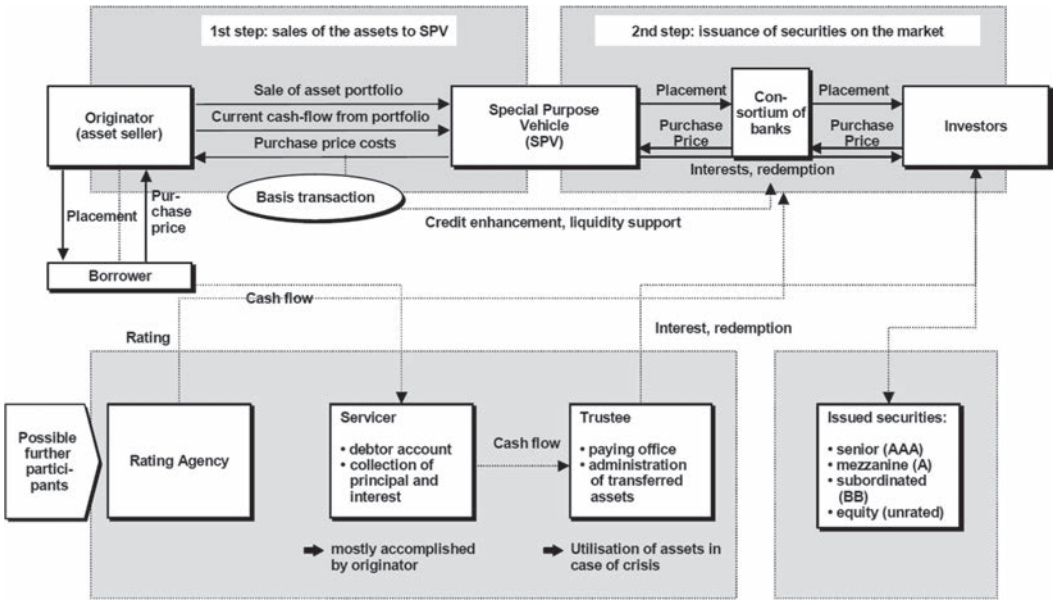
B. SME securitisation structure

Despite the diversity of types and underlying assets, the basic mechanics of a securitisation transaction are common to nearly every transaction and the basis of the structure is to a large extent similar (Figure 2).

1. Structure and participants

SME-related securitisations are produced through the pooling of a number of SME assets by a financial intermediary, typically the originator of the loans. Due to the small size of SME loans, the number of pooled assets is relatively large. Drawing on the example of an SME CLO, the ultimate goal of the transaction is the transformation of a portfolio of SME loans originated by a financial intermediary into a publicly-issued debt security. The resulting security is not only tradable, transferrable and liquid but also ring-fenced and isolated from their originator.

Figure 2. **Structure of an ABS transaction**



Source: Jobst (2002).

To get there, a sizable number of SME loans needs to be granted by the lender, typically a bank (*originator*) to different SMEs. The resulting portfolio needs to be large enough to reach a minimum critical size for the securitisation to be economically viable. The Originator then transfers the loans to a bankruptcy-remote special purpose entity or vehicle (SPE or *SPV, the issuer*), created for the limited purpose of acquiring the underlying loans and issuing securities on the back of the claims on the portfolio of loans (principal and interest payments). These claims are sliced in different tranches of risk/quality and seniority, ranging from senior secured to residual, equity-like tranches ("*first loss position*") and possibly with varying maturities.

The SPV may alternatively convey the assets to a *trustee* who is custodian of the collateral pool, monitors compliance and oversees the transaction. The newly-issued securities are then purchased by capital market investors such as institutional investors, asset managers, insurance companies, pension funds, hedge funds and banks (*investors*). Investors' demands differ and depend on the type of securitisation, underlying asset class and the seniority of the tranches.

The originator will very often be the *servicer* of the transaction, collecting payments and tracking the performance of the underlying pool, as well as the *arranger*, *placement agent* and *underwriter* (if any), usually on a best efforts basis (Bond Market Association, 2004). Financial guarantors, such as the monoline insurers,[2] may also provide insurance against specific high-grade credit risk for a fee, either guaranteeing payment on specific tranches or through the issuance of credit default swaps against such tranches. *Rating agencies* (one or more) provide ratings to different tranches issued by the SPV, based on expected losses for the different tranches and based on criteria depending on the type of underlying assets.

2. True sale vs. synthetic securitisations and the pass-through structure

The use of finite-lived, standalone SPVs allows the originator to offload the SME loan portfolio off its balance sheet, with significant benefits (OECD, 1999). It allows the fulfilment of one of the primary objectives of securitisation from the originator's

standpoint: regulatory capital relief through the transfer of the assets off the balance sheet. At the same time, as the economic cost of capital associated with those loans is reduced, the originator benefits from refinancing advantages. The liquidity produced by the transaction can potentially be used for further on-lending to the real economy. Post-crisis, the benefit is restricted by retention requirements for issuers (see Section V.A.4).

Such "cash" or "true sale" securitisation structures isolate the transferred assets and the SPV from bankruptcy of the originator. Credit risk of the collateral asset pool is delinked from credit risk of the originator, thus increasing the attractiveness of the instrument to investors. The SPV is consequently a bankruptcy-remote vehicle in terms of economic and legal recourse.

In contrast, in synthetic securitisation transactions the asset pool is not legally transferred – only the risk exposure is transferred.[3] This is accomplished through the use of derivative instruments on securitised claims – such as credit linked notes (CLN) purchased as insurance against the portfolio of loans. Synthetic securitisations can be funded, unfunded or partially funded[4] and may not necessarily involve an SPV as issuing agent although they do follow the basic securitisation structure (Jobst, 2005, 2006). The loan portfolio in such cases would remain on the balance sheet of the originator and the corresponding credit risk would be transferred to the capital markets. Synthetic securitisations provide for better risk management and capital optimisation, rather than effective refinancing benefits to the Originator, as ownership of the loan portfolio is not transferred.

Tranching of claims that are backed by a loan portfolio differentiates this securitisation structure from a traditional "*pass-through*" structure. In the case of the latter, investors take a direct exposure on the performance of the portfolio and are serviced as and when cash is actually generated by the underlying assets. The advantage of creating tranches or different classes of securities in that they can deliver to investors securities of different risk-return profiles (and different corresponding ratings) and different maturities, catering to investors' differing requirements and risk appetites. Both interest/principal cash flows and losses are allocated according to the tranche's seniority.

3. Credit enhancement techniques

Unlike plain vanilla corporate bonds, securitised instruments are credit enhanced in that some of the securities' credit quality can be higher than that of the underlying asset pool. Various types of credit support or "credit enhancement" can be supplied by internal or external sources in order to achieve the desirable credit quality, some of which are mentioned in the following. As a result of such techniques, non-investment grade pools of SME loans or parts of SME loan portfolios can be enhanced and transformed into investment grade instruments.

Securitised tranches are issued under senior-subordinate capital structures (see Figure 2) and are ranked and priced differently, depending on their position in the seniority structure. For instance, mezzanine and all other subordinated tranches provide protection from losses to the senior tranche, the subordinated and equity tranches provide protection to the mezzanine tranche and so forth, insulating senior tranches.

The equity or "first-loss piece", typically unrated and the most junior tranche of the structure, is expected to absorb any initial losses. Such tranche is to be retained by the issuer in order to provide some "skin-in-the-game" and align his interests with those of the investors, addressing moral hazard.[5] Recently implemented regulation on required retention

rates for securitisation (see Section V.A.4) has been designed with the same objective. Subordination of tranches therefore serves as the primary form of credit enhancement.

Credit enhancement is also achieved through overcollateralisation, as all tranches begin with a certain amount of overcollateralisation drawing from the first loss position. Overcollateralisation is most prominent in SME covered bonds, and is one of the main attractive characteristics for investors.

The excess spread that results from the difference between the interest on the loan portfolio and the interest paid to the securities issued, including any ongoing fees of the transaction, acts as an additional credit enhancement that protects debt tranches from losses. In the absence of losses, such excess is transmitted through to the holder of the equity part and any losses are effectively absorbed by that part as well.

External insurers can provide credit enhancement through guarantees on senior tranches of securitisation programmes, as was the case with monoline insurers. The premium paid to such third parties is offset by a lower interest rate paid to the investor on the insured securities. In the US, monoline insurers failed to absorb the losses occurred by the subprime crisis and were unable to meet their claims.

Credit enhancement through guarantees is one of the main tools used by the official sector. For example, the European Investment Fund (EIF) is a leading provider of triple A-rated credit enhancement in SME securitisations. It benefits from Multilateral Development Bank status, which enables financial institutions to apply a 0% risk-weighting to assets the EIF guarantees. Typically, EIF guarantees certain tranches of notes (senior and/or mezzanine tranches) issued through a SME securitisation transaction and works on the basis of own resources as well as mandates (EIF, 2014). In the US, government sponsored enterprises (GSEs) such as the two housing GSEs, Fannie Mae and Freddie Mac, were chartered by Congress to create a secondary market for residential mortgage loans and played an important role in fostering the securitisation market for MBS. External guarantees facilitate the provision of the desired rating that renders the transaction commercially viable/investable by a larger number of investors (rating agencies effectively specify the amounts of credit enhancement necessary to achieve desired tranche ratings). In addition, they provide for standardised structures and quality control.

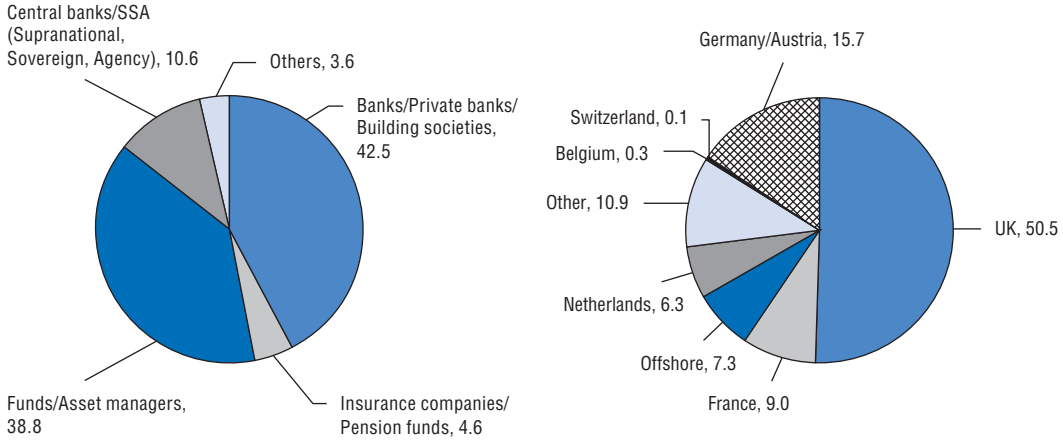
C. Investor base and pricing

The SME securitisation space is a complex market that requires significant resources from the investors' side, rendering it a niche market according to some market participants. Investors need internal analytical capabilities and in-house expertise for the assessment of the pools of loans subject to securitisation and in order to assess the credit quality of the resulting securities. This can partially explain the fact that SME securitisation as an asset class is considered by some to be a niche market and has a rather restricted investor base. Barriers to entry for new or small buyers are relatively high due to the considerable resources required.

Banks, given their first-hand knowledge of SME finances as the primary lenders to SMEs, can be considered to be natural buyers of SME securitisation instruments, together with fund/asset managers reflected in their high share of participation in the market overall (Figure 3). This is explained by the fact that they have the technical expertise and the resources required for such investments. Banks have the ability and information required to perform detailed fundamental analysis of the securitised assets on a loan-by-loan basis. Operational requirements (disclosure, due diligence, stress testing, reporting, and

Figure 3. **Investor distribution for placed new structured finance issuance in Europe**

2013, percentages weighted by investor type and by investor location



Note: Insurance and pension fund participation in securitisation placements can be direct or indirect through asset/fund managers and in the latter case it may not be specifically disclosed as such.
Source: BofA Merrill Lynch (2014).

documentation) would be less of a burden to large financial institutions than to smaller investors. Nevertheless, retention requirements could limit their propensity to participate in the market altogether.

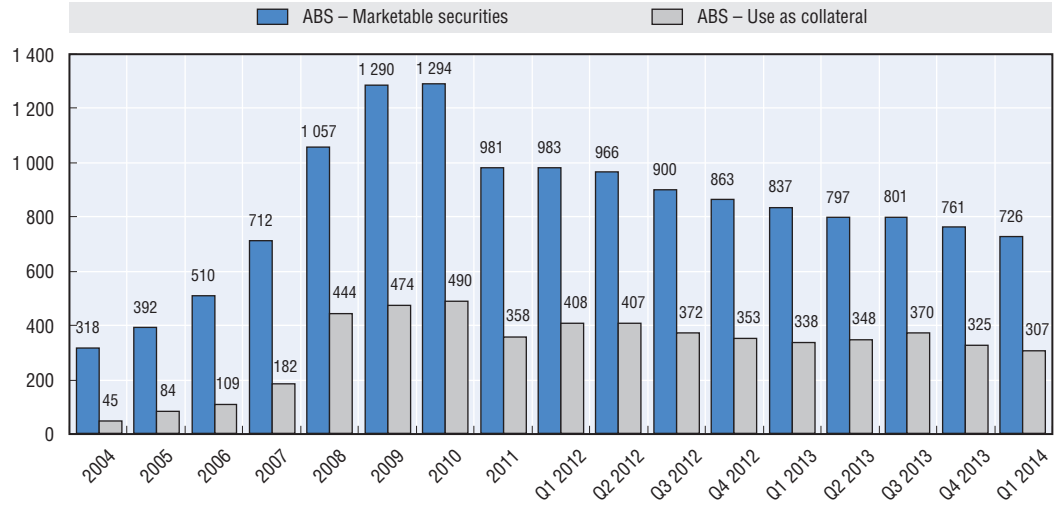
Long-term institutional investors have the scale and resources available to invest in SME securitisation but are faced with regulatory and information availability challenges. Pension funds and insurance companies – as well as their asset managers – can build in-house expertise should they wish to invest in this asset class, given their scale and resources. Even sophisticated investors, however, cannot necessarily perform a thorough analysis on the securities due to the lack of publicly available information on the performance of those securities. The heterogeneity of the composition of the pool of SME loans as well as the non-standardised underwriting structure and documentation accompanying such issuances adds to the burden. These impediments have been identified by the official sector and are being addressed, particularly in Europe (see Section V). The main challenge for long-term investors, however, is increasing regulatory requirements for securitisation investments. Insurance companies are particularly affected by the increased capital charges of Solvency II (see Section V.A.2).

ABS issuances can offer attractive risk-reward trading opportunities to hedge funds and other types of funds, but are still not mainstream investments due to limited secondary market liquidity. SME ABS would appear to be advantageous for hedge funds both on an absolute and on a relative basis compared to many other fixed-income products. Structured financial instruments are attractive to such investors given technical as well as idiosyncratic factors which they can exploit. SME CLOs, however, are considered as niche structured credit instruments by hedge funds, not least due to their thin market liquidity and lack of transparent pricing compared to other types of corporate credit (Neuberger Berman, 2013).

Central Banks, supranational and national agencies cover a very important part of the investor base, particularly in Europe. The European Central Bank (ECB) provides credit to financial institutions participating in the Eurosystem credit operations on a collateralised basis through the pledging of assets including ABS and covered bonds (Figure 4). In order to be eligible as collateral for such refinancing operations, marketable assets must comply

Figure 4. **ECB-eligible and pledged marketable ABS**

In EUR bn, nominal amounts, averages of end of month data over each time period shown

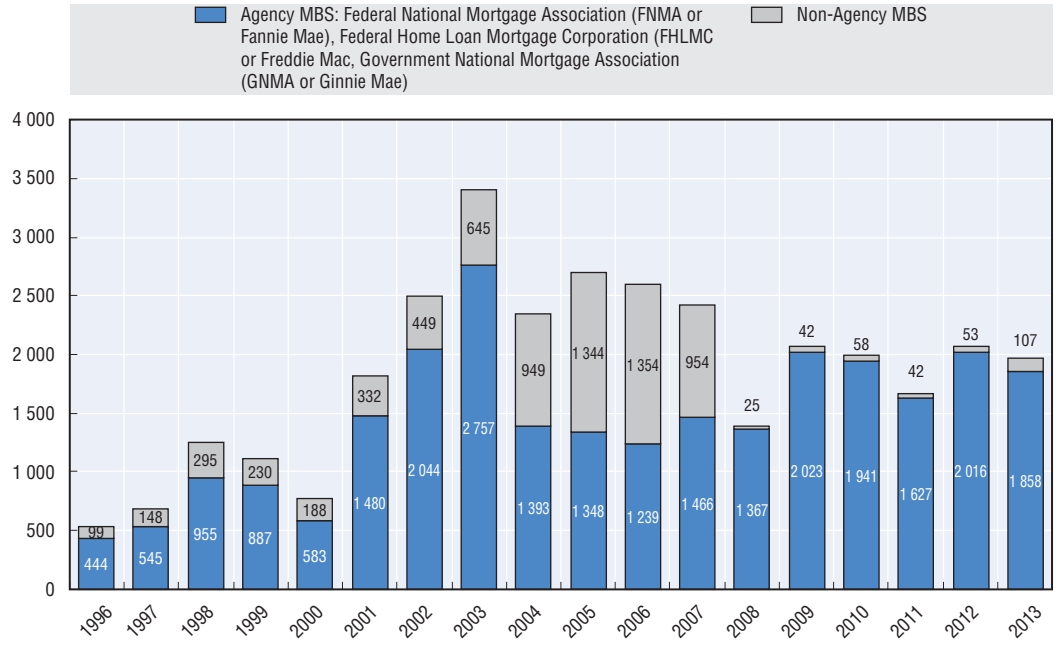


Source: ECB, *www.ecb.europa.eu/paym/coll/html/index.en.html*.

with the eligibility criteria specified by ECB's framework for monetary policy instruments. The scale of those operations has been such that the ECB could be considered as the single largest investor in the European securitisation market. In the US, the support of Government Sponsored Entreprises (GSEs) such as Fannie Mae and Freddie Mac was instrumental for the quick rebound of the US securitisation market, as evidenced by the proportion of agency-backed mortgage-related securities out of all such securities issued (Figure 5).

Figure 5. **Agency-backed MBS proportion in total US MBS issuance**

1996-2013, in USD billion



Source: Thomson Reuters, SIFMA.

The demand for securitisation products has decreased significantly over the last few years as a result of the lingering post-crisis stigma associated with the asset class and the regulatory uncertainty. However, many observers see the possibility of an upcoming turnaround. Regulatory uncertainty is stemming from the pending and ongoing discussions on capital charges and other requirements linked to securitisation, with significant impact on insurance investors in particular. Nevertheless, in the current low yield environment, the search for yield continues across a broader spectrum of investors. There is therefore expectation for ever rising demand for higher credit risk transactions, particularly down the capital structure at the mezzanine level. Industry participants report the return to the market of investors that had exited post-crisis, as well as the entrance of new investors, amongst which are institutional investors such as pension funds (BofA Merrill Lynch, 2014).

Along with regulatory issues, restrained volume of collateral for new issues is another concern raised by industry participants in connection to the SME space in particular. Lack of new collateral seems to be a concern in Europe, where managers struggle to ramp up their portfolios compared to their US peers. Although not the most heated issue, lack of supply is one of the counter arguments of investors reluctant to enter the securitisation market. Supply of collateral is also restrained by the persisting declining trend of SME lending in many OECD and non-OECD countries in the years after the crisis, as evidenced by the OECD Scoreboard on access to finance for SMEs and entrepreneurs (OECD, 2014). Prior to the crisis, increased financial engineering and leverage (re-securitisations, CDO squared, etc.) would have been a potential alternative to boost securitisation levels despite low supply of collateral. This cannot be the case at the current juncture given regulatory efforts addressing the pitfalls of the past and policy efforts actively promoting simple, transparent and high-quality securitisation (see Section V.C).

SME CLOs are considered as one of the highest yielding instruments in the European ABS space. This comes as a consequence of the high entry barriers that investors face, mostly in terms of higher cost, compared to other asset classes, of performing due diligence to appropriately assessing the riskiness of the underlying SME loans. Nevertheless, market consensus appears to be that the investor base is indeed deepening for securitisation overall, and particularly so in Europe. This trend is likely to positively affect the SME securitisation space as well.

Pricing and spread compression in light of the post-crisis environment and recent regulatory reforms could negatively impact SME securitisation. Recent action by the ECB and the BoE aiming at reviving the securitisation market is expected to tighten spreads over Euribor or Libor for securitisations, most likely those eligible as High-Quality Securitisation (HQS; see Section V.C), including SME CLOs. Such a trend would be similar to the one felt in the covered bond market as a reaction to the set of actions affecting covered bonds. ECB purchase programmes, preferential treatment of covered bonds in terms of regulatory capital (significantly lower capital charges relative to securitisation) and liquidity (eligibility of certain covered bonds for the LCR ratio, see Section V.A.3) are some of them. The market also expects second-order effects on the pricing of non-HQS securitisation transactions to follow with a short time lag. Nevertheless, such spread compression could have a negative effect on supply, potentially putting additional pressure to new issuance levels of SME securitisations (BofA Merrill Lynch, 2014).

According to many market participants, the somehow limited investor base does not seem to be the most pressing issue of the securitisation market. Other hurdles are

seen to be more prominent at this stage, like regulatory conditions. This impediment, the industry claims, needs to be prioritised and addressed effectively. Clarity around the final resulting regulatory framework is expected to have a positive effect on investors' willingness to participate in that market. Furthermore, the improvement of data and analytics are seen as important in order to allow for the widening of the investor base and the efficient risk transfer between banks or other originators of SME lending and institutional or other non-bank investors wishing to participate in this market. Supply of SME transactions lags investor expectations due to scarcity of collateral which can only be addressed if underlying credit growth for SMEs picks up. Addressing the above stumbling blocks, the industry argues, will allow securitisation to be seen as less of a niche product, better integrated into the broader fixed income markets.

D. Defining covered bonds

A covered bond is an on-balance-sheet asset-backed debt instrument, secured by a priority claim on high-quality assets, which remain on the lender's balance sheet. The collateral assets "covering" the bonds remain on the balance sheet of the issuer and thus provide double protection to investors who enjoy full recourse to the issuer as well as the to cover pool in case of issuer insolvency. In terms of structure, covered bonds are predominantly bullet, fixed-rate instruments (full repayment at maturity) but have recently evolved into pass-through structures, reducing the asset-liability maturity mismatch risk (S&P, 2013).

The ring-fenced asset pool is characterised by overcollateralisation and dynamic management. The issuer is required to maintain the size and quality of the underlying cover pool and is obliged to replace non-performing loans throughout the life of the transaction. An asset coverage test by an independent monitoring party checks whether sufficient overcollateralisation is available to meet investors' claims and requires the issuer to meet minimum overcollateralisation levels if this is not the case.

From an investor's perspective, covered bonds offer diversification, low risk and good quality investment opportunities. Covered bondholders have preferential claim against the cover pool and the proceeds arising from it, while benefiting from the cash-flows of the entire credit institution/issuer in case of insolvency and in case the funds realised from the monetisation of the collateral do not fully meet their claims (dual or full recourse). In terms of subordination, covered bond investors rank at least pari passu with senior unsecured debt holders for any unsatisfied claims. Given the full recourse and bankruptcy remoteness of the asset pool, covered bonds are typically rated higher than senior unsecured debt by the same issuer. The instrument is thus typically considered a yield-enhancing alternative to sovereign bonds.

From the issuers' standpoint, covered bonds offer an alternative cost-effective form of wholesale funding which remains resilient even in times of crisis, as well as investor diversification. In the broader context of the financial system, covered bonds are considered beneficial to overall financial stability: issuers are required to retain the credit risk they are originating, overcoming moral hazard present in originate-to-distribute securitisation and promoting more robust origination practices.

The range of eligible cover assets is prescribed by the specific covered bond framework applying in each country. The most common cover asset is mortgage loans, followed by public sector loans (national, regional or local authority level) ship loans and

aircraft loans or a mix thereof.[6] Claims against SMEs and guaranteed export loans may also be used as eligible cover assets, although that segment of the covered bond market is relatively new and restricted in terms of outstanding issuance volume.

Covered bonds are either governed by specific legislation (statutory framework) or on general contractual rules and structured programmes in markets where a relevant legislative framework is absent. One of the earliest references to the instrument is found in Prussia back in 1770. Today, covered bonds comprise one of the most important segments of privately issued bonds in the European capital markets. As of early 2014, 26 European countries have developed active covered bond markets covered by a relevant legal framework and at least seven more countries were in the process of adopting/updating covered bond legislation with a view to develop active covered bond markets (see Table 1).

Table 1. **Covered bond legislation in Europe**

	Year
Armenia	2008
Austria	2005
Azerbaijan	2010
Bulgaria	2000
Czech Republic	1995
Cyprus[1]	2010
Denmark	1851/2007
Finland	2000/2010
France	1999/2010
Germany	1900/2005
Greece	2007
Hungary	1997
Iceland	2008
Ireland	2002/2007
Italy	2005
Latvia	1998
Lithuania	2003
Luxembourg	1997
Netherlands	2008
Norway	2006
Poland	1998
Portugal	2006
Romania	2006
Russian Federation	2003
Slovak Republic	1996
Slovenia	2003
Spain	1981/2007
Sweden	2004
Switzerland	1931
Turkey	2007
Ukraine	2006
United Kingdom	2008

1. Footnote by Turkey: "The information in this document with reference to 'Cyprus' relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the 'Cyprus' issue." Footnote by all European Union member States of the OECD and the European Commission: "The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus."

Source: ECBC (2014).

The instrument has taken a global dimension with notably active covered bond markets in Canada, New Zealand, Australia and South Korea (ECBC, 2013).

There is no one single definition of a covered bond across markets. Although the principles are the same for all covered bonds, in practice the different legislative frameworks at different jurisdictions provide for different variations of covered bond instruments (Table 2). Some of the main existing frameworks include German and Austrian *Pfandbriefe*, French *Obligations Foncieres*, Spanish *Cedulas Hipotecarias*, Danish *Realobligationer*, Swedish *Sakerstallda Obligationer* and the *Lettres de Gages* in Luxembourg.

Interestingly, investors in covered bonds exhibit significant home bias (ECBC, 2013; Figure 6). The different national legislative frameworks, the difficulty in obtaining

Table 2. **Covered Bonds outstanding**

As of year-end 2013, in EUR million

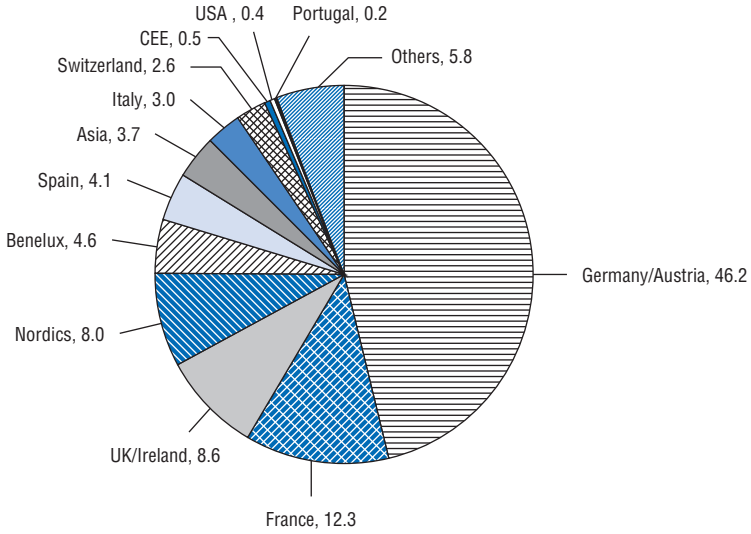
Issuing country	Public sector	Mortgage	Ships	Others	Mixed assets	Total	EUR denominated by euro area issuer
Australia	-	46 021	-	-	-	46 021	-
Austria	23 682	18 854	-	-	-	42 536	39 184
Belgium	-	8 188	-	-	-	8 188	8 188
Canada	-	50 459	-	-	-	50 459	-
Cyprus[1]	-	1 000	-	-	-	1 000	1 000
Czech Republic	-	10 355	-	-	-	10 355	-
Denmark	-	359 646	5 514	-	-	365 160	-
Finland	-	29 783	-	-	-	29 783	29 230
France	68 349	202 822	-	-	73 015	344 185	316 562
Germany	245 961	199 900	5 792	506	-	452 159	437 737
Greece	-	16 546	-	-	-	16 546	16 546
Hungary	-	4 016	-	-	-	4 016	-
Iceland	132	671	-	-	-	803	-
Ireland	22 154	20 827	-	-	-	42 981	36 360
Italy	10 100	120 599	-	-	-	130 699	130 699
Latvia	-	-	-	-	-	-	-
Luxembourg	21 708	-	-	-	-	21 708	12 925
Netherlands	-	61 015	-	-	-	61 015	55 362
New Zealand	-	7 851	-	-	-	7 851	-
Norway	2 035	105 202	-	-	-	107 237	-
Panama	-	218	-	-	-	218	-
Poland	84	707	-	-	-	791	-
Portugal	1 200	34 199	-	-	-	35 399	35 399
Slovak Republic	-	4 015	-	70	-	4 085	-
South Korea	-	2 536	-	-	-	2 536	-
Spain	30 352	334 572	-	-	-	364 924	363 731
Sweden	-	217 854	-	-	-	217 854	-
Switzerland	-	89 064	-	-	-	89 064	-
United Kingdom	5 822	130 792	-	-	-	136 614	-
United States	-	6 000	-	-	-	6 000	-
Total	**431 579**	**2 083 713**	**11 306**	**576**	**73 015**	**2 600 189**	**1 482 924**

1. Footnote by Turkey: "The information in this document with reference to 'Cyprus' relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the 'Cyprus' issue." Footnote by all European Union member States of the OECD and the European Commission: "The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus."

Source: ECBC (2014).

Figure 6. **Covered bonds investor distribution by region of origin**

Investor breakdown for publicly placed euro benchmark issues, January 2011 to June 2013, in %



Source: ECBC (2013), NORD/LB Fixed Income Research.

information about the foreign markets and their different characteristics, as well as other more standard reasons such as country limits affect investor participation in international covered bond markets. That is not to say, however, that investors do not seek to take advantage of fragmented markets and important rate differentials between countries, which partially explains the buy-in of German investors in high yielding Spanish Cédulas (while only a very small number of Spanish investors buy low yielding German Pfandbriefe).

III. Benefits and drivers of securitisation

Securitisation allows borrowers, originators and investors to benefit from a solid and transparent market extending to the real economy and the financial system overall. This section provides an overview of the benefits to the main constituencies involved in the securitisation markets, making the case for healthy SME securitisation to become a non-niche asset class, accessible to a wider range of investors. Accessibility of SME structures to long-term institutional investors, such as pension funds and insurance companies, is of particular importance.

A. Benefits to originators

One of the driving forces of securitisation issuance by financial institutions is their need to diversify their funding sources and refinance their loans through an effective source, on flexible terms and at a potentially lower cost than other funding sources. Based on empirical evidence, the reduction of funding cost and the pursuit of economic (as opposed to regulatory) efficiency was the principal motive for securitisation issuance before the crisis, consistent with the domination of originate-to-distribute models (BIS, 2011). Funding diversification has remained one of the prominent drivers of origination post crisis. For lower rated originators, securitisation transactions can often achieve a lower cost of funds than a direct debt issuance by the originator.

The ability to tailor securitisation transactions to meet different investor needs, coupled with the numerous credit enhancement possibilities, allow the originators to tap into a wider and diversified investor base than through senior unsecured debt. Meeting the demand of a broader investor base with different risk appetites might allow for the issuance of securitized products at a lower cost (for each risk/return profile) compared to other instruments. This will likely result in improved credit conditions for the real economy and may enhance resilience in periods of crisis.

By securitising assets, some or most of the credit risk arising from those assets is transferred to the capital markets, with the originator's exposure limited to the portion retained as credit enhancement. The credit risk of the underlying pool of loans is transferred and dispersed to entities/investors that are more willing and potentially better able to manage such risk, reducing the likelihood of banks becoming credit constrained or their funding dependent on business cycle conditions.[7] However, as the 2007/8 crisis made evident, the possibility of fully off-loading risks may be limited to the extent that SPVs and similar vehicles had to be brought back onto banks' balance sheets for reputational reasons (and in some jurisdictions also required by regulators).

The originator's motivation to achieve such market-based transfer of credit risk originates from the prospect of achieving regulatory capital relief. Such capital relief arises from the reduction in risk-weighted assets and is proportionate to the weighting of loans comprising the underlying pool of each transaction.[8] As a result, capital is freed up and can potentially generate further lending capacity and on-lending to SMEs and other parts of the real economy.

Besides better risk management, originators benefit from enhanced liquidity and forgo asset encumbrance concerns (as encumbrance associated with securitisation is less significant than other forms of secured financing, e.g. covered bonds requiring over-collateralisation and on-balance-sheet). By transforming illiquid asset pools into marketable securities, originators can easily transfer these into cash through the capital markets. The transformation of illiquid loans into more liquid assets increases the supply of high-quality collateral that can support other transactions, provided that the market is deep and liquid enough and can address relevant regulatory pressure (Liquidity Coverage ratio, increased levels of collateral requirements in the financial system for the protection against counterparty risk) (ECB and BoE, 2014).

At the same time, asset encumbrance associated with securitisation is significantly lower than that resulting from covered bond or senior secured issuance because fewer assets need to be pledged. As a result, originators' funding flexibility is increased (Wehinger, 2012). Securitisation can at the same time support the deleveraging and de-risking process that banks are still undergoing, without damaging lending to sectors that cannot directly access capital markets – as is the case with SMEs.

Issuance of structured finance instruments can also serve as a tool to build up recognition and track record. Originators can improve their profile in the capital markets as well as benefit from visibility in other business lines. Banks which are efficient in originating certain asset types can improve their market share in the specific line of business without creating balance sheet concentration. Better management of the asset-liability profile of the bank's balance sheet is also achieved, especially in the case of pass-through securitisation where repayment obligations match the payments of the underlying assets.

