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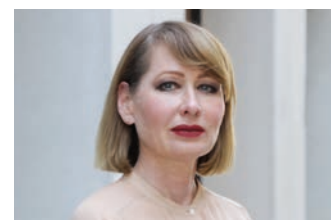
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1. Preface



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1.1 Introduction

The Law of 22 March 2004, as amended (“the Securitization Law”), sets out a comprehensive and flexible legal, regulatory, and fiscal framework to encourage securitization business in Luxembourg¹. The Securitization Law was devised to facilitate capital market transactions and/or intra-group transactions, or a combination of both, but can also be used in the context of restructuring.

Aside from the obvious benefits associated with freeing up the regulatory capital that must be set aside by banks, securitization can act as a catalyst for additional lending to the real economy. Transferring the risk of some loans to other banks or long-term investors such as pension funds and insurance companies generates new lending capacity. This is crucial for the European economy, since banks are then free to extend new loans to households and businesses—in particular, small and medium-sized enterprises.

1.2 The appeal of securitization

Securitization can also be an effective mechanism in the deleveraging of European banks. As of 30 June 2023 Europe’s banks’ balance sheets had an average 1.88% of non-performing loans (NPLs) with an approximate total amount of non-performing loans of around €588 billion². The refinancing and restructuring of these legacy loan portfolios through securitization can help such banks restructure their balance sheets and transfer the credit risk of exposure to the wider capital market. For example, several large NPL securitizations in recent years partly contributed to the drop in the NPL to total loans ratio from 5.1% in 2016 to 1.88% in mid 2023³.

On 24 March 2023, a new bill of law aiming, inter alia, at transposing Directive (EU) 2021/2167 on credit servicers and credit purchasers (“NPL Directive”) into Luxembourg law (“Bill”) was submitted to the Luxembourg Parliament⁴. The new Bill will additionally enhance ability of the banks to sell non-performing loans. This bill was signed by the Minister for Finance on 29 December 2023.

From a capital market perspective, securitization can provide additional investment opportunities to institutional investors with differing asset diversification, risk and returns, and duration profiles. The repackaging of non-liquid assets or loans into new financial instruments enables conversion from illiquid to liquid securities. Investors can therefore gain exposure to different asset classes such as real estate, shipping, consumer finance, aviation or vehicle leases without directly financing individual assets and violating investment policies or restrictions. In the second quarter of 2021 euro area banks held 84% of the total market value of euro area securitizations.

Securitization can also present untapped opportunities for banks in Luxembourg seeking to adopt a new business model or broaden the appeal of their product range to professional investors and high-net worth clients. Finally, securitization may serve as a solution to run-off sub or non-performing private equity (PE) and illiquid hedge fund investments.

1.3 The state of the EU securitization market

European securitization market remains subdued and has not yet regained traction to recover to levels seen prior to the 2008 financial crisis. While European issuance peaked in 2008 at €818.7 billion, the following years brought decrease with issuance hovering at around 21 percent in 2021 compared to pre-2008 financial crisis levels⁵. Aside from the significant drop in European securitization, a notable change since 2007 has been the percentage of securitization vehicles placed and retained⁶. Prior to 2007, most securitization vehicles were placed, but following the financial crisis, issuers have retained the majority of European issuance except for 2021-22 period during the Ukraine crises after which again from 2022 to 2023 the majority is retained by the issuers.

Also as per the KBRA release research 2024, issuance is expected to increase in 2024 with newly circulated transactions to outpace

¹ The updates to the Securitization Law are discussed on the pages 26

² www.ecb.europa.eu

³ www.eba.europa.eu

⁴ EU Directive on non-performing loans: Luxembourg Bill introduces a framework for their transfer and a new PFS category, Elvinger Hoss, 5 May 2023

⁵ Monitoring systemic risks in the EU securitization market, ESRB, July 2022

⁶ “Placed” and “retained” in this context usually refer to the distribution strategy for the securities issued by the securitization vehicle:

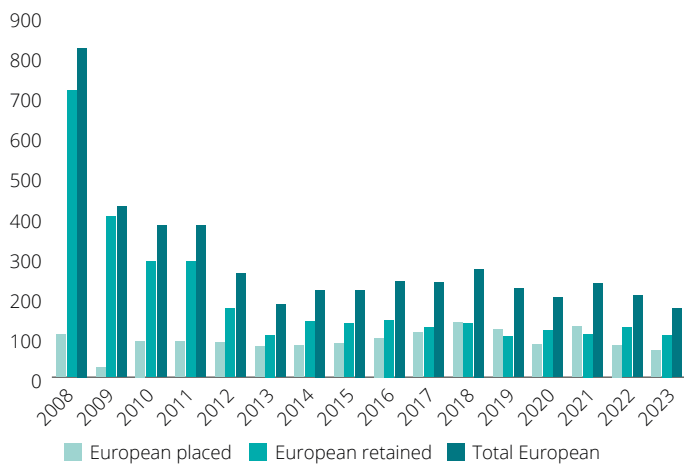
“Placed” typically means that the securities have been sold to investors in the market. This is often done through underwriters or brokers who “place” the securities with various types of investors such as pension funds, insurance companies, and mutual funds.

“Retained” means that some or all of the securities issued by the securitization vehicle are kept by the originating institution (the entity that created the SPV and transferred assets to it). Retaining securities can be a strategy to manage risk, to keep skin in the game, or to comply with regulatory requirements that aim to align the interests of the originating institution with those of the investors.

retained transactions for the first time since 2019. As central banks cut back on support programmes, a return to capital markets for secured funding will find appeal⁷.

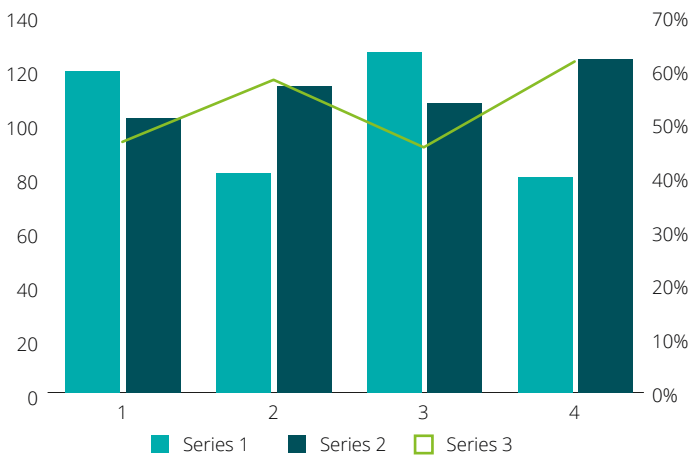
Further, as per the Morningstar DBRS 2024 Issuance Forecast, considering the improvement in macroeconomic outlook from start of 2023 the issuances for 2024 to continue moving at a slow and steady pace which would range between EUR 210-220 Bn⁸.

Figure 3: European historical issuance 2008—Q3 2023 (in EUR billion)



Source: Association for Financial Markets in Europe (AFME); Deloitte calculation

Figure 4: European historical issuance 2019—2022 (in EUR billion)



Source: Association for Financial Markets in Europe (AFME); Deloitte calculation

This seems to indicate that issuers find it difficult to attract investors to securitization products; this may be attributed to a confluence of factors:

- Investors’ ongoing lack of trust in securitization despite the very low default rate of AAA and BBB-rated EU securitization vehicles during the financial crisis. To revive securitization, market issuers, originators, and regulators may be required to educate and provide further incentives (e.g., guarantees by national governments, ECB, etc.) to investors
- Lack of securitization products/ transactions that are tailored to meet the objectives and requirements of the issuer, originator, borrower (in case of loan securitization), and investor. One example of an instance where the objectives and requirements of the issuer, originator, sponsor, borrower, and investor can diverge is SME true-sale loan securitization
- On 28 December 2017, the European Union published in its Official Journal the Regulation (EU) 2017/2402 or Securitization Regulation. While this Regulation does not impact all Luxembourg Securitization vehicles, the requirements for banks other institutional investors was increased

7 KBRA Releases Research – 2024 European Structured Finance Sector Outlook: Turbulence Ahead, December 2023

8 Source: <https://dbrs.morningstar.com/research/427310/quarterly-european-securitisation-issuance-reportq4-2023>

Securitization: Why and how does it work?

2.1 Benefits of securitization

Securitization is a technique used to convert illiquid assets/claims into tradeable securities. These illiquid assets/claims may include bank or car loans, lease contracts, trade receivables, and insurance premiums, among others. Securitization acts not only as a means to raise cash on the capital markets, but also as a credit risk transfer tool. For investors, it provides attractive and diversified investment opportunities without the need to set up a complex and expensive client-facing infrastructure. Instead, they can leverage and benefit from the lending and servicing expertise of originators. Removing loans from the balance sheets of banks can also have macro-economic benefits as banks can create more new lending, which has a positive impact on the economy. Securitization permits to achieve a tax neutrality as any distributions (including commitments and dividend payments) and other payments to investors, creditors or shareholders made by the securitization vehicle will qualify as interest payments being fully tax deductible (subject to application of the interest limitation rule).

Further, Securitization vehicles may, in principle, benefit from the Luxembourg network of Double Tax Treaties (“DTTs”) and European Union Directives based on a certificate of residence issued upon request by the Luxembourg tax authorities. However, the access to DTTs and EU Directives must be assessed on a case-by-case basis from the perspective of source countries

- Benefits for original lenders/originators:
 - Creation of liquidity
 - Funding diversification
 - Reduction in funding costs
 - Risk reduction and transfer
 - Regulatory capital relief
 - Raise capital without prospectus-type disclosure
- Benefits for investors:
 - Tailored investments
 - Portfolio diversification
 - Risk sharing

Green Regulation

On 30 November 2023, Regulation (EU) 2023/2631 of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds (the “EuGB Regulation”) was published in the Official Journal of the EU. The new regulation will apply from 21 December 2024⁹. This version took into account the suggestions regarding sustainable securitization outlined in the EBA report, which were favoured by most participants in the securitization market.

Chapter 3, **“Conditions for the use of the designation ‘European Green Bond’ or ‘EuGB’ in respect of securitization bonds”** sets out the conditions to use these designations for securitization transactions. This chapter further lays down the principle that, by default, references to the term “issuer” will apply to the “originator” in securitization transactions, thereby imposing obligations relating to the use of proceeds from the **issue not on the SSPE but on the entity that originated the assets subject to the securitization (art. 16)**.

The regulation further clarifies that in the case of a securitization bond designated as ‘European Green Bond’ or ‘EuGB’, the prospectus published pursuant to Regulation (EU) 2017/1129 shall include a statement that the bond is a securitization bond and that the originator is responsible for fulfilling the commitments undertaken in the prospectus regarding the use of proceeds. In order to provide transparency about the environmental characteristics of the securitised exposures, this article further details information to be included in the prospectus on a best efforts basis and to the best of the originator’s ability, on the basis of the available data, including:

- a) the share of securitised exposures in the pool of securitised exposures, that finance economic activities which are taxonomy-eligible economic activities as defined in Article 1, point (5), of Delegated Regulation (EU) 2021/2178;
- b) per relevant economic activity listed in delegated acts adopted pursuant to Article 10(3), 11(3), 12(2), 13(2), 14(2) or 15(2) of Regulation (EU) 2020/852, in the pool of taxonomy-eligible exposures referred to in point (a) of this paragraph, the share of taxonomy-aligned securitised exposures;

⁹ [Keen to issue a European green bond or a sustainability-linked bond? Here's what you need to know \(arendt.com\)](https://www.arendt.com/en/insights/2023/11/30/keen-to-issue-a-european-green-bond-or-a-sustainability-linked-bond-heres-what-you-need-to-know)

- c) per relevant economic activity listed in delegated acts adopted pursuant to Article 10(3), 11(3), 12(2), 13(2), 14(2) or 15(2) of Regulation (EU) 2020/852, in the pool of taxonomy-eligible exposures referred to in point (a) of this paragraph, the share of securitised exposures that fail to meet the 'do no significant harm' objectives as referred to in Article 3, point (b), of Regulation (EU) 2020/852.

The information included in the prospectus shall also be included in the European Green Bond factsheet referred to in Article 10 of the regulation and, on the basis of **yearly updates to be carried out by the originator**, in the European Green Bond allocation report referred to in Article 11.

Exclusions

- Synthetic securitizations are also not permitted to adopt this designation (art. 17)¹⁰.
- Additionally, certain securitised exposures are excluded from the framework (art. 18), including:
 - exposures financing the exploration, mining, extraction, production, processing, storage, refining or distribution, including transportation, and trade of fossil fuels;
 - Exposures financing electricity generation from fossil fuels, co-generation of heat/cool and power from fossil fuels, or production of heat/cool from fossil fuels, where the activity meets the criteria for 'do no significant harm' set out in Delegated Regulation (EU) 2021/2139, may be included in the pool of securitised exposures for the purposes of this Regulation.

At one hand the new European Green Bond label could present challenges for securitization transactions and give rise to new complex disclosure considerations¹¹ and on the other hand, it may be an opportunity for the securitization market to attract new investors who will be attracted by the new European Green Bond label.

2.2 The process

In its most basic form, securitization is the process whereby illiquid assets or rights are pooled and transformed into tradeable and interest-bearing financial instruments that are sold to capital market investors. The pool of underlying assets or rights, also known as the "reference portfolio" or "collateral pool", may be homogenous or heterogeneous. Interest and principal payments from the assets or rights are passed on to capital market investors through a securitization special purpose entity (SSPE). Reference portfolios may contain assets such as vehicle loans and leases, residential mortgages, commercial mortgages, credit card receivables, student loans, aircraft leases, or brand and franchise royalties that are generated by a company or a financial intermediary (the "Originator").



¹⁰ [EU Green Bond Standard – a panacea for green securitization? - Hogan Lovells Engage](#)

¹¹ [Market Horizons podcast: What does the EU Green Bond Regulation mean for securitization? - Allen & Overy \(allenoverly.com\)](#)

2. Industry fundamentals

2.3 Types of asset-backed securities

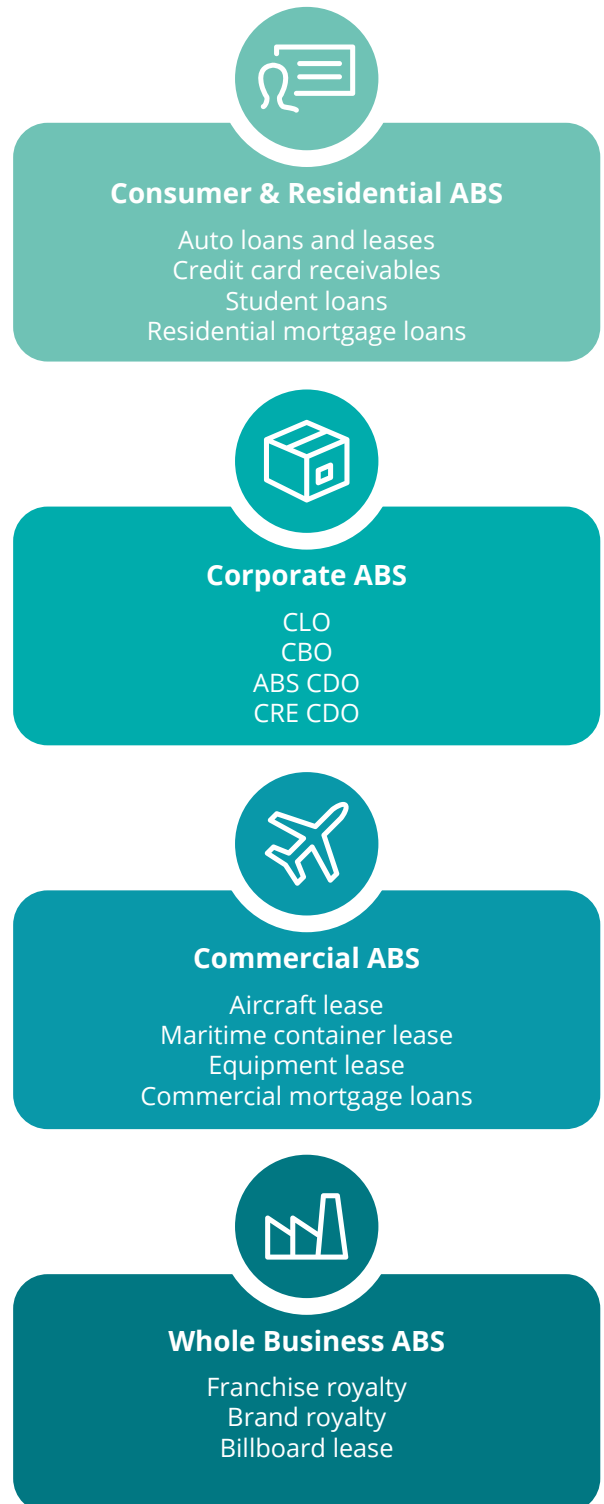
Asset-backed securities (ABS) can be broken down into more granular categories depending on the collateral type of the underlying reference portfolio. Mortgage-backed securities (MBS) are a type of asset-backed security secured by the principal and interest payments of a single mortgage or a pool of mortgages:

- Residential mortgage-backed securities (RMBS) are secured by residential property, usually single-family homes
- Commercial mortgage-backed securities (CMBS) are secured by commercial real estate such as office buildings, shopping malls, logistics centers, and industrial properties

Collateralized debt obligations (CDOs) are financial instruments that pool a group of assets such as high-yield debt or ABS, which are then repackaged into discrete tranches that are sold to investors. The underlying collateral pool of CDOs may be either static or dynamic. In a static CDO structure, the entire reference portfolio is fixed and the underlying assets cannot be changed at any point in the entire lifecycle of the CDO. Dynamic CDO structures are actively managed by the CDO manager, who selects the collateral pool and often manages the CDO reference portfolio, and can also replace underlying assets to increase performance and decrease credit risk:

- Collateralized bond obligations (CBOs) are CDOs backed by a collection of low-grade corporate (junk) bonds
- Collateralized loan obligations (CLOs) are CDOs backed by a pool of leveraged bank loans
- Commercial real estate CDOs (CRE CDOs) are backed by commercial real estate loans and bonds

Figure 5: Overview of ABS by collateral type

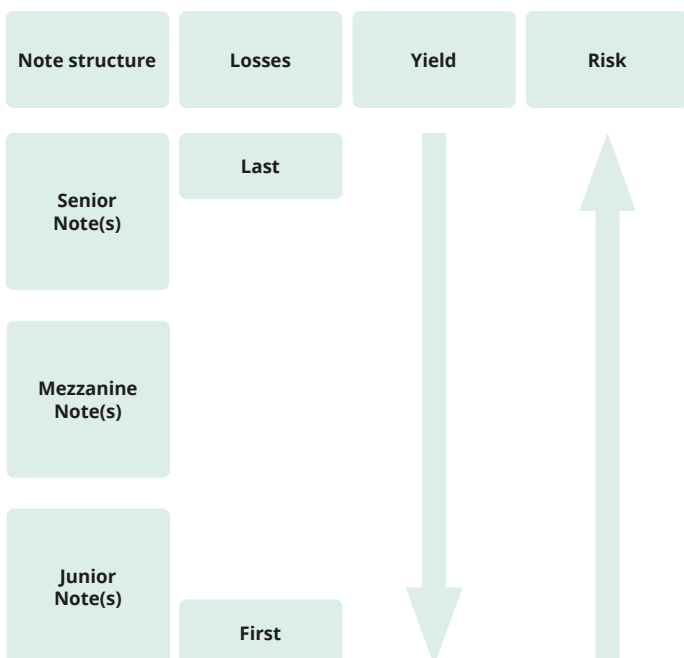


2.4 Risk and return profiles of tranche notes

Notes or bonds issued by an SSPE (the "Issuer") can be subdivided into graduated slices to attract a diverse range of investors with different risk and return requirements. These slices, known as "tranche notes", are then sold separately to investors. Tranches can pay fixed or floating-rate interest and the investment returns (interest and principal repayment) are allocated among the tranches in accordance to their seniority. For example, the most senior and least risky tranche receives investment returns generated by the collateral pool ahead of other tranches and is last to incur losses. Due to the lower risk profile of senior tranches, the expected return is lower than for higher risk tranches (i.e., mezzanine or junior). As each tranche has a distinct level of risk associated with it, investors may only be eligible to invest in certain tranches and/or build portfolios with specific risk and return profiles by investing in a mixture of senior, mezzanine and junior tranche notes.

