

RESEARCH REPORT

SMALL AND MEDIUM SIZED ENTERPRISE SECURITISATION

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Executive Summary

Background

Small and medium sized enterprises (SMEs) account for 60% of employment and 48% of output in the private sector in the UK economy.¹ Therefore, ensuring appropriate finance for SMEs means ensuring appropriate finance for much of the UK economy. If the UK has well-functioning financial markets for SMEs this will support productivity and enhance the long-term prosperity of the UK.

The British Business Bank (BBB) aims to improve the functioning of finance markets for smaller businesses, so that these markets work more effectively and dynamically. In addition to working with partners to unlock funding, the BBB is committed to understanding where market failures may exist in the provision of finance and supporting a more diverse and sound financial environment. One potential form of financial intermediation for SMEs, which has had relatively little success in the UK, but more success overseas, is the securitisation of SME liabilities. The BBB asked the National Institute of Economic and Social Research (NIESR) to informally consult with stakeholders in securitisation markets and to consider the viability of an SME securitisation market in the UK.

Methodology

NIESR carried out an informal consultation with an extensive list of stakeholders in the securitisation markets and a review of the academic and regulatory literature with a view to uncovering where market failures may exist which might limit a more active SME securitisation market. Stakeholders included potential issuers and investors, regulators, development banks, credit rating agencies and industry bodies. A full list is provided in Annex 1 – interviews took place from August to October 2014. Each stakeholder was asked a number of questions on a confidential basis, although in practice they differed somewhat depending on stakeholders' function and interest in the market. The questions covered the suitability of SME exposures for securitisation, alternative financial technologies, appropriate levels of information disclosure, introducing preferential treatment for 'qualifying' securitisations, secondary market infrastructure and the regulatory environment. NIESR researchers have interpreted the responses within an economic framework and offered some recommendations.

Key findings

Stakeholders acknowledged that credit and liquidity issues in some segments of the securitisation market exacerbated the global financial crisis, particularly the US sub-prime residential mortgage securities market (RMBS).² While securitisation markets were illiquid for a prolonged period, many stakeholders were eager to highlight the very clear differences in European and US securitisation practices and credit performance. Standard & Poor's (2013) report European default rates of 2.5% compared to 18.4% on US private securities between

¹ Department for Business, Innovation and Skills (2014).

² For example, see Brunnermeier (2009).

2007 and 2013, despite Europe having suffered a deeper recession. Moreover, European SME securitisations had default rates of 0.29% in this period (see section 3). Securitisation issuance is far smaller today than pre-crisis levels, despite a substantial share being retained for placement with central banks.³

A clear message from past and possible future investors is that, in principle, there is a strong interest in investing in SME backed financial assets. This included longer-term domestic investors, such as insurance companies and pension funds, rather than mostly banks and other leveraged investors who were significant investors in securitisation markets in the past (see section 4). Securitisation is recognised as a lending technology which can deliver the greatest degree of diversification. For potential investors a particular attraction of securitising SME liabilities is the potential to diversify risk by holding a pool of loans on many hundreds of SME firms across different industries and locations. The SME category includes a very large number of firms (98% of all firms in the UK economy) across a wide range of economic sectors.⁴

Stakeholders reported that SME securitisation could provide an alternative to bank finance to support SMEs during periods of banking sector stress. Large corporations were able to access alternative sources to bank finance, unavailable to smaller businesses. Large banks are yet to settle on a long-term 'equilibrium' business model which may involve more or less branches and therefore less local access to SMEs. A well-functioning securitisation market could add to financial and economic stability. An alternative to bank finance can also provide more effective competition to the large four UK banks which account for 80% of SME lending.⁵ Participants welcomed statements by the Bank of England (the Bank) and European Central Bank (ECB) acknowledging the possible benefits of securitisation, but some questioned whether this is likely to be long lasting rather than for expediency.⁶

At present, the economics of SME securitisation for 'bank funding' is unfavourable for a number of reasons. Exceptionally low cost funding from the official sector means securitising assets is uneconomic for institutions with access to official funding. Banks can swap assets with central banks for low cost funding or obtain funding through other public schemes such as the Government's Funding for Lending scheme. Looking beyond the current exceptional conditions, larger banks with funding alternatives suggested that SME assets would be some way down the list of assets they would first seek to securitize. More homogeneous, familiar and easily quantifiable assets, such as mortgages, auto loans and credit card receivables are more likely to be securitized before SME liabilities. By contrast, SME securitisation is more likely to be used for 'risk transfer' from banks to investors over the near term. If regulators are content that risk has been transferred, then this lowers banks' capital requirements and increases their capacity for further lending once demand improves.

Another set of issues more particular to SMEs and perhaps preventing a deeper market from developing relates to the opacity of SME loans. While the heterogeneity of loans is desirable to

³ IMF (2015) report US and European total private issuance in 2014 was less than half the levels observed in 2003.

⁴ Department for Business, Innovation and Skills (2014).

⁵ Competition and Markets Authority (2014).

⁶ The UK Government announced it was in favour of reforming securitisation markets back in early 2008.

facilitate diversification, the greater cost of obtaining verifiable information can make credit assessment challenging and even create incentive problems arising from differences in information between transacting parties. For example, SME loans differ with respect to the terms, the quality and marketability of collateral and also the underwriting standards of those originating the loans. The lack of public data with a comparable track record makes estimating and benchmarking credit risk much more difficult for investors.

Some progress has been made. The ECB and Bank requirement that issuers provide loan-by-loan data for all of the underlying assets in a securitisation is widely welcomed by investors. While this should facilitate transparency, potentially allowing for more accurate valuation, significant issues remain. First, some investors regard the data as being of insufficient quality, due to inconsistencies in the data definitions used across and even within banks. Second, the lack of verifiability of some data creates further doubts about its quality. Third, it was suggested that much of the documentation could be standardised and that simpler securitisations (with less structuring) would be easier to assess. Stakeholders accepted the need for 'high quality securities', along the lines suggested by Prime Collateralised Securities, but until there is a different regulatory treatment this was not thought to provide a transformational change (see section 5). The Bank and ECB (2014) and the European Banking Authority (2014) suggested and recommended different regulatory treatment of high quality securitisations according to supervisory standards.⁷

Another suggested obstacle to using SME loans in securitisations is that they may yield artificially low interest rates, perhaps due to cross-subsidisation from providing more lucrative financial products, such as insurance products. The yields on the loans may be too low to compensate investors for the necessary investment costs and risks involved. This may signal uncompetitive behaviour of incumbent providers of finance. Recent policy discussions around making credit information more widely available through credit registers may support competing sources of SME finance, including securitisation.⁸ Investors may be able to create performance benchmarks and even indices of returns for similar assets. Stakeholders welcomed credit register proposals but questioned how the quality of the data could be assured.

Many participants highlighted the high set-up costs for securitisations, for example for setting up IT systems to collect loan by loan data, which would only be amortised if sufficient volumes of securitisation transactions were expected. This is a particularly relevant barrier to entry for smaller banks and finance providers. New entrants to SME lending might also find their lack of a track record to be a barrier to having securities on their SME lending rated. This points to a number of market failures that may be hampering growth of the SME securitisation market, including imperfect information and regulatory failures. To address these issues, some market participants argued that there is a case for a shared securitisation platform for multi-originator deals to encourage challenger banks and non-bank finance companies to provide funding to SMEs. The idea is to reduce the high set-up costs of securitising SME loans, leading to wider market participation and therefore increased competition among SME lenders.⁹ This needs to

⁷ The European Banking Authority (2014) issued its Discussion Paper on 'simple, standard and transparent securitisations' towards the end of our consultation period.

⁸ See Bank of England Discussion Paper (2014).

⁹ Any shared platform would need to be fully costed with strict asset quality applied.

be considered alongside the effectiveness of measures to mitigate originators' incentives to shift risks to the vehicle.

Finally, many stakeholders suggest that the regulations introduced in the aftermath of the financial crisis had created an uneven playing field tilted against securitisation technology. The Basel II capital requirements for banks investing in securitisations can be higher than for the underlying loans themselves. The approach of rating agencies to securitisations is considered by many issuers and investors to have become overly restrictive in absolute terms and relative to covered bonds. Securitisations which banks can include in their liquidity buffers have more stringent requirements than covered bonds of similar assets. For issuers, the process of verifying that material risk has been transferred to obtain capital relief is considered to be cumbersome. And the EU Solvency II capital requirements for insurance companies are considered to be prohibitive and would essentially prevent insurers investing in securitised assets. However, market participants are encouraged that there is greater recognition of these issues and expect some improvement in the regulations.¹⁰

¹⁰ The draft Basel III regulations is intended to ensure that capital requirements of asset backed securities do not exceed those for their underlying loans and a Delegated Act by the European Insurance and Occupational Pensions Authority proposes less punitive treatment of certain types of high quality securitisations.

1. Introduction

The objective of this paper is to assess whether a market for SME securitisation could be a viable means of improving access to finance for SMEs in the UK.¹¹ In the process, we assess recent policy proposals and further suggestions raised during our informal consultation. In this section, we examine some of the challenges facing SMEs requiring external finance. We argue that SME securitisation could provide greater capital market access and enhance competition in the SME lending market which implies more diversified sources of finance for SMEs and possibly better terms and conditions.

Small and medium sized enterprises (SMEs) account for roughly the two thirds of employment and half of output in the private sector in the UK economy.¹² Some SMEs are also a key source of innovation and challenge to larger incumbent firms which drives productivity growth throughout the economy. The OECD (2014) shows how young SMEs (less than 5 years old) have particularly high rates of job creation and destruction and net job growth relative to the rest of the economy.¹³ If the UK has well-functioning financial markets for SMEs this will support productivity and enhance the long-term prosperity of the UK.

SMEs rely on high street banks for most of their external finance. It is estimated that nearly 80% of external finance provided to SMEs takes the form of traditional bank lending in the form of loans and overdrafts.¹⁴ Banks are also estimated to account for more than 90% of lending to SMEs in the form of asset and sales finance (leasing and factoring), bringing the total share of bank lending to SMEs to 93%.¹⁵ The traditional explanation is that SMEs comprise a highly heterogeneous set of businesses with lower reporting requirements than large firms. As a result, there may be a high cost to obtaining information relative to the size of a loan for SMEs. Since Diamond (1984) banks have been considered to have a comparative advantage in assessing the creditworthiness and monitoring the activities of SMEs. The financial structure of banks enables depositors and investors to delegate to banks the monitoring of borrowers to ensure that they fulfil their contractual obligations.

However, this dependence on banks for external finance leaves SMEs, and therefore a large part of the economy, exposed to the health of the banking sector. Since 2011, loans to SMEs have declined at an annual rate of over 3% in nominal terms each year.¹⁶ While this is certain to be due in part to less demand for finance, there is empirical evidence to suggest that the supply of credit from banks to SMEs has been curtailed.¹⁷ New alternative financing for SMEs has emerged and grown very rapidly since the crisis, such as crowd-funding and peer-to-peer

¹¹ We consider term securitisations only and not short dated securitisations (asset backed commercial paper).

¹² Department for Business, Innovation and Skills (2014).

¹³ See Criscuolo, Gal and Menon (2014).

¹⁴ TheCityUK (2013).

¹⁵ TheCityUK (2013).

¹⁶ Bank of England (2014a) and own calculations.

¹⁷ See Armstrong et al (2013).

lending, but this remains around only 1% of the stock of total bank lending. Larger firms have access to both banks and various sections of the capital markets to raise funds. They have greatly increased their borrowing from capital markets while bank lending has also declined over this period. In the five years since the end of 2008, bank loans to non-financial firms have fallen at an annual rate of 4% while corporate bond issuance has increased by 4.7% annually.¹⁸ An important question is whether it is possible for SMEs to have access to capital markets, thereby creating a more diversified source of finance, greater competition for the banking sector and more economic stability.

In addition to the economic loss arising from some credit worthy SMEs facing some degree of credit rationing, this may particularly affect young SME firms without a significant track record or assets to offer as collateral. Armstrong (2013) found that younger SMEs of between two and six years old are more likely to face rejection for loan applications than older SMEs taking account of all other characteristics. If the younger SMEs are more productive and become tomorrow's larger companies, then bank credit rationing when there is no alternative source of finance can impose a shadow over the long- term performance of the rest of the economy.

SME lending is also heavily concentrated in the four large high street banks. According to Competition and Markets Authority (2014) the four largest UK banks account for 80% of SME loans outstanding. These banks also provide 85% of SME current accounts and on 60% of occasions the SME current account is held with the same bank which provides the SME owners with their own personal current account.¹⁹ Holding a SME's current account provides access to valuable private information on its creditworthiness. Any SMEs which are unable to obtain a loan from their main bank might find it challenging to obtain finance elsewhere, as other potential lenders might worry that the main bank's negative private information led to this rejection. Moreover, this private information on SMEs forms a barrier to entry for challenger banks or other potential SME lenders, who would find it costly to collect and verify the relevant information. While the degree of market power is difficult to measure, such a high concentration of market share among a small number of banks is at least suggestive.

By first principles, banks with some market power might seek to exercise it by restricting the supply of loans to SMEs, driving up the costs to lending. This may be more evident in a reluctance to re-price loans following government measures to promote lending after the crisis in the absence of competition. Even if the concentration of market power did not lead to higher interest rates on SME loans, it might still lead to higher costs for financial services than would be expected under more competitive conditions, as banks might cross-subsidize their SME business with fees for other services such as cheque clearing.²⁰ The presence of such informational barriers to entry is likely to reduce the supply (credit rationing) and increase the cost of financial services to SMEs. Hence, increasing competition in SME lending might be one means of increasing the supply of finance and improving the terms of lending.

¹⁸ Bank of England (2014b).

¹⁹ Competition and Markets Authority (2014).

²⁰ For example, see IMF (2014) p25.

While SMEs have almost exclusively relied on (a small number of) banks for external funding, recent technological changes raise the prospect of alternative sources of finance. As the cost of processing certain types of information changes, new lending technologies may become economically advantageous. Securitisation is one form of lending technology made possible by the transformation in the cost of processing information. Certain types of borrowers have access to a wider pool of funding than bank finance. However, this also gives rise to new incentives and challenges to regulation. In the following sections, we first explain what securitisation is, then go on to describe the particular challenges facing SME securitisation, including market failures, and finally explore which policy measures might support a viable SME securitisation market.

