Whitepaper | January 2023

Triangulating yield, credit and capital

The role of securitisation in liquidity portfolios

Alastair Sewell, CFA





Alastair Sewell, CFA
Liquidity Investment Strategist

Main responsibilities

Alastair is responsible for developing and executing the firm's liquidity solutions business strategy, covering money market funds through to ultra-short duration bond funds. In this newly created role, he leads the strategy's external relationships, drives new product launches, produces research and content and supports portfolio managers in achieving performance targets.

Experience and qualifications

Alastair joined Aviva Investors from Fitch Ratings, where he was head of fund ratings, responsible for producing ratings and research on money market and short duration bond funds in EMEA and Asia Pacific. Prior to this, he was a CDO rating analyst in Fitch's structured credit group. Alastair started his career at a UK local authority in 2003.

He holds a BSc in Biology from the University of Bristol, an MBA from the University of Bath and a CFA Institute Certificate in ESG Investing. Alastair is a CFA charterholder.

Contents

STS securitisation: Key takeaways	3
Introduction	3
STS securitisation: The basics	4
Securitisation risks are low	6
Capital ideas: The Solvency II spread risk module	8
STS securitisation growing in significance	9
Executing on the STS securitisation opportunity	10

STS securitisation: Key takeaways

STS securitisations can add yield to liquidity portfolios and provide diversification at low levels of credit risk. There are complexities, but these can be readily addressed where the investment manager has the requisite expertise and skill.

Credit quality is typically high, insulating bondholders from the risk of default. Liquidity has proven resilient, both compared with other asset classes over prolonged periods of time and

more recently during the stress in the sterling financial market in September 2022. Yields tend to be higher than bonds of comparable credit quality. Lastly, qualifying senior STS securitisations can be capital efficient for some investors.

With sufficient expertise, these bonds can play an important role in liquidity portfolios, particularly for capital-focused investors, such as insurers.

Introduction

The simple, transparent and standardised (STS) securitisation market offers significant opportunities for investors.

Yields on STS securitisations are relatively high, while their senior position in the capital structure results in lower credit risk. This benefit is compounded by the fact that capital charges on STS securitisations are low. This means portfolios with STS securitisation offer the potential to generate attractive returns above cash. Volumes are also meaningful, making this opportunity actionable in practical terms for investors.

In this whitepaper, we set out the key considerations for insurers investing in STS securitisations, namely:

- · Understanding risks
- · Volumes and underlying assets
- · Solvency II spread risk capital charges
- · How to execute on the opportunities

Yields on STS securitisations are relatively high, while their senior position in the capital structure results in lower credit risk

The opportunity in brief

STS securitisations potentially offer attractive yields over cash. They are senior in the capital structure and credit risk is therefore low. They benefit from favourable treatment

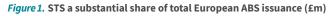
under insurance and bank regulation. As a result, holding these securities can generate attractive capital-efficient returns over cash.

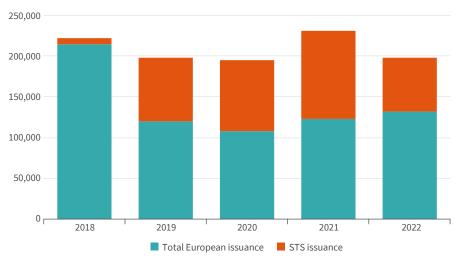
STS securitisation: The basics

Securitisation is a technique for converting pools of assets into securities. These will usually be pools of mortgages, giving rise to residential mortgage-backed securities (RMBS)1 and covered bonds, or pools of consumer receivables such as auto loans and credit cards, collectively known as asset-backed securities (ABS), as well as a broad array of other securitised asset classes. Volumes are substantial.

This paper does not go into the characteristics of securitisation. Rather, it focuses on the intersection of insurance regulation and STS securitisation regulation, and how this presents opportunities. A previous article, Covered bonds and ABS: Do you know the difference?, provides further details on how securitisations work.2

Securitisation is a technique for converting pools of assets into securities





Source: J.P. Morgan International ABS & CB Research, December 16, 2022.

STS regulation

The STS regulation³ was finalised in late 2017 and prescribes a set of requirements for a given transaction to qualify. Since implementation, STS securitisations have formed a material share of total securitisation issuance, as Figure 1 shows.

The regulation involves positive and negative screening criteria across the three key criteria of simplicity, transparency and standardisation. Responsibility for compliance is shared jointly between the originator, sponsor and issuer, effectively setting a high bar. STS securitisation status may also in some cases be verified by third parties, although final responsibility remains with the key parties to the transaction.

STS regulation involves positive and negative screening criteria

^{1.} Or commercial mortgage backed securities, CMBS.

^{2.} Caroline Hedges and Reto Bachmann, 'Covered bonds and ABS: Do you know the difference?', Aviva Investors, July 28, 2021.