Typical investors in senior tranche notes include insurance companies, pension funds, and other risk-averse investors. Junior notes, also referred to as first-loss tranches, are generally unrated and offer the highest investment yield, but must absorb the first losses on the collateral pool. Investors in junior tranches tend to be hedge funds and other investors seeking higher risk/return profiles. The Originator can also retain junior tranche notes if no investors are found or to satisfy the risk retention requirements under the EU Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR).

Figure 6: Risk/return profile of note tranches



2.5 The cash flow waterfall

Most securitization transactions follow a predetermined schedule that prioritizes the manner in which interest and principal payments from the collateral portfolio must be allocated. This schedule, which is explained in the documents associated with the issuance (i.e., the prospectus), is known as the "cash flow waterfall" or simply the "waterfall". In conventional waterfalls, senior tranches receive cash flows after payment obligations to securitization servicers (e.g., auditor, custodian bank, etc.) and agents (e.g., administrative agent, trustee, paying agent, etc.) are met.

Investors in mezzanine tranches receive the residual cash flow once the obligations to senior tranche holders have been fulfilled. The residual cash flows to junior tranche holders after all scheduled periodic payment obligations to securitization servicers/agents, senior, and mezzanine tranche holders are met. This is known as the "excess spread" and serves to enhance the internal credit of the securitization structure. It can be deposited in a dedicated "spread or reserve account" until some or all of the notes mature. The excess spread then serves as a first line of defence to absorb losses in the event that the reference portfolio underperforms. If individual loans or a portfolio of loans experience delinquency or default, the cash from the excess spread account can be used to pay the noteholders. Alternatively, the excess spread can be periodically paid out to junior tranche noteholders, thereby increasing the yield for those investors.

Figure 7: The cash flow waterfall

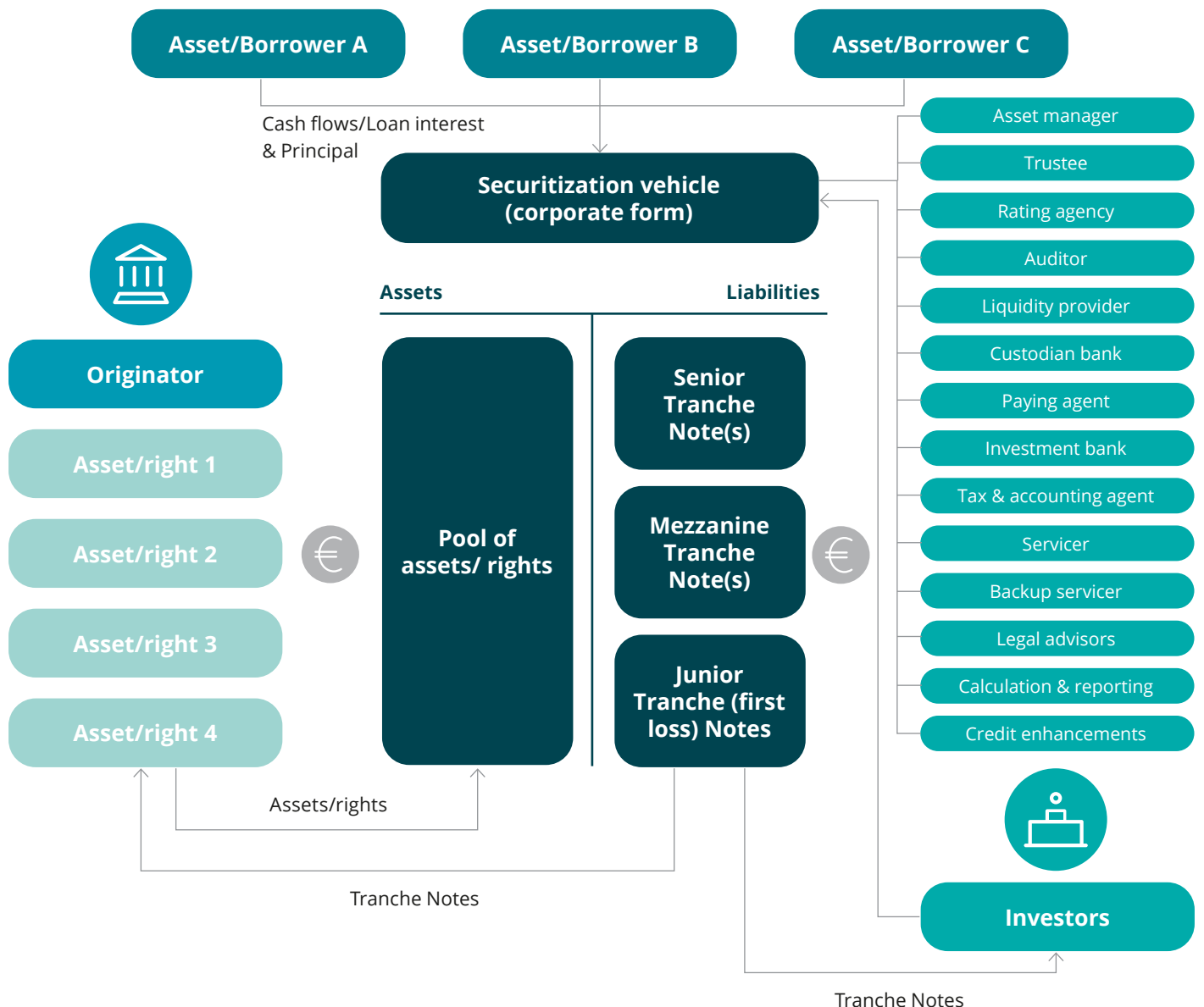


2.6 True sale securitization

The true sale securitization process generally involves two steps. Firstly, the Originator identifies the assets or rights of which credit risk and/or legal ownership should be removed from its balance sheet and pooled. Originators aiming to remove both the legal ownership and the credit risk related to the assets or rights from their balance sheet sell and transfer the reference portfolio to an SSPE. In such “true sale” securitization transactions, it is imperative that once the sale and transfer of the assets or rights to the SSPE has been carried out, the transaction cannot be challenged, voided, or otherwise reversed if the Originator is declared insolvent or bankrupt.

In step two of the process, the Issuer of the pooled assets or rights finances the acquisition through the issuance of tradeable and interest-bearing financial instruments that are sold to investors. As mentioned above, these bonds or notes can be sold in tranches with different seniorities in accordance with the cash waterfall.

Figure 8: Overview of true sale securitization



2.7 Synthetic securitization

Synthetic securitization is another type of transaction enabling credit risk to be transferred and regulated financial institutions to reduce regulatory capital requirements. The key difference between synthetic securitization and true sale securitization is that the Originator does not sell and transfer legal title of the assets or rights to the Issuer, and subsequently may not obtain any funding or liquidity under the transaction. Instead, the Originator only transfers the credit risk of the reference portfolio to capital market investors through an SSPE by entering into a series of funded and unfunded credit derivatives, usually credit default swaps (CDS) but also total return swaps (TRS) or credit-linked notes (CLNs).

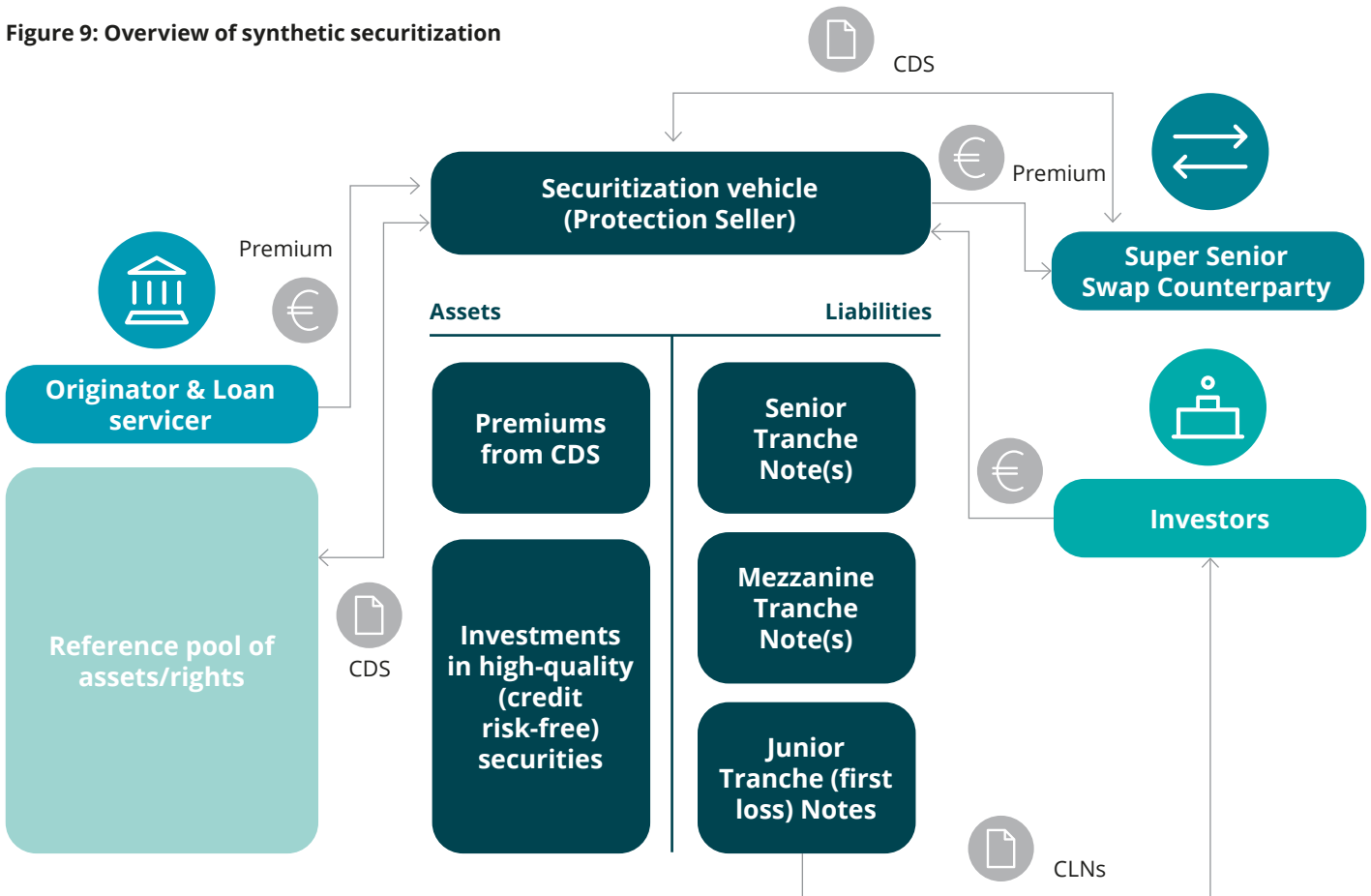
In a simple synthetic securitization transaction, the Originator (the “Protection Buyer”) enters into a single CDS on the underlying reference portfolio as a whole or a series of CDS with the SSPE (the “Protection Seller”). In the event of a default or any other credit event affecting the reference portfolio, the Protection Seller will pay an amount to the Protection Buyer.

In return for the transfer of the credit risk, the Protection Buyer will pay a fixed amount upfront—the premium—to the Protection Seller on a quarterly or yearly basis over the life of the CDS.

Unfunded credit derivatives are bilateral, privately negotiated credit derivatives contracts. In such transactions, the Protection seller does not make any upfront payment to the Protection Buyer. The Protection Seller will only make a payment to the Protection Buyer to cover losses when a credit event occurs. This means that the Protection Buyer is exposed to (counterparty) credit risk and relies upon the Protection Seller being able to pay an agreed settlement amount. CDS and TRS are types of unfunded credit derivatives.



Figure 9: Overview of synthetic securitization



The SSPE also issues CLNs that are sold to investors, who typically assume the risk of the mezzanine tranche, which is equal to the remaining notional amount (face value) of the CDS. The SSPE deposits the amount received from the sale of the CLNs in a bank account as collateral or invests the proceeds in risk-free financial instruments. Over the life of the transaction, the SSPE passes on the premiums received on the CDS to the CLN investors. In addition, and depending on the transaction structure, the returns earned by the SSPE on the financial instruments/amount in the interest-bearing account are then passed back to the Originator or paid out to the CLN investors.

The SSPE also enters into a back-to-back unfunded super senior CDS with a highly rated swap counterparty (e.g., a bank) and therefore passes on a portion or all of the credit exposure of the reference pool of assets or rights. This super senior CDS can sometimes represent up to 80 percent of a synthetic securitization structure's notional amount and sit above the CLNs in the waterfall structure.

Because of the higher degree of flexibility offered by synthetic securitization and in the absence of sale and transfer of legal title of the underlying assets or rights of the reference portfolio to the SSPE, such transactions can be brought to the market more quickly without a need for extensive legal analysis across multiple legal jurisdictions.

Funded credit derivatives entail the issuance of a series of debt obligations by a bank or SSPE, which are then purchased by one or more Protection Sellers. In contrast to unfunded credit derivatives, there is an upfront payment to the Protection Buyer, who has no exposure to credit (counterparty) risk. A CLN is a type of a funded credit derivative. CLNs carry an embedded credit derivative, for example a CDS. The amount payable (principal and interest) under the CLN will depend on the premium payments received on the CDS that are being passed on to investors, potential credit events (write downs of losses on the notes), and the returns on the risk-free financial instruments.



2.8 Credit enhancement

It can be difficult to market a securitization transaction to investors if they are either unrated or if they have sub-investment grade ratings. This is particularly the case for institutional investors who are generally only permitted to invest in securities with an investment grade rating. To attract investors, a securitization transaction therefore can require some form of credit enhancement in order to achieve an investment grade rating for one or several note classes. Credit enhancement increases the creditworthiness of the notes to be issued by the SSPE and protects investors from bearing all the risk of the collateral pool if economic conditions deteriorate.

Credit enhancement can either be external or internal. Internal credit enhancement refers to measures taken inside the securitization structure and measures include overcollateralization, subordination, and the use of reserve accounts. External credit enhancement involves third-party guarantees such as insurance policies and letters of credit. It is critical for the issuer to examine each form of credit enhancement prior to issuance in order to identify the most cost-effective credit enhancement mechanisms. Generally, the issuer will consider the trade-off between improving the credit rating of particular note classes in the structure versus the reduction in yield required to sell the notes to investors.

2.8.1 Internal credit enhancement

Over-collateralization

One form of internal credit enhancement is overcollateralization. This form of credit protection is generated by issuing securities with a face value that is lower than the face value of the underlying collateral pool. For example, if the collateral pool consists of exposures with a combined face value of €300 million and the issuer targets a triple-A rating for some or all securities to be issued, the issuer/sponsor would obtain an indication from a credit rating agency as to how many securities it could issue versus the collateral pool in order to achieve the desired rating. Having assessed the creditworthiness of the underlying borrowers, granularity of the exposure pool, expected default rates, correlations among loans, and other factors, the credit rating agency may decide that securities with a face value of €280 million could be issued. Thus, in circumstances where some of the underlying borrowers default on their payment obligations, the issuer would still be able to honor principal and interest payments to the investors. Assuming all borrowers meet their payment obligations, the cash flows from the extra €20 million can be used to redeem securities earlier or to redeem securities preserved within the securitization structure and allocated to a reserve account. After all notes have been redeemed, the remaining funds in the reserve account and any remaining collateral will be distributed to the originator.

Reserve/spread funds

Reserve accounts come in two forms being cash reserve funds and excess spread accounts. Cash reserve funds are typically funded at the beginning of a securitization transaction and usually by the originator. The party that deposits funds into the reserve account will normally hold a residual interest in the reserve account. Funds paid into the reserve account may typically only be invested in highly liquid, investment grade securities. If a borrower in the exposure pool defaults on a payment obligation, the unpaid principal balance of the exposure is deducted from the reserve account and paid to the investors. If funds are subsequently recovered through the foreclosure/asset enforcement process, these amounts are either used to replenish the reserve account or paid over to the party that holds the residual interest in the reserve account.