2. Securitisation Markets

Securitisation is a form of financial intermediation by which illiquid financial contracts (such as mortgages and loans) are transformed into diversified and liquid securities. These securities can be bought and sold by third party investors. The performance of the securities depends on the underlying assets and the structure of the transformation but not necessarily the financial state of the issuer (unlike a bank deposit or a covered bond).²¹ The advantage of securitisation over 'traditional' banking is that it breaks-up the intermediation process into separate steps so that securities can be created which are tradable and match a wider range of investor preferences. The disadvantage is that poor implementation can lead to misaligned incentives and excessive risk taking.

Stakeholders made a number of opening observations about the securitisation markets. First, securitisation has been used for decades and the securitised asset markets are by far the largest capital markets in the world (including banking sectors). Second, technology that enables securitisation to become so widely used, such as batch-processing, cannot be reversed and some adaptation to the technological environment is efficient, although this inevitably brings risks. Third, financial regulation has focussed on the traditional (deposit taking) banking sector, while securitisation markets have in the past developed outside of the perimeter of financial regulation (the so-called 'shadow banking' sector). Fourth, some securitisation markets became completely illiquid and amplified the depth of the global financial crisis. However, other securitisation markets have been resilient and offset the decline in bank credit.

Stakeholders were keen to emphasise that securitisation ought not to be considered in normative terms that had tended to colour much of the post crisis regulatory debate.²² They argued that securitisation is simply another financial intermediation technology which, when used properly, can support the real economy and, when used negligently, can create financial instability. They pointed to the very different performance of securitisations across assets and jurisdictions during the financial crisis. For example, the markets for securitised credit card receivables and auto loans remained active during the crisis, while the market for securitised higher risk mortgages remains very limited. The IMF (2013) point out that during the period of

²¹ Covered bonds differ from ABS in that investors have a claim on the issuer as well as the cover pool of underlying assets. They are regulated under the EU CRD which restricts the assets included in the cover pool.

²² Many stakeholders consider that negative comments by regulators in the past had effectively stigmatised securitisation markets.

financial turmoil in 2011 the performance of the European residential mortgage backed securities (RMBS) market was superior to most EU sovereign debt, senior bank debt and many covered bonds (with the exception of *Pfandbriefe*). Therefore, a nuanced approach to securitisation is appropriate.

2.1 Development of securitisation markets

Stakeholders often referred back to how securitised markets had developed to draw inferences about building robust markets for the future.²³ The first modern securitisations were structured under the auspices of the Government Sponsored Enterprises (GSEs) in the 1970s. The purpose of these institutions was to create deeper mortgage capital markets.²⁴ The underlying mortgages in the securities had to meet certain conservative 'conforming' criteria including loan size, equity, credit score and loan to income ratios etc. The RMBS were 'pass-through' securities meaning the cash flows were simply passed through to final investors with minimal financial engineering.²⁵ Apart from different cash flow properties, the securities were homogeneous which contributed to creating a successful liquid market. Legislation was enacted in the 1990s to encourage the GSEs to focus on mortgages of middle to low income families.²⁶

The US Tax Reform Act (1986) enabled the creation of Real Estate Mortgage Investment Conduits (REMIC), or bankruptcy remote investment vehicles which spurred the growth of private sector (or 'private label') securitisations. These were securitisations issued by the investment banks to cater for mortgages which typically exceeded the maximum loan limits for conforming mortgages. An unintended consequence of REMIC is that it enabled securitisation notes to be re-packaged into new securities and many derivative products. These became the staple of the rapidly growing short-term liquidity markets such as repo and asset backed commercial paper markets. The mismatch between the longer maturity of the underlying assets and the short-term funding contributed to the fragility of the market.²⁷ The investment banks also created a new category of mortgage securitisations called sub-prime which included mortgages which were typically of much lower credit quality.

The simplest form of securitisation is a pass-through security illustrated in Diagram 1. The first stage is that the underlying assets, such as mortgages or other loans and leases, are pooled together and sold to a separate legal entity called a special purpose vehicle (SPV). The assets are usually sourced by the bank sponsoring the SPV, although 'originators' such as mortgage brokers can also perform the same function. The cash to buy the portfolio of assets is raised by

²³ Historians point to the US Farm Mortgage Bonds in the 1850s as the first securitised assets.

²⁴ Riddiough and Thompson (2011) argue that liquid secondary markets for RMBS have supported the unique long-term fixed rate mortgage market in the US.

²⁵ This meant that investors carried the duration risk if mortgage borrowers decided to repay or re-finance loans before the maturity of the mortgage.

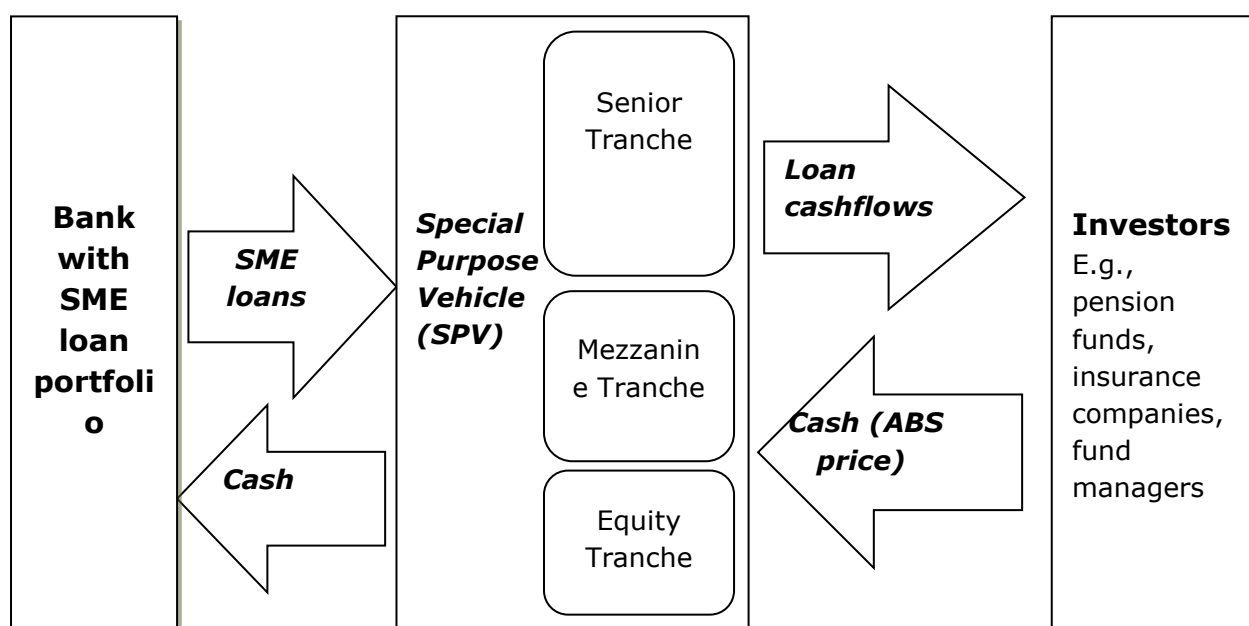
²⁶ President Bush's Community Development Act (1992) and President Clinton's Community Reinvestment Act (1997) both refocused the agencies toward mortgages for middle to low income families and regions of development. Fannie Mae and Freddie Mac were taken into "conservatorship" by the US Treasury in September 2008 - a form of temporary nationalisation.

²⁷ Many stakeholders said that these markets were so buoyant before the crisis that securitisations were increasingly designed to meet the needs of short-term investors and the roll-over risks were underestimated.

the issue and sale of financial claims on the SPV, which are bought by investors in the form of notes called asset backed securities (ABS). This allows the cash flows from the loans, including repayment, to be passed through to the final investors.

In a 'synthetic' securitisation the underlying portfolio credit exposure rather than the underlying assets is transferred to the SPV to achieve the same risk transfer.²⁸ Other structures re-fashion the cash-flows so that investors receive a fixed final repayment (a so-called 'bullet', like a traditional bond) rather than the uncertain timing of the cash flows. Stakeholders said that prior to the financial crisis securitisations were increasingly being designed to meet the demands of investors, which were not necessarily the same as the cash flows generated from the underlying assets. Varying degrees of financial engineering were required to make investors' demands and the cash flows from the securitised assets match. For example, transforming UK residential mortgages into short-term bullet securities for international investors often included embedded interest rate and currency swaps with third party institutions.

Diagram 1. A stylised simple securitisation



²⁸ In this paper, we focus on cash securitisations. Synthetic securitisations have become less attractive since the financial crisis. The EBA proposals exclude synthetic securitisations from qualifying for preferential regulatory treatment as a 'simple, standard and transparent' securitisation. Tighter regulatory treatment has reduced the ability to obtain capital relief on synthetic securitisations. See Box 3 on the German state-owned bank KfW's Promise programme, based on synthetic securitisation.

Modern securitisations are divided into separate classes or 'tranching' securities based on the seniority of their claim to the cash flows of the underlying assets. The most junior or 'equity' tranche absorbs any initial losses on the assets. If the equity tranche is depleted, the mezzanine tranche absorbs the next losses, while senior tranches are best insulated from any losses.

Tranching makes it possible for a single pool of loans to be tailored to meet the risk appetites of a range of investors. While this process is often criticised (as 'sliced and diced') it is perfectly possible to create highly rated or 'safer' (from a credit perspective) senior tranches with a lower default probability than the underlying assets. But this is done at the cost of concentrating the default risk in the more junior tranches. The most senior tranches tend to be emitted primarily for funding purposes, allowing banks to fund loans from capital markets in addition to depositors or other funding sources. The more junior tranches might also be sold to transfer risk from the lender's balance sheet, allowing the originating bank to claim capital relief on the securitised loans.²⁹ This creates capacity for further lending. The extent to which senior tranches can be insulated from default risk and the extent to which risk becomes concentrated in junior tranches depends on the correlation in default risk across assets in the underlying securitisation pool. Box 1 shows some simple examples of this technology.

²⁹ Prudential regulation requires banks to hold a certain amount of equity capital against each loan. By securitising, banks can claim to have transferred the risk involved in the securitised loans off of their balance sheets, so that they no longer need to hold as much capital against those loans.

Box 1: Tranching and Credit Enhancement*

To explain the effects of tranching, we use two simple examples to illustrate that the senior tranche is more protected from losses when 1) the correlation of default rates across assets in the securitisation pool is lower and 2) the securitisation pool is more granular (it contains a larger number of other less than perfectly correlated assets) and 3) the senior tranche is thinner (it is composed of a smaller percentage of the assets).

Say that a bank pools two SME loans which should repay £100 with independent default risks of 10% each into a single security. Untranching, the pool of loans will pay off: £200 with probability $0.9^2 = 81\%$, £100 with probability $2(0.9)0.1 = 18\%$ and 0 with probability $0.1^2 = 1\%$.

Tranching the pool of two uncorrelated loans into a junior and senior claim each of £100, will concentrate the losses in the junior claim, giving protection to the senior claim. If one or both of the loans defaults, the junior security absorbs the loss. The junior claim only pays off when both loans in the pool payoff: £100 with probability 81% and 0 with probability 19%. The senior claim, however, is expected to pay off £100 fully 99% of the time, with an expected payoff of £99. It only incurs losses in the unlikely event that both claims default.

The correlation structure is crucial, however. Imagine that instead, the default rates of the two loans are perfectly correlated: in expectation, if one defaults, the other will too. Now tranching has no effect at all. Both the 'junior' and 'senior' securities pay off £100 with probability 0.9 and 0 with probability 0.1. The lower the correlation among default rates, the greater the protection of the senior claim.

Now imagine that there are four assets in the pool, with uncorrelated default probabilities of 10% each. Splitting the security into two equally sized tranches illustrates that a more granular underlying loan portfolio yields a more protected senior claim. Now the senior claim suffers losses if all four loans default (a loss of £200 with probability $(0.1)^4 = 0.01\%$) or if 3 of the loans default (a loss of £100 with probability $4(0.1)^3(0.9) = 0.36\%$), so that losses are only incurred 0.37% of the time and the expected payoff is £199.62. Splitting the security into four equally sized tranches leaves a highly protected senior tranche which only incurs a loss when all four loans default. The most senior tranche incurs a loss of £100 with a probability of just 0.01%, and an expected payoff of £99.99. Hence, making the most senior tranche thinner leads to even more protection or credit enhancement. * This box draws on the discussion in Coval, et al. (2009).

The early securitisations had well defined collateral that could be easily valued, if not liquidated. RMBS and securitised commercial mortgages (CMBS) were the most common assets. However, the relatively long maturity of the underlying assets meant that any securities sold to shorter-term investors entailed a maturity mismatch or required considerable financial engineering. Other underlying assets include auto loans, credit card receivables and even student loans. These differ greatly in terms of the ability to identify and access the underlying collateral. Where loans are repaid on a regular basis, so that the amount outstanding to any specific creditor can vary, the SPV often takes the form of a trust which aggregates the cash flows. This often required the sponsoring institution to provide liquidity services to the SPV which connects the performance of the securities to the issuer.

2.2 Conflicts of interest and regulation

Separating each step in the financial intermediation process may create competition and greater specialisation, but differences in information at each step between parties can also create divergent interests. Some originators did not retain any interest in the loan portfolio, and so may have had a greater incentive to increase volume rather than likelihood of repayment. The vehicles were also increasingly complex with representations and warranties connecting the sponsor to the performance of the securities. The complexity of many securities made them very difficult or even impossible to accurately value. Institutions that sponsored vehicles were also market makers implied an asymmetry of information leading to a vulnerable market. These misaligned incentives contributed to the breakdown of large segments of the securitisation market summarised in Box 2.

Box 2: Securitisation and the Global Financial Crisis (GFC)

The failure of parts of the securitisation market was an important catalyst to the GFC. The most notable failures were in the US subprime market where there were substantial credit losses. In other markets, liquidity evaporated even if credit quality was resilient. Institutions that had become reliant on securitisation faced funding crises that soon spread to other liabilities. We interpret the failure of securitisation as the result of several conflicts of interest, overly complex structures, excessive maturity transformation and leverage and, at best, lax regulation. These failures were by no means exclusive to securitisation, but resolving them is necessary for a resilient SME ABS market.