^{3. &#}x27;EUR-Lex - 32017R2402 - EN', EUR-Lex, as of January 2023.

Example STS criteria

Simple

Requirement

Homogenous assets selected through clearly defined criteria set in advance, such as prime RMBS

Exclusions

No commercial mortgage-backed securitisations or actively managed securitisations (such as collateralised loan obligations)

Transparent

Requirement

External verification of data on underlying assets

Exclusions

No or sub-standard asset servicing capability

Standardised

Requirement

Hedging of currency and interest rate risks

Exclusions

Lack of periodic reporting

STS securitisations can be identified easily – many benefit from clear third-party verification or can be identified through data providers such as Bloomberg.

Note: Selected items only.

Source: Aviva Investors, STS Regulation, January 2023.

Qualifying senior STS securitisations are subject to lower capital charges under insurance and banking regulation. This benefits insurance and bank investors and incentivises issuance.

Securitisation risks are low

Securitisations are not immune to broader economic and market conditions. However, the structural protections embedded within securitisations means their ability to weather periods of economic or financial market stress can be strong.

Default rates are low

Default rates in investment-grade securitisations are low. At the AAA-rating level, default rates are exceptionally low, reflecting the structural protections in place. Where there have been defaults, these tended to be concentrated in the 2007-2008 global financial crisis and within specific segments of the securitised universe. Since then, new regulatory standards – such as the STS regulation – have been introduced, providing additional protections to investors.

Figure 2. Default rates 1996-2021 by rating category (per cent)

Rating	European securitisations	European covered bonds		
AAA	0.06	0		
AA	0.24	0		
A	0.36	0		
BBB	0.81	0		

Note: Year 1 average cumulative impairment (securitisations and covered bonds) rates 1996-2021. Source: Fitch Ratings 2021 Default & Transition Study.

Covered bonds

Covered bonds are bonds secured by a cover pool, typically mortgages. They benefit from low spread risk charges under Solvency II (0.7 per cent for AAA bonds), making them capital efficient for insurers. A further benefit is the protections built into their structure; to date, no covered bond has defaulted.

Ratings tend to be stable

Securitisation ratings tend to be stable over a one-year horizon. This reflects the fact that rating agencies base their analysis on increasingly stressful scenarios as the tranche rating level increases. AAA-rated tranches are stressed severely in the rating analysis, meaning the tranche can typically endure substantial deterioration in the underlying pool before being downgraded. Nonetheless, looking ahead, most rating agencies expect more challenging market conditions. As a result, ratings downgrades could increase, highlighting the importance of robust credit analysis in security selection, incorporating internal and external perspectives. Fundamentally, however, structural enhancements protect senior tranches from default risk and credit migration risk.

Looking ahead, most rating agencies expect more challenging market conditions To put this another way, senior securitisation tranches can sustain substantial deterioration in the underlying collateral before that becomes material to the creditworthiness of the securitised bonds.

Figure 3. Rating migration rates (per cent)

Rating	European ABS	European RMBS	Global covered bonds	European corporates	European banks
AAA	98	97	94	79	97
AA	88	88	72	86	91
А	86	88	90	91	93
BBB	81	85	82	95	89

Note: Average annual one-year transition rates 1996-2021, net of withdrawn and paid-in-full. Source: Fitch Ratings 2021 Default & Transition Study.

Securitised asset liquidity is robust

The Association for Financial Markets in Europe found recently⁴ that investment-grade securitised assets (ABS and covered bonds) have been more liquid than corporate bonds since 2016. This demonstrates the important role securitised assets can play in highly liquid portfolios.

Our own experience of the September 2022 market stress bears out AFME's findings. During that period, we found pools of liquidity in securitised assets when other asset classes were suffering liquidity issues. We believe this reflects differentiated underlying investor bases, with an increasingly strong and, perhaps more importantly, consistent bid for securitised assets from bank treasuries and other investors. Among other investors, money market funds (MMF) are a good example. MMF regulation allows an incremental five per cent allocation to STS securitisations.

Secondary market liquidity of securitisations has proven robust. Liquidity risk was brought into sharp focus by the issues in the gilt market in September 2022. Notwithstanding the severity of this episode, there is growing evidence government bond markets are not necessarily always as liquid as market participants hope. We argued in our recent article *Time to rethink collateral cash* that the best approach to liquidity risk management is to diversify across asset classes, recognising liquidity varies over time.

Diversification

The addition of STS securitisations to portfolios can provide useful diversification. As we recently highlighted in *Enhanced cash in short-duration fixed income*, these securities are beneficial in terms of diversification in more challenging market conditions.⁷

Investment-grade securitised assets have been more liquid than corporate bonds since 2016

^{4. &#}x27;Comparing CB, ABS and Corporate Bond Liquidity', AFME, November 2022.

