



Synthetic securitisation

Making a silent comeback

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Securitisation markets have returned to policymakers' attention recently, only this time as a hoped-for panacea to anaemic lending in Europe rather than as a culprit for the financial crisis. To date, the focus is largely on true-sale securitisation, which allows banks to reduce their credit risk and thus frees up capital. Yet synthetic securitisation also has notable potential, especially for SME lending to gain traction, because it is easier to implement and more flexible regarding the underlying loan portfolio than true-sale transactions.

Synthetic securitisation saw mixed trends in recent years. On the one hand, complex arbitrage deals have almost disappeared. On the other hand, balance sheet synthetic deals have surged, reaching an issuance volume of EUR 94 bn in 2016. While transactions have become mostly private, they are now much less complex and of robust asset quality. Long-term institutional investors are major buyers. Still, the evolving framework for simple, transparent and standardised (STS) securitisations so far covers only true-sale securitisations. A firm inclusion of balance sheet deals would be sensible and could well contribute to a recovery in lending in Europe.

Synthetic securitisation has seen impressive momentum in recent years which has gone largely unnoticed. Banks have increasingly tapped this market to manage credit risk and improve their capital ratios. Policymakers have paid renewed attention to securitisation markets, too. They see securitisation as a tool to enhance lending to the real economy, which has been anaemic in some euro area countries. Consequently, the European Commission has named restarting high-quality securitisation as one of the main objectives of its Capital Markets Union project.¹ But discussions have centred around true-sale securitisation, largely neglecting the potential of synthetic securitisation. Especially for tailor-made loans such as loans to small and medium-size enterprises (SME), however, synthetic securitisation offers lucrative features. In contrast to plain-vanilla (true-sale) deals, SME loans can easily be securitised in a synthetic way, thus releasing banks' regulatory capital, which can then be used for the provision of additional funding to SMEs. To shed some light on these points, we compare synthetic and true-sale securitisation in Europe, their regulation, and the most recent issuance and market quality trends in this publication.

¹ The Basel Committee on Banking Supervision (BCBS) and the International Organisation of Securities Commissions (IOSCO) jointly lead a task force for identifying the impediments to securitisation at the global level. Similar to the EU framework, they aim to develop general criteria for simple, transparent and comparable (STC) securitisation instruments.



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True-sale versus synthetic securitisation

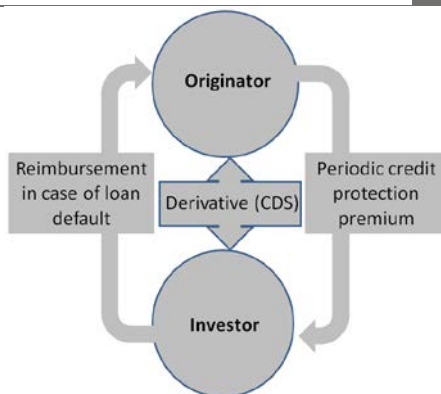
Securitisation		1
	True-sale	Synthetic
Portfolio of loans	Passed onto an SPV	Remains on bank balance sheets
Purpose	Funding	Credit risk/ capital management
Typical underlying portfolio	Mortgages, consumer loans	Corporate exposures, SME loans
Investor return	Cash flows of underlying loans	CDS premium

Source: Deutsche Bank Research

In short, securitisation is the transformation of income-yielding assets (typically loans) on bank balance sheets into tradable securities. In its simplest form, the originator, usually a bank, bundles a pool of loan exposures to pass them to the capital markets. There are two main securitisation types, differing in terms of how the credit risk is transferred to the capital markets. In a **true-sale securitisation**, the originator passes the ownership of loans to another financial entity, a special-purpose vehicle (SPV). In doing so, the loans are removed from the originator's balance sheet and the SPV becomes entitled to their cash flows. Usually, SPVs finance the takeover by issuing bonds. Depending on the underlying loans, there are subcategories of true-sale securitisations, such as mortgage-backed securities (MBS) or asset-backed securities (ABS), which are backed by auto loans, consumer loans, etc.²

In a **synthetic securitisation**, the originator transfers the credit risk of the bundled loans via credit derivatives or guarantees to the capital markets. The loans themselves remain on the originator's balance sheet. This is called a *balance sheet synthetic securitisation* transaction (see diagram 2). In its simplest form, this securitisation functions as a hedge against a loan default. If there are defaults in the underlying loan portfolio, the seller of the credit protection (i.e. of the credit default swap (CDS)) reimburses the originator for the loss. For the loan portfolio protection, the originator pays a periodical fee (i.e. CDS premium). Unlike a true-sale securitisation, the originator does not obtain any funding or liquidity in such a transaction. There are also transactions where the originator does not even own the underlying loans and holds the credit protection only for arbitrage opportunities. This type is called *arbitrage synthetic securitisation*.