The most egregious market abuses and greatest capital losses were in the US subprime market. Dell’Ariccia, et. al. (2012) document that credit quality was lower among securitised loans than loans held on banks’ balance sheets.³⁰ This is attributed to the US ‘originate-to-distribute’ model of mortgage lending where mortgage originators were remunerated by the volume of loans rather than probability of repayment and had no ongoing exposure to the loans they had originated. Another notable possible conflict of interest was between the three dominant credit rating agencies that provided “opinions” that were hard wired into bank regulations.

A further vulnerability was the excessive maturity mismatch, where long-term lending was often funded with short-term borrowing.³¹ Regulatory loopholes in bank regulation created an incentive for banks to transfer long-term assets to legal conduits that issued short-term securities, in most cases 30 day asset-backed commercial paper (Asset Backed Commercial Paper, or ABCP). SPVs were endowed with credit lines from the sponsoring bank as a ‘liquidity backstop’ in case the securities could not be rolled-over. As a result, the sponsoring banks were exposed to liquidity risk beyond the assets and liabilities on their balance sheets.³²

This maturity exposure was often compounded by leverage. Suppose a bank has a (relatively low) leverage ratio of 20, so that its \$100bn in assets are financed by \$5bn equity and \$95bn debt. If the bank must inject \$1bn to its SPV to refinance its subprime RMBS, then its leverage ratio rises above 20 (its equity falls below 5%). To return to a leverage ratio of 20, the bank

³⁰ Albertazzi, et. al. (2011) find that the quality of securitised loans was actually higher in some dimensions in a well-regulated Italian context which required retention of some loans on the lender’s balance sheet.

³¹ The account of how maturity mismatch played a role in the financial crisis draws on Brunnermeier (2009).

³² Banks were able to offer ‘liquidity backstops’ to their SIVs without incurring any capital charges, because Basel I regulations treated certain ‘liquidity backstop’ credit lines to SIVs as ‘reputational’ credit lines, which incurred no capital charge.

must either raise \$1bn in new equity (which can be difficult) or sell off \$20bn in assets. If any of these assets are mortgages or RMBS, then prices for these assets come under even more pressure. The more leveraged the bank to begin with, the greater the sell-off which is necessary to regain the original leverage ratio.

Complexity and a lack of transparency in securitisations added further vulnerabilities. Securitised assets were often highly complex, involving embedded derivative contracts, some implicit options with hard to value triggers and complex subordination structures. There was also a lack of transparency, consistency of definitions and shortage of loan level data for most securitised assets. Even the secondary markets were opaque with sponsoring banks also acting as market makers. When default rates for subprime mortgages began to rise early in 2007, and leveraged investors began a 'fire sale' where prices fell below their 'fundamental' value. The complexity and lack of transparency made it difficult for new investors to enter and support the market with new funds.

Stakeholders also pointed to the unintended consequences of capital regulations. The original Basel I capital regulations created an incentive to shift better quality assets off their regulatory balance sheet to avoid capital charges. Some argue that in the past Basel II capital regulations inadvertently encouraged greater leverage. The risk weights attached to investment grade securitisations were so much lower than for the equity tranche that issuers minimised the amount of 'loss buffer' in the transaction. The IMF (2013) suggest that the internal models used as a basis for estimating risk weights by larger banks led to lower capital charges than justified in practice. In many other areas there was not enough disclosure of information despite the increasingly complex nature of the transactions. We were told that incomplete offer documents were circulated in the marketing process with investors becoming increasingly reliant on the credit ratings rather than being able to conduct their own due diligence.

Since the crisis, regulation has tightened and has begun to favour simple over complex and transparent over opaque structures. Policy papers by the European Banking Authority (EBA), the Bank of England (BoE) and the European Central Bank (ECB) recommend granting preferential regulatory treatment to securities which satisfy strict requirements on simplicity, transparency and quality of underlying assets. It is on these high quality, simple and transparent securitisations which we focus in this paper. Although different classes of securitisations have some things in common, participants in our consultation explained clearly that the type of underlying assets, the structures used and the extent of financial engineering has had very different consequences through and beyond the crisis. In the next section, we will summarise some of the market trends in securitisation, highlighting the distinctions between the developments in different types of securitisation markets since the crisis.

3. Market Trends

Securitisation has a long history in the US. The first modern residential mortgage backed securities (RMBS) were issued in the 1970s by the Government Sponsored Enterprises. The underlying mortgages met specific conforming standards and the original objective was to create a deeper secondary market for mortgage finance.³³ Private label (i.e. non government)

³³ In the United States, government sponsored agencies such as Fannie Mae and Freddie Mac buy conforming mortgage-related assets from loan originators, and issue securities (primarily RMBS) based on these loan pools. Fannie Mae and Freddie Mac were taken into "conservatorship" by the US Treasury in September 2008. This is a form of temporary nationalisation.

securitisations covering non-conforming mortgages were issued in large volume by investment banks from the early 1990s. Since the crash, the private label RMBS market has struggled to recover. However, US securitisation markets for non-real estate assets have fared much better with issuance of credit card receivables, leases and auto loans proving much more robust. Related markets, such as collateralised loan obligations (CLOs) which package riskier corporate loans have also recovered strongly.

European capital markets have been dominated by covered bonds for decades while the ABS market is a much more recent development. The UK is one of the largest ABS markets (along with the Netherlands) in Europe, but its SME securitisation market is very small with only a handful of investor placed transactions to date. Although SME ABS performed well through the crisis, with a very low level of losses, there has been little SME ABS issuance in the UK since the crisis. This is in contrast to some other markets such as the securitisation of credit card receivables or auto loans, which also have performed well through the crisis in terms of losses and which have recovered, or even surpassed, their previous (relative) size. In the European periphery, nearly all securitisation issuance is retained by the lender for use as collateral at the ECB for repo transactions, with only a trickle of securitisations being placed in the market.³⁴

Both UK and European securitisation markets began to grow rapidly around the turn of the century, but have shrunk since the financial crisis. Table 1 provides more detailed data on European and UK securitisation markets since the crisis. UK outstanding securitised assets have fallen from their peak of €700bn to only €400bn in 2014. Issuance has dropped even more dramatically, with the UK figure falling from €256bn in 2008 to only €49bn in 2014.

We highlight five key trends in UK and European securitisation markets since the crisis:

- 1) Sharp increase in securitisations retained for use in central bank repo transactions, especially in Southern Europe
- 2) Further decline in UK issuance after the introduction of the Bank of England's Funding for Lending (FLS) scheme in 2012
- 3) Lower (expected) loss rates for UK and European securitisations than for US counterparts
- 4) Shift in issuers from large banks to challenger banks and non-banks
- 5) Decline in securitisation investment by 'real money' European insurers

We also emphasize four aspects of SME securitisation markets:

- 1) UK SME ABS market is small compared to other countries and other collateral types

³⁴ Repo transactions are where securities (in this case ABS) are exchanged for cash (in this case with the ECB) with an agreement to buy them back at a future date and price.

- 2) Larger SME securitisation markets in Germany and Spain (and also US and Japan) have developed with government support/intervention
- 3) SME ABS transaction sizes seem to be large relative to other types of securitisation
- 4) UK SME loan default and write-off rates are low compared to other types of underlying such as credit card receivables

Table 1: A snapshot of securitisation in Europe and the UK, 2008 and 2014³⁵

[billions of €]	Issuance		Outstanding	
	2008	2014	2008	2014*
Country				
UK	256.4	49.1	699.5	400.1
Spain	103.4	27.2	296.1	176.2
Netherlands	75.7	25.2	295.5	254.6
Italy	94.8	19.2	208.1	161.0
Germany	110.6	18.4	135.2	71.4
Rest of Europe	178.2	76.9	530.4	371.8
<i>Total Europe</i>	<i>819.2</i>	<i>216.0</i>	<i>2,164.8</i>	<i>1,435.1</i>
UK by Type				
RMBS	242.6	25.2	505.1	217.7
CMBS	1.1	3.6	83.2	54.2
CDO	1.0	0.0	4.6	9.6
WBS	0.0	3.6	66.8	71.5
Credit Card	11.1	7.5	27.4	21.3

³⁵ It is important to note that SME assets may be categorised under other securitisation definitions in Table 1. For example, the proprietor of an SME may have a mortgage which is in an RMBS or assets in the 'other' category. Because SME assets may also be included in other categories of securitisations such as residential or commercial mortgages, auto loans, credit cards, consumer loans etc. it cannot be fully disaggregated.

Auto	0.6	4.8	0.6	6.8
Leases	0.0	0.4	0.0	0.3
Consumer/Other	0.0	0.0	6.4	5.8
SME	0.0	4.0	5.3	8.7

Source: SIFMA/AFME (2014), AFME (2015). CDOs are collateralised debt obligations, CMBS are commercial mortgage backed securities and WBS are whole business securitisations. *2014 outstanding data is as at 2014:Q4, except for Credit Card, Auto, Leases and Consumer/Other, which is 2014:Q1. The combined outstanding for these categories in 2014:Q4 is €34.2bn, but no further breakdown is available.

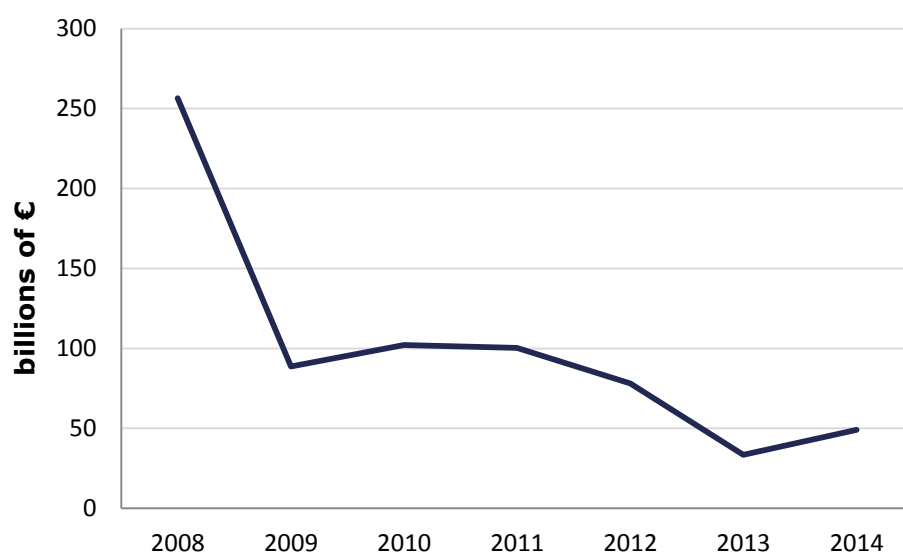
3.1 Key Trends

A major change in the European securitisation market since the crisis is the drop in the share of issuance which is 'placed' or sold in the market. In 2007, the last full year before the onset of the financial crisis, 70% of European issuance was placed in markets. Beginning in 2008, however, bank issuers began to 'retain' securitised assets on their balance sheets, in order to use them as collateral for repo transactions with central banks. While virtually all securitisation issuance in Europe in 2009 was retained (94% of the €424bn total), there has been great diversity between the amount retained versus placed issuance across countries since 2010. The share retained for use as collateral has remained particularly high in the Eurozone crisis countries, with very little market activity: 91% of Spanish and 95% of Italian issuance over the period 2010-13 has been retained. In the UK and Germany, the role of market placement has recovered somewhat, with the majority of issuance placed in the market over the same period. Based on placed issuance, the UK, Germany and the Netherlands are the major securitisation markets that are still active, each accounting for about one-quarter of European securitisation market placement.³⁶

In the UK, securitisation activity has dropped markedly twice. First, as the crisis unfolded, the volume of securitisations issued plummeted from its peak of €256bn in 2008, to only €89bn one year later (fig 1), coinciding with the general decline of securitisation market activity across Europe. After stabilising at a lower level between 2009 and 2011, UK securitisation issuance began to fall again in 2012, reaching €34bn in 2013 and €49bn in 2014. Market participants attributed this further fall in UK securitisation activity to the introduction of the Bank of England's Funding for Lending Scheme (FLS) in July 2012 and the accompanying increase in the availability of cheap funding for UK banks. Market participants identified the continued availability of cheap central bank funding as an obstacle to the revival of securitisation markets, both in the UK and in other parts of Europe.

Fig 1: UK Securitisation Issuance

³⁶ SIFMA/AFME (2014).



Source: AFME (2014), AFME (2015)

The low level of securitisation market activity in the UK and Europe since 2008 is unlikely to be due to credit performance which has been quite robust throughout the crisis. Overall, European loss rates are an order of magnitude below those of the US. Fitch (2012) reports that realised losses for securitised assets issued between 2000 and 2011 were 0.2% for the EMEA, compared to 2.4% for the US, while expected losses were 0.6% for the EMEA against 5.4% for the US. This is particularly striking given the deeper and longer recession in the UK and Europe compared to the US. The performance of European and US securitised assets is compared across all asset classes in Table 3.