B. Benefits to investors

Both bank and non-bank investors use securitisation as a means to diversify their investment portfolios and exposure to different asset types, industries and parts of the real economy, while still achieving attractive yields according to their risk/return profile. By diversifying, investors can manage their exposure limits in terms of product type/region/liquidity or other characteristics so as to meet their portfolio diversification requirements. Pooling, tranching and credit enhancement results in securities that can be tailored to meet investors' different needs. The flexibility of these structures serves and benefits investors constrained by investment criteria or prudential limitations, such as investing only in investment grade securities.

Customisation of securities in terms of maturity, risk, yield, coupon, underlying type of claims and credit quality allows investors to match their asset-liability profile. This is particularly important in the case of long-term institutional investors such as insurance companies and pension funds. Flexibility in structuring the timing of cash flows attributed to each security or tranche provides a means to match the risks that arise due to mismatches between their assets and liabilities, assisting them in their asset-liability management (ALM, mostly in the medium-term range given the typical tenor of ABS).

Besides ALM, securitisation offers institutional investors diversification opportunities in asset classes that they could otherwise not invest in, such as the SME space. Direct lending to SMEs is in principle difficult for institutional investors at the current environment due to potential lack of expertise, infrastructure, information on past performance, absence of liquid secondary market, and other reasons. Securitisation has the potential to act as the bridge between institutional investors and SMEs, unlock long-term financing for the real economy and facilitate SME lending by institutional and alternative investors, such as hedge funds.

With monetary stimulus around the world pushing bond yields to record low levels, securitisation lends itself to investors searching for yield. This is the case particularly in the riskier, lower ranked tranches of the structure.

C. Benefits of SME securitisation

Securitisation provides an efficient way to alleviate credit constraints and improve the diversity of credit supply to SMEs. Credit availability has been an important impediment to SMEs' access to finance particularly in the years following the financial crisis. SMEs have become ever more reliant on external (mostly bank) financing than in the pre-crisis period, due to the reduced availability of internal funding in a context of subdued growth and demand in most countries (OECD, 2014). By allowing banks to achieve regulatory relief on their SME lending portfolio through securitisation, banks can effectively lend without committing too much of their capital base. Lending activity is boosted and indirect capital market funding of SMEs promoted. Such indirect access to market financing is crucial to credit-constrained SMEs, since most of them are otherwise unable to directly access the capital markets for credit. Participation by non-banks in the funding of the real economy and further diversifying lending sources for SMEs may also improve financial stability overall if it results in lower leverage and (in principle) simpler balance sheets that are less correlated to those of banks (ECB and BoE, 2014).

Promoting the benefits of SME securitisation also means to promote the role of banks that are generally best positioned to originate SME loans. Pricing, capital intensity, as well

as the complex logistics associated with SME loan origination render the exercise cumbersome for non-bank institutions that might lack the expertise, relationships and infrastructure to enable SME loan origination. In addition, through the process of SME securitisation, **banks would be better able to manage their balance sheet and risk with the benefit of greater resilience.** Incentives to monitor the quality and performance of their lending portfolio, enhancement of credit reporting systems and better availability and accessibility of information create a transparent ecosystem. Such an ecosystem can act as a "disciplining device", reducing information asymmetries between borrowers, originators and investors and help contain systemic risk (Mersch, 2014).

Securitisation of SME loans can also indirectly benefit SME loan origination by encouraging best practices for originators. When participating in securitisation transactions, their lending portfolios get exposed to the scrutiny of investors, lawyers, accountants, trustees and rating agencies' external reviews. This can often provide originators with insights into best market practices and is most likely to promote habits of standardisation of SME lending terms, documentation, and pricing to allow for the easier securitisation of such loans. SME originators are thus incentivised to better manage their loan portfolio and render it more transparent, which in turn allows for the tracking of performance of the asset class, further fostering its growth.

As the diversity of credit supply to SMEs is improved in a well-functioning and efficient securitisation market, **SMEs can become an asset class that is "investable" and reached by institutional investors or other types of "patient" capital.** This is particularly relevant in the current protracted low interest-rate environment. In addition to facilitating the flow of funds from long-term investors to the SME sector in need for credit, institutional investors can get acquainted with the asset class in general. Building the know-how and the expertise around SMEs via their securitisation investments could allow for further investing in the SME space, perhaps also using different instruments (e.g. private placements).

Besides spurring SME financing and improving the diversity of credit supply to SMEs, such financing techniques potentially **allow for the easing of credit conditions.** The prerequisite for this to be achieved is that the benefits arising from securitisation transactions are passed on to the original borrower at the time of origination. A broader improvement of credit conditions may also result from the lower cost of issuance (for the originator) compared to other sources of funding. SMEs are thus able to enjoy both a lower re-financing risk and a financing at possibly better terms.

Avoiding credit constraints more broadly that arise in times of financial stress is of particular importance to SMEs, given their high dependence on bank financing. Not only can fostering SME securitisation promote and strengthen the role of capital markets in financing the real economy, it can to a certain extent also **somewhat decouple SME lending from banking sector cycles, with potential beneficial countercyclical effects for the macro economy.**

Through securitisation, SMEs obtain, indirectly but in effect, **market funding without the need for (high) individual company credit ratings** required when issuing debt directly in formal bond markets. On top of that, SME debt can even achieve a higher credit rating than the one that could potentially be obtained on a standalone basis, by being part of a highly rated upper tranche in the whole structure. This would otherwise be unachievable for the majority of smaller or micro SMEs.

SMEs securitisation also **makes capital available for further on-lending by originators.** The lending-on-lending cycle also indicates a relevant pivotal point for policy interventions in the SME securitisation space, aiming at boosting lending to SMEs by originators/issuers. The challenge in the design of such policies is the difficulty to ensure that the freed-up capital will be redeployed in new, additional SME lending that would otherwise not be dispersed (i.e. over and above the SME loans that would anyway be issued in the system).

SMEs securitisation also **allows targeted "unconventional" monetary policies** (see also section VI.A below). Outright purchases of SME ABS allows a central bank to stimulate further credit creation by creating incentives for securitising – and thus generating – SME loans. Such policies may also assist the transmission of monetary policy more generally and improve overall price stability, as contended by the ECB that sees such benefits of SME securitisation for the Eurosystem overall (Mersch, 2014). ABS being an important part of the Eurosystem's balance sheet, the central bank has a strong interest in ensuring transparent, well-functioning and liquid secondary markets for the ABS it holds.

Fostering SME securitisation also has the potential to address fragmentation in SME credit markets, an issue especially relevant for Europe. Originators can access capital markets elsewhere than in their own jurisdiction, removing constraints of market segregation. The benefits of such market access can theoretically be passed on to small borrowers at the time of origination. Public intervention through the provision of guarantees or credit enhancement on SME securitisation transactions further assists in the correction of imbalances of fragmented markets.

IV. Current standing of the securitisation market

A. State of the broader securitisation market

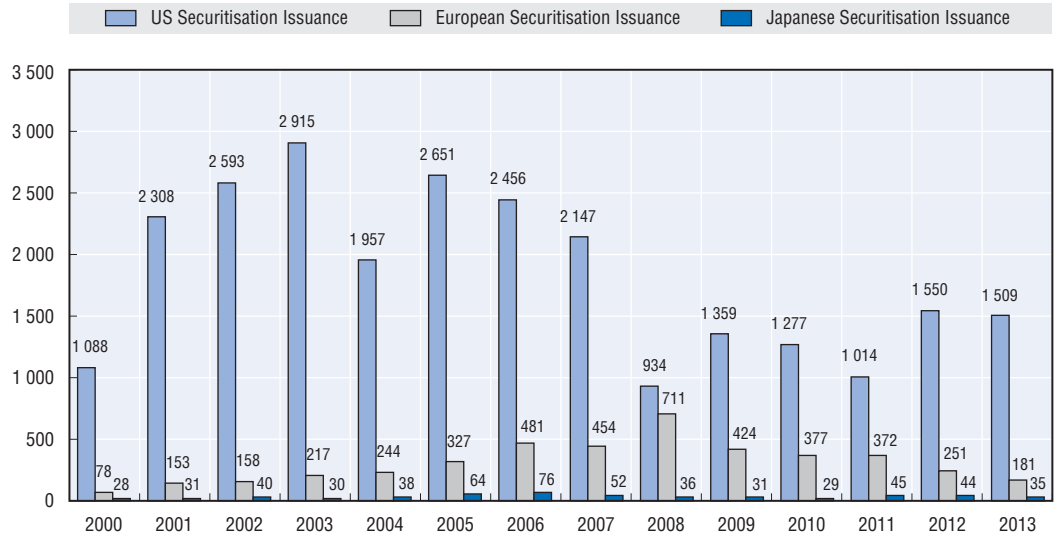
In the years leading up to 2008, the securitisation market thrived across major OECD economies, with securitisation issuance peaking at EUR 711 bn in Europe (2008), and standing at EUR 2 147 bn in the US (2007) and EUR 76 bn in Japan (2006) (Figures 7-11). In the US, new issuance was predominantly driven by Agency MBS, guaranteed by the Government Sponsored Entities (GSEs, Fannie Mae and Freddie Mac) (see also Figure 5 above). The absence of such GSEs in Europe partially explains the lower scale of the European market for securitisation. The support by public financial institutions played also a role in the development of securitisation markets elsewhere, in particular in China (Box 2).

Subprime RMBS and other highly complex and opaque securitisation structures played a prominent role in the build up to the crisis, stigmatising the entire securitisation market. Potentially inadequate regulation for some types of securitisation, complex structuring to "improve" risk diversification by issuers and misalignments of interest between originator and investor led to underpricing of risk and unexpected defaults. Such defaults, together with liquidity squeezes, undermined the securitisation model as a whole and led to a sharp post-crisis fall in securitisation overall. Failure by market participants to recognise the importance of inherent financial market instability and event risk, as was the possibility of a downturn in the US housing market, is thought by some to have been part of the problem, necessitating a more cautious approach toward securitising risk.

Full offloading of risks by the originator through the "originate-to-distribute" model promoted poor loan originating practices from the side of originators. As they had little

Figure 7. **Pre-and post-crisis securitisation issuance in the US vs. Europe and Japan**

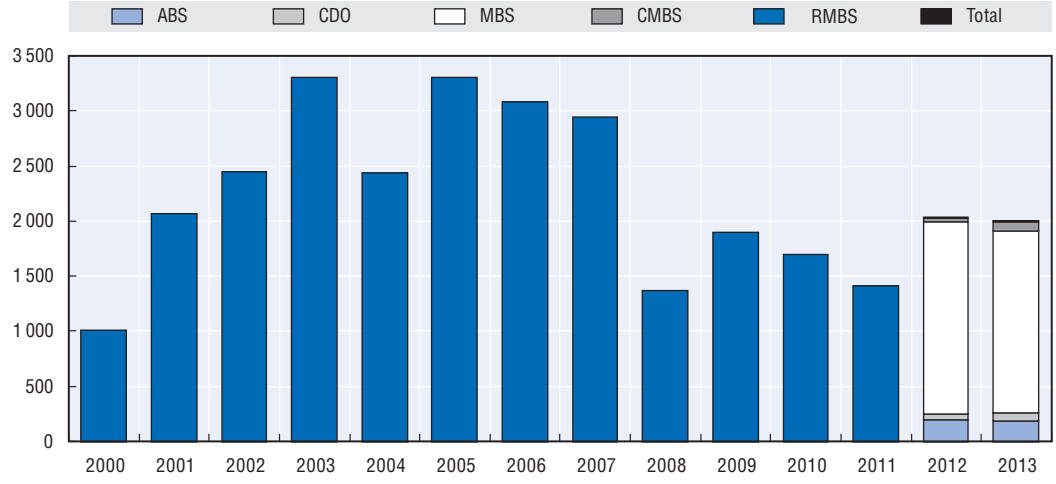
Annual issuance levels, 2000-13, in EUR billion



Note: Currency conversions of original data based on annual average exchange rates.
Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters.

Figure 8. **Securitisation issuance: United States**

Annual issuance levels, 2000-13, in USD billion

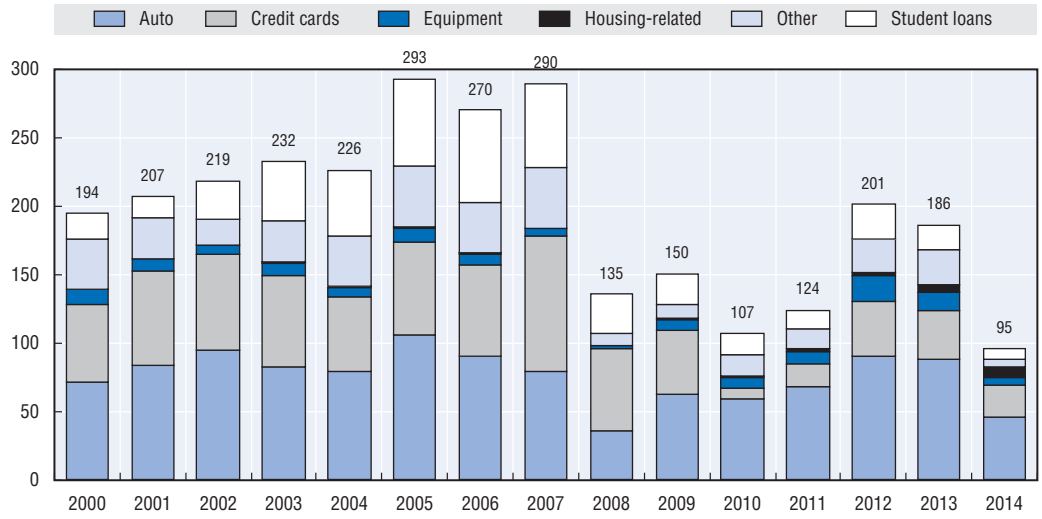


Note: Currency conversions of source data in EUR based on annual average USD exchange rates.
Source: SIFMA, AFME, Thomson Reuters.

"skin-in-the-game" their economic interest was driven by a short-sighted perspective on the loans they granted. Pools of poorly underwritten loans were securitised and purchased by over-leveraged investors who depended on short-term wholesale funding (ECB and BoE, 2014). The absence of proper due diligence, coupled with information asymmetries between issuers and investors, impeded proper credit risk assessment by issuers and investors. This has also contributed to an overreliance on credit rating agencies (CRAs) by investors who did not necessarily go through their own credit risk assessment exercise. The methodology and issuer-pay model of CRAs became subject to increased scrutiny by

Figure 9. **Breakdown of US ABS issuance**

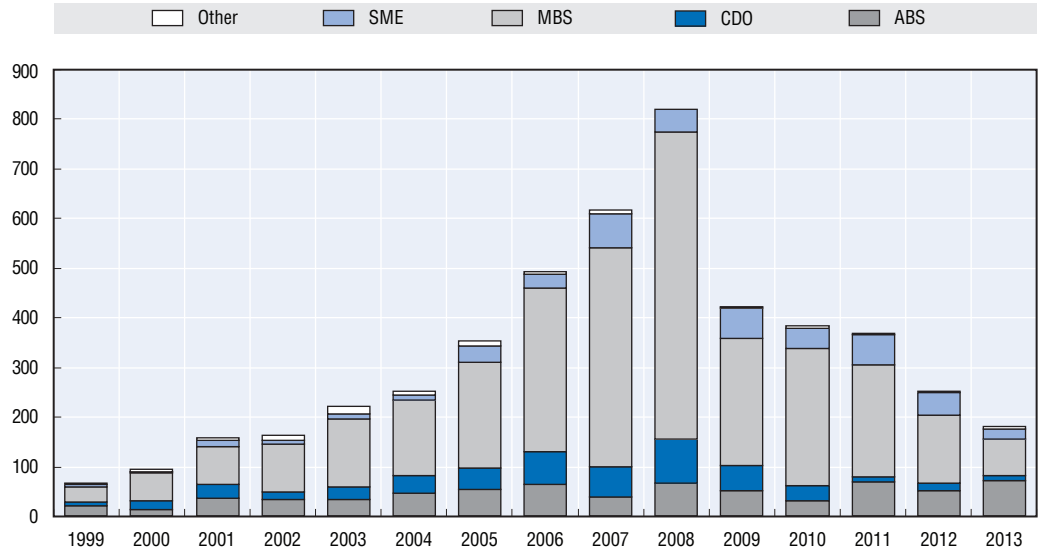
Annual issuance levels, 2000-13, in USD billion



Note: Other includes anything that does not fit into any of the remaining categories, including those with mixed asset categories (e.g., tax liens, trade receivables, boat loans, aircraft, etc).
Source: Thomson Reuters, SIFMA.

Figure 10. **Securitisation issuance: Europe**

Annual issuance levels, 2000-13, in EUR bn



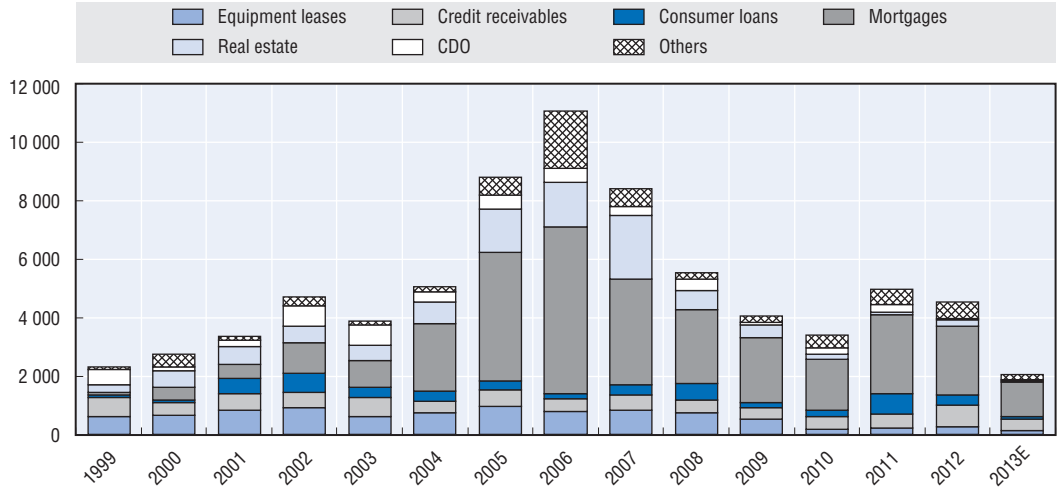
Note: "ABS" includes Auto, Consumer, Credit Cards, Leases, and other ABS; "MBS" includes CMBS, RMBS, and Mixed; "Other" includes Whole Business Securitisations (WBS) and other securitisations. Currency conversions of source data in USD based on annual average EUR exchange rates.
Source: AFME/SIFMA Members, Bloomberg, Dealogic, Thomson Reuters.

market participants and the regulators, with their incentives and methodology being put into question. Post-crisis reforms in CRA regulation and CRA's own changes in ratings methodologies of structured products have tried to address these shortcomings.

The quasi extinction of structured investment vehicles (SIVs) was another reason for the decline in issuance levels. A major part of securitisation (up to 75% in the run-up

Figure 11. **Securitisation issuance: Japan**

Annual issuance levels, 2000-13, in yen bn



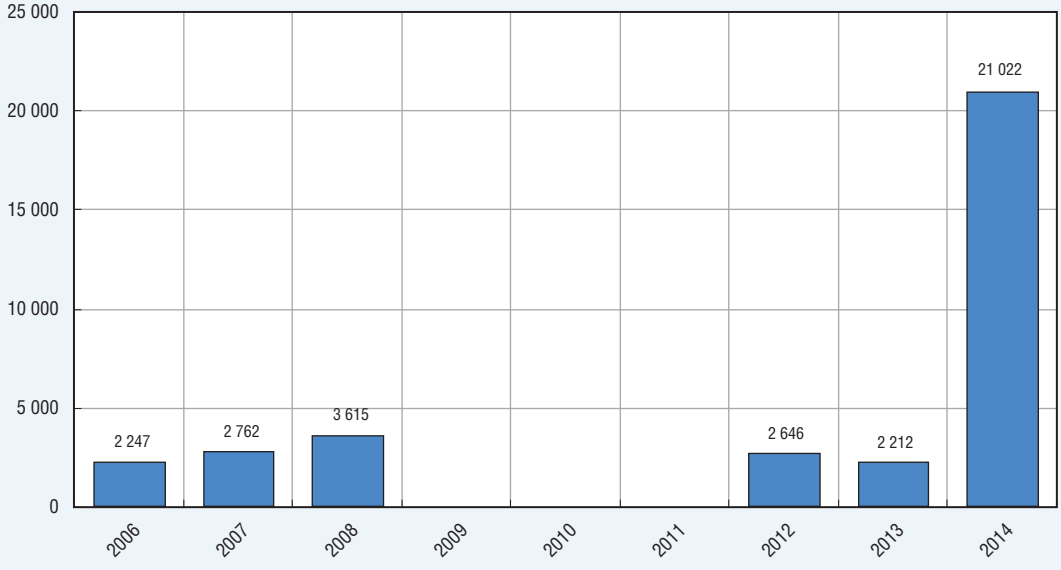
Note: Estimates for the year 2013 cover January-July issuance.
Source: Thomson Reuters, Deutsche Securities Inc.

Box 2. **Securitisation in China**

The Chinese securitisation market is a recent, though steadily developing market, marked by restrictions in issuance levels (prescribed by quota), limited non-bank participation, and the absence of a dedicated legal framework.

Figure 12. **Issuance of asset-backed and mortgage-backed securities in China**

Annual issuance, 2006-14, in USD million



Source: Thomson Reuters.

China officially established a securitisation market in 2005 with the launch of a pilot scheme allowing China Development Bank and China Construction Bank to securitise loan assets and mortgages, respectively. The scheme was then expanded to other Chinese commercial banks, investment banks and securities firms

Box 2. **Securitisation in China** *(cont.)*

(quota of RMB 15 billion) but was scaled down and ultimately halted in the wake of the 2008 financial crisis. A new pilot programme was introduced in 2012, allowing securitisation issuance up to RMB 50 billion or the equivalent of less than 1% of the banking sector's total balance (ASIFMA, 2013). The scheme allowed inter alia the securitisation of SME loans. In 2013, a third round was initiated with a quota of RMB 300 billion.

Besides quota restrictions, a number of structural and regulatory hurdles seem to have impeded growth of the securitisation market in China. Currently the market is structurally fragmented by the existence of different frameworks governed by different regulatory authorities and applying different guidelines with respect to eligible originators, underlying assets, and the investor base (Table 3). The majority of issuances until recently were limited to the interbank bond market. This, coupled with a limited scope of eligible investors, resulted in a majority of investors being the banks themselves (ca. 80% of issues are held by banks, according to Moody's). This was recently changed by a new regulation[1] and, in June 2014, Ping An Bank issued the first ABS to be listed on Shanghai Stock Exchanges,[2] boosting liquidity and widening the investor base. Risk assessment proves to be a challenge given weak data quality and lack of historical performance data. Competitiveness of securitised products is another issue, given attractive yields offered by shadow banking products. Tightening of shadow banking regulation could potentially correct arbitrage opportunities for investors, incentivising them to invest in ABS.

Table 3. **Securitisation structures in China**

Regulator	CBRC, PBOC	CSRC	NAFMII
Approval timeframe	2-3 months	2-3 months	1-2 months
Guideline	Pilot Projects for Securitisation of Credit Assets Procedures issued by PBOC, CBRC and MOF (2012)	Administration of Securities Companies' Asset Securitisation Businesses issued by CSRC (2013)	Guidelines on ABN for Non-financial Enterprises on the Interbank Bond Market issued by NAFMII
Approval mechanism	Case by case basis	Case by case basis	Filling mechanism
Issuer (SPV)	Trust, broker's asset managm.plan	Broker's asset management plan	Corporate
Underwriter	Brokers and Banks	Brokers and Banks	Brokers and Banks
Trading place	Interbank market/exchange	Exchange and OTC markets	Interbank market
Underlying assets	Credit assets of banks and financial Institutions including **SME loans**, auto loans, mortgage loans, infrastructure loans, agriculture loans, etc.	Physical corporate asset including Highway toll rights, future flow of public utilities, financing leasing receivables, etc.	Future cash flow of public utilities, BOT projects, etc.
On/Off balance sheet	Off balance sheet (Trust SPV)	Off balance sheet (Discretionary asset management SPV)	On balance sheet
Outright sale & bankruptcy remoteness of underlying assets	Yes	Yes	No
Credit enhancement	Mainly internal credit enhancement, few external credit enhancements due to cost concerns	Mainly external credit enhancement, providing funds or corporate guarantee services for corporations	n.a.
Subscriber of the inferior tranche	ABS originator – banks should hold subordinate class with amount of no less than 5% of the inferior tranche and hold no less than 5% of total ABS size. The remaining proportion of inferior tranche can be subscribed via private placement.	Fully subscribed by ABS originator	n.a.
Rating and audit requirement	Double rating mechanism – need 2 rating agencies to grand credit rating upon public issue	Third party rating agency to provide credit rating – an annual rating report to be released during the lifetime of the SPV	Double rating mechanism – need two rating agencies to grant credit rating upon public issue

Source: Adapted from BNP (2014).

Box 2. **Securitisation in China** *(cont.)*

The development of a formal securitisation market open to a broader range of market participants and governed by a clear and consistent regulatory framework could provide significant benefits to the Chinese economy. It would allow for the decentralisation of risks in the banking system alleviating concerns of excessively levered banks overly reliant on deposits. This in turn would allow local municipalities to divert from over reliance on bank lending for the funding of their infrastructure projects (ASIFMA, 2013).

Given the risks securitisation can pose, the development of the Chinese securitisation market needs to be carefully designed and supervised in order to avoid past pitfalls, like overcomplicated structures, high leverage, flawed risk-pricing mechanisms, and overreliance on external credit ratings. Despite Chinese securitisation being simpler in terms of structure (perhaps also due to undeveloped derivatives markets), the great interconnectedness of such products with banks could undermine broader stability. In addition, legal enforceability and bankruptcy-remoteness remain unclear given the absence of comprehensive rules on the transfer of asset title for various underlying asset types under the relevant framework (Fitch, 2013b). It will be crucial to develop an asset securitisation product design, issue and trade approach that fits into Chinese financial markets, while improving product innovation and risk control capability of relevant financial entities.

The growth potential for the Chinese securitisation market is enormous: total securitisation issuance since the introduction of the asset class accounts for only 0.1% of total banking assets of about RMB 166 trillion (as of July 2014, according to data from Thomson Reuters Datastream). The latest quota of RMB 425 billion is about 0.3% of total banking assets, a startling difference against the equivalent ratio in the United States, where outstanding ABS securitisation stands at roughly over 60% (as of Q2 2014). Quotas would have to be lifted for a meaningful risk transfer for the banking system to take place. Nevertheless, a careful design and implementation of a regulatory framework, appropriate risk pricing and management will be of paramount importance for the establishment of a healthy and solid securitisation market in China.

1. The new regulations were jointly issued by the People's Bank of China, the China Banking Regulatory Commission, the China Securities Regulatory Commission, the China Insurance Regulatory Commission and the State Administration of Foreign Exchange (Circular No.127).
2. See the official website of The 2nd Annual China Securitization Forum 2014 at *www.opplandcorp.com*.

to the crisis according to some estimates) was done for risk transfer, offloading risky assets to SIVs. While such SIVs were the main "buyers" of securitised products they added another risk, a maturity mismatch between assets and liabilities in SPVs to the extent they were money market funded. Accounting rules allowed for securitisation-related risk exposure to be kept out of sight by offloading them to SIVs, thus allowing for the non-disclosure of associated risks to investors and regulators (IMF, 2009).

In the aftermath of the financial crisis, resurgence has been swift in the US, with the market rebounding thanks to investors' search for yield, low default rates on issuances (besides subprime RMBS) and a more accommodating approach by the US authorities compared to their European counterparts. 2013 issuance stood at EUR 1 509 bn, almost two-thirds of the pre-crisis level. The GSEs helped the revival by supporting a liquid and deep market.

Unlike the US, the securitisation market in Europe nearly shut post crisis and did not enjoy a similar recovery, with EUR 181 bn of issuance in 2013, just one-fourth of the pre-crisis peak, mostly concerning straightforward vanilla ABS issuances. Despite its resilient performance throughout the crisis, European securitisation failed to recover to its pre-crisis levels. Investors' risk aversion remained high in the years following the crisis, with the perceived stigma still lingering on the asset class.

The pitfalls of the past have been recognised in policy responses to the crisis and have been addressed in recent regulations that aim to restore investor confidence (see Section V). Recently implemented regulations require risk retention or "skin in the game" from the issuers' side, removing misalignments of interest and information asymmetries between originators and investors. Such information asymmetries are also addressed through enhanced due diligence requirements, increased transparency and promotion of greater availability of information on loan-level data, asset performance, documentation and other deal structure-related information.

Despite post-crisis efforts to reduce the danger of excesses of the past and rectify potentially damaging aspects of the instrument, the securitisation market is still suffering from the labels attached to it at the height of the 2007-08 subprime crisis. Issuance levels have yet to rebound to pre-crisis levels, particularly so in Europe. A number of structural roadblocks prevent issuers and investors from reviving the market, varying from regulatory treatment and public intervention, to economic viability, transparency and standardisation (see Sections V, VI, and VII).

B. Overview of the SME securitisation market

SME securitisation in the US has been relatively underdeveloped compared to other securitisation classes, given that the market has historically been focused more on the real estate and consumer market segments. Following the downturn of the economy in the aftermath of the crisis, a lot of importance was placed on small businesses as an engine for economic recovery. Alternative financing vehicles such as the SME securitised products gained prominence.

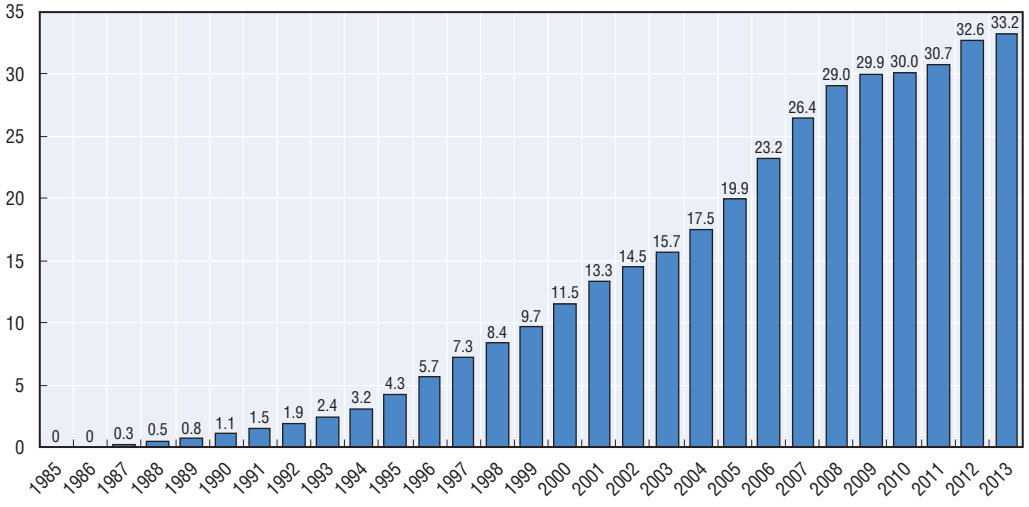
SBA loans, partially guaranteed by the US Small Business Administration, have a leading role in the SME securitisation space in the United States. The SME loans securitisation programme launched by the Small Business Administration in 1985 has long preceded SME securitisation programmes in Europe. SBA volume in recent years has reached record levels in terms of the total amount lent and number of participants involved (Figure 13). Other SME securitisation is considered to be in its early stages by the market, but is expected to further expand at a growing pace thanks to the participation of more non-depository lenders into this space.

In Europe, the share of SME securitisation in total securitisation issuance is small (Figure 14). The total volume of SME transactions peaked in 2007 at EUR 77.3 bn, failing to revert to such levels ever since (Figure 15). Most of the transactions executed prior to the crisis where placed with investors, domestic or otherwise. Spain and Germany were the two most active markets (see Figures 16 and 17). A significant amount of transactions was unfunded, dominated by KfW's programmes in Germany which accounted for the majority of synthetic SME securitisations prior to the crisis.

From 2008 onwards, the volume, type of placement and geography of SME securitisation changed significantly. Only a small minority of transactions was actually placed with investors (see Figure 24, Section VI.A.5 below) with the majority of deals being retained for repo funding with the ECB. Italy and peripheral countries such as Greece and Portugal became more active, although the volumes correspond to a very small number of underlying deals (BofA Merrill Lynch, 2014). Synthetic securitisation nearly disappeared, as the main motivation for structuring SME transactions was funding rather than capital enhancement needs.

Figure 13. **Small business loan administration ABS outstanding**

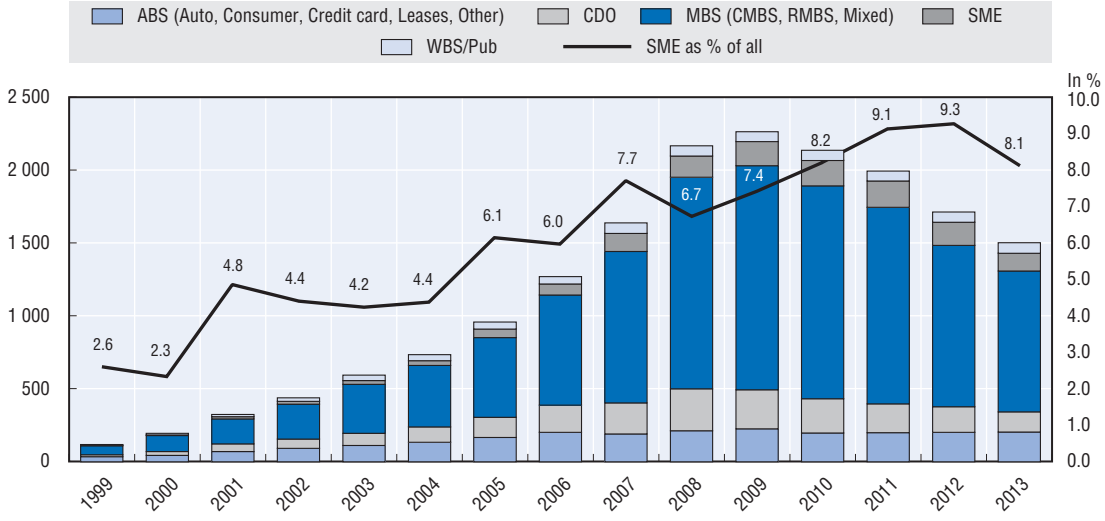
Annually, 1985-2013, in USD bn



Source: SIFMA, Bloomberg, Dealogic, Thomson Reuters.