Balance sheet synthetic securitisation 2



Source: Deutsche Bank Research

For issuers, having another credit risk management tool and being able to release capital is the central benefit of a balance sheet synthetic securitisation. Of course, this could be achieved via a true-sale securitisation as well. That said, synthetic securitisation is in two ways more advantageous than true-sale securitisation: 1) It avoids many of true-sale securitisation's administrative and legal steps. These include the sale and insolvency-proof transfer of the underlying loans and any associated collateral to the SPV; corporate administration agreements between bank and SPV, e.g. to collect receivables of loan portfolios; and encryption of personal data related to the loan etc.³ 2) Synthetic securitisation grants greater flexibility regarding the underlying loan portfolio and is usually less costly from a legal and operational point of view. Some loan segments contain clauses preventing a true, legal sale of the loan.

Both of these features, 1) and 2), allow synthetic originators to securitise a greater spectrum of loans more efficiently and free up lending more quickly. This is especially relevant for the securitisation of SME loans. By and large, these loans have stricter ownership requirements (banks are often not allowed to sell them) and are usually too tailor-made to be bundled and passed on to SPVs.

Capital constraints put pressure on lending

In the past few years, capital constraints have become much more pressing for the banking sector and, in turn, banks' clients. Hence, the potential benefits of securitisation have increased. Chart 3 shows the link between a tighter capital position and credit intermediation by banks. During the financial and sovereign

² It is also possible to securitise the cash flows generated by a business, known as *wholesale securitisation*. Wholesale securitisations are rather complex and almost only used in the UK.

³ See Krauss and Cerveny (2015) for a comprehensive list of legal and administrative steps.

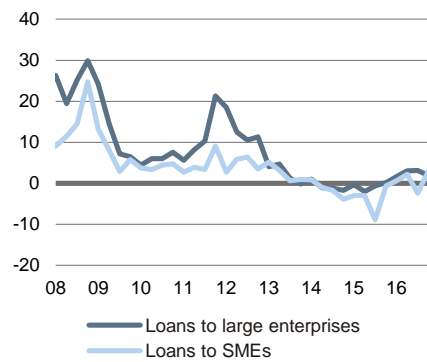


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Impact of euro area banks' capital positions on lending

3

Contributed to tightening of credit standards minus contributed to easing in %



Sources: ECB, Deutsche Bank Research

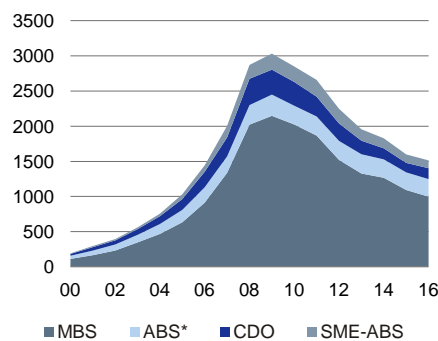
crises, credit standards for loans to both large enterprises and SMEs were tightened significantly due to the (constrained) capital position of European banks. No additional tightening has been observed in recent years, but neither has a significant easing. Credit standards are probably still quite tight due to capital constraints and are far from “normal”. Indeed, the ECB’s bank lending survey defines changes only compared to the previous quarter, and not at an absolute level. All in all, European banks’ capital constraints may still put a brake on lending to non-financial corporations as well as households.

Recent empirical studies provide further evidence that bank equity is an important determinant of bank lending growth. For a sample of 105 banks from 14 countries, Gambacorta and Shin (2016) show that a 1 pp increase in the equity-to-total assets ratio is associated with a 0.6 pp increase in annual loan growth. Similarly, weaker risk-weighted capital ratios are correlated with lower loan growth. Considering the relatively high capital requirements of SME loans when held on-balance sheet, relieving banks’ capital positions via synthetic securitisation could thus well translate into enhanced lending to the real economy.