Table 3: Performance of securitisations issued 2000 to 2011 (%)

Region	Type of loss	ABS	RMBS	CMBS	Structured Credit	All
US	expected	0.4	6.4	4.5	23.7	5.4
	realised	0.1	3.5	0.9	9.0	2.4
EMEA	expected	0.1	0.2	2.8	1.1	0.6
	realised	0.1	0.004	0.6	0.8	0.2

Source: Fitch (2012)

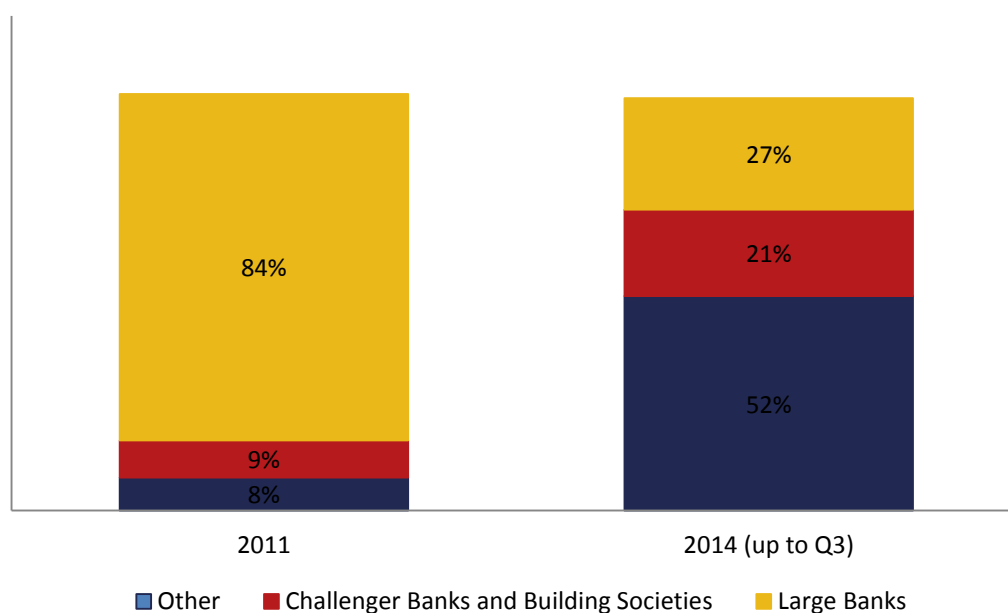
All three ratings agencies recognise that default loss rates for ABS were low in Europe throughout the crisis. Standard & Poor's estimate that the cumulative default rates on European SME ABS were 0.29% over the five years between April 2007 and March 2013. This is only marginally higher than those for RMBS at 0.08% or other consumer ABS at 0.13%.³⁷

³⁷ S&P data cited in AFME (2013). S&P defines defaults to be either (i) principal losses or (ii) non-payment of interest.

S&P also report a default rate of 0.4% on SME CLOs over a similar period.³⁸ Moody's (2014b) reports that no Italian or German SME ABS experienced any impairment through the crisis period of January 2007 to March 2014.³⁹ For the UK, no impairment was recorded for tranches at any ratings level except B. Over the same period, Moody's reports that only two tranches of two SME ABS transactions in Europe (out of more than 500) experienced any principal losses at all. Fitch (2012) reports no losses or expected losses on any UK, German or Italian ABS issued between 2000 and 2011, with all losses being concentrated in Spain. Even in Spain, as of October 2012 Fitch reported realised losses on all ABS (including auto, credit card and SME) of only 0.2%, rising to 0.6% when expected losses are included.

Since the crisis, the profile of issuers of securitised assets in the UK seems to have changed markedly. As recently as 2011, large banks predominated, accounting for 84% of issuance in the UK securitisation market (Figure 2).⁴⁰ In the first part of 2014, the share of large banks had fallen to only 27%, while challenger banks accounted for 21% of issuance and with non-banks accounting for 54%.⁴¹

Figure 2: Issuers of UK Securitisations, 2011 and 2014 (up to Q3)



Source: Lloyds, Plehn (2014).

³⁸ S&P data cited in BoE/ECB (2014). Collateralized Loan Obligations (CLOs) are typically less granular and less diversified than SME ABS – i.e. they are made up of a smaller number of larger loans, which are often syndicated.

³⁹ Moody's Investors Service (2014b). Impairment is defined as either (i) a ratings downgrade to non-investment grade Ca/C status even if no principal losses or (ii) payment shortfalls, defined as principal loss, interest shortfall or distressed exchange.

⁴⁰ Data from Lloyds, as cited in Plehn (2014).

⁴¹ The non-bank category included corporate, automotive, private equity and CLO asset managers.

Finally, the UK investor base for securitised assets seems to have changed since the crisis. Before the crisis, demand from money market funds (MMFs) and structured investment vehicles (SIVs) were an important source of investment in securitised assets, estimated to cover more than half of UK market for issued securitised assets in 2007.⁴² These investors were mostly short term and leveraged investors who invested in long dated underlying assets via maturity transformation in the securitisation process. The extent of maturity transformation (as well as other forms of transformation) created complex and difficult to value securities which proved fragile and illiquid even if the underlying capital was robust (see Box 2 on the role of securitisation in the crisis). Structured Investment Vehicles have effectively ceased to exist, while market participants indicated that demand from money market funds for securitised assets has decreased substantially. It was thought that MMFs were unlikely to return to the market in significant numbers due to the new EU Money Market Funds Regulation (EU MMFR), which prohibits money market funds from investing in most securitisations.⁴³

At the same time, holdings of some 'real money' unleveraged investors have decreased. Although European insurers seem to have increased their total fixed income exposures since the crisis, Table 4 shows they have decreased their exposures to structured products.⁴⁴ This decrease is apparent both in absolute terms and as a decrease in the share of securitised assets in fixed income portfolios from 10% in 2008 to less than 5% in 2013.

Table 4: Fixed income portfolio composition of 30 largest European insurers

(billions of €)	2008	2009	2010	2011	2012	2013
Government	719	814	931	991	1,039	997
Corporate	594	701	769	810	856	789
Structured	193	154	187	148	127	109
Covered Bonds	166	161	219	246	237	231
Mortgages/Loans/Other	193	202	223	253	258	251
<i>Total Fixed Income</i>	<i>1,866</i>	<i>2,031</i>	<i>2,329</i>	<i>2,448</i>	<i>2,517</i>	<i>2,377</i>

Source: BoA Merrill Lynch Global Research (2014a)

3.2 SME securitisation markets

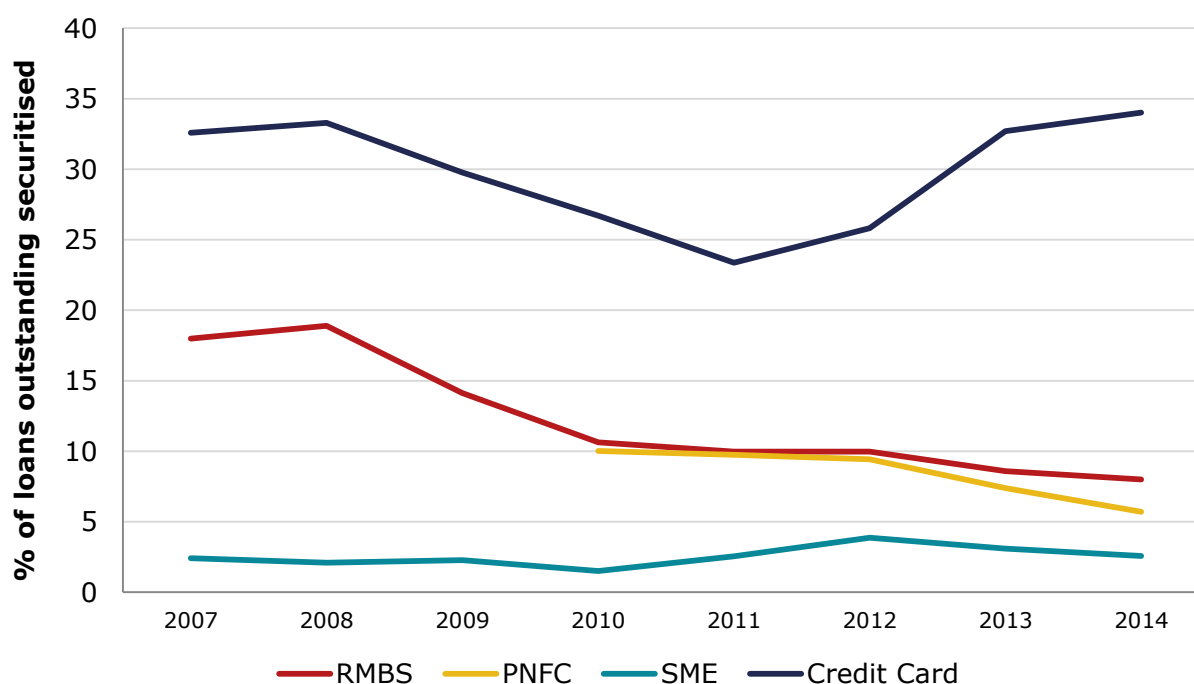
⁴² Data from Deutsche Bank Global Research, as cited in Plehn (2014).

⁴³ EU MMFR restricts investment by money market funds in securitisations to those which have maturities of less than 398 days and which are backed by equally short-maturity corporate debt, to preclude any excessive maturity transformation.

⁴⁴ BoA Merrill Lynch (2014a). In a sample of the 30 largest European insurers the fixed income share of investments rose from 62% in 2007 to 77% in 2008, and has remained around 80% since, reaching 82% in 2013.

Throughout the crisis, the share of SME loans outstanding which are securitised has remained steady at a very low level of around 3%, see Figure 3. The UK’s SME securitisation market is also small compared to other European countries. The UK made up for only 5% of European SME ABS outstanding as of the first quarter of 2014, compared to a UK share of 29% for all types of securitised assets as shown in Table 5. However, the structure and extent of government support in each of these markets differs considerably. Spain and Germany have government agencies which support SME ABS (as do the US and Japan). By contrast, the substantial Italian market has no such direct government involvement. The funding support to SME ABS also differs in each of these markets. There were a handful of deals in the UK SME ABS market between 2010 and 2012 and there has been very limited SME ABS issuance in 2013 or 2014. One of the main goals of this paper will be to understand why the UK SME ABS market is currently moribund, and what can be done to revive it.

Figure 3: Proportion of loans outstanding securitized in each asset class



Sources: Bank of England (2014b), AFME, SIFMA, Bank of England/Financial Conduct Authority Mortgage Lenders Annual Returns.

Table 5: SME securitisation in the UK and Europe

[billions of €]	Issuance		Outstanding	
	2000-07	2008-14	2007	2014
SME by Country				

Germany	83.0	13.1	18.2	1.9
Spain	62.5	128.6	66.9	29.9
Netherlands	23.2	32.4	17.0	9.6
UK	6.9	11.9	6.5	8.7
Italy	3.3	49.6	1.1	23.9
Belgium	2.5	29.4	0.5	18.5
Rest of Europe	19.4	48.1	15.8	14.3
<i>Total Europe</i>	<i>200.8</i>	<i>313.1</i>	<i>126.0</i>	<i>106.8</i>

Sources: KfW (2008), AFME (2014), AFME (2015). Outstanding data is as at 2014:Q4.

Before the crisis, Germany and Spain were the largest SME securitisation markets (Table 5). In Germany, the KfW's Promise synthetic securitisation programme, which included government guarantees, seems to have played a role in the large volumes of German SME securitisation before the crisis (See Annex 2). However, Germany's issuance of SME ABS collapsed after 2010, when changes in Basel rules made the KfW's Promise programme uneconomic. See Annex 2 for an explanation of the KfW model and the consequences of the change in regulation.

The other major SME securitisation market, Spain, had been nurtured to this size by the government's FTPYME guarantee program that allows for multi-originator deals, facilitating entry for smaller lenders with (initially) low volumes of SME loans (see Box 3 below). Although Spanish issuance of SME ABS remained strong through the crisis, this was mainly due to retained issuance for use as collateral with central banks, reflecting the difficult market funding situation due to the Euro-crisis. Similarly, strong Italian issuance of SME ABS was primarily retained for central bank funding.

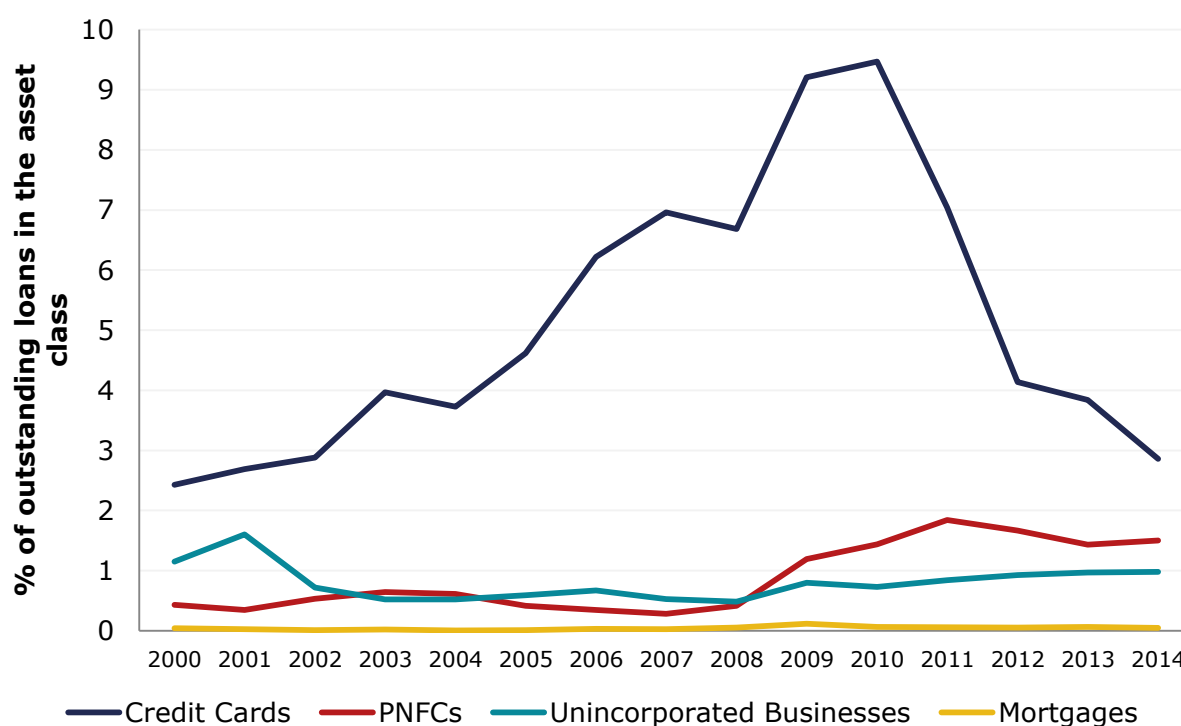
Market participants attributed the small size of SME securitisation markets without government support to the heterogeneity of the underlying SME loans, including in terms of the loan term, noting that the largest and most active securitisation markets tend to be characterised by homogeneous underlying assets with relatively predictable repayment schedules, such as auto loans, credit card receivables and mortgages. Market participants also reported that the credit quality of these more homogeneous underlying assets was relatively easy to quantify using a small number of variables.

