Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability

May 2025





Contents

Executive summary 3				
1	Introduction			
2	Synth	etic securitisations and the STS framework	11	
	2.1	Synthetic securitisation	11	
	Box 1	Funded and unfunded credit protection in the context of synthetic STS securitisation	14	
	Box 2	Significant risk transfer	17	
	2.2	The EU STS Securitisation framework	18	
	Box 3	STS notification requirements	20	
	Box 4	Synthetic STS securitisation and regulatory capital relief – a simplified numerical example	21	
3	The s	ynthetic (STS and non-STS) securitisation market in the EU	23	
	3.1	Data	23	
	3.2	Recent developments in the EU synthetic securitisation market against the backdrop of global developments	24	
	3.3	Developments in the EU synthetic securitisation market in relation traditional securitisation	to 25	
4	The s	vnthetic STS securitisation market in the EU	29	
	4.1	Structure of synthetic STS transactions	29	
	4.2	Market development since 2021	33	
	4.3	Originators	34	
	4.4	Protection sellers	37	
	4.5	Credit quality of the securitised loans	41	
5	Finan	cial stability considerations	45	
References				



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability - May 2025 Contents

Imprint and acknowlegements



50

Executive summary

This report describes the European Systemic Risk Board's (ESRB) assessment of the financial stability implications of introducing simple, transparent and standardised (STS) criteria for on-balance-sheet securitisations in the European Union (EU). The EU Securitisation Regulation¹ (SECR) assigns the macroprudential oversight of the European Union's securitisation market to the ESRB. Following the amendments made to the SECR in 2021, the ESRB was mandated to assess the impact on financial stability of introducing the STS criteria for on-balance-sheet securitisations (hereinafter referred to as "synthetic securitisations") and publish its findings in a report. In contrast to "true sale" securitisations, where the assets are usually removed from the originator's balance sheet, in synthetic securitisations the assets remain on the balance sheet. Instead, the credit risk of those assets is transferred synthetically to a third party (the "protection seller"), typically via a contingent contract (a derivative or a credit-linked note) or financial guarantees. The SECR specifies that the financial stability assessment should be conducted in collaboration with the European Supervisory Authorities (ESAs) and that the report should cover any potential systemic risks, such as risks created by concentration and interconnectedness among non-public credit protection sellers. As part of its collaboration with the ESAs, the ESRB obtained granular data on synthetic securitisation from the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA).

The relaunch of the securitisation market is a priority for the European Union. Recent reports by Mario Draghi and Enrico Letta identify relaunching the EU securitisation market as part of a broader strategy to enhance the lending capacity of banks, deepen capital markets, establish a savings and investment union, and boost competitiveness.² To evaluate the supply and demand factors hindering the development of the securitisation market in the EU, the European Commission launched a targeted consultation on the functioning of the EU securitisation framework in late 2024.³ While securitisation can deliver substantial economic benefits and support financial stability, it may also carry risks to financial stability, as evidenced by the global financial crisis. Therefore, to determine the right balance between these benefits and risks, it is essential to assess the financial stability impact of previous and prospective regulatory changes.⁴

The main purpose of synthetic securitisation is to achieve a significant risk transfer, which provides regulatory capital relief for banks. Under specific conditions, banks are allowed to replace their pre-securitisation capital requirement with a regulatory capital requirement based on the securitised tranches they retain. For example, in a three-tranche synthetic securitisation, the originator typically transfers the risk associated with the mezzanine tranche, while retaining the risk of the first loss and the most senior tranche. By offloading the risk of the mezzanine tranche to

⁴ For more information on the impact of G20 financial regulatory reforms on securitisation, see Financial Stability Board (2025), "Evaluation of the Effects of the G20 Financial Regulatory Reforms on Securitisation: Final Report".



¹ Regulation (EU) 2021/557 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis (OJ L 116, 6.4.2024, p. 1).

² See Letta, E. (2024), "Much more than a market" and Draghi, M. (2024), "The future of European competitiveness: A competitiveness strategy for Europe".

³ See European Commission (2024), "Targeted consultation on the functioning of the EU securitisation framework".

investors, banks can substantially lower the regulatory capital requirements for the underlying loans. Such capital optimisation transactions enable banks to lend more to the economy while maintaining the same level of regulatory capital. Such strategies can also be used to make payouts to shareholders through dividend payments or share buybacks. However, either case would result in an increase in leverage, making banks more vulnerable during severe economic downturns.

The EU is the largest market for synthetic securitisation, accounting for about half of the global market. The issuance of synthetic securitisations has risen globally since 2016, increasing nearly fourfold from €55 billion to €207 billion. In the European Union, issuances have risen from €36 billion to €102 billion during this period. As at the end of 2023 (the most recent date for which global data are available) the outstanding amount of EU synthetic securitisations – referring here and throughout to the outstanding amount of securitised exposures – came to around €300 billion, accounting for roughly 50% of the global market. The United Kingdom accounted for approximately 20% of the global outstanding amount, with the remaining share distributed across other countries worldwide.

The issuance of STS-compliant synthetic securitisations has risen sharply since 2021. The STS framework was extended to synthetic securitisation in 2021. Between then and the second quarter of 2024, the outstanding amount of synthetic STS securitised exposures rose from zero to €145 billion, representing 40% of the outstanding amount of synthetic securitisations in the EU. During the same period, the outstanding amount of synthetic securitisations that did not conform to the STS criteria (henceforth "synthetic non-STS securitisations") remained stable at approximately €200 billion. The increase in synthetic STS securitisations can be attributed to a few large transactions, with the average deal size exceeding €2 billion. This figure is larger than the average deal sizes of synthetic non-STS and traditional securitisations, which typically hover around €1 billion. In terms of the number of transactions, 98 synthetic STS securitisations were reported to ESMA between 2021 and the second quarter of 2024.

For synthetic securitisations to qualify for the STS label, the credit protection provided by private investors must be funded. In synthetic securitisation, originators transfer credit risk to a third-party protection seller. This credit protection can be either funded or unfunded. To qualify for STS status, the SECR requires that credit protection provided by private entities be funded, meaning it should be backed by high-quality debt securities or cash to mitigate counterparty credit risk. Risk transfer in synthetic STS securitisation can be structured through financial guarantees, credit derivatives, or credit-linked notes (CLNs). The most common structure involves transferring credit risk via CLNs. These hybrid instruments expose investors to the credit risk of the underlying loans, effectively making them protection sellers. CLNs may be issued directly by the originating bank or through a securitisation special purpose entity (SSPE). The SECR also permits unfunded credit protection to qualify for STS status if it is provided by investors recognised under the Capital Requirements Regulation (CRR) as having a 0% risk weight, such as public sector entities, central banks, multilateral development banks and international organisations. As at the second quarter of 2024, 87% of the outstanding amount of synthetic securitisations in the EU consisted of funded credit protection provided by private investors, while 13% comprised unfunded credit protection offered by multilateral development banks.

Synthetic STS securitisations have traditionally been originated by a small number of large banks. The number of banks originating synthetic STS securitisations in the EU grew from ten in



2021 to 21 in 2022, before falling to 17 in 2023. However, these banks account for almost half of total bank assets in the EU. In the second quarter of 2024, the five largest originators combined accounted for 58% of the outstanding amount of synthetic STS securitisation in the EU. Despite this concentration, the loans underlying the synthetic STS securitisations of the five largest originating banks represented, on average, just 1% of their assets. In contrast to traditional securitisations, which are typically backed by residential mortgages, consumer loans (including auto loans) and commercial mortgages, synthetic STS securitisations primarily rely on loans to corporates and small and medium-sized enterprises (SMEs) as their underlying assets.

Protection sellers in funded synthetic STS securitisations are typically investment funds and pension funds, which are mostly domiciled outside the euro area (EA). In the second quarter of 2024, the outstanding amount of CLNs issued under synthetic STS securitisations was €8.3 billion. Entities outside the EA (non-EA entities) are the largest investors, holding approximately three-quarters of the total outstanding amount. The specific locations of investors that are domiciled outside the EA are not identifiable from the data sources available for the analysis. However, anecdotal evidence suggests that they are primarily investment funds and pension funds based in the United States and the United Kingdom. Among EA-based investors, who make up the remaining one-quarter of investors, the majority are non-money market fund (non-MMF) investment funds. A large portion of these investment funds are structured as open-ended vehicles. As CLNs are not liquid, this may expose investment funds to liquidity risk if they face investor redemptions during periods of market stress. Data show that some of these investment funds have obtained loans from EU banks, in most cases from lenders other than the securitisation originator.

To date, the default rate in synthetic STS securitisations has been negligible. In the second quarter of 2024, the default rates for loans underlying synthetic STS securitisations were close to zero. Among the different segments of the underlying loans, consumer loans showed the highest default rates, albeit at just 0.7%. Overall, synthetic STS securitisations have exhibited lower default rates compared to both non-STS securitisations and traditional securitisations across various segments of underlying loans. This may be attributed to several factors, including variations in the loan vintages within the portfolios, the low default rates observed since the STS label was extended to synthetic STS securitisations compared with non-STS securitisations.

The ESRB assesses that extending the STS framework to synthetic securitisation has not, to date, resulted in significant risks to financial stability in the European Union. This conclusion is based on the following findings. First, the loans underlying synthetic STS securitisations are small compared to the originator banks' balance sheets. Second, the credit protection provided by private entities is funded, thus mitigating counterparty risk. Third, the credit quality of the loans that have been securitised appears to be robust, although synthetic STS securitisations have yet to be thoroughly tested by a severe economic downturn. Lastly, most of the risk associated with EU synthetic STS securitisations is transferred to investment funds and pension funds that are primarily domiciled outside the euro area. This results in diversification of risk across different sectors and geographical regions.

The ESRB believes that the relaunch of the securitisation market must be accompanied by close risk monitoring and assessment of the risks from procyclical effects and



interconnectedness. One of the findings on which the ESRB's current assessment is based is that the loans underlying synthetic STS securitisations are small compared with the originator banks' balance sheets. A successful relaunch of the EU synthetic securitisation market would make this market a more material mechanism for significant risk transfer and regulatory capital relief for EU banks. Risk monitoring and assessment is needed to prevent and mitigate any risks to financial stability that such an increase in materiality might entail, especially with respect to any procyclical effects that could arise or impacts caused by interconnectedness.

Procyclical effects could result from a reassessment of risk weights during severe

economic downturns. In synthetic STS securitisations, the senior tranche attachment point – the threshold at which the retained senior tranche begins to incur losses –is typically lower than in synthetic non-STS securitisations. This attachment point is calibrated to account for both expected and unexpected losses within the underlying portfolio, with the unexpected loss covering for tail risk. However, during severe economic downturns a low attachment point can intensify procyclical effects. This is because a significant deterioration in the credit quality of the portfolio would lead to losses approaching, or even exceeding, the senior tranche attachment point. In this scenario – in contrast to a situation where the portfolio had not been synthetically securitised – the protected tranche would shield the originating bank from some losses on the underlying portfolio. However, the regulatory capital requirements for the unprotected senior tranche would rise more sharply and in a non-linear manner due to dynamically adjusting risk weights.