Excess spread accounts involve the allocation of the excess spread into a separate reserve account. The excess spread is the amount remaining after all periodic administration expenses (e.g., asset servicing fees, etc.) and payments to investors have been made. Usually, the excess spread account increases over time up to some pre-defined level and is used to absorb losses from the exposure pool. The terms governing the spread account are normally dictated by the credit rating agency as the basis for obtaining a rating.

Subordination

One of the most common forms of internal credit enhancement is the subordination of some tranche notes in order to obtain a higher investment rating for other, more senior, tranche notes. The subordinated tranche notes are intended to absorb losses from the collateral pool prior to more senior note classes. Based on an analysis of the collateral pool, a credit rating agency will specify how many AAA notes, AA notes, B notes, and so forth, can be issued.

The following is a simple example of how subordination works. Assume the collateral pool contains 100 loans each worth €1 million and the credit rating agency assesses the cumulative default risk on the collateral pool at 10%. If the objective of the issuer/sponsor is to create tranche notes with an investment grade rating then the easiest way to achieve this may be to create subordinated tranche notes/classes in the amount of €10 million and senior ranking tranche notes/classes in the amount of €90 million. In the event of a default on a collateral loan, the loan amount would be deducted from the balance of the subordinated tranche notes/classes. This means that the senior ranking tranche notes/classes would be protected from the risk of loss until defaults exceed €10 million.

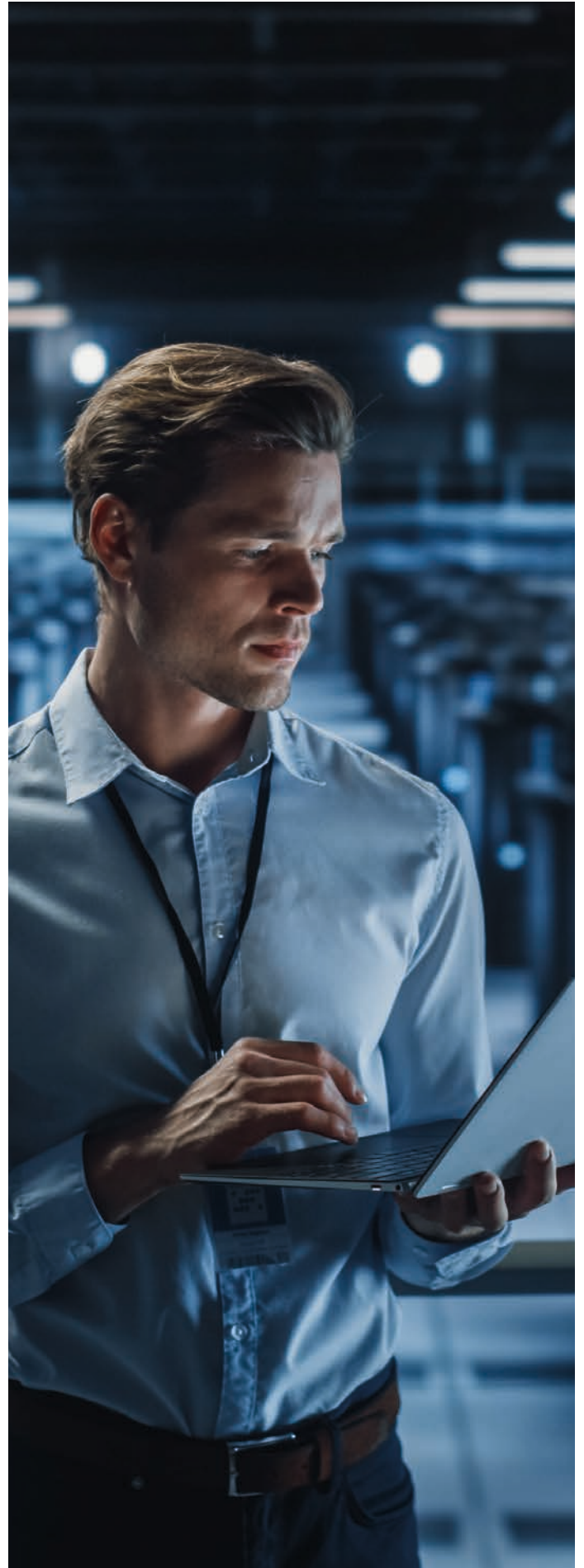
2.8.2 External credit enhancement

Letter of credit

Another form of credit enhancement is a letter of credit. A letter of credit is an irrevocable commitment in which a commercial bank or other financial institution is paid a premium to cover any losses actually incurred on the collateral pool up to the required credit enhancement amount.

Surety bonds

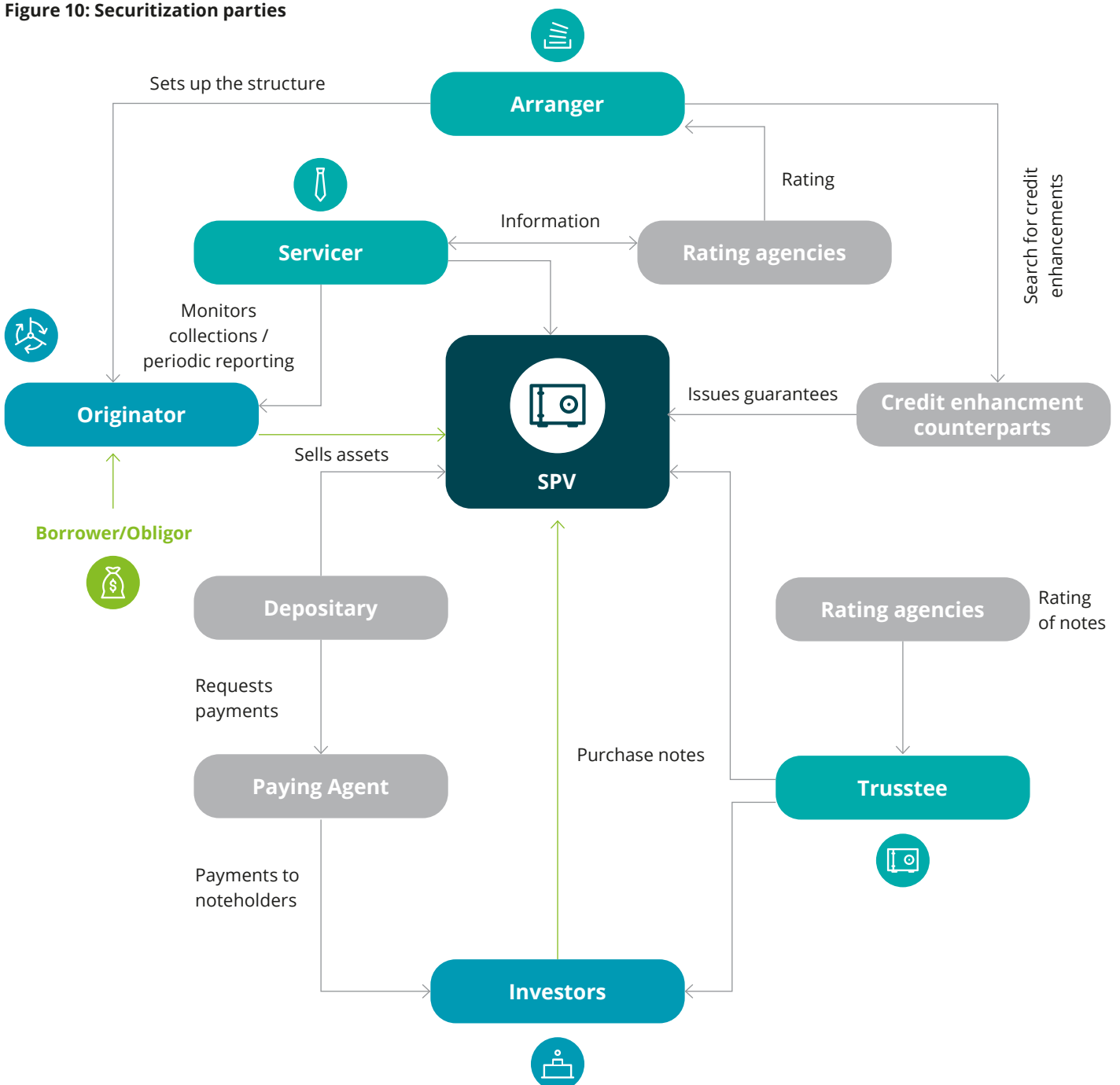
Surety bonds are insurance policies that reimburse the issuer for any losses on the collateral pool. Surety bonds, also often referred to as performance bonds, are issued by third parties, usually AAA-rated insurance companies. Surety bond providers generally guarantee the principal and interest payments for specific note classes. The guarantee is often referred to as a wrap. The cost of this guarantee is determined by the insurance company's perceived credit risk in the underlying collateral pool. The biggest perceived disadvantage of this form of credit enhancement is if the credit enhancement provider is downgraded, the note classes guaranteed by the credit enhancement provider are typically downgraded as well.



2.9 Securitization parties

A securitization transaction involves several parties, of which the most important are the Obligor or Borrower, the Originator, the Sponsor, the Investor, the Trustee, the Credit Rating Agency, the Asset Servicer or Collateral Manager, the Calculation Agent, and the Credit Enhancement Provider.

Figure 10: Securitization parties





Borrower/Obligor

The borrower/obligor is an individual or entity that is legally required through a contractual commitment to provide one or more payments. The quality and performance of the securitization depends on the ability of the borrower/obligor to honour all contractual obligations. If a borrower/obligor does not fulfil its contractual obligations, the obligee (e.g., bank, commercial company, SSPE, etc.) usually has the right to seek recourse in court and, in the case of secured lending arrangements, the ability to initiate unilateral collateral enforcement actions. Unless otherwise stipulated in the contractual documents, the obligee is not required to consent to the sale of the claim (loan) with the attached payment obligation to another party such as an SSPE. In many securitization transactions, the originator or an affiliate of the originator continues the customer relationship and acts as servicer to the SSPE, collects and passes on the payment collections, and acts as a loan monitoring agent.



Originator/Sponsor

An originator is typically an institution that was involved, either itself or through its related entities, directly or indirectly, in the creation and underwriting of the obligations involved in the securitization transaction. Such obligations arise during the course of the originators' ordinary business activity and are subject to various underwriting standards. In some instances, the originator purchases assets/ claims (exposures) from third parties with view to securitizing them at a later stage. In such transactions, the originator is often referred to as the securitization sponsor. Typical originators include commercial banks, insurance companies, captive financial companies, major car manufacturers, leasing companies, commercial companies, and trade companies.



Investors

The investors subscribe to the securities issued by the SSPE and are therefore entitled to receive principal repayments, interest and, if foreseen in the constitutional documents, profit participations based on the cash flows generated by the underlying securitization pool. Typical investors in securitized exposures are institutional investors such as pension funds, insurance companies, alternative asset managers, investment funds, and banks. The appeal of asset-backed securities can be traced back to the higher rate of return they offer in comparison to other assets with a similar level of credit risk and the combination of different securitization tranches to achieve the desired risk/return profile.



Asset servicer

In the context of securitization, asset servicing describes the process of collecting the payments from the underlying borrowers in the exposure pool and transferring the collected funds to the SSPE. Perhaps because of the apparent simplicity of this task, the asset servicing role is often taken for granted by both issuers and investors, who often mainly focus on the performance of the exposure pool, the deal structure, and the price at which notes will be issued. However, asset servicing is one of the most critical elements in any securitization transaction and it becomes increasingly complex as a result of the specialist knowledge required when dealing with sophisticated asset classes. This is why credit rating agencies place particular emphasis on the capabilities and track record of the asset servicer. The originator is frequently appointed as asset servicer of the exposure pool owing to its existing relationship with the underlying borrowers. The responsibilities of the asset servicer will vary somewhat depending on the asset class and the local market, but for a portfolio of securitized loans they may include the following important functions:

- Recording loans via a servicing database
- Accepting and processing loan payments from borrowers
- Transferring payments to the SSPE
- Reconciling bank accounts and loan balances
- Performing escrow analysis
- Collecting on delinquent accounts
- Discussing and agreeing new payment terms with delinquent borrowers
- Initiating and processing foreclosure/ asset enforcement procedures in collaboration with legal advisors
- Managing accounts of borrowers that have declared bankruptcy
- Maintaining, administering, and liquidating asset holding companies



Trustee

The trustee's primary fiduciary duty is to preserve the interests of the investors involved in the purchase the securities issued by the SSPE. The nature of the trustee's duties is specifically set forth in the trust agreement. The trustee usually subcontracts the administration and servicing of the securitized exposure pool back to the originator, an affiliate of the originator or a third-party provider.

However, the trustee retains ultimate responsibility for the administration of the SSPE that holds the securitized assets/ claims.

The trustee oversees the initial creation of the SSPE that will hold the securitized exposure pool. The trustee must also confirm that the SSPE has received clear title to the securitized exposures, free of any claims, charges or encumbrances, whether actual or implied. When assets or claims are transferred to the SSPE at the conclusion of the securitization transaction, the assets or claims are pledged to the holders of securities issued by the SSPE. Since the assets or claims will serve as collateral for the repayment of the securities issued by the SSPE, the trustee must also confirm that the security interest in the assets or claims is structured so as to ensure that the assets or claims will not be vulnerable to the claims of the SSPE's other creditors—a mechanism often referred to as "bankruptcy remoteness." The trustee usually mandates a specialized securitization or structured finance law firm and obtains legal opinions to the effect that the security interest has been soundly structured.



Arranger/underwriter

The arranger and/or underwriter is typically an investment bank that plans, organizes, structures, and markets the securitization transaction together with the originator/ sponsor.



OTHER PARTIES



Calculation and reporting agent



Paying agent



Credit rating agency



Legal advisors



Registrar



Custodian



Auditor



Credit enhancer



Back-up servicer



Tax advisors

2.9.1 Credit enhancement provider

A credit enhancement provider is a third-party that agrees to support the credit quality of another party, individual securities or a pool of assets by making payments, up to a pre-agreed amount, in the event that the other party defaults on its payment obligations. Such contractual arrangements protect against the risk that the cash flows generated by the collateral pool are insufficient to meet all the amounts due to the obligor.

2.9.2 Credit rating agencies

A credit rating agency assigns a credit rating that rates a borrower's/obligor's ability to pay back debt by making timely interest payments, and the likelihood of default. A rating agency may rate the creditworthiness of issuers of debt obligations, debt instruments, and in some cases, the servicers of the underlying debt. As debt obligations can be issued in several tranches, rating agencies can also assign individual credit ratings to tranches with different seniority in the cash flow waterfall of a securitization vehicle. This means that tranches with higher seniority may have better creditworthiness than a single conventional, unstructured, and untranching note with the same overall repayment income stream. Such structural features allow rating agencies to assign senior tranches high ratings such as triple A or other high grades. Notes with a high rating are then eligible for purchase by pension funds and money market funds that are required to invest in higher-rated debt.

Three rating agencies currently dominate the market: Standard & Poor's, Moody's Investor Services, and Fitch Ratings.

Smaller rating agencies include DBRS, Kroll Bond Rating Agency, and A.M. Best. These credit rating agencies employ varying methodologies to rate structured finance products, but generally focus on the type of pool of assets/claims underlying the securitization security and the overall capital structure of the SSPE. This approach often involves a quantitative assessment in accordance with mathematical models reflecting maturity and issuer diversification, expected default rates, recovery rates, and correlation between the exposures. In addition, credit rating agencies review the following factors:

- Capabilities and financial strengths of the originator/servicer of the exposure pool;
- Legal risks embedded in the structure, e.g., ensuring that title to the exposure has been transferred and that the pledge over the collateral pool has been perfected;
- Overall soundness of the transaction structure (e.g., asset liability timing of cash flows, covenants and other default mechanisms;

- Ability of the asset servicer/collateral manager to manage the exposure pool;
- Type and quality of credit enhancement, e.g., track record of third-party guarantor.

Credit rating agencies may be paid by the originator/sponsor not only for assigning ratings to structured securities, but also for advice on how to structure tranches. This involves back and forth and analysis between the originator, sponsor, structuring and restructuring specialists, where applicable, and the credit rating agency. During this process, the originator/ sponsor may submit proposed structures to the credit rating agency for analysis, review and feedback until the originator/ sponsor is satisfied with the ratings of the various tranches.

2.9.3 Registrar

The primary responsibility of the registrar is to maintain the records of the registered holders of securities and to process subscriptions and redemptions of the securities issued by the SSPE.

2.9.4 Calculation and reporting agent

This party to the securitization transaction calculates and reports the distribution of interest, principal repayments and profit participation (where applicable) due to the investors and other creditors. The allocation of funds available from the exposure pool is governed by the cash flow waterfall. Generally, the following documents are submitted to the management body and investors:

2.9.5 Paying agent

The terms and conditions set out in the securitization documents specify the distribution dates on which interest and principal repayments are to be made to the investors. A few days prior to the distribution date, the paying agent receives a report from the calculation and reporting agent specifying the payment instructions for the distribution date. On the distribution date, interest and principal repayments are made by the paying agent to holders of securities and payments are also made to other creditors.

2.9.6 Back-up servicer

One of the primary duties of the trustee is to assume the role of back-up asset servicer in the event that the original asset servicer is removed or the contractual agreement is terminated. To mitigate the risk of issues with servicers and agents affecting the performance of the securitization vehicle, "back-up servicers" may be appointed as early as the outset of the transaction. A back-up servicer will ensure that cash collections from the underlying exposure pool and subsequent distributions of interest and principal repayments to the investors continue without interruption. A back-up servicer may also be authorized to assume responsibility for reviewing and

verifying the calculations performed by the calculation and reporting agent. To prevent any loss of data and ensure a smooth migration if the servicer is removed, the back-up servicer may run parallel reporting along with the existing servicer. It is essential that the back-up servicer is always ready to immediately assume the role of servicer should it be required to do so. To that end, the back-up servicer may receive tapes/document copies from the servicer on a periodic basis.

2.9.7 Custodian

The custodian bank is responsible for safeguarding the assets of the SSPE, including liquid assets (e.g., cash, term deposits, etc.) and transferable securities (e.g., shares, bonds, etc.), and for arranging the settlement of any purchases and sales.

The custodian bank is also responsible for the safekeeping of the exposure pool in true sale securitization transactions. In Luxembourg, the use of a custodian bank is only mandatory for regulated SSPEs, such as securitization funds and regulated securitization companies.