European true-sale securitisation market shrank drastically

4

Outstanding amounts in USD bn



* excluding SME-ABS

Sources: SIFMA, Deutsche Bank Research

European true-sale securitisation market is broken

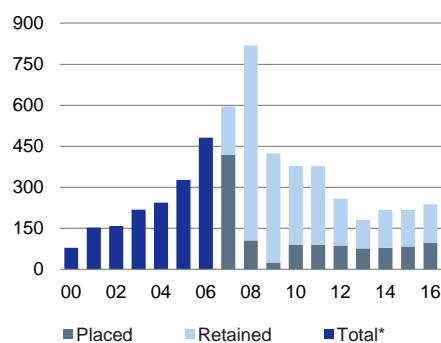
The true-sale securitisation market has been in the focus of policymakers because of its larger market size. Indeed, preferential regulatory treatment has been discussed for this segment first, which saw a fundamental reshaping after the financial crisis (chart 4). In the run up to the crisis, outstanding European true-sale securitisation grew exponentially, reaching USD 3 tr by 2009. The lion’s share of the growth came from mortgage-backed securities that expanded almost 20-fold from USD 111 bn in 2000 to USD 2.1 tr in 2009. Since then, outstanding volumes of all securitised assets have tumbled to USD 1.5 tr. The setback has hit on all fronts. MBS, which still form the largest market segment by far, have fallen to USD 874 bn. Similarly, securitised assets backed by loans to SMEs (SME-ABS) have declined to USD 112 bn, from USD 228 bn in 2009.

The decline of true-sale securitisation has significant implications for issuers and the real economy. Indeed, this type of securitisation is an additional funding alternative for banks and, considering its market size, is crucial in enabling further lending. The impact on bank funding is probably not so detrimental at the moment, given central banks’ expansionary monetary policies (such as TLTROs) and the resulting abundant liquidity in financial markets. Yet European banks have been deleveraging since the crisis and remain hesitant to expand their loan books. The dwindling securitisation market has deprived them of an option to extend commitments to clients without tying up scarce capital and thus negatively impacts loan generation in Europe.

Issuance in Europe: Changed structure while coming down

5

EUR bn



*data availability limits the differentiation with respect to issuance type before 2007.

Sources: AFME, Deutsche Bank Research

The decline in market size is also visible in securitisation issuance (see chart 5). After peaking in 2008, with a volume of around EUR 820 bn, issuance came down significantly to values of around EUR 200 bn, as observed fifteen years ago. More important though is the change in composition of placed versus retained issuances. In 2007, around 70% of the EUR 600 bn issuance volume was placed, i.e. sold to a third party. Since the crisis, by contrast, much of the issuance has been retained by originating banks – around 60-75% in recent years. The main reason is originators using securitised assets as collateral to obtain liquidity from the ECB. This, however, implies that current issuance relies on support from the ECB’s liquidity programmes.

But who are the investors of placed deals? Even though recent data is lacking, somewhat older figures suggest that 43% of the European placed deals went to banks in 2013. Another 39% were sold to funds/asset managers, and 5% to insurance companies and pension funds (see Nassr and Wehinger (2015)). As



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most of these investors are tightly regulated financial institutions, the regulatory treatment of securitisation exposures is central for the demand for structured finance assets.

Heavy-handed regulation towards the securitisation market

Securitisation has been in the spotlight during and after the crisis, and some practices have been criticised for leading to excessive risk-taking and unsound lending (i.e. originate-to-distribute models). In line with these concerns, regulatory measures have been adopted to discourage securitisation exposures globally and in Europe. However, the new regulatory framework does not differentiate between complex, opaque and bespoke securitisations versus simple, well-documented, high-quality securitisation. This contributed to the downfall of the European securitisation market (Shekhar et al, 2015; European Parliamentary Research Service, 2016; ECB 2016).

Simple, transparent and standardised securitisation

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- In a first step, the European Commission (EC) issued a legislative proposal on STS securitisation in September 2015
- In December 2016, the Economic and Monetary Affairs Committee (ECON) of the European Parliament published its own report on the proposed EC framework
- Parliament has requested that the current 5% indirect retention rate be increased in some cases up to 20%, which raises concerns about the potential of STS securitisation. The EC wants to impose an explicit 5% retention rate for issuers
- Parliament will start negotiations with Member States in order to reach agreement on STS securitisation rules, which are expected to be finalised in H1 2017

Source: Deutsche Bank Research

Regulation of synthetic securitisation

7

- Synthetic securitisation is not eligible for the current STS framework, as explicitly stated in the December 2016 ECON report
- ECON has asked the EBA, in close cooperation with ESMA and EIOPA, to finalise an STS eligibility framework for **balance sheet synthetic securitisations** with a view to promoting funding of the real economy and, in particular, SMEs. The EBA has also been asked to propose appropriate capital requirements for such a synthetic securitisation
- Following the EBA's report, ECON wants to request a report from the European Commission and, where appropriate, a legislative proposal in order to extend the STS framework to balance sheet securitisations
- According to ECON, arbitrage synthetic securitisations will be strictly excluded from the STS framework