Procyclical effects may also arise from rollover risk affecting regulatory capital

requirements. Synthetic securitisations are currently a regular part of many EU banks' capital management strategies, alongside traditional instruments like Additional Tier 1 bonds and common equity. Synthetic STS securitisations typically have an average maturity of about three years. If banks have originated new loans in the expectation that they will again be able to achieve significant risk transfer when the previous synthetic STS securitisation matures, they will have to initiate a new round of synthetic securitisation for these new loans. However, during a severe economic downturn, banks may find it more challenging to obtain credit protection for their synthetic securitisations. This difficulty arises because potential investors may be less willing to provide credit protection, or may only do so at higher costs. Such a freeze in the synthetic securitisation market would expose banks to higher capital requirements than they had anticipated when originating the loans. During a severe economic downturn, such rollover risk can thus create procyclical effects.

Interconnectedness enables risk to spread throughout the financial system, potentially creating a contagion channel if these interconnections are opaque and challenging to

monitor and assess. Risk transfer through synthetic securitisation can be beneficial when the risk is moved to entities that can manage it more effectively or absorb it better if it materialises. However, it can pose a threat when it becomes a channel for contagion. This situation can arise if opaqueness makes it harder to trace and monitor the risk and/or if the risk gets amplified because of underlying vulnerabilities in its ultimate holder.⁵ At present, only public transactions need to be reported to the securitisation repositories, whereas most synthetic securitisations are private. This, combined with complex interconnections between market participants across different jurisdictions and financial sectors, makes it harder to see who ultimately bears what type of risk. For instance, credit-linked notes are frequently used as collateral in repo transactions, adding an additional layer

⁵ See ESRB (2024), "A system-wide approach to macroprudential policy".



of interconnectedness and risk amplification channels due to leverage. Against this backdrop, the ESRB welcomes the proposal set out in the Joint Committee Report on the implementation and functioning of the Securitisation Regulation⁶ to extend mandatory reporting requirements to securitisation repositories for private securitisations.

Any changes to the STS criteria should be carefully examined from a financial stability perspective to ensure that no sources of systemic risk are introduced. The synthetic STS

securitisation market has grown strongly in recent years, contrasting sharply with the stagnation seen in most other securitisation market segments. Simplification and other regulatory changes can play a role in fostering the growth of the synthetic STS securitisation market. For example, the Joint Committee Report on the implementation and functioning of the Securitisation Regulation considers several measures to unlock the potential of the securitisation markets. To ensure sustainable growth in this market segment, such changes need to be evaluated from a financial stability perspective. For instance, the Joint Committee Report considers the pros and cons of allowing (re)insurers to act as eligible providers of unfunded credit protection under the STS framework. From a financial stability perspective, the ESRB believes that the drawbacks of such a regulatory change would outweigh the benefits. In particular, such a change could create a contagion channel from the (re)insurance sector to the banking sector via concentration and counterparty risk.

⁶ Joint Committee of the ESAs (2025), "Joint Committee Report on the implementation and functioning of the Securitisation Regulation (Article 44)".



1 Introduction

Securitisation can bring economic benefits and support financial stability. Securitisation essentially transforms a pool of illiquid loans into securities, offering several advantages for banks and the broader economy. For banks, it provides a means to diversify funding sources, potentially lower funding costs, and become less dependent on their own credit ratings.⁷ By securitising loans, banks can transfer credit risk off their balance sheets and reduce capital requirements, thereby freeing up capacity for additional lending. These securities may also qualify as collateral for central bank operations and as high-quality liquid assets for calculating the liquidity coverage ratio. Meanwhile, investors can benefit from securitisation by gaining access to asset classes that may not be readily available through other investment avenues. Ultimately, by providing economic agents with increased access to credit on more favourable terms, securitisation can bring economic benefits. And by distributing risk to economic agents that may be better able to manage and/or absorb it when it crystalises, securitisation can also support financial stability.

Securitisation may entail risks to financial stability that can harm the economy. The global financial crisis (GFC) demonstrated how securitisation can contribute to excessive risk-taking within the financial sector. Poor underwriting standards, complex and opaque products and misaligned incentives between market participants served to amplify the financial stability risks generated by such instruments.⁸ Securitisation also created excessive leverage in the financial system by fuelling a rise in asset prices and overindebtedness across borrowers. This led to a deeper crisis and caused the benefits of securitisation to be outweighed by the cost it inflicted on the financial system and on the real economy.

In 2017, the EU adopted a regulatory framework for securitisation intended to reap the benefits of securitisation while limiting the risks to financial stability. The European

Commission's 2014 Investment Plan for Europe set out to develop an EU capital markets union, thus reducing the fragmentation of the EU's financial markets, and to improve financing for the EU economy.⁹ A key part of this plan was to revive high-quality securitisation markets while avoiding the mistakes that led to the 2008 crisis. Securitisation was viewed as a tool to enhance the depth and liquidity of capital markets, while also attracting a wider range of investors and improving resource allocation. This initiative led to the adoption of the European Securitisation Regulation¹⁰ (SECR) in 2017, which came into effect on 1 January 2019. The Regulation established a set of criteria to distinguish simple, transparent and standardised securitisations (known as the STS criteria) from those that are complex, opaque and non-standardised.¹¹ At the outset, the STS criteria applied only to traditional (also known as "true sale" or "cash") securitisation, where the

¹ For an overview of the STS label, see PCS (2023), "A quick guide to the STS Regime".



⁷ See Deku, Y., Kara, A. and Zhou, Y. (2019), "Securitization, bank behaviour and financial stability: a systematic review of the recent empirical literature".

For more on the role of securitisation markets in the global financial crisis, see Box 3 of ESRB (2022), "Monitoring systemic risks in the EU securitisation market".

⁹ See European Commission (2014), "An Investment Plan for Europe".

¹⁰ See Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (OJ L 347, 28.12.2017, p. 35).

originator typically transfers the assets underlying the securitisation off their balance sheet. The SECR also established a comprehensive reporting framework for public transactions through data repositories to meet the needs of investors and supervisors. Lastly, the regulatory framework included amendments to the CRR based on the revised Basel framework for securitisations¹², adding a more risk-sensitive prudential framework for securitisations.¹³ STS-compliant securitisations benefited from more favourable prudential treatment compared to non-STS securitisations.

In 2021, the STS criteria for securitisation in the EU were extended to synthetic

securitisation. As part of the EU Capital Markets Recovery Package, the SECR was amended in 2021 and the STS criteria were extended to synthetic securitisations.¹⁴ In contrast to true sale securitisations, in synthetic securitisations the assets underlying the securitisation remain on the originator's balance sheet and only the credit risk of the assets is transferred synthetically, typically via a contingent contract (a derivative or a CLN) or financial guarantees. This change in the SECR was designed to support the EU economy's medium-term recovery from the effects of the COVID-19 pandemic by stimulating securitisation activity.

The ESRB is responsible for the macroprudential oversight of the EU securitisation market, which includes assessing the impact on financial stability of the decision to extend the STS criteria to synthetic securitisations. The SECR assigned the macroprudential oversight of the European Union's securitisation market to the ESRB.¹⁵ According to the SECR, the "ESRB shall continuously monitor developments in the securitisation markets" and, at least every three years, and in collaboration with the EBA, publish a report on the financial stability implications of the securitisation market in order to highlight financial stability risks. The first edition of this report focused on traditional securitisation and was published in 2022.¹⁶ Furthermore, following the amendments made to the SECR in 2021 to expand the STS criteria to on-balance-sheet securitisations¹⁷, the ESRB, in collaboration with the ESAs, was mandated to assess the impact on financial stability of introducing the STS criteria for synthetic securitisations and to publish its findings in a report. This mandate includes assessing and reporting systemic risks created within this market, focusing on the concentration and interconnectedness among non-public credit protection sellers. The SECR specified that the report should take into account the specific features of synthetic securitisation, namely its typical bespoke and private character in financial markets,

¹⁷ See Regulation (EU) 2021/557 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis (OJ L 116, 6.4.2021, p. 1).



¹² See BIS (2016), "Revisions to the securitisation framework".

¹³ See Regulation (EU) 2017/2401 of the European Parliament and of the Council of 12 December 2017 amending Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (OJ L 347, 28.12.2017, p. 1).

¹⁴ See Regulation (EU) 2021/557 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis (OJ L 116, 6.4.2021, p. 1).

¹⁵ See Article 31 of Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (OJ L 347, 28.12.2017, p. 35).

¹⁶ See ESRB (2022), "Monitoring systemic risks in the EU securitisation market".

and examine whether the treatment of STS on-balance-sheet securitisation is conducive to overall risk reduction in the financial system and to better financing of the real economy.

This report contains the ESRB's assessment of the financial stability implications of extending the STS criteria to synthetic securitisations in the EU, as mandated under the

SECR. The report, which was due in 2022, was delayed as the ESRB decided to reassess its priorities in the wake of Russia's invasion of Ukraine. However, the delay did allow for this assessment to look at a larger sample. The report is organised as follows: Section 2 outlines the mechanics of synthetic securitisation and introduces the STS framework. Section 3 provides an overview of recent developments in the EU synthetic securitisation market (both STS and non-STS), set against global trends and against the traditional securitisation market. Section 4 explores how synthetic STS securitisation is structured, the concentration among originators, the types of protection sellers involved, and the credit quality of the securitised loans. Finally, Section 5 presents the final financial stability considerations.



2 Synthetic securitisations and the STS framework

This chapter provides an overview of the EU synthetic securitisation framework. It starts by describing traditional securitisation and compares it with synthetic securitisation. It then sketches out the securitisation process, differentiates between funded and unfunded credit protection, and explores the incentives for banks to participate in securitisation. It also examines the potential implications of synthetic securitisation for financial stability. The chapter concludes with a description of the simple, transparent and standardised (STS) framework.

2.1 Synthetic securitisation

In traditional securitisation, banks remove loans from their balance sheets by selling them to third-party investors. In a typical traditional securitisation, the originator puts together a pool of loans that have similar risk characteristics, such as residential mortgages, consumer loans, auto loans or credit card receivables, and sells them to a SSPE. The pool of loans is thus transferred off the balance sheet of the originator, which is why this type of arrangement is known as "true sale" or "cash" securitisation.¹⁸ The originator and the SSPE are bankruptcy-remote entities, meaning they are insulated from each other's risk of distress or bankruptcy. To finance the acquisition of the assets from the originator, the SSPE issues tradable securities. These securities are divided into tranches of different seniority and are backed by the purchased assets. The SSPE receives the proceeds generated by the assets and distributes them among the investors based on the level of seniority of the tranches (Figure 1).¹⁹

For a more detailed description, see, for example, Fabozzi and Kothari (2008).



¹⁸ Although credit risk is transferred under the prudential framework if SRT is achieved, the accounting framework (e.g. IFRS 9) only allows for the derecognition of the assets from the originator's balance sheet in specific circumstances. Generally, if the originator retains the servicing of the loans, accounting derecognition is not feasible.

Figure 1





Banks engage in traditional securitisation mainly for funding and risk transfer purposes. By

selling some of their assets through true sale securitisation, banks obtain funding and move their credit risk off their balance sheet. This may reduce capital requirements, thus freeing up capacity to support new lending. True sale securitisation transforms a pool of illiquid loans into tradable securities. When the originating banks retain a large share of the tranches issued, they benefit from the fact that the securities are more liquid than the underlying assets. These securities may qualify as high-quality liquid assets for the purpose of calculating the liquidity coverage ratio²⁰ and as collateral for central bank operations.