2.9.8 Auditor

In Luxembourg, the financial statements/ annual accounts of the SSPE have to be audited by one or more independent auditors (Réviseurs d'entreprises). The auditors of a Luxembourg SSPE are appointed by the management body of that SSPE.

2.9.9 Tax and accounting advisor

The tax and accounting advisor analyses and assists with the tax-efficient structuring of the proposed transaction. The planned transaction structure is designed to mitigate potential tax or accounting implications, i.e., to monitor the corporate income tax liability of the SSPE and/or manage withholding taxes exposure on the cash flows to investors.

2.9.10 Legal advisors

Considerable legal work is required to ensure that a securitization transaction meets the requirements of the originator and the investors while also complying with all regulations. Legal advisors will typically assist with:

- Drafting the articles of association of the SSPE (e.g., in accordance with the provisions of the Luxembourg Securitization Law)
- Drafting the prospectus and listing documents
- Reviewing or drafting the asset sale and purchase agreements
- Legal opinions regarding the perfection of the pledge over the exposure pool
- Loan restructuring (e.g., in non-performing loan transactions)
- Initiating the foreclosure and asset enforcement processes



2.10 Capital Requirements Regulation

On 31 December 2013 and 1 January 2014, new EU capital rules for financial institutions set out in the fourth Capital Requirements Directive (2013/36/EU (CRD IV)) and the Capital Requirements Regulation (Regulation (EU) No 575/2013, the CRR) came into effect. According to the CRR, sponsor or originator institutions may exclude securitized exposure from risk-weighted exposure amount (RWEA) calculations and expected loss amounts if significant credit risk arising from the securitized exposure is deemed to have been transferred to third parties.

2.10.1 Significant Risk Transfer

To deduct securitized exposure from the RWEA calculation, originator institutions must be able to demonstrate to National Competent Authorities (NCAs) that the requirements of a Significant Risk Transfer (SRT) are satisfied. NCAs also need to consider how the level of capital relief achieved is commensurate with the risk transferred to third parties as the tests are passed and regulated institutions are permitted to take capital relief when the transfer of credit risk to third parties meet certain conditions.

It is therefore important that originator institutions and sponsor institutions should have policies and methodologies in place to ensure ongoing compliance with all significant risk transfer requirements according to the CRR.

- Contractual support

The EBA guidance on implicit support for securitization explains that contractual support includes credit enhancement provided at the inception of a securitization transaction. Examples of implicit support:

- Overcollateralization
- Credit derivatives
- Spread accounts
- Contractual recourse obligations
- Subordinated notes
- Credit risk mitigants provided to a specific tranche
- The subordination of fee or interest income, or
- Deferral of margin income
- Implicit support

Implicit support refers to support beyond that which originator and sponsor institutions are already contractually obliged to provide and for both traditional true sale and synthetic securitization,

implicit support undermines the SRT requirement under the CRR. Implicit support acts as a signal to the market that all or part of the contractually transferred credit risk is still with the originating institution and has in effect not been transferred. Accordingly, there are restrictions on providing implicit support and compels originator institutions and sponsor institutions that fail to comply with the requirement to hold their own funds to hedge all securitized exposure as if it had not been securitized.

Examples of implicit support:

- Purchase of deteriorating credit-risk exposures from a securitized pool
- Addition of higher-quality risk exposures to the collateral pool
- Sale of discounted credit-risk exposures into the pool of securitized exposures at above market prices after the closing of the securitization
- The purchase of underlying exposures at above market prices
- Ad hoc credit enhancements provided to one or more tranches, or
- An increase in the first loss position
- Arm's length transactions

The EBA guidelines on what constitutes arm's length conditions in the context of securitization transactions state that transactions executed at arm's length are those where the terms of the transaction are such as they would be in a normal commercial transaction, if:

- A. The parties had no relationship to each other (including, but not limited to, any special duty or obligation, and any ability to control or influence each other); and
- B. Each party:
 - i. Acted independently
 - ii. Entered into the transaction of its own volition
 - iii. Acted in its own interests; and
 - iv. Did not enter into the transaction on the basis of extraneous factors that are not directly connected

2.10.2 Risk retention requirements

One of the core elements of the CRD is a “skin in the game” requirement intended to ensure that originators of securitization vehicles retain an economic interest in their performance. This requirement prohibits institutions from assuming any exposure to securitization unless a bank has explicitly disclosed to the institution that it will retain, on an on-going basis, a “material net economic interest” of at least five percent in the securitization vehicle.

2.10.3 Simple, Transparent and Standardized Securitization/ Comparable securitization

European standard setters and regulators learned several lessons from the US sub-prime securitization crisis. One lesson is that opaque and complex securitization transactions may pose undesirable risks to investors and accordingly a new securitization regulation was published by the European Union. Under this regulation:

Simple securitization means that:

- Exposure packaged in securitization vehicles must be homogeneous loans/ receivables (e.g., car loans with car loans, residential mortgages with residential mortgages)
- No securitization of securitizations is allowed
- Loans must have a credit history long enough to allow reliable estimates of default risk
- The ownership of a loan must have been transferred to the securitization issuer (i.e., they must be sold by the creator of the loans to the entity that will issue the securitization)

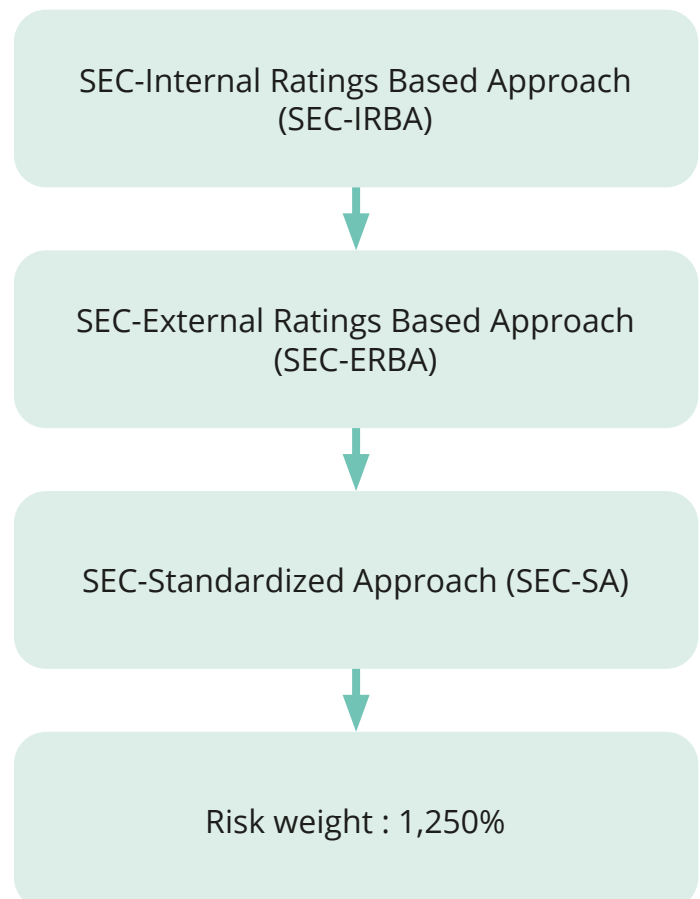
Transparent and standardized securitization means that:

- Exposure packaged in securitization vehicles must have been created using the same lending standards as any other exposure, i.e., no cherry-picking is allowed
- At least five percent of the loan portfolio must be retained by the originator
- Documents must provide details of the structure used and the payment waterfall (i.e., the sequence and amount of payments to each tranche)
- Data on packaged loans must be published on an ongoing basis
- The contractual obligations, duties, and responsibilities of all key parties associated with the securitization vehicle must be clearly defined

2.10.4 Hierarchy of rating approaches under the securitization framework

The CRR follows the Basel Framework closely by ranking the Securitization Internal Ratings-Based Approach (SEC-IRBA) as the primary credit risk calculation approach, followed by the External Ratings-Based Approach (SEC-ERBA) and Standardized Approach (SA). To use SEC-IRBA, a bank needs supervisory approval of the IRB model for the type of exposure in the securitization pool and sufficient information to estimate the exposure-weighted average capital charge of the underlying pool had the exposure not been securitized (KIRB). An institution that cannot calculate KIRB for a given vehicle will be required to use the External Ratings-Based Approach for the calculation of the risk-weighted exposure amounts. Under the SEC-ERBA, risk weightings are assigned based on credit assessments or inferred ratings, the seniority of the tranche, and the granularity of the securitization pool. A bank that cannot use SEC-ERBA must apply the Standardized Approach. If an institution cannot use SEC-IRBA, SEC-ERBA or SEC-SA for a given securitization exposure, it shall apply a risk weight of 1,250%.

Figure 11: Hierarchy of rating approaches



3. Luxembourg securitization

At the heart of Europe and securitization

Luxembourg is a prime venue for securitization in Europe. It hosts 25 percent of all European securitization transactions and it is the domicile for around 1,500 securitization vehicles.



3.1 The modernized Luxembourg securitization framework

Following the law of 25 February 2022 and its publication in the official gazette on 4 March 2022, the Securitization Law, which has been successful for almost 20 years, has evolved in line with business practices and demands and has been modernized through the addition of several new and important features. The result is an even more clear, flexible and modern securitization framework.

The key elements of the modernized Securitization Law are the following:

- **Additional financing sources.** The requirement that Luxembourg securitization vehicles are financed through the issuance of “securities” has been relaxed by now simply requiring the issuance of “financial instruments” (instruments financiers), which would allow Luxembourg securitization vehicles to access multiple financing sources and to support a wider range of instruments (such as loans or promissory notes). Of course, the repayment amount of these financial instruments still needs to be linked to the securitised risks. The added advantage is the reduction in legal formalities and cost in connection with the preparation of the financing documentation.
- **Active management** is now allowed for Luxembourg securitization vehicles for securitised risks related to debt securities, claims or debt instruments, except if such financial instruments are issued to the public. This allows the use of Luxembourg securitization vehicles in CDO/CLO structures, which have historically rather been set up in other jurisdictions.
- The choice of legal forms that can be used for Luxembourg securitization vehicles is enlarged by allowing the use of simple or special limited partnerships, general corporate partnerships and simplified joint-stock companies. This makes Luxembourg securitization vehicles more attractive to investors (such as private equity houses or family offices) who already extensively use tax transparent partnership structures in Luxembourg.
- The modernized Securitization Law now contains a clear legal framework on what is to be considered public issuances on a continuous basis by incorporating the CSSF’s interpretation of these two criteria (which were previously set out in the CSSF FAQ on securitization) while at the same time reducing the denomination threshold for public issuances from EUR 125,000 to EUR 100,000. Consequently, only securitization vehicles issuing more than three times per year non-private placements with a denomination below EUR 100,000 to non-professional investors need to be authorised by the CSSF.
- **Holding of securitized assets.** The modernized Securitization Law now clarifies that a securitization vehicle may acquire, directly or

indirectly, the assets that it securitizes and the assets generating the cash flows that are securitized.

- Increased flexibility for constituting security interests or guarantees. Luxembourg securitization vehicles can now grant security interests to secure any obligation relating to the securitization transaction.
- The treatment and distribution of profits and losses of equity financed compartments is under the modernized Securitization Law clearly defined, stating that this has to be done on a compartment basis.
- The modernized Securitization Law finally also defines a default legal subordination of different types of debt and equity instruments issued by a Luxembourg securitization vehicle.

In addition, the Regulation (EU) No 2017/2402 of the European Parliament and the Council of 12 December 2017, as amended (the “EU Securitization Regulation”) is now well established in Luxembourg.

The EU Securitization Regulation, which is applicable to European securitization transactions whose securities (or other securitization positions) are issued on or after 1 January 2019, is a key element of the European Commission’s capital markets union and supports the development of the European securitization market.

The EU Securitization Regulation contains a first – general – part that provides a definition of securitization and the related concepts (such as due diligence, risk retention and transparency requirements) and a second part that creates an additional framework for simple, transparent and standardised (“STS”) securitizations.

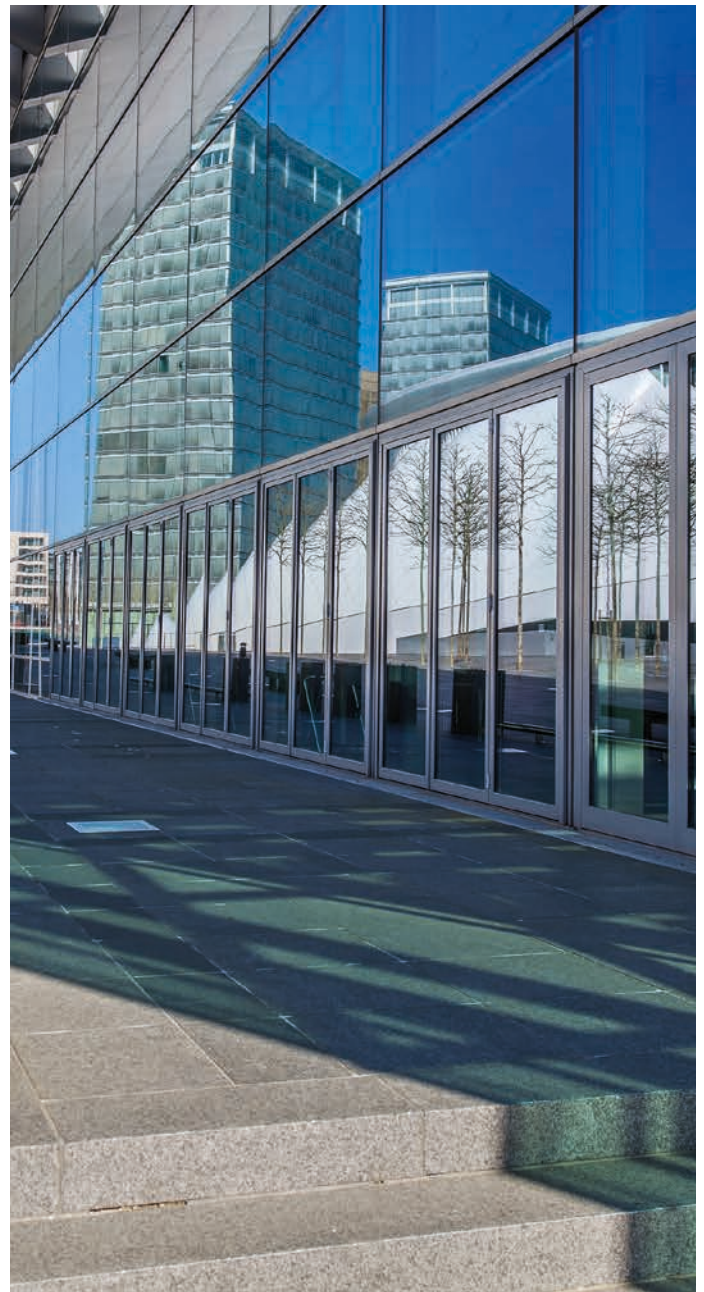
In order to be considered as STS, an EU securitization must fulfil numerous criteria relating to simplicity, transparency and standardisation as mentioned under chapter 4 of the EU Securitization Regulation.

According to the definition of securitization under the Securitization Law, not all Luxembourg securitization transactions meet the definition of securitization as per the EU Securitization Regulation, and therefore the EU Securitization Regulation does not apply to all Luxembourg securitizations. On the other hand, contrary to the EU Securitization Regulation, the Securitization Law is an opt-in law and therefore Luxembourg securitization vehicles performing securitization under the EU definition may not have opted for the Securitization Law.

Contrary to the EU Securitization Regulation, Luxembourg securitization vehicles may acquire or assume any risk (and not only credit risk) and issue financial instruments to retail clients, while tranching is not mandatory.

Consequently, a Luxembourg securitization vehicle may be structured in three possible ways: (i) subject to the Securitization Law and out of scope of the EU Securitization Regulation, (ii) in scope of the EU Securitization Regulation (but not fulfilling the STS requirements) and possibly also subject to the Securitization Law and (iii) in scope of the STS requirements of the EU Securitization Regulation and possibly also subject to the Securitization Law.

As such, Luxembourg continues to be a flexible and attractive environment with a very divers toolbox of securitization solutions.



3.2 Impacts of the ATAD

In context of Luxembourg securitization vehicles, implementation of the Anti-Tax Avoidance directive (“ATAD”) in Luxembourg via the law of 18 December 2018, may impact the taxation of Luxembourg securitization companies as from tax year 2019 for two main provisions, namely – a) interest deduction limitation rule which aims to discourage multinational groups from reducing the overall tax base of the group by financing group companies in high-tax jurisdictions with debt and b) the hybrid mismatch rule which aims to eliminate the double non-taxation created by the use of certain hybrid instruments or entities.

Interest limitation rule

Interest limitation rule continues to be probably the most relevant tax topic for securitization companies. Article 168bis of the Luxembourg Income Tax Law (“LITL”) establishes the interest limitation rule in Luxembourg that sets out a limit on the amount of yearly interest that is deductible for tax purposes. The deduction of interest expenses, which exceed the received taxable interest revenues and other economically equivalent taxable revenues, will be limited to 30% of the EBITDA or a lump sum of EUR 3 million in the period in which they are incurred (i.e. the relevant tax year).

The interest limitation rule applies to Luxembourg resident corporate taxpayers subject to corporate income tax. Nonetheless, Luxembourg chose the option to exclude certain entities such as standalone entities and financial undertakings. Luxembourg also decided to exclude securitization companies falling within the scope of article 2, 2) of the EU Regulation 2017/2402 of 12 December 2017. This exemption has been challenged by the EU Commission in March 2022 and the Luxembourg Ministry of Finance submitted a draft law to the Luxembourg Parliament to align with the views of the EU Commission and include securitization companies covered by the EU Regulation 2017/2402 within the scope of the interest limitation rules. The law has not yet been voted by the Parliament meaning that until now, the exemption still applies.

The Luxembourg tax authorities issued guidance (Circular n°168bis/1) on 8 January 2021 clarifying certain aspects of the interest expense deduction limitation rules in article 168bis of the LITL.

The circular mentions that only borrowing costs incurred exclusively by the taxpayer (article 45 LITL) or directly for the purpose of acquiring, securing, and retaining revenue (article 105 LITL) are in principle tax deductible and can be subject to the interest expense deduction limitation rules, to the extent that their total or partial deduction is not denied.

