HELLENIC FINANCIAL STABILITY FUND

HFSF Bulletin
No 2

Synthetic securitisation as a key capital and risk management tool for the Greek banking sector

Ian Bell, Alex Karagiannidis, Harry Noutsos

July 2022

In collaboration with:

PCS

HELLENIC FINANCIAL STABILITY FUND

HFSF Bulletins are papers written by staff members of the Hellenic Financial Stability Fund, and occasionally in cooperation with third parties. The papers relate to subjects of topical interest and are technical in nature. The views expressed therein are those of the authors and do not necessarily reflect the views, official policy, or position of the HFSF.

The authors are grateful to Michael Haralabidis, HFSF's Chief Risk Officer, for his valuable comments.

About PCS

Prime Collateralised Securities (https://pcsmarket.org) is an independent, not-for-profit initiative set up to re-inforce the asset-backed securities market in Europe as a key to generating robust and sustainable economic growth for the region. At the heart of the PCS initiative is its work as an authorised third party verification agent under both the European Union and UK STS regulations helping all market stakeholders to navigate the STS regime.

The editor of the HFSF Bulletin series is Michael Haralabidis, HFSF's Chief Risk Officer *(mharalabidis@hfsf.gr).*

This publication is available on the HFSF website (hfsf.gr/en/).

Ian Bell
CEO of PCS
ian.bell@pcsmarket.org

Alex Karagiannidis
Senior Risk Officer
akaragiannidis@hfsf.gr

Harry Noutsos
Managing Director PCS
harry.noutsos@pcsmarket.org

KEY TAKEAWAYS

- Synthetic securitisation has seen increased momentum since 2021 in the Greek banking sector, albeit with limited transaction activity; Synthetic securitisation should be a permanent tool in the arsenal of Greek banks to serve as a day-to-day risk and capital management tool and not only as an exceptional measure;
- There is a shift in sentiment and policymakers now fully recognize the benefits of synthetic securitisation in increasing a bank's capacity to hedge/manage credit risk across their whole book;
- The inclusion of synthetic securitisation to the Simple, Transparent and Standardised (STS) framework provides additional benefit thanks to lower capital requirements under the Capital Requirements Regulation;
- Greek Banks can benefit from properly structured synthetic securitisations, since they provide increased flexibility in capital management, reduce credit concentration risk and enhance credit risk mitigation; from a macro-prudential and macro-economic perspective synthetic securitisation strengthens financial stability and brings capital within the Greek economy to fund economic growth;
- The most notable benefits for the Greek banking system and the economy as a whole are: (a) the freeing of existing capital for Banks and thus the increase of their lending capacity to the real economy, (b) the capital inflows from a more diversified foreign investor base and (c) the mitigation of credit concentration risk and consequently the support of financial stability;
- Overall, synthetic securitisation is a mechanism that allows the banking sector to reduce its exposure to specific sectors and/or geographies by transferring their risk to external investors, enhancing banking system's resilience by safeguarding it from shocks derived from the assets that were synthetically securitised.

INTRODUCTION

Synthetic securitisation issuance has a mixed history, from significant contraction in the wake of the financial crisis to increased momentum in the last decade. Historically, banks have been using this tool to manage credit risk and improve capital ratios. In addition, regulators have recently taken note of the benefits synthetic securitisation can provide by increasing lending capacity to the real economy.

In Greece, synthetic securitisation is beginning to be used as both a risk and capital management tool. We believe that trend should and will continue. But, beyond this, we believe that the technology should be seen not only as an exceptional measure to be used in special circumstances but as a day-to-day management tool allowing Greek banks to manage flexibly their capital position and lending envelopes in an ongoing pro-active way. This would enable the Greek banking system to increase its resilience in downturns without having to artificially restrict its lending to the Greek economy and thereby constrict growth.

SYNTHETIC SECURITISATION

The market

The European synthetic securitisation market is primarily a private market. Hence, statistics are hard to come by. In Greece there had been no synthetic securitisation activity until recently. But in the last year alone, four transactions by three systemic Banks have been completed. These transactions securitised a nominal value of €5bn. The table below provides the basic details of the transactions, as publicly reported:

Table 1 – Notable Synthetic Securitisations in Greece

Date	Issuer	Deal size	Description
16 March 2021	PIRAEUS BANK	€ 1.4 bn	synthetic securitisation of performing SME and corporate loans
27 December 2021	EUROBANK	€ 1.0 bn	
27 December 2021	EUROBANK	€ 0.7 bn	
17 December 2021	ALPHA BANK	€ 1.9 bn	

Sources: [3], [4], [5]

In Europe as a whole (including the United Kingdom) the number is estimated at €84bn in nominal value terms for 2021, based on IACPM (EU at €62bn and UK at €22bn, see source [7]).