As in traditional securitisation, synthetic securitisation involves dividing the credit risk of a portfolio of loans into tranches of different seniority. In synthetic securitisation, the total credit risk of the loan portfolio is divided into layers with different levels of seniority (known as "tranches"), ranging from the riskier "junior tranche" (often called the "first-loss" or "equity tranche"), to the less risky "senior tranche", with a three-tranche structure that includes an intermediate level of risk and seniority known as the "mezzanine tranche". The threshold at which losses begin to affect a specific tranche is referred to as the "attachment point". For instance, if the mezzanine tranche has an attachment point of 5%, it means that the initial 5% of losses on the loan pool are absorbed by the first-loss tranche before impacting the mezzanine tranche. The attachment point of the mezzanine tranche corresponds to the detachment point – the threshold at which losses completely exhaust the tranche – of the first-loss tranche.

Unlike traditional securitisation, in synthetic securitisation the loans remain on the originator's balance sheet and the credit risk of a specific tranche is transferred to a third

²⁰ For more on the prudential treatment of securitisation under financial regulation, see ESRB (2022), "Monitoring systemic risks in the EU securitisation market".



party through a credit protection agreement.²¹ In synthetic securitisation, ownership of the underlying assets – usually loans to SMEs or other corporates – remains with the originator. Credit protection is achieved through a contingent contract (a derivative or a CLN) or financial guarantees, rather than through an outright sale. The originator (protection buyer) agrees to pay a credit protection premium to the investor (protection seller), who in turn agrees to compensate the originator for any losses resulting from a credit event, such as bankruptcy, default or restructuring, affecting the underlying loans of the securitisation. The credit protection can be either funded or unfunded (Box 1). With unfunded credit protection, the originator is exposed to counterparty risk, meaning that if the protection seller fails on their obligation to pay the credit protection following a credit event, the originator bears the loss. Although an SSPE is not required in synthetic securitisation, as it is in traditional securitisation, it is often used. When an SSPE to the investors (Figure 2). The use of an SSPE is tied to how the credit protection arrangement is structured.

Figure 2





Source: ESRB.

Notes: For simplicity, this figure illustrates credit-linked notes sold to investors by an SSPE without collateral (i.e. an unfunded guarantee). For a more accurate depiction of a typical synthetic securitisation, please see Figure B of Box 1.

²¹ In practice, there are also synthetic securitisations where the originators do not retain the exposures on their own balance sheet. These are typically referred to as "arbitrage" synthetic securitisations and are not eligible for the STS criteria.



Box 1

Funded and unfunded credit protection in the context of synthetic STS securitisation

When credit protection is unfunded, the originator is exposed to counterparty risk. In the context of unfunded credit protection, the credit risk is transferred through a financial guarantee or a credit default swap (CDS). The originator, also known as the protection buyer, pays a protection fee to the investor, who acts as the protection seller. In exchange, the investor provides credit protection to cover the credit risk associated with a specific tranche of the underlying loans. This type of protection is labelled "unfunded" because the protection seller makes no upfront payment to meet any potential future liabilities. The investor is required to compensate the originator only if and when a credit event occurs. To mitigate this risk, the SECR deems unfunded guarantees as eligible for the STS criteria only when they are provided by an investor (protection seller) recognised under the CRR as carrying 0% risk weight, such as public sector entities, central banks, multilateral development banks, or international organisations (Article 26e(8)(a) of the SECR). This mitigates the counterparty risk to which the originator is exposed throughout the transaction's lifespan. The European Investment Bank/European Investment fund are examples of supranational entities providing financial guarantees on mezzanine and/or senior tranches of SME securitisations.²²



Figure A Unfunded credit protection

To qualify for STS status, the credit protection provided by private protection sellers must **be funded.** When the investor (protection seller) is not recognised by the CRR as eligible for a 0% risk weight, which is typically the case for private entities, the SECR requires that the protection seller funds the credit protection by providing high-quality collateral in order for the securitisation to

²² For more information on the EIB/EIF facilities, see the EIF web page Portfolio Guarantees & Credit enhancement / Securitisation.



qualify for STS status. Such high-quality collateral could be in the form of 0% risk-weighted debt securities, such as EU government securities or securities of supranational entities, or in the form of cash. If in cash, it should be either held with a third-party credit institution or deposited with the protection buyer, with both options subject to a minimum credit quality standard (Article 26e(8)(c) of the SECR). A funded credit protection arrangement can be structured through financial guarantees, credit derivatives or CLNs.

Funded guarantees or credit derivatives: in this type of structure, the protection seller either provides a financial guarantee to the originator or enters into a credit derivative contract with the originator. Additionally, the investor provides an extra layer of security in the form of a cash deposit or low-risk debt securities. The collateral protects the originator against counterparty risk while simultaneously reducing the capital requirements associated with the exposure. Once any realised losses covered by the protection contract have been accounted for, the remaining collateral must be returned to the investor upon the termination of the credit protection agreement.

CLNs: in this type of structure, the originator issues a CLN that is purchased by one or more investors. The CLN carries an embedded credit derivative. Upon issuance, the investor purchases the CLN. The proceeds provide the collateral, which is deposited or invested in eligible instruments, such as low-risk debt securities. This structure may also require a trustee or custodian. The amount the originator is scheduled to repay on the note – that is, principal, coupon or both – may be written down, based on the protection payments stipulated in the terms of the note ("the embedded credit derivative"). The returns on the collateral, along with the protection premium payments from the originator, are used to ensure that interest and principal payments to CLN holders are met. Due to the prefunded nature of this type of credit protection, the ability of the originator (protection buyer) to obtain credit risk protection is not contingent on the creditworthiness of the investor (protection seller) over the life of the transaction. The CLNs can be issued either directly by the originator or indirectly through an SSPE. When the CLNs are issued via an SSPE, the credit risk is initially transferred from the originator to an SSPE (Figure B).





Banks engage in synthetic securitisation mainly to achieve a significant risk transfer, which in turn provides them with regulatory capital relief. Like traditional securitisation, synthetic securitisation allows banks to move credit risk off their balance sheets. This is reflected in a reduction of the regulatory capital required for the underlying portfolio. Each tranche in a synthetic securitisation is subject to risk-based capital requirements: the riskiest first-loss tranche incurs higher capital charges, whereas the less risky senior tranche incurs lower charges. By transferring the credit risk of the mezzanine tranche to investors in a three-tranche securitisation, and the first-loss tranche in a two-tranche securitisation (a common practice in synthetic securitisations), banks can substantially reduce their regulatory capital requirements (see Box 4). While synthetic securitisation offers several advantages for originator banks, it does not provide them with funding.

To qualify for capital relief, synthetic securitisations must satisfy the criteria of "significant risk transfer" (SRT). To substitute the pre-securitisation capital requirement for each underlying exposure with the capital requirement calculated on the basis of the retained securitised tranches, the securitisation must meet the criteria for SRT under the CRR (see Box 2). While SRT, and the associated capital relief, can be achieved via traditional or synthetic securitisation, in practice synthetic securitisation accounts for most SRT transactions.²³

Synthetic securitisation is viewed by market participants as less costly to issue, more flexible to structure, and less burdensome to manage and administrate than traditional securitisation. For investors, synthetic securitisation offers a simpler and faster way to gain exposure to the credit risk of asset pools, providing flexibility in portfolio management and access to

²³ See González, F. and Morar Triandafi, C. (2023), "The European significant risk transfer securitisation market", ESRB Occasional Paper Series, No 23.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability Synthetic securitisations and the STS framework specific risk profiles. Additionally, since the tranches with transferred credit risk carry higher risk, they tend to offer an attractive rate of return.

The GFC showed how synthetic securitisation can be a source of systemic risk. The GFC highlighted how unfunded credit protection can pose systemic risks in synthetic securitisation, as underscored by the failures of monoline insurers. Before the crisis, monoline insurers expanded their operations to offer unfunded guarantees for structured credit products like asset-backed securities and collateralised debt obligations, enabled by regulatory changes. During the GFC, the sharp decline in the value of these products led to substantial losses for monoline insurers, resulting in widespread downgrades and the failure of most of these insurers, thus exacerbating the financial turmoil. Entities that had relied on monoline insurers for credit protection, including banks that had issued those structured products, faced write-downs as the value of their protection diminished as the insurers were downgraded.²⁴

Unfunded credit protection creates an additional layer of synthetic leverage. When investors sell unfunded credit protection to originators, they take on the credit risk of the underlying reference assets without having to commit the full amount that would be required were they directly investing in the underlying assets, as is typical in traditional securitisation. This arrangement allows investors to gain exposure to credit risk with a much smaller initial investment, thus leveraging their position. This synthetic leverage magnifies both the potential returns and the potential losses for investors. In the event of a credit default, investors must cover potentially significant losses. Consequently, in unfavourable conditions, high leverage can result in significant financial losses for investors, ultimately affecting their solvency and ability to fulfil the credit protection agreements, potentially leading to systemic impacts.

Box 2 Significant risk transfer

Significant risk transfer is the concept used in the EU regulatory framework to refer to trades that result in capital relief. The concept was introduced in Basel II in 2004 and formally incorporated in EU regulation through the Capital Requirements Directive (CRD) in 2006.²⁵ Since 2014, the SRT framework has been part of the CRR to ensure a harmonised approach across EU countries. SRT securitisation has grown strongly in Europe in recent years, to the point where some estimate that the European market accounts for around 85% of the global SRT market.²⁶ The SRT market is now a regular part of many European banks' capital management strategies, alongside traditional instruments like Additional Tier 1 bonds and common equity.²⁷

The SRT securitisation framework allows banks to reduce their regulatory capital requirements by transferring the credit risk of a high-risk tranche to investors. Once an SRT is achieved under Articles 244 to 246 of the CRR, banks are required to hold capital only against those tranches

²⁷ See González, F. and Morar Triandafi, C.(2023), "The European significant risk transfer securitisation market", ESRB Occasional Paper Series, No 23.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability Synthetic securitisations and the STS framework

For a more detailed explanation on the lessons learned from the Great Financial Crisis for insurance companies, see Box 1 of the Joint Committee Report on the implementation and functioning of the Securitisation Regulation.

²⁵ See Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast) (OJ L 177, 30.6.2006, p.1).

See Renault, O. (2022), "Significant Risk Transfer (SRT) Chronicles", Pemberton News and research.

whose risk they have retained²⁸, rather than for the entire underlying portfolio. This results in significantly lower capital requirements for the retained tranches post-securitisation compared with the requirements before securitisation, because banks usually retain only the credit risk of the senior tranche, which typically accounts for most of the underlying portfolio but has a low capital requirement, and sometimes a thin junior tranche. SRT can be achieved in both synthetic and traditional securitisation. However, synthetic securitisation currently makes up the bulk of SRT transactions.

To qualify for the SRT framework, as specified in Articles 244 and 245 of the CRR, the transfer of risk needs to be effective. The originator of the securitised product is not allowed, for instance, to repurchase the securitised exposures, in the case of traditional securitisation, or call the transaction before most of the securitised exposures have been amortised. Banks can choose between two different paths: the SRT route and the permissions-based route.