The circular provides further analysis on the non-exhaustive list of borrowing costs included in article 168bis (1) 2) IITL. However, these

concepts remain unclear in many instances, hence leaving certain transactions or structures in the same uncertain position as they were before the circular was issued.

The list includes more particularly the following:

- Issuance of, and redemption premium on, financial instruments;
- Derivatives, including contracts commonly known as forwards, futures, options, and swaps. Interest expenses that are calculated on the basis of a notional amount are also covered, in particular in the context of a swap where the notional amount (in principle) has not been the subject of a transaction or a physical exchange;
- Capitalized interest included in the balance sheet value of a related asset, or the amortization of capitalized interest. The circular specifies that, where the option for incorporating the interest on borrowed capital to the acquisition cost of a new asset is retained for tax purposes, the regime only applies to capitalized interest or borrowing costs when they are or are likely to be deducted (notably for amortization, depreciation deduction, or disposal of the asset); and
- The circular also clarifies that foreign exchange gains and losses that are included in taxable income and that relate to interest on loans and financing-related instruments are included in the definition of borrowing costs. Foreign exchange gains and losses resulting from the loan principal are not considered by the current rules.

The circular confirms the application of a horizontal symmetric approach whereby the concept of “borrowing costs” and “interest revenue and other economically equivalent income” should be defined or interpreted similarly whether it is arising from a debt receivable or a debt payable. This was highly discussed during the legislative process and hence expected by Luxembourg taxpayers.

The Luxembourg tax authorities also formalized the economic approach as a possible way to qualify income as equivalent to interest. This is, however, without any further details or background.

We also note that the circular proposes to consider the tax treatment in the hands of the creditor and the debtor (vertical symmetry) for the purpose of qualifying an income or an expense in a domestic context. It remains however unclear how such a vertical symmetry would apply in a cross-border context.

The LTA further updated the circular regarding the interest limitation rules on 2 June 2021. The LTA includes a specific section for the safeguard clause (hereafter the “**escape clause**”) with regard to the situation of corporate collective entities which are members of a consolidation group.

The escape clause allows an entity to deduct the full amount of its exceeding borrowing costs incurred in case such **entity is a member of a consolidated group for financial accounting purposes**.

In order to deduct the full amount of the borrowing costs incurred, the entity must demonstrate that **the ratio of its equity to its total assets is no more than 2.5 below, equal or higher than the equivalent ratio of the group to which it belongs**.

In order to apply the escape clause, the following **cumulative conditions** must be met:

- **The entity must be a member of a consolidated group for financial accounting purposes** (i.e. fully consolidated);
- **The consolidated financial statements must be prepared in accordance with a qualifying set of accounting standards**, i.e. IFRS or the national financial reporting system of a Member State; and
- **The consolidated financial statements must be subject to an appropriate audit** by an expert authorised to audit consolidated financial statements as part of a statutory engagement or a contractual engagement at the request of the taxpayer.

In the event that the requirements below are cumulatively met, the escape clause may apply. However, restatements and adjustments to the financial statements will be required to compare the entity's ratio to the consolidated group's ratio.

The method to compare the ratios is also provided in the circular

Finally, it should be noted that the escape clause is not automatically applicable. Indeed, the entity seeking to benefit from it must make a request in the context of the income tax return. The request must be made for each operating year for which the entity would like to benefit from the escape clause.

It is expected that the Luxembourg tax authorities will issue other circulars or guidance clarifying the provisions of the ATAD 1 Law.

Hybrid mismatches

The article 168ter LITL (also in application as from 1 January 2019) aims to eliminate — in an EU context only — the double non-taxation created with certain instruments or entities treated differently in different jurisdictions (hybrids).

The objective of the provision regarding hybrid mismatches is to neutralize the tax effects of hybrid arrangements, exploiting differences in the tax treatment of an entity or instrument under the laws of two or more EU Member States to achieve a deduction in both States. Also, on August 8, 2019, Luxembourg published a draft law that would implement the hybrid mismatch measures with countries outside of the EU and covers additional types of hybrid mismatches. This draft law replaced article 168ter of the LITL and introduced a new article 168quarter with effect from 1 January 2020.

The tax treatment applicable to Luxembourg securitization vehicles allows to consider dividends paid by a securitization vehicle as an expense whereas from a legal perspective the payment remains a dividend. The expense qualification from a pure Luxembourg tax point of view permits the deductibility of the payment (as well as an absence of withholding tax) while the legal qualification of the income as dividend renders the income potentially eligible for an exemption in the hand of the foreign shareholders based on its participation exemption regime or the DTT signed between its country of residence and Luxembourg.

This illustrates a situation of deduction and non-inclusion targeted not only by BEPS Action 2 but also by other regulations or measures like the ATAD I and ATAD II or the General Anti Abuse Rule inserted in the EU Parent Subsidiary Directive.

In the light of BEPS Action 2 and ATAD I and II, the Member State involved is required either to deny deduction of payments, expenses or losses or to include payments as taxable income.

Based on the above, Luxembourg could consider in the future adapting its securitization tax regime with respect to the deductibility of dividend payments. The risk of challenge of the securitization regime based on the new European tax environment may not be immediate and any adjustment or amendment of the securitization tax regime would however need to maintain the tax neutrality of the vehicle.

For the time being, no adjustment has been envisaged in Luxembourg with respect the application this provision.

Also to be noted, that the securitization vehicles will out of scope of ATAD III.

Unshell directive

On 22 December 2021, the European Commission released a draft for a new directive laying down rules to prevent the misuse of the so-called “Shell entities” for tax purposes in the EU, amending Directive 2011/16/EU on administrative cooperation in the field of taxation (DAC). The directive aims to prevent shell entity misuse for tax purposes by standardizing the assessment criteria and processes to identify shell entities through a substance test, and by coordinating their tax treatment among Member States. While the directive may still be amended and clarified based on comments from various public and private bodies, its main concepts are likely to be adopted.

By derogation, five categories of undertaking are explicitly excluded. These exceptions, inter alia, include 19 regulated financial undertakings such a “securitization special purpose entity” and undertakings with at least five own full-time equivalent employees or members of staff exclusively carrying out the activities generating the relevant income.

The draft directive distinguishes undertakings / arrangements that are at risk of lacking substance and may be misused for tax purposes by analyzing three “gateway” criteria. Where an undertaking crosses all the three gateways, it will be required to annually report further information to the tax authorities via its tax return. The 3 gateways are the following:

- i. Analysis of the activities based on the income received - Is the bulk of the company’s income passive (dividends, interest on bonds, etc.)? The gateway is met if more than 75% of overall revenue in the previous two tax years is relevant income or if more than 75% of its assets are real estate property or other private property of particularly high value.
- ii. Are a majority of transactions cross-border? The second gateway requires a cross-border element. If the company receives the majority (>60%) of its relevant income through transactions linked to another jurisdiction or passes this relevant income on to other companies situated abroad, the company crosses to the next gateway
- iii. Are management and administration outsourced? The third gateway focuses on whether the administration of day-to-day operations and the decision making on significant functions are outsourced in the two preceding tax years.

Relevant income, according to the above-described gateways, may be the following type of income:

- Interest or any other income generated from financial assets, including crypto assets
- Dividends and income from the disposal of shares
- Royalties or any other income generated from intellectual or intangible property or tradable permits
- Income from financial leasing
- Income from immovable property
- Income from movable property, other than cash, shares or securities, held for private purposes and with a book value exceeding 1 million euro
- Income from insurance, banking and other financial activities
- Income from services which the undertaking has outsourced to other associated enterprises.

The directive carves out a securitization special purpose entity as defined in Article 2 point 2 of Regulation (EU) 2017/2402 or if it issues listed debt. However other securitization entities should be impacted by the entry into force of the directive.

3.3 EU Mandatory disclosure regime

In March 2018, an EU Directive’ on Administrative Cooperation was agreed which requires disclosure to be made to tax authorities in respect of certain cross border transactions (“DAC 6”). Although this is stated as being aimed at “aggressive tax practices” the directive is widely drafted and requires disclosure of structures as soon as they fall under any of the predefined hallmarks.

The Directive was transposed by a law dated 25 March 2020 and applies as from 1 July 2020. Therefore, it is necessary for advisers to track potentially reportable transactions to determine what needs to be disclosed, in due course. It should also be noted that the Luxembourg DAC 6 Law extends the legal professional privilege of the lawyers to chartered accountants and auditors. For intermediaries benefitting from legal professional privilege, it has been established an exemption from any kind of reporting. Instead, these intermediaries are only required to notify any other intermediary that is not protected by professional secrecy, or the taxpayer in the absence of such an intermediary, within 10 days.

Securitization vehicles may be impacted by the DAC 6 provisions depending on the structuring of the transaction they enter into.

3.4 Pillar Two

“Pillar Two” is the EU Directive of 14 December 2022 (2022/2523) implementing a global minimum level of taxation for multinational enterprise groups and large-scale domestic groups in the Union. It is also known as the GloBE Directive (Global anti-Base Erosion Directive). The EU Pillar Two Directive aims to ensure a jurisdictional minimum taxation of at least 15 % for groups meeting the EUR 750 million consolidated revenue threshold.

The Pillar Two Directive is to be transposed by a Luxembourg law as from 1st January 2024.

The topic is relevant for all players, from multinational groups to funds. Securitization companies also need to give it a careful reading and analysis notably when it can be established that they are part of a multinational group.

Some accounting questions around the concept consolidation from an accounting point of view should be raised before starting a scoping exercise of the relevant entities that would be part of the same group as the securitization company.

Developments around Pillar Two need to be closely monitored.

3.5 Benefits of Luxembourg securitization

Aside from the well-known benefits of securitization, such as lower regulatory capital requirements for banks and insurance companies, portfolio diversification, capital market access, and efficient refinancing and restructuring, the Luxembourg securitization framework offers a range of additional advantages to originators, sponsors, and investors.

3.5.1 Legal and regulatory framework | Segregation of assets and liabilities

To ensure the appropriate segregation of assets and liabilities, a Luxembourg securitization vehicle can create one or more compartments (for securitization companies) or sub-funds (for securitization funds) corresponding to a distinct part of the securitization vehicle’s assets. For this to occur, the constitutional documents (articles of association or the management regulation) of the securitization vehicle must foresee the creation of multiple compartments/sub-funds. The decision to set up compartments/sub-funds is taken by the board of directors and can be made at any time throughout the entire life of the securitization vehicle.

Each compartment or sub-fund can issue notes against a single asset/claim or a portfolio of assets/claims. The rights/ claims of investors/creditors relating to a specific compartment or sub-fund will be limited to the assets thereof, which will be exclusively available to cover such rights/claims. As with investors, each compartment or sub-fund shall be treated as a separate entity, unless otherwise stipulated in the constitutional documents of the securitization vehicle. Consequently, compartments or sub-funds do not contaminate each other if the assets underperform.

Bankruptcy remoteness

The Securitization Law recognizes the validity and enforceability of: (i) the contractual subordination of claims, (ii) the non-petition agreement (whereby investors and creditors waive their rights to initiate insolvency or bankruptcy proceedings against the securitization vehicle), and (iii) the noteholders’ limited right of recourse with respect to the securitization vehicle (the scope of the noteholders’ right of recourse is limited to the assets of the relevant compartment/sub-fund only).

Enforcement of pledges

As with the Securitization Law and the Company Law, the Luxembourg law relating to financial collateral arrangements dated 5 August 2005 as amended on 20 May 2011 (the “Collateral Law”) should be viewed as creditor-friendly legislation aimed at facilitating and accelerating the enforcement of collateral arrangements (e.g., share and asset pledges) including those over credit claims.



3.5.2 Taxation

Securitization companies are fully subject to Luxembourg corporate income tax and municipal business tax. Payments and commitments made to investors and to other creditors are, however, fully deductible. The law expressly states that—for tax purposes—payments made by such companies are always treated as interest, even when made in the form of a dividend, leading to a significant reduction in their taxable basis. No withholding tax is due on these payments. In addition, securitization companies benefit from an exemption from the regular net worth tax rate but are still subject to a minimum net worth tax ranging from €535 to €32,100 per year (depending on the assets held). On the other hand, securities funds are not liable to net worth tax.

In principle, as fully taxable resident companies, securitization companies have access to double taxation treaties concluded by Luxembourg with other countries, as well as EU directives. Upon request, they can obtain a tax residence certificate from the Luxembourg tax authorities.

Securitization funds are assimilated with transparent investment funds for Luxembourg tax purposes. They are not subject to corporate taxes or net wealth tax and theoretically do not have access to European directives or double taxation treaties. Investors are taxed according to the rules applicable in their country of residence. No subscription tax is payable by securitization funds.

As long as they do not have the effect of transferring rights related to immovable property located in Luxembourg or to aircraft, ships or riverboats recorded on a public register in Luxembourg, agreements entered into in the context of a securitization transaction and all other instruments relating to such a transaction should not be subject to registration formalities, even when referred to in a public deed or produced in court or before any other public authority.

Finally, one of the most attractive tax aspects is the VAT exemption from which a securitization fund may benefit with respect to management services.

3.5.3 Investment policy

A wide range of assets/rights can be securitized under the Luxembourg Securitization Law. These include:

- Trade receivables, e.g., credit card receivables, rental income
- Performing and non-performing loans, e.g., commercial and residential real estate, automotive, shipping, aircraft and infrastructure/project finance
- Tangible and intangibles assets, e.g., commodities, art, royalties

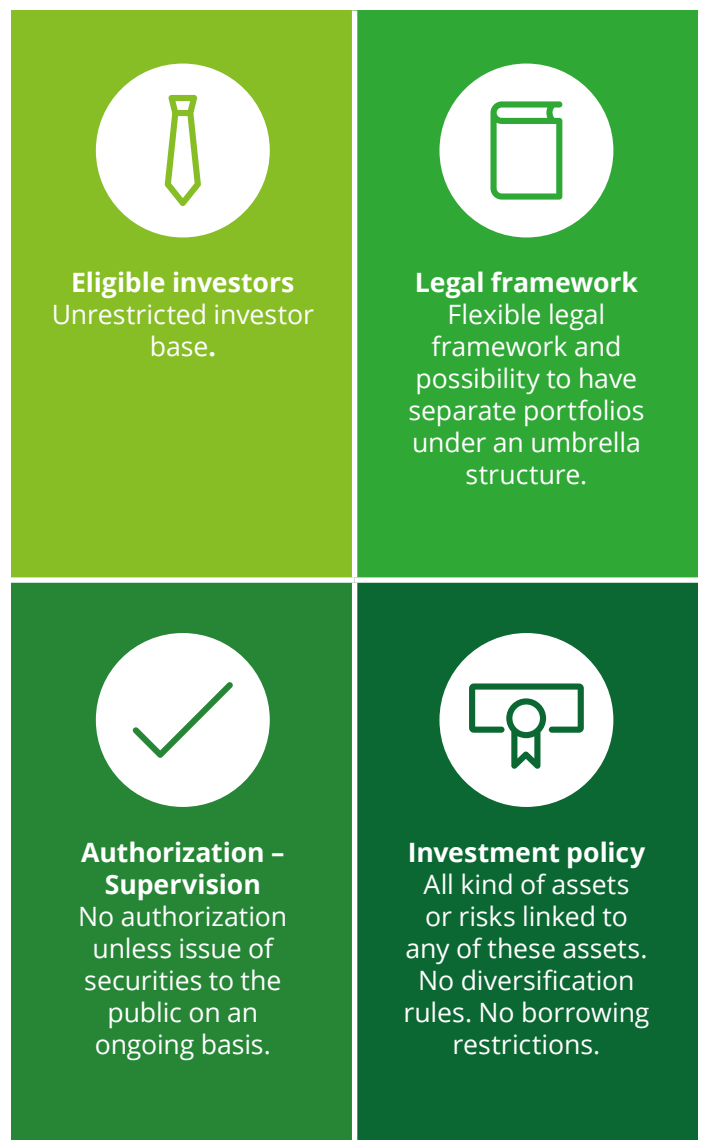
- Liquid and illiquid financial instruments, e.g., shares, bonds, illiquid hedge fund positions, PE participations
- Any activity with a reasonably ascertainable value or predictable future revenue streams

Securitized risks may also result from obligations assumed by third parties or inherent to the activities of third parties.

3.5.4 Authorization and supervision

Only securitization companies issuing securities (equity or debt): (i) on a continuous or revolving basis, and (ii) to the public are subject to the supervision of the CSSF.

Figure 12: Benefits of Luxembourg securitization



“One of the most appealing features of securitization as a technology is its flexibility. It can be used on granular assets such as residential mortgages where many thousands of individual mortgages can sit within a deal. It can also be used to finance non-granular assets such as commercial real estate, where deals might only be underpinned by 10 loans or fewer.”

Financial Times, August 2017



3.6 The Luxembourg stock exchange

Securitization vehicles in Luxembourg have access to the Luxembourg stock exchange, which operates two markets: the Bourse de Luxembourg and the Euro Multilateral Trading Facility (“Euro-MTF”) market. The Luxembourg stock exchange features more than 41,000 listed and tradeable securities, including Asset-backed Securities (“ABS”).

3.7 Securitization vehicles

The Securitization Law and the law of 10 August 1915, as amended from time to time (the “Company Law”) allow the use of regulated and non-regulated vehicles for the securitization of a wide range of assets including trade receivables, loans, tangible and intangible assets, shares, and any other activity with a reasonably ascertainable value or predictable future revenue streams.

Luxembourg securitization vehicles can take two forms: a corporate form or a securitization fund.