Source: ECON A8-0387/2016

In Europe, two primary sets of rules apply to banks' securitisation exposures and determine the demand for securitised assets. These are the Capital Requirements Regulation and the Capital Requirements Directive (CRR/CRD IV). Both were adopted in June 2013 and implemented in 2014 with the aim of improving European banks' capacity to absorb losses, while setting high risk weights for securitisation exposures. These capital charges become prohibitively expensive at cases. For example, for securitisation investments with a rating of B+ and below, a risk weight of 1,250% applies. This means that banks have to hold at least 100% capital against the asset's nominal amount. In addition to banks, other major investors, such as asset management companies, are also subject to the CRR/CRD IV in many EU countries and are therefore not able to fill the gap in demand left by banks.⁴ What is more, the CRR prevents European banks from investing in positions that do not fulfil certain risk retention requirements, i.e. where originators maintain some "skin in the game", currently 5% of the risk. This not only dampens the demand for securitised products, but also reduces the supply.

Recently, though, there has been a change in sentiment, and policymakers now recognise the benefits of securitisation in increasing banks' lending capacity. Indeed, asset quality in the European securitisation market has been and continues to be much more robust than in its US counterpart, as Europe lacks explicit public guarantees (see section below). Taking this into account, European policymakers now aim to establish a simple, transparent and standardised (STS) securitisation market to restart high-quality securitisation in Europe. This target has become one of the main pillars of the Capital Markets Union project (see box 6). The STS framework could indeed help revitalise the true-sale securitisation market, provided it comes with reasonable retention rates for issuers and favourable regulatory treatment for investors. However, it will not automatically translate into enhanced lending across all loan segments. For example, STS's favourable measures will probably help the mortgage market to take off, as loan portfolios are relatively standard and include collateral. On the other hand, the STS framework will be very difficult to implement in the SME loan segment, where loans are usually tailor-made and not standardised. As discussed above, synthetic securitisation allows for much more flexibility in underlying loans and thus helps banks to manage their capital and credit risk more freely. Hence, it may be a more suitable fit for loans to very small companies, for loans to companies with differing legal forms, or for loans with differing and non-traditional collateral attached (machines, private guarantees, etc.). In this respect, this segment is even more relevant for

⁴ See European Fund and Asset Management Association (2017) for a detailed discussion.



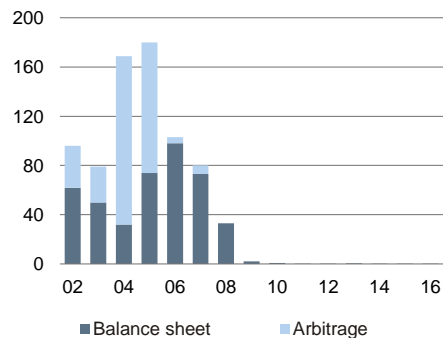
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enhancing lending to corporations than for true-sale securitisation. Yet synthetic securitisation has not been included in the STS framework so far (see box 7).

Rated synthetic securitisation market vanished after the crisis

8

Issuance in EUR bn

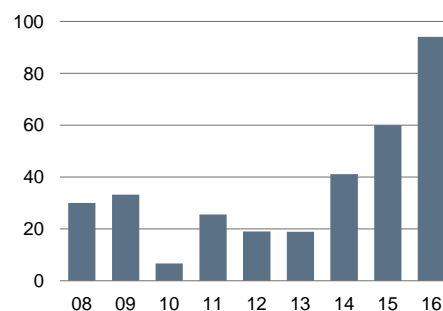


Sources: EBA, ECB, Deutsche Bank Research

Bilateral synthetic securitisation issuance on the rise in Europe*

9

EUR bn



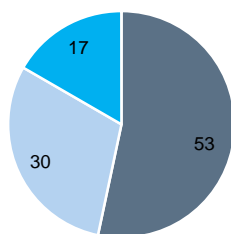
* volumes reported stem from the activity of 12 large European issuers

Sources: EBA, Bloomberg Finance LP, Deutsche Bank Research

Synthetic securitisation portfolios by underlying asset class in the EU*

10

% of issuance in 2015



Loans to large corporations Loans to SMEs Other

*bilateral deals only

Sources: EBA, Deutsche Bank Research

Synthetic securitisation market: Bilateral and growing

Trends in synthetic securitisation can be grouped into two episodes. Before the crisis, most transactions were rated by credit rating agencies and issuance volumes were publicly available. This type of transparent issuance peaked in Europe in 2005, reaching EUR 180 bn, up from EUR 60 bn in 2001 (see chart 8). The boom was partly driven by a surge in arbitrage synthetic securitisations. They allowed “originating” banks (i.e. the protection buyers) to increase the variety of instruments they could acquire without funding the credit exposure. Yet they were highly complex, and risks associated with these positions were in some cases unclear. Investors in these products were exposed to relatively high losses (Segoviano et al, 2013). Consequently, the market for arbitrage synthetic deals – and rated issuances in general – came down gradually to EUR 33 bn in 2008 and has since vanished.