Traditional vs synthetic securitisation

In this paper the focus is on synthetic securitisation. However, it is important to note how it differs from traditional securitisation, the most notable differences being summarized below:

Table 2 – Traditional vs Synthetic Securitisations

	True-sale	Synthetic
Portfolio of assets	Transferred to SPV	Retained on bank balance sheet
Purpose	Primarily funding	Credit risk mitigation & capital management
Representative underlying portfolio of loans	Mortgages, Consumer credit	Corporate, SME and SBL exposures
Investor return	Cash flows from underlying loans	CDS or FG premium

Synthetic securitization

A synthetic securitisation retains the two key aspects of a traditional securitisation: (a) investors are at risk on the assets only and not the original lender and (b) this asset risk is tranched.

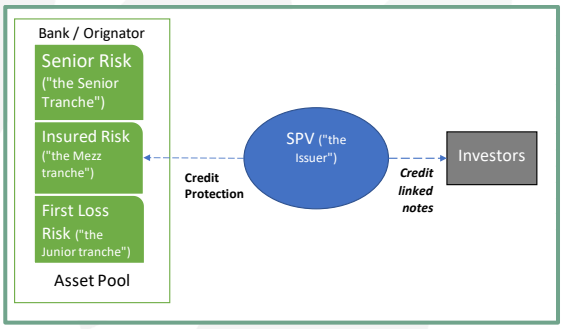
But, whereas a traditional securitisation involves a financing of the bank, a synthetic securitisation does not operate through a sale of assets but by the investors "insuring" the bank against losses on part of those assets. In a synthetic securitisation, investors agree that if credit losses on a specified pool of financial assets exceed a pre-agreed number (the "attachment point"), the investors will compensate the bank for all losses up to another pre-agreed number (the "detachment point").

Because the aim of a synthetic securitisation is for a financial institution to shift risk over a pool, in these securitisations the "investor" is also often referred to as the "protection seller" and the original lender as the "protection buyer".

In exchange for covering the credit risk in a pool, the protection seller receives a stream of regular payments which can be fees, swap payments, interest etc.

A synthetic securitisation at its simplest can be graphically represented as follows:

Figure 1 – Synthetic securitisation high level illustration



It is feasible, in theory for the bank to do a synthetic securitisation on the whole pool, including the senior risk. However, since synthetic securitisations are designed to remove the risk of a pool from the balance

sheet of a bank, it would be very unusual for a bank to pay a protection seller to cover the "catastrophic risk" on a portfolio.

However, depending on price and risk appetite, synthetic protection buyers may choose to purchase protection either for the first loss risk or the mezzanine risk or, sometimes, both.

The financial technology – key elements

Legal vectors of risk shifting

A synthetic securitisation involves one or more investors agreeing to compensate a financial institution for credit losses on a pool from an attachment point to a detachment point. This is usually done via one of **five techniques**:

a) Insurance

In the rare cases where the protection seller is an insurance undertaking, it can write a credit insurance policy directly for the benefit of the bank with a first loss provision (the attachment point) and a maximum cover (the detachment point).

b) Guarantees

The protection seller can also enter into a credit guarantee contract with the bank that guarantees the obligations of the debtors under the assets securitised, again with a first loss and a maximum.

c) Credit default swaps (CDS)

The protection buyer and the protection seller enter into a credit default swap where the protection buyer swaps a stream of fixed or floating payments (effectively interest) against a stream of payments from the protection seller equal to the losses on the protected assets.

d) Credit linked notes (CLNs)

Here, the protection buyer (or a special purpose vehicle – see "funded vs unfunded" below) issues actual tradable notes. Under the terms of the notes, the issuer pays interest and repays principal. **But**, crucially, the principal repayment is limited recourse to the amount paid under the performing assets in the pool. In other words, if there are credit defaults between the attachment point and the detachment point, repaid principal is decreased by an amount equal to those defaults.

Funded vs unfunded

A bank will enter into a synthetic securitisation to remove the risk on a portfolio of assets by having another entity – the protection seller – agree to pay for the losses on that portfolio. This, however, leaves the protection buyer exposed to the credit risk of the protection seller. If, as losses occur on the protected portfolio, the protection seller refuses or is unable to pay, then those losses will fall back on the protection buyer.

This risk is a commercial matter (and, as we shall see, likely a regulatory matter). If the protection seller's credit rating is extremely robust, it may not matter. But the goal of most protection buyers is to remove risk from their balance sheet altogether and not merely to substitute the risk on the securitized assets with risk on the protection seller. So, to achieve this, the protection buyer may require the protection seller to put up cash as collateral for its obligations under the synthetic securitisation. This cash can then be drawn on if the protection seller is unwilling or unable to pay when obligated to do so under the securitisation.

When a synthetic securitisation is cash collateralized, it is called a "**funded**" transaction. When it is not, it is an "**unfunded**" transaction.