Another distinctive feature of SME securitisation is that portfolio sizes seem to be large relative to other securitisations. Before the crisis the average size of SME securitisation deals in Europe was €1.3bn.⁴⁵ This is in line with the four post-crisis UK SME securitisation deals from the Lloyds' Sandown programme, which were £0.8bn, £1.3bn, £1.5bn and £1.5bn. In contrast,

⁴⁵ Moody's data, as cited in KfW (2008), and own calculations.

less than 20% of European securitisation deals in 2014 had deal sizes in excess of €1bn, making up 33% of the total volume of securitisations (measured in €) over this period.⁴⁶ This is in line with the view of market participants, who noted that the greater heterogeneity of SME loans led to higher fixed costs of securitisation (IT costs, legal and accounting fees, preparing documentation), so that deal sizes had to be large enough to recoup these costs. The relatively large volumes of SME loans necessary to make securitisation economic was also perceived to be a substantial barrier to the entry for smaller lenders and challenger banks to SME lending and securitisation, as they might find it difficult to build up such large portfolios. Multi-originator platforms such as those used in Spain's FTPYME programme seem to have been able to reduce the size of loan portfolio necessary to make SME securitisation economic, see Box 3.

Figure 4: Write-offs as a proportion of total loan amounts outstanding for each asset class



Source: Bank of England, 2014b

Credit quality on underlying SME loans in the UK has remained high through the crisis, with default rates on SME loans for the UK remaining at very low levels. In a 2013 survey, bank managers estimated that between 0.3% and 0.6% of SME loans would default in the next 12 months if interest rates remained unchanged.⁴⁷ These numbers are in line with Bank of England data on write-offs of loans to PNFCs and to unincorporated businesses of all sizes,

⁴⁶ AFME (2014) and own calculations.

⁴⁷ Arrowsmith, et. al, 2013 report that bank managers surveyed estimated that 0.6% of loans had a default probability in excess of 50%.

which have been considerably lower than write-offs of credit card debt (Figure 4).⁴⁸ The peak write-off rate for credit card loans was 9.5% in 2010, while the write-offs from loans made to unincorporated businesses have never exceeded 1.0% since the onset of the crisis. The higher write-offs on credit card debt, together with the continued activity in the credit card securitisation market (Table 1), suggests that credit risk on SME loans is unlikely to be a barrier to a market in SME ABS emerging.

Hence, in order to understand the impairment of European SME ABS markets, we need to look beyond past performance, and focus on deeper structural and regulatory issues that might be at work. In the next section, we examine the potential benefits of securitisation, focusing on the benefits for SME finance. Then, in section 5 we go on to examine some of the challenges facing securitisation markets in general, and SME ABS markets in particular.

Box 3: Spain's FTPYME programme

Beginning in 2000, the Spanish government began to provide partial guarantees on the senior tranches of 'true sale' SME ABS. In order to qualify, 80% of the loans in the portfolio must be to SMEs, and 80% of the securitisation volume must be used for further SME lending within 12 months. Up to 80% of tranches rated AA and higher could be guaranteed, and up to 50% of A tranches. A fixed quota of guarantees was announced each year, and if a larger volume of deals met the criteria, then guarantees were shared so that the guaranteed share of each transaction fell.

One interesting feature of this programme was that multi-originator deals were allowed. A multi-originator SME ABS contains the SME loans made by several lenders. This can allow lenders with low volumes of SME loans to access capital market funding via securitisation, as the fixed costs to setting up the vehicle could be shared in proportion to the loans contributed to the deal. In this way, barriers to entry to SME securitisation, and potentially to SME lending, could be reduced. European Commission (2004) reports that the average volume of loans contributed in multi-originator FTPYME deals was as low as €19 million in 2001. In contrast, over the period 2000 to 2003, single-originator deals had an average size of €547 million.

However, caution should be exercised when taking lessons from the Spanish FTPYME programme. Virtually all of the SME ABS impairment in Europe was due to Spain, which underwent a severe recession, and whose SME loan portfolios contained a large share of assets with exposure to the construction and property sector.⁴⁹

⁴⁸ The Bank of England does not report write-off data separately for SMEs. Unincorporated businesses are likely to cover the smaller end of the SME market, while PNFCs contain the remaining larger end of the SME spectrum, as well as larger corporations. SME write-off rates are likely to be somewhere in between the write-off rates on unincorporated business and on PNFCs as a whole.

⁴⁹ Moody's (2014b) and Fitch (2012) both make this point.

4. Potential Benefits of SME Securitisation

Within well-functioning markets, stakeholders suggested that securitisation offers a number of potential benefits for SME finance. These are:

- Increasing the amount of funding available to SMEs
- Diversifying the sources of funding available to SMEs
- Promoting competition in SME lending

Although these three benefits are inevitably connected, we discuss each of these potential benefits to SME Securitisation in turn.⁵⁰

4.1 Increasing funding to SMEs

Securitisation enables investors to invest in pools of SME loans, thereby giving SMEs indirect access to capital market funding. Stakeholders suggested several ways that securitisation could be beneficial to investors. First, it allows capital market investors to delegate the expensive screening and monitoring of loans to banks (and other possible lenders) who specialise in this function. Second, by pooling together a large number of loans, securitisation (when sufficiently granular) diversifies the risk associated with individual firm loans. Third, investors can choose the degree of risk or sensitivity of their investment to the economy based on the risk tranche they choose. Fourth, the securitised assets can be traded at a lower transaction cost than individual loans.⁵¹

Many investors informed us that they would be interested in a new asset class with performance tied to the UK economy. Fund managers already have a number of options to gain an exposure to the real economy; for example, through corporate bonds, collateralised loan obligations, whole loan transactions etc. However, the attraction of SME ABS is that it has the potential to include a portfolio of more diverse and granular (smaller individual) assets. This offers greater scope for diversification and the removal of firm specific risks that are significant in less diversified alternative options. Several investors suggested that SME ABS is the ideal vehicle to gain a 'whole economy' exposure compared to other available assets. While other securitisations, such as RMBS, may be backed by more liquid collateral, the exposure to a single sector, more volatile than the UK economy, implies greater risk.

The process of tranching (see Box 1) enables the creation of assets with very different claims and payoffs. These assets can be designed to meet particular investors' appetite. For example, those investment mandates to invest in only the highest investment grade assets would be excluded from investing in SME assets without some form of structured finance. Some investors specifically require term assets to match their liabilities (such as pension funds) and securitisation may enable investment in longer dated real economy assets other than

⁵⁰ Note that we specifically asked stakeholders about the benefits of SME securitisation rather than the broader question of whether SMEs are presently credit constrained.

⁵¹ In practice, the assets are not traded on exchanges and most investors suggested that they would hold the securities until maturity.

mortgages. Therefore, the process of securitisation is a technology which has the potential to substantially increase the investor base. Of course, there must also be investors willing to accept the junior or riskier tranches. If carried out in an efficient manner, this enhances risk sharing. This is potentially significant given that over 90% of SME finance is reliant on the banking sector (see section 2).

Across Europe SME ABS is a relatively small market and so there is no hard empirical evidence on whether its introduction has improved the terms of SME finance e.g. reduced the cost of funding. There is evidence that the securitisation of corporate debt has lowered the cost of borrowing in the US. Nadauld and Weisbach (2012) compare the cost of individual bank loans with the cost of the same firms lending through loans funded by collateralised loan obligations. They find that securitisation resulted in a 15 basis point decline in the cost of borrowing for identical firms and similar loans. This supports the expressions from our stakeholders that there are capital market investors who seek exposure to the real economy and securitisation may be an effective mechanism of intermediation. Of course, this does not imply that the same reduction in borrowing cost would necessarily be forthcoming for SME exposures, or even whether any cost reduction would be passed-on to SMEs.

There is also an indirect mechanism of increasing possible funding for SMEs via risk transfer. When banks securitise their SME loans, they can apply to the Prudential Regulatory Authority (PRA) for recognition of significant risk transfer (SRT). If the PRA is satisfied that the risk has been substantially and permanently removed from the balance sheet, then banks no longer need to hold (as much) equity capital against the securitised SME loans. Some potential issuers questioned why the PRA required so much time to decide whether a transaction constitutes SRT. It was suggested that having to wait for as long as six months jeopardizes the commercial case for the transaction. However, from a regulatory perspective, SRT is a difficult concept as even if there is no de jure claim on the sponsoring institution there may be a de facto claim such as reputational risk. While risk transfer may result in more capacity for lending, there is no guarantee that this will be used for SME lending rather than mortgage or other types of lending as the capital is fungible.⁵² However, if a bank has in some sense 'optimised' its risk exposure then the new capacity might imply a greater propensity towards SME assets.

Box 4: Securitisation for funding or risk transfer?

In our consultation, stakeholders often categorised securitisation as either for funding or risk transfer purposes. Using securitisation for funding purposes often means that the economic risk of the assets remains with the originator and this is one of a number of ways in which the originator may choose to fund its assets (along with perhaps deposits and other capital market instruments). Securitisation is an alternative source of funding, with different properties and may enable a better risk match between assets and liabilities. If securitisation is used for risk transfer then the regulator (in the UK the PRA) must be satisfied that the risk has been permanently transferred to an SPV from the originators' balance sheet with the exception of retention risk required under regulation. Risk transfer can be achieved by transferring legal ownership of the assets to the SPV (a cash transaction) or without transferring ownership where the originator purchases protection against the portfolio (a synthetic transaction). The

⁵² The Bank of England's Funding for Lending scheme, in its latest incarnation, tries to ensure that incremental finance is channelled towards SMEs.

advantage for the originator of risk transfer is that the amount of regulatory capital required to be held by the issuer is reduced.

A clear message from our stakeholders was that in the current environment securitising SME loans would be mainly to transfer risk and obtain capital relief. The availability of exceptionally low cost funding from the official sector was cited as a key reason that it is currently not economic to securitize assets for funding purposes. Banks can swap assets with central banks for low cost funding or obtain funding through support schemes such as Funding for Lending. However, market participants recognised that these conditions are unlikely to persist indefinitely. Looking beyond current exceptional funding conditions, banks suggested that SME assets would be some way down the 'pecking order' of assets they would first securitize as funding conditions normalise due to the relatively low cost of RMBS funding and high cost of creating an SME securitisation platform.

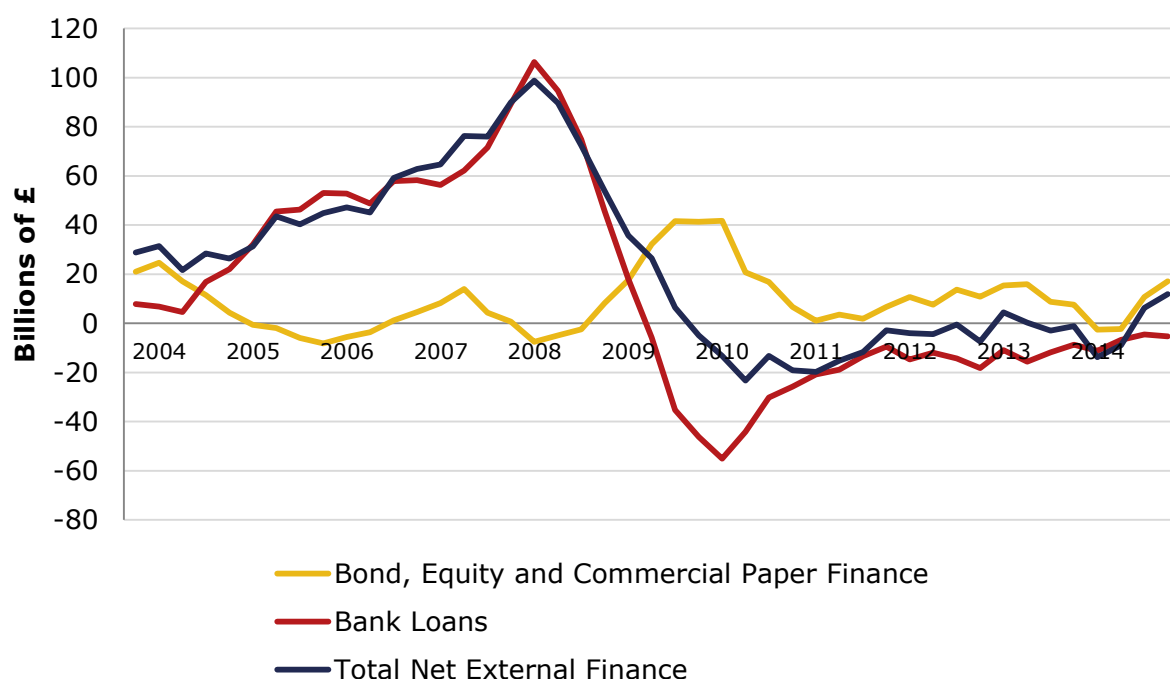
4.2 Macroeconomic stability

Parts of the securitisation market undoubtedly amplified the global financial crisis (see Box 2). Yet a well-functioning and regulated securitisation market has the potential to stabilise, rather than de-stabilise, the macroeconomy. Securitisation could provide an alternative way of funding SMEs and reduce the dependence on the banking sector. The extent to which capital markets are not perfectly correlated with bank credit is the potential for achieving greater stability in SME finance. This is especially important due to the dependence of SMEs on bank loans for external finance and the tendency of the banking sector to deleverage (in practice, often reduce lending) during economic downturns. Diversifying the sources of finance may help to make SMEs less vulnerable to banks' deleveraging in downturns, potentially helping to mitigate the effects of a negative shock to the economy. For example, in the aftermath of the financial crisis large firms have become large issuers of corporate bonds and sought to reduce their reliance on bank finance. This alternative source of finance almost certainly reduced the depth of the economic downturn.

Throughout the crisis capital markets have been a stabilising factor for corporate borrowing. Figure 5 below shows the collapse in net bank lending in 2008 was, in part, offset by an increase in the issuance of bonds, equity and commercial paper which resulted in a smaller overall decline in corporate finance. This pattern of finance may be the deliberate choice of corporations or it may be due to a more restrictive credit supply. SMEs have seen an even greater relative fall in bank lending compared to larger firms and they cannot access capital markets. Whether SMEs would have had the need to raise funds to the same extent is unclear but a securitisation market would at least provide an alternative source of funding. Kroszner, Laeven and Klingebiel (2006) present evidence based on a study of 38 countries which shows that economic sectors that are dependent on the banking system as a source of external finance see a substantially greater fall in output in response to a banking crisis.⁵³

Figure 5: Sources of UK Corporate Net External Finance

⁵³ See Kroszner, Laeven and Klingebiel (2006).