Under the SRT route, Articles 244(2) and 245(2) of the CRR set out two fundamental tests to achieve an SRT. The first relates to mechanical risk transfer, which requires the sale of a minimum portion of non-senior tranches to external investors. In a two-tranche structure, the originator bank should transfer at least 80% of the first-loss exposure value; in a three-tranche structure, the originator bank should transfer a minimum of 50% of the RWAs of the mezzanine position.

Alternatively, banks can still benefit from capital relief if they demonstrate, among other criteria, that they have adequate internal risk management to assess the transfer of risk under Articles 244(3) and 245(3) of the CRR. This permissions-based approach is less prescriptive than the SRT route and focuses on the internal framework developed by the bank to assess and manage risk. The adequacy of internal risk management policies and the methodologies employed are the key dimensions used to assess the transfer in this case.

In both cases, bank supervisors need to assess whether the bank's capital requirements can justifiably be reduced – that is, whether this reduction is in line with the credit risk transferred to third parties. This validation ensures that banks are not in a weaker capital position after originating SRT transactions. The CRR allows the competent authorities to object to SRT if the capital relief is not commensurate with risk transfer.

2.2 The EU STS Securitisation framework

The SECR established a harmonised cross-sectoral framework for securitisation within the

EU. Designed to enhance and harmonise the legislative framework established in the wake of the GFC, the SECR came into force in 2019 to address the risks posed by complex and opaque securitisation. Through increased transparency and standardisation, the SECR aims to revitalise the EU securitisation market, encourage safer securitisation practices, and broaden financing options for EU firms. The SECR also enforces stricter rules on risk retention and investor due

²⁸ This includes tranches in traditional securitisations not sold to investors and any tranche in a synthetic securitisation.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability Synthetic securitisations and the STS framework

diligence while prohibiting re-securitisation. The SECR represents a step forward in regulating the EU securitisation market while promoting financial stability.

A key element of the SECR was the introduction of the simple, transparent and standardised framework. The SECR introduced a clear set of criteria to identify simple, transparent and standardised (STS) securitisations. Drawing from the Basel framework's simple, transparent and comparable (STC)²⁹ regime for traditional securitisation, the STS criteria aim to ensure that investors can easily distinguish complex, opaque and bespoke securitisations from simple, transparent and standardised securitisations by requiring the disclosure of all necessary information.

To qualify for the synthetic STS regime, securitisations must fulfil several requirements, as outlined in Articles 26b to 26e of Section 2a of the SECR. These include conditions on underlying exposures (Article 26b), standardised procedures (Article 26c), transparency regulations (Article 26d), adequate credit protection coverage (Article 26e), and termination conditions (Article 26e). Synthetic securitisation transactions that meet these requirements qualify as STS on-balance-sheet (synthetic) securitisations.

Table 1 STS general requirements

Article 26b	The requirements related to simplicity apply to the originator and the underlying exposures.
Article 26c	The requirements related to standardisation aim to standardise the procedure regarding the securitisation structure. This includes requirements on transaction documentation, loss allocation and servicing requirements.
Article 26d	The requirements related to transparency specify the regulations governing the disclosure of information between the originator, investor, SSPE and other third parties.
Article 26e	This article sets out the requirements for adequate credit protection coverage in case of a credit event and the conditions for investors and originators when it comes to terminating a securitisation transaction. It also covers the requirements relating third-party verification agents and synthetic excess spreads.

In 2021, the STS framework was extended to include synthetic securitisations. Initially, the STS framework was limited to traditional securitisation. However, in the wake of the COVID-19 pandemic, and as part of the EU Capital Markets Recovery Package, the SECR was amended in 2021 in a bid to stimulate securitisation activity and support a medium-term economic recovery. The key amendment to the SECR was the extension of the STS framework to include synthetic securitisations.

⁹ The EU STS regime covers both true-sale and synthetic securitisations, whereas the Basel framework's STC regime (and the UK STS regime) covers only true sale securitisations. Some countries, including the United States, do not recognise STC securitisations and therefore offer no capital reductions for these exposures.



Compliance with STS criteria must be notified to ESMA. National competent authorities (NCAs) are responsible for overseeing the STS criteria, while the ESAs ensure that STS requirements are understood and consistently applied among designated NCAs. In this context, it is important to highlight the EBA Guidelines on the STS criteria for traditional³⁰ and on-balance-sheet³¹ securitisation, as well as the peer review on the implementation of STS requirements entrusted to ESMA under the SECR.³² Compliance with the STS criteria must be notified to ESMA by the originators and/or sponsors. Securitisations meeting the STS criteria receive the STS label once published in the ESMA public register for STS securitisations (see Box 3 below).

Box 3

STS notification requirements

Under Article 27(1) of Regulation (EU) 2017/2402³³, originators and sponsors are required to notify ESMA when a securitisation meets the STS criteria. For traditional securitisations, both the originator and the sponsor must submit this notification jointly, whereas for synthetic securitisations, the responsibility lies solely with the originator. The notification template that must be submitted to ESMA, as referred to in Article 27(7) and detailed in the RTS³⁴, includes several key components. These include the identification of the securitisation transaction, detailed information demonstrating compliance with the STS criteria, specifics about the risk retention measures, data on the underlying assets and their performance metrics, and, if applicable, details of any third-party verification of STS compliance. While certain fields are mandatory for both public and private transactions, others are optional specifically for private transactions.

ESMA is responsible for maintaining a public list of all notified STS securitisations. Each securitisation should be added to the list immediately upon notification. ESMA must also update the list when any securitisation is no longer deemed STS, either due to a decision by the competent authorities or a notification from the originator or sponsor.

According to Article 29(5) of the SECR, NCAs must ensure that originators and sponsors comply with the STS criteria. A third party may be authorised by a competent authority to verify that a securitisation meets the STS criteria. However, even with third-party verification, the ultimate responsibility for ensuring compliance remains with the originator and sponsor, who must ensure the accuracy of the STS notification and ongoing adherence to the criteria. This means that, even if a third party has verified compliance, the originator and sponsor remain legally accountable for the accuracy of the STS notification and for the ongoing compliance of the securitisation. This system

³⁴ See Commission Delegated Regulation (EU) 2020/1224 of 16 October 2019 supplementing Regulation (EU) 2017/2402 of the European Parliament and of the Council with regard to regulatory technical standards specifying the information and the details of a securitisation to be made available by the originator, sponsor and SSPE (OJ L 289, 3.9.2020, p. 1).



³⁰ See EBA Guidelines on STS criteria for non-ABCP securitisation.

³¹ See EBA Guidelines on STS criteria for on-balance-sheet securitisation.

³² Article 36(7) of the SECR.

³³ See Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (OJ L 347, 28.12.2017, p. 35).

ensures that the securitisation market within the EU operates under stringent standards, promoting stability and investor confidence.

The extension of the STS label to synthetic transactions has made it more advantageous for banks to achieve a significant risk transfer. Given that most synthetic securitisations achieve an SRT, extending the STS label to such transactions enabled banks to achieve higher capital relief when using either the internal ratings-based (IRB) approach or the standardised approach. Securitisations that meet the STS requirements are subject to a lower risk weight floor of 10% for retained senior tranches, compared with a 15% floor for those that do not meet the STS criteria. For banks operating under the standardised approach, the STS regime lowered by 50% the "p" factor³⁵ used to calculate the risk weights. For IRB banks, the p-factor was also reduced by 50% within the formula, although it is still subject to a floor of 0.3. As a result, it has reduced the size of the mezzanine tranche needed to achieve a given level of capital savings. See Box 4 below for a simplified example of regulatory capital relief obtained through synthetic STS securitisation.

Box 4

Synthetic STS securitisation and regulatory capital relief – a simplified numerical example

Figure A below shows a simplified numerical example to demonstrate the benefits for banks in obtaining regulatory capital relief through synthetic STS securitisation. This example attempts to replicate the typical market structure of a three-tranche synthetic STS securitisation transaction. In the example, the underlying reference loan pool is worth €2 billion. Considering a risk weight (RW) of 53%, a bank with a 14% capital requirement must set aside €148.4 million to meet the capital requirements for this non-securitised loan portfolio.

If the bank decides to securitise the same loan portfolio and transfer the risk of the mezzanine tranche of this portfolio through an SRT transaction, the capital requirements would be significantly lower. To simplify the calculation, the transaction is assumed to be both SRT and STS. Replicating the typical market structure of a three-tranche synthetic STS securitisation transaction, the originator and the protection seller determine that 1% of the losses of the portfolio will be allocated to the first-loss tranche, 8% to the mezzanine tranche, and remaining losses to the senior tranche. The originator will retain the first-loss and senior tranches, but transfer the risk of the mezzanine tranche. Following the securitisation, the senior tranche has a much lower risk weight (10%), resulting in capital consumption of €25 million. The mezzanine tranche has a 0% risk weight, as the risk is transferred to a protection seller having a risk weight of 0% according to the CRR, and the first loss will be taken in full due to the 1,250% risk weight resulting in a capital deduction of €20 million. Overall, the transaction reduces the bank's regulatory capital requirement by €103.4 million compared with a situation where the bank held the portfolio without transferring the risk. Last but not least, the regulatory capital savings obtained must be weighed against the cost of the financial guarantee provided by the protection seller, as well as any fees and expenses incurred by the bank

³⁵ The "p" factor is a non-neutrality factor used to increase the total capital charges associated with a securitised pool of assets compared with holding the underlying assets directly on the balance sheet. A higher "p" factor means a higher capital charge. For instance, a "p" factor of 1 means that for the whole securitisation structure, there is 100% more capital required compared with the requirement for the underlying assets.



in structuring the transaction. According to González and Triandafil (2023), in significant risk transfer transactions, the annual protection costs for mezzanine tranches could range from 3-4% for very low-credit risk loans (e.g. residential mortgages) to up to 15-17% for high-risk loans. However, these estimates may change frequently in line with prevailing market conditions and other factors, such as the level of subordination of the protected tranche, collateral, counterparty risk, interest rates and the cost of equity.

Figure A

Numerical example of a typical three-tranche synthetic STS transaction



Source: ESRB, adapted from González and Triandafil (2023). Notes: Capital consumption pre-securitisation: €148.4 million (2 bn×53%×14%). Capital consumption post-securitisation: €45 million. Senior tranche: €1820 m×10%(RW)×14%=€25 million. Mezzanine: €160 m×0%(RW)=0. First Loss: €20 million (1250% RW). Total capital relief: €103.4 million (-70%).



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability Synthetic securitisations and the STS framework

3 The synthetic (STS and non-STS) securitisation market in the EU

This section highlights the key differences between the synthetic securitisation market (including the STS and the non-STS segments) and the traditional securitisation market and is divided into three parts. The first part outlines the data sources used in this report. The second offers an overview of the EU synthetic securitisation market in the context of global developments, and the third compares several features of the EU synthetic and traditional securitisation markets.

3.1 Data

This report relies primarily on data sourced from ESMA's synthetic STS notification template and from the common reporting (COREP) framework. ESMA provided granular data on all synthetic STS transactions, as sourced from its synthetic STS notification template (see Box 3). This data form the basis for identifying the synthetic STS securitisations discussed in this report. Meanwhile, the EBA provided the COREP date. COREP is a standardised reporting framework designed to address the Capital Requirements Regulation and Directive (CRR/CRD). It is used by financial institutions to report their capital adequacy and risk exposures to supervisory authorities and applies to all credit institutions and investment firms operating within the European Economic Area.