It is worth noting that transactions done on the basis of credit linked notes, since they require the issuance of a capital market instrument against cash, are always funded synthetic securitisations.

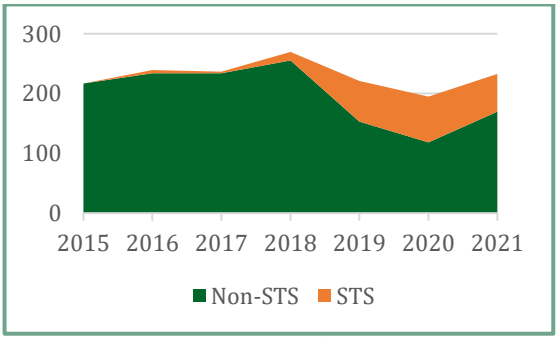
STS or non-STS

In 2019, the EU Securitisation Regulation came into force. It created a new category of

securitisations: "simple, transparent and standardised" or "STS" for short. To be STS, a securitisation must meet a long list of criteria (over one hundred). In exchange, the Capital Requirement Regulation (CRR) and other European legislation gave some regulatory advantages to STS securitisations.

Since its inception, the response from market participants has been positive with numerous STS securitisations registered with ESMA. As a result, STS securitisations now account for substantial part of issuance which is steadily growing.

Figure 2 – Total European Historical Issuance (Placed & Retained), € Billions

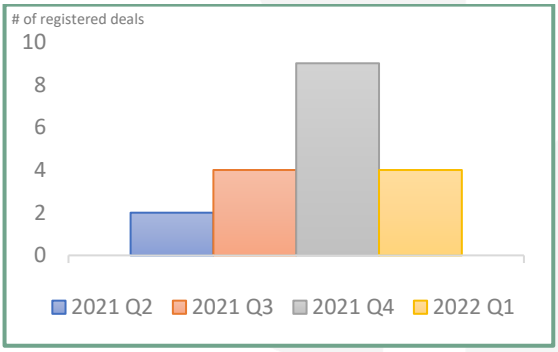


Source: [1]

A 2021 amendment to the Securitisation Regulation made STS status available to synthetic securitisation that had not originally been allowed to use the designation.

Notably, from June 2021 until late April 2022, 20 synthetic STS securitisations have already been registered on the ESMA website.

Figure 3 – Private Synthetic STS deals registered with ESMA



Source: [2]

Current synthetic securitisation may be STS or may not be STS. Why this matters is set out below when we discuss capital requirements benefits for synthetic securitisations.

The benefits for Greek Banks

One of the essential features of securitisations, traditional or synthetic, is that the investor or protection buyer takes the credit risk of the securitised assets. It follows from this that if the credit risk of those assets lies with the protection sellers, it does not lie with the securitising bank.

Capital – whether regulatory or economic – is held by banks to cover losses that may be suffered through credit defaults on their assets. If those credit defaults are fully covered by third parties such as protection sellers, it follows that capital allocated before the securitisation to cover those assets is no longer needed. It can therefore be returned to shareholders or allocated to new assets to enhance profitability or used to boost capital ratios.

The rules as to where the attachment and detachment points need to be and what structural features a synthetic securitisation must meet before the regulators will recognize that capital allocated to the securitised assets can be released are known as the "**Significant Risk Transfer rules**" or **SRT**. A synthetic securitisation that meets these rules is known as an SRT securitisation.

The SRT rules are complex. They are found in the CRR, the extensive EBA guidelines and national competent authorities' (or for larger bank, the SSM's) interpretations of those guidelines.

But appropriately structured, a synthetic securitisation can allow the release of the capital previously allocated to the securitised assets.

It is here that the STS rules provide additional benefit. Under the CRR, once a synthetic securitisation has been done, the unprotected senior tranche held by the protection buyer also becomes a securitisation tranche. As such, the bank will have to allocate to it the regulatory required capital for securitisations. Under the CRR, the amount of capital required to be allocated to an STS securitisation is smaller than the amount to be allocated to the same securitisation if it is not STS.

Economic risk and capital management

Whether a synthetic securitisation meets the complex SRT requirements, if properly structured it will always remove a quantum of risk from the securitised assets. As such, it is a tool that Greek banks can use to hedge/manage credit risk across their whole book.

For example, it can reduce **credit concentration risk** (**large exposures)** either to a single corporate, an industry sector, a geographical area or all of the above. This is particularly relevant for Greek banks' whose activities are heavily concentrated in a smaller economy itself not significantly diversified across industrial and/or service sectors and geographies.

Once risk has been removed, it can allow either the bank to achieve its preferred overall risk balance and/or it can create additional headroom to continue lending to a given sector or geographical area without concern that this is leading to overconcentration of risk across the bank's book.