Figure 14. **European securitisation outstanding by collateral**

In EUR billion (l.h.s.) and SME securitisation as a % of total securitisation (r.h.s.)

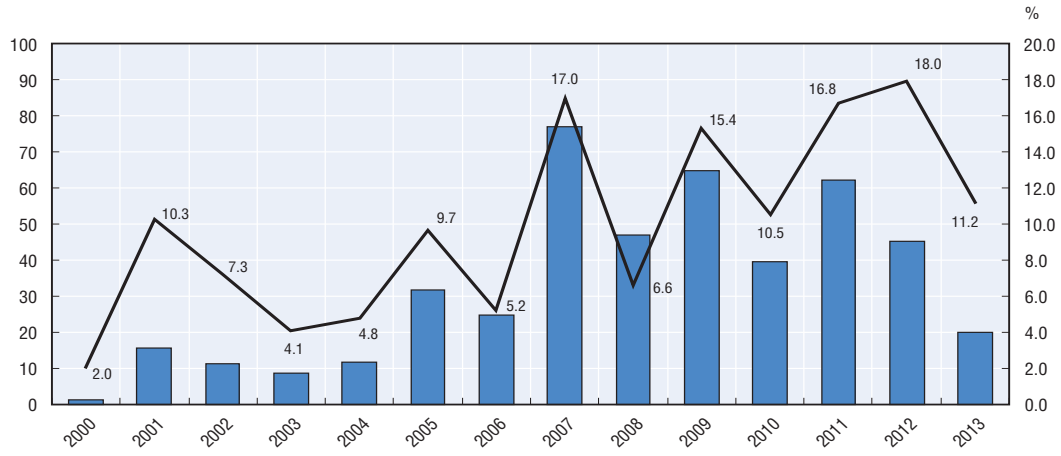


Note: "ABS" includes Auto, Consumer, Credit Cards, Leases, and other ABS; "MBS" includes CMBS, RMBS, and Mixed; "Other" includes Whole Business Securitisations (WBS), public finance initiatives, and other securitisations.
Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters.

Issuance in Q1 2014 was weak, with EUR 1.6bn of SME issuance across Europe, 60% lower than the previous quarter and a further 83% drop on a year-on-year basis. The market for SME structured transactions remains fragile, but optimism for its revival is growing, driven by policymakers' goodwill and statements in favour of the rehabilitation of the entire securitisation industry. For this to happen, a number of headwinds, discussed below, will need to change direction assisted by the regulator and policymakers, but also market participants overall. That said, important safeguards need to be put in place in the structured finance market to prevent the reoccurrence of pitfalls of the past.

Figure 15. **European SME securitisation issuance**

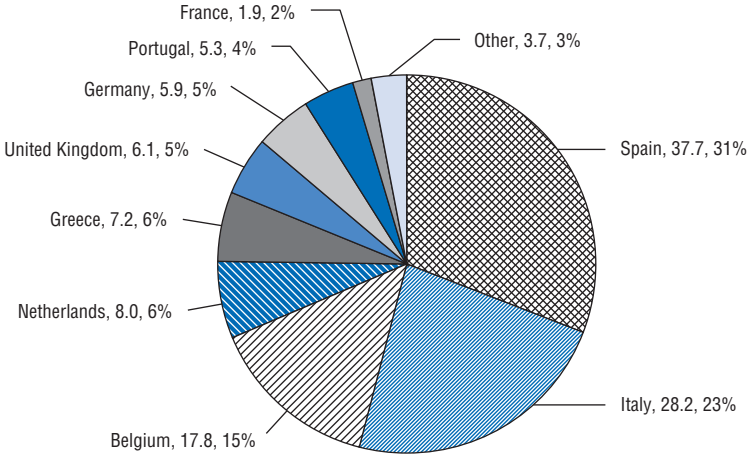
Annual issuance, 2000-13, in EUR billion (l.h.s.) and as a % of total issuance (r.h.s.)



Source: SIFMA, Bloomberg, Dealogic, Thomson Reuters, prospectus filings.

Figure 16. **European SME securitisation outstanding by country**

Outstanding SME securitisation in selected EU countries, in EUR bn and in % of total, as of 2013



Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters, prospectus filings, Fitch Ratings, Moody's, S&P.

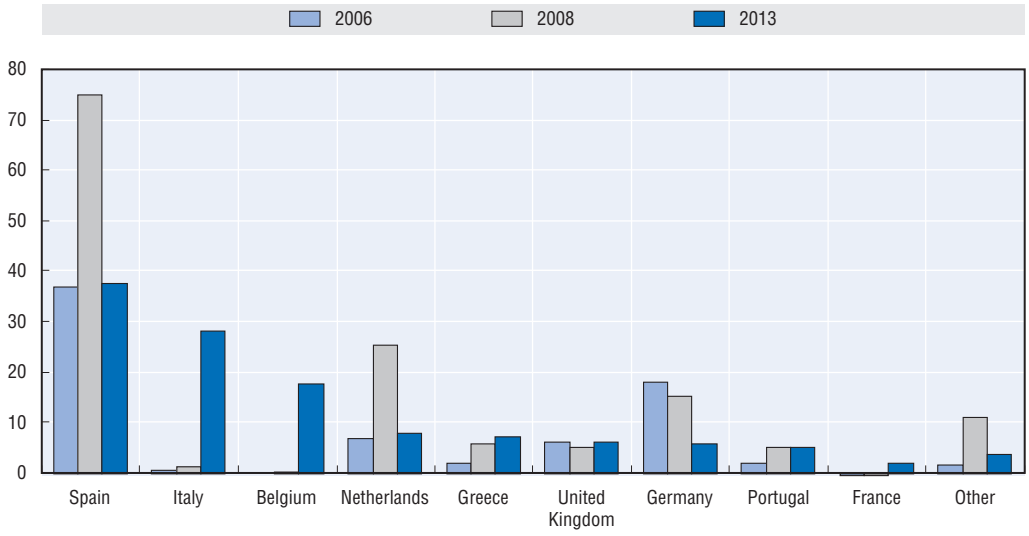
C. Current state of the covered bond market

Compared to securitisation, covered bonds have emerged from the crisis relatively unscathed (Figure 18), and remain one of the key components of capital markets, providing cost-effective and diversified funding to issuers and a safer alternative to senior unsecured securities for investors. The attractiveness of the instrument, particularly in Europe (Figure 19), lies to a certain extent in its potential to enable the channelling of funds to the real economy in an efficient and simple way, away from complex originate-to-distribute models, thus ensuring financial stability. In Europe, favourable eligibility treatment in the context of ECB's (and other central banks') operations has further encouraged issuance levels.

The resilience of this asset class during the recent years of market turmoil is mainly attributed to its key "safety" features. The most important such features are the strict

Figure 17. **European SME securitisation in selected countries**

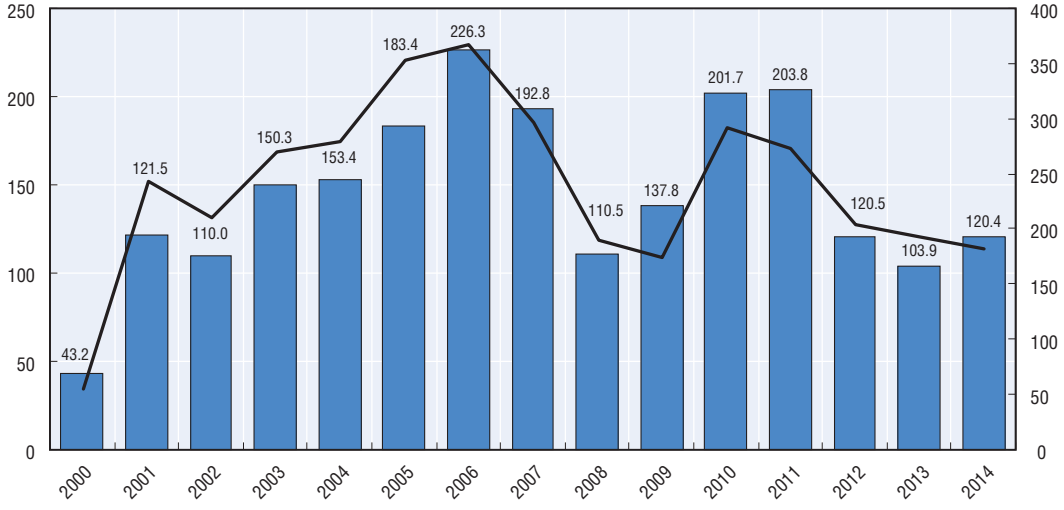
Outstanding SME securitisation in selected EU countries, in EUR bn



Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters, prospectus filings.

Figure 18. **Selected European covered bond issuance**

Annual issuance levels, 2000-14; in billions of euros (l.h.s.) and number of issues (r.h.s.)

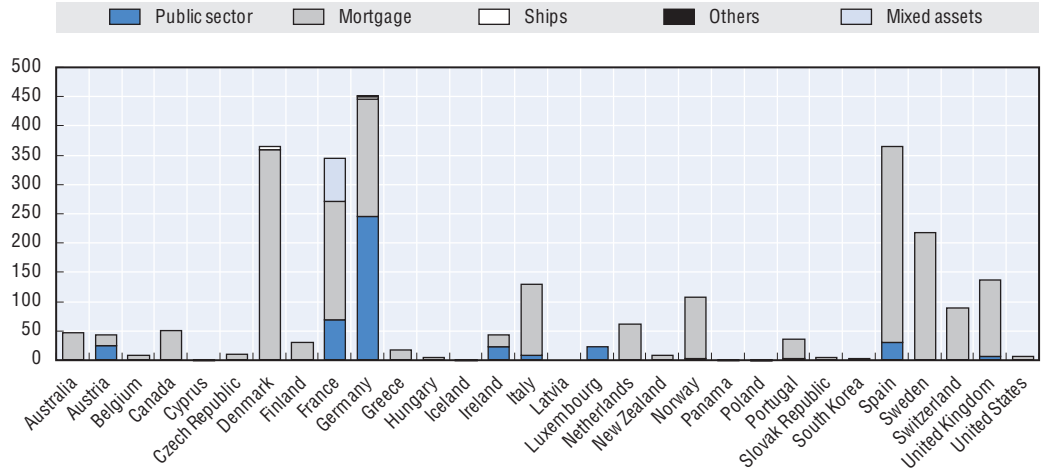


Note: Includes *Cedulas Hipotecarias*, *Lettres de gage publiques*, *Obligations Foncieres*, *Pfandbriefe*, issues in Italy, Ireland, the UK and other European covered bond issuance. 2014 figure as of 8/12/2014.
Source: Thomson Reuters.

legal and supervisory framework and the double recourse that investors enjoy, which is the main differentiating factor between securitisation and covered bond issuance. The double protection against default (recourse to the issuer and to the cover pool) allows such instruments to be rated higher than the issuer's senior unsecured debt. For the same reason, covered bonds enjoy favourable regulatory treatment (Solvency II, Basel III capital and liquidity requirements, bank bail-ins/resolutions), which constitutes the main attractive characteristic of the instrument. Recourse to the originator generally improves the liquidity of the instrument, attracting wide investor and issuer interest.

Figure 19. **Covered bonds outstanding in Europe**

Outstanding levels as reported by the ECBC, 2013, converted in billions of euros



Source: ECBC – European Covered Bond Council (2013), Thomson Reuters.

Despite their numerous benefits and attractive characteristics, covered bonds are seen as a complement, rather than substitute to securitisation and other capital market instruments. This is mainly due to the fact that they stay on issuing bank's balance sheet and do not provide the possibility of risk transfer and regulatory relief offered by securitisation. Asset encumbrance concerns further restrict their use in the current deleveraging environment, and limit their role as substitute for securitisation. That said, the low interest rate environment is pushing institutional investors towards alternative instruments and such quest for yield would be expected to promote the growth of covered bond issuance, especially given the instrument's relatively favourable risk characteristics.

V. The impact of regulation on securitisation markets

A. Ongoing regulatory workstreams affecting securitisation issuance

Although there is a growing recognition by policy makers of the economic benefits of securitisation, the relevant regulatory framework is seen by many observers as crucial for a revival of the industry. Post-crisis regulatory response designed to enhance the system's overall resilience was necessary so as to impede the resurgence of complex and opaque structures that contributed to the financial crisis. Nevertheless, the proposed regulatory treatment, designed to address the flaws of the past, is perceived as unduly restrictive by many market participants. This is the case particularly in Europe, where it has been highlighted as one of the most (if not the most) important impediments for the market's re-launch.

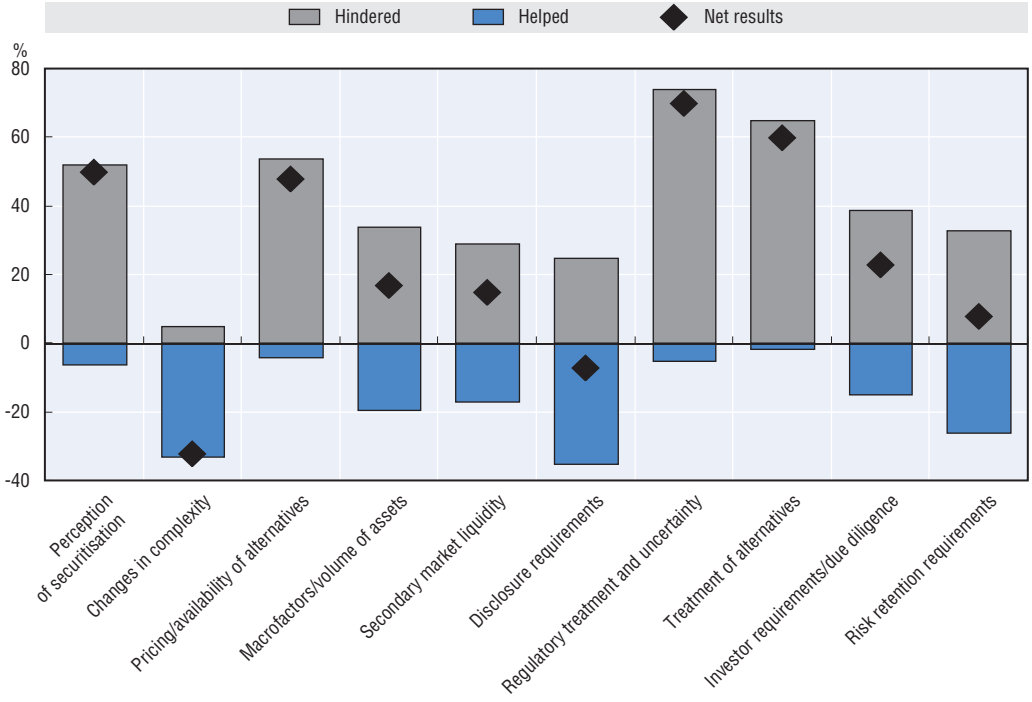
The main regulatory initiatives that have a bearing on securitisation address pitfalls brought to the fore during the crisis. Examples of such flaws addressed by regulation are the misalignment of interests between originators and investors, the misalignment of regulatory capital with corresponding credit risk, the overreliance on credit rating agencies and the lack of due diligence by investors, as well as the quality of certain products subject to securitisation techniques.

A number of ongoing regulatory reforms intended to address these flaws and make the financial sector safer may run counter to fostering securitisation by dis-incentivising originators and investors. The final framework of the Basel Committee on Banking Supervision

(BCBS) for securitisation, the European Insurance and Occupational Pension Authority's (EIOPA's) proposal on Solvency II treatment of the instrument, and the implementation of the Liquidity Coverage Ratio are perhaps the most prominent regulatory workstreams with a possible negative bearing on securitisation. While some alleviation has been achieved compared to initial proposals, many market participants deem these regulations still as unduly onerous on both banks and investors. The regulatory environment relative to securitisation instruments is perceived as challenging (Figure 20) and many investors prefer to abstain from participating in that market altogether. Many investors find it difficult to operate under an enduring uncertainty arising from the expected revisions in such regulations, and see it as hampering the re-launch of the market.

Figure 20. **Factors impacting securitisation markets since 2009**

Market participants' responses



Note: Regulatory treatment category includes capital and liquidity treatment. Diamond-shaped markers reflect net results.
Source: Responses to the BCBS – IOSCO Task Force (BCBS and IOSCO, 2014).

1. *Basel securitisation framework: regulatory capital requirements and risk weights*

BCBS published the final version of the Basel Securitisation Framework on 11 December 2014 (BCBS, 2014), on the back of its second proposal issued a year earlier (BCBS, 2013a). This final iteration, to come into effect in January 2018, revises the capital charge treatment for securitisation, replaces the complex hierarchies for determining risk weighting with a simpler single hierarchy that reduces "mechanistic reliance" on external ratings, while addressing issues around the lack of risk sensitivity in the pre-crisis era. The final framework allows for some easing in the capital charge treatment for securitisation when compared to the original proposals; however, there are still significant increases in the risk weightings compared to the current framework, with the risk weight floor raised from 7% to 15% (Table 4). Earlier proposals for the new framework have been considered not

Table 4. **External ratings-based approach senior tranche risk weights**

Final framework vs. previous proposals and current framework
Percentage

	External ratings-based approach (ERBA)				Ratings-based approach (RBA)			
	Final framework (BCBS, 2014)		Proposal Dec. 2013 (BCBS, 2013a)		Revised RBA proposal (BCBS, 2012)		Current framework	
	1-year maturity	5-year maturity	1-year maturity	5-year maturity	1-year maturity	5-year maturity	1-year maturity	5-year maturity
AAA	**15**	**20**	*15*	*25*	*20*	*58*	7	7
AA+	**15**	**30**	*15*	*35*	*32*	*75*	8	8
AA	**25**	**40**	*25*	*50*	*51*	*97*	8	8
AA-	**30**	**45**	*30*	*55*	*61*	*110*	8	8
A+	**40**	**50**	*40*	*65*	*71*	*124*	10	10
A	**50**	**65**	*50*	*75*	*81*	*141*	12	12
A-	**60**	**70**	*60*	*90*	*94*	*162*	20	20
BBB+	**75**	**90**	*75*	*110*	*106*	*183*	35	35
BBB	**90**	**105**	*90*	*130*	*118*	*203*	60	60
BBB-	**120**	**140**	*120*	*170*	*136*	*235*	100	100
BB+	**140**	**160**	*140*	*200*	*153*	*265*	250	250
BB	**160**	**180**	*160*	*230*	*170*	*294*	425	425
BB-	**200**	**225**	*200*	*290*	*210*	*363*	650	650
B+	**250**	**280**	*250*	*360*	*262*	*442*	1 250	1 250
B	**310**	**340**	*310*	*420*	*321*	*485*	1 250	1 250
B-	**380**	**420**	*380*	*440*	*389*	*502*	1 250	1 250
CCC [+/-]	**460**	**505**	*460*	*530*	*472*	*568*	1 250	1 250
Below CCC-	**1 250**	**1 250**	*1 250*	*1 250*	*1 250*	*1 250*	1 250	1 250

Source: BCBS – Basel Committee on Banking Supervision (2012, 2013a, 2014).

supportive enough for securitisation by market participants, and this may still be the case for the final framework, as the capital that banks are required to hold is a multiple of what they are required to hold today. This is the case even for high quality securitisations as of the time of release of the final report, although this is expected to change if proposals for the definition of safer securitisation into the Basel framework, released on the same day (11 December; BCBS and IOSCO, 2014) are incorporated.

A simplified hierarchy of approaches for the calculation of risk weights has been set out: i) the internal ratings-based approach (IRBA) will apply to banks that have supervisory approval and provided they have sufficient data on the underlying pool, or ii) the external ratings-based approach (ERBA) based on an external credit rating (rating agency) or where a rating can be inferred on the exposure, provided that the jurisdiction permits ratings to be used.[9] If the above two approaches cannot be used, the standardised approach is applicable, which derives from the simplified supervisory formula approach. In the event that none of the above is applicable, a 1 250% risk weight is used, while re-securitisation structures can only apply the standardised approach.

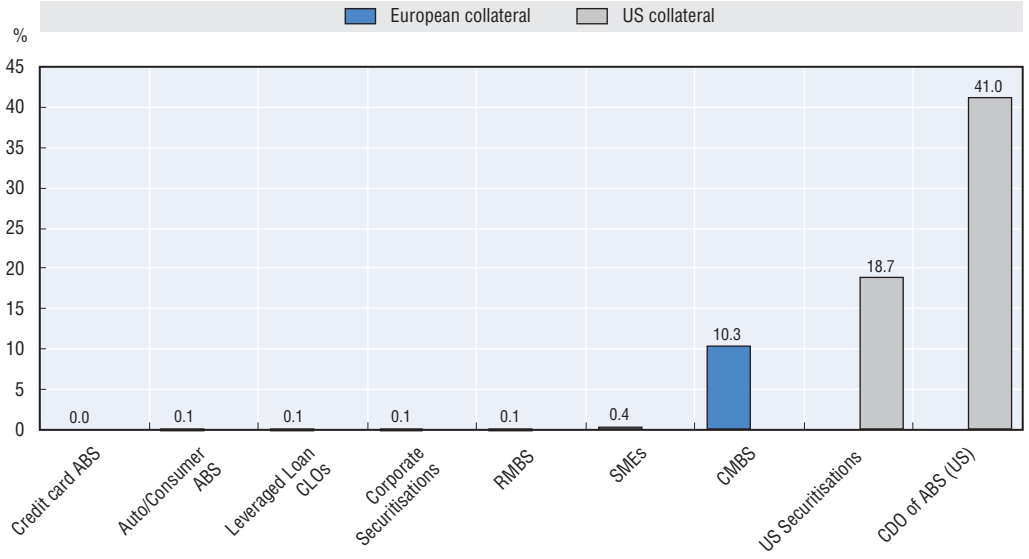
The risk weights applied under the ERBA are reduced compared to the previous proposals, with the incremental improvement being less material as one moves down the rating scale (see Table 4). The floor risk weight is lowered to 15% from 20% in the original revised ratings-based approach (RBA) proposal (2012). The risk weight for an AAA-rated senior tranche with a 5-year maturity is finally 20% vs. 58% in the December 2012 (revised RBA) and 25% in the December 2013 (ERBA) proposal, but considerably higher than the 7% currently applying under the RBA.

The revised framework seeks to reduce the cliff effects of Basel 2.5, where securitisations were fully deductible from capital when they fell below a certain credit level, thus reducing the pressure for unnecessary fire sales of such exposures in times of distress. Risk weights further down the capital structure and for longer maturities are reduced compared to the previous proposals. The "look through" approach applying to senior bonds allows senior exposures to receive a maximum risk weight that is capped at a value as if the underlying assets where directly held. **This allows for senior ABS to have actual risk weights that are lower than the 15% floor.**

Despite a decrease in the risk weighting for securitisation exposures under Basel's revised proposal, the corresponding capital requirements are still sharply increased compared to the current framework. Such risk weightings are considered to be unduly conservative by bank and non-bank investors relative to the actual performance of the asset class. This is particularly true in the European space, as evidenced by the default rates of transactions compared to complex US structures (Figure 21).

Figure 21. **European securitisation defaults**

Percentage, mid-2007 to 2013



Source: Standard & Poor's.

From an investor standpoint, a rise in capital costs related to securitised assets may translate into lower returns and limited appetite for this asset class. Increased capital requirements, particularly with respect to high-quality assets, are highly likely to discourage investor participation in securitisation transactions. Further analysis (as envisaged in future work by the CMF) will be required, however, to see whether this would also increase SME funding gaps in cases where such gaps may exist.[10]

In addition, the Basel Committee's trading book review may also result in increased capital requirements for banks acting as market makers, with a possible negative impact on secondary market liquidity for securitised products.[11] Market participants indicate a potential risk of shifting part of such activities to unregulated specialised funds.

Further adjustments to the risk weights can be expected for structures that will satisfy the BCBS and IOSCO (2014) criteria of **simple, transparent and comparable**

securitisation, once these are set in stone (consultation period ends in February 2015) and before the framework comes into effect in 2018. Uncertainty around the regulatory capital relief banks will be achieving through securitisation might have deterred issuance by banks while the combined effect of recent regulatory amendments are thought to have a detrimental effect on investor appetite for such instruments.

2. EIOPA on Solvency II capital requirements and EC's Delegated Act on Solvency II

In December 2013, the European Insurance and Occupational Pension Authority (EIOPA) published a set of guidelines on Solvency II capital charges for insurers' securitisation holdings, under its Technical Report on Standard Formula Design and Calibration for certain long-term investments. The intention is to distinguish between high-quality securitisations and riskier ones, and apply different spread charges to the two categories instead of the blanket charge of Solvency II (7% for AAA-rated securitisations).

EIOPA suggests the creation of a *high-quality securitisation* (HQS) type, called Type A securitisations. This type consists of senior tranches of same-type assets of a lower risk profile that also fulfil a number of criteria. SME loans are included in the Type A eligible underlying assets, together with other qualifying assets (Table 5). Synthetic securitisations, CDOs, CLOs (except SME CLOs), CMBS and mixed pools of assets are not allowed under Type A and fall under the Type B category. For it to be eligible as Type A, a securitisation has to be backed by loans for which at least one payment has been made (with the exception of credit card ABS), effectively ruling out securitisations of newly originated loans. A number of the criteria used by EIOPA are similar to the ECB eligibility criteria regarding refinancing operations.

Table 5. **Solvency II securitisation spread charges for Type A and Type B securitisations**

Percentage

Credit Quality Step	0	1	2	3	4	5	6
Type A securitisations (selected senior RMBS, SME CLO, Auto ABS, consumer ABS, credit card ABS)	4.30	8.45	14.80	17-20.00	82.00	100.00	100.00
Type B securitisations (CLOs, CDOs, CMBS, WBS)	12.50	13.40	16.60	19.70	82.00	100.00	100.00

Note: Credit quality step 0 corresponds to AAA, 1 to AA+, AA, AA-, 3 to BBB+, BBB, BBB- and so on. Credit quality steps 4, 5 and 6 will generally not fall under Type A.
Source: EIOPA (2013), Deutsche Bank (2013).

The floor for capital charges incurred for holding Type A securitisations is lower than the previous standard for all securitisations, while charges for Type B ones are higher than what was proposed under the previous Solvency II proposal. Indicatively, AAA-rated senior RMBS, Auto ABS, Credit Card ABS and SME CLOs have a lower risk factor of 4.3%, while leveraged loan CLOs, CMBS, WBS and CDOs have an increased risk factor of 12.5% compared to the previously proposed 7%.

According to EIOPA's assessment, SME loans' credit risk charge stands between the charge for rated bonds and loans with credit quality steps 3 and 4 (the equivalent of Moody's Baa and Ba ratings). This assessment is based on historical SME loan default rates and the low diversification of SMEs' income sources in terms of business lines and geography relative to large enterprises. Price drops in distressed situations, are already incorporated in pricing (EIOPA, 2013).

EIOPA's proposal for the recognition of HQS in the context of regulation is undoubtedly a positive step forward. For insurance investors, however, the requirements of Solvency II

are still perceived as prohibitively high. This is the case even for high-quality structures, especially relative to the actual performance of securitisation transactions, particularly in Europe (Figure 20 above). The guidelines are being criticised by the industry for being calibrated on the experience of the collapse of the US subprime mortgage market as the benchmark, unduly punishing better performing structures (Global Risk Regulator, 2014). Despite being incrementally positive for SME CLOs, those capital charges are still considered as unduly onerous and discouraging for insurance investors' participation in that market.

The **European Commission's** delegated act on Solvency II (EC, 2014a) together with the relevant act on the Liquidity Coverage Requirement (EC, 2014b), published on 10 October 2014, are considered the **first legislative acts providing a differentiated approach to securitisation.** Securitised positions are eligible for a more proportionate and risk-sensitive prudential treatment for banks and insurance undertakings acting as investors, provided that they meet a set of eligibility criteria set out in the acts.

Similar to EIOPA, EC's Solvency II delegating act classifies securitisations into Type I (meeting the EC's definition of High Quality Securitisation) and Type II. SME ABS of a minimum BBB-rating are eligible as Type I, together with some RMBS, Auto ABS and Consumer ABS. A number of criteria (time tranching, reporting, etc.) define Type I eligible securitisations, with anything not meeting that definition falling into the Type II category.

European insurance companies investing in senior tranches of SME securitisation of at least BBB-rating that fulfil the requirements of Type I or High Quality Securitisation benefit henceforth from lower capital charges. Many observers consider the final rules of the European Commission as a positive step for the reviving of the securitisation market, and the inclusion of SME securitisation in eligible Type I responds to the industry's calls for lower capital requirements for insurance investors. At the same time, financial stability is not compromised as HQS remains at least twice as onerous as corporate bonds of the same rating (EC, 2014c).

However, market participants consider securitisation charges still as being onerous compared to other fixed income assets, and in particular compared to covered bonds (see Table 6) but also loan portfolios (3.0% capital charge per year of duration). Nevertheless, such relaxation of capital charges has undoubtedly removed some of the disincentives for insurance companies to invest in HQS.

Table 6. **European Commission's delegated act on Solvency II: Spread charges**

Per year of duration
Percentage

Credit Quality Step	0	1	2	3	4	5	6
Type I securitisations (selected senior RMBS, SME ABS, Auto ABS, consumer ABS of BBB-rating)	2.1	3.0	3.0	3.0	n.a.	n.a.	n.a.
Type II securitisations	12.5	13.4	16.6	19.7	82.0	100.0	100.0
Covered Bonds (up to 5yr duration)	0.7	0.9	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate Bonds (up to 5yr duration)	0.9	1.1	1.4	2.5	4.5	7.5	3.0

Note: Credit quality step 0 corresponds to AAA, 1 to AA+, AA, AA-, 3 to BBB+, BBB, BBB- and so on. Credit quality steps 4, 5 and 6 will not fall under Type I.
Source: European Commission (2014a, 2014c), Deutsche Bank (2014).

3. *EBA's high-quality liquid assets and the European Commission's LCR Delegated Act*

The European Banking Authority (EBA) published on 20 December 2013 a report on the definition of high-quality liquid assets (HQLA) and extremely HQLA, along with

operational requirements for liquid assets and an impact assessment of liquidity coverage requirements. The implementation of the liquidity coverage ratio (LCR) begins on 1 January 2015, when only 60% coverage is required. The ratio will be phased in gradually with a 10% annual incremental requirement to full LCR coverage of 100% by 2019. The purpose of the LCR is to ensure that banks have adequate stocks of unencumbered HQLA that can be converted into cash at little or no loss of value, in order for the bank to meet its liquidity needs in a 30-day liquidity stress scenario.

Contrary to EIOPA, **EBA does not make a distinction between high-quality and high risk securitisations**, but rather places most of asset-backed securities in the lowest bucket for liquidity (Level 2B). The proposals ease earlier conditions applying to securitisations qualifying for LCR, with AA- and above rated RMBS being included in the liquidity coverage ratio, vs. AA and above previously. No risk retention is required and there is no requirement for the underlying loans to have a maximum loan-to-value (LTV) ratio of 80% at issuance, as was the case in the previous proposal. A number of additional criteria are also outlined in the report (EBA, 2013a).

Senior tranches of RMBS securitisations in issuances of minimum size of EUR 100 million, backed by first lien mortgages, rated AA- and above and with a maximum maturity of 5 years are effectively the only ABS qualifying for the HQLA definition. The revised EBA proposal allows for senior peripheral RMBS to be eligible, given the drop of the risk retention requirement and the adjustment in the minimum rating. Nevertheless, broader ABS backed by equities, bank-issued government guaranteed bonds or other credit claims are not considered liquid by EBA.

Under the European Commission's delegated act on LCR (EC, 2014b), HQLA eligibility is extended to asset classes beyond RMBS with a positive effect on the attractiveness of securitisations for European banks, even if the incremental differences are viewed as marginal by some market practitioners.

Senior tranches of SME securitisations (including leasing) rated AA- and above (applying a second best rating rule) are now eligible as Level 2B assets, applying a 35% haircut to the current market value. Level 2B assets cannot comprise more than 15% of total HQLA stock and need to be backed by a pool of homogeneous assets. In the case of SME ABS, at least 80% of the borrowers need to be SMEs at the time of issuance, while none of the borrowers can be a credit institution or investment firm.

EBA assessed the impact of the LCR on SME lending and found no evidence that the introduction of the LCR would result in a decline in SME lending. EBA also concluded that, based on academic research, a decrease in SME lending does not translate into an improvement in the LCR.

Shortly prior to this report, EBA issued another report on the consistency of risk-weighted assets across residential mortgage and SME loans (EBA, 2013d). The report identifies country location, default rates, model parameters and calibration as drivers of risk-weighted diversity. The ultimate aim of the broader exercise is the harmonisation of different approaches to the calculation of risk weights and the convergence in supervisory and banks' practices around risk weighting.

The treatment of securitisation continues to be challenged by the industry. The new proposal is being criticised by market participants for being calibrated based on the recent crisis experience, despite the fact that liquidity is crisis-specific. According to that view, it is doubtful whether liquidity could be modelled based on past experience. EC's delegated

acts were welcomed by market participants as positive, nevertheless a significant portion of senior European ABS with similar liquidity characteristics to comparable asset classes are thought to be disenfranchised by the detail (Deutsche Bank, 2014).

The gap between the treatment of covered bonds and securitisation regarding the LCR is one of the instances of an unlevel playing field between the two asset classes. Covered bond issued in the EEA rated ECAI 1[12] of minimum size of EUR 500 million are considered to be extremely HQLA and ECAI 1 rated covered bonds of minimum size of EUR 250 million are considered to be HQLA subject to additional conditions relating to regulations governing the structure. Some of those thresholds and conditions have been lowered through the delegated act of the EC, with additional classes also introduced (such as unrated and foreign covered bonds). Such differential treatment of instruments might unduly favour covered bonds over ABS, with covered bonds benefiting from extensive LCR recognition and more favourable treatment in terms of haircuts and rating thresholds.