COREP template C14.00 includes granular securitisation-level data on transactions where banks have participated as originators, sponsors or investors. These data provide detailed information on each reported transaction, including the identity of the originator, the type of securitisation (traditional or synthetic), the date of origination, the type of underlying exposures, the outstanding amount of the securitised exposures, the amount of the securitised exposures at origination, the exposures in default, the loss given default (LGD), the expected loss (EL), the unexpected loss (UL), the structure of the securitisation (the attachment point of each tranche), and whether the securitisation meets the SRT and STS criteria.

The data reported in the ESMA notification template identifies the protection seller and shows the type of protection agreement. These data include the issue date and notification date to ESMA, the identity of both the originator and the protection seller, the type of synthetic securitisation (funded/unfunded), the type of credit protection agreement (credit derivative/financial guarantee/CLN), the type of underlying exposures, and the international security identification code (ISIN) of the credit-linked notes issued. The identification of the protection seller in the ESMA notification template in the case of synthetic STS securitisations was not considered where the securitisation is structured through an SSPE issuing CLN. In these instances, the SSPE is typically reported as the protection seller, instead of the CLN investors. Consequently, the protection sellers reported in the ESMA notification template in those cases were substituted with the CLN holders. COREP data and the information provided on the ESMA notification template were linked using common identifiers, mainly the origination or issue date and the originator's identity.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic (STS and non-STS) securitisation market in the EU The analysis was further enriched using ECB databases and market data. In addition to the data obtained from COREP and the ESMA notification templates, information was used from the ECB's Centralised Securities Database (CSDB) and the Securities Holdings Statistics by Sector (SHSS). These two databases offer quarterly, ISIN-level details on outstanding amounts and holdings of securities, categorised by country and sector. The SHSS was instrumental in identifying the protection sellers whenever CLNs were used to transfer credit risk, providing data on the amount of CLN holdings by investor sector. However, this dataset does not identify individual investors or provide details on sector and country of residence for non-euro area investors. The analysis also relied on market data from the International Association of Credit Portfolio Managers (IACPM) on the Synthetic Securitisation Market Volume Survey and the Association for Financial Markets in Europe.

3.2 Recent developments in the EU synthetic securitisation market against the backdrop of global developments

The annual issuance of synthetic securitisation has increased fourfold globally since 2016. At the global level, annual issuances of synthetic securitisations increased from €55 billion to €207 billion between 2016 and 2023 (Chart 1, panel a). In the EU, annual issuances rose from €36 billion to €102 billion over the same period. The largest increase in issuances happened in the rest of the world, where annual issuances rose from €7 billion to €79 billion. This trend shows an increase in the use of synthetic securitisation (in terms of the number of transactions and the size of each transaction), as well as the entry of more participants into the market.³⁶ In the EU, the introduction of the STS framework for synthetic securitisations in 2021 might have led to an increase in the issuance of synthetic securitisations, which reached new highs over the subsequent two years.

The EU is the largest market for synthetic securitisation globally. At year-end 2023, the outstanding amount of EU synthetic securitisations came to around €300 billion, accounting for roughly 50% of the world market (Chart 1, panel b). At around 20% (€120 billion), the United Kingdom accounted for the second largest share of the market, with the remaining share distributed across other countries worldwide.

³⁶ Further details on the issuance of synthetic securitisation worldwide can be found in IACPM (2024), "Synthetic Securitization Market Volume: 2016 – 2023".



Issuance and outstanding amount of securitised exposures in the EU and the rest of the world

a) Issuance of synthetic securitisation in the EU and the rest of the world

b) Outstanding amount of securitised exposures in the EU and the rest of the world (2023)





Source: IACPM Synthetic Securitisation Market Volume Survey 2016-2023 (available at IACPM website) . Notes: The IACPM Synthetic Securitisation Market Volume Survey covers the 40 largest global and regional institutions active in the significant risk transfer market; (a) Other regions include Switzerland, United States, Canada and Asia.

3.3 Developments in the EU synthetic securitisation market in relation to traditional securitisation

Synthetic securitisations tend to be backed by corporate or SME loans. As of the second guarter of 2024, almost 80% of the outstanding amount of synthetic securitisations was backed by a portfolio of corporate and SME loans (Chart 2, panel a). In the same period, the main underlying asset classes for traditional securitisation were residential mortgages (44%), corporate and SME loans (20%) and consumer loans (19%). There are several reasons explaining the high share of corporate and SME loans in synthetic securitisation. First, through synthetic securitisation, the originators retain their customer relationship. Second, as most synthetic transactions are private placements (Chart 4, panel a), originators are not subject to the same disclosure requirements as public transactions. This means that they can keep the terms and conditions of those loans confidential.

Synthetic securitisations are originated by few banks. The ten largest originators accounted for 77% of the outstanding amount of synthetic securitisations in the second quarter of 2024 (Chart 2, panel b). Combined, these ten originators represented 37% of total EU banking assets, meaning they are large banks at EU level. These results broadly align with those observed in the case of traditional securitisation. Studies have shown that larger banks are more likely to securitise and



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic (STS and non-STS) securitisation market in the EU

issue collateralised securities in higher volumes.³⁷ This suggests that larger banks may derive greater benefits from participating in synthetic securitisation, and securitisation in general, or it could indicate that a certain bank size is required for these securitisations to be economically viable. Economies of scale, broader expertise, risk management needs, and greater market presence are the reasons typically cited in the literature for the higher prevalence of large banks in the securitisation market.

Chart 2

Share of outstanding amount of securitised exposures by type of underlying loans and size of originator

a) Share of outstanding amount of securitised exposures by type of underlying loans (Q2 2024)

b) Share of outstanding amount of securitised exposures among the largest originators (Q2 2024)





Sources: COREP and ESRB calculations.

Note: In panel b), banks are ordered according to their securitised exposure, i.e. the "Five largest originators" includes the five banks with the largest securitised exposures and the "Next five largest originators" includes the banks ranked sixth to tenth based on securitised exposures in each market segment.

Synthetic securitisations are originated by banks domiciled in few Member States. In the second quarter of 2024, around 80% of the total outstanding amount of traditional and synthetic securitisation in the EU was originated by banks based in France, Italy, Spain and Germany (Chart 3, panel a). In synthetic securitisation, French banks account for approximately 27% of the outstanding securitised exposures, while Spanish, German and Italian banks account for 20%, 17% and 15% respectively. Traditional securitisation exhibits a more balanced distribution among the

³⁷ See Casu, B., Clare, A. Sarkisyan, A. and Thomas, S. (2013), "Securitization and Bank performance", Journal of Money, Credit and Banking, Vol. 45, No 8, December; Farruggio, C. and Uhde, A. (2015), "Determinants of Ioan securitization in European banking", *Journal of Banking and Finance*, Vol. 56, pp. 12-27; Minton, B., Stulz, R. and Williamson, R. (2009), "How much do banks use credit derivatives to hedge Ioans?", *Journal of Financial Services Research*, Vol. 35, No 1, pp. 1-31, February; and Uzun, H. and Webb, E. (2007), "Securitization and risk: empirical evidence on US banks", *Journal of Risk Finance*, Vol. 8, No 1, pp. 11-23, January.



four largest originator countries. The Spanish, Italian and French banking systems each account for roughly 20%, whereas German banks hold a 15% share. This distribution reflects the relative size of banks in these countries within the European Union. In some Member States – such as Germany, Denmark and Sweden – banks prefer covered bonds over traditional securitisation as a funding tool. This preference may, among other reasons, explain why some countries are underrepresented in the traditional securitisation market relative to the size of their economies.

The loans underlying traditional and synthetic securitisations are concentrated among a few Member States. In the second quarter of 2024, around 50% of the total outstanding amount of synthetic securitisations in the EU was backed by loans granted to borrowers located in France, Italy and Spain (Chart 3, panel b). However, the level of geographical concentration is lower in terms of the underlying loans than in terms of the originating banks. This is largely due to the cross-border activity of the EU's largest banking groups. In synthetic securitisation, loans granted to counterparties outside the EU accounted for 19% of the underlying pool of assets, compared to 15% in traditional securitisation.

Chart 3

Share of outstanding amount of securitised exposures by country of the originator and of the underlying exposure

a) Share of outstanding amount of securitised exposures by country of the originator (Q2 2024) *b)* Share of outstanding amount of securitised exposures by country of the underlying exposure (Q2 2024)



Sources: COREP and ESRB calculations. Note: These numbers do not include asset-backed commercial paper (ABCP).



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic (STS and non-STS) securitisation market in the EU

Synthetic securitisations are typically private, while traditional securitisations are more

often public. Unlike public securitisations, private securitisations do not require the preparation of a prospectus, and the transactions are typically tailor-made to match the specific risk and return requirements of the investors. Additionally, private securitisations do not have to be reported to a securitisation repository, but only to the NCAs concerned. As a result, private securitisations tend to be less costly and less complex to issue than public securitisations. As of the second quarter of 2024, around 92% of the outstanding amount of synthetic securitisations was private (Chart 4, panel a). Private securitisations are less common in traditional securitisation, accounting for roughly one-third of the total.

Significant risk transfer was achieved in virtually all synthetic securitisations, compared

with one-quarter of traditional securitisations. In the second quarter of 2024, virtually all synthetic securitisations qualified for significant risk transfer (Chart 4, panel b). This overlap between synthetic securitisation and significant risk transfer suggests that achieving SRT, and the associated capital relief, is the main motivation behind synthetic securitisation (see Box 2). Banks typically prefer to structure SRT transactions using synthetic rather than traditional securitisations because synthetic securitisations offer greater flexibility due to their bespoke nature, are faster to execute, and have lower origination costs since there is no transfer of assets to a vehicle. Indeed, only around 27% of traditional securitisation achieve SRT, suggesting that traditional securitisation is seen more as a tool to obtain funding rather than capital relief (Chart 4, panel b).

Chart 4

Share of outstanding amount of securitised exposures by type of placement and SRT compliance



a) Share of outstanding amount of securitised exposures by type of placement (Q2 2024)

Sources: COREP and ESRB calculations.

Note: These numbers do not include asset-backed commercial paper (ABCP).



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic (STS and non-STS) securitisation market in the EU

b) Share of outstanding amount of securitised exposures: SRT versus non-SRT (Q2 2024)

4 The synthetic STS securitisation market in the EU

This section focuses on synthetic securitisations that meet the STS requirements, as we compare the trend over time with respect to synthetic securitisations that do not meet the STS requirements. It is divided into five parts. Subsection 4.1 analyses how synthetic STS transactions are structured. Subsection 4.2 focuses on market developments since the STS label was extended to synthetic transactions in 2021. Subsection 4.3 examines concentration among originators of synthetic STS securitisations. Subsection 4.4 explores who the protection sellers of synthetic STS securitisations are and where they are located, and investigates potential interconnectedness between originators and protection providers. Finally, subsection 4.5 analyses the credit quality of the loans underlying synthetic securitisation.