3.7.1 Creation and legal form

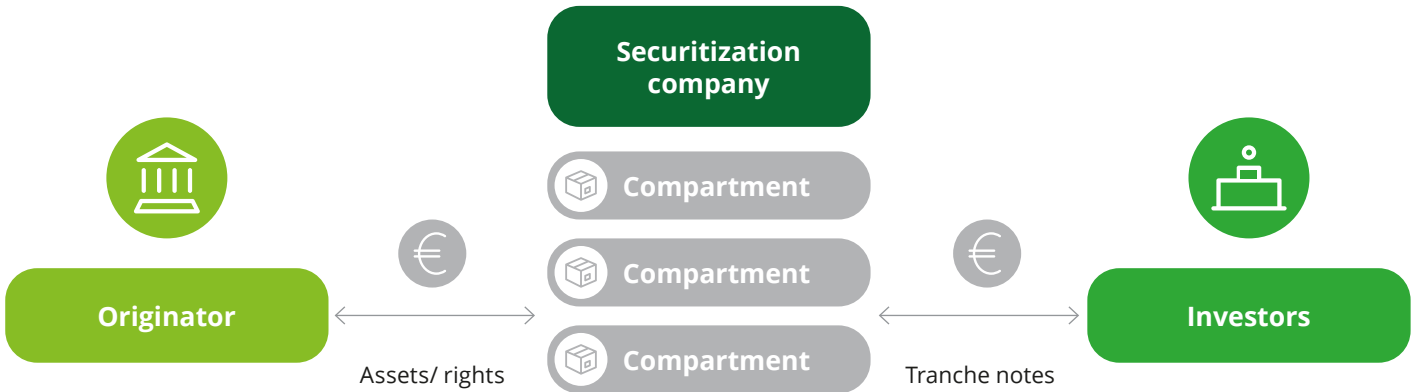
The constitutional documents (articles of association, partnership agreement) of a securitization vehicle that takes the form of a corporate entity or a partnership (a “securitization company”) must specifically refer to the Luxembourg Securitization Law to qualify as a Luxembourg securitization vehicle.

A securitization company can take the following corporate forms:

- A public limited liability company (société anonyme or “SA”)
- A partnership limited by shares (société en commandite par actions or “SCA”)
- A private limited liability company (société à responsabilité limitée or “Sàrl”)
- A cooperative organized as a public limited company (société coopérative organisée sous forme de société anonyme or “SCSA”)
- A simplified joint stock company (société par actions simplifiée ou “SAS”)
- A simple limited partnership (société en commandite simple or “SCS”)
- A special limited partnership (société en commandite spéciale or “SCSp”)
- A general corporate partnership (société en nom collectif ou “SNC”)



Figure 13: Securitization company

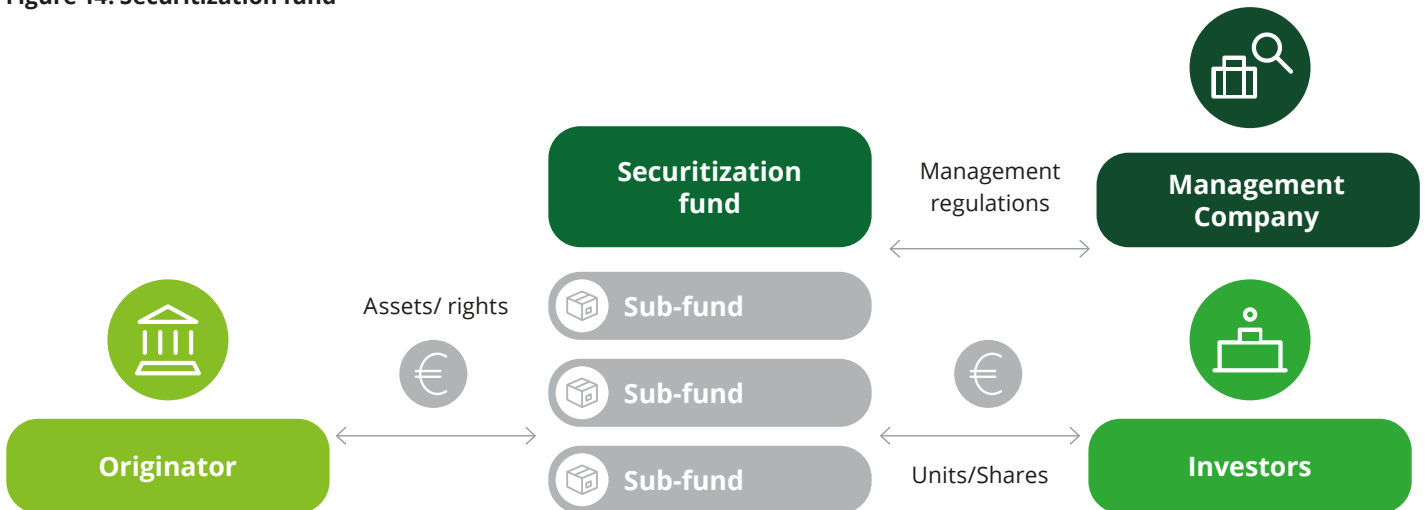


A securitization company only needs to meet the minimum capital requirement applicable to its corporate form (i.e., SA/ SCA: €31,000, Sàrl: €12,500, no minimum capital requirement for an SCSA but The capital referred to in the articles of incorporation must be subscribed upon incorporation, no minimum capital requirements for partnerships). This requirement must be met at the company level, not by each individual compartment.

A securitization company can be set up as an orphan structure, e.g., the shareholders of the company are Dutch private foundations (Stichtings). In such cases, the securitization company would not be regarded as a subsidiary of the originator and consolidation may be avoided (depending on local GAAP). Foundations are administrated by a management board that is responsible for fulfilling the purpose of the foundation as defined by its articles of association.



Figure 14: Securitization fund



A securitization fund takes the form of a stand-alone fund, a fonds commun de placement (co-ownership) or a fiduciary trust, managed by a management company whose registered office must be located in Luxembourg. The management regulations must specifically refer to the Securitization Law for the vehicle to qualify as a Luxembourg securitization fund. A securitization fund does not have a legal personality, but it is entitled to issue units representing the rights of investors in accordance with its management regulations.

Compartmentalization allows for the segregation of the assets and liabilities across multiple compartments, so that assets may be ringfenced on a compartment-by-compartment basis.

3.4.2 Compartments and sub-funds

A securitization company can create several compartments and a securitization fund can create multiple sub-funds within one structure. Compartmentalization allows for the segregation of the assets and liabilities across multiple compartments, so that assets may be ringfenced on a compartment-by-compartment basis. Unless otherwise stipulated in the constitutional documents of the securitization company, the segregated compartments do not affect each other if assets underperform, as potential losses are borne by the noteholders and creditors of the various compartments. This means that the noteholders' and creditors' right of recourse can be limited on a compartment-by-compartment basis.

Compartmentalization allows for the segregation of the assets and liabilities across multiple compartments, so that assets may be ringfenced on a compartment-by-compartment basis.

To allow for compartmentalization, the articles of association of the securitization company should simply authorize the board of directors to create segregated compartments. Liquidation of one compartment does not affect the existence of any other compartment, or that of the securitization company itself.



3.8 Authorization and supervision

Only securitization companies issuing securities (equity or debt): (i) on a continuous or revolving basis, and (ii) to the public are subject to the supervision of the CSSF.

In terms of the definition of public issuances on a continuous basis, the modernized Securitization Law indicates that only securitization vehicles issuing more than three time per year non-private placements with a denomination below EUR 100,000 to non-professional investors need to be authorised by the CSSF.

Luxembourg securitization vehicles are generally not subject to the EU directive on alternative investment fund managers (“AIFMD”). However, the securitization vehicles that must comply with the provisions of AIFMD are¹²:

- Securitization vehicles acting as first lender, i.e., originating new loans
- Securitization vehicles issuing securities offering synthetic exposure to non-credit related assets and undertaking the transfer of credit risk only as an accessory activity

3.9 Accounting

Luxembourg securitization companies must comply with the provision of Section XII of the Company Law, and with the provisions of Chapters II and IV of Title II of the Law of 19 December 2002 on the trade and companies register and the accounting and annual accounts of companies (“the Accounting Law”). The Accounting Law allows the application of Luxembourg Generally Accepted Accounting Principles (“Lux GAAP”) as well as the use of International Financial Reporting Standards (“IFRS”):

- Lux GAAP: historical cost/fair value option
- IFRS: fair value

In the event that a Luxembourg securitization vehicle is set up with multiple compartments, a breakdown of assets and liabilities as well as profit and loss statements per compartment must be prepared in addition to consolidated financial statements.

The accounting and tax regulations applicable to a securitization fund managed by a management company and governed by management regulations is the Accounting Law. However, this does not apply to:

- The content and layout of the annual report
- Asset valuation, which will follow the mark-to-market model set out in the **Law of 17 December 2010 on Undertakings for Collective Investments**, as amended (the “UCI Law”). Thus, the following two options are available:
 - i. Lux GAAP: mark-to-market
 - ii. IFRS: fair value

3.10 Reporting obligations

Under the Securitization Law, both regulated and unregulated securitization vehicles must comply with the following circulars of the Luxembourg Central Bank (Banque centrale du Luxembourg—“BCL”) that implement ECB regulations and guidelines and set out reporting obligations:

- i. **Guideline ECB/2011/23** of 9 December 2011, on the statistical reporting requirements of the ECB in the field of external statistics
- ii. **Regulation ECB/2012/24** of 17 October 2012 concerning statistics on holdings of securities
- iii. **Guideline ECB/2013/24** dated 25 July 2013 on the statistical reporting requirements by the ECB in the field of quarterly financial accounts
- iv. **Regulation ECB/2013/40** of 18 October 2013 concerning statistics on the assets and liabilities of financial vehicle corporations engaged in securitization transactions
- v. **BCL circular 2014/236** dated 25 April 2014 on statistical data collection by securitization vehicles, which replaces and repeals (i) BCL circular 2009/224 dated 8 June 2009, and (ii) BCL circular 2013/232 dated 20 June 2013, and sets out the initial registration requirements applicable to Luxembourg securitization vehicles and their continuous periodic reporting obligations

¹² Question No. 19, Frequently Asked Questions Securitization, Commission de Surveillance du Secteur Financier, 23 October 2013.

Every securitization vehicle falling within the scope of the reporting population as defined by BCL circular 2009/224 dated 8 June 2009 (implementing **ECB Regulation ECB/2008/30** dated 19 December 2008) must submit the following information to the BCL at the time of the initial registration:

- The nature of the securitization vehicle
- The International Securities Identification Numbers (“ISINs”) of financial instruments issued by the securitization vehicle
- Information about the reporting agent (i.e., the entity that submits the data)
- Information about the management company, if applicable

If a registration is amended or cancelled, the securitization vehicle will submit the following to the BCL¹³:

- All information regarding the registration amendment
- The closure/liquidation date if the securitization vehicle is closed or liquidated

This must occur as soon as the total assets of a securitization vehicle vary to such an extent that it could change its situation regarding reporting obligations.

The ongoing reporting obligations that apply to securitization vehicles are:

- Initial notification: any securitization vehicle whose quarterly total balance sheet exceeds €500 million or the equivalent in a foreign currency shall inform the BCL of this by submitting its most recent annual accounts, if available, within one month of this threshold being passed
- Quarterly statistical balance sheet of securitization vehicles: a report must be provided to the BCL on a quarterly basis no later than 20 working days after the end of the period to which it relates (the “S 2.14 Report”)
- Transactions and write-offs/write-downs on securitized loans of securitization vehicles: a report must be provided to the BCL on a quarterly basis no later than 20 working days after the end of the period to which it relates (the “S 2.15 Report”)
- Security by security reporting of securitization vehicles: a report must be provided to the BCL no later than 20 working days after the month-end to which it relates (the “SBS Report”)

BCL circular ST.13-0993, dated 9 December 2013, lowers the exemption threshold below which a securitization vehicle is exempt from all statistical reporting obligations, apart from the obligation to produce end-of-quarter reports on outstanding amounts in relation to total assets, from a total of EUR 100 million to EUR 70 million on the balance sheet¹⁴.

BCL circular ST.16-0557, dated 24 May 2016, implemented ECB **Decision ECB/2015/50** of 18 December 2015 (amending Decision ECB/2010/10 on non-compliance with statistical reporting requirements. Since 1 July 2016, the ECB and the BCL have monitored reporting agents’ compliance with the minimum standards required to meet their reporting obligations. All failures to meet the minimum requirements will be recorded in a database and sanctions may be imposed by the BCL. More serious misconduct will also be recorded so that the ECB may impose sanctions.

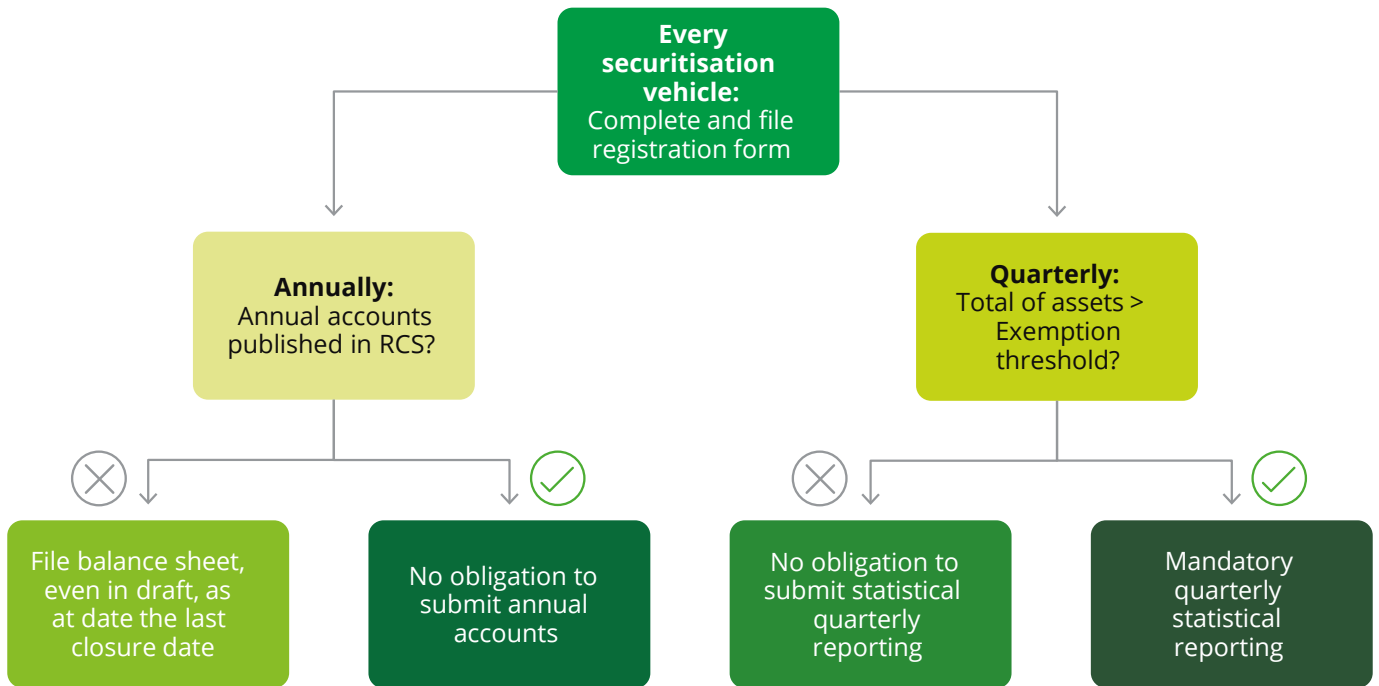
BCL reporting obligations aside, securitization vehicles entering into derivatives contracts fall within the scope of **EU Regulation 648/2012** of 4 July 2012 on over-the-counter (“OTC”) derivatives, central counterparties and trade repositories, also known as the European Market Infrastructure Regulation (“EMIR”)¹⁵.

¹³ The BCL reserves the right to impose specific reporting obligations on securitization vehicles with a balance sheet falling below the threshold.

¹⁴ The exemption threshold is determined at the level of the securitization vehicle as a whole and not on a compartment-by-compartment basis for multi-compartment structures.

¹⁵ The CSSF confirmed in its press release no. 13/26 dated 24 June 2013 that securitization vehicles are also covered as non-financial counterparties and may thus be subject to the reporting and risk mitigation obligations under EMIR.

Figure 15: Overview of BCL reporting obligations



“As a heterogeneous asset class, securitization stands to benefit from a framework allowing investors, regulators, and other participants (such as central banks lending against securitizations as collateral) to distinguish between deals on an objective, consistent basis. Greater standardization can also contribute to better liquidity in the secondary market.”





4. Structuring scenarios

A flexible legal framework and opportunities to create multiple compartments within one legal entity make Luxembourg a highly appealing location for securitized loan portfolios.

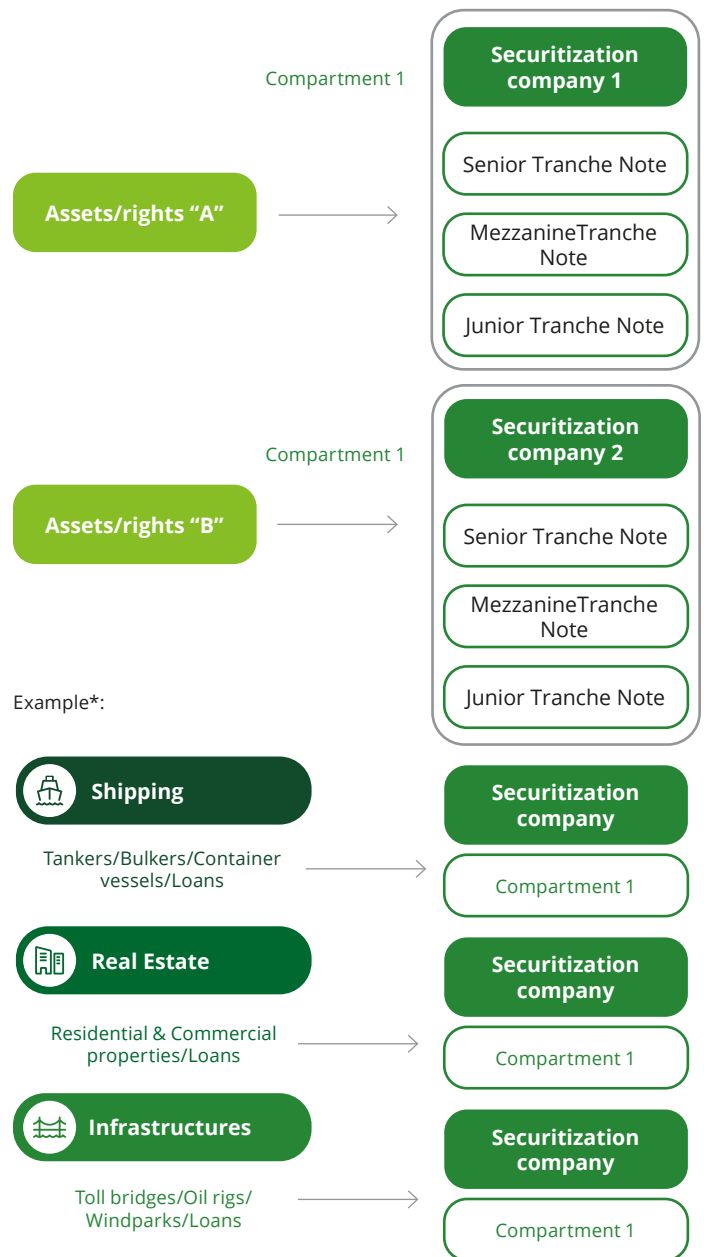
4.1 Structuring scenarios

In this section, Deloitte is proud to present a series of case studies to illustrate the advantages of the structural features of Luxembourg securitization vehicles, the unique securitization scenario of non-performing loans, and the use of double taxation treaties to ensure tax-efficient structuring.