4. EBA's final draft on securitisation retention rules

Following a consultation paper published in May 2013, EBA came out with a final draft of the Technical Standards on Securitisation Retention Rules (EBA, 2013b). Under the Capital Requirements Regulation (CRR) a minimum of 5% risk retention of securitised exposure is required by the sponsor. A fifth way of risk retention was introduced in this draft, besides the four acceptable ways of Article 122a of CRD III (horizontal slice, vertical slice, randomly selected exposure, and retention of originator interest) requiring a minimum 5% retention of all assets that go into a securitisation. Sponsors can now retain a first loss exposure of no less than 5% of every securitised exposure in the securitisation. The legal definition of a sponsor was expanded to include investment firms and therefore CLO managers, while third party risk retention is not allowed. These rules are applicable from 1 January 2014 to CLOs that were issued after 1 January 2011 (including CLOs 2.0 and excluding pre-crisis deals). They will extend to all CLOs where new underlying exposures are added or substituted after the end of 2014. Risk retention will continue to apply even after the reinvestment period for these deals ends.

The clear purpose of the ruling is for sponsors to keep "skin in the game", with numerous benefits. The misalignment of interests between originators and investors, which previously led to excessive originate-to-distribute models, is being effectively addressed. More disciplined origination practices are also promoted. It is expected by many observers, however, that the rules will be harder to meet by small managers with limited transactions and smaller balance sheets, for whom funding of retained tranches might be scarce. Barriers to entry for smaller CLO managers (and other small non-bank issuers) are therefore expected to be put up as a consequence of this ruling. It has been argued by market participants though that, in the context of simple and transparent SME securitisation, the risk of reputational damage for small regional/savings banks could and would play the same role as the retention rate requirement, without overly limiting those banks that have excellent SME origination capabilities but limited securitisation arrangement capacity (Altenburg, 2014).

5. EBA's final guidelines on Significant Credit Risk Transfer for securitisation transactions

Articles 242 and 243 of the Capital Requirements Regulation (CRR) describe the cases and the conditions under which Significant Credit Risk Transfer (SCRT) has occurred in a

securitisation, waiving the requirement to set aside capital for the originator (EBA, 2013c). There has been an inconsistency in the way national authorities and regulators assess the requirements, and EBA's final guidelines on SCRT issued on 7 July 20014 clarified the criteria for such classifications, introducing a unified framework for the assessment of SCRT. EBA recognised the importance of securitisation in a well-defined prudential framework as a "a useful tool to achieve credit risk transfer and risk-sharing in the financial system and to support the current deleveraging and de-risking process of EU banks without inducing an excessive contraction in the real economy", in addition to its use as a funding tool for the real economy (EBA, 2014a).

EBA's guidelines on SCRT apply to both originators and competent authorities and provide for a more consistent approach for the assessment of SCRT across EU member states. The guidelines include i) requirements for originators when engaging in securitisation transactions for SCRT; ii) requirements for competent authorities to assess transactions that claim SCRT; iii) requirements for competent authorities when assessing whether commensurate credit risk has been transferred to independent third parties; and iv) a standard template on how competent authorities should provide information to EBA for approved transactions claiming SCRT (EBA, 2014a).

The level of transparency and reporting required to receive capital relief has been raised for originators: in addition to information sharing and reporting requirements, originators are required to put in place an appropriate governance process, monitoring systems and controls for periodic reviews. Such constant level of reporting will provide originators with the ability to report on an *ad hoc* basis the level of risk transfer and the respective impact on expected loss estimates. The guidelines also introduce a level playing field for the provision of capital relief for originators with call options incorporated in transactions (and the subsequent risk being transferred back into their balance sheet). In addition, time based calls with a price or spread linked strike are not allowed for a securitisation to be eligible for SCRT. Mechanisms of disproportionate reduction of risk transfer over time or substitution of assets that increase credit risk to the originator are not allowed for SCRT, while investors should have no legal or other types of connection to the originator.

As implied by the EBA guidelines, due diligence requirements and information disclosure are of paramount importance for the fostering of a healthy and robust securitisation market. Loan by loan analysis, simplified presentation of major transaction features, stress testing, and other related practices enhance transparency and information availability. Nevertheless, industry participants note that the inconsistency in the requirements of securitisation transactions vs. similar asset types (such as covered bonds) may create a disincentive for investors in securitisation relative to other instruments of similar risk profile.

6. Volcker rule on ownership interest in covered funds

On 10 December 2013, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission and the Commodity Futures Trading Commission released a final version of the Volcker Rule. **The rule restricts the ability of US banking and nonbank financial entities to engage in proprietary trading activities.** Of particular relevance to the securitisation industry is a provision prohibiting those entities from retaining any "ownership interest" in "covered funds" save for limited exceptions.

The final rule has an impact on collateralised loan obligations (CLOs), which are considered as "covered funds" under the rule, unless those CLOs have only loans as underlying assets. Under this definition, certain obligations that have characteristics of loans but are more commonly considered to be securities, such as bonds, are not excluded and the Volcker rule will apply. In terms of definition of ownership interest, a request for clarification has been submitted to the Fed by market participants on whether exposure to CLO debt comes under "ownership interest". To comply with the Volcker Rule, newly issued CLOs will either eliminate their ability to include bonds within their portfolio or include this as an option not to be exercised without a regulatory change. Indicatively, seven of the eleven CLOs to have been sold in the five weeks since the final version of the rule came out did not include bonds in their collateral pool.

7. Other important regulatory workstreams affecting securitisation

Additional regulatory reforms have been put in place recently to address specific securitisation problems that were highlighted during the recent crisis. For example, under CRA III regulation (EU, 2013), firms may only use CRAs if all of a number of conditions are satisfied. There is a requirement to use two or more different rating agencies, while mandatory rotation is required for re-securitisations. Pre- and post-trade transparency for venue and over the counter (OTC) fixed income trades, as prescribed by MiFID II, requires the disclosure of price, volume and time of transactions for all liquid trades and the pre-trade disclosure (on demand/upon request) for illiquid instruments.

Real time reporting might add to the administrative burden of such trades but will provide valuable price information and will support the secondary market. The same holds for the ongoing monitoring of performance and stress testing of exposures required under AIFMD, Solvency II and CRR regulations.

B. An unlevel playing field and the case for a co-ordinated regulatory approach

A comprehensive range of regulations have been introduced either designed to specifically address securitisation risks or indirectly affecting securitisation while targeting the wider market or systemic issues. Some of the regulations introduced have been through a number of revisions in the last three to four years and some are still expected to be finalised. The engagement of regulators with the private sector through public consultations and the ongoing discussions were seen to have had a positive and useful effect. At the same time, to the extent that the consultation and revision process has led to regulatory uncertainty, this has been perceived to have had a constraining effect on the re-launch of the (European) securitisation market.

Calibration of the abovementioned critical regulatory workstreams is seen by market participants as a pivotal step towards the revitalisation of the securitisation market. Failure to remove the impediments to a transfer of corporate lending risk from bank balance sheets, still under continuing deleveraging pressure, to the institutional investor sector, which in a low interest rate environment is suffering from a dearth of yield, is deemed unfortunate.

The complexity of the regulatory framework affecting securitisation creates imbalances at various levels. First, across different market participants: capital charges for banks holding securitisation necessarily differ from those applied to insurance investors, as these charges are derived from different approaches and methodologies (Basel vs. Solvency II). However, better calibration of these charges, accounting for the

differences between sectors, would allow for the risk transfer between banks and long-term investors willing to take different types of risk. This is particularly pertinent for high-yielding tranches found in the mezzanine part of the ABS structure. The different timing of the resolution of those different regulatory workstreams does not assist in their more sensible alignment *vis-à-vis* market participants. Lastly, the non-alignment across jurisdictions creates imbalances in the securitisation markets across the world, deterring some markets from growing while unintentionally directing investors to more attractive jurisdictions.

While a lot of emphasis is being placed on the analysis of the standalone impact of regulatory measures such as capital charges or liquidity ratio eligibility on securitisation, a more holistic and system analysis of the impact of the entire set of regulations affecting the asset class is warranted. Investment decisions are based on the overall framework affecting the instrument, and as such, a co-ordinated and holistic approach to formulating the regulatory framework for securitisation would be beneficial to all stakeholders involved. The EIF has long argued that a stable and reliable regulatory framework is key for the recovery of the European Structured Finance market and that a holistic view should be taken as the regulations are developed (Kraemer-Eis, Passaris and Tappi, 2013; Frohn, 2013), noting that "most individual proposed regulations make sense on a stand-alone basis, but some might also be questionable, taking into consideration the overall picture of the regulatory wave".[13] A similar call for detailed horizontal review of the framework across regulation and products was also highlighted by the EBA in its recent discussion paper on simple, standard and transparent securitisation (EBA, 2014b).

Lack of consistency in the regulatory frameworks of similar investment instruments may create an unlevel playing field for asset classes with similar characteristics (same underlying exposure, all secured financing), both at the domestic and at the international level. Inconsistent treatment of closely related instruments can create unintended biases favouring some instruments to the expense of their alternatives.

An example highlighting such imbalances might be the case of covered bonds vs. securitisation (Table 7). While the double recourse safety feature of covered bonds would justify a somewhat more favourable regulatory treatment, capital charges for SME securitisation may be disproportionately higher than those applying to SME covered bond structures (under the standardised approach) or SME whole loan portfolio holdings. Specific covered bonds are also eligible LCR instruments contrary to the vast majority of ABS. The combined effect of additional operational requirements (retention, stress testing, due diligence and disclosure) and other factors (such as ECB repo eligibility in Europe) might unintentionally increase the attractiveness of SME covered bonds compared to SME ABS for investors looking to gain SME exposure. Similarly, capital charges on insurers willing to invest in SME ABS are higher than the respective charges on an actual whole loan portfolio (for equally rated instruments), favouring the direct investment in loan portfolios against the structured approach, adding more hurdles to the revival of the structured market. According to the EBA, even though differences in regulatory capital charges between the two instruments are justified given the different levels of risk of the corresponding exposures, these should be calibrated to "reasonably conservative standards" related to the risks of the corresponding exposures (EBA, 2014b). The EBA also recommends that senior tranche capital charges should not be higher than the charges of the underlying portfolio.

Table 7. **Securitisation, covered bonds and whole loan portfolios: Main regulatory requirements**

	Securitisation	Covered Bonds	Whole loan portfolios
Regulatory Capital	BCBS: *Senior tranches (1-5 yr):* AAA 15%-20%; AA 15%-45%; A 40% to 70%; BBB 75% to 140%; BB 140% to 225%, B 250% to 420%. *Non-senior tranches (1-5 yr)*: AAA 15% to 70%; AA 15% to 140%; A 60% to 210%; BBB 170% to 420%; BB 470% to 860%; B 900% to 1130% – explicit maturity adjustment at tranche plus to pool level; UL + EL. Solvency II: differentiation between HQ and non-HQ securitisations (see Table 7).	CRR: CB rating regardless of maturity AAA/AA 10%, A+ to BBB- 20%, BB+ to B- 50%, CCC 100% (limited differentiation) under Standardised Approach; UCITS compliant vs. CRD compliant covered bonds. Solvency II – preferential capital requirements for highly rated covered bonds (AAA and AA), otherwise treatment same as corporate bonds, based on rating and duration (and contribution to diversification).	BCBS: Residential mortgages 35%, Retail exposures 75%, Corporate loans AAA-AA 20%, A 50%, BBB+ to BB- 100%, B+ to below B 150% – UL only, no explicit maturity adjustment. Solvency II: preferential capital treatment for residential mortgages, all corporate loans treated same as bonds based on credit quality and duration.
LCR	AA and above RMBS included in Level 2B, max. 15%.	Eligible AA- and above CBs issued under CB law in Level 2A, max. 40%.	Non-eligible
Repo eligibility and haircuts (ECB)	Category V, regardless of asset class and maturity; haircut 10% for AAA to A-, 22% for BBB+ to BBB.	Cat II and III, haircut depends on maturity and rating AAA to A- range 1% to 9%, and BBB+ to BBB – range 7% to 35%.	Non-marketable securities, haircut not disclosed. Deal and asset class specific, not widely transparent.
Operational and transparency requirements	Retention, due diligence, stress testing, cash flow models, deal documentation, etc. Disclosure requirements for originators, sponsor and lender of all materially relevant information on credit quality and performance of individual underlying exposures, cash flows and collateral, needed to conduct a comprehensive stress tests; data is determined as of date of deal closing	CRR: At least semi-annually: value of cover pool and outstanding covered bonds, geographical distribution and type of cover assets, loan size, interest rate and currency risks, maturity structure of cover assets and covered bonds, percentage of loans more than 90 days past due.	None explicitly specified.

Note: As of March 2014.
Source: EBA (2013a), EIOPA (2013), BCBS (2013a), BofA Merrill Lynch (2014), BCBS (2014).

Sensible and balanced calibration of the regulatory framework affecting securitisation could limit unintended consequences to investors by addressing a number of conflicts on different levels:

1. on a standalone basis, co-ordinating all different regulations having a direct or indirect impact on securitisation, with a view to provide a consistent and clear framework around the asset class;
2. on a relative basis against similar investment instruments, conflicts in the treatment of securitisation vs. the treatment of other asset classes, such as covered bonds;
3. on a jurisdictional basis across markets.

A holistic and co-ordinated approach on regulation on a relative basis could provide a level playing field, eliminating unintended biases against securitisation. Balancing of some disproportionately costly regulatory and operational disincentives present in securitisation might redirect issuer and investor preferences to this instrument.

Co-ordination of the regulatory measures should not be limited across products or jurisdictions. The case for a co-ordinated approach to financial regulation *vis-à-vis* other economic policies is also important so as to avoid unintended harm to sustainable economic growth (BIAC, 2014).

C. High-Quality Securitisation (HQS)

Besides EIOPA's Solvency II differentiation between Type A and Type B securitisation, a number of similar initiatives to promote High-Quality securitisation have seen promoted in recent years. Such proposals include the Prime Collateralised Securities (PCS) initiative established by the Association of Financial Markets in Europe (AFME, 2013, 2014a, b), the proposal by the ECB and BoE (2014b), as well as the EIF's view on high-quality SME ABS (Kraemer-Eis et al., 2014).

In 2012, AFME and the European Financial Services Roundtable established the PCS industry-based independent initiative that developed a quality label for high-quality securitisations. PCS grants its label to individual securities fulfilling its criteria of best standards, around the principles of simplicity, structural strength and transparency (PCS, 2014a, 2014b). The four key principles underlying the PCS label rule out transactions issued under an *originate-to-distribute* model (targeting alignment of interest) and those aiming at maturity transformation (i.e. non self-liquidating assets[14]), excluding re-securitisations (only single iteration of credit tranching allowed) and require increased transparency (initial and ongoing reporting). The full set of PCS criteria consists of a rather complex set of numerous conditions that transactions should meet in order to be granted the HQS label.

In Europe, the ECB and the BoE have been – among others – vocal supporters of the revitalisation of a market issuance of simple, structurally robust and transparent ABS on a meaningful scale. At the same time they call for concerted policy action involving a range of official entities, including EU and international regulators. In the context of their recent discussion paper (ECB and BoE, 2014b), the two central banks **propose the identification of "qualifying securitisations"** (see Box 3) through criteria not too dissimilar to those currently applying for central bank eligibility of ABS (see Table 8). Qualifying securitisations allow investors to understand and assess respective risks with greater confidence. This type of securitisation could then be encouraged through preferential regulatory capital and liquidity treatment. SME loan securitisations are included in an indicative, non-exhaustive list of examples of underlying assets that comply with these principles, subject to meeting the criteria discussed.

The European Commission' delegated act on Solvency II published on 10 October 2014 (EC, 2014a) **defines Type I and Type II securitisation, with the former being very much aligned on EIOPA's recommendation on high quality securitisation.** Securitised SME loans can qualify for the high quality securitisation label in a lower risk bucket than other securitisations if they meet the transparency and simplicity requirements proposed by EIOPA, very much in line with ECB's collateral eligibility criteria (EC, 2014c).

Such differentiated regulatory treatment of qualifying HQS is also in line with EBA's recommendations on simple standard and transparent securitisations that was published shortly before the delegated acts (EBA, 2014b). The criteria identifying eligibility as simple standard and transparent effectively capture and reduce the major risks identified during the crisis with the exception of collateral credit risk. Some of the criteria include non-reliance on the issuer (true sale, off balance sheet), no leverage involved, homogeneity of underlying assets, and exclusion of re-securitisations. Importantly, the issuer is required to provide 5 years of historical default data of similar exposures.

The joint BCBS and IOSCO Task Force on Securitisation Markets published on 11 December 2014 a consultation document with 14 criteria for simple, transparent and comparable securitisations (BCBS and IOSCO, 2014). The proposed criteria on simplicity,

Box 3. **ECB-BoE's high-level principles for "Qualifying Securitisations"**

The European Central Bank (ECB) and the Bank of England (BoE) commented on the impediments to securitisation in April 2014 (ECB and BoE, 2014a) following up a month later with a joint discussion paper proposing a roadmap for the revival of the market (ECB and BoE, 2014b). The paper aimed at launching a public consultation, eliciting feedback by market participants on such impediments and on ways to alleviate them.

The two central banks propose the development of high-level principles to identify simple, structurally robust and transparent securitisations that will be defined as ***qualifying securitisations.*** The risk and return of such transactions can be consistently understood by investors, facilitating their risk assessment and increasing their confidence. Such structures can benefit from greater liquidity and potentially preferential regulatory treatment, with the aim to encourage a substantial recovery of the market.

Criteria defining such qualifying securitisations cover the nature of the underlying assets, structure, transparency and external credit assessment:

- **Underlying assets:** Specifically eligible qualifying securitisations can be credit claims or receivables with defined terms relating to rentals or principle and interest payments. Interest payments may not be referenced to complex formulae or exotic derivatives, and the structure overall cannot have derivatives-linked claims but rather rely on recourse to the obligors.
- **Structure:** Synthetic securitisations and re-securitisations are excluded altogether, with qualifying transactions being plain vanilla, true sale securitisations. Receivables need to be current self-liquidating from intrinsic cash flows and there should be no delinquent loans at the time of issuance. Originators must demonstrate that the underlying claims are homogeneous and originated in line with prudent and consistent criteria in the context of the originator's ordinary course of business.
- **Transparency:** Loan loss performance on substantially similar assets as the underlying to the transaction needs to be made available. Access to information by investor is promoted through the obligation for initial and ongoing data reporting and clarity around debtor payments, priorities of payments, rights transferred to the assets, counterparties involved and servicing. Cash flow models and loan-level or granular pool stratification data should be provided to investors initially and loan level performance reporting throughout the life of the transaction will facilitate investors' risk assessment. Standardised prospectuses and disclosures along the lines of the prospectus directive are promoted.
- **External credit assessment:** The transactions should be subject to ongoing independent credit assessment (for example by two external credit assessment institutions) as well as legal and accounting reviews.

Examples of eligible underlying assets (subject to meeting the entire set of criteria) include SME loans, residential mortgages, consumer finance loans, leasing receivables, auto loans/leases, credit card receivables and certain commercial real estate mortgages.

transparency and comparability are along the same lines as the ones recommended by the EBA aiming at helping stakeholders assess the risks involved in a securitisation transaction. The criteria are designed to address key types of risks involved in securitisation; asset, structural, fiduciary and servicer risks. Once finalised, such criteria are expected to be incorporated in the Basel capital framework within 2015, and securitisations meeting these criteria will possibly be granted preferential treatment.

Table 8. **HQS comparative eligibility criteria under different selected approaches**

	BoE	ECB	Federal Reserve	EIOPA	PCS
	Repo eligibility (Eligible securitisations as collateral)	Eurosystem Standard Collateral Framework (Eligible Marketable Assets)	Discount Window Eligible Collateral	Type A Securitisation	PCS Label
SME loan ABS	✓	✓	✓	✓	✓
CDO of ABS	×	×	×	×	×
Synthetic	×	×	×	×	×
Re-securitisation	×	×	×	×	×
Geography	UK, EEA, US	Originator or intermediary, credit claims, issuer, governing law, security – EEA country or in EEA country	Securities denominated in eligible foreign currencies are acceptable (Japanese Yen, Euro, Australian Dollars, Canadian Dollars, British Pounds, Danish Krone, Swiss Francs, and Swedish Krona)	Admitted for trading in a regulated market (EEA or OECD)	Issuing vehicle and securitised assets in EU and EEA only
Requirements	Discretion in assessing each security. Differences in eligibility for Level A (no securitisation included), B (broadly equivalent to AAA) and C (broadly equivalent to A3/A-) collateral sets.	Cash-flow generating homogeneous assets, only one type of asset, no heterogeneous asset pools allowed. Must not consist of credit-link notes, derivatives instruments.	At least investment grade, certain types must be AAA (e.g. CDOs, CMBS), follow the Depository Trust Company (DTC) Pledging Process, margins for securities are assigned based on asset type and duration.	Homogeneity, at least one payment made under a loan, no credit impaired borrowers; no self-certified mortgages, no default loans at issuance or when added, sound underwriting under Mortgage or Consumer Credit Directive or similar.	Min size, reported proportion retained, min. number of assets in a pool, LTV criteria, strict underwriting criteria, no subprime mortgages i.e. no self-certified product, equity release products.
Seniority	Most senior tranche	Most senior tranche only; no-subordination in case of acceleration or enforcement		Most senior tranche only	Most senior tranche only
Legal		Asset acquisition under EU member law, true sale, no (severe) clawback.	Securities should not be subject to any regulatory or other constraints that impair their liquidation.	True sale, no severe claw-back,[1] servicing continuity.	Detailed requirements
Disclosure	Loan-by-loan data; completion of mandatory fields in the relevant loan level data template; transaction documentation, ongoing reporting (standardised monthly investor reporting and cash flow models).	Loan-by-loan data on the pool of cash flow generating assets; completion of mandatory fields in the relevant loan level data template; ongoing reporting.	Reporting requirements of local Reserve Banks.	Loan-by-loan, relevant information made available at issuance and on ongoing basis.	Loan level and cash flow data, ongoing information about performance.

1. Retraction of already distributed payments, as a result of special circumstances.

Source: BofA Merrill Lynch (2014), Federal Reserve (2014), Perraudin (2014).

The European Investment Fund's (EIF's) approach to HQS is based on both the transaction structure and the creditworthiness of the assets subject to securitisation. The criteria of such transactions are therefore broader, going beyond the assets' characteristics and leaning towards the view of an investor (see Box 4).

Box 4. **High-quality SME ABS according to EIF**

According to the European Investment Fund (EIF), a "high-quality SME ABS" transaction would need to satisfy the following principles, over and above the principle of transparency which is a prerequisite for any structured transaction:

1. **Assets:** Senior, first lien, fully disbursed loans to SMEs (as defined by EU recommendation 2003/361).
2. **Originator:** Experienced SME lenders, not pursuing an originate-to-distribute business, keeping on their balance sheet large SME exposures.
3. **Borrowers:** Not marked as in insolvency in the central bank's register.
4. **Loans/Leases:** Not in severe arrears for the past 12 months. Standard amortizing, non-syndicated, non-inflation linked. Limits on the share of loans featuring balloon payments, or switching the interest rate. Loans pay at least semi-annually.
5. **Concentration:** Limits on single group/region/industry and maturity concentration.
6. **Structure:** Senior tranches, with an expected life lower than 5 years. Commingling and set-off considerations addressed by the structure. Cash reserve covering for both principal and interest, large enough to cover senior expenses for 2 IPDs. Default definition within 9 months missed payments. Excess spread trapping in favour of the senior on collateral deteriorating. Plain swaps, without scheduled notional, featuring replacement languages.
7. **Servicing:** No interest suspension allowed, permitted variations clearly defined in volume and magnitude, back-up provisions in place.
8. **Data:** The originator receives an A1 compliance score by the European Data Warehouse, the pool is audited on an either 99/1 or 99/5 basis.

According to EIF, SME ABS tranches abiding to the above principles would merit lower capital charges and favorable treatment in terms of Liquidity Coverage and Net Stable Funding Ratios.

Source: Kraemer-Eis et al. (2014).

SME loans are an eligible underlying asset class for PCS. It should, however, be noted that both the PCS as well as the ECB and BoE proposals are *conceptual* approaches based on the fundamental characteristics of transactions. Both proposals build on an analysis of principles rather than a strictly defined list of asset classes that should be rejected based on poor past performance. Therefore, even though PCS labels are only granted to senior tranches of securitisations, if PCS criteria are met in a transaction they are – by definition – met by all of its tranches (PCS, 2014b). Qualifying securitisations, as proposed by ECB and BoE, can apply to all the tranches of a transaction.

Perraudin (2014) performed a statistical analysis of the relative historical performance of selected European HQS, using a simplified version of the PCS definition. Their relative performance was evaluated in terms of risk (using volatility as a measure) and liquidity (measured by the bid-ask spreads). The purpose of the study was

to analyse whether such HQS are worthy of preferential regulatory treatment. Given that ratings are often part of regulation, ratings were kept constant in the sample. According to the results of the study, HQS had substantially lower risk and somewhat higher liquidity than non-HQS tranches consistently over time, both within asset classes and for the market overall.

The concept of high-quality securitisation has been shared by many stakeholders, including regulators, policy makers and industry participants, although in different forms and styles. In Perraudin's study a HQS definition tended to indeed add information on liquidity and riskiness, over and above the information contained in ratings. Despite sharing a common underlying principle, the large number of different approaches would need to be refined and a common, single definition of what constitutes high-quality securitisation should be agreed upon. This could then be translated into a fairer regulatory treatment, commensurate with the corresponding risk of relevant transactions or tranches. AFME has suggested the introduction of a core definition for qualifying transactions and additional filters and requirements to address specific demands (for instance, LCR liquidity) (AFME, 2014b). Less scrutiny by investors who might over-rely on such labelling runs the risk of potential moral hazard, as was the case with credit rating over-reliance before the crisis.

The introduction of a categorisation of high-quality securitisation is commonly agreed by the market to be overall beneficial, provided that it is not too restrictive or cumbersome. Some industry participants call for caution when forming such a single definition of HQS: in their view, such a definition would need to be sufficiently broad in order for it to be truly beneficial to the market. It is argued, for example, that excluded corporate loan CLOs can be granular homogeneous transactions including SME loans in the asset pools, while the self-liquidating requirement will exclude interest-only corporate loans that could otherwise be eligible. For some industry participants, certification processes and legal verification of notions underlying the criteria (e.g. "true sale") may in practice involve lengthy and contentious technical standards that risk rendering the criteria cumbersome or even unusable. A very complex process would add, from this perspective, another burden and potentially additional regulatory uncertainty about eligibility of transactions, possibly driving investors away from the market. The existence and prior labelling experience of independent agencies, such as the PCS, provide possible avenues for the practical implementation of such a certification process. This is particularly important given the importance of timely determination of qualifying securitisations for marketing, pricing and initial liquidity of the transaction (AFME, 2014b).

It should be noted, however, that according to a recent analysis conducted by the Bank of International Settlements, the **possibility of severe undercapitalisation of ABS mezzanine tranches exists even for extremely simple and transparent securitisations** (BIS, 2014). The study highlights that mezzanine tranches are subject to considerable uncertainty due to the "cliff effect" under which even a small estimation error in the calculation of risk can have an important impact on the bond, bringing the risk of a mezzanine tranche as low as that of the senior tranche or as high as that of the junior tranche of the structure. According to the study, such possibility is pronounced even in mezzanine tranches of extremely simple and transparent transactions, revealing potential undercapitalisation of those tranches and calling for proportionately much higher requirements than those of the underlying pool of assets.

VI. Public Policies that impact SME securitisation

The muted recovery of the securitisation market can be partially explained by prevailing conditions in the financial system (deleveraging) or the economy overall (weak lending growth) or by legacy factors (lingering stigma). This chapter seeks to analyse enabling factors, especially targeted policies, as well as structural and conjectural barriers to the revival of securitisation markets, touching on unintended consequences of monetary policy, deal economics, standardisation of structure and availability of information on creditworthiness and performance.

A. Public policy to support SME securitisation and SME lending: Selected case studies

A number of conventional and unconventional monetary policies implemented before and (mainly) after the financial crisis have had a direct or indirect effect on securitisation (see Table 9). These policies and public programmes played an important role in supporting SME securitisation markets and reviving these markets in the aftermath of the crisis. However, such public interventions and official programmes can also have unintended consequences, as discussed in this section. The following subsections present selected programmes in the United States, Japan, Korea, and Europe. The subsequent section (VI.B) highlights some further considerations to be taken into account when assessing such programmes, with a focus on policy interventions in Europe.

1. US Federal Reserve: Term Asset-backed Securities Loan Facility (TALF)

The Term Asset-backed Securities Loan Facility (TALF) was launched in November 2008 by the US Federal Reserve, a funding facility designed to support the issuance of ABS collateralised by loans of various types to consumers and businesses of all sizes (Federal Reserve, 2008). The programme came at a time when ABS issuance came to a halt and spreads were widening to levels outside the historical range of risk premiums. Given the importance of ABS markets for the funding of a substantial share of SBA-guaranteed SME loans as well as consumer credit, disruption of this market was limiting the availability of credit to support economic activity.

The Federal Reserve Bank of New York (FRBNY) provided loans of up to USD 200 billion on a non-recourse basis to ABS investors to finance the purchase of certain AAA-rated ABSs backed by newly and recently originated consumer and small business loans. The FRBNY's protection was the underlying ABS held as collateral at market value less a haircut. In case of non-payment, an SPV established under FRBNY would liquidate the collateral as necessary. The US Treasury Department provided USD 20 billion of credit protection to the FRBNY's SPV by acquiring the equivalent amount of subordinated liabilities, to provide the SPV with funds and also potentially bear losses of such an amount. Losses over and above this amount were extended by the FRBNY in connection to the TALF under the Troubled Assets Relief Program (TARP).

SME ABS were included in the eligible ABS classes for the TALF programme, as were student, auto and credit card ABS, and CMBS. Eligible securities were plain vanilla structures (no synthetics) and more importantly, self-refinancing was excluded – i.e. originators of the loans could not be borrowers under TALF. Campbell et al. have studied the effects of the TALF programme and found that it improved conditions in the securitisation market, lowered interest rate spreads for some categories of ABS without impacting the pricing (i.e. subsidising) of individual securities (Campbell et al., 2011). According to the impact

Table 9. **Selected SME/securitisation-related unconventional official sector programmes**

Country	Programme	Programme description	Amount	Timeframe
Australia	AOFM	During the GFC, the Australian Government invested in high quality AAA-rated RMBS to support competition from smaller lenders	AUD 15.5 bn	Oct. 08 to Apr. 13
ECB	ABSPP/CBPP	Purchase of senior and mezzanine tranches of euro area ABS in both primary and secondary markets/Purchase of euro-denominated covered bonds issued in both the primary and secondary markets, including fully retained issues	TBD	Q4 2014
EIB/EIF	Structured finance facilities	Supporting SME debt financing through financial intermediaries and operating using either own funds participating as principal in SMEsec transactions guaranteeing senior and or mezzanine notes, or administering public money via the utilisation of third party mandates from the EU and EU member states	EUR 7.8 bn (EIF guarantee commitments)[1]	Since 2000
EIB/EIF	ABS credit enhancement and SME initiative (SMEI)	ABS Credit Enhancement: Part of an enhanced risk mandate between EIB/EIF, joint effort to invest/guarantee mezzanine tranches of SME securitisation transactions. Can cover both funded and unfunded deals, can also be offered in conjunction with EIB investment of SME securitisation transactions for a bigger catalytic impact towards new SME lending SMEI: joint EC/EIB/EIF initiative, offers uncapped guarantees and support on SMEsec aiming to restore access to finance for SMEs across the EU, through capital relief, loss protection and liquidity (optional programme at the discretion of each member state)	ca. EUR 3.8 bn	2014-20
Germany	KfW's promise	Created by KfW to allow banks to transfer first/second loss SME risk into capital markets, thus providing regulatory capital relief. Based on synthetic technology with KfW as the CDS intermediary. EIF has acted as a swap counterparty for the first loss piece and the mezz tranche in many of these securitisations	EUR 47.6 bn until 2008	Since 2000
Japan	SME ABS	BoJ purchases BB and above rated ABS with maturities of up to 4 years and rated ABCP (max. 1 yr), backed by loans/receivables/other credit facilitates to SMEs. BoJ would buy up to 50% of each tranche	JPY 1 trn limit	July 03 to Mar. 06
Spain	ICO	ICO guaranteed eligible senior SME CLO tranches issued by banks, allowing for zero-risk weighted bonds. Aggregate guarantee quantum was preset for a given year with banks bidding for allocations	Annual limits ranging EUR 2 bn-7 bn	2000-08
Korea	P-CBO programme	The primary collateralised bond obligation (P-CBO) programme aims to support small and larger corporates via P-CBOs that are ABS backed by newly-issued SME bonds and receive various credit enhancements	(no limit)	Since 1999
UK	FLS	Designed to boost lending in the real economy, eligible banks and building societies could secure funding for 4 years against eligible collateral, in return for lending commitments. Borrowable amount is 5% of lending stock plus any net expansion in eligible lending	No limit. 5% of stock = £ 80 bn at launch	18 mths from Aug. 13. For SMEs from Feb. 14
UK	SLS	Allowed banks to borrow UK T-bills for up to 3 years by pledging high-quality RMBS and other illiquid securities	No limit, £ 185 bn at peak	Apr. 08 to Jan. 12
UK	ABSGS	UK HMT provided guarantees (credit or liquidity but not both) to new issue AAA RMBS for 3-5 years. Substantially unutilised	No limit	Apr. 09 to Dec. 09
US	TALF	Loan facility from the New York Fed that provided 3-5 yr non-recourse leverage financing to buyers of new issue AAA rated ABS, RMBS, CMBS. The US Treasury shared some risk via subordinated exposure to the vehicle	USD 71 bn lent, USD 200 bn limit	Mar. 09 to June 10
US	PPIP	US Treasury provided debt financing (leverage) and co-invested at the equity level along with nine pre-approved investment funds to purchase eligible legacy RMBS and CMBS (pre-2009, orig AAA) away from the banks, insurers, funds, etc.	USD 18.6 bn funding, USD 22 bn limit	Dec. 09 with 8-year term
US	CPFF	NY Fed purchased 3 m ABCP directly from eligible issuers	No limit, USD 350 bn at peak	Oct. 08 to Feb. 10

1. The European Councils of June and October 2013 called for the EIB Group to support securitisation transactions by expanding the range of joint risk-sharing instruments between the EIB and the European Commission, and for increased EIF credit enhancement capacity. For example, in 2013 the EIB invested over EUR 1.7 bn in covered bonds and asset-backed securities and the EIF committed EUR 590 m to both "true sale" and "synthetic" securitisation transactions for the benefit of SMEs. More information can be found here: *www.eib.org/infocentre/publications/all/sme-report-2013.htm*.