4.1 Structure of synthetic STS transactions

The data show that an STS securitisation typically consists of three tranches, with the originator retaining the senior and first-loss tranches but transferring the risk of the mezzanine tranche. In the second quarter of 2024, 62% of outstanding synthetic STS securitisation was structured with three tranches, while the remaining 38% was structured with two tranches. In three-tranche synthetic STS securitisation, the first-loss and mezzanine tranches collectively cover around 1% and 7% of portfolio losses, respectively, while the senior tranche covers the remaining losses (Chart 5, panel a). In a two-tranche structure, the first-loss tranche covers about 6% of portfolio losses. Conversely, in three-tranche synthetic STS securitisation, the protected tranche – meaning the portion of the securitisation whose risk is transferred to a third party – exhibits a median attachment point of 1% and a detachment point of 9%. In a two-tranche securitisation, the median attachment and detachment points are 0% and 7% respectively (Chart 5, panel b). Overall, the data show that originators typically transfer the risk of the mezzanine tranche in a two-tranche securitisation and the risk of the first-loss tranche in a two-tranche securitisation.

The senior tranche attachment point is lower in synthetic STS securitisation than in

synthetic non-STS securitisation. In a three-tranche synthetic STS securitisation, the median senior tranche attachment point is 9%, compared to 13% in synthetic non-STS securitisation (Chart 6, panel a). In a two-tranche synthetic STS securitisation, the median senior tranche attachment point is 7%, while it is 30% in synthetic non-STS securitisation (Chart 6, panel b). Moreover, the interquartile range is less dispersed for synthetic STS securitisation. The lower attachment point for senior tranches is due to stricter credit quality and diversification requirements in synthetic STS securitisations compared with non-STS securitisations. Additionally, as a safeguard against excessively low attachment points for the senior tranche, supervisory entities, during the SRT assessment, expect the senior tranche to be insulated from losses under various scenarios – including a backloaded loss scenario – in which the risk parameters (probability of default and LGD) of the underlying portfolio are also stressed.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic STS securitisation market in the EU

Structure of synthetic STS securitisations

a) Aggregated structure of three-tranche and twotranche synthetic STS securitisations *b) Median attachment and detachment of the risk sold by originators of synthetic STS securitisations*





Sources: COREP and ESRB calculations.

Notes: Panel a) presents the aggregated share of each tranche in three-tranche and two-tranche synthetic STS securitisations. Including the senior tranche in the chart would bring the securitised pool of loans to 100%. In panel b), the attachment point of the risk sold corresponds to the attachment point of the most subordinated tranche protected by third parties. The detachment point of the risk sold corresponds to the detachment point of the most senior tranche protected by third parties. In a securitisation, the attachment and detachments points indicate the minimum pool-level losses at which a given tranche begins to suffer losses and the point at which pool losses completely wipe out the tranche, respectively.



Senior tranche attachment points for synthetic STS securitisations

a) Senior tranche attachment point for a threetranche securitisation, interquartile range (yellow bar) and median (green dot), Q2 2024 *b)* Senior tranche attachment point of a twotranche securitisation, interquartile range (yellow bar) and median (green dot), Q2 2024





Synthetic STS securitisations tend to be funded, meaning that counterparty risk for the originators is mitigated. Box 1 describes how, in synthetic securitisations, credit risk can be transferred from the originator to the investors. As of the second quarter of 2024, the data show that 87% (\in 126 billion) of the outstanding securitised exposures were covered by a funded protection scheme (Chart 7, panel a). This resulted in a protected tranche of \in 11.6 billion at the inception of the contract (Chart 7, panel b). When the transactions are unfunded, the protection is typically provided by a multilateral development bank (0% risk-weighted entity), covering 13% of the total synthetic STS securitised exposures. This arrangement resulted in a protected tranche of \in 1.9 billion at the inception of the contract. These results contrast with those observed before the GFC, where unfunded credit protection was the prevalent credit protection mechanism.³⁸

The bulk of synthetic STS securitisation volume is structured using an SSPE. In contrast to traditional securitisation, synthetic securitisation does not require an SSPE (see Section 2.1). However, the data show that most synthetic STS securitised exposures are structured using an SSPE.

³⁸ See EBA (2020), "Report on STS framework for synthetic securitisation under Article 45 of regulation (EU) 2017/2402".



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic STS securitisation market in the EU

Sources: COREP and ESRB calculations.

Synthetic STS securitised exposures and protected tranches by type of credit protection

a) Synthetic STS securitised exposures by type of credit protection (Q2 2024) b) Amount of protected tranches by type of credit protection



Sources: COREP and ESMA. ESRB calculations.

Notes: In panel b), the amount of the protected tranches was determined by multiplying the share of the protected tranches by both the securitised exposures at contract origination and the outstanding amount of the securitised exposures as of Q2 2024. Where the share of the protected tranche was missing or incorrect, a two-step imputation process was used to estimate the amount. First, two separate averages of the share of the protected tranches were calculated, one for funded credit protection and the other for unfunded credit protection. Second, these averages were applied to the securitisations with missing or incorrect data, depending on whether they were funded or unfunded.

Risk transfer typically occurs through credit-linked notes. Figure 3 shows the most common structure for a synthetic STS securitisation transaction. The credit risk is initially transferred through financial guarantees from the originator to an SSPE. The SSPE issues credit-linked notes and sells them to investors, who then assume the risk associated with the mezzanine tranche of the portfolio. The SSPE allocates the proceeds obtained from selling the notes to deposits or eligible investments (low-risk fixed income assets), as collateral (see **funded credit protection in Box 1**). The returns on these investments, along with the protection premium payments received from the originator, are used to ensure that interest payments to CLN holders are met. The amount the SSPE will repay on the CLN may be written down, depending on the credit events recorded in the mezzanine tranche of the originator's portfolio. Less frequently, CLNs are issued directly by the originating bank without the use of an SSPE. When unfunded credit protection is provided by multilateral development banks, the risk transfer is facilitated through financial guarantees.



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic STS securitisation market in the EU



Figure 3 Typical three-tranche synthetic STS transaction

Source: ESRB, adapted from González and Triandafil (2023).

4.2 Market development since 2021

Despite the small number of transactions, the outstanding amount of synthetic STS

securitisations has grown rapidly. A total of 132 synthetic STS transactions (all private) were reported to ESMA from the time the scope of the STS label was widened in 2021 to include synthetic securitisations through to end-2024 (Chart 8, panel a). Despite this fairly small number, the outstanding amount of synthetic STS securitisations had risen to \in 145 billion by the second quarter of 2024. During the same period, the outstanding amount of synthetic non-STS securitisations was largely unchanged. This means that synthetic STS securitisations account for 40% of the outstanding amount of synthetic (STS and non-STS) securitisations in the EU.

Synthetic STS transactions are on average twice the size of synthetic non-STS

securitisations. The sharp increase in the outstanding amount of synthetic STS securitised exposures, despite the small number of transactions, shows that the average transaction amount was large. Between 2021 and 2023, the average amount of securitised exposures at origination was well over €2 billion for synthetic STS transactions. In comparison, the average size of synthetic non-STS transactions was around €1 billion (Chart 9, panel a).



Number of synthetic STS securitisations and outstanding amount of synthetic securitisations

a) Cumulative number of synthetic STS securitisations notified to ESMA

b) Outstanding amount of synthetic STS and non-STS securitised

(number of transactions)





Sources: COREP, ESMA and ESRB calculations.

4.3 Originators

Synthetic STS securitisations were originated by a small number of large banks. The number of banks originating synthetic STS securitisations in the EU increased from 10 in 2021 to 21 in 2022, before dipping to 17 in 2023 (Chart 9, panel b). These banks typically have large balance sheets, with average assets exceeding €600 billion (Chart 10, panel a).

Synthetic STS securitised exposures constitute a small fraction of banks' total assets. In the second quarter of 2024, the exposures underlying synthetic STS securitisations represented on average 0.9% of the assets of banks participating in this segment. The median and interquartile ranges further suggest that most EU banks have only a small exposure to the loans underlying synthetic STS securitisations (Chart 10, panel b).



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic STS securitisation market in the EU

Average amount of synthetic securitisation and number of banks originating STS securitisations

a) Average amount of synthetic STS and non-STS securitisation

b) Number of banks originating synthetic STS securitisations, by year of origination





Sources: COREP, ESMA and ESRB calculations. Note: These numbers do not include asset-backed commercial paper (ABCP).


Size of banks involved in synthetic securitisation and securitised exposures as share of total bank assets and risk exposure amount

a) Size of banks involved in synthetic securitisation

b) Share of synthetic securitised exposures to total bank assets and risk exposure amount (Q2 2024)



Sources: COREP and ESRB calculations

Notes: Consolidated-level data. These numbers do not include asset-backed commercial paper (ABCP).

Synthetic STS securitisations are mainly originated by banks located in France. In the

second quarter of 2024, French banks accounted for 44% (€55 billion) of the outstanding amount of synthetic STS securitisations (Chart 11, panel a). Spanish and German banks were the second and third largest originators of STS securitisations respectively. Together, banks domiciled in these three countries accounted for approximately two-thirds of the synthetic STS securitised exposures originated in the EU. The synthetic STS securitisation market is also highly concentrated at the originator level, with the five largest originators accounting for 58% of the outstanding amount of the synthetic securitised exposures represented less than 1% of their total assets as of the second half of 2024 (Chart 10, panel b). The small number of banks active in this market and the high level of concentration means that so far only a few large banks have managed to achieve an SRT through synthetic STS securitisation.



Country of origination and share of synthetic STS securitisation among the largest originators

a) Country of origination of synthetic STS securitisation (Q2 2024

b) Share of synthetic STS securitisation among the largest originators (Q2 2024)

(percentage of synthetic STS securitised exposures)

(percentage of synthetic STS securitised exposures)





Sources: COREP and ESMA. ESRB calculations.

Notes: The data include synthetic STS securitisations whose protection seller is a private entity. In panel b), banks are considered from a stand-alone (non-consolidated) perspective. They are also ordered according to their securitised exposure, i.e. the "Five largest originators" includes the five banks with the largest synthetic STS securitised exposures and the "Next five largest originators" includes the banks ranked sixth to tenth.

4.4 Protection sellers

Investment funds and pension funds are the largest protection sellers of EU synthetic STS securitisation. In synthetic STS securitisation, credit risk is transferred from the bank's balance sheet to private investors through the use of financial guarantees, credit derivatives, or most commonly, credit-linked notes. The IACPM provides data by investor type on synthetic securitisations that qualify for the STS label. The data suggest that investment funds and pension funds are the main private protection sellers in synthetic STS securitisation (Chart 12). In 2021, investment funds represented almost 80% of private protection sellers, with pension funds accounting for the remainder. However, by 2023 pension funds had increased their share to around 50%.

Securities holdings statistics confirm the large presence of investment funds as protection sellers. When risk is transferred through credit-linked notes, the CLN noteholders are the protection sellers in synthetic securitisations (see Section 2). The SHSS database can be used to identify both the sector and the country (if within the euro area) of the investors of the credit-linked notes. According to this database, investment funds represent the largest category of private protection sellers among euro area investors, with holdings of approximately €1.6 billion in credit-



linked notes (Chart 13, panel a). The pension fund sector follows as the second largest, with an exposure of roughly $\in 0.2$ billion. The discrepancy between IACPM and SHSS data on pension fund exposure suggests that non-euro area pension funds form a relatively large category of protection sellers in synthetic STS securitisations.³⁹

Chart 12

EU synthetic STS qualifying transactions, protected tranche at inception by investor type



(share of the annual protected amount)

Source: IACPM Synthetic Securitisation Market Volume Survey 2016-2023.