4.1.1 Compartmentalization and tranching

In the most basic scenario, sponsors, arrangers, and originators of securitization vehicles can set up a Luxembourg securitization vehicle with only one compartment or sub-fund that holds a portfolio of mostly homogenous assets or rights. Such securitization vehicles are typically automotive loans and lease ABS, CMBS, RMBS and credit card receivable ABS. The Securitization Law also provides a highly attractive and flexible regulatory framework by allowing a combination of multi-compartment structures and tranching to tailor securitization transactions to the specific objectives and requirements of originators, arrangers, sponsors, guarantors, and investors. A typical structure is created by pooling assets and rights within the same asset class in compartments. The securitization vehicle can then issue series of tranches to investors (Figure 22).

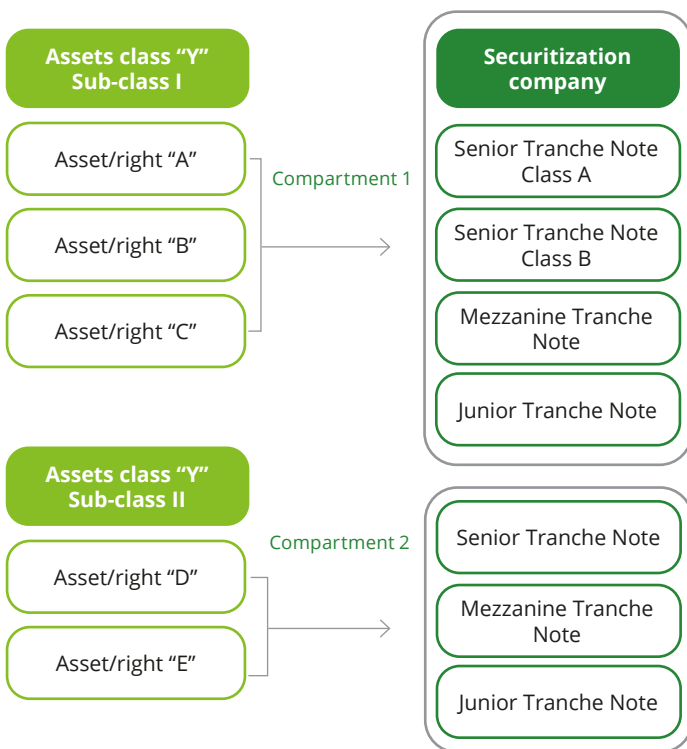
Figure 16. Pooling approach 1



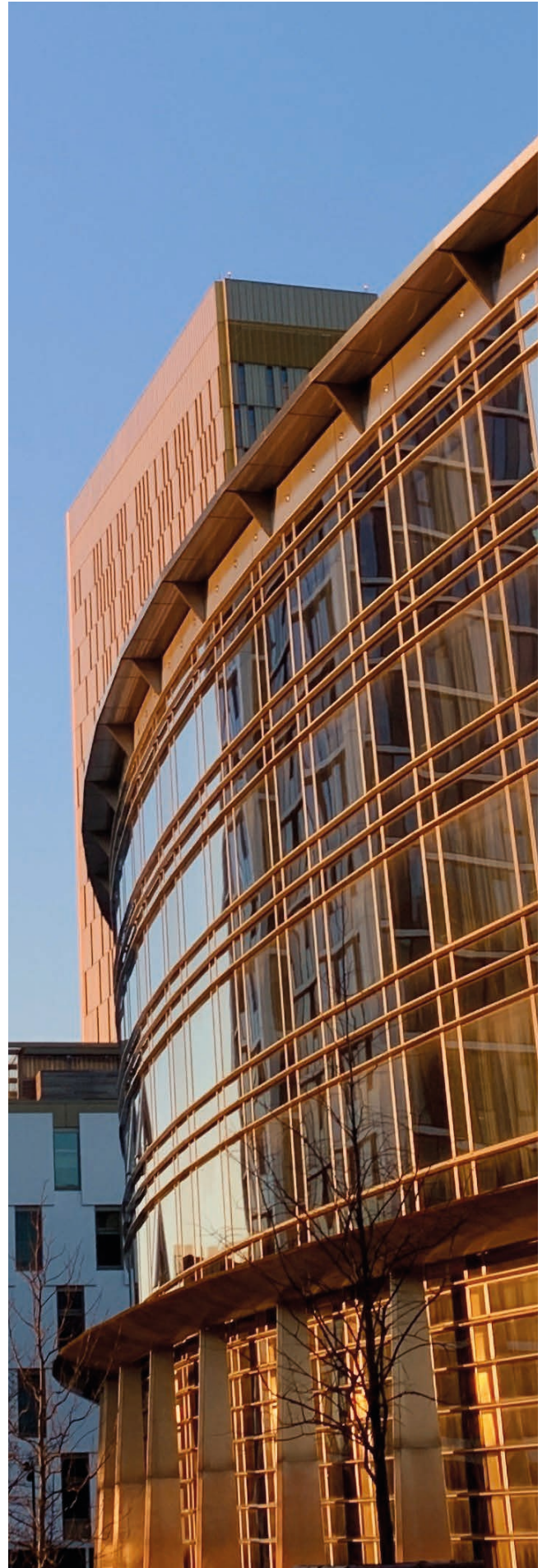
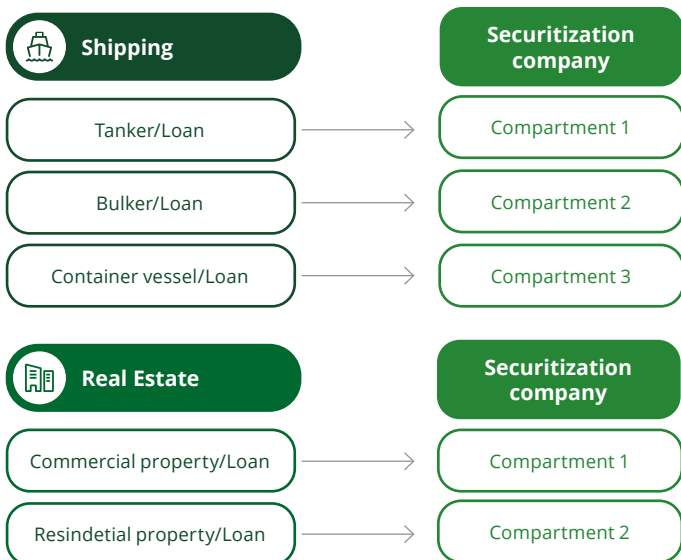
* For reference purposes only

A second approach is to set up a securitization vehicle with multiple compartments where each asset sub-class is allocated to a dedicated compartment. Asset sub-classes can be categorized by geographical region (e.g., prime or secondary real estate) or industry segments (e.g., tanker, dry bulk, and container for shipping) (Figure 23).

Figure 17. Pooling approach 2

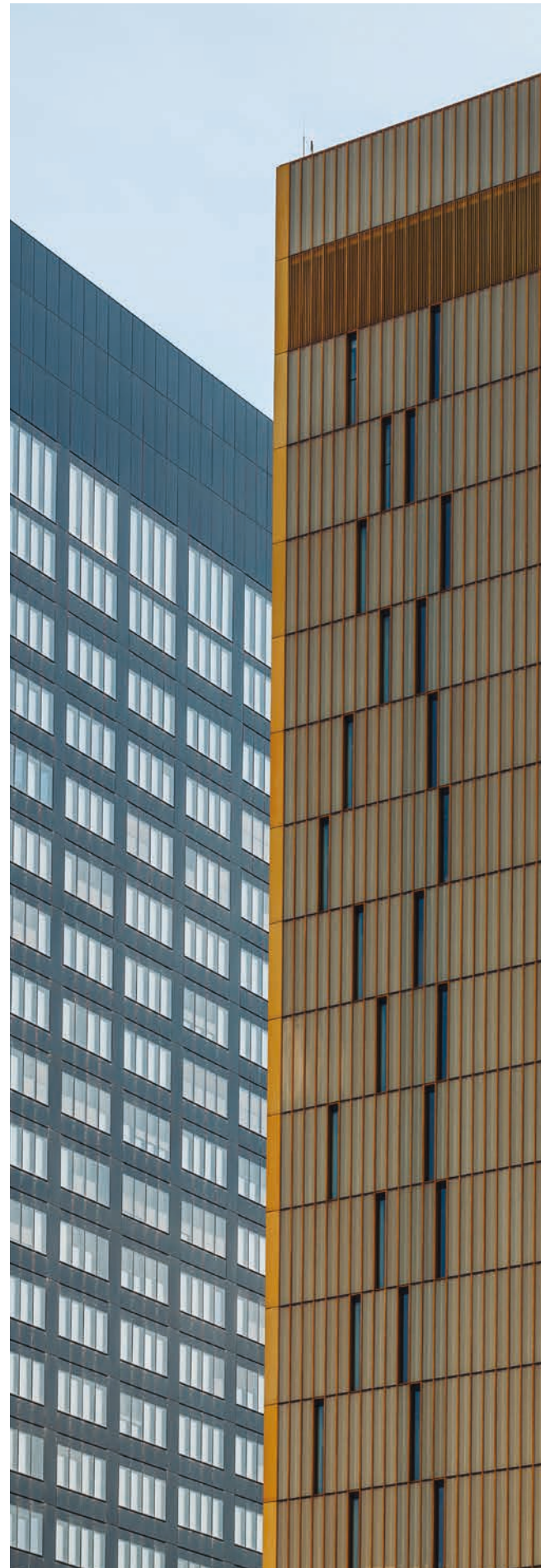
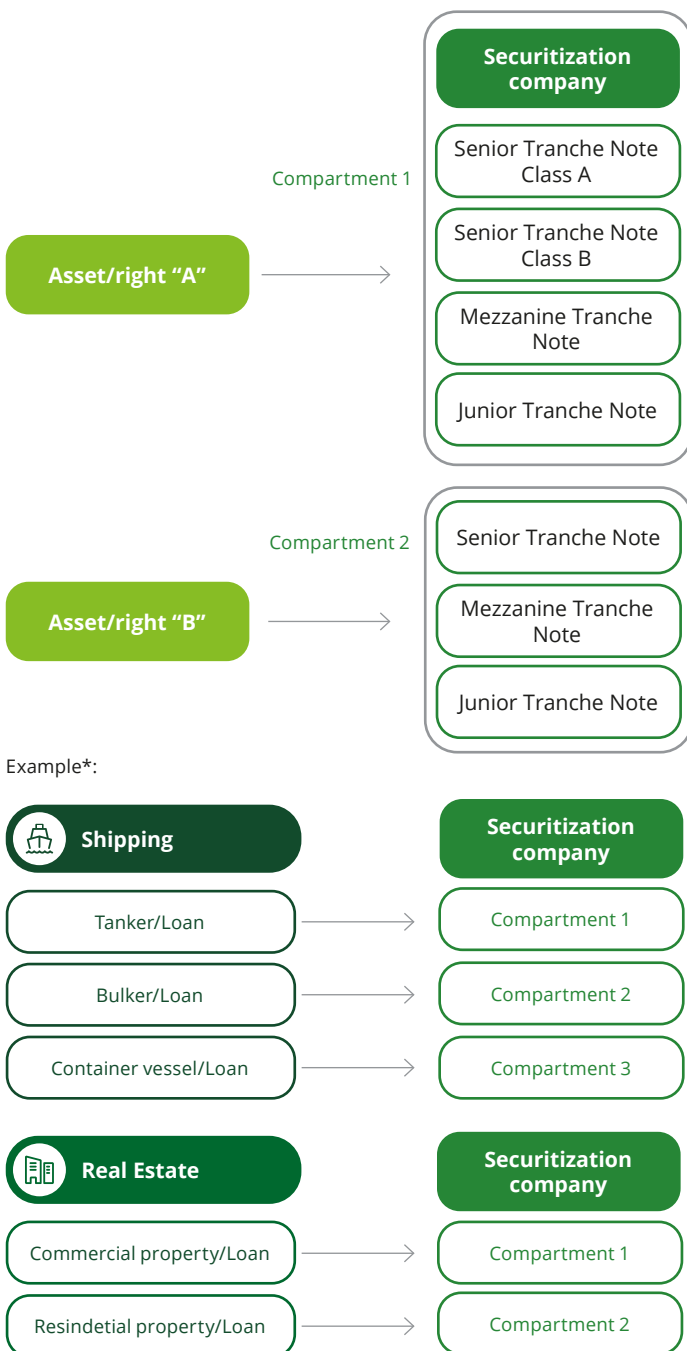


Example*:



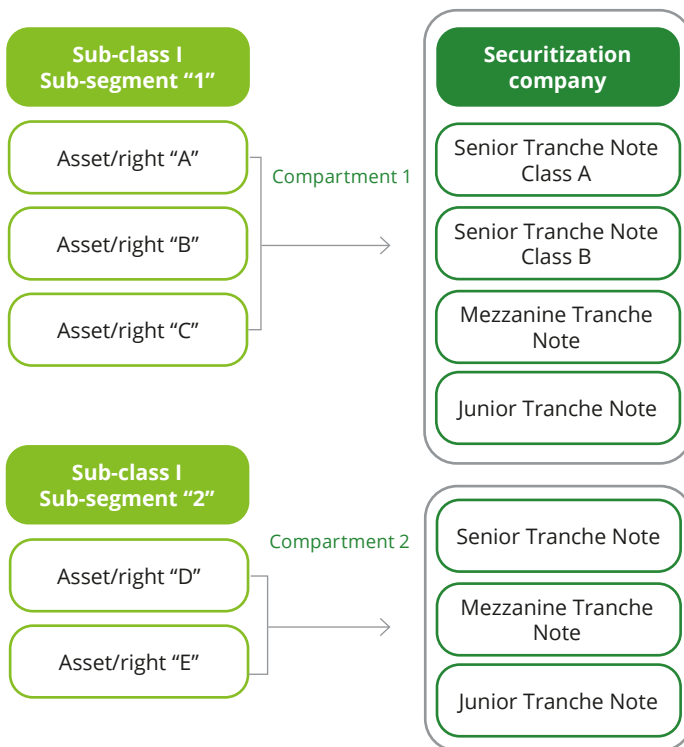
Another option is to set up a multi- compartment structure within one legal entity whereby each compartment only acquires a single asset or right (e.g., loan) within one asset class (e.g., infrastructure, real estate, shipping, aviation) and issues tranches of securities against this specific asset or right to investors (Figure 24).

Figure 18. Single asset/right securitization.

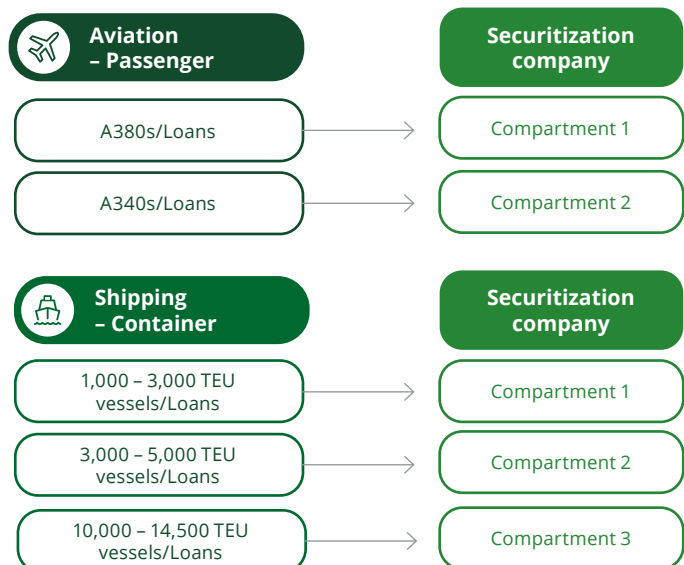


Luxembourg securitization structures can also be set up at a more granular level, which can help originators, sponsors, and arrangers to attract investors to specific industry sub-segments. The benefit to investors is that they can build portfolios with different risk and return profiles by investing in tranches with different seniority rankings from several compartments.