Source: Compiled from information by the ECB, H M Treasury, New York Fed, AOFM, Bank of Japan, KfW, ICO, EIF, EIB, RBS (2014).

analysis of Ashcraft et al., "through the TALF programme, the Federal Reserve was able to prevent the shutdown of lending to consumers and small businesses, while limiting the public sector's risk" (Ashcraft et al., 2012).

Perhaps more important than the tightening of the spreads was the signal the Federal Reserve gave to investors on the merits of high-quality, non-opaque, simple securitisation structures allowing for the rebuilding of confidence in this market. Aiming at preventing the shutdown of lending to small businesses and consumers, the Federal Reserve encouraged private investors to participate in the market by providing them with liquidity in the form of loans. The interest rate on such loans was high enough to provide some credit enhancement to the public sector and at the same time incentivise investors to repay loans prior to maturity as the market recovered, making the facility uneconomic as new-issue spreads reverted towards historical norms.

Between the end of 2008 and mid-2010, FRBNY lent USD 71 billion under the TALF to investors, and nearly all TALF loans have been repaid or matured. As of 9 January 2013, TALF loans outstanding totalled USD 556 million. Accumulated fees collected through TALF totalled USD 743 million through 9 January 2013. When the programme closed in June 2010, USD 43 billion in loans, with initial maturities of three or five years, were outstanding, reduced to USD 5.3 billion by June 2012 (Federal Reserve, 2013a). The pricing strategy allowed for the early repayment by investors as markets returned to normal. TALF supported the origination of nearly 900 000 loans to small businesses among other loans.[15]

2. Outright purchases of SME ABS by the Bank of Japan

In 2003, the Bank of Japan (BoJ) introduced a JPY 1 trillion scheme for outright purchases of SME ABS and SME ABCP, aiming to restore the monetary transition mechanism and diversify credit risks for the financial sector. The programme was focused on instruments rated BB or higher and limited eligibility of ABCP and ABS at a maturity of up to one and three years, respectively (Hirata et al., 2004). The programme aimed at the same time **to increase the financing options for SMEs**, for instance through the use of accounts receivable as collateral, and to fill in the gap of the "middle-risk-taking lender" unavailable to SMEs (the majority of middle-risk firms)

The BoJ purchased a broad range of SME ABS, including those backed by loans, receivables and leases. In order to avoid conflicts of interest with the originators and moral hazard, the BoJ did not purchase first loss tranches, but only mezzanine tranches, limiting its participation to a maximum of 50% of the tranche size. The targeted benefits included improved liquidity on the secondary market for SME ABS, increased volumes of SME ABS in the primary market, lower spreads for SME ABS, the transfer of risk and respective relief to the financial institutions participating, and possibly the increase in volume of SME lending.

The scheme ended in March 2006 as initially announced (sunset clause). Such a pre-defined termination allowed BoJ to exit from its ABS and ABCP purchase schemes smoothly and without selling into the market as market participants were expecting such termination and the market had already shown signs of stabilisation since 2002. The total amount purchased was substantially below the JPY 1 trillion cap (Yamaoka et al., 2010). The total volume purchased, combined with the relatively short maturities of purchased transactions, allowed for the smooth and gradual exit of the BoJ as the securities reached maturity.

3. *The Funding for Lending Scheme (FLS) in the United Kingdom*

The Funding for Lending Scheme (FLS) in the UK provides a good example of policies designed to ensure they support lending to SMEs. At inception, the scheme provided funding to banks and building societies for an extended period, at below market rates, with both the price and quantity of funding provided linked to their performance in lending to the UK real economy without making a distinction between non-financial large corporates, households or SMEs. A year after its launch in mid-2012, it was seen that the policy had contributed to a substantial fall in bank funding costs, which fed through to improvements in credit conditions for households and large businesses, but there appeared to be less of a positive effect on SME lending.

Reflecting the significant improvements in household and large business credit conditions, the scheme has been tapered when it comes to mortgage and large corporate lending and the **incentives have been re-designed so as to focus towards SME lending**. Under the amended scheme, the incentives to increase net lending are heavily skewed towards SME lending. The extended phase allows participants to draw 5 pounds in the scheme for every 1 pound of net lending generated to SMEs.[16]

In addition, participants are required to report corresponding lending data for the period in standardised forms, which must be submitted quarterly. Participants are also required to provide an independent audit report on the accuracy of the data provided to the Bank of England for the FLS extension after the close of the extended drawdown period, while usage and lending data for participating institutions are made public by the Bank of England (BoE 2012, 2014b).

4. *Korea's primary collateralised bond obligation (P-CBO) programme*

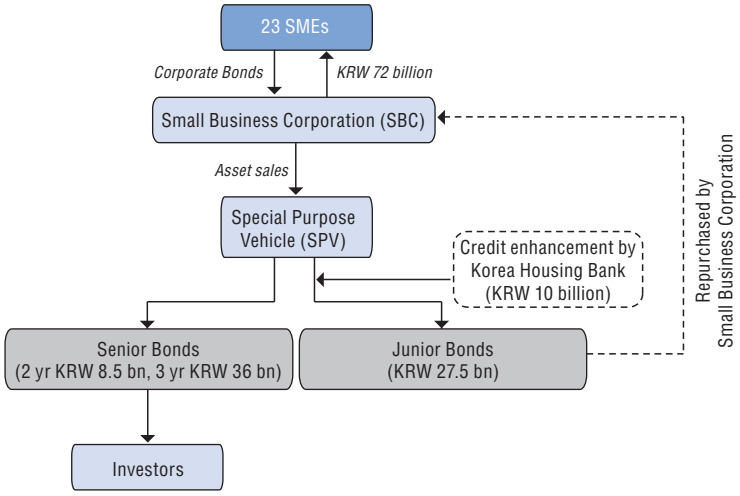
Trust in Korean capital markets was severely damaged in the aftermath of the 1997 Asia crisis. The crisis severely affected the bank lending channel – as banks undergoing restructuring processes were reluctant to provide financing – and paralysed the capital market channel. **In 1999, the Korean government introduced the primary collateralised bond obligation (P-CBO) programme to support small and larger corporates.**

A P-CBO is an ABS backed by newly-issued SME bonds sold to a special purpose vehicle (SPV) who acts as the issuer of the P-CBOs. The SPV issues both senior and junior tranches and sells these to the market. A Trustee for the SPV (optional) reinforces liquidity and supervises cash flows to protect investors.

Credit enhancement provided in various forms was instrumental for the success of the P-CBO programme. The first P-CBOs issued benefited from credit enhancement by the Korea Housing Bank in the form of KRW 10 billion of liquidity facilities, as well as the Small Business Corporation (SBC) which agreed to repurchase junior tranches for the amount of KRW 27.5 billion (Figure 22). The KRW 44.5 billion senior tranche was publicly placed in the market. A special guarantee programme for P-CBOs was established in 2000 with guarantees provided by public credit guarantee funds such as the Korea Credit Guarantee Fund (KODIT) and the Korea Technology Finance Corporation (KIBO). Such credit enhancement significantly increased the amount of AAA-rated senior bonds from a range of 40%-70% depending on the asset pool quality, to over 90% of the total value of the underlying assets (Park et al., 2008). Investors enjoy more attractive yields and the funding efficiency of the programme was reportedly maximised. The first cross-border P-CBO was launched in 2004 with 46 Korean SMEs participating in a KRW 10 billion P-CBO issuance guaranteed by the Industrial Bank of Korea (IBK) and the Japan Bank for International Co-operation (JBIC).

Figure 22. **Primary collateralised bond obligation programme (P-CBO) in Korea**

First P-CBO Programme, 1999

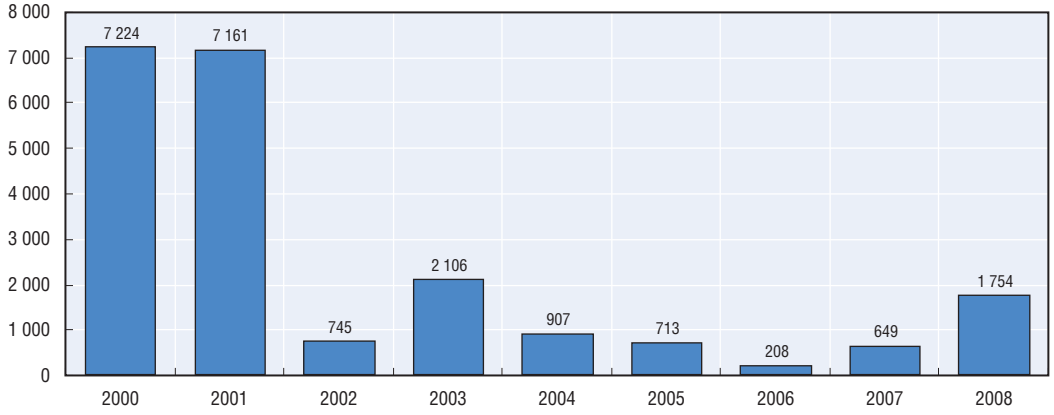


Source: Adapted from Asia-Pacific Finance and Development Centre.

As the corporate bond market began to stabilise from 2002 onwards, the scheme started to be phased out so as to prevent public intervention from distorting the corporate bond market. The amount of P-CBOs subsequently decreased (Figure 23) and KODIT mainly supported rollover transactions from January 2002 onwards. According to KODIT, the P-CBO programme supplied a total of KRW 17 334 trillion to 1 865 companies out of which KRW 2.23 trillion to 180 SMEs (Park et al., 2008).

Figure 23. **P-CBO issuance levels**

In KRW trillion, 2000-08



Source: Financial Supervisory Service.

KODIT began re-issuing P-CBOs targeted to support SMEs after the 2008 financial crisis and economic recession. Issuance of P-CBOs is currently one of the important measures used by KODIT to support financially weakened SMEs in Korea. The success of the guarantee programme can be partly attributed to the development of an in-house credit rating system by KODIT called Corporate Credit Rating System (CCRS), concurrently with the establishment of its guarantee programmes for P-CBOs. CCRS provided a credit

rating for a participating company by combining financial and non-financial quantitative and qualitative ratings (Park, 2006).

Despite the success of the P-CBO scheme, risks such as originator moral hazard and increasing reliance of SMEs in P-CBO issuance might distort the corporate bond market for smaller companies, particularly those with low credit ratings. The introduction of fees at an arm's length basis and the selection of tighter covenants might address such issues.

5. ECB's monetary policy and refinancing operations

In Europe, the ECB, the Eurosystem and national central banks (NCBs) played a central role in supporting the bank lending channel to enhance the availability of credit to SMEs. Allocation of liquidity through main refinancing operations and long-term refinancing operations provided banks with quasi unlimited access to central bank liquidity, on the basis of the pledging of eligible collateral with the central bank. Collateral requirements have been eased a number of times since 2008, and the maturity of operations lengthened as well.

The ECB launched two **long-term refinancing operations** (LTROs) in 2011 and 2012, respectively, with a cumulative take-up of over EUR 1 trillion, providing cheap funding for banks and limiting their funding needs. In June 2014, the ECB announced two consecutive targeted long-term (4-year) refinancing operation programmes (TLTRO) for a combined amount of EUR 400bn. Banks are entitled to an initial allowance of 7% of their lending book to the euro-area non-financial institutions excluding loans to households for house purchase, and an additional quarterly allowance of up to three times their net lending to the same group from March 2015 to June 2016. The interest rate on the TLTRO is fixed at the prevailing rate of the Eurosystem's main refinancing operations plus a fixed spread of 10bps. In addition, the existing eligibility of additional assets used as collateral, notably under the additional credit claims framework, will be extended at least until September 2018.

Given that funding through securitisation is on less advantageous terms than funding through LTRO, it can be claimed that **securitisation issuance has an indirect funding disadvantage relative to LTRO.** Therefore, the funding benefit of securitisation for the issuer is no longer a valid incentive for securitisation issuance. In addition, easy monetary policy might lead to certain unwanted behaviour from investors pursuing risky assets in a quest for yield or for using the cheap funding to acquire higher-yielding sovereign bonds instead of boosting bank lending to the economy. **This issue is somehow addressed in the TLTRO, and was captured in the extension of the Bank of England's Funding for Lending Scheme.** The latter focuses on business lending, and lending to smaller businesses is particularly encouraged by allowing banks to draw GBP 5 in the Scheme for every GBP 1 of net lending to SMEs during the reference period.

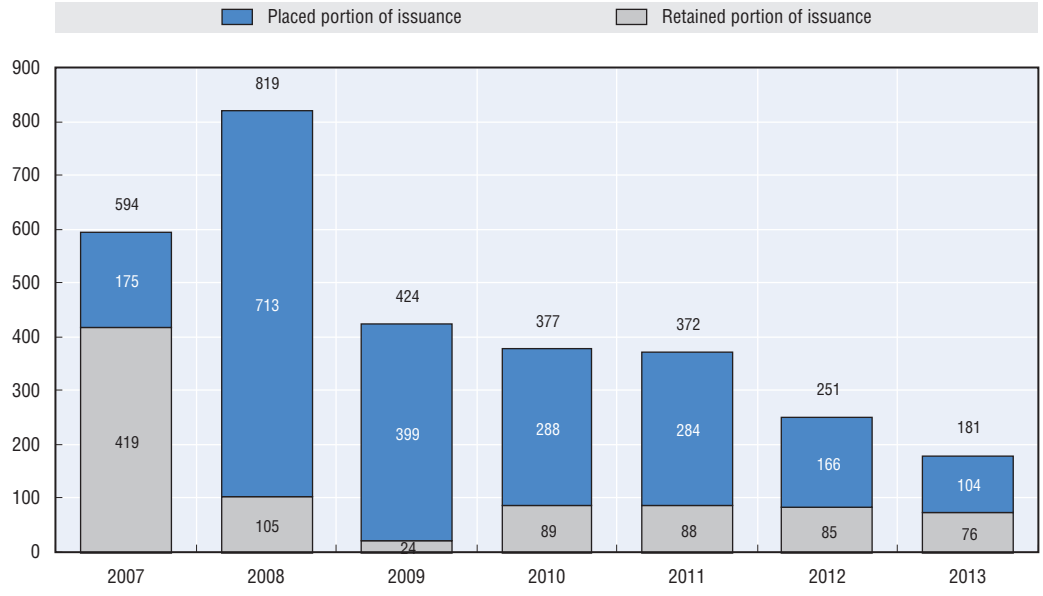
While ABS had been part of the collateral framework of the Eurosystem early on, their eligibility criteria were eased in the years following the recent financial crisis. In addition to normal procedure (conventional requirements of general documentation), there has been an exception for ABS whose underlying assets include SME loans to become eligible as collateral for funding purposes through monetary operations in the Eurosystem, even if they do not fulfil the normal conventional assessment requirements.

Although allowing the posting of SME securitisation as collateral with the ECB was undoubtedly beneficial given the collapse of the interbank market, some industry players believe that such policy had a detrimental effect to the revitalisation of the real securitisation

market. Throughout the period when such collateral was eligible for central bank repo refinancing, most issuances were retained rather than placed in the market. Retention rates are especially high for SME securitisation, as compared to securitisation more broadly (Figures 24 and 25). In addition, the key benefits of securitisation are not achieved through such funding operations, as they provide no capital relief and therefore do not allow for further on-lending through redeployment of funds to the real economy and to the SME sector. At the same time, the absence of a capital relief does not assist in the deleveraging effort of the banks. It should be well noted, however, that the purpose of these official programmes is to enhance the functioning of the monetary policy transmission mechanism by supporting lending to the real economy and not to support the revival of any particular market.

Figure 24. **European securitisation: retention rates**

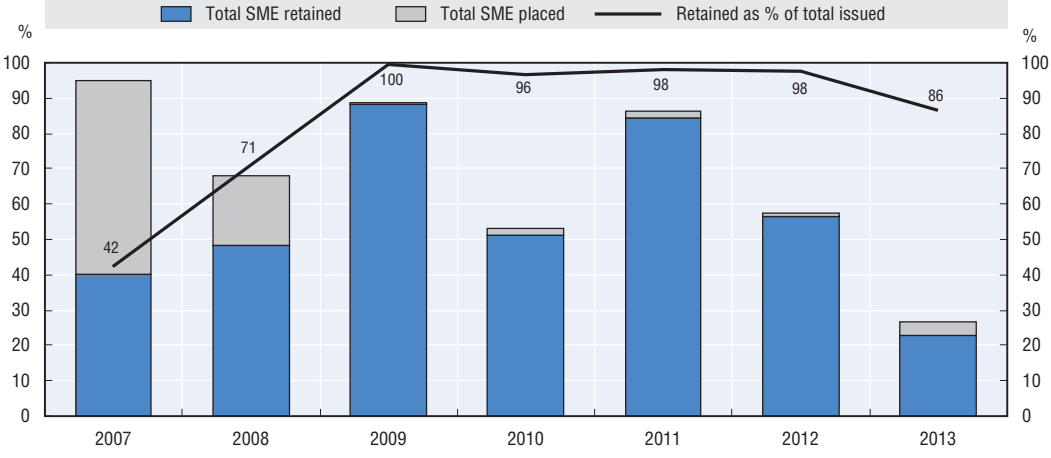
Annual issuance levels, 2007-13, in EUR billion



Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters.

Figure 25. **European SME securitisation retention rates**

Annual issuance levels, 2007-13, in USD billion and in %



Source: AFME, SIFMA, Bloomberg, Dealogic, Thomson Reuters.

Another similar initiative raised was the acceptance of so-called "additional credit claims" as collateral, which are to a large extent loans to SMEs. Under this framework, euro area national central banks (NCBs) determine the set of eligibility criteria and risk control measures chosen in order to accept these loans (haircuts, probabilities of default) which are in turn approved by ECB's General Council. This framework allows for some kind of differentiation regarding collateral requirements for monetary policy purposes, mobilising unencumbered and performing credit claims, while utilising the 'local' expertise at the NCB level. NCBs are supposed to take into account that these additional credit claims reflect local features. NCBs are not only best suited to deal with this particular asset class, but also incentivised given that this is not a loss sharing exercise but one where NCBs bear the risks themselves.

Such programmes were of particular importance given the dismal lending environment and the difficulties SMEs had in accessing finance during and after the crisis, in an environment of declining bank profitability and erosion of bank capital (Wehinger, 2014). Falling lending volumes, rising credit spreads, higher collateral requirements by the financing banks as well as multiple-time increases in insolvencies (OECD, 2014) explain and justify the pressing need for the central banks to act on SME financing.

The share of SMEs in overall securitisation in Europe is small overall, with the largest shares of issuance taking place in Spain and Italy (see Figure 16 in Section IV.B above). **SME securitisation support as currently extended by the European Investment Bank and the European Investment Fund** is acknowledged as highly professional and well-intentioned (see Box 5). Nevertheless, eligibility of such instruments as collateral for ECB repo operations is seen by some market participants to potentially carry counterproductive effects, blocking the revitalisation of a market-based SME securitisation. Supported deals end up in a similar way as collateral for repurchase agreements by European banks seeking cheap funding from the ECB. Further development of current schemes should preferably allow market-based perceptions and pricing of risk, once the current regulatory inconsistencies are overcome.

Box 5. **EIB Group Risk Enhancement Mandate (EREM)**

The European Council (2013a,b) conclusions of June and October 2013 required an increase of the credit enhancing capacity of the European Investment Fund (EIF) with the purpose of supporting the impaired financing of European SMEs. The proposal was the capital increase of the EIF together with the European Investment Bank (EIB) Group Risk Enhancement Mandate (EREM). The objective of this overall financial support package is to provide an increasing access to finance for SMEs and small midcaps, including through the revitalisation of the SME securitisation market, in the context of the economic crisis. The EREM was approved by EIB and EIF Boards in December 2013 and the EREM Framework Agreement was signed between EIB and EIF in March 2014.

The EREM contribution (EUR 4 billion from EIB supplemented by EUR 2 billion) will enable raising the credit enhancement capacities of the EIF with a view to increasing access to finance for SMEs and small midcaps (defined as enterprises with up to 500 employees), mainly through financial institutions, including guarantee institutions and microfinance institutions. Instruments deployed under the EREM shall:

1. contribute to the development of European capital markets instruments to the benefit of SMEs and small midcaps (SME Initiative, SME asset-backed securitisation, loan funds/ mini-bonds, etc.), and

Box 5. **EIB Group Risk Enhancement Mandate (EREM)** *(cont.)*

2. target specific areas in the fields of youth employment, microfinance, co-operative banks and other smaller financial institutions that do not have access to direct EIB financing, social, environmental and innovation impact, etc. as well as other areas agreed with the EIB.

To achieve this in the most efficient manner, the EIF will leverage on its catalogue of existing products, systems and procedures. The EIF will also establish for each EREM window a clear origination strategy and selection process in full co-ordination with the EIB to serve the market in an efficient manner. The EREM will focus on the 28 EU member states and has the following windows:

- *ABS credit enhancement (active since-mid 2014):* The amounts made available under the proposed EREM will allow the EIF to increase its capacity as credit enhancer of ABS tranches, both in terms of larger ticket size and broader scope in each individual SME securitisation.
- *Joint SME Initiative (expected early-2015):* Guarantee scheme and securitisation scheme supported by European Structural and Investment Funds (ESIF) and EU instruments (COSME and Horizon 2020).
- *Other initiatives concerning:* Loan funds, microfinance, co-operative banks and smaller institutions, social impact finance, youth employment programme.

Source: Kraemer-Eis, Lang and Gvetadze (2014).

Despite entailing some unintended consequences, such policy initiatives are still viewed as necessary by market participants under the particular challenging context, with the caveat that these are not long-term solutions that can resuscitate the SME credit market, but rather temporary measures for the provision of liquidity to the market and potentially to credit-restricted SMEs. From an SME finance perspective, capital constraints, and not funding shortfalls, might be a more pressing issue, particularly so in an "unusual" environment in terms of monetary conditions, interest rates and liquidity in financial markets that is likely to persist. For as long as banks are still under pressure to de-lever, SME lending is expected to be avoided as SME loans are capital-intensive products for banks to hold on their balance sheets.

6. ECB's Covered Bond Purchase Programmes and the effect of refinancing operations on the covered bond market

In 2009, the ECB launched the Covered Bonds Purchase Programme (CBPP) in order to stabilise the market for covered bonds and enhance bank refinancing. Under the programme, the Eurosystem bought covered securities of EUR 60 billion within a one-year period. In November 2011, CBPP2 was launched for a total volume of EUR 40 billion, with EUR 16.4 billion purchased until the ending of the programme in October 2012 (ECB, 2012). CBPP2 was phased-out earlier than envisaged given investors' increasing demand for euro area covered bonds and a decline in the relevant supply of bonds.

In September 2014, the ECB announced CBPP3, the purchase of a broad portfolio of euro-denominated covered bonds issued by MFIs domiciled in the euro area, in both the primary and secondary markets, and including fully retained issues. According to the technical modalities of the programme, announced on 2 October 2014 (ECB 2014e, 2014g),

purchases will take place progressively for two years, beginning mid-October. The criteria for qualifying covered bonds are centred around ECB Eurosystem eligibility, with a minimum first-best credit assessment of credit quality step 3 (CQS3; currently equivalent to an ECAI rating of BBB- or equivalent) and will extend to both retained and investor-placed bonds, including fully retained issues.[17] The Eurosystem will apply an issue share limit of 70% per security in general[18] and "conduct appropriate credit risk and due diligence procedures on the purchasable universe on an ongoing basis". The technical annex also specifies that the ECB's CBPP3 portfolio will be made available for lending on a voluntary basis.[19]

The **CBPP is perceived as the enabling factor for the reopening of the covered bond market after the credit crisis.** An evaluation study of the first programme in 2011 has demonstrated that the programme has contributed to "a decline in money market term rates, an easing of funding conditions for credit institutions and enterprises, encouraging credit institutions to maintain and expand their lending to clients, and improving market liquidity in important segments of the private debt securities market" (ECB, 2011).

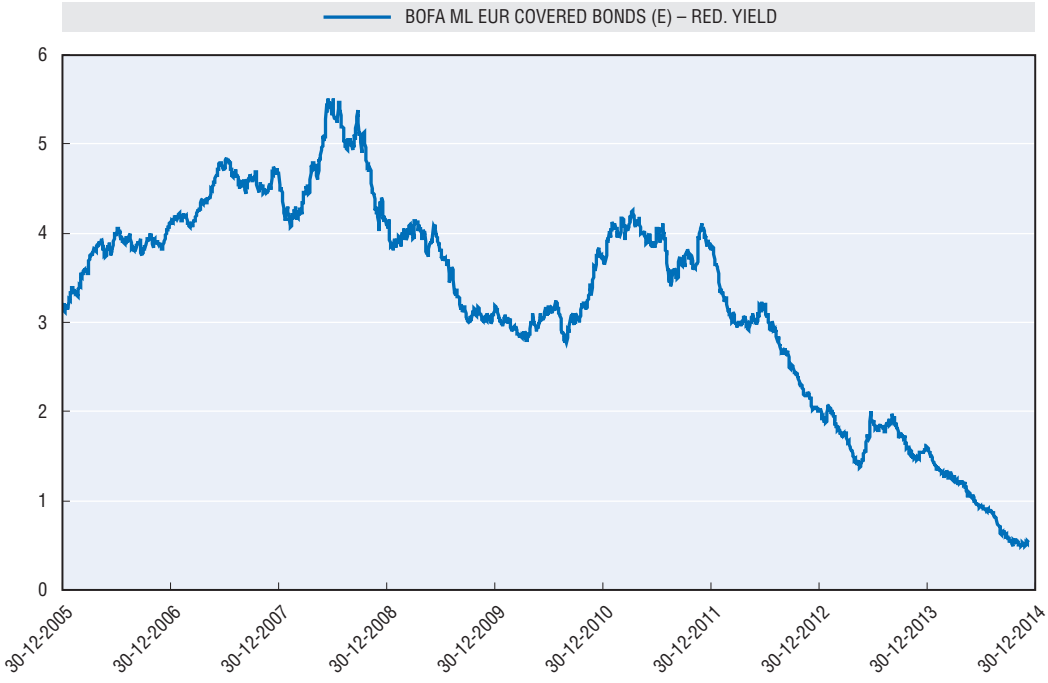
However, to the contrary, **so far the covered bond market appears to have been negatively affected by the monetary operations run by the ECB.** By part of the industry LTROs are held responsible for the drop in public issuance, replacing public covered bond placements with retained supply of said instruments (ECBC, 2013). At the same time, collateral "locked" in pledged retained covered bonds decreases the stock of available eligible collateral for public issuance. This is particularly relevant when it comes to SME covered bonds, given the relatively limited amount of outstanding SME loans in banks' balance sheets. Analysts expected that public covered bond issuance levels will be further depressed in 2014 following the announcement of the TLTRO, which is the most attractive and competitive source of funding, including compared to cover bond "repo-ing" with the ECB. It should, however, be noted that a very important contribution to the drop of covered bond public issuance came from subdued lending to the real economy and weak housing markets – amongst other factors such as bank deleveraging that resulted in lower funding needs, or asset encumbrance concerns and the corresponding preference of senior unsecured funding.

Following the announcement of the CBPP3 programme in September 2014, a number of new issuances in October and November were well-received by the market, however, the covered bond market did not pick up enough to bring the volume levels to 2010-11 levels. Covered bond spreads have started to tighten upon announcement of the programme with yields falling to 0.5 per cent levels in December 2014 (see Figure 26). Such low yield levels are not deemed sufficient by some investors Decreasing private demand thus reflects some crowding out by the CBPP3. A number of transactions for new covered bond issuances have reportedly been postponed, as the proposed returns were seen as insufficient for private investors (*Financial Times*, 2014).

In particular, CBPP3 is seen by the market as more of a backstop to ECB's initiative that does not necessarily help the revival of SME lending. As the experience with past CBPPs that have been tested throughout the crisis has shown, such programmes allow for swift intervention by the ECB if deemed necessary. Despite depressed issuance levels and lack of supply, the size of the covered bond market is material enough to serve the purpose of the exercise (see also Figures 18 and 19 in Section IV.C above). The use of covered bonds besides ABS (see below) will allow for smaller respective purchases than a single-instrument

Figure 26. **Covered bond yields in Europe**

2006-14, in per cent



Source: Thomson Reuters Datastream.

targeted programme, limiting the crowding out of private investors from those markets. Nevertheless, given that the vast majority of covered bonds are backed by mortgages and public sector loans (Figure 19 above), the immediate effect to SME lending would be limited. **Given that selling covered bonds will not provide any capital relief to participating institutions, the effect to primary market issuance is likely to be less significant than the respective ABS programme** (described in the following), particularly in view of the parallel TLTRO, as mentioned above.

Purchases under the CBPP3 commenced on 20 October 2014. As of 5 December 2014, the ECB has purchased EUR 13.488 billion of covered bonds on the secondary market and EUR 4.313 billion on the primary market, with the programme still ongoing.

7. ECB's outright purchases of ABS

On 4 September 2014, the ECB announced a novel ABS purchase programme (ABSPP) starting in October 2014, the modalities of which were announced on 2 October (ECB, 2014e). ABSs were already expected by the market to be the preferred vehicle for the exercise of quantitative easing by the ECB. The ECB has announced the intensification of preparatory work related to outright purchases of ABS so as to improve monetary policy transmission, given the role of the ABS market in facilitating new credit flows to the real economy (ECB, 2014a). The scope of ABS to be considered for purchasing by the Eurosystem is real economy-oriented, i.e. targeting securitised debt of the non-financial private sector (ECB, 2014c). ABS targeted are simple, transparent, and "real" – i.e. based on loans and not on derivatives (ECB, 2014b). Additional reporting requirements may apply in order to ensure that such credit enhancing programme will actually be used to lend to the real

economy. In parallel, on 20 October 2014 the Eurosystem launched a new (its third since 2009) covered bond purchase programme (CBPP3), targeting the purchase of euro-denominated covered bonds issued by MFIs domiciled in the euro area (see subsection 6 above).

According to the technical modalities of the programme (ECB, 2014f), **the ECB will purchase senior and mezzanine tranches of euro area ABS in both primary and secondary markets**, starting in Q4 2014. The asset purchase criteria for senior tranches are centred around ECB Eurosystem eligibility[20] and will extend to both retained and investor placed bonds.[21] The program itself will be in place for at least two years and focus on both newly issued securities and those traded on secondary markets. For fully retained securities, purchases will be possible subject to some participation by other market investors. An issue share limit of 70% per individual security applies, as is the case with CBPP3.[22]

Specific details on the eligibility criteria for guaranteed ABS mezzanine tranches remain to be announced at a later stage, together with details on pricing and implementation infrastructure/mechanisms. The joint paper by the BoE and the ECB (ECB and BoE, 2014b) has provided a good outline of the ideal ABS the central bank will be striving for. Prior experiences with buying programmes, such as the US TALF or the outright purchases by the Bank of Japan, as well as the previous CBPPs in Europe provide useful insights on the challenges and the structuring considerations for such programme. Indeed, similar to the Federal Reserve's programmes, ABSPP will aim at senior tranches of ABS, and mezzanine tranches provided that they are guaranteed (by a national government or development bank).

Price transparency issues may arise from the purchase of newly structured non-marketed ABS by the ECB. Nevertheless, the use of ABS as eligible collateral for monetary operations for over ten years has provided the Eurosystem with important expertise as to the pricing and treatment of ABS instruments.

The aim of the new purchase programmes is twofold. On the one hand they will foster credit easing for the banking sector, representing more than 80% of credit intermediation in Europe (ECB, 2014c). At the same time, they will significantly steer the size of ECB's balance sheet to 2012 levels (purchases will not be "sterilised", i.e. they will be financed by increases in central bank money with a subsequent increase of the central bank's balance sheet).

Careful selection of participating ABSs for such exercise needs to be ensured particularly with regard to the corresponding credit risk, in order for the ECB's balance sheet credit quality to be preserved. The collateral eligibility criteria under ECB's refinancing operations do serve as a good guide for the requirements of such product. The ECB has released a tender notice around risk management of ABS and covered bonds positions, focusing on cash flow modelling and pricing of losses for both covered and ABS bonds, current and historical ABS market prices, and an ABS structuring tool (ECB, 2014d).

Purchases of ABS under the ABSPP commenced on 21 November 2014 and the programme is still ongoing at the time of writing of this report. As of 5 December 2014, EUR 0.601 billion of ABS were purchased in the market by the ECB.

B. Some considerations for assessing ECB's and other asset purchase programmes

Views differ over the necessity for public intervention when it comes to senior tranches of high-quality issuances, as private investor demand for that part of the

structure is consistently strong in capital markets. In the case of the ECB, the provision of credit enhancement for the mezzanine tranches of participating deals through national government guarantees reduces the direct exposure of the ECB in riskier parts of the issuances. Nevertheless, important concerns arise around the risk that these guarantees will involve, particularly when it comes to a potential indirect off-loading of riskier and lower credit quality legacy debt to national governments and the ECB. The large scale of the ABSPP programme[23] might also drive originators to pre-crisis originate-to-distribute practices with lenient lending standards. Carefully designed selection and pricing mechanisms can ensure that such practices are avoided and robust origination practices are fostered instead.

There is no consensus on whether quantitative easing exercises have a significant effect on bank lending. A recent working paper by the Bank of England finds no statistically significant evidence that the 2009 gilt purchase programme produced a new bank lending channel and that other policies should be preferred for the improvement in the supply of credit (Butt et al., 2014). The results of this study contrast with results of another recent Bank of England working paper that shows that quantitative easing exercises may have had a statistically significant, albeit small, effect on bank lending (Joyce and Spaltro, 2014).