Source: Bank of England, 2014. Four quarter sums of net issuance.

If buyers of SME ABS do not have the same credit cycle as banks then they may contribute to a more stable overall funding environment. For example, if capital market investors who participate in SME ABS are highly leveraged, like banks, then their appetite to invest is likely to fall when uncertainty rises. If they are required to sell their holdings of SME ABS then this could add to the same cyclicality of banks' balance sheets. Indeed, during the crisis there were feedback loops between limited participation markets for structured products and the health of banks.⁵⁴ An important element of a robust market is that SME ABS are attractive to 'real money' (non-leveraged) investors such as insurers and pension funds. Such 'real money' investors could channel funding to SMEs by buying SME securitisations and holding them on their balance sheets. In periods of uncertainty when prices fall they may see this as a buying opportunity rather than being forced to sell assets.

In our interviews, the clear message from past and potential future investors is that there is a strong interest in acquiring an investment exposure to SMEs. This included longer term, unleveraged and domestic investors such as insurance companies and pension funds rather than primarily banks and other leveraged investors as in the past. One large investor in the UK corporate sector told us how they had engaged with the Treasury in 2009 specifically to find a way of investing in the SME sector of the economy, lending some credence to the idea that 'real money' investors in SME ABS might help to reduce the volatility of the credit cycle.

4.3 Promoting competition

⁵⁴ See Allen and Gale (1994) for a full discussion of Limited Participation Markets.

Another potential benefit of SME ABS is to promote the entry of 'challenger banks' and non-bank financial institutions into the SME lending market. The market for SME lending is highly concentrated, with the big four UK banks accounting for more than 85% of total SME lending⁵⁵. This is suggestive, if not indicative, of market power. It is well understood that generally, monopolistic behaviour leads to a smaller provision of goods or services at a higher price. Hence, increasing competition in the SME lending market could have the beneficial effect of increasing the amount of finance available to SMEs at lower cost and better terms than currently available.

Stakeholders discussed the importance of private information for understanding competition in the SME finance market. Some stakeholders highlighted that a bank that provides current account services has an important information advantage over potential competitors as the data shows the cash flows associated with the business. It is therefore not surprising that SMEs often use the same bank for a loan as their current account. Some stakeholders suggested that SME lending rates were often artificially low, in effect cross-subsidised by the sale of other financial products like insurance or overdraft facilities. This idea is supported by the IMF (2014) although they offer no hard evidence. Stakeholders noted that the Williams and Glynn and TSB divestments from RBS and Lloyds Bank would create more competition at least between banks if not financing sources.

Several stakeholders highlighted the high set-up costs associated with a SME ABS platform. This would require providing new (and consistent) data, a securitisation platform with all of the associated fees and cultivating an investor base. It was widely suggested that this would not be worthwhile if the market includes a handful of transactions. Banks would only be willing to develop this capacity if they consider that this will be an important and ongoing source of finance in future. The set-up costs are particularly problematic for smaller lenders. If this cost could be overcome then securitisation might support the entry of challenger banks and non-bank financial institutions into the SME lending market, increasing competition and diversifying the funding sources for SMEs.

Stakeholders who considered that the big four banks were in fact competitive pointed to the cost of maintaining a branch network. However, they also accepted that the global banking model for the future is still in some doubt. The IMF (2014) highlights how many traditional lines of business do not earn a high enough return to cover their cost of funding. They discuss excess capacity in the banking industry and how this will need to be addressed. This may have important implications for SME finance in the UK. Over the last ten years the number of bank and building society branches in the UK has declined by 17% with 470 branch closures in 2014, more than double the previous year.⁵⁶ Moreover, in the UK there are approximately 150 banks per million of population, approximately one-third of the average in Germany and France. If proximity to clients is important for gathering information, then the consolidation in the banking sector, especially if it means more branch closures could restrict the availability of credit. Other stakeholders were more sanguine and suggested that improvements in information technology (e.g. internet banking) meant that consolidation was inevitable and

⁵⁵ CMA (2014).

⁵⁶ www.communitybanking.org.uk

would not necessarily lead to less credit availability. Stakeholders were not of the view that crowd-funding and peer-to-peer lending could really replace branch banking any time soon.⁵⁷

Many stakeholders suggested that the government's ongoing support for the banking sector may be a constraint on competition and new alternative sources of finance. The most widely discussed example was the Funding for Lending Scheme which, while it may be necessary, is at the cost of reducing the viability of securitisation markets. Another possibility was that the preferential risk treatment of sovereign bonds may simply be crowding out exposure to other assets. Until the economics of the broader banking system is resolved and these support schemes are no longer required, it is difficult to see how the economics of securitisation will encourage a market led solution to wide scale take up of a SME ABS market from emerging.

5. Challenges for SME Securitisation

Participants in our consultation raised a number of challenges that would need to be overcome for a robust SME ABS market. Almost all began by stating that in the current financial environment SME securitisation is uneconomical. Participants pointed to the cheap funding provided by the official sector (e.g. Funding for Lending and ECB), the desire to reduce risk and the preferential treatment of other asset classes (including sovereign bonds). The point was not to say that the interventions were inappropriate, only that they may have 'crowded-out' securitisation. When we asked stakeholders to look beyond current financial conditions, several stakeholders suggested that after six or seven years the financial environment was the 'new normal'. This is a broader challenge to the regulatory community.

5.1 Information and SME securitisation

Securitising SME assets has advantages and disadvantages compared to other financing methods. By their nature, SME assets tend to be more differentiated or heterogeneous reflecting the very different array of industries often performing specialised functions. This is desirable as it facilitates diversification but it can also make the value of assets more difficult to quantify on a consistent basis.⁵⁸ The collateral for SME loans are often specialised equipment, which might be difficult to value and for which secondary markets may be illiquid. By contrast, secondary market prices for real estate and autos make it easier to estimate recovery values for the underlying assets. The terms and conditions of SME loans also display greater heterogeneity as they are often tailored to industry or sector specific performance measures. Heterogeneity in the underwriting standards of those originating the loans is also an issue. These types of heterogeneity complicate the assessment of default probabilities and of expected losses given default.

⁵⁷ Some stakeholders thought that such sources of finance are often familiar institutions working to avoid some form of regulation.

⁵⁸ In contrast, several market participants cited the transparency and homogeneity of mortgages, auto loans, credit card receivables and other forms consumer credit as advantageous for securitisation. It was often asserted that homogeneity and transparency are an important reason that these securitisation markets have remained active in the wake of the crisis.

By way of example of how a securitisation might overcome these issues, consider the successful Sandown Gold 2010 SME ABS issued by Lloyds Banking Group. The pool consisted of 1,733 secured term loans (some fixed and some floating) from 1,407 businesses at a value of £806.6mn in total covered by collateral estimated at a value of £1.5bn.⁵⁹ The value of the individual loans varied between £25,000 and £5.5mn each (more than half were less than £1mn). The SMEs were from all regions of the UK and across many diverse sectors of the economy, although real estate businesses accounted for 15%. Most of the collateral was a form of fixed assets (including a high share of private residences). The pool was fixed, in the sense of no replacement loans added, although some loans were inevitably adjusted to take account of changes in terms, collateral and prepayment. The maturity of the loans extended out to 23 years.

The Sandown Gold transaction is one example of a pool of SME loans which has been used for securitisation. The degree of over-collateralisation to some extent mitigated possible information issues. We consider three key types of information problem that were raised in varying degrees through the consultation.

5.1.1 Between SMEs and lenders

Information on credit quality can be difficult to obtain. Some market participants indicated that the heterogeneous nature of SME assets was a disadvantage for securitisation. One participant noted that it was possible to summarise creditworthiness for mortgages (and other consumer finance products) accurately using a relatively small number of quantifiable criteria. SME creditworthiness is much more difficult to quantify. SMEs cover a wide range of sectors, ownership structures, sizes and have a wide variety of business models. They can also be highly innovative, and their business models may be untested. Assessing the quality of a business plan involves expertise and judgment. Such soft information can be impossible to quantify and difficult to transmit.

Soft information might also give rise to negative selection effects. One market participant related the experience of a credit institution that had tried to use a model based on quantitative measures to assess the creditworthiness of SMEs, neglecting the 'soft' judgements on business plans. This credit institution found that it had attracted a negative selection of less creditworthy SMEs. Presumably, these firms looked good on paper but had poor business plans that had been rejected by others. This illustrates that relying on quantitative information on SMEs alone is inadvisable, as it might lead to negative selection effects.

5.1.2 Between SME lenders

Much of the available credit information on an SME is derived from its cash flow balances and is proprietary to the bank holding its business current account (BCA). For smaller non-corporate SMEs, the information contained in its BCA records is often the main source of credit information. This means that the bank holding SME BCAs has an informational advantage over other lenders when assessing non-corporate SME creditworthiness. This advantage for BCA providers creates a barrier to entry for other lenders, and hinders competition in SME

⁵⁹ An interest rate swap converted the fixed rate loans to floating rate payments.

lending.⁶⁰ However, some argued that this information advantage creates 'rents' for the lending bank and in turn an incentive to discover more SME borrowers.

Conversely, the lending relationship may impede competition in the market for SME BCA services. SMEs which have a loan with a given lender may be reluctant to switch current accounts to another lender, because they would be concerned that another bank might not be willing to grant them credit on similarly favourable terms. This is exacerbated by the fact that much of SME lending is predicated on soft information such as a lender's judgment on the quality of an SME's business plan. If the current lender/BCA granting bank has judged the SME favourably in the past, why take the risk that another lender will have an equally good opinion?

5.1.3 Between issuers and investors

The third type of information asymmetry lies between the issuers and investors. The literature on securitisation considers the impact of market imperfections on the securitisation process.⁶¹ Diamond (1984) predicts that bank loans should not be sellable, because banks cannot transmit their soft information on borrowers to potential buyers of the loans. There is an issue of the extent to which this information can now be conveyed through the use of information technology. Selling the loans might weaken banks' incentives to screen and monitor borrowers, and therefore lead to greater risk taking on the part of the issuer. This can be mitigated to an extent by the quality of the collateral used to secure the loan and by the risk retention required under regulations (see below). Gorton and Pennacchi (1995) argue that banks can, and do, retain a share of the riskier loans in order to strengthen their incentives to screen and monitor borrowers properly.⁶² Albertazzi, et. al. (2011) examine whether risk retention works in practice to keep the quality of securitised loans at or above those not securitised. They find that in the Italian prime RMBS the securitised loans with risk retention were on average less risky than those the banks kept on their books.

5.2 Set-up costs for SME securitisation

Issuers cited the substantial set-up costs for securitisation, and in particular the need for setting up appropriate IT systems to collect loan-by-loan data required by the ECB and the Bank of England for use of ABS as collateral. In order to justify these set-up costs, SME lenders would have to expect to have steady streams of SME lending and a steady flow of securitisation issuance. Market participants said that SME securitisation only became economic at a deal size of around £250mn– a size of loan portfolio that a challenger bank or smaller finance company might find difficult to achieve as a new entrant to SME lending. The relatively large volume of SME loans necessary to make securitisation viable was reported to be a substantial barrier to the entry for smaller lenders and challenger banks.

⁶⁰ See the Breedon review, BIS (2012).

⁶¹ Without any market imperfection then there is no rationale for securitization to be preferred over direct lending and borrowing.

⁶² Although Gorton and Pennacchi (1995) focus on loan sales rather than securitization, many of the asymmetric information problems are similar. One key difference, however, is the maturity of the loans sold, which averaged 28 days.

This is an infant industry or 'critical mass' problem. Only once a critical mass of deals is expected does it become economic to incur the set-up costs. Multi-originator platforms such as those used in Spain's FTPYME programme seem to have been able to reduce the size of loan portfolio necessary to make SME securitisation economic (Box 3).

5.3 Regulation

Following the financial crisis, regulation of securitisation has been tightened to avoid the mistakes and excesses of the past (see box 2). The regulatory response has been complex because securitisation markets are global and therefore many regulatory authorities are involved. Moreover, the pre-crisis failings occurred at many different stages from issuance and structuring to investing, so that each part of the investment chain had to be reviewed. Annex 3 summarises the regulation relevant for securitisation in the EU. These regulations encompass four key areas important for securitisation:

- Risk retention rules
- Capital requirements
- Due diligence and information disclosure
- Eligibility for the liquidity coverage ratio

Many of the post-crisis regulatory reforms have improved the functioning of securitisation markets, and are contributing to making them safer. However, market participants interviewed expressed concerns about a number of regulatory developments relevant to securitisation markets. A major concern was that the regulatory treatment of securitisation has tightened to such an extent that it is out of line with the treatment of other assets of similar maturity and credit quality, such as whole loan pools or covered bonds. While the new risk retention rules for originators and issuers were not seen as problematic, the new rules on capital requirements for both bank and non-bank investors as well as the eligibility of securitised assets to satisfy liquidity coverage ratios were seen as areas of concern.

Potential investors raised regulatory issues as undermining the viability of an SME ABS market. The capital requirements for insurers and reinsurers in Solvency II, set to take effect in January 2016, are seen as being more onerous than comparable assets such as covered bonds or whole loan portfolios. This calls into question the development of a longer term and less leveraged investor base. Investors also expressed concern about the capital requirements for banks and building societies holding securitised assets in CRD IV as well as for alternative investment funds such as hedge funds. Another regulatory issue in CRD IV is the ability of banks and building societies to use securitised assets in their liquidity coverage ratio. The treatment of ABS is seen by market participants as out of line with the treatment of covered bonds and corporate bonds of similar credit quality.