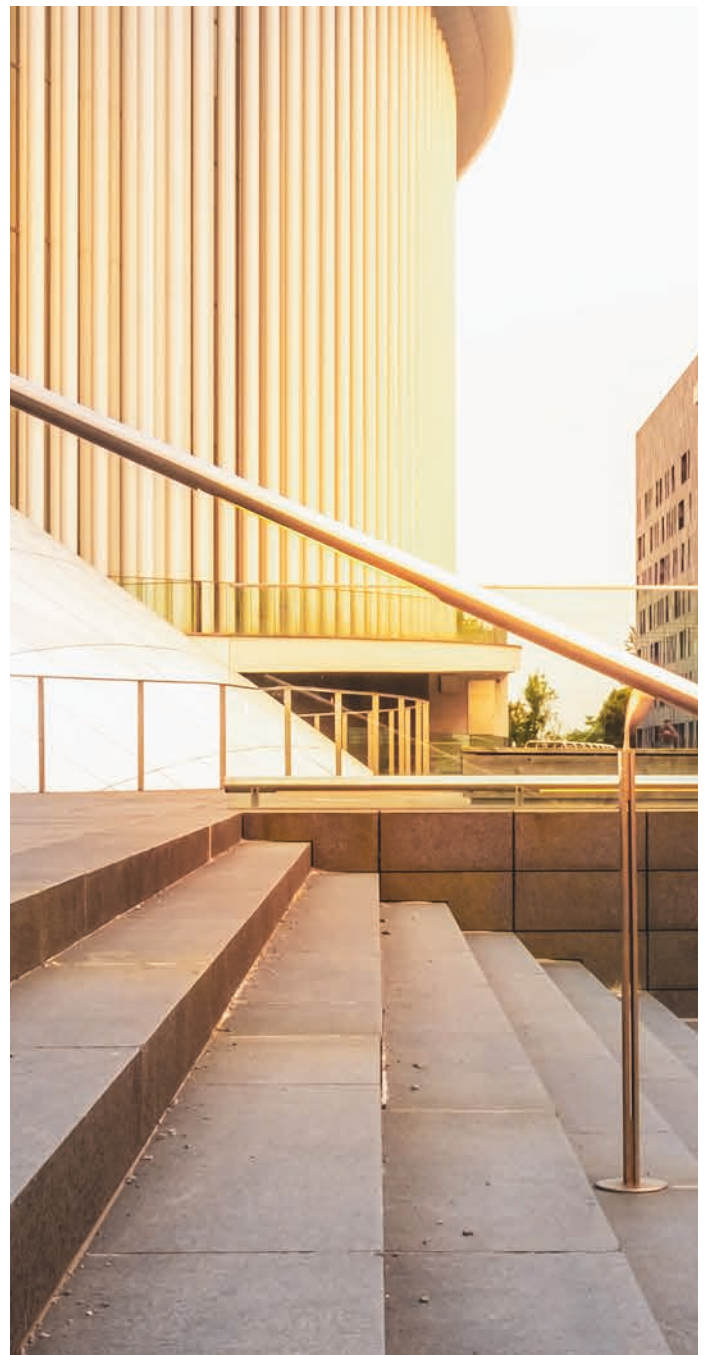
Figure 19.



Example*:



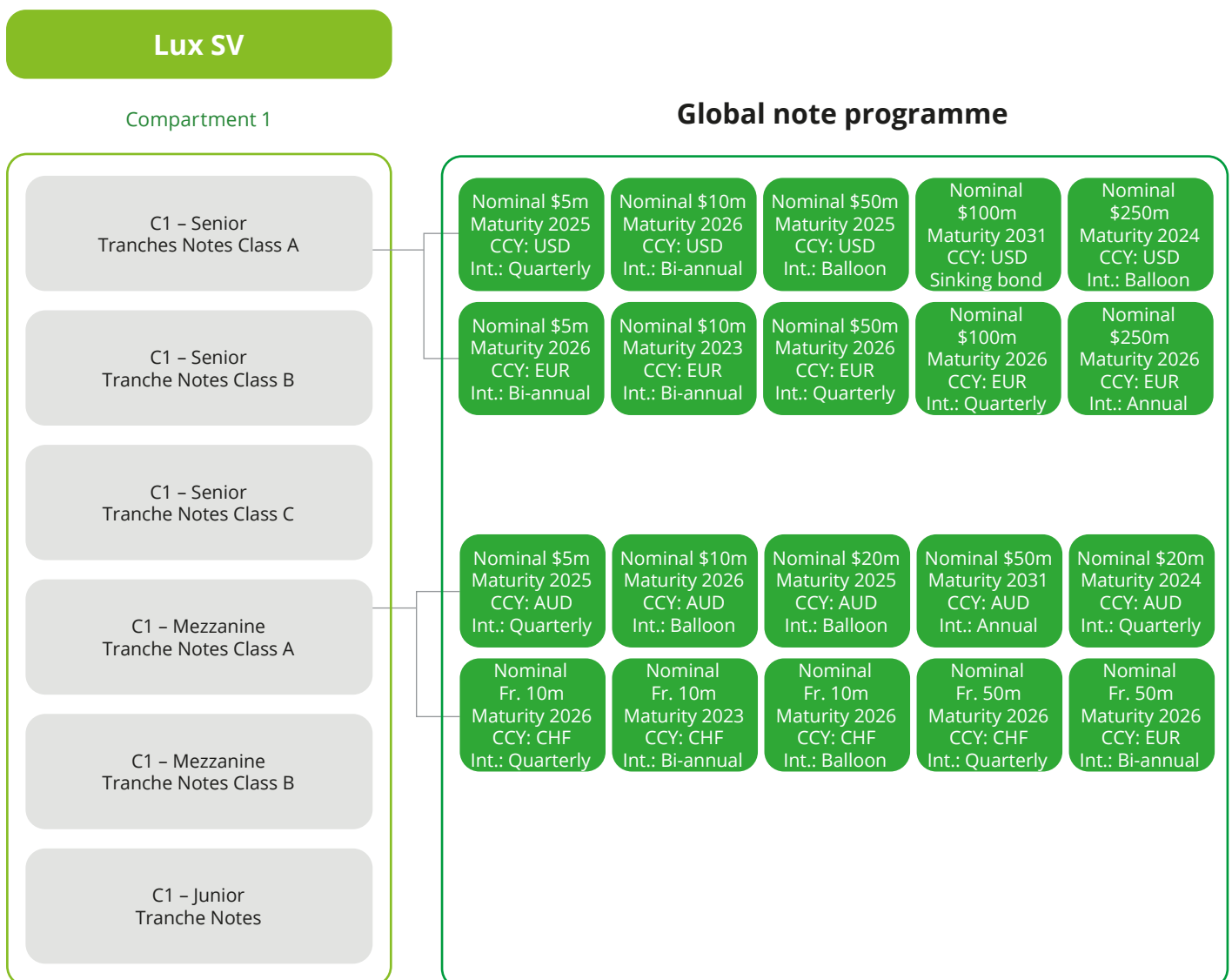
The pooling approach at sub-segment level can allow for a unique index-based securitization structure of performing and non-performing exposure (loans). Such index-based securitization structures can provide additional return to investors when economic/industry conditions improve (for a detailed explanation, please see the "Securitization of non-performing loans" section below).



4.1.2 Global note program

Securitization through a regulated or non-regulated Luxembourg securitization company allows stakeholders to benefit from a note program. Such a program can be designed to issue bonds/notes on a continuous basis (with varying maturities, interest rates, interest payment frequencies, and currencies) to informed investors or the public, while avoiding the repeated duplication of extensive and costly legal documentation (e.g. offering memorandum, pledge agreement, etc.) for each individual issue.

Figure 20. Example of a global note program*



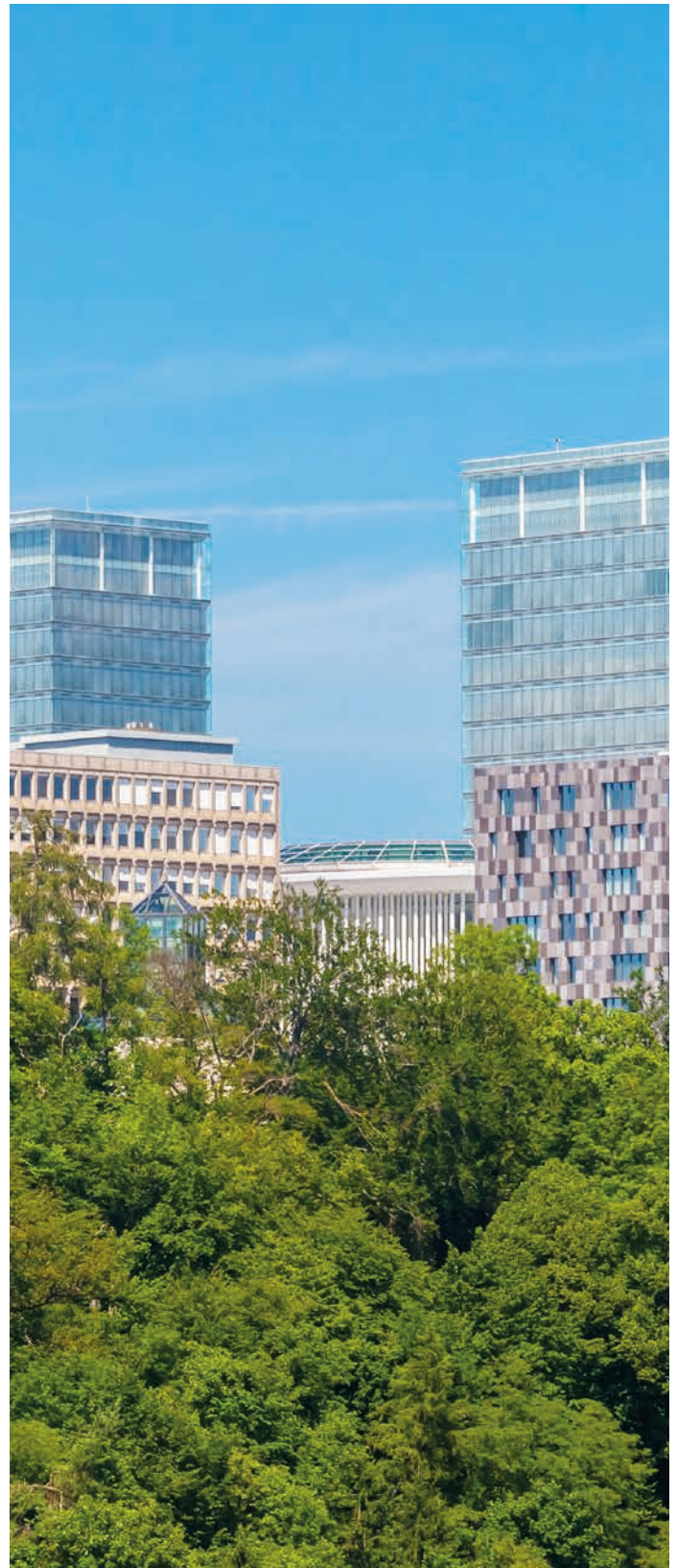
* For reference purposes only

4.1.3 Redemption of notes and profit participation

The reference portfolio of assets or rights against which notes are issued does not have to be static provided that the condition of no active management is fulfilled. Depending on the terms and conditions of the notes and market sentiment, individual or multiple assets or rights within the reference pool may be sold on the secondary market. Should either (i) an attractive offer be received by the SSPE and no suitable assets or rights be found to replenish the collateral pool (e.g., for CLO structures), or (ii) the terms and conditions of the offering memorandum not permit the replenishment of the reference portfolio, then cash proceeds can be:

- a) retained by the Luxembourg SSPE until the notes mature and/or
- b) distributed to noteholders through early partial redemptions of the notes in accordance with the waterfall structure (Figure 27) (subject to the terms and conditions of the offering memorandum or noteholders' approval).

Profit participating notes can provide additional returns to investors if economic/industry conditions improve, or when cash flow from the underlying reference portfolio exceeds expectations. The terms and conditions set out in the initial documentation may therefore clearly impose (with or without noteholders' approval) profit participation upon various note tranches when the securitization transaction is created (Figure 28). Assuming that assets or rights outperform expected returns or can be disposed of at a profit, Luxembourg SSPEs can make cash payments to profit participating noteholders in accordance with the terms and conditions set out in the offering memorandum. In addition, notes can be redeemed in part or in full in accordance with the waterfall structure.



4.1.4 Securitization of non-performing loans (NPLs)

As an alternative to outright sales where banks offload their NPL portfolios, at potentially highly discounted prices, the securitization of NPL portfolios can help to:

- Restructure balance sheets
- Transfer economic and credit (counterparty) risk to the capital market
- Potentially avoid significant losses crystallizing upon sale
- Enable banks, national agencies (originators), and investors to participate in higher than expected loan recovery rates and a revived economic/industry environment

NPL securitization can be appealing, as improvements in the general economic or industry-/asset-specific environment can be shared by originators (if they become investors in the securitization tranches, e.g., through a partially retained deal) and prospective investors through profit-participating notes issued by a Luxembourg SSPE. Following the sale of an NPL portfolio to a Luxembourg SSPE, the new terms and conditions of the consensually restructured loans may stipulate that borrowers must make unscheduled loan principal repayments to recover some of the potential losses that materialize at the level of banks or national agencies upon sale of the restructured loans to the SSPE (performance component 1).

The trigger for the unscheduled repayments of loan principal may be linked to recognized indices. These indices might be specific to industry sub-segments or even the assets themselves²². As the index increases, so should the financial strength and cash flows from the borrowers.

Notably, and in contrast to a cash sweep used in restructuring and enforcement proceedings, the borrowers have additional headroom and are not required to operate at the minimum cash level. Once the unscheduled loan principal repayments have closed the “value gap”, scheduled loan principal repayments remain payable by the borrowers.

The future cash flow related to performance component 1 may also be structured as a deferred purchase price option (e.g., over a period of between three and five years), so that the originator (bank) is eligible to receive additional purchase price consideration from the SSPE when the relevant index attached to the loan(s) increases. Depending on local GAAP and subject to discussions with the auditor of the bank, the deferred purchase price option could be valued and capitalized (based on a projected index by a recognized third party, e.g., MSI for shipping). The bank and its auditor would need to have an annual discussion regarding the likelihood of the bank receiving part or all of the additional purchase price consideration and write-downs on the receivable

might be needed. One possible benefit of such securitization structuring is therefore that the bank may not be required to recognize the full losses on the date of the sale of the NPL portfolio to the Luxembourg SSPE.

In addition to performance component 1, investors may also benefit from upturns in the general economic/industry environment by linking loan interest payments on the restructured loans to relevant indices (e.g., the same index as for performance component 1). Consequently, as the index increases, borrowers are required to make higher interest payments on the loan (performance component 2). To protect investors against a falling index and borrowers against onerous loan interest payments, an interest floor and cap can be set (e.g., floor: LIBOR + bps = min. 4 percent; cap: LIBOR + bps x index = max. 15 percent). Investors therefore have a return profile that cannot fall below a certain threshold and borrowers know in advance the maximum interest payment amounts.

Another incentive for banks and borrowers to consider such NPL securitization structuring is that (long-standing) relationships are not broken. The bank can become a third-party loan monitoring and servicing agent of the Luxembourg SSPE through a service level agreement (SLA). This SLA could generate fee income for the bank as servicer of the loan and avoid staff redundancies. Other benefits of index-linked NPL securitization are:

- Borrowers are incentivized to outperform the reference index through improvements in their operating model (e.g., higher revenue, opex reduction, etc.). Borrowers outperforming the index can build up a cash reserve whereas borrowers underperforming the index are incentivized to review their business model and improve operational efficiency
- Cash flows linked to performance components 1 and 2 are classified as interest payments and not as dividends under the Luxembourg securitization framework. Consequently, no withholding tax is payable at the level of the Luxembourg securitization company
- The payoff profiles of the indexation performance components are similar to those of a call option and create value for investors. Such call options can be traded separately on the OTC market
- Investors can hedge/swap out LIBOR and only keep returns from the indexed performance components
- Loan can be stress tested via LIBOR and indexation for the IFRS 9 “Expected loan losses model” calculation





5. Our services and technology

Deloitte Luxembourg—Integrated solutions for securitization services

Securitization has proved to be the refinancing and restructuring vehicle of choice in recent years. Deloitte can guide you on the journey ahead.

5.1 Our services

Deloitte is proud to offer a centralized securitization team and state-of-the-art technology to assist with the initial structuring and regulatory, tax, and accounting set-up, as well as the daily administration of securitization structures, their investment portfolios, and issued financial instruments. Our services encompass:

 <h1 style="font-size: 48px; margin: 0;">1</h1> <h2 style="margin: 0;">Pre-securitization assistance</h2> <p>Deloitte's pre-securitization advisory services help to prepare portfolios for the securitization process by:</p> <ul style="list-style-type: none"> • Focusing on the objectives, needs, and requirements of originators, sponsors, and investors • Providing modeling and scenario analysis and coordination with rating agencies • Ensuring completeness of the loan files and documents • Pre-listing services 	 <h1 style="font-size: 48px; margin: 0;">2</h1> <h2 style="margin: 0;">Securitization implementation assistance</h2> <p>During the second stage, Deloitte can assist with:</p> <p>Deal structuring</p> <ul style="list-style-type: none"> • Formulating a consensual and comprehensive asset (e.g. loan) restructuring plan • Assisting and coordinating legal advisors in drafting legal documentation • Preparing financial forecasts <p>Set up of the securitization vehicle</p> <ul style="list-style-type: none"> • Confirmation of the tax treatment applicable to the Luxembourg vehicle (e.g. access to double tax treaties) • Coordination with external service providers 	<p>Asset and collateral valuation Listing and implementation assistance</p> <ul style="list-style-type: none"> • Review of commenting on the prospectus and resubmission to the Luxembourg Stock Exchange • Submission to clearing house of the prospectus approved by the Luxembourg Stock Exchange • Submission of listing application packages to the Luxembourg Stock Exchange
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Post securitization services

Following the securitization process, Deloitte can assist you with the daily operations of the securitization vehicle:

Loan servicing and monitoring

- Assisting with evaluation and monitoring of collateral maintenance covenants in loan agreements
- Enforcement option analysis and stepby-step plans for share/asset pledges
- Assisting in the monitoring of investment criteria and restrictions (e.g., for CLOs)
- Modeling and assisting in the monitoring of interest cash flows as well as scheduled and unscheduled distributions/redemptions related to the issued financial instruments
- Modeling and assisting with the monitoring of currency and interest hedging

Accounting, financial, and tax reporting

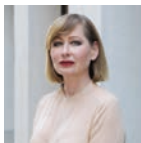
- Accounting services for entities in multiple location
- Multi-GAAP (Lux GAAP, IFRS, US GAAP etc.) accounting, financial statement compilation, and consolidation
- Support in the external financial reporting process
- Identification and analysis of proposed and or newly implemented accounting principles
- Continuous tax-efficient planning and structuring; identification and selection of appropriate Luxembourg and foreign investment structures
- Cross-border tax compilation and reporting
- VAT analysis and reporting
- Statutory annual audit

Risk management and modeling

- Basel III, CRR/CRD IV, Solvency II
- IFRS 9
- Measurement and management of financial risk (market, operational, credit, liquidity, etc.)
- Quantitative evaluation and management of portfolio risk
- ICAAP and Economic Capital Calculation
- Capital adequacy, regulatory reporting and compliance for financial institutions
- Development of Value-at-Risk models and back testing. Assistance in the validation of risk models and their technical capabilities and functionalities

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