By marketing a synthetic securitisation the bank will discover how much independent third party investors – often from outside Greece – believe the market cost of credit of the type securitised to be. This will allow the securitising bank to benchmark the price it charges borrowers for its products against the market's perception of the appropriate risk/reward equilibrium.

A number of banks across Europe deliberately use synthetic securitisations, amongst other things, as a price discovery tool. If the market's analysis suggests that the bank is lending too cheaply, this is a sign to senior management that it may be underestimating the risk embedded in part of its lending. At the very least, if the market is wrong in its risk assessment (as can be the case), the pricing discrepancy should lead banks' senior management or Boards to require risk managers to explain in great details why their risk analysis is better than the market's. If the reason for the below market pricing is competitive pressure – which obviously does not affect potential non-bank and non-Greek investors – then the question is raised as to whether this is really a business the bank should be involved in at current pricing levels.

The benefits for the Greek banking system

Broadly, the benefits of synthetic securitisation for the Greek banking system as a whole reflect the benefits for individual Greek banks.

Recycling capital

By freeing capital within banks, synthetic securitisation allows the Greek banking system to continue generating new lending even when it would otherwise have run out of available capital and to do so without having to turn to the equity or quasi-equity markets.

This breaks the **artificial ceiling** on the financing of the recovery and growth of the Greek economy imposed by banks' capacity to raise capital in the markets. The ceiling is artificial because the Greek economy's potential for growth is not correlated (or very weakly correlated) with the capacity of banks to raise capital. The latter is dependent on a multitude of issues including profitability, potential equity returns, alternative investment opportunities for potential capital

providers – within or without Greece - and the market's perception of risk. Since the vast majority of all lending within Greece is made by the banking sector, this artificial link raises the risk that an economy in need of substantial financing to generate growth is unable to find it because banks cannot raise enough capital. Synthetic securitisation addresses that risk by decoupling the financing capacity of the Greek banking sector from its capital raising capacity.

Bringing outside capital to Greece

Lending requires capital in order to cover unexpected losses (risk of doing business). If, as set out above, that capital is not held by the Greek banking system it is because the credit risk of bank assets has been moved to non-Greek investors. Those investors, in turn, one way or the other will have some form of economic capital to absorb those risks. (This economic capital need not be in the form of regulated capital or equity. For example, a fund's "capital" may be the willingness of its investors to lose some of their investment so long as the overall return is positive).

So, from a macro-prudential and macro-economic perspective, synthetic securitisation brings capital within the Greek economy to fund economic growth.

Increases resilience of the banking sector

From its inception, the role of securitisation, both traditional and synthetic has been to redistribute risk. In a well-regulated financial ecosystem, concentrated risk is diffused through multiple investors including cross-border investors who would not otherwise have access to this risk (and its attendant rewards).

By allowing the banking sector, individually and collectively, to reduce its exposure to certain sectors and/or geographies by transferring the risk of those sectors or geographies to investors outside the Greek banking system, synthetic securitisation increases the resilience of the banking as a whole to shocks concentrated in those areas whose assets were synthetically securitised.

ABBREVIATIONS

AFME: The Association for Financial Markets in Europe

CDS: Credit Default Swap

CET1: Common Equity Tier 1

CRD: Capital Requirements Directive

CRR: Capital Requirements Regulation

EBA: European Banking Authority

ESMA: The European Securities and Markets Authority

EU: European Union

FG: Financial Guarantee

IACPM: International Association of Credit Portfolio Managers

PCS: Prime Collateralised Securities

P2G: Pillar 2 Guidance

P2R: Pillar 2 Requirement

RWA: Risk-weighted asset

SPV: Special Purpose Vehicle

SRT: Significant Risk Transfer

STS: Simple, Transparent and Standardised Securitisations

SREP: Supervisory Review & Evaluation Process

SSM: Single Supervisory Mechanism

SOURCES

[1] AFME Securitisation Data Report Q4 2021

https://www.afme.eu/Publications/Data-Research/Details/AFME-Securitisation-Data-Report-Q4-2021-and-2021-Full-Year

[2] ESMA Register for SIMPLE, TRANSPARENT, AND STANDARDISED (STS) SECURITISATION NOTIFICATIONS

https://www.esma.europa.eu/policy-activities/securitisation/simple-transparent-and-standardised-sts-securitisation

[3] Alpha Bank Press Release, December 17, 2021

[4] PIRAEUS Bank Press Release, 16 March, 2021

[5] EUROBANK Press Release, December 27, 2021

[6] PCS, STS criteria for term securitisations, November 2018

https://pcsmarket.org/wp-content/uploads/2018/11/STS-Criteria-Term1.pdf

[7] IACPM, Synthetic Securitization Market Volume, May 2022 – Select Survey Results

http://iacpm.org/