Together with RMBS and other ABS containing loans to the real economy, SME ABS will be part of such quantitative easing exercise by the ECB, entailing numerous benefits for the SME securitisation market. Liquidity on the secondary market for SME ABS will be improved by such purchases and spreads will most likely tighten for the asset class. Given that the programme will also involve purchases in the primary market, primary origination of SME ABS may be fostered as banks will pursue risk transfer that will assist in de-levering their balance sheet. Tightening of the spreads across the board will help bring back issuances that were priced out as uneconomical (see Section VII.A), particularly when it comes to legacy securitisations, and depending on the evolution of loan rates when it comes to new issuances. The purchase of newly issued SME ABS may also incentivise other players, such as institutional investors, to enter this market. To that end, the International Organization of Securities Commissions (IOSCO) is working towards the creation of a framework of standards and criteria for simple, transparent and consistent ABS that would encourage non-bank investors (pension funds, insurance, asset managers) to participate in this market.[24] By broadening the diversity of issuers and buyers in a market more or less dominated by a few jurisdictions, fragmentation issues will be also addressed. Depending on the terms of such a programme, the volume of further on-lending to SMEs and the real economy could be fostered, potentially resulting in improved financing terms for SMEs in the countries involved.

On the other hand, asset purchase programmes face a number of challenges, especially regarding the underlying SME asset class. Record low levels of interest rates may undermine the funding benefit of participation in such programme. Nevertheless, if and when rates increase, the attractiveness of ABS as a funding channel will become more apparent. The effectiveness of the programme could be enhanced by changes in regulation towards a more favourable treatment of certain ABS and in line with the regulatory treatment of similar instruments such as covered bonds. This has recently also been mentioned by the President of the ECB: "certainly, some of these [regulatory] changes will be needed to rebuild a market which could be, especially in Europe, an important channel

of credit intermediation" (ECB, 2014c). Insofar as legal and regulatory treatment may discriminate SME ABS against SME covered bonds, issuers might prefer SME covered bond over SME ABS issuance.

A number of additional challenges exist around asset purchase programmes. Purchasing on the primary market could risk being perceived as a direct financing of entities. At the same time, outright purchases in relatively small markets risk distorting market pricing. Holders of legacy ABS might refrain from selling their holdings at reduced market prices, in order to avoid marking them to market and incurring potential accounting losses. Others may tactically be unwilling to sell, anticipating that the central bank's purchases will drive prices higher or by hoping to sell at off-market prices. Purchases at off-market prices would enhance yields for the more junior tranches, driving higher yields for investors who might be incentivised to buy some of those mezzanine tranches. More importantly, originators may find it more efficient to issue RMBS than SME ABS given that the former normally enjoy a deeper investor base and in general more favourable spreads.

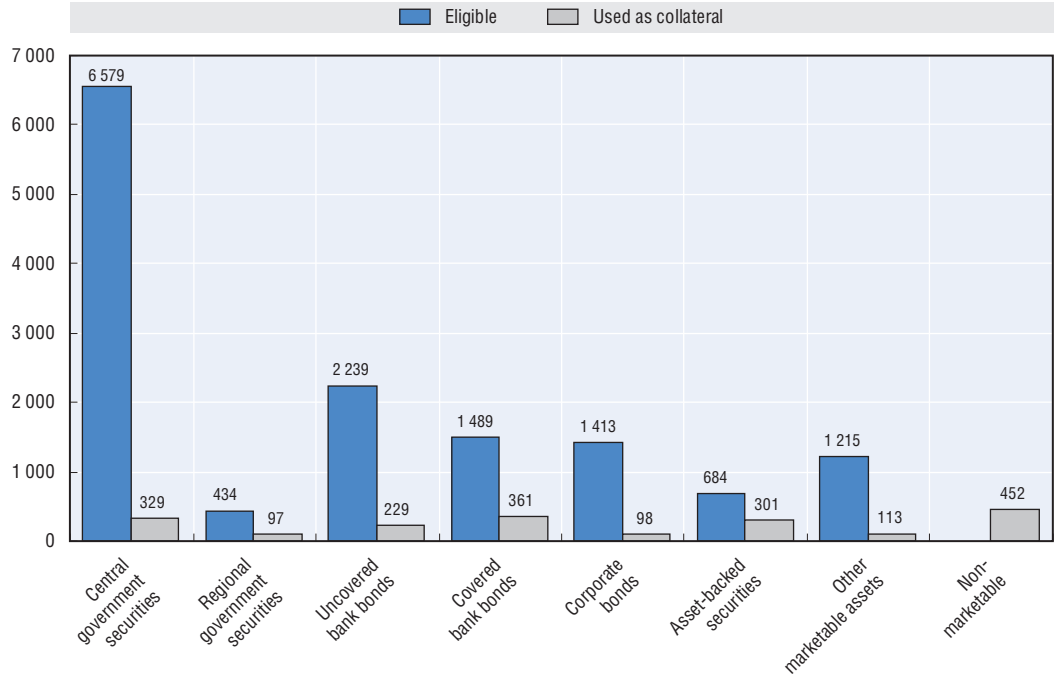
The inclusion of primary issuance in asset purchase programmes and the inclusion of other types of real-economy-related ABS had positive effects on the market. They address the issue of limited availability of outstanding SME ABS, especially in Europe, as the availability of SME ABS may not be enough to reach a critical mass and have a noticeable market and economic impact, for instance in European peripheral countries. Based on the principle that capital is fungible, more standardised asset classes, which are easier to securitise, can be promoted in securitisation programmes, creating headroom in banks' balance sheets to be redirected to SME lending. Some form of insurance that (part of) the freed-up lending capacity is channelled into SMEs will be important.

Capital incentives, rather than liquidity, are likely to motivate originators for new issuances under an asset purchase programme. Given the abundance of funding provided to banks, especially in Europe through the ECB repo facility, the outright repurchase programme is unlikely to offer a significant funding cost advantage to banks. Nevertheless, capital relief from securitisation will be a major driver of new issuance, provided that it is not outweighed by the capital charges assigned to the first loss portion that is retained by the originator (or other tranches, as required). In Europe, the provision of guarantees for mezzanine tranches by national and supranational institutions will be critical for banks to benefit from capital relief, as banks would need to sell at least 50% by risk weight of mezzanine tranches in order to be able to claim capital relief (Deutsche Bank, 2014a). In addition, a number of leveraged-constraint banks will benefit from the sale of senior tranches even if they fail to get capital relief, as they would look into improving their leverage ratio rather than achieve gains on capital (Reuters, 2014).

The purchase of ABS or covered bonds that are currently retained and used as collateral for central bank funding (Figures 23 and 24 in Section VI.A.5 above) **would prevent the crowding out of private investors from the relatively small primary market.** Other assets, such as unsecured corporate bonds, could also be part of similar initiatives. To get an order of magnitude of the potential pool of assets available for such purchases, the eligible assets for refinancing operations of the ECB that are not yet pledged could be used as a proxy (see Figure 27).

Figure 27. **Eligible and pledged marketable assets – ECB**

As of Q2 2014, in EUR billion, nominal amounts



Source: ECB, *www.ecb.europa.eu/paym/pdf/collateral/collateral_data.pdf?ba3bb0e0c2611c6740a278aa2ee7818a.*

VII. Other difficulties and impediments to SME securitisation

A. Economic viability of SME securitisation

The low level of SME securitisation issuances placed in the primary market cannot be solely attributed to prevailing regulatory and monetary policy regimes but is also due to the lack of economic viability of certain SME issuances. As demonstrated by the relevant data (see Figures 24 and 25 above), most SME securitisation issued in Europe at the aftermath of the crisis was retained and used as collateral with the ECB, while very little was actually placed, usually just the senior, less risky, part of the structure. Besides regulatory treatment, asset quality considerations, low liquidity (and associated liquidity premia) and other factors may result in yield levels required by investors that cannot be serviced by the cash flows of the asset pool, rendering public issuance uneconomic.

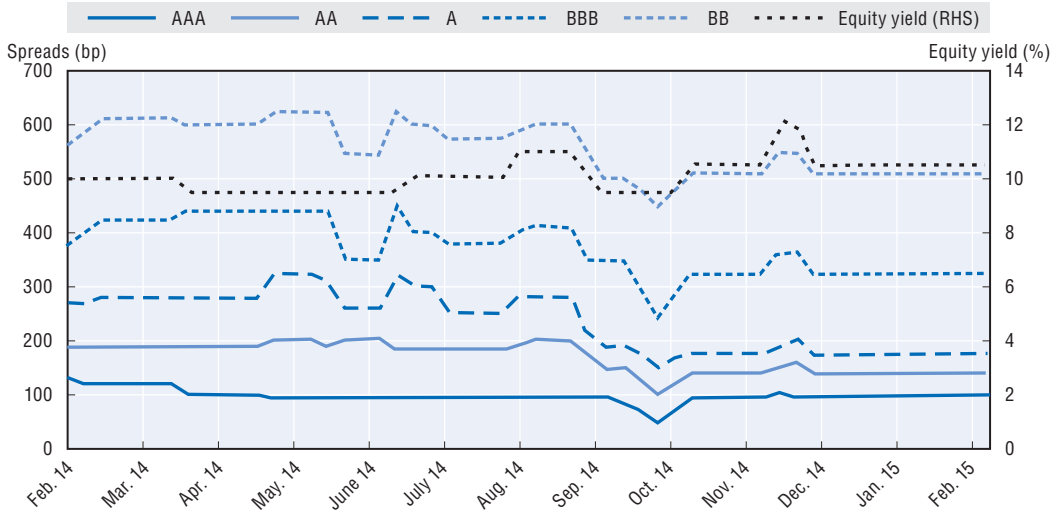
SME securitisation is regarded as uneconomic by some issuers due to the mismatch of the yield required by investors and the return on the underlying asset for the issuer. When investors approach SME CLOs they tend to perform a relative pricing, looking for a spread on a SME CLO that is higher than a comparable residential mortgage-backed security (RMBS) reference. Such a spread premium should compensate investors not only for the lack of liquidity in the market for SME CLOs, but also for the default risk of the underlying SME loans that is normally higher than that of larger corporates' loans or (with the RMBS reference in mind) of mortgages. From the lender's perspective, as the spreads need to reflect the riskiness of the underlying loans, SME loans are supposed to have a higher spread than residential mortgages based on performance statistics and non-performing levels of SME and residential loans disclosed by banks (even though pre-crisis levels of spreads that banks charged on SME loans were rather comparable to the ones

charged on residential mortgages). As a result, for SME securitisation to be rendered economically viable and profitable, spreads charged on SME loans by originators would need to increase and/or the desired yield expected by investors to decrease.

The underlying economics of SME collateralised loan obligations (CLOs) or leveraged (corporate) loan CLOs are suggested by industry participants to be insufficient for the placement of such products in the market. Leveraged corporate loan CLOs are referred to by market players as an interesting comparison to SME CLOs in order to showcase an example of SME deal economics that do not work. Leveraged loans CLOs have seen a comeback after the crisis with EUR 7.5 billion of new issuance reported for 2013 in Europe. Although the underlying loans are mostly loans to European mid-cap corporates whose risk profiles are somewhat different to those underlying SME CLOs, the economics of the structure provide a good example of how SME securitisation could become economically viable. In such structures, the entire capital is being placed with investors, from AAA tranches down to the equity tranches, and investors' (asset managers' in this particular case) demand seems to meet the underlying borrowers' along the entire issuance. Such AAA tranches are priced at 140 basis points (bp) over Euribor (see Figure 28 as pricing examples of non-SME CLO tranches), while the spreads on the underlying loans stand on average at 400bp. Conversely, Fitch estimated in May 2013 that the prevailing minimum primary market spread for AAA-rated SME CLOs would be between 80-100bp over Euribor for core European jurisdictions, while prevailing loan spreads charged on such loans ranged between 120-250 bp (Fitch, 2013a).

Figure 28. **CLO secondary market spreads**

Spreads over Libor in basis points (l.h.s.) and equity yield in per cent (r.h.s.)



Source: Deutsche Bank (2015).

Based on the above example, it comes as no surprise that originators of SME CLOs opt for cheaper ECB liquidity rather than placement with investors in the primary market. Official sector schemes providing funding at favourable terms may render securitisation expensive compared to tapping such official sector schemes (as discussed in section VI.A above). At the same time, investment in government bonds leveraging on LTRO liquidity can be used as an example of the latter, with an attractive yield achieved through

a sovereign bond carry trade when compared to a much higher risk-adjusted break-even point for LTROs directed to SME loans.

SME securitisation is deemed uneconomical when the liability spread exceeds the asset spread. Economics of SME securitisation issuances can be particularly unfavourable when issuance involves legacy (pre-crisis) loans carrying low spreads, against current yields demanded by investors (ECB and BoE, 2014b). Such yields incorporate compensation that covers for greater liquidity risk appreciation, perceived riskiness of the underlying loans given macroeconomic outlooks and other factors, including regulatory charges.

Market views are mixed over the ideal, optimal level of SME asset spreads and its implications for SME securitisation. SME asset spreads are not considered by some as high enough to create a robust cash securitisation market, particularly in the periphery of Europe during the crisis. Thin SME spreads are thought to be justified in countries such as Germany, where default levels were very low and the broad macroeconomic environment allowed for issuance of AAA-rated instruments, but not in countries where SME asset performance did not follow the same pattern. Such thin spreads, deemed unjustified, are also thought by some observers to work against the interest of macro prudential stability by driving over-indebtedness. A potential quantitative easing exercise in Europe could drive spreads tighter, possibly making issuance economical for countries that were previously priced out of the market, such as peripheral European countries.

Ancillary revenues generated from products and services related to SME lending may be another possible reason behind the issuance of non-economic tranches that cannot be placed in the market (besides monetary operations with central banks), and a potential factor behind low asset spreads in underlying SME loan portfolios. Examples of such revenues include credit cards, leasing, insurance products, transaction services (foreign exchange, treasury, payroll), invoice trading, etc.

For traditional commercial banks, however, SME loans are considered a major profit centre and a product offering some pricing flexibility when compared to more or less standardised mortgage spreads. SME loans can therefore involve high margins and banks may choose to hold SME loan portfolios on their balance sheet instead of securitising them, further adding to the issue of asset encumbrance. The high profitability of SME lending can be seen as the natural pay-out for the effort small commercial banks put into building long-standing relationships with SMEs, particularly at local level. The investment required for building the infrastructure necessary to arrange and serve SME loans adds to the originator's costs. Yet, despite high profitability, return on capital of SME loans is seen by some industry players as insufficient and regarded as the key challenge banks are currently facing. SME loans are highly capital intensive. On top of that, spreads charged may not always reflect these high capital charges. For SME lending to make commercial sense from a risk-return perspective, the bank needs to factor in its own funding/refinancing costs, capital requirements associated with the loan, SME default risk, administrative and infrastructure costs as well as the opportunity cost of placing the funds as loans to SMEs.

Investors might also disadvantage securitisation issued by banks considered as "too-big-to-fail", when compared to other wholesale liabilities (ECB and BoE, 2014b). Securitisation issued by too-big-to-fail institutions is not perceived to be benefiting from implicit guarantees associated with such issuers due to the potential bankruptcy remoteness of the securitisation. Measures are being taken internationally by policy-makers to address such distortion, led by the work of the Financial Stability Board (see also FSB, 2013).

B. Financing options, the role of information and limits to disintermediation

Traditionally, SMEs tend to reach out to their local bank with which they already have a relationship when seeking financing. While such relationship banking has its benefits, it often leads to, or perpetuates, SMEs' lack of awareness of other financing options potentially available to them, such as those provided by the "shadow banking" industry, including crowd funding platforms or hedge funds that directly finance small businesses (Schuller, 2014). Moreover, SMEs are generally ill-equipped to deal with investor due diligence requirements. This lack of information and understanding leads to a weaker position of an SME in financing negotiations. This is an area where SME managers or owners need to be supported by independent advice, no matter if it is coming from the regulator or an independent market participant. Such advice and financial education, more generally, could empower SMEs to reach out for the best financing option – be it a bank loan or something more sophisticated – and to enhance competition between finance providers.

Nevertheless, while it is generally accepted that SMEs are heavily reliant on traditional bank lending, fuller disintermediation of SME financing may be neither achievable nor desirable. This is particularly true for very small and small enterprises, where the cost and ticket size required for capital markets issuance tends to be prohibitive. Pricing, capital intensity, as well as the complex logistics involved in SME loan origination are factors that hinder the complete disintermediation of banks in SME financing. Initiatives for the "unplugging" of banks, particularly in Europe with the collection of funds from investors that are then directed to SMEs, have been faced with challenges on the origination side: the logistics involved in the origination of SME loans can be extremely complex, especially when compared to the refinancing at the portfolio level. The local nature of the commercial relationship, the large number of on-the-ground bankers involved and the large distribution of SMEs, as well as the range of tailored-made products offered to SMEs are all factors adding to the inherent complexity of that type of client.

Many industry participants therefore argue that, **rather than replacing or removing some of the actors involved in SME financing, attention should be brought to the proper functioning of the different constituents involved.** As such, banks are thought as best placed in terms of underwriting and origination of SME loans. This is unlikely to change by the upcoming evolution of the banking landscape following recent and upcoming banking regulations, particularly so in Europe, characterised by the fragmentation of its financial markets. The possibility of online digital platforms facilitated by public institutions closely related to SMEs constitutes a potential alternative way of pooling SME loans favoured by a few market players.

The involvement of banks is also important alongside institutional investors on syndicated loan securitisations through SPVs, particularly in the space of mid-cap company financing. The benefit of having banks alongside investors in such structures is for investors to have the knowledge and equipment to negotiate a structuring or restructuring situation. The provision of a framework by the official sector for the transferability of loans is proposed by some market participants as a potential step forward, particularly as regards syndicated leveraged loans.

Given the fixed-cost nature of sourcing and monitoring particularly small and mostly local firms, capital market funding and lending by non-banks (direct or via funds[25]) should have a complementary role alongside traditional bank lending channels. For very small firms, issuance in the capital markets would only be made available with

very light requirements and constraints (in terms of quotation, listing, supervising and cost). Private placements (see Sections IX.D and IX.E below) could ease such requirements but still carry costs that are deemed prohibitive for very small SMEs.

For a large part of the SME population, particularly those at the lower end of the size spectrum, the portfolio approach provided by securitisation is the cheapest solution available, allowing for the sharing of funding and structuring costs and costs of (indirect) access to capital markets. Through its "pooling" capacity, securitisation can be the easiest way to bring capital market money to SMEs, working as a bridge that allows the on-the-ground knowledge of the banks to be deployed with capital markets' funding, insofar as such a bridge does not result in pure "originate-to-distribute" models.

C. Data transparency, data platforms and product standardisation

Lack of availability of credit information of the right form (comparability) and at the right time (timeliness) is a significant impediment to the fostering of market-based SME financing overall. Central credit registers and DataWarehouses, owned and operated by central banks or financial supervisors, exist or are being developed in a number of countries to address this issue. Besides the establishment of such data platforms, mandatory reporting and sharing of credit information could be a way to enhance completeness and availability of SME credit information, perhaps in some cases on an anonymised basis for some of these data (BoE, 2014a). Although public support is relevant and important, the burden of the cost should not lie entirely with the public sector and providers of financing should not be dis-incentivised from collecting and dispersing credit information, as appropriate.

1. Asymmetric information and the importance of data sharing

Data paucity is one of the main challenges to SME securitisation as well as to all other market-based financing instruments for SMEs. An important hurdle to the pooling and repackaging, portfolio-based approach of SME securitisation is the provision of enough relevant information for investors to quantify the level of risk involved. According to some market participants, market-based signals rather than quantitative models are seen as important indicators of risk and a right tool for financial market regulators to adequately measure securitised and un-securitised intrinsic investment risk. To that end, some market participants call for the institutionalisation of an ongoing, public, permanent process of exchange between actors with differing risk perceptions, like between buyers and sellers, and the disclosure of relevant information to both sides of a deal throughout the life of the investment.

The importance of information for credit markets has been advocated by several academic authors (Stiglitz et al., 1981; Miller, 2003) arguing that the asymmetric information between provider and receiver of financing is a fundamental characteristic of credit markets, leading to adverse selection and moral hazard on behalf of the borrower. The same principles apply to market-based financing and the corresponding instruments, and it can be argued that better availability and sharing of information can positively influence borrower and lender behaviour, countering adverse selection and moral hazard risks.

Information asymmetries are also important among competing providers of financing (competing banks for example) and market participants often make reference to the failure of past projects aiming at combining information from different commercial

banks (without any public support). Views differ as to whether such information exchange, with Gehrig et al. (2007) arguing that it does not necessarily lead to more efficient credit markets. The International Finance Corporation, on the other hand, claims that credit reporting systems aiming at reducing information asymmetries enhance competition and reduce default rates, ultimately resulting in lower cost of funding and easier access to credit (IFC, 2012). For a more elaborated analysis of credit information sharing, see OECD's discussion paper on Credit Information Sharing (OECD, 2010).

Such information is particularly important on transactions involving SMEs, given that the SME sector is highly heterogeneous, harbouring sector-specific risks only a fraction of which can be gauged from financial statements. SME entrepreneurs are often less prone, willing or able to share risk sensitive information, while sourcing and monitoring SME financing entails a significant fixed cost for market participants.

The lack of loan level data, a veritable information asymmetry particularly with respect to SMEs, often inhibits the development of more rigorous fundamental analysis of financing instruments such as SME securitisations. Loan-by-loan information allows for the statistical analysis and the analysis of parameters that are meaningful only in relation to each specific loan (interest rates, maturities, collateral pledged). The downside to loan-level reporting and data provision is the cost of the supporting infrastructure and the cost of maintaining such databases.

Public support via public financial institutions could help to compensate for this structural cost disadvantage SMEs have to face as compared to larger borrowers. However, outright subsidisation should be avoided to minimise crowding out.

Sharing of SME credit data amongst providers of SME financing will not only allow for better credit evaluation of SME-related instruments, but will also **level the playing field across institutions.** New and alternative providers of financing may face lower barriers to entry into the SME financing space, thus improving the availability of credit to SMEs (BoE, 2014).

However, while many banks have the relevant information, for commercial reasons they may not be willing to share it, thus so far projects with the objective to combine information from different commercial banks have failed. This is why public support might not be sufficient, and **information sharing would have to be – to some extent – mandatory**.

2. DataWarehouse platforms to improve SME loan-level information

Regulatory initiatives requiring the provision of detailed, standardised loan-level information have been introduced on both sides of the Atlantic. In the US, regulatory initiatives including the Wall Street Reform and Consumer Protection Act (Dodd-Frank regulation) require that loan-level information is made available to investors both at the time of origination and on an ongoing basis. Originators are therefore required to run systems that can process and maintain performance data at loan level at issuance and over the period of servicing of loans.

In Europe, such an initiative was launched by the European Central Bank in 2013 through the **European DataWarehouse** (ED),[26] comprising loan level reporting for underlying loans of ABS issued in Europe. ED is the first ABS warehouse ever created that is owned by its market users, and it is being supported and endorsed by the ECB and members of the Eurosystem. The ECB and NCBs, such as the Bank of England, are fully engaged in obtaining greater structural and collateral transparency and both require loan

level data to be made available in order for asset-backed bonds to be eligible as collateral at each bank's liquidity operations.

Fully transparent and granular loan level data, freely accessible to all qualified users like institutional investors, could be **regarded as a public commodity**. Thus, building and operating SME DataWarehouses may require public support. However, as the European (ED) example shows, such initiatives do not necessarily need public support. Private sector initiatives may even be able to deliver such widely consolidated and standardised repositories in a more expedient manner, by refining the large amount of data already available but currently lacking standardisation, accuracy and minimum quality requirements and allowing for their meaningful use (e.g. Altenburg, 2013). However, others would argue that a facility with even remotely comparable capabilities does not yet exist and would take years to build, involving substantial public investment that could only be justified by the paramount relevance of the SME sector for growth, innovation and employment. **Suitable platform solutions and their trade-offs** (e.g. region-wide vs. national, strictly public vs. in co-operation with the private sector, protection of confidentiality vs. open data) **are yet to be explored in greater detail.**

Such platforms would also allow for a possible repositioning or even for necessary restructuring efforts by individual members of the pertaining SME universe, either initiated on their own or nudged by monitoring participants. In providing loan-level information beyond the collection of mere balance sheet and profit and loss (P&L) data, DataWarehouse platforms contribute to building critical, qualitative know-how across a wide array of industry sectors that is crucial for better assessing investment risk. Therefore **such platforms can be instrumental in detaching investment decisions from a pure external ratings-driven decision making**, addressing the issue of excessive reliance on external credit ratings without a proper understanding of the transaction involved. When it comes to SME ABS, the inability of investors to accurately size the credit risk by performing their own fundamental analysis has meant that many such instruments tend to overprice risk ("trade to worst"). DataWarehouse platforms have the potential to enhance differing perceptions of risk beyond ratings and beyond the awarding of other group-think-inducing quality grading through the dispersion of risk perception, broadening the inherent limitations of available concepts of risk measurement.

However, **the availability of data *per se* is meaningless if it is not being understood and used by the relevant professionals in order to make informed investment decisions.** Individual loan information as provided by the ED initiative is thought by some market players to be useful only to the extent that an investor can create his own stratification on the portfolio, given the large number of individual loans each SME portfolio can include (in the tens of thousands). In such cases, looking at individual loans or borrowers is not common practise, unless these represent a large part of the portfolio, which is rarely the case for SME portfolios. On the contrary, portfolios of mid-cap firm loans are more concentrated (including about 50 to 150 borrowers in each such portfolio). The **promotion of standardised reporting** would assist investors in their risk analysis and portfolio selection process, as is the case with syndicated loans where private equity houses ensure that information packages are made available to investors.

But at this stage, **the problem of an absence of historical loan-level databases seems to be more pressing.** The reason for this may also be high associated reporting costs as well as the non-mandatory reporting for non-pledged SME ABS (for which the central bank

would require detailed information). Past performance analysis and information on loans in arrears will take a number of years to be fully operational, somehow limiting the current usefulness of the existing data platforms for investors. Reporting requirements through the various regulatory and supervisory regimes may be overlapping, increasing the cost of transparency for issuers. Issuers may therefore be discouraged by the costs associated with such reporting requirements, and may be driven towards other instruments instead.

3. Credit registers, SME credit scoring and the role of standardisation

Increased standardisation provides greater comparability and allows investors to perform comprehensive and well-informed analysis on the underlying exposures. Standardised loan tape templates for SME CLOs (among other structured products) were launched in 2013 by the ECB. Data availability in a user-friendly format, including IT and technical considerations on the platforms, are needed so as to encourage the actual use and proper understanding of the data by investors.

In its response to the BoE and ECB discussion paper on securitisation, AFME highlights the **importance of simplifying and harmonising both data reporting templates and formats**, so that securitisation-specific information "only needs to be submitted once, to one place and in a single format" (AFME, 2014b). A single repository of data, harmonisation of reporting requirements, emphasis on data quality and user-friendliness and facilitation of information flows are more important than additional reporting and data provision requirements.

Observers also point out that, contrary to other types of underlying assets to ABS, **the SME loan asset class would benefit from the creation of additional specialised credit registers.** Such registers provide data on SME loans underlying structured finance instruments while being in line with national confidentiality and privacy laws. Besides improving availability and quality of information, they allow investors to run accurate models of default and recovery rates (BoE and ECB, 2014b). At the same time, more abundant data and information would aid the development of standardised metrics of credit performance.

Data disclosure also includes all forms of external credit assessments, such as ratings assigned by credit rating agencies or credit bureaus, recognised to play a significant role in structuring the market and observing default frequency. Better information flow between participants allows for better assessment of the risk premium required by investors and easier access to funding by SMEs. Public initiatives such as the one sponsored by Banque de France (see Box 6), collecting the information on a loan-by-loan basis (whenever a bank has an aggregate exposure above a EUR 25 000 threshold for the corporate) and assigning ratings to all corporates (above a EUR 750 000 annual turnover threshold), is extremely beneficial to the system. Similar credit registers – without necessarily a relevant scoring system attached to them – exist in a number of other European countries. To mention two extreme examples, the Banco de Portugal has a minimum reporting threshold of only EUR 50 per borrower, one of lowest reporting thresholds for this type of registers (operating on a borrower-by-borrower reporting basis), while the German Bundesbank has a minimum threshold of EUR 1.5 million on aggregate loans per borrower, which is on the high side (operating on a loan-by-loan reporting basis).

The limitation of accessibility only to banks (as regulated entities) is, however, noted by some market participants as a major constraint in the above effort. Mimicking such

Box 6. **The Banque de France rating system**

The Banque de France rating is an assessment of a company's ability to meet its financial commitments over a three-year period. It comprises:

1. a **turnover rating**, indicating the company turnover, represented by a letter from A to M: A for companies with turnover higher than EUR 750 million, and M for companies with a turnover lower than EUR 0.10 million. A non-significant turnover rating N is given to companies that do not directly carry out an industrial or commercial activity (e.g. holding companies). The turnover rating X corresponds to companies whose turnover is either unknown or too old (over 21 months old);
2. a **credit rating,** assessing the creditworthiness of the company, represented by a range of 13 different levels: 0, 3++, 3+, 3, 4+,4, 5+, 5, 6, 7, 8, 9, P. The rating 0 is given to companies for which the Banque de France has collected no unfavourable information. In descending order, the most favourable ratings are 3++, 3+, 3 and 4+.1 The credit rating 8 represents irregular payments and 9 very irregular payments (severe cash flow problems). Rating P is given when the company is undergoing insolvency proceedings (court-ordered turnaround procedure or judicial liquidation).

Such credit assessment is based on i) an analysis of company, and potentially consolidated, accounts, ii) a study of bank liabilities and possible trade bill payment incidents, and iii) the company's environment: sector of activity, economic and financial ties with other entities, and, where appropriate, any legal events affecting the company.

The data used for the attribution of a credit rating to resident companies is collected by the **French Central Credit Register** (CCR, established in 1946), collecting loan-level data for non-financial companies from banks with a minimum aggregate threshold of EUR 25 000 on a monthly basis.

CCR is part of the larger information system operated by the Banque de France on non-financial companies since 1982 (Fichier Bancaire des Entreprises, FIBEN). FIBEN combines credit information collected by the French CCR with the companies' accounts and other public data, such as court judgments.

This rating system is used by the Banque de France in the framework of its Eurosystem monetary financing operations and for the purpose of prudential supervision. The ratings are also made available to credit providers and cover more than 250 000 non-financial resident companies (above an annual turnover threshold of EUR 750 000). Although banks are not obliged to use those ratings in their credit assessment, they often do use these scores particularly for the calculation of collateral eligibility for refinancing operations with the Banque de France.

Source: Banque de France (2013), Fiben cotation website, *www.fiben.fr/cotation/*, Stevant (2010).

initiatives and broadening their range would be beneficial to SME financing because more investors would be able to make their own judgements about risks related to SMEs. With asymmetries of information reduced (if not ruled out), and with fewer regulatory impediments, even high risk tranches with adequate risk premiums could become attractive to qualified investors. The modification of banking legislation is also raised by market participants as possibility to lifting impediments to the greater involvement of institutional investors.

Concrete actions to make securitisation transactions more transparent and standardised are already being taken by public authorities and the private sector, for

instance in terms of standardisation of reporting templates but also in terms of differentiation of "high-quality" securitisation products (see Section V.C above). The Prime Collateralised Securities initiative (PCS), the differentiation introduced in European regulation based on the concept of "high-quality securitisation" for simple and transparent securitisations, as well as the proposal by the Bank of England and the European Central Bank are all in the same vein.

At the same time, in the context of the SME universe, complete standardisation can be seen as impossible and counter to the very nature of inherently diverse SMEs. The capacity of securitisation to allow for various degrees of credit enhancements through different sizes of tranches and different forms of credit enhancing is consistent with the diverse characteristics of SMEs. At the same time, aggregating large pools of SME loans allows for the smoothing out of idiosyncrasies. The high heterogeneity of SME pools is an important source of attractiveness to private investors, with some investors arguing that, despite a fairly high implied probability of default of individual SME loans, the relative stability of SME portfolios renders them attractive from the standpoint of a private investor.

VIII. SME ABS vs. SME covered bonds

As discussed in Section II.D above, **covered bonds are asset-backed instruments with many similarities to securitisation products** and in particular to plain vanilla ABS, as they are both collateralised by an underlying pool of assets. Nevertheless, a number of key differences exist that have rendered the instrument a safer alternative to securitisation in the years following the financial crisis. Some of these differences, in terms of the characteristics and regulatory treatment of the instrument, warrant a more specific discussion and assessment which is the objective this chapter which also presents some case studies of such instruments.

A. SME-backed covered bonds

1. Features and problems of SME-backed covered bonds

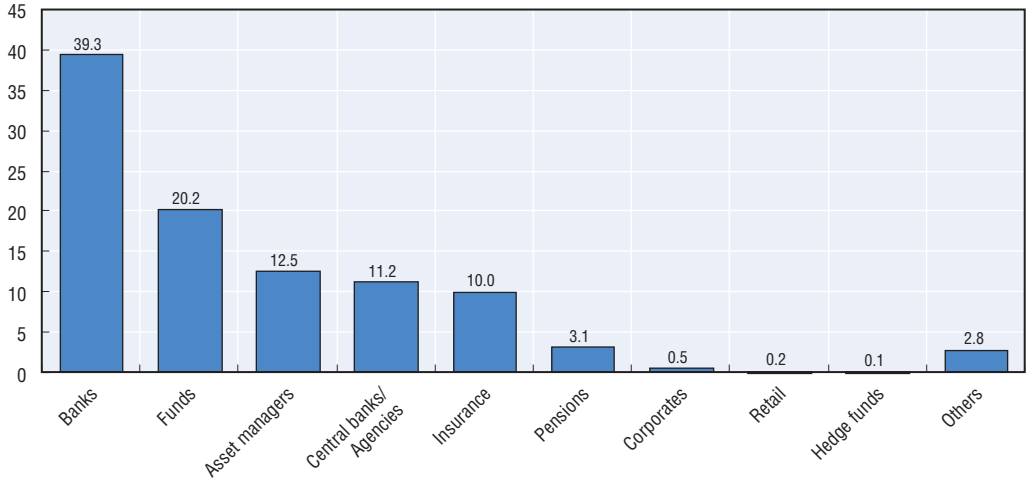
In order to raise financing for SMEs, SME loans can be bundled together in a cover pool against which covered bonds can be issued. However, to date, the use of SME loans as an asset class in covered bonds is not permitted in the legislation of many countries with an active covered bond market. This has been changing with the gradual introduction of covered bond legislation as mentioned above (II.D; e.g. Portugal 2006, Greece 2007, United Kingdom 2008, and Australia 2011) or the update of existing rules. Nevertheless, to date, the use of SME loans as an asset class in covered bonds is not permitted in the legislation of most countries with an active covered bond market. The majority of covered bond regulation is mostly geared towards mortgages and public sector loans and the market for SME covered bonds is relatively new and small in terms of volume outstanding.