Since the crisis, synthetic securitisation deals have become bilateral. At the same time, volumes have gone up significantly recently, from EUR 20 bn in 2013 to EUR 94 bn in 2016 (see chart 9). Last year, five large deals alone amounted to about EUR 20 bn. It is important to note that, with the now opaque structure of the market, these figures should be considered as lower-bound estimates rather than a precise account of market activity. Of the recent issuance volumes, more than 90% were balance sheet transactions where the originator transferred the credit risk of the underlying loans to the capital markets. The investor base for balance sheet synthetic deals usually consists of non-bank investors, mainly hedge funds (47%), pension funds (22%) and sovereign-wealth funds or public/supranational investors (20%) (EBA, 2015).

Industry observers point out that balance sheet synthetic transactions have become much less complex in recent years as well. Documentation often comprised around 500 pages in the past, and is now only 20 to 30 pages long. Moreover, only the most senior tranches are placed. Both are desired trends from a regulatory perspective. That said, mezzanine tranches would provide much more capital relief to banks and have substantially higher yields than senior tranches: typical mezzanine yields are in the 8-13% range. Considering the rock-bottom interest rates in general, mezzanine tranches have probably become more attractive for investors in recent years (who may require transparent and simple products, though). Hence, an uptick in mezzanine issuance could in principle be a boon for investors and issuers alike and free up capital for more lending.

Also important to note is the difference in the underlying assets between true-sale and synthetic securitisation. Whereas most of the former securities are backed by mortgage loans, corporate exposures make up the lion’s share in the latter case (see chart 10). Loans to large corporations accounted for 53% of the synthetic portfolios in 2015. More remarkably, a further 30% were loans to SMEs. This underlines the importance of balance sheet synthetic securitisation for the transfer of *corporate* credit risk from banks to markets and for strengthening the extension of credit, especially to SMEs and large firms.

Balance sheet synthetic segment has a high market quality

Public perception towards (true-sale and synthetic) securitisation and its associated risks has largely been shaped by the high-profile defaults in the US during the crisis, which have been taken as given for all subsegments and regions. However, the EU securitisation market in general was robust even

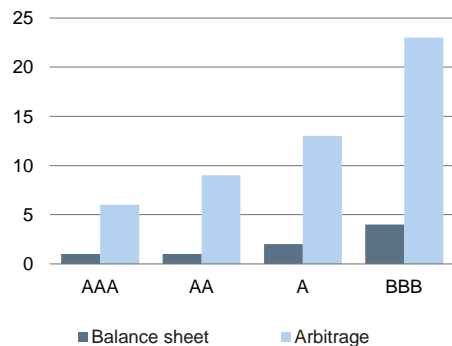


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Balance sheet synthetics are robust

11

Life-time default rates in % in 2014



Sources: EBA, Deutsche Bank Research

during the crisis, and defaults were significantly lower than in its US counterpart. This has not changed materially. In 2015, the average structured finance default rate in the US was 5.2% compared with only 0.7% in the EU⁵, which shows that concerns regarding market quality in Europe are overblown.

More specifically, the toxic tag attached to synthetic securitisation is also exaggerated. Chart 11 details life-time default rates for balance sheet and arbitrage synthetic securitisations as of 2014. The former performed vastly better than the latter for all ratings. On aggregate, the average default rate for investment-grade (IG) balance sheet deals was only 2% versus 13% for arbitrage deals. This compares to a default rate of 3.4% for – true-sale – European ABSs in the same year (IG and high-yield combined), for example. Against this backdrop, balance sheet synthetic securitisations do not necessarily perform worse than true-sale securitisations.

Concluding remarks

In recent years, the two subsegments of synthetic securitisation have seen diverging trends. Riskier arbitrage transactions have disappeared. Meanwhile, lower-risk balance sheet synthetic deals have surged. Most trades have become bilateral. Balance sheet synthetic securitisation has significant potential to enhance bank lending to the real economy in Europe. It offers flexibility regarding underlying loans and is thus particularly applicable to SME loans. In addition, this market segment exhibits robust asset quality. Long-term institutional investors are the major buyers. Against this background, the inclusion of balance sheet synthetic deals in the developing STS framework could contribute to a recovery in lending in Europe.

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⁵ See S&P (2016).



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