^{5. &#}x27;Liquidity in core government bond markets', Financial Stability Board, October 20, 2022.

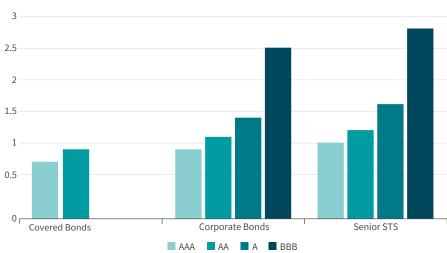
^{6.} Alastair Sewell, 'Time to rethink collateral cash', Aviva Investors, December 13, 2022.

^{7.} Mhammed Belfaida, 'Enhanced cash in short-duration fixed income', Aviva Investors, January 4, 2023.

Capital ideas: The Solvency II spread risk module

Qualifying STS securitisations and covered bonds have beneficial treatment under the Solvency II⁸ standard model spread risk module. Solvency II was amended in 2018 to account for the introduction of the STS regulation. The resulting capital charges⁹ are as follows:





Source: European Securities and Markets Authority, June 2018.

The stress factors for STS securitisations are marginally higher than those for corporate bonds at any given rating level. For example, the stress factors at the AA-rated level (equivalent to credit step 1 in regulatory terms) are 1.1 per cent for corporate exposures and 1.2 per cent for senior STS securitisation exposures.

However, this comparison is not necessarily meaningful. In reality it is relatively rare for corporate issuers to be rated above AA, whereas senior securitisation tranches routinely achieve AAA ratings. To put a finer point on it, other than certain banks guaranteed by highly rated sovereigns, there are only a handful of AAA corporates globally, including Johnson & Johnson¹⁰ and Microsoft. In contrast, almost all securitisations have a AAA tranche, which will typically represent a meaningful share of the overall capital structure.

The final spread risk charge factors in credit quality and spread duration. It is worth mentioning Solvency II applies a floor of one (year) for duration.

Government securities typically have stress factors of zero. However, the potential for stress in government bond markets, as witnessed so clearly in the UK gilt market in September 2022, means diversifying portfolios away from pure government exposures is not only warranted but necessary.

Longer-duration bonds face materially higher spread risk charges. Specifically, when duration is over five years, additional minimum capital charges apply. It is also worth noting Solvency II focuses on tranche duration rather than asset pool duration, which can be a significant factor for securitisations.

It is relatively rare for corporate issuers to be

^{8.} Solvency II is the regulatory framework for European insurers.

^{9.} Reference is to bonds with duration under five years; higher capital charges above five years in most cases. The final capital charge is duration multiplied by the spread risk charge displayed in the chart.

^{10.} Ratings correct as of the time of writing.

STS securitisation growing in significance

STS securitisation volumes are now material. Cumulative issuance by UK issuers was approaching €62 billion as of December 2022, according to JPMorgan. Europe-wide, around a third of total issuance (€66 billion) last year was in STS securitisation format in the year to end-November, demonstrating the importance of STS to the broader market. UK entities were the largest issuers of STS ABS, with RMBS the main asset type.

Issuance fell in 2022 compared with prior years, reflecting increased market uncertainty driven by high inflation, interest rate rises and the Russia-Ukraine war. Total issuance in Europe fell 15 per cent to €171 billion from €201 billion, whereas STS securitisation decreased by a more meaningful 39 per cent, driven by material declines in issuance from Germany, Italy and the Netherlands. Year-on-year issuance by UK issuers fell eight per cent, demonstrating the relative resilience of the market.

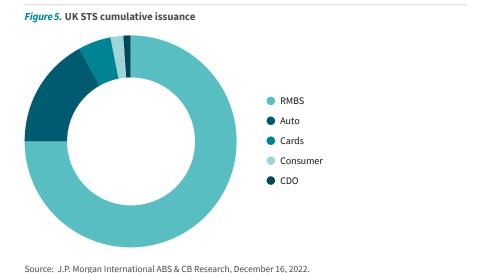
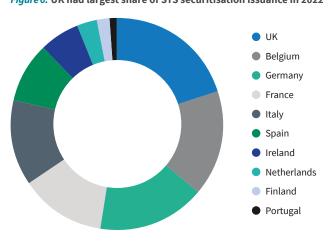


Figure 6. UK had largest share of STS securitisation issuance in 2022



Source: J.P. Morgan International ABS & CB Research, December 16, 2022.

Executing on the STS securitisation opportunity

The STS securitisation market offers attractive potential opportunities; however, to execute on this, deep asset class expertise is needed:

Our securitisation investment experience

We have been investing in securitisations for over 20 years, with dedicated research resource and portfolio managers with in-depth sector knowledge. Securitisations are complex. Having the knowledge and experience to invest is a critical prerequisite for success.