The private protection sellers in synthetic STS securitisations are typically non-EA entities.

According to the SHSS, 75% of CLN exposure is held by non-EA investors. Decomposing the exposures by issuer domicile reveals that most issuers reside in France, Ireland and Spain. In all these countries, the large footprint of non-EA investors is visible. However, for CLNs issued by French entities, a significant share is held by Dutch and domestic investors (Chart 13, panel b). As for the non-EA investors, industry contacts suggest that they are mainly located in the United States and the United Kingdom.

Aside from geographical coverage, SHSS and IACPM data also differ in terms of instrument coverage. When a deal is structured through a financial guarantee, no securities are issued. Consequently, the exposure is not recorded in the SHSS.



Outstanding amount of credit-linked notes issued under synthetic STS securitisation, by investor sector

a) Outstanding amount of CLNs issued under synthetic STS securitisation, by investor sector (Q2 2024) *b)* Outstanding amount of CLN issued under synthetic STS securitisation, by country of the issuer and of the investor (Q2 2024)



Sources: ESMA, CSDB and SHSS. ESRB calculations.

Note: Non-EA investors are computed as the residual when comparing total exposure reported for EA investors in the SHSS and overall total exposure as indicated by the CSDB.

EA investment funds selling protection are primarily regulated under the Alternative Investment Fund Managers Directive (AIFMD) and employ a wide range of investment

policies. When the originating bank issues credit-linked notes directly, the data on synthetic STS transactions reported to ESMA identify the original protection sellers, whether they happen to be EA or non-EA protection sellers.⁴⁰ These data represent only a small segment of the synthetic STS securitisation market and do not include the amount of protection each protection seller provides. Nevertheless, the data provide further insights into the types of investors participating in this market. The data identify investors for 28 out of 89 synthetic STS securitisations, encompassing 171 investment positions across 96 investors. Of these 96 investors, 38 are domiciled in the EU, thus allowing for additional granularity. Among these EU-based investors, 21 are investment funds. Most of the investment funds are regulated under AIFMD. Their investment policies are diverse, with around half of them classified as "Other" (Chart 14, panel a). Apart from this category, common fund types include hedge funds, mixed funds, and bond funds.

⁴⁰ When a transaction is structured through an SSPE, the SSPE is listed as the protection seller in the ESMA notification template. To identify the protection sellers in these instances, we refer to the holders of credit-linked notes as recorded in the SHSS database. However, it is important to note that this dataset does not disclose information about individual investors.



Around 60% of the investment funds holding synthetic STS CLNs are structured as openended vehicles, making them potentially vulnerable to outflows during periods of stress.

Due to the illiquidity of credit-linked notes, investment funds participating in synthetic STS transactions face a risk of liquidity mismatch. In the event of significant redemptions, it might prove challenging to meet outflows if the funds are heavily exposed to CLNs. This liquidity mismatch may encourage a first-mover advantage and cross-asset spillovers, especially considering the diverse investment strategies of the funds holding synthetic STS securitisations (Chart 14, panel b).

Chart 14

Investment policy and fund types of investment funds providing protection for synthetic STS transactions through CLN



Sources: ESMA and ECB.

Some investment funds holding synthetic STS CLNs use leverage, which is predominantly sourced from lenders other than the securitisation originator. Leverage can exacerbate liquidity mismatches, and investment funds holding synthetic STS CLNs exhibit a broad spectrum of leverage positions, ranging from unleveraged to several times their equity. According to AnaCredit data, approximately €165 million in loans has been extended by EA credit institutions to EU investment funds holding CLNs. While the exposures of these funds to CLNs remain unknown, the data reveal that the risk transferred out of the banking system through synthetic STS securitisations can be partially cycled back to the banking sector. In some cases, leverage is provided by the bank originating the synthetic STS securitisation. However, the available data are insufficient to establish a causal link between the loans extended by the originator and the protection seller's investment in CLNs. If the originator provides financing for the protection seller to subscribe to CLNs, it would effectively mean the originator is funding its own capital relief. This could prompt the supervisor to consider the transaction ineligible for SRT status.



While the STS framework enhances transparency, assessing the risk to financial stability from concentration and interconnectedness is constrained by a lack of data. Analysing the investor base of synthetic STS securitisations poses challenges due to a lack of data for what is already a small segment of the securitisation market, making it hard to draw conclusions about patterns or systemic implications. Furthermore, the data do not allow for a comprehensive assessment of the concentration and interconnectedness among non-EA investors, who constitute the largest portion of the market.

4.5 Credit quality of the securitised loans

To date, the default rate in synthetic STS securitisations has been negligible. In the second quarter of 2024, the default rates for synthetic STS securitisations across all categories of underlying loans were very low (Chart 15). The highest default rates within synthetic STS securitisations were observed in consumer loans, reaching 0.7%. Overall, synthetic STS securitisations exhibited lower default rates compared with both non-STS and traditional securitisations across all segments. An analysis by the EBA, covering the period from 2000 to 2008, confirms that the default rate in synthetic securitisations was lower than in traditional securitisations.⁴¹ On the one hand, the low default rate exhibited by synthetic STS securitisations may be partially influenced by factors such as vintage effects and the historically low default rates seen since the scope of the STS label was extended to cover synthetic securitisations in 2021. On the other hand, this likely reflects the more stringent requirements associated with STS securitisations, according to which the underlying portfolio must meet certain minimum standards for credit quality and diversification, as specified in Article 243(2) of the CRR. These requirements do not apply to synthetic non-STS securitisations, where originators are free to include riskier assets and less diversified portfolios. Lastly, the high cost of credit protection for risky loans creates an incentive for originators to choose high-quality loans for synthetic securitisation.

¹ See EBA (2015), "The EBA report on synthetic securitisation (EBA/Op/2015/26)".



Unveiling the impact of STS on-balance-sheet securitisation on EU financial stability The synthetic STS securitisation market in the EU



Chart 15 Default rate by type of underlying exposure (Q2 2024)

Sources: COREP and ESRB calculations.

Notes: (a) Excludes securitisations classified as non-performing, as well as those reported as performing but with more than 30% of the underlying assets in default. Defaulted exposures are calculated in accordance with Article 261(2) of the CRR, as the ratio of the nominal amount of underlying exposures in default to the total nominal amount of all underlying exposures.

According to the internal estimates made by the banks, the average probability of default for corporate and SME loans underlying synthetic STS securitisations was approximately 1%, with a corresponding average LGD of around 39%. The credit risk metrics estimated by banks using the IRB approach provide a forward-looking perspective on their evaluation of underlying loan risk. Between 2020 and 2024, the estimated average probability of default for securitised exposures remained stable at approximately 1% for synthetic STS securitisations and 2.5% for synthetic non-STS securitisations (Chart 16, panel a). Synthetic STS securitisations generally exhibit slightly higher LGDs compared with synthetic non-STS securitisations, both usually averaging around 40% (Chart 16, panel b). Overall, these findings suggest that banks perceive the loans underlying synthetic STS securitisations as being less risky than those in non-STS structures. Additionally, when comparing the actual default rates in the second quarter of 2024 with the probability of default estimated by banks between 2020 and 2024, the findings suggest that the credit performance of synthetic transactions exceeded the banks' expectations.



Probability of default and loss given default for loans underlying synthetic securitisations

a) Weighted average probability of default of corporate and SME loans underlying synthetic securitisations

b) Weighted average loss given default of corporate and SME loans underlying synthetic securitisations



Sources: COREP and ESRB calculations.

Note: This information is reported only by those institutions that apply the IRB approach to the vast majority (more than 95%) of their securitised exposures.

Expected and unexpected losses for corporate and SME loans underlying synthetic STS securitisations have been lower than those of non-STS securitisations. According to the Basel regulations, expected losses are supposed to be covered on an ongoing basis by provisions and write-offs, as they represent a predictable cost component of the lending business. Meanwhile, unexpected losses relate to potentially large, unpredictable and infrequent losses and should be absorbed by a bank's capital.⁴² From the second quarter of 2021 to the second quarter of 2024, synthetic STS securitisations exhibited consistently lower expected and unexpected losses than non-STS securitisations. More precisely, the average expected loss for synthetic STS securitisations was 0.4%, with an average unexpected loss of 4.1% (Chart 17, panel a). During the same period, synthetic non-STS securitisations exhibited higher average losses, reaching 1% for expected losses and 4.7% for unexpected losses.

The exposure-weighted average maturity of the corporate and SME loans underlying synthetic STS securitisations is around three years. The maturity of the loans also affects their riskiness. The longer the maturity, all else being equal, the greater the risk of the borrowers defaulting. Most synthetic securitisations have a relatively short exposure-weighted average maturity, typically three years or less (Chart 17, panel b). The loans underlying synthetic STS and non-STS securitisations have a similar exposure-weighted average maturity of approximately three years. However, a further analysis of the distribution reveals that loans in synthetic STS

⁴² See BIS (2005) "An Explanatory Note on the Basel II IRB Risk Weight Functions".



securitisations generally have a more uniform maturity than those in non-STS securitisations. Only about a quarter of the corporate and SME loan-backed synthetic securitisations in our sample have a maturity exceeding three years.

Chart 17

Expected loss, unexpected loss and average maturity of loans underlying synthetic securitisations

a) Weighted average expected and unexpected loss of corporate and SME loans underlying synthetic securitisations *b) Exposure-weighted average maturity of corporate and SME loans underlying synthetic securitisations (Q2 2024)*



Sources: COREP and ESRB calculations.

Notes: In panel b), p25, p50, p75 correspond to the 25th, 50th and 75th percentiles of the distribution of the exposure-weighted average of the corporate and SME loans underlying synthetic securitisation in the second quarter of 2024.



5 Financial stability considerations

The ESRB assesses that extending the STS framework to synthetic securitisation has not, to date, resulted in significant risks to financial stability in the European Union. This conclusion is based on the following findings set out in this report. First, the loans underlying synthetic STS securitisations are small compared with the originator banks' balance sheets. Second, the credit protection provided by private entities is funded, thus mitigating counterparty risk. Third, the credit quality of the loans that have been securitised appears to be robust, although synthetic STS securitisations have yet to be tested by a severe economic downturn. Lastly, most of the risk associated with EU synthetic STS securitisation is transferred to investment funds and pension funds that are primarily domiciled outside the euro area. This results in diversification of risk across different sectors and geographical regions.

The ESRB believes that the relaunch of the securitisation market must be accompanied by close risk monitoring and assessment of the risks from procyclical effects and

interconnectedness. The primary objective of synthetic securitisation is to achieve significant risk transfer and obtain the resulting regulatory capital relief. This enables banks to lend more to the economy while maintaining the same level of regulatory capital. Such strategies can also be used to make payouts to shareholders through dividend payments or share buybacks. What little literature there is on this topic suggests that capital relief transactions lead to an increase in both lending and dividend distributions.⁴³ Capital optimisation strategies increase bank leverage, thus making banks more vulnerable during economic downturns. A successful relaunch of the EU synthetic securitisation market would make this market a more material mechanism for achieving significant risk transfer and regulatory capital relief for EU banks. Risk monitoring and assessment is needed to prevent and mitigate any risks to financial stability that such an increase in materiality might entail, especially with respect to any procyclical effects that could arise or impacts caused by interconnectedness.