Besides statutory shortcomings, the issuance of SME-backed covered bonds is faced with the same inherent difficulties relative to credit risk assessment that are present at the SME securitisation market. Information transparency is a key feature necessary for the promotion of such instruments, and the lack of transparent, standardised information on the credit profile of underlying SME loans is still an impediment to investors in their credit assessment process. It should nevertheless be noted that, when assessing a covered bond, investor focus is somewhat moved away from the cover pool towards the credit of the originator, given the double recourse feature of that instrument.

The investor base for covered bonds is different than the one for ABS, as the risk-reward profile of the instruments is very dissimilar to securitisation, raising the question of sufficient investor appetite for this instrument (Figure 29). A broad base of investors with diversified needs is a pre-requisite for the functioning of such nascent market segments, with the breadth of investor needs allowing for various similar instruments to co-exist.

Figure 29. **Investors in the covered bond primary market**

Investor breakdown for publicly placed euro benchmark issues, January 2011 to June 2013, in %



Note: Covered bonds that are retained by the issuer and used for central bank operations are excluded.
Source: ECBC (2013), NORD/LB Fixed Income Research.

Tenor is another factor affecting SME covered bonds, with SME loan maturities being, on average, shorter than those of mortgages or public sector loans (see Table 10). The turnover of SME covered bond programmes and the dynamics of the underlying cover pool are therefore more pronounced that the respective collateral of mortgage covered bonds, for example, adding to the complexity of the structure in terms of credit assessment (small size of claims, short to medium-term maturities, very high overall volume and turnover in a covered bond programme). **High turnaround of the cover pools therefore requires some additional investor sophistication** in terms of risk assessment expertise and analytical resources for constant surveillance throughout the life of the investment.

Table 10. **Average life of SME loan-backed vs. mortgage-backed structured finance instruments**

Weighted Average Life (WAL) in years

	Residential mortgage covered bonds	SME securitisations and SME covered bonds
Germany	5.9	1.6
Spain	10.8	4.2
Italy	10.1	5.0
Turkey	n.a.	0.9

Source: Moody's (2013), Deutsche Bank (2013).

Appropriate risk appetite, sufficient information and transparency, expertise to analyse credit quality of SME claims are all factors that will allow investors to allocate part of their portfolio to such instruments. Similar to securitisation, a more coherent and harmonised definition of the covered bond asset class and its respective regulatory treatment will improve the perception of investors and their confidence in the asset class, rendering covered bonds a more widely accepted instrument by investors. Over and above the regulatory workstreams discussed in Section V.A (Basel III, CRD IV, LCR), covered bonds are **particularly affected by bail-in frameworks** currently prepared or recently passed in different jurisdictions; including covered bonds in assets that are subject to bail-ins would be counterintuitive and contrary to the inherent principle of insolvency insulation. Uncertainty around the relevant regulatory treatment might drive investors away from the asset class overall.

In the European context, SME assets do not qualify for special treatment under the Capital Requirements Directive (CRD), which only allows public sector loans, mortgages and shipping loans as eligible assets. In addition, SME covered bonds are not eligible for treatment under the UCITS (Undertakings for the Collective Investment of Transferable Securities) framework, co-ordinating the distribution and management of investment vehicles across the EU while maintaining high standards of investor protection. Nevertheless, SME covered bonds are classified within the Eurosystem's collateral framework and are eligible for liquidity repo transactions with the ECB.

SME covered bonds are not complying with the definition of the ECBC covered bond quality label (see Box 7) given that SME loans are not considered to be enforceable as a security of longer maturities (as is the case with consumer loans, too). Non-complex enforceability processes and foreseeability of values and/or performances are required for cover assets serving as a long-term credit security.

Box 7. **ECBC Covered Bond Label**

The Covered Bond Label Foundation was established in 2012 by the Mortgage Federation (EMF) and the European Covered Bond Council (ECBC) in order to respond to the market-wide request for improved standards and increased transparency in the European covered bond market. The Foundation developed a quality label in co-operation with issuers, investors and regulators, and in consultation with all major stakeholders.

The label establishes a clear perimeter for the asset class and highlights the core standards and quality of covered bonds. At the same time, it seeks to increase transparency and improve access to information for investors, regulators and other market participants. It aims at improving liquidity in covered bonds and positions the asset class with respect to the upcoming regulatory challenges (CRD IV, Solvency II, redesign of ECB repo rules, etc.). As of August 2014, 81 labels were granted to 70 issuers from 13 European Member States, covering over EUR 1.3 trillion of covered bonds outstanding.

The label is complemented by a transparency tool/platform developed at national level based on the "Guidelines for National Transparency Templates" and operational since January 2013. The platform provides detailed covered bond data, comparable asset pool information and legislative framework information on the various national legal frameworks.

Source: ECBC (2013, 2014).

Uncertainty around the level of protection from a resolution in case of an issuer's insolvency for SME structures, given that these are not covered under the specific covered bond legal frameworks (with the exception of Turkey) **translate into an ambiguous categorisation of the structure.** Inclusion in covered bond indexes is not straightforward; for example, the Commerzbank's SME covered bond was not included in Markit's iBoxx index, placing them instead under the "other collateralised" category, restraining participation of investors who track indices.

The contentious nature of SME covered bonds in the investor community could be addressed through the introduction of statutory legal frameworks for such asset class and a potential harmonised framework for covered bonds at least at a minimum level with a view to solidify the instrument while safeguarding the high level of investor security (ECBC, 2014).

2. Turkish banks paving the way for SME covered bonds

Turkey was one of the first countries to allow the option of SME-backed covered bond issuance through specific legislation, counting many such issuances. Turkey's Sekerbank issued the first SME covered bond in 2011, fully subscribed by the Netherlands Development Finance Company (FMO), the International Finance Corporation (IFC) and Unicredit (the latter as the arranger of the deal). Although not considered as a publicly placed covered bond given that the buyers were not real-money investors, it set the precedent for other programmes to follow. Denizbank issued an SME covered bond in early 2013, and has been followed by other issuers in the country, such as Yapi ve Kredi Bankasi. These first transactions by Sekerbank and Denizbank have also been supported by EIF guarantees. This, like the involvement of other IFIs, shows that public support helps to implement such innovative structures.

According to industry participants, a number of country-specific factors were the drivers behind Turkish banks' activity in the SME covered bond space: SME loans transferred to an SPV for a securitisation issuance are not taken into account in the calculation of the issuer's market share in that product. Given the importance Turkish banks assign to the market share metric, covered bonds are preferable as the underlying assets remain on the balance sheet of the issuer. Tax complications linked to the sell-out of assets to SPVs also added to the incentives.

On January 2014, Turkey published an updated regulation on the issuance of covered bonds, unifying the framework for mortgage and asset covered bonds, with the purpose of facilitating public issuance of covered bonds (ING, 2014). Amongst the most important changes affecting SME covered bonds were the introduction of a limit to the amount of covered bonds that can be issued (covered bonds cannot exceed 10% of total assets) as a way to address encumbrance risks. Such limit, together with higher minimum rating and over-collateralisation criteria, are likely to affect issuance levels. Reporting requirement amendments, on the other hand, will increase transparency and availability of credit information, improve investor ability to perform due diligence and credit assessments. A dedicated register for the cover assets needs to be created and records kept in book or electronic format (Cover Register). The bonds are subject to nominal value, cash flow and net present value matching requirements (between the cover assets and the bonds issued). A Cover Monitor is appointed to check the Cover Register and monitor compliance with the matching requirements. SME loans, previously explicitly referenced in legislation as eligible collateral, are now included in the consumer loan asset class.

3. *Commerzbank's SME covered bond*

In Germany, Commerzbank issued a structured covered bond in 2013, the first one to be backed by loans to German SMEs. Given that SME loans are not eligible under the German Pfandbrief legislation for covered bonds (see Box 8), Commerzbank used a contractual structure with an SPV and a Trustee for payments under a priority of payments (Figure 30). Investors were offered dual recourse to the issuing bank as well as to a guarantee provided by the SPV. Commerzbank's SME covered bond was issued with a 5-year scheduled maturity and a switch to pass-through option in case of insufficient funds, carried a fixed coupon of 1.5% and was issued at par.[27]

Box 8. **Covered bonds under the *Pfandbrief* Act**

Pfandbriefe are covered interest-bearing bonds issued by credit institutions licensed to engage in such issuances (the *Pfandbrief* Banks). The underlying collateral that is eligible under the framework are mortgage loans, public loans to national and local governments, shipping and aircraft loans. SME loans are not eligible cover assets under the Act.

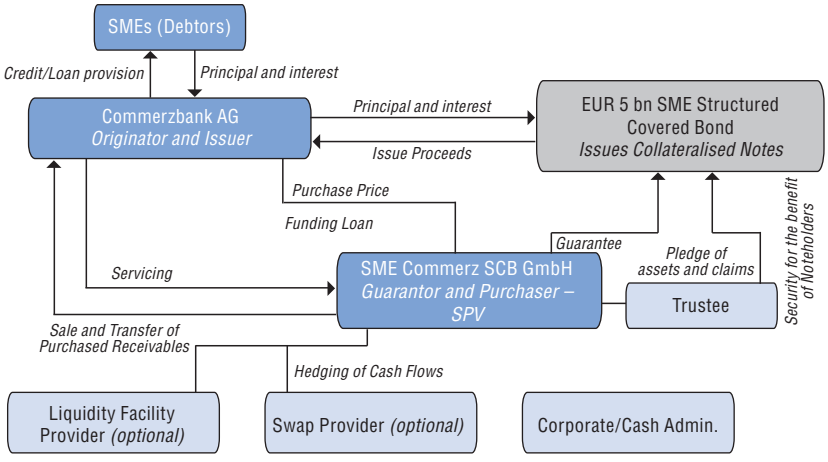
The *Pfandbrief* market is the second largest market for fixed income bonds in Germany and has a good reputation with investors due to the particularly high level of security its structure offers and due to its untarnished credit history. At the same time, given the associated low risk premiums, issuers enjoy a cheap and reliable source of funding.

The issuance of *Pfandbriefe* is bound by the regulations of the German *Pfandbrief* Act (last amended in 2010) with high level of requirements with regard to investor protection. A nominal value matching requirement applies and the cover pool is bankruptcy-remote. While a 2% overcollateralisation requirement is applied, in practice credit ratings incentivise issuers to hold higher percentages of overcollateralisation.

Assets comprising the cover pool are recorded in a cover register maintained by each *Pfandbrief* bank, also required to publish information on a quarterly and annual basis. The *Verband Deutscher Pfandbriefbanken* (VDP) is the professional umbrella organisation that looks after the economic, legal and reputational interests of its 39 German *Pfandbrief* Banks.

Source: VDP (2014).

Figure 30. **Commerzbank SME covered bond structure**



Source: Adapted from Commerzbank SME Structured Covered Bond Programme Prospectus (December 2013).

The pricing of Commerzbank's SME covered bond was seen as very competitive, particularly given that the implied spread was below the senior unsecured funding spread of the originator. Commerzbank issued an SME CLO from the same part of the balance sheet, used as repo collateral with the ECB. The two issuances were rated by the same rating agency and had a very similar risk profile. Interestingly enough, the originator opted for both transactions in order to benefit from the better regulatory treatment that a covered bond allows for. From an investor perspective, although the risk profile of the underlying portfolio of SME loans was similar, the recourse to the originator improves the liquidity profile of a covered bond providing another advantage in addition to the preferential regulatory treatment of a covered bond. Over-collateralisation, either mandatory under the legal framework or voluntary for the instrument to achieve the highest possible rating, adds a further safety net for investors. Nevertheless, given that these securities are a single name paper, due to exposure rules there is a limited amount of such bonds that a counterparty is allowed to hold.

The Commerzbank transaction can also be used as an example of the high levels of transparency required in such structures and the potential for standardisation. This particular SME covered bond comprises 700 companies, most of them essentially mid-caps with an average revenue level for the companies in the pool of around EUR 500 million, well in excess of the high end of the SME spectrum. The analysis of this pool was therefore performed on a statistical basis, relying on the bank's internal model. Such an exercise is only applicable on a fairly granular portfolio, highlighting the importance of transparent and relatively standardised information. Initiatives such as the Banque de France's standardised rating system for small creditors was highlighted as valuable for the fostering of such instruments. The level of transparency required goes beyond the cover pool of SME loans, as comprehensive information on the issuer of the covered bond relative to, for instance, asset encumbrance, is equally deemed important.

In April 2014, the French Banking Federation introduced the Euro Secured Notes Issuer (ESNI), a new platform designed to support SME lending in France and in Europe. The scheme uses an SPV structure, incorporated under the French *Fonds Commun de Titrisation* rules, where each participating bank has a separate compartment in the vehicle. Within a compartment, notes are ranked *pari passu*. The sponsor banks also provide overcollateralisation.

Despite benefiting from a dual recourse to the issuer and the cover pool assets, the market does not perceive the instrument as a covered bond because the SME loans involved are an asset class that is currently not eligible within covered bond frameworks (HSBC, 2014).

The **inaugural EUR 2.65 bn SME-backed non-tranched notes issued by the ESNI** were backed by loans of BNP Paribas, BPCE, Crédit Agricole, HSBC France and Société Générale, with maturities of up to three years. The underlying SME loans backing the ESNI notes remain on the balance sheet of the bank and were highly rated by the Banque de France. In case of an individual bank default, the loans are taken over by the SPV and transferred to the respective compartment using the covered bond legal framework for the *Obligations de Financement de l'Habitat*.

The platform is supported by the Banque de France, who has the status of In-house Credit Assessment Source (ICAS) recognised by the ECB.[28] Banque de France has a credit valuation model and rating system, FIBEN, originally created in the context of monetary

refinancing operations, allowing for an in-house credit assessment and rating attribution of resident companies (see Box 6 above). This credit quality assessment system is used to evaluate and haircut SME loans before including them in the ESNI pool. The very existence of the rating and credit information system of the Banque de France can be considered as one of the most important enabling factors of such a structure.

The ESNI initiative aims at providing an alternative funding tool for banks, which would translate to further on-lending to SMEs. The pilot issue was mainly used to provide liquidity to participating banks, as the notes are eligible collateral with the Banque de France, and perhaps eligible in the interbank market. Similar to other programmes, it is unclear whether publicly placed issuances of this kind will be treated by the industry as covered bonds or senior secured bonds.

Besides ESNI, there are three types of covered bonds in France: *Obligations Foncières*, *Caisse de Refinancement de l'Habitat* (CRH) and *Obligations de Financement de l'Habitat*. France has amended its broader covered bond legislation in 2014, improving the covered bond legal framework through, for example, the increase of the minimum overcollateralisation from 102% to 105% in line with other jurisdictions (Agefi, 2014).

4. *Other upcoming or potential SME covered bond issuances*

Originators like Commerzbank or HSH Nordbank (who added a KfW guarantee on its cover pool SME loans so as to meet the requirements of the *Pfandbrief* Act) **used securitisation-style elements when structuring SME-backed covered bonds in order to bypass the absence of covered bond legal framework** in their respective jurisdictions.

Austrian regulators are considering allowing SME loans as cover assets, while in **Spain** a amendment in the securitisation law (March 2014) introduced the possibility of structured covered bond issuance in conditional pass-through form, which can include SME loans in the cover pool.

In February 2014, **Italy** created a new type of covered bonds outlined in article 12 of law decree 145 (*Destinazione Italia*), allowing for alternative assets (i.e. besides mortgage and public sector loans) to be eligible as covered assets for secured bond issuance. Such SME covered bonds are not explicitly covered by the Bank of Italy regulation of covered bonds regarding supervision, asset monitoring and minimum capital requirements required by the issuer. Therefore, smaller lenders who are not currently allowed to issue mortgage or public sector covered bonds (*obbligazioni bancarie garantite*) will be allowed to issue SME covered bonds (Fitch, 2014a).

The absence of a critical mass of sufficiently sizeable portfolios of SME loans in highly fragmented markets (such as in the case of Italy) is noted by the industry as another impediment to the promotion of such structures. However, the possibility of pooling portfolios by different banks can result in multi-originator structures where each of the individual originators needs to be assessed and rated for the structure to receive a credit rating. Such **multi-originator platforms**, similar to the initiatives of the European Investment Fund, are **facilitated by the existence of standardised underwriting processes**.

Regulators could enhance the attractiveness of such instruments by working on the introduction and fine-tuning of integrated and consistent frameworks of covered bond regulation, particularly in Europe, so as to facilitate the development of the asset class. Difficulties in defining the eligibility criteria for SME loans, heavy requirements in terms of analytical capabilities, as well as spread compression and the provisions of cheap funding

through monetary policy measures[29] significantly reduce the chances of SME covered bonds becoming more than a niche instrument designed for funding and liquidity purposes.

B. Comparing SME-backed covered bonds to SME ABS

SME securitisation (for instance SME ABS) is very similar to SME covered bonds in the sense that both are collateralised by an underlying pool of SME claims. Nevertheless, a number of very important differences exist (see Table 11). Such changes explain not just the different spreads but also the different investor base attracted by each of the instruments, and to a great extent the differences in regulatory treatment for the two SME-backed asset classes.

Table 11. **Characteristics of SME securitisations vs. SME covered bonds**

	SME securitisations	SME covered bonds
Issuer	Mostly SPVs	Mostly financial institutions[1]
SME collateral eligibility	Yes	No – only in few jurisdictions are SME claims covered under special CB law
Credit risk transfer	Yes, apart from portion retained	None, on-balance-sheet item
Recourse to issuer	No	Yes, double recourse
Structure	Tranched	Untranched
Repayments	Amortising, typically pass-through	(Soft) bullet or conditional pass-through
Source of repayment	Cash flow of securitised claims	Issuer meets repayments. In case of issuer insolvency, cash flow of covered assets
Capital relief	Yes	No
Asset-liability match	No (pass-through structure, liabilities met by cash flows generated by the assets)	Depending on the programme
Cover pool	Predominantly static	Dynamic
Maturity	Fixed at closing	Unlimited
Overcollateralisation	Rating Agency requirement for rating	Legally/contractually required

1. In some cases, a covered pool of SME claims may be first sold into a special purpose entity (true sale) but the latter would need to be fully consolidated with the issuing credit institution.

When compared to senior unsecured bank or corporate debt, the differences of the covered bonds instruments are more straightforward: covered bonds are more secure (cover pool), less market volatile, enjoy better rating stability (even though ceilings such as the sovereign one still exist) and somehow preferential regulatory treatment (e.g. Basel, LCR, Solvency II, bank bail-in frameworks) as well as official sector support in repo operations (e.g. ECB repo eligibility).

IX. SME corporate bonds and private placements

A. Mid-cap bond markets

Corporate bond issuance is commonly used by large companies for which it is easier to obtain credit ratings and that are relatively less costly for investors to analyse and monitor. Large companies can also issue bonds in large denominations that are typically purchased by financial institutions. Corporate bond issuance involves the regular payment of interest and a bullet repayment at the end of the bond life. For SMEs, however, bond finance is not commonly available, even though several possibilities for midcap companies exist.

SMEs are to a large extent ill-equipped for direct debt issuance on corporate bond markets thus the market for SME bonds is relatively small in terms of outstanding volume

and number of issues. A number of impediments, including the absence of rating and the inability to join indices somehow restrict their attractiveness for a broader range of institutional investors.

In the past years several markets for retail bonds have been created. In Germany, BondM market launched in 2010, targeting Mittelstand companies with turnovers from EUR 50 m to EUR 1 bn. In the United Kingdom, the London Stock Exchange's (LSE's) retail bond trading platform, the Order Book for Retail Bonds (ORB) was launched in 2010, enabling trading in bonds with smaller, more manageable denominations (GBP 1 000 or similar; LSE, 2010) and issues of smaller sizes than the institutional bond market (typically around GBP 25-150 million average issuance size for listed ones and GBP 1-10 million for unlisted ones; KPMG, 2011). ORB benefits from market making similar of that used in shares trading, enhancing liquidity in the secondary market and thus boosting participation in primary markets. Issuers enjoy flexibility in terms of issuance size, allowing for retail participation in smaller sizes (GBP 1 000) while the median size is around GBP 72.5 m (Llewellyn Consulting, 2014).

In France, *Émissions Obligataires par Offre au Public* (IBO) were launched in 2012 and the programme allows listed and unlisted SMEs to issue bonds on NYSE Euronext and Alternext Paris. In Italy, ExtraMOT PRO was launched in 2013 (see Section IX.B). In Spain, MARF (New Alternative Fixed Income Market) was launched at the end of 2013 (Kraemer-Eis, 2014).[30] A number of similar initiatives are underway (e.g. at Athens Stock Exchange's EN.A STEP alternative market, and at the Irish Stock Exchange[31]) for the development of markets that allow investors to invest in securities generating SME debt.

Despite such national initiatives, capital markets remain relatively fragmented for SMEs and mid-caps, with low levels of cross-border investment in securities other than "blue chips". This is mainly attributed to obstacles such as different securities laws, bankruptcy laws and tax incentives, but also due to investors' tendency to discriminate between the different types of bonds depending on the perceived quality of the underlying collateral. Another reason may be that so far experiences with SME bonds have been mixed, especially in Germany, with many downgrades and high default rates, and concomitant concerns over transparency, accounting and rating standards.[32] This may also be due to problems of asymmetric information where public SME bond markets end up with higher, underpriced risk.[33]

Such small and mid-cap trading bond platforms have a number of attractive characteristics, for issuers and investors alike. Issuers can place bonds in the market with listing requirements that are more relaxed than those for larger blue-chip companies. SMEs can issue bonds on an unrated basis, improve their financial flexibility and access a larger investor base. Investors on the other hand have the opportunity to invest in bonds at yields well above the ones offered by large caps, particularly relevant for "search for yield" investors given the current low interest rate environment. Smaller trading denominations on certain markets give retail investors the possibility to diversify their investment portfolio beyond traditional bank deposits.

Cost and reporting requirements associated with bond issuance make this market suited mostly to the upper segment of SMEs and beyond, essentially medium-sized and larger companies.[34] The role of brokers is also important in getting those bonds to institutional investors, given that most bond investors look into placements in large scale bond issuances. Convincing brokers to add such asset classes into their distribution platforms can be instrumental for the fostering of the market. When it comes to retail

micro and small company bonds, investors face challenges such as scarce liquidity, relative lack of transparency compared to medium and large corporate bond issuances and incomplete ratings coverage. These, however, could be partly justified by the fact that these markets are not yet mature, as well as by the inherent characteristics of small, young and perhaps riskier SMEs without a longstanding credit history.

There are also intermediary vehicles that pool small cap bonds in funds, offering diversification to investors. The small cap bond fund Micado in France is an example of such bundling, but such structures, and their success, have been rather limited.

B. Mini-bonds: A new instrument to cover the SME funding gap in Italy

The emergence of mini-bonds in Italy offers an interesting case of an innovative instrument that was assisted by regulatory reform and favourable fiscal treatment for SMEs. The introduction of the mini-bonds instrument allowed unlisted SMEs to issue debt traded on regulated markets or specialised trading facilities such as the ExtraMOT Pro platform of the Italian Stock Exchange, even for deals of a few million euro. ExtraMOT Pro was launched in February 2013 as a flexible and cost-effective platform to cater for such deals, allowing SMEs to attract national and international professional investors – private investors are not currently allowed to invest in mini-bonds (Borsa Italiana, 2013).

In the context of the 2012 *Decreto Sviluppo* (legistlative decree No. 83/2012), the main legal and tax obstacles for unlisted firms wishing to issue bonds were lifted, thus providing access to capital markets for SMEs wishing to publicly issue debt in the form of such mini-bonds. The legislation lifted the previously penalising tax treatment of bond issuance by unlisted companies relative to listed ones, aligning the rules on tax deductibility of interest expense of the two respective types of firms. In relation to the tax applying to investors in such instruments, the exemption from the 20% withholding tax on interest on debt issued by listed companies was extended to debt issued by unlisted companies, provided that such debt is traded on regulated markets or multilateral trading facilities (Freshfields, 2012).

The conditions to be satisfied by issuing firms include the existence of audited financial statements, the placement of the instruments with qualified investors and the involvement of a "sponsor" to arrange the issuance. Sponsors could be banks, asset managers, investment companies or registered brokers, and must retain a portion of the notes issued until maturity (structure A of Figure 31). The institutionalisation of the role of sponsor was indicative of a trend of pure facilitation of SME financing by banks, rather than direct financing or lending of last resort. This sponsor requirement was later dropped altogether under the 2013 decree described below (structure B of Figure 31).

Following the liberalisation of mini-bond issuances reforms through the regulatory framework enacted in 2012, further possibilities were opened through the enactment of another decree in 2013, in the context of the *Destinazione Italia* regulation (Presidenza del Consiglio dei Ministri, 2013). This regulation extended the opportunity of mini-bond issuance to a greater number of SMEs by allowing special purpose vehicles to acquire corporate bonds. Credit funds can thus be established with a view to aggregate a number of mini-bond issuances in sufficiently large portfolios that can then be securitised. Smaller SMEs are therefore given indirect capital market access through specialised investment funds.

Engineering consulting group CAAR issued the first mini-bond by a non-private-equity-owned unlisted SME in April 3013, a EUR 3 million five-year mini-bond with a coupon of 6.5% (Figure 32). This inaugurating transaction was followed in August 2013 by a

Figure 31. **Indicative mini-bond transaction structures**

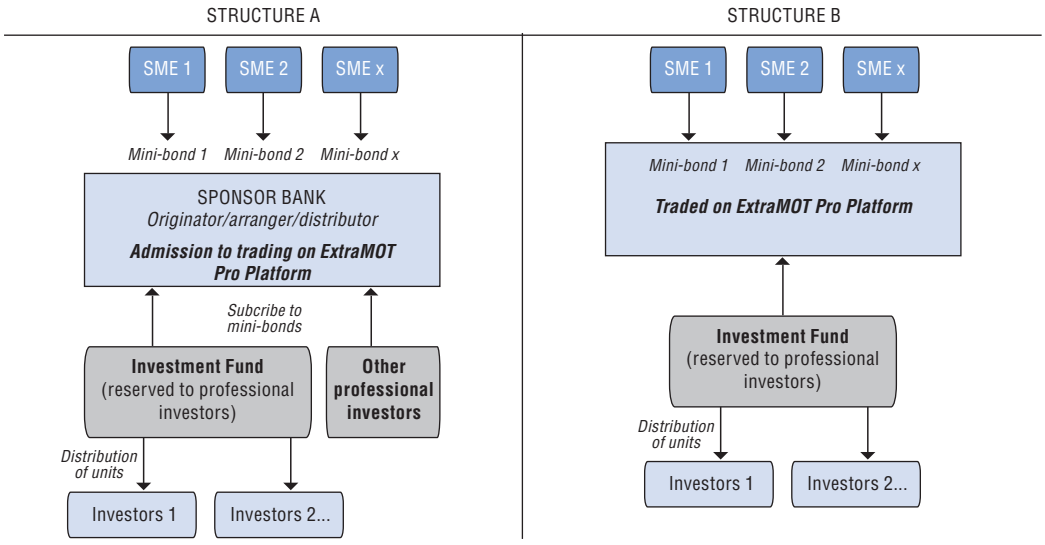
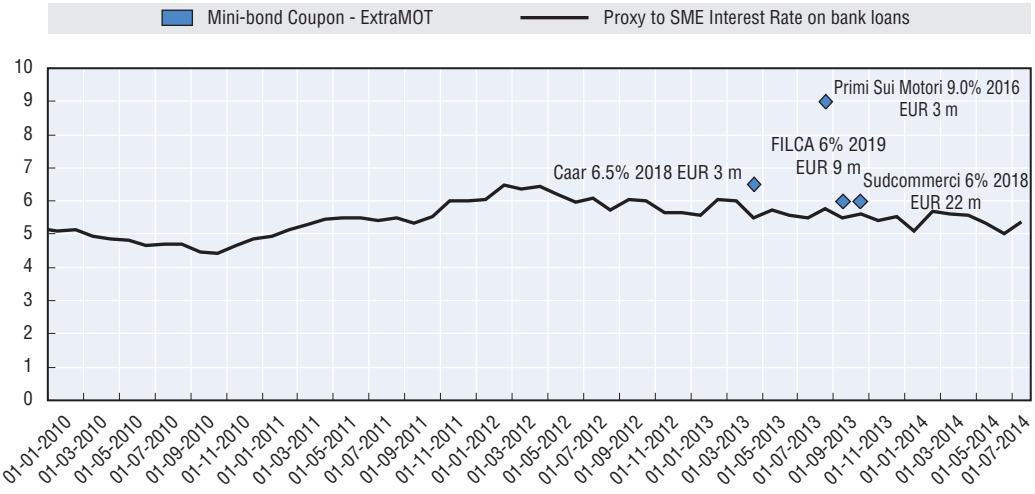


Figure 32. **Selected mini-bond issuance rates vs. SME loan rates**



Note: Interest rates applying to non-financial corporations for new loans of up to EUR 1 million used as a proxy for SME loan rates.
Source: OECD, based on information from Borsa Italiana and Banca d'Italia.

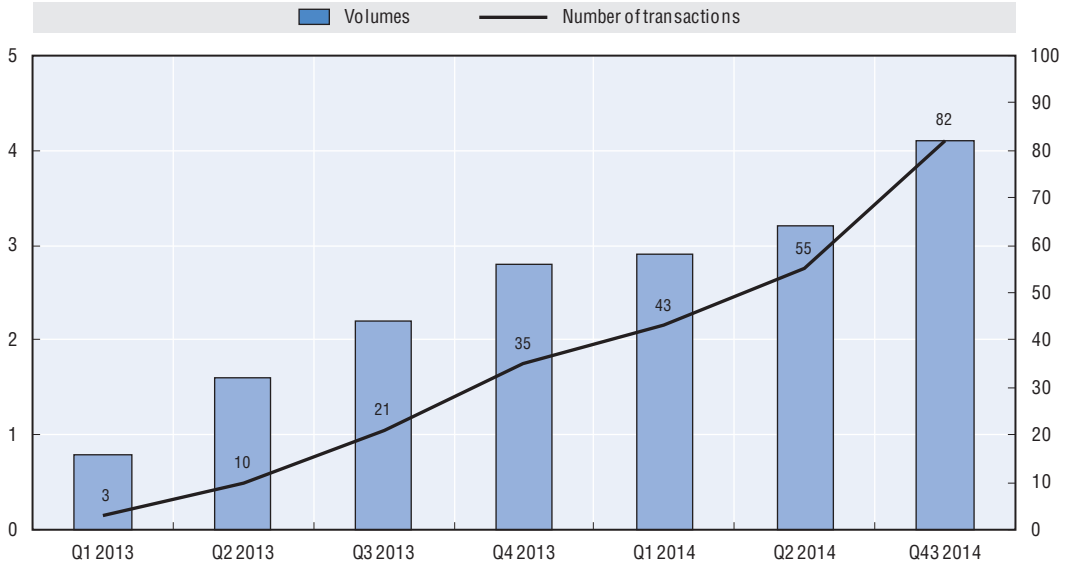
EUR 3 million 9% bond due 2016 note, issued by the listed internet marketing company Primi Sui Motori. Filca Co-operative and commercial estate managing firm Sudcommerci issued a EUR 9 million 6% 2019 and EUR 22 million 6% 2018 note respectively, according to Borsa Italiana.

Despite the attractive characteristics of the instrument for SMEs, issuance of mini-bonds by SMEs has been small, but is rising. By the end of January 2014, around 30 such transactions took place on ExtraMOT Pro, for a value of ca. EUR 3 billion (Fitch, 2014b). Most of the issuance, however, is skewed towards large corporates, although a number of credit funds are being established with a view to invest in mini-bonds: Monte dei Paschi di Siena (EUR 150 million), Antares – Azimut (EUR 300 million), Fondo per le Imprese (EUR 100 million), Anthilia Bond Impresa Territorio (EUR 100 million), BNP Paribas Investment Partners Italia

Mini-bond Fund (EUR 150 million) (Private Equity International, 2014). By end-September 2014, the EIF found 82 issuances with an average volume around EUR 50 million, most of them from bigger companies (Kraemer-Eis, 2014; Figure 33).

Figure 33. **Italian mini-bond issuance since inception**

In EUR billion (l.h.s.) and in number of transactions (r.h.s.)



Source: EIF (Kraemer-Eis, 2014), based on data from Borsa Italiana (09/2014).

Very thin liquidity with a virtually non-existent secondary market, as well as the careful due diligence required for small transactions render the analysis cost-intensive for marginal amounts of investment compared to average funds under management of large players. **Specialised mini-bond funds might overcome such burdens so as to unleash the potential of the nascent mini-bond market for SME financing**.

Innovative "mixed" structures combining characteristics of mini-bonds and securitisation have recently appeared, such as the "Viveracqua Hydrobond 1" project in Italy: a group of eight Italian water utility companies issued ABS backed by their mini-bonds on a cross-collateralised basis. The EUR 150 million 20-year notes have a coupon of 3.9%. The transaction was unrated but the underlying utilities hold unsolicited ratings from the Italian rating agency CRIF. The EIB bought the majority of the bonds, with the rest allocated to banks and pension funds, allowing the utilities to develop long-term investment in infrastructure. Pooling of mini-bonds in aggregate vehicles, as well as multi-originator "club"/joint deals in the form of consortia can give SMEs the scale of issuance required to render the issuance attractive for smaller SMEs.

C. Specialised institutional debt funds and SME lending[35]

Institutional non-bank lending is also channelled to SMEs through debt funds created by non-bank institutional investors (insurance, pension funds, private equity funds). Although a standard definition does not currently exist, such debt funds typically consist of plain loans, SME bonds, mini-bonds or similar instruments of SME financing that are either pooled together by a fund manager or co-originated with a partner bank (Kraemer-Eis, 2014). Resulting shares in the fund are bought by the investors.

The benefits of SME debt funds for involved stakeholders are not dissimilar to the ones offered by SME securitisation, besides the potential for regulatory arbitrage from the side or the originator-bank. Originator-banks benefit from transfer/sharing of risk while still keeping the relationship with SMEs, as well as potential capital relief. It is therefore necessary that adequate incentive structure mechanisms are in place to avoid moral hazard and similar risks witnessed in the pre-crisis originate-to-distribute securitisation models. The Financial Stability Board in particular is considering adjusting the supervision and regulation of lending activities of non-banks to avoid unintended regulatory arbitrage (FSB, 2013). Institutional investors, on the other hand, benefit from attractive returns and secure access to the SME asset class which is difficult to tap. SMEs enjoy an additional alternative source of finance and potentially longer maturities than the ones offered by traditional bank lending.