Our securitisation investment process involves significant due diligence. Our analysts and portfolio managers work collaboratively in determining stresses and identifying bonds with sufficient yield premia. Once purchased, all securities are subject to ongoing monitoring and review, involving regular stress testing and collateral pool reviews.

The result: over the last ten years, we have never owned a securitisation position in our short-duration strategies that has been downgraded.

Key risks

The value of an investment and any income from it can go down as well as up and can fluctuate in response to changes in currency and exchange rates. Investors may not get back the original amount invested.

Bond values are affected by changes in interest rates and the bond issuer's creditworthiness. Bonds that offer the potential for a higher income typically have a greater risk of default.

Some investments could be hard to value or to sell at a desired time, or at a price considered to be fair (especially in large quantities), and as a result their prices can be volatile.

For investments in money market instruments such as short-term bank debt, the market prices/value can rise as well as fall on a daily basis. Their values are affected by changes in interest rates, inflation and any decline in creditworthiness of the issuer.

Investments are not guaranteed, an investment in a Money Market Fund is different from an investment in deposits and can fluctuate in price meaning you may not get back the original amount you invested. This investment does not rely on external support for guaranteeing liquidity or stabilising the NAV per unit or share. The risk of loss of the principal is to be borne by the investor.

Important Information

THIS IS A MARKETING COMMUNICATION

Except where stated as otherwise, the source of all information is Aviva Investors Global Services Limited (AIGSL). Unless stated otherwise any views and opinions are those of Aviva Investors. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. Information contained herein has been obtained from sources believed to be reliable, but has not been independently verified by Aviva Investors and is not guaranteed to be accurate. Past performance is not a guide to the future. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested. Nothing in this material, including any references to specific securities, assets classes and financial markets is intended to or should be construed as advice or recommendations of any nature. Some data shown are hypothetical or projected and may not come to pass as stated due to changes in market conditions and are not guarantees of future outcomes. This material is not a recommendation to sell or purchase any investment.

In Europe this document is issued by Aviva Investors Luxembourg S.A. Registered Office: 2 rue du Fort Bourbon, 1st Floor, 1249 Luxembourg. Supervised by Commission de Surveillance du Secteur Financier. An Aviva company. In the UK Issued by Aviva Investors Global Services Limited. Registered in England No. 1151805. Registered Office: St Helens, 1 Undershaft, London EC3P 3DQ. Authorised and regulated by the Financial Conduct Authority. Firm Reference No. 119178. In Switzerland, this document is issued by Aviva Investors Schweiz GmbH.

In Singapore, this material is being circulated by way of an arrangement with Aviva Investors Asia Pte. Limited (AIAPL) for distribution to institutional investors only. Please note that AIAPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIAPL in respect of any matters arising from, or in connection with, this material. AIAPL, a company incorporated under the laws of Singapore with registration number 200813519W, holds a valid Capital Markets Services Licence to carry out fund management activities issued under the Securities and Futures Act (Singapore Statute Cap. 289) and Asian Exempt Financial Adviser for the purposes of the Financial Advisers Act (Singapore Statute Cap.110). Registered Office: 1 Raffles Quay, #27-13 South Tower, Singapore 048583. In Australia, this material is being circulated by way of an arrangement with Aviva Investors Pacific Pty Ltd (AIPPL) for distribution to wholesale investors only. Please note that AIPPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIPPL in respect of any matters arising from, or in connection with, this material. AIPPL, a company incorporated under the laws of Australia with Australian Business No. 87 153 200 278 and Australian Company No. 153 200 278, holds an Australian Financial Services License (AFSL 411458) issued by the Australian Securities and Investments Commission. Business Address: Level 27, 101 Collins Street, Melbourne, VIC 3000 Australia.

The name "Aviva Investors" as used in this material refers to the global organization of affiliated asset management businesses operating under the Aviva Investors name. Each Aviva investors' affiliate is a subsidiary of Aviva plc, a publicly-traded multi-national financial services company headquartered in the United Kingdom. Aviva Investors Canada, Inc. ("AIC") is located in Toronto and is registered with the Ontario Securities Commission ("OSC") as a Portfolio Manager, an Exempt Market Dealer, and a Commodity Trading Manager. Aviva Investors Americas LLC is a federally registered investment advisor with the U.S. Securities and Exchange Commission. Aviva Investors Americas is also a commodity trading advisor ("CTA") registered with the Commodity Futures Trading Commission ("CFTC"), and is a member of the National Futures Association ("NFA"). AIA's Form ADV Part 2A, which provides background information about the firm and its business practices, is available upon written request to: Compliance Department, 225 West Wacker Drive, Suite 2250, Chicago, IL 60606.

386450 - 31/01/2024

Contact us

Aviva Investors St Helen's, 1 Undershaft London EC3P 3DQ +44 (0)20 7809 6000

www.avivainvestors.com