5.3.1 Capital Requirements (CRD IV and Solvency II)

Regulators have sought to address the seemingly inadequate amounts of equity capital held by banks, insurance companies and other regulated investors. Capital requirements have tightened in an attempt to make banks more resilient to an increase in default rates or decline in the value of assets. According to stakeholders, these capital requirements can affect the 'demand' for investing in securitised assets as they require a higher yield to make this an

economically attractive asset class. This applies not only to banks but also to 'real money' investors such as insurance companies and pension funds. Insurance companies and pension companies are major investors, and are an important potential class of investor in SME ABS. Total European pension fund and insurance assets under management totalled €11.4 trillion at the end of 2011, making up 75% of assets under management by institutional investors. The way in which their investment holdings are regulated by Solvency II is of major importance.

The latest European Commission proposals for Solvency II involve lower capital requirements for securitisations satisfying the criteria for 'High Quality Securitisations' (HQS) summarised in Box 5. The most senior tranche of some SME ABS would satisfy the HQS criteria, so that a senior 5 year AAA rated SME ABS could attract a risk factor of 10.8% (capped at the level of the underlying loans), rather than 60% for mezzanine and junior 5 year AAA tranches. However, these risk factors look high when compared with those on duration and ratings equivalent 5 year corporate bonds and loans of 4.5%, or for covered bonds of 3.5% (see Table A1 in Annex 3). Solvency II proposals recommend a 0% risk factor for securitisations which are guaranteed by the European Investment Fund or European Investment Bank. This might make investing in SME ABS very attractive, as long as they are the recipients of EIF/EIB guarantees.

5.3.2 High Quality Liquid Assets for the Liquidity Coverage Ratio

Another 'demand side' regulatory obstacle cited by market participants was the CRD IV treatment of ABS as 'High Quality Liquid Assets' (HQLA) to cover the liquidity coverage ratio (LCR). The reduced ability of ABS to satisfy the LCR seems likely to disincentivise banks from holding securitised assets on their balance sheets. While earlier versions of CRD IV excluded all but the most highly rated RMBS from use as HQLA, the latest version of CRD IV rules envision that SME ABS will be eligible as Level 2B assets, which can be used to satisfy at most 15% of the liquidity coverage ratio, and only at a haircut of 35%. These limits apply for the most highly rated SME ABS. While this amounts to some progress, the treatment of SME ABS and other forms of securitisation are still perceived to be out of line with that of other assets.⁶³

Box 5: European Insurance and Occupational Pensions Authority Criteria for High Quality Securitisations (HQS)

EIOPA propose the following criteria for HQS which would qualify for lower capital requirements.

Structural features

- Seniority – only the most senior tranche is eligible
- Legal true sale with no clawback – the assets must be irrevocably transferred to the SPV, even in the case of bankruptcy of the originator.
- Servicing continuity – plans in place to ensure continuity in the case of default from servicer or other counterparty

⁶³ The most highly rated covered bonds are eligible as Level 1 assets, and may be used to satisfy up to 70% of the LCR, at a haircut of only 7%. That is, the most highly rated covered bonds are treated nearly as well as cash and central bank reserves in calculating the liquidity coverage ratio. Even unrated covered bonds which satisfy some other requirements receive preferential treatment to the most highly rated SME ABS, also qualifying as Level 2B assets but with a lower haircut of 30%.

Asset characteristics

- Eligible underlying assets – only residential mortgages, loans to SMEs, auto loans and leases, consumer loans and credit card receivables
- Homogenous cash flows – only one type of eligible asset per transaction
- Restricted use of derivatives – only allowed for hedging currency or interest rate risk. No synthetic securitisations.
- Minimum rating requirements – credit quality step 3 or above (investment grade) at all times
- No credit impairment – no subprime
- No non-performing loans – no loan should already be in default when it joins the asset pool
- At least one payment – has been made by the borrowers.

Listing and transparency

- Listing requirement – the securitisation must be tradable on a regulated market in the EEA or OECD, or ‘on other robust market infrastructure’
- Transparency, reporting and disclosure requirements – very granular data on the underlying assets, allowing proper due diligence and stress tests

Underwriting process

- No self-certification – information about borrowers for residential loans must be confirmed by the lender
- Process for assessing creditworthiness – must meet requirements set out in the Mortgage Credit Directive (2014/17/EU) or in the Consumer Credit Directive (2008/48/EC) or equivalent requirements outside the union.

Regulators no doubt reflect on how ABS markets became completely illiquid during the crisis. Yet the treatment of SME ABS might be seen as excessively restrictive, given that certain SME ABS can be easily converted (with a haircut) to liquid assets by using them as collateral for repo agreements with the BoE and ECB, or by participating in the ECB’s recently announced ABS purchase scheme. As one market participant interviewed put it, “liquid is whatever the central bank will accept.” It would be more consistent to align the regulatory definitions of liquid assets with central bank policies.

5.3.3 Significant Risk Transfer

Banks can obtain capital relief by securitising a portfolio of loans (see Box 4). Market participants noted that changes to the capital requirements for holding SME securitisations on balance sheets could reduce the amount of capital relief. This is related to risk retention rules, which require that at least a 5% share of any securitisation or portfolio exposure is retained by the issuer. In some cases, the capital requirements from the retained portions are such that there are no capital benefits from the securitisation.

A tension can arise between risk retention and capital requirements. From a risk retention perspective, retaining the most junior ‘first loss’ tranche of the securitisation on the issuing bank’s balance sheet provides the incentive to screen and monitor borrowers. This is important to avoid the decline in loan quality associated with the ‘originate-to-distribute’ model described in section 1. However, when capital requirements are sharply increasing for riskier junior tranches, the issuing bank has a strong incentive to retain a vertical tranche (a constant percentage of each seniority tranche) or otherwise avoid retaining the most junior tranche. In this way, there is a tension between higher capital requirements for junior tranches on the one hand, and the incentives on risk retention on the other.

One of the key 'supply side' obstacles named by issuers in securitising in the UK were the delays involved in gaining approval for regulatory capital relief by the PRA. This is seen as an obstacle for two reasons. First, the PRA is perceived to possess some amount of discretion in judging whether significant risk transfer (SRT) has indeed taken place. This adds a layer of uncertainty to the securitisation process. Second, a long delay is costly in itself as they cut into the amount of time which the regulatory capital relief can be used. However, de jure and de facto risk transfer have not always coincided in the past and it is for the issuer to make the securitisation simple and transparent enough that the risk transfer is clear.

5.4 Data quality and standardisation

Another set of issues for investors and potential investors is related to the availability and quality of data. Although progress has been made in the requirements for loan-by-loan data, the quality of the data available was cited as being uneven, as data definitions seemed to be inconsistent across banks. The latest EBA's HQS does not resolve this quality of data issue. One potential investor said that the data needed to somehow be verified by a third party to mitigate some of the information concerns raised above. Stakeholders noted that a credit-register would clearly be beneficial but again the issue of verification of the data had to be resolved. Investors noted that the data currently available was less useful for accurately assessing credit quality of SME loan portfolios, due to the lack of comprehensive credit-register style data for benchmarking. The lack of assets for benchmarking was also seen as inhibiting the demand for SME ABS.

Finally, investors and potential investors were in agreement that a lack of standardisation of SME ABS structures and documentation were a barrier to the market. This made due diligence more costly than necessary, in effect increasing the cost of gathering information on credit quality, making investment in SME ABS less attractive than for other more standardised products.

6. Policy Implications

Stakeholders noted a possible shift in attitudes of policymakers towards securitisation markets. In May 2014, the Bank of England and European Central Bank (BoE/ECB, 2014) published a discussion paper that highlights the potential benefits to lending and monetary transmission of a high quality and transparent securitisation market. In October 2014, the European Banking Authority laid out its proposals for 'simple standard and transparent securitisation' (EBA, 2014). Both reports emphasize the need to prevent the abuses of the past, and emphasize that a well-functioning, well-regulated securitisation market could have benefits to the economy. This may be particularly important as the banking system remains in some state of 'disequilibrium'.

We set out to study the UK SME securitisation market, with a view to understanding possible market failures and making recommendations which might be supportive of this market and financial stability. The recommendations are meant to ameliorate the many information issues described in Section 5. NIESR has identified five 'building blocks' – policies or institutions - which would support the development of this type of a competition-enhancing UK SME securitisation market.

- Standardisation in line with the EBA's 'simple, standard and transparent securitisation' definition
- Establish a UK credit register, in line with BoE consultation, perhaps with additional required third party verification of data
- Expand access to SME creditworthiness data, in line with recent HM Treasury legislation
- Adjust regulation to create a level playing field with whole loan portfolios and covered bonds with the same credit and liquidity risk
- Introduce a platform to reduce the fixed costs for SME securitisation, similar to the British Business Bank recent ENABLE programme for asset and lease finance

The first three building blocks aim to reduce the information asymmetries in SME securitisation and lending markets. Reducing information asymmetries is important to ensure that both SME lending and securitisation markets operate in the most efficient manner possible, and are not prevented from reaching their potential size. Measures should be taken to ensure quality of data, such as third party verification of the data in the credit register. Levelling the regulatory playing field for the same credit and liquidity risk is to prevent unintended consequences of biases in favour of specific assets. A platform to reduce the fixed costs for SME securitisation would aim to promote entry and greater competition in SME lending and securitisation. This would enable the loan quality to be stipulated and standardise the ABS.

6.1 Simple, standard and transparent securitisation

The first measure is to promote standardisation, transparency and simplicity in SME securitisations following the EBA's (2014) proposals on 'simple, standard and transparent' securitisations. The EBA lists 22 criteria that a securitisation should satisfy to receive preferential treatment as 'qualifying' securitisations (see Annex 4). The idea is that securitisations that conform to the criteria would be deemed as 'qualifying' for preferential regulatory treatment relative to non-conforming securitisations. This would provide an incentive to issue standardized 'qualifying' securitisations. Greater standardisation promotes deeper more liquid markets.⁶⁴ We do not consider that the criteria are prescriptive to the extent that they mitigate the need for credit assessment.

Many investors and potential investors in securitisations took the view that increased standardisation of structures and documentation would be beneficial. This would reduce the dimensionality of the credit risk assessment. If structures, terms and documentation were standard, then securitisation deals would only differ with regard to the credit quality of the underlying assets. This would make it much easier to compare the losses and default rates across securitisations and across issuers. This increased transparency would help to reduce some of the information problems described in Section 5. The increased comparability of securitised assets might also make them more readily tradable, potentially increasing liquidity of secondary markets.

When asked which features might be desirable in a standardised simple SME securitisation, there was broad agreement that restricting underlying assets to floating rate loans was

⁶⁴ See Pagano and Volpin (2012).

desirable. This would reduce the repayment risk and remove the need for a swap agreement and simplify valuation of the securitised assets. Market participants agreed that maturity transformation should as far as possible be avoided to minimise rollover or liquidity risk. Revolving structures without maturity transformation were not seen as problematic: these are common in securitisations of credit card receivables, and would arise if the SME loans had a shorter maturity than the securitisation.

6.2 Credit register

The second building block – establishing a credit register - aims to ameliorate some of the information problems between SME securitisation issuers and investors. A credit register would allow investors to assess the track record of an SME lender's securitised assets, and compare it to a benchmark comprised of all SME lending in the economy. Being compared to an industry-wide benchmark would strengthen incentives for SME lenders to build up a reputation for high credit quality (i.e. low default and loss rates) in their SME loan portfolios and in the SME ABS they issue. It would also be important to be able to compare performance of an issuer's retained and securitised SME loans, so that investors can satisfy themselves that securitised loans have similar or superior quality to assets retained on the issuer's balance sheet.

One step in this direction is the ECB and Bank of England requirement that issuers provide loan-by-loan data for all of the underlying assets in securitisations used as collateral. While this was widely welcomed by investors, they stressed that significant issues remain. First, some investors regard the data as being of insufficient quality, due to inconsistencies in the data definitions used across and even within banks. Second, the lack of verifiability of some data creates further doubts about its quality. Finally, the loan-by-loan data being collected is far from comprehensive, as loan-by-loan data requirements only apply to some securitised loans, not to all SME loans. Lack of comprehensive public data makes estimating and benchmarking credit risk in SME assets difficult for investors.

In April 2014, the Bank of England published a discussion paper, looking at the desirability and feasibility of establishing a central credit register (CCR) for the UK. This credit register would provide anonymised data either on all SME loans made by regulated lenders, or on all credit facilities for firms, regardless of their size. The report notes that some sort of CCR is either in operation or under consideration in 16 of the EU-28, and will need to be established in all Eurozone countries (an additional 6 countries) in the next few years to comply with the requirements of the single supervisory mechanism (SSM). One concern raised in our consultation was the quality of data and whether it would deteriorate in the next credit cycle. Some participants suggested that third parties could be used to submit or verify the data. One investor suggested that part of the financial intermediation process which could be enhanced is the role of accountants to provide some verification of the data submitted to the CCR. This may simply be an extension of the opinion they provide in annual accounts or more detailed information from management accounts. NIESR recommend serious consideration of the potential for accountants to perform some verification role in the CCR.

The Bank report sets out the many advantages of a CCR in reducing asymmetric information problems, among others in providing 'contextual' data necessary for benchmarking credit risk. Although provision of more detailed loan-by-loan data has clear benefits, these must be weighed against the costs to SME lenders and issuers of ABS of providing this information. Several potential issuers of SME ABS cited high set-up costs for IT systems to provide loan-by-

loan data as a key issue hindering the development of a more active SME ABS market. These high set-up costs may form a barrier to entry for smaller banks and finance providers, potentially posing a further barrier to entry and hindering competition in SME lending.

The BoE report raised a further area of concern, the possible weakening of incentives for lenders to collect their own information. However, empirical evidence on the impact of CCRs tends to support an overall beneficial impact on the provision of credit to firms. Using a sample of 129 countries, Djankov, McLiesh and Shleifer (2007) find that institutions for credit-data sharing are correlated with higher ratios of private credit to GDP. Jappelli and Pagano (2002) find that countries with entities which share credit information are characterised by lower default rates and greater volumes of bank lending. However, they also find no distinction between the role played by private and public information-sharing entities.

6.3 Sharing of information on business current accounts

The third building block for a viable SME securitisation market aims to promote competition in the SME lending market by reducing the informational disadvantage of new entrants to the SME lending market, such as challenger banks and non-bank financial institutions. Following the 2013 Budget announcement, that government would “investigate options for improving access to SME credit data to make it easier for new lenders to assess applications for loans to smaller businesses” HM Treasury have legislated to mandate sharing of information on SME’s bank current account, loans and credit cards with other finance providers via credit reference agencies (CRAs).