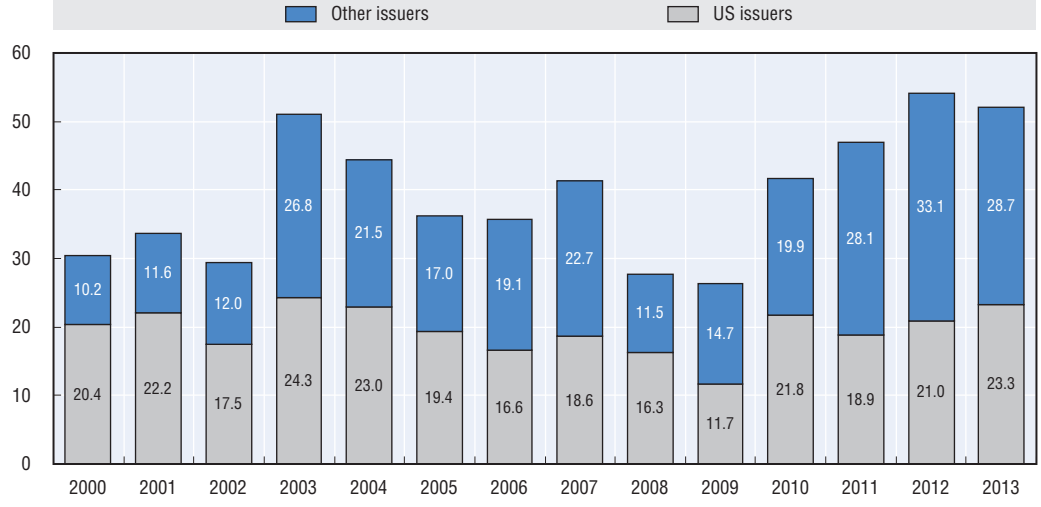
According to EIF's screening of the European market for debt funds, only a minority of debt funds are active in the SME space with most of them targeting mezzanine or mid-cap corporates. Nevertheless, this area presents considerable growth potential and the EIB Group is promoting pilot transactions to support debt funds targeting SMEs and small mid-caps under the EIB Group Risk Enhancement Mandate (see Box 5 above).

D. Current state of the private placements market

Private Placements (PP) can offer an alternative to public corporate bond issuance, potentially broadening the availability of finance for medium-to-large unlisted companies. The principle attraction of private placements is that they provide a source of funding without the need for a formal credit rating and reporting requirements common for other capital market debt products. Where regulatory frameworks allow private placements, some markets have already been developed. Besides the US private placement market, which is available to both US and non-US companies (Figure 34), the most well-known PP markets in Europe are the *Schuldschein* market in Germany (see Box 9) and the *Euro PP* in France and internationally (see Box 10). Growth of the existing markets, as well as cross-border issuance (mostly tapping the US market) indicate that there is a growing supply and demand for these products.

Figure 34. **US private placements**

Annual transaction levels, 2000-13; in USD billion



Source: Thomson Reuters.

Box 9. **The case of Schuldschein loans in Germany (and elsewhere)**

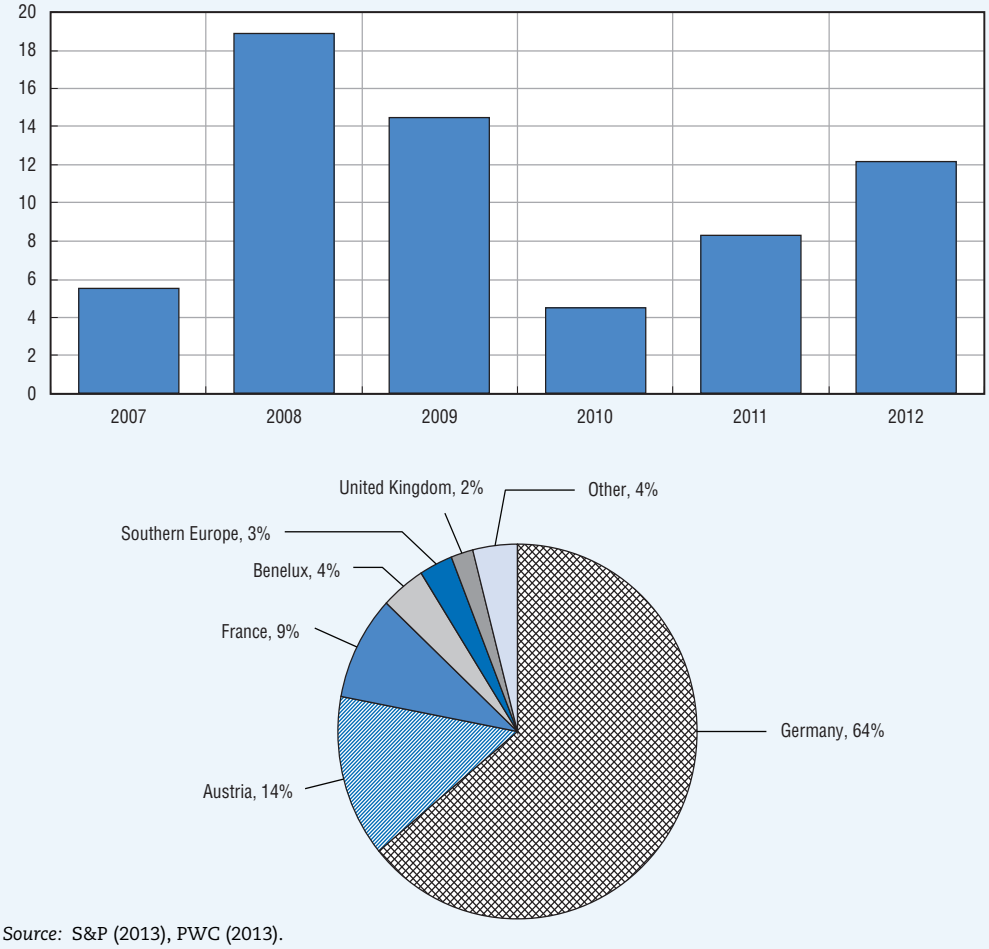
***Schuldschein* loans are private, unlisted bilateral loan agreements, the German equivalent of private placements.** The instrument is traded over the counter (unlisted) and benefits from a strict legal framework (German Civil Code) and standardised documentation.

***Schuldschein's* benefits** are similar to the ones provided by US PPs in terms of competitive pricing, longer tenures, diversification of investor and lender base, no formal rating requirement and particularly its accessibility to smaller borrowers. In addition, the instrument is not accounted for at market value (no mark-to-market) but at amortised cost, avoiding balance sheet volatility. The simple, standardised documentation increases efficiency and allows for expedient procedures while lowering product complexity and issuing costs.

The *Schuldschein* market was traditionally catering for the German market only (primarily for the public sector), however, in recent years issuance by non-German corporates has surged (Figure 35). Similarly, the majority of investors are still German banks, insurance companies and to a lesser extent investment funds. International investors are increasingly attracted by this market (e.g. the 2012 Neopost deal being placed with Taiwanese investors, and Société Générale teaming up with German banks to arrange a *Schuldschein* for French Plastic Omnium and Orpea in the same year).

Figure 35. **Schuldschein issuance to corporates**

Annual, 2007-12, in EUR billion (upper panel) and by country, as of 2012 (lower panel)



Source: S&P (2013), PWC (2013).

Box 9. **The case of Schuldschein loans in Germany (and elsewhere)** *(cont.)*

Since January 2007, Schuldschein loans became **eligible for ECB credit operations**, increasing the attractiveness of the instrument.

In terms of issuance levels, in 2012 a total of EUR 12.2 billion was placed in the market vs. EUR 8 billion in 2011, for a total of 65 deals (Figure 35). Only a handful of those companies fall into the small/mid-cap group, nevertheless, issuance of small amounts in the range of EUR 10 million was also reported (S&P, 2013). According to Capmacron, the share of *Schuldscheine* in total corporate funding in Germany was 5.5% as of year-end 2012, compared to 2.1% in 2002.

Schuldscheine can be seen as an alternative or competitive instrument to SME bonds (see Table 11 for some of the main differences). One further characteristic differentiating the two instruments is that *Schuldschein* issuance, as with any PP issuance, allows for maintaining a certain level of confidentiality – which could be of importance to small family-owned businesses. More importantly, SME bond issuance is performed on a rather "anonymous" basis from the side of investors, as SMEs rarely know their creditors and bondholders change easily given higher market liquidity. This in turn can render renegotiations/restructurings, when necessary, much more difficult.

Table 12. **Schuldschein vs. SME bonds**

	Schuldschein	SME bonds
Instrument	Loan	Security
Contract	Bilateral	Bearer
Structure	Standardised yet flexible	Standardised
Platform	Over-the-counter	Exchange traded
Formal rating	Not required	Required for most
Documentation	Standardised, relatively slim	Standardised, usually several hundred page long (incl. annual reporting)
Secondary market	Low liquidity (therefore illiquidity premium)	High liquidity (therefore more price volatility during the life of the bond)

However, **lack of standardised documentation and information on the creditworthiness of issuers, lack of liquidity in secondary markets**[36] **and differences in insolvency laws are all obstacles that hinder stronger growth of these markets** on a national and cross-border level. So far, international investor demand is mostly met by US PPs, while international investors are also active in the Schuldschein market.

E. The case of Private Placements for mid-sized companies

The key benefit of taking the private placement route for mid-sized companies is the diversification of their funding away from bank lending through privately placed bonds, without the need to secure formal credit ratings required for publicly traded debt issuance. That said, some assessment of their creditworthiness is indeed required, and to that end, credit rating agencies have been active in providing special mid-market evaluation procedures that analyse mid-sized companies' credit profile and help investors without the in-house capability to better navigate this complex and relatively opaque market. With no minimum size limit, privately placed bonds can cater to the needs of issuers of small tickets – with issuances in the single digit USD million range being

Box 10. **Charter for a Euro PP market**

A Euro PPs is a form of private placement that has been developed mainly in France for the financing of mid-sized companies. As of end-2014, it is estimated that EUR 9.8 billion of Euro PPs were issued since 2012 through more than 115 issues (*www.euro-privateplacement.com/*).

Euro PPs are essentially not dissimilar to other forms of private placements; although a number of specific characteristics differentiate them from US PPs. A Euro PP may take the form of a bond issue or a loan, but in both cases, the Euro PPs transaction is based on deal-specific documentation negotiated between the issuer and the investors. The process for carrying out a Euro PP transaction more closely resembles negotiating a bank loan agreement. In particular the instrument ranks *pari passu* with bank debt. The existence of financial covenants requires a more thorough credit analysis and monitoring procedure from both the issuer and the investor side. The terms and conditions of Euro PP transactions, including those covenants, are negotiated between the issuers and the investors (as in the case of bank loans). Unlike other private placements, Euro PP may be listed (Table 13). The flexibility in the form and size of the issue is an advantage for intermediate-sized companies wishing to make use of a tailor-made debt financing instrument that meets their specific needs.

An initiative for the development of a full-fledged Euro PP market both in France and internationally has been pursued since 2012 by all the relevant professional associations gathered into the Euro PP Working Group with the support of French authorities. Building on existing market practices and aiming at promoting a standard approach based on best practises, the Euro PP Working Group has produced a set of standard markets practices (the Euro PP Charter) in March 2014 and more recently a set of standard documentation. Similar endeavours for the development of formal Private Placement markets have been launched elsewhere in Europe, as with the example of the UK (ACT, 2012). The Pan European Private Placement (PEPP) initiative, co-ordinated by the International Capital Market Association (ICMA) aims at bringing together the various initiatives at the European level.

Table 13. **Existing Euro PP formats**

Format	Documents	Listing	Confidentiality	Transferability
Bonds traded on a regulated market	Bond documentation	Euronext Paris, Luxembourg	No	Yes – no limitation
Bonds traded on a Multilateral Trading Facility	Bond documentation	Alternext or Euro MTF (Luxembourg)	No	Yes – no limitation
Unlisted bonds	Bond documentation	None	Yes	Yes – limitations may be set out in a transfer approval form
Loans	Bank loan agreement	None	Yes	Yes – only to the extent permitted by the loan agreement

Source: Fédération Bancaire Française (2014).

reportedly delivered to very small companies in the United States. In practice, however, the average small privately placed bond is roughly within a EUR 20-30 million range according to market observers.

The direct relationship between lenders and borrowers allows for the development of a closer connection with investors, which is beneficial to smaller companies with limited visibility in the public markets and the wider investor community. According to

market observers, investors who cannot be served by the secondary PP market due to the illiquidity of the market often drive new PP issuance by deploying funds in the market through reverse enquiry, particularly in Europe. Financial intermediation, traditionally by banks, is of particular relevance in such cases.

The role of institutional investors in promoting the private placement market is both critical and essential, as they constitute the driving force in the efforts made particularly in Europe. The interest of institutional investors is based on a search for higher yield (illiquidity premium of private placements), asset risk diversification and long-term assets matching. Investors are also looking beyond yield to the defensive characteristics of the private placement market, when looking for protection against potential volatility.

Nevertheless, the number of active investors today is limited and the investor pool dominated by large institutional investors who have developed their own credit assessment capabilities. The lack of liquidity of secondary markets is another obstacle for investors, but private placements are structurally illiquid instruments and this does not seem to be an issue for buy-and-hold long-term investors. Syndication or club deals structured by lead investors would be a way for a broader number of investors to participate in such markets. Interestingly, a disconnect is often noticed to exist between the expectations of issuers in terms of modest cost of funding and the high expected returns of investors participating in PP markets.

Besides an under-developed investor base, lack of standardisation is one of the key barriers to the development of the nascent PP market in Europe. Lack of standardised documentation increases the issuing cost (advisory, legal fees and other), as individual agreements need to be drafted for each transaction. Standardisation of documentation is considered to be one of the enabling factors in the US PP market. US PPs benefit from standard loan documentation (Model Note Purchase Agreement) and covenants, rendering them user-friendly "off-the-shelf" products which are more straightforward and attractive to both investors and issuers.

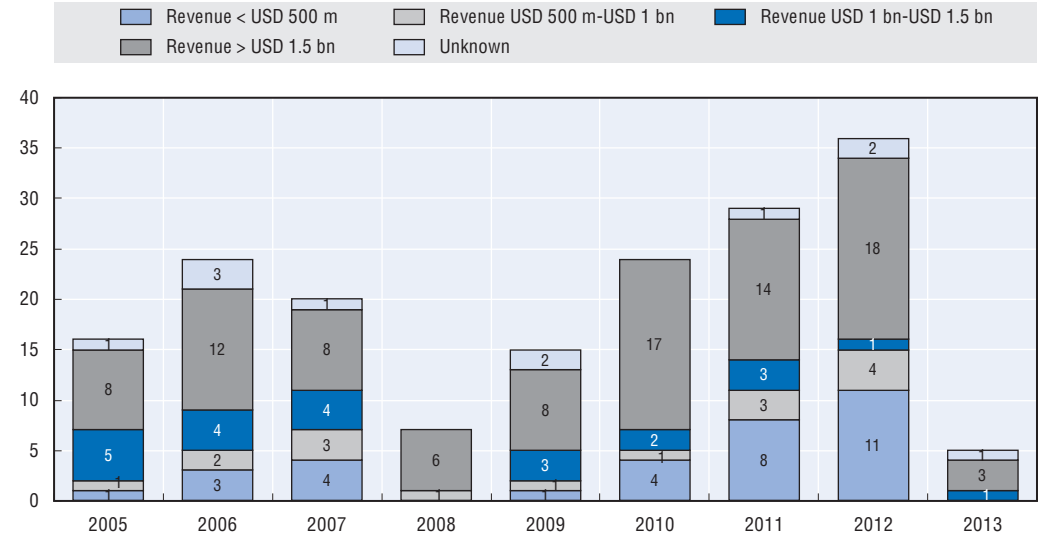
A large part of the success of the US PP market is attributed to the role of the National Association of Insurance Commissioners (NAIC). US PP issuances receive a credit scoring by the NAIC and investors are provided with regulatory guidance on capital weighting.[37] Although the existence of a credit scoring mechanism is recognised by market participants as an important enabling factor for the thriving US PP market, views differ as to whether such initiatives should be led by the public or the private sector. In practice, when the NAIC's Securities Valuations Office (SVO) provides credit quality assessment for a PP issuance, the first insurance company actually buying the PP pays for this service and all subsequent purchases by other insurance companies benefit from the already attributed credit scoring. The cost of such analysis is modest (under USD 5 000), the SVO ratings are recognised by the regulator and the system is designed to align incentives with regard to information. However, according to some observers, the private sector should be the one leading this effort so as to ensure high quality of service provided and harmonisation of accounting and regulatory discrepancies across markets, as is the case with bankruptcy laws. For Europe, the establishment of a similar mechanism on a European-wide level would be a way to create the level of uniformity necessary for investors to engage in the European PP market.

European issuers have been actively tapping the US PP market over the years, with a third of the US PP market reported to consist of European companies' placements

(Figure 36). Investor demand, especially by institutional investors, helps to push for more harmonisation and standardisation of the European PP markets and support their growth, as evidenced by initiatives to create a pan-European private placement market. A European PP market along the lines of the successful US PP model, but without necessarily copying it, could hold great potential for medium-sized companies. At industry level, an initiative led by the International Capital Markets Association (ICMA) is underway, building on a national Euro PP initiative in France, focusing on the investor side and looking at the essential principles and market practices that will attract investors into a PP market with European-wide appeal.

Figure 36. **European companies tapping the US PP market**

Number of deals annually, by revenue size, 2005-13



Source: S&P (2013).

Standardisation of documentation to the extent possible, credit scoring, regulatory recognition for capital weighting purposes as well as information sharing and financial reporting by issuers to institutional investors are some of the cornerstones of this effort towards the recognition of PPs as an asset class in Europe. Banks can have an active role in this debate as intermediaries, despite the fact they are somehow less involved with regard to PPs as compared with other capital market instruments, given that PPs do not require underwriting per se or market making. A risk of such a model would be the introduction of an unnecessary dichotomy between perceived investment grade and other credit profiles. The aim of a pan-European PP market would be to cater for a greater diversity of credit profiles, corresponding to the reality of mid-sized companies.

The role of public policy is important for the recognition of PPs in Europe as an asset class and for their appropriate regulatory treatment. Policy measures are increasingly being adopted in Europe so as to foster private placement markets for mid-sized companies. In the United Kingdom, legislation will be introduced in Finance Bill 2015 to enable the provision of withholding tax exemption[38] for private placements (HM Treasury, 2014). The effectiveness of tax measures to resolve structural issues around such markets in the long-run may be questionable, particularly when it comes to small size deals. Nevertheless, the exemption from the 20% UK withholding tax charge is expected by the

market to boost private placement financing by UK borrowers and facilitate cross-border borrowing through such instruments. In France, authorities have fostered the development of the Euro PP market by implementing important initiatives. In August 2013, a reform of the French insurance code has been set up, in order to facilitate insurance companies' investment in loans directly or through a fund of loans. The measure has been accompanied by concrete actions, such as the sponsoring of a EUR 1 bn fund of private placements as a test case. In addition an industry task force supported by the French ministry of the economy, has developed by end-2013 a guidance document, the Euro PP Charter (serving as a basis to the ICMA initiative; see above, Box 10), intended to provide a non-binding framework of best practices and to enhance the standardisation of the Euro PP market.

X. Concluding remarks and policy implications

More than half a decade into the financial and economic crisis, growth remains sluggish and banking sector problems are still inhibiting a more strongly footed recovery in OECD economies from taking hold. As banks are deleveraging, **capital markets will have to play a bigger role** especially in financing long-term investment, including in infrastructure, SMEs and knowledge-based capital, which are key contributors to economic growth and job creation.[39]

The **benefits of alternative, non-bank debt financing for SMEs** are widely agreed by policy makers and there are many arguments in favour of the development of the SME securitisation, covered and other corporate bond and private placement markets. As credit sources tend to dry up more rapidly for SMEs than for large companies during economic downturns, broadening the range of non-bank debt financing instruments for SMEs should help making them more resilient to financial shocks. Given SMEs' importance across economies, this is also essential for economic recovery from the current economic and financial crisis. Given that there are many arguments in favour of the development of SME debt instruments markets, a wide range of policy measures may be warranted.

Regarding regulation**, markets for market-based debt financing for SMEs should be carefully designed and overseen and so as to foster the use of alternative financing instruments without putting at stake the overall resilience of the financial system.** Sensible and balanced calibration of the existing regulatory frameworks affecting such instruments should be pursued. Regulation should also take a holistic and co-ordinated approach to avoid regulatory arbitrage with respect to different instruments and stimulate investor appetite. Healthy competition should be secured across similar financing solutions, eliminating any imbalances or disincentives that might direct investor and issuer preferences away from some of these instruments. The creation of solid frameworks for the SME covered bond and private placement asset classes at national or broader international levels should be encouraged.

Regarding market infrastructure, **the build-up of loan-level data, performance track records, the encouragement of ongoing reporting and data sharing needs be prioritised.** Pooling of such information in centralised data platforms, set up and maintained through a certain public initiative, would benefit all participants by increasing the transparency of the SME financing market and allowing an informed decision-making by capital holders. Appropriate balance in the level of disclosure requirements should nonetheless be safeguarded so as to stimulate investor appetite without rendering such issuance/investment overly costly or cumbersome.

Standardisation plays an important role, too. For example, the development of "off-the-shelf" versions of non-bank debt financing instruments for SMEs could be supported with a view to lowering the cost of such instruments and increase the efficiency and accessibility of those instruments to SMEs and retail investors. Likewise, the creation of indices could enhance liquidity and investor participation in publicly traded SME debt.

On the **demand side**, the official sector could provide **support for raising awareness** – among SME entrepreneurs as well as smaller local financial institutions traditionally serving SMEs – **about the availability and attractiveness of such financing alternatives** for SMEs and financial intermediaries. The official sector could also co-operate with private sector institutions in improving the visibility of successful transactions and platforms for such instruments.

On the **supply side**, investors should be assisted and incentivised to set up internal infrastructures that would allow them to participate in the SME-debt market. Furthermore, the potential impact from the provision of incentive schemes particularly to investors but also to SMEs (e.g. tax incentives) targeted to such instruments should be critically evaluated.

With regard to public intervention, the official sector should raise the profile of the public debate required to overcome the barriers identified and encourage the appropriate and safe use of non-bank debt financing instruments for SMEs. **Public intervention should be designed in such a way that private sector participation is not crowded out.** Specific evaluation and control procedures (beyond a standard impact assessment) would need to be put in place to ensure that the intended (capital, funding) benefit is passed on to the real economy through the provision of additional SME financing.

While the size of the SME securitisation market is insignificant in terms of the wider financial system, **careful assessment of the riskiness of inappropriate design and use of such instruments needs to be encouraged in the context of a widely interconnected financial system.** The corresponding benefits to the real economy and their materiality to SMEs also need to be accounted for.

Policy makers also need to acknowledge that **SME finance is, like SMEs themselves are, exceptionally diverse and complex, and faces unique challenges.** As such, there is no "magic bullet" for SME finance and it is only by pushing different ideas, avenues and instruments that the different constraints and predicaments can be tackled in developing a healthy non-bank debt market for SMEs. To achieve this, a joint effort may be needed, involving all constituents concerned: investors, issuers, intermediaries, regulators and public policymakers.

Governments and regulators can provide valuable support for developing the necessary infrastructure for new financing instruments for SME financing and incentivise investment in securitisation and other non-bank debt instruments suitable for SMEs. Such financing, when used properly, can play a significant role in the recovery of the real economy by unlocking resources and capacity for further lending, broadening the SME investor base and diversifying investors' portfolios, as well as assisting in the creation of a sounder financial system through better risk sharing within the economy.

Notes

1. With bank funding to leasing companies expected to be even scarcer in the future, SME lease securitisation is anticipated to represent a particularly relevant type of SME securitisation (Kraemer-Eis and Lang, 2012 and 2014).

2. It should be noted that monoline insurers, in particular, failed to absorb the losses occurred by the subprime crisis and were unable to meet their claims in the US.
3. Synthetic structures have the potential to ease the execution of SME loan securitisations by circumventing obstacles associated with loan clauses which prevent the legal true sale of SME loans (AFME et al., 2015).
4. A synthetic securitisation is funded if the issuer offloads his payment obligation upfront through the purchase of credit-linked notes or the provision of collateral under a credit default swap, and is unfunded if the issuer's payment obligation is not paid in advance or collateralised. A partially funded structure has parts of the credit risk funded and other parts unfunded (Sidley Austin Brown & Wood, 2001).
5. Optimal retention policies are analysed and discussed in Kiff and Kisser (2010). While it can be shown that under certain conditions retaining an interest in the equity tranche does not always induce the originator to diligently screen borrowers ex ante, their preliminary results show that equity tranche retention continues to best incentivise loan screening.
6. While mortgage loans are allowed under all existing frameworks, public sector loans are available in Austria, France, Germany, Luxembourg, Norway, Spain and UK, while ship loans are mostly found in Denmark and Germany.
7. Although credit risk is off-loaded to SPVs in cash securitisations (save for the retained portions), synthetic securitisations expose originators to counterparty credit risk linked to corresponding insurance purchases.
8. Risk weights of retained tranches of securitisation are prescribed by the Basel Committee on Banking Supervision and relevant EU legislation on Capital Requirements Regulation (ECB and BoE, 2014).
9. According to recent research by Duponcheele et al. (2014), the ERBA approach applied to European banks is "profoundly discouraging" to new issuances of HQS, given that post-crisis changes in rating agencies methodologies have "boosted the conservatism of ratings-based capital requirement rules" compared to a formula-based approach.
10. In discussing an earlier version of this paper, some CMF delegates have argued that there might not be a generalised gap but that the issue might be a more localised or regional phenomenon (especially affecting the EU periphery), and furthermore, that a gap tends to exist more with respect to equity rather than debt financing. Also, the BCBS work emphasises that while some risk measures and capital requirements for banks might increase, in the longer term, the associated greater stability is beneficial also for SME funding.
11. See BCBS (2013b). Based on this revised report, a first quantitative impact study (trading book test portfolio exercise) was delivered in September 2014, the second one is to be delivered by end-2014 (see *www.bis.org/publ/bcbs288.htm*).
12. Within the Eurosystem credit assessment framework (ECAF) an External credit assessment institution (ECAI) source is one whose credit assessments may be used by credit institutions for the determination of risk weight exposures according to the CRD. The ratings equivalence is as follows: AA- and above is ECAI1, A- to A+ is ECAI2, BBB- to BBB+ is ECAI3, BB- to BB+ is ECAI4, B- to B+ is ECAI5, CCC+ and below is ECAI6. From 1 March 2011 the requirement to have two-ratings and the second best-rule applies to all ABSs regardless of issuance date. The second best-rule means that not only the best, but also the second-best available ECAI credit assessment must comply with the credit quality threshold. See *www.ecb.europa.eu/paym/coll/elisss/ecai/html/index.en.html*.
13. See also Kraemer-Eis, Lang and Gvetadze (2013, 2014).
14. Self-liquidating credit is repaid with money generated by the asset purchased, the repayment schedule and maturity of such self-liquidating credit are designed to coincide with the timing of the assets' income generation.
15. Other loans were 3 million auto loans, more than 1 million student loans, 150 000 other business loans, and millions of credit card loans.
16. Net lending to financial leasing corporations and factoring corporations – which can be important sources of finance for some SMEs – also continue to count towards allowances generated in the following year, pound for pound (as was the initial allowance of the scheme). The programme was further extended on 2 December 2014 so as to provide lenders with continued certainty over the availability of cheap funding to support lending to SMEs during 2015 (*www.bankofengland.co.uk/markets/Pages/FLS/default.aspx*).

17. For covered bond programmes which currently do not achieve the CQS3 rating in Cyprus and Greece, a minimum asset rating at the level of the maximum achievable covered bond rating defined for the respective jurisdiction will be required for as long as the Eurosystem's minimum credit quality threshold is not applied in the collateral eligibility requirements for marketable debt instruments issued or guaranteed by the Greek or Cypriot governments, with the following additional risk mitigants: i) monthly reporting of the pool and asset characteristics; ii) minimum committed over-collateralisation of 25%; iii) currency hedges with at least BBB- rated counterparties for non-euro-denominated claims included in the cover pool of the programme or, alternatively, that at least 95% of the assets are denominated in euro; and iv) claims must be against debtors domiciled in the euro area.

    Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus" issue.

    Note by all European Union member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

18. Per security uniquely identified by an International Securities Identification Number (ISIN). In the case of Greek and Cypriot covered bonds not fulfilling the CQS3 rating requirement an issue share limit of 30% per ISIN will apply.

19. Such voluntary lending will be conducted through security lending facilities offered by central securities depositories, or via matched repo transactions with the same set of eligible counterparties as for CBPP3 purchases.

20. A minimum of two ratings is required, with the second best rating of at least credit quality step 3 (CQS3), currently equivalent to an ECAI rating of BBB-/Baa3/BBB.

21. For Greek and Cypriot ABSs which cannot achieve the second-best credit assessment criterion, a derogation based on the fulfilment of the following requirements will be applied for as long as the Eurosystem's minimum credit quality threshold is not applied in the collateral eligibility requirements for marketable debt instruments issued or guaranteed by the Cypriot or Greek governments: i) compliance with the general criteria (see previous footnote) except the credit quality threshold; ii) ratings on a second-best basis at the maximum achievable rating in the respective jurisdiction; iii) a minimum current credit enhancement of 25%; iv) availability of investor reports and of modelling of the ABSs in standard third party ABS cash-flow modelling tools, as assessed by the ECB; v) all counterparties to the transaction (e.g. account bank and swap provider), except for the servicer, have a first-best rating of at least CQS3 and full back-up servicing provisions are in place.

22. Except in the case of ABSs with underlying claims against non-financial private Greek and Cypriot entities not fulfilling the CQS3 rating requirement, where a limit of 30% per ISIN will be applied.

23. The potential universe of securities available to purchase across both covered and asset backed bonds stand at about EUR 1 trillion.

24. See e.g. Bloomberg (2014). This is also part of work underway for the G20 by the BCBS-IOSCO Task Force on Securitisation Markets; see e.g. the September 2014 Cairns communiqué by G20 Finance Ministers and Central Bank Governors at *www.g20.org/sites/default/files/g20_resources/library/Communique%20G20%20Finance%20Ministers%20and%20Central%20Bank%20Governors%20Cairns.pdf*.

25. Such funds could also include joint bank and non-bank funds like ABN AMRO's loan fund set up in co-operation with nine insurance companies.

26. See *www.eurodw.eu*.

27. By way of a comparison, Commerzbank also issued a public sector covered bond with a similar term and a coupon of 1%. As of September 2013, the SME covered bond was trading above par, while the public sector covered bond was trading at around 99% of par. While the SME covered bond is structured outside the German Pfandbrief legislation, the ECB treated it as a covered bond for central bank repo purposes, it thus benefits from a favourable repo haircut compared to traditional SME CLOs (Fitch, 2013).

28. Nationale Bank van België/Banque Nationale de Belgique, Banca d'Italia, Banka Slovenije, Banco de España, Central Bank of Ireland, Deutsche Bundesbank and Oesterreichische Nationalbank are the other NCBs of the ICAS source (see ECB *www.ecb.europa.eu/paym/coll/risk/ecaf/html/index.en.html*)

29. For example, observers point out the unintended consequences of programmes such as the ECB's Longer-Term Refinancing Operations (TLTRO) that render funding through securitisation less attractive. The problem that these measures do not stimulate (intended) on-lending is somewhat addressed in the recent Targeted LTRO (TLTO). See the discussion in Section 5 above.

30. According to information from the Spanish Treasury, in 2013, only one company issued 50 million euro of bonds in the MARF. By end of 2014, its first full year of activity, outstanding bonds achieved 328 million euro and outstanding commercial paper amounted to 172 million euro.

31. While those two markets currently focus on equity they plan to develop mini-bond segments for the issuance of debt by SMEs.

32. In Germany, for example, there are rating agencies specialised on SMEs, like Creditreform, Scope, Euler Hermes, and Feri Euro Ratings Services. According to information provided by the EIF, in June 2014 the 17th SME bond issuer filed for insolvency, the third in 2014. As per early October 2014, 23 such SME bonds were in trouble (default or restructuring), counting for a volume of EUR 1bn (Brächer et al., 2014, Kraemer-Eis, 2014). The series of defaults, in particular among renewable energy companies, raised concerns over transparency, disclosure, accounting and rating standards, with a negative impact on deal pipelines (Kraemer-Eis, 2014). Moreover, there are several lawsuits regarding information contained in brochures. More recently, in January 2015, the Düsseldorf stock exchange, announced to terminate the "Mittelstandsmarkt", its dedicated SME bond platform.

33. As some observers point out, given the dynamics – especially the price dynamics – of these markets, the "best" corporates tend to be "courted" by investors in the private placement market, the "normal" ones remain bank financed, while most of the firms that are tapping public markets have often faced difficulties with other financing options.

34. In France, this would apply to a "mid-size" segment beyond the SME definition of the European Union (fewer than 250 employees and turnover of less than EUR 50 million or total assets of less than EUR 43 million). This specific segment is designated, by official decree, as, "*Entreprise de taille intermédiaire*" (ETI) and defined to comprise companies with 250 to 4 999 employees, or, if fewer than 250 employees, with a turnover of at least EUR 50 million and total assets of EUR 43 million. It covers the segment beyond SMEs and the lower one of larger companies.

35. This paragraph is based on Kraemer-Eis, Battazzi et al. (2014).

36. In fact, PPs are illiquid buy-and-hold instruments, thus PP markets are illiquid by nature.

37. Note that credit scoring of small business loans in the US is also undertaken based on the FICO (Fair-Isaac) scoring model.

38. Exemption from the duty to deduct income tax from interest paid on unlisted securities issued by companies with a minimum duration of three years.

39. This is also being recognised in OECD's work on institutional investors and long-term investment (*www.oecd.org/finance/lti*), a project that also feeds into efforts at G20 level in this area. Besides infrastructure, SME financing is an important component of this work.

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