Procyclical effects could arise from a reassessment of risk weights during severe economic downturns. The senior tranche attachment point of synthetic securitisations – the threshold at which the senior tranche begins to incur losses – is calibrated to account for both expected and unexpected losses within the underlying portfolio, with the unexpected loss covering for tail risk. However, during severe economic downturns a low attachment point can intensify procyclical effects. This is because a significant deterioration in the credit quality of the portfolio would lead to losses approaching, or even exceeding, the senior tranche attachment point. In this scenario – in contrast to a situation where the portfolio had not been synthetically securitised – the protected tranche would shield the originating bank from some losses on the underlying portfolio. However, the regulatory capital requirements for the unprotected senior tranche would rise more sharply and in a non-linear manner due to dynamically adjusting risk weights. Data from euro area countries show that during the sovereign debt crisis, average annual corporate loan default rates reached 17% in Ireland (2011-2012), 12% in Portugal (2015), nearly 9% in Spain (2013), and almost 7% in Italy (2013) (Chart 18, panel a). The observed loss given default rates remained relatively stable in

⁴³ See Osberghaus, A. and Schepens, G. (2025), "Synthetic, but How Much Risk Transfer?", Working Paper Series, ECB, forthcoming.



most of those countries, except for Ireland, where it reached 63% in 2011 (Chart 18, panel b). Taken together, the cumulative loss rates⁴⁴ over a three-year period – corresponding to the average maturity of synthetic STS securitisations – would have approached or even reached the attachment points for senior tranches currently observed in these securitisations.

Chart 18

Average default rates and observed loss given default rates for corporate loans | IRB banks

rates (percentages) (percentages) Ireland Ireland Italv ltalv _ _ Portuga Portugal Spain Spain Interquartile range: EU countries Interquartile range: EU countries 18% 70% 16% 60% 14% 50% 12% 40% 10% 8% 30% 6% 20% 4% 10% 2% 0% 0% 2009 2009 2011 2013 2016 2018 2020 2022 2011 2013 2016 2018 2020 2022

a) Average annual default rates

b) Average annual observed loss given default rates

Source: EBA Risk Dashboard.

Notes: The default rates shown in panel a) are calculated on an annual basis by taking the sum of new defaults over the last four quarters as the numerator (flows) and the average of the non-defaulted exposures (original exposures minus defaulted exposures) over the same period as the denominator. The observed loss given default rate in panel b) is calculated by dividing the credit risk adjustments (write-offs for observed new defaults) by the observed new defaults for the year. No data are available for 2014. Corporate loans include SME loans.

Procyclical effects may also arise from rollover risk affecting regulatory capital

requirements. Synthetic securitisations are a regular part of many EU banks' capital management strategies, alongside traditional instruments like Additional Tier 1 bonds and common equity. Synthetic STS securitisations typically have an average maturity of about three years. If banks have originated new loans in the expectation that they would again be able to again achieve significant risk transfer when the previous synthetic STS securitisation matures, they will have to initiate a new round of synthetic securitisation for these new loans. However, during a severe economic downturn, banks may find it more challenging to obtain credit protection for their synthetic securitisations. This difficulty arises because potential investors may be less willing to provide credit protection, or may only do so at higher costs. Such a freeze in the synthetic securitisation market

¹⁴ The loss rate is calculated as the default rate times loss given default.





would expose banks to higher capital requirements than they had anticipated when originating the loans. During a severe economic downturn, such rollover risk can thus create procyclical effects.

Interconnectedness enables risk to spread throughout the financial system, potentially creating a contagion channel if these interconnections are opaque and challenging to

monitor and assess. Risk transfer through synthetic securitisation can be beneficial when the risk is moved to entities that can manage it more effectively or absorb it better if it materialises. However, it can pose a threat when it becomes a channel for contagion. This situation can arise if opaqueness makes it harder to trace and monitor the risk and/or if the risk gets amplified because of underlying vulnerabilities in its ultimate holder.⁴⁵ At present, only public transactions need to be reported to the securitisation repositories, whereas most synthetic securitisations are private. This, combined with complex interconnections between market participants across different jurisdictions and financial sectors, makes it harder to see who ultimately bears what type of risk. For instance, credit-linked notes are often used as collateral in repo transactions, adding an additional layer of interconnectedness and risk amplification channels due to leverage. Against this backdrop, the ESRB welcomes the proposal set out in the Joint Committee Report on the implementation and functioning of the Securitisation Regulation⁴⁶ to extend mandatory reporting requirements to securitisation repositories for private securitisations.

Regulatory changes to the STS framework should be thoroughly evaluated from a financial stability perspective to ensure that no sources of systemic risk are introduced. Simplification and other regulatory changes can play a role in fostering the growth of the synthetic STS securitisation market. For example, the Joint Committee Report on the implementation and functioning of the Securitisation Regulation considers several measures to unlock the potential of the securitisation markets. To ensure sustainable growth in this market segment, regulatory changes need to be evaluated from a financial stability perspective. For instance, the Joint Committee Report considers the pros and cons of allowing (re)insurers to act as eligible providers of unfunded credit protection under the STS framework. From a financial stability perspective, the ESRB believes that the drawbacks of such a regulatory change would outweigh the benefits. In particular, such a change could create a contagion channel from the (re)insurance sector to the banking sector via concentration and counterparty risk. To mitigate counterparty credit risk, Article 249 of the CRR requires providers of unfunded credit protection to have a minimum credit quality step both at the time the credit protection is initially recognised and throughout the duration of the securitisation. It also imposes a capital charge on the protected tranche, thereby reducing the capital relief the originator would receive through STS securitisation. However, this minimum credit quality step requirement under Article 249 of the CRR introduces a cliff-edge effect, as a downgrade below the eligibility threshold would render the synthetic securitisation ineligible for both the STS label and SRT. As a result, banks would lose the associated capital relief. This effect would be amplified if the change in regulation led to (re)insurers becoming major providers of credit protection for synthetic STS securitisations. Adverse developments specific to the (re)insurance sector that would lead to rating downgrades of (re)insurers might thus create large spillover effects to the banking sector.

⁴⁶ Joint Committee of the ESAs (2025), "Joint Committee Report on the implementation and functioning of the Securitisation Regulation (Article 44)".



⁴⁵ See ESRB (2024), "A system-wide approach to macroprudential policy".

References

Altunbas, Y., Gambacorta, L. and Marques-Ibanez, D. (2009), "Securitisation and the bank lending channel", *European Economic Review*, Vol. 53, No 8, pp. 996-1009.

BIS (2005), "An Explanatory Note on the Basel II IRB Risk Weight Functions".

BIS (2016), "Revisions to the securitisation framework".

Casu, B., Clare, A., Sarkisyan, A. and Thomas, S. (2013), "Securitization and Bank Performance", *Journal of Money, Credit and Banking*, Vol. 45, No 8, December.

Commission Delegated Regulation (EU) 2020/1224 of 16 October 2019 supplementing Regulation (EU) 2017/2402 of the European Parliament and of the Council with regard to regulatory technical standards specifying the information and the details of a securitisation to be made available by the originator, sponsor and SSPE (OJ L 289, 3.9.2020, p. 1-216).

Deku, S.Y., Kara, A. and Zhou, Y. (2019), "Securitization, bank behaviour and financial stability: a systematic review of the recent empirical literature", *International Review of Financial Analysis*, Vol. 61, pp. 345-254.

Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast) (OJ L 177, 30.6.2006, p.1).

Draghi, M. (2024), "The future of European competitiveness: A competitiveness strategy for Europe".

EBA (2015), "The EBA report on synthetic securitisation (EBA/Op/2015/26)".

EBA (2020), "Report on STS framework for synthetic securitisation under Article 45 of regulation (EU) 2017/2402".

EIF, Portfolio Guarantees & Credit enhancement / Securitisation.

ESRB (2022), "Monitoring systemic risks in the EU securitisation market".

European Commission (2014), "An Investment Plan for Europe".

European Commission (2024), "Targeted consultation on the functioning of the EU securitisation framework".

Fabozzi, F.J., and Kothari, V. (2008), Introduction to securitization, John Wiley & Sons, Inc.

Farruggio, C. and Uhde, A. (2015), "**Determinants of loan securitization in European banking**", Journal of Banking and Finance, Vol. 56, pp. 12-27.



Financial Stability Board (2025), "Evaluation of the Effects of the G20 Financial Regulatory Reforms on Securitisation: Final Report".

González, F. and Morar Triandafi, C. (2023), "The European significant risk transfer securitisation market", *ESRB Occasional Paper Series*, No 23.

IACPM (2024), "Synthetic Securitization Market Volume: 2016 - 2023".

Joint Committee of the ESAs (2025), "Joint Committee Report on the implementation and functioning of the Securitisation Regulation (Article 44)".

Letta, E. (2024), "Much more than a market", April.

Minton, B., Stulz, S. and Williamson, R. (2009), "How much do banks use credit derivatives to hedge loans?", *Journal of Financial Services Research*, Vol. 35, No 1, pp. 1-31, February.

Osberghaus, A. and Schepens, G. (2025), "Synthetic, but How Much Risk Transfer?", *Working Paper Series,* ECB, forthcoming.

PCS (2023), "A quick guide to the STS Regime".

Regulation (EU) 2017/2401 of the European Parliament and of the Council of 12 December 2017 amending Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (OJ L 347, 28.12.2017, p. 1).

Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (OJ L 347, 28.12.2017, p.35).

Regulation (EU) 2021/557 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis (OJ L 116, 6.4.2021, p. 1).

Renault, O. (2022), "Significant Risk Transfer (SRT) Chronicles", Pemberton News and research.

Uzun, H. and Webb, E. (2007), "Securitization and risk: empirical evidence on US banks", *Journal of Risk Finance*, Vol. 8, No 1, pp. 11-23, January.



Imprint and acknowlegements

This report was approved by the ESRB General Board on 27 March 2025. Contributions were made by.

Emily Beau ESRB Secretariat

Emilio Hellmers (former) ESRB Secretariat

Can Keskin (former) ESRB Secretariat

Jeremy Christian Kostons (former) ESRB Secretariat

Márcio Mateus (Editor) ESRB Secretariat

Angel-Ivan Moreno ESRB Secretariat

Carl Nordahl (former) ESRB Secretariat

Pablo Sinausia Rodriguez ECB Banking Supervision

Arianna Santone (former) ESRB Secretariat

Cristina-Maria Triandafil ECB Banking Supervision

Olaf Weeken ESRB Secretariat

© European Systemic Risk Board, 2025

Postal address Telephone Website 60640 Frankfurt am Main, Germany +49 69 1344 0 www.esrb.europa.eu

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

The cut-off date for the data included in this report was 30 June 2024.

For specific terminology please refer to the ESRB glossary (available in English only).

PDF ISBN 978-92-9472-396-3, doi:10.2849/5018923, DT-01-25-006-EN-N