Currently, finance providers can purchase limited data on an SME’s credit history from CRAs. This data includes information on missed payments on existing credit facilities, and ‘flags’ concerning debt management plans which might indicate that default and/or missed payments are more likely in the near future. The CRAs limit access on BCA data to closed user groups, restricting access to banks which already provide BCA services to SMEs. The Treasury proposals would open these ‘closed user groups’ for SME BCA information to challenger banks and other finance providers.

Taken together, these three proposals on standardisation, a credit register and information sharing among finance providers would work towards levelling the informational playing field among SME lenders, facilitating increased competition in SME lending. More competition in SME lending is likely – as in any market – to lead to increased provision of finance to SMEs at lower overall cost. A larger and more diverse market for SME lending might indirectly support the viability of a SME securitisation market, by increasing the volumes of SME loans which are securitisable.

The last two building blocks aim to expand and diversify the funding sources for SMEs and to promote competition in the SME lending markets.

6.4 Levelling the regulatory playing field

One effective way of diversifying the sources of funding for SMEs is by making investing in SME securitisations attractive for ‘real money’ (non-leveraged) investors such as insurers and pension funds. Unleveraged investors are likely to bring greater stability over the cycle to SME finance, as they are less vulnerable to swings in the value of assets. Greater participation by

unleveraged investors in SME finance would assist in reducing the size of bank balance sheets and the degree of leverage in the financial system. There was clear demand from the potential investors we consulted with to ensure that risks are not spread elsewhere in the financial system.

The most important regulatory change would be to bring the Solvency II capital requirements for insurers and reinsurers investing in SME securitisations into line with the capital requirements on comparable assets such as whole SME loan portfolios or covered bonds of SME loans. In addition, to the extent that the alternative investment funds (AIFs) covered by AIFMD are non-levered, the capital requirements for AIFs investing in SME securitisations should also be adjusted to bring them into line with comparable assets. Whether the securitisation market is as liquid as markets for other assets with comparable credit risk involves observing how the market operates after the EBA reforms have been introduced.

6.5 A multi-originator platform for SME securitisation

One of the key obstacles to securitisation for smaller entrants is the high fixed costs to securitisation. Smaller entrants might not be able to generate sufficient volumes of SME loans to make securitisation a viable means of funding. Hence, it would be useful to find ways of lowering fixed costs to securitisation for smaller challenger banks and non-bank financial institutions (NBFIs). Improving access to capital market funding for smaller challenger banks and NBFIs might also support entry into SME lending, promoting competition.

One way to lower the fixed costs to securitisation would be to devise a mechanism for sharing the fixed costs of securitisation. This could be achieved by funnelling the SME loans of several smaller lenders into a single SPV, which would then securitise them and sell them on. Smaller banks and NBFIs could pay a share of the fixed costs in proportion with the share of loans they contribute to the SPV. This is called 'multi-originator' securitisation, and was a feature of the Spanish government's FTPYME programme (see box 3).

Such a multi-originator platform for the securitisation of SME loans would be similar to the British Business Bank's recently announced ENABLE programme for the securitisation of leases. This SME asset funding finance vehicle (AFFV) would act as an intermediary in the securitisation process, providing warehouse facilities to smaller banks and NBFIs, in order to achieve a critical mass and selling the combined portfolios on as bonds to investors. The AFFV would be cost-neutral, in that it would charge the participating smaller banks and NBFIs fees proportionate to the share of the loans they contribute.

The advantage of such a platform is that it would reduce the entry costs to SME securitisation for smaller challenger banks and NBFIs, thereby lowering the entry costs to SME lending and promoting competition in SME lending. SMEs would be the main beneficiaries of a more diverse and competitive funding environment, which would be expected to lead to greater supply and/or lower cost of SME finance.⁶⁵ However, such a platform would not be without risks and challenges and care needs to be taken to avoid incentive problems. The British Business Bank's ENABLE program envisions that the most junior equity tranche of the securitisation would remain with the lenders, while the mezzanine tranche would be retained by the BBB, and the

⁶⁵ Increases in competition in a market are generally expected, by first principles, to increase supply and reduce cost.

senior tranche(s) would be sold on to outside investors. To minimise uncertainty in the medium term a structure that puts changes in the operation of the platform outside of the reach of the political process would be beneficial.

Annex 1: List of Stakeholders Interviewed

Investors	APG	Netherlands
	Bank of America/Merrill Lynch	UK
	Danske Bank	Denmark
	Erste Securities	UK
	JP Morgan	UK
	Lloyds	UK
	Prudential	UK
	RBS	UK
Pension Consultants	Mercer	UK
Regulators	Bank of England	UK
	European Banking Authority	EU
SME Lenders / Issuers	AGFE	UK
	Close Brothers	UK
	GE Capital	UK
	Lloyds	UK
	RBS	UK
Development Banks	British Business Bank	UK
	Development Bank of Canada	Canada
	European Investment Bank/Fund KfW	EU Germany
Credit Rating Agencies	Fitch	UK
	Moody's	UK
	Standard and Poor's	UK
Trade Bodies	Association of Financial Markets in Europe (AFME)	Europe
	British Bankers Association	UK
	Prime Collateralised Securities	UK

Annex 2: KfW's Promise Programme

In 2000, the German government-owned bank Kreditanstalt fuer Wiederaufbau (KfW) established its Promise programme, designed to support lending to SMEs. German banks had long been able to access capital market funding using covered bonds ('Pfandbriefe'). Hence, the goal of the KfW's promise programme was not to promote 'true sale' SME securitisation for funding purposes, but rather to facilitate 'synthetic' securitisation for risk transfer and capital relief.

Under the Promise programme, banks lending to SMEs were able to transfer the risk of their SME portfolios to KfW by means of a credit default swap (CDS). There were several elements of the programme which helped to reduce the fixed entry costs to securitising SME loans and ameliorate information problems. Promise was essentially a platform, a ready-made standard securitisation vehicle with standardised documentation and structures. This reduced information costs for investors, as they became familiar with the Promise characteristics. KfW's standard template also reduced the costs of securitisation for originators. These lower entry costs seem to have made securitising smaller loan portfolios economical, as the average size of Promise portfolios between 1999 and 2004 was €201 million, while non-Promise securitised portfolios tended to be larger, averaging €722 million.⁶⁶ However, KfW did not allow more than one originator in a single transaction, so smaller banks with SME loan volumes below €50 million did not participate.

In addition, two elements of Basel I capital regulation rules allowed banks to reduce the capital they held against their securitised SME loan portfolios: (1) under Basel I, all SME loans, regardless of their rating, attracted a risk weighting of 100%; and, (2) the amount of regulatory capital relief on a synthetic securitisation depended on the quality of the SME lender's counterparty for the credit default swap. The counterparty charge on the portfolio was 1.6% for banks, but 0% for swaps undertaken with the KfW, a government-owned bank.

The first element implied that twice as much regulatory capital relief could be obtained by performing synthetic securitisations on SME loans than on mortgages, which attracted a capital charge of 4%. The second element further increased the amount of capital relief for synthetic SME securitisations, as long as the KfW acted as an intermediary counterparty. The capital relief available to banks under the KfW's Promise programme was attractive enough that between 2000 and 2007, as long as the Basel I framework was in place, a total of €46bn of SME loans were securitised, giving Promise a market share of 24% of the European SME securitisations over this period. The programme was open to all banks in the European Community, although the majority of transactions were with German banks.

New rules introduced in Basel II made the KfW's Promise programme less attractive to banks in terms of the capital relief it offered. Since the crisis, the Promise programme has become very inactive, and the market for German SME ABS has shrunk to only 14% of its peak 2008 size, based on securitised assets outstanding.⁶⁷

⁶⁶ European Commission, 2004 and own calculations.

⁶⁷ SIFMA/AFME, 2014

Annex 3: EU Regulation of Securitisation

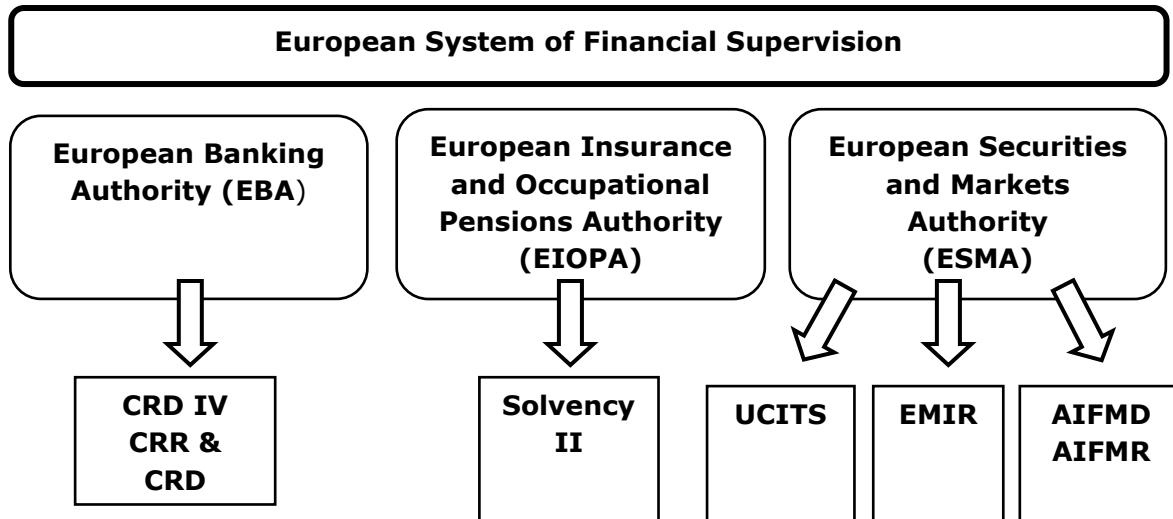
Securitisations in the European Union are regulated by three bodies, according to the type of institution which is issuing or investing in the securities. These three regulators form the three branches of the European System of Financial Supervision: The European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA)⁶⁸.

The EBA regulates banks and building societies. These prudentially regulated credit institutions must adhere to CRD IV, composed of the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD), which implement Basel III standards in the EU. The CRR applies directly to all banks and building societies throughout the EU, while the CRD is implemented through national law. In the UK, the Bank of England's Prudential Regulatory Authority and the Financial Conduct Authority supervise the implementation of CRD IV. The CRD IV framework can be relevant to banks both as issuers of securitisations as well as investors in securitised assets. A key area is the eligibility of securitised assets as High Quality Liquid Assets (HQLA) to satisfy Liquidity Coverage Ratio (LCR) requirements, and the capital requirements for holding securitised assets on the bank's balance sheet.

The European Insurance and Occupational Pensions Authority (EIOPA) regulates insurers, reinsurers and pension funds. EIOPA is primarily important because its proposed Solvency II framework, set to take effect in January 2016, will determine capital charges for investing in securitised assets for this large group of 'real money' investors.

Finally, the European Securities and Markets Authority (ESMA) regulates a range of other investment institutions. The Undertakings for Collective Investments in Transferable Securities (UCITS) regulatory framework applies to investment funds which are open to all investors throughout the EU. The Alternative Investment Fund Managers' Regulation and Directive (AIFMR, AIFMD) apply to 'collective investment undertakings' that are not otherwise regulated under UCITS, including hedge funds, private equity funds, some retail investment funds, investment companies and real estate funds. Both of these are relevant for securitisation investors who fall into the groups covered by the UCITS or AIFMR/AIFMD. The European Market Infrastructure Regulation (EMIR) regulates over the counter derivatives, clearing and trade repositories. EMIR can be relevant for securitisations which involve interest rate swaps (for example, to deal with redemption/refinancing risk for fixed rate loans) or currency swaps. The European Money Market Regulation applies to money market funds.

⁶⁸ The European Systemic Risk Board provide oversight for risk across the entire European financial system.



Annex 4: Simple, standard and transparent securitisation

This is a summary of the 22 criteria proposed by the EBA for a securitisation to qualify as 'simple, standard and transparent'.⁶⁹

Pillar I: simple securitisations

- Securitisations should be a 'traditional' securitisation, neither synthetic nor a re-securitisation
- No cherry picking – either whole portfolios of eligible loans or random selection among assets satisfying the eligibility criteria
- Legal true sale – no clawback provisions or recourse to the issuing bank
- Homogeneity of the underlying assets with regard to asset type, currency and legal system, and consistently originated in the ordinary course of the lender's business using stable underwriting standards, and with full recourse to the borrower
- No impaired assets, and no derivatives
- At least one payment on the underlying asset should have been made,

Pillar II: standard securitisations

- 5% risk retention rule of the CRR/CRD IV should be satisfied
- Interest rate and currency risks should be mitigated by hedging, but only derivatives for hedging purposes should be allowed.
- Terms and conditions should only be based upon 'commonly encountered market interest rates'.
- In revolving structures, clear and specific provisions for early termination of the revolving period.
- Repayment in accordance with seniority, and no provisions for immediate liquidation of underlying assets.
- Clear specification of the obligations of the trustee and servicer upon default or insolvency
- Designation of a person with fiduciary responsibilities, resolve conflicts between different classes of noteholders, as well as clear definition of voting rights to the most senior credit tranches.
- Requirements on the servicers, including risk management controls and reporting capabilities.

Pillar III: transparent securitisations

⁶⁹ See EBA (2014) for a more detailed list of the 22 proposed criteria for 'simple, standard and transparent' securitisations.

- Compliance with the Prospectus Directive.
- Compliance with the disclosure to investors requirements of Article 409 of the CRR and Article 8b of the CRA.
- Where legally possible, access to all underlying transaction documents should be provided to investors.
- Requirements on the transaction documentations, including remedies for delinquency and default of underlying assets, priority of payments, triggers, and a liability cash flow model.
- Mandatory external verification on a sample of underlying assets with confidence level of at least 95% by an appropriate independent party (but not a CRA).
- Ready access for investors to data on historical performance for at least five years for substantially similar exposures to those being securitised.
- Ready access for investors to loan-by-loan data for the underlying assets, both at inception and on an ongoing basis.
- Quarterly disclosure of all 'materially relevant data' on performance of the underlying assets, data on cash flows, and breach of any triggers.

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