

## CHALLENGES AND OPPORTUNITIES OF SECURITIZATION IN ARMENIA'S BANKING SYSTEM

LUSINE MINASYAN   
Yerevan State University

**Abstract:** Securitization is an integral part of modern finance, providing liquidity and risk-sharing mechanisms. The driving force behind securitization is the need for banks to realize the value of assets on their balance sheets. Typically, these assets are residential mortgages, corporate loans, and retail loans, such as credit card debt. The article examines the quality of banking system assets, paying special attention to the growing volumes of mortgage lending and the overheating of the real estate market. It examines modern approaches to regulating the mechanisms of risk transfer from the banking system to the market, as well as the possible negative consequences of the application of Basel II and III on the pace of market development.

**Keywords:** *NPLs, Mortgage Loans, Securitization, Bazel II and III, Banking system*

### Introduction

Since the Global Financial Crisis there has been a significant downturn in global securitisation market activity. As an alternative source of funding for the banking sector, securitisation markets can play a role in supporting economic growth. However, the revival of confidence in these markets depends on a range of complex factors, and both securities and prudential regulators must continue to address the issues with securitisation that came to light through the experiences of the Crisis. Risk retention has been a focus of regulatory attention since the Crisis, and is seen as a way to address misaligned incentives arising in certain structures and practices that were prevalent in some markets prior to the Crisis. The EU has implemented risk retention requirements for EU credit institutions through the Capital Requirements Directive (CRD). The securitisation markets can play a role in supporting economic growth. Securitisation offers financial institutions a market-based alternative to existing sources of funding.

*Securitisation markets create opportunities for issuers to raise finance through alternative funding and by diversifying funding sources, potentially making bank lending less sensitive to abrupt changes to the cost of funds, ultimately affecting the availability of finance to economic growth. For that reason, access to these funding sources may be important to those economies experiencing slow growth. The relationship between asset securitization and GDP is complex, and the effects can be both positive and negative. When*

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\* Lusine Minasyan – Lecturer, Chair of Finances and Accounting, Faculty of Economics and Management, YSU, E-mail: [lminasyan@ysu.am](mailto:lminasyan@ysu.am), ORCID: <https://orcid.org/0009-0001-8066-6106>.



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*managed properly, securitization can stimulate economic activity by increasing credit availability and lowering borrowing costs, which can contribute to GDP growth. However, poorly structured or excessive securitization can lead to financial instability and crises, which can harm economic growth. Therefore, while there can be a positive correlation between asset securitization and GDP in stable periods, the overall impact depends on the quality of the securitization process and the broader economic context.*

Securitization by its nature is endowed with the function of redistributing and transforming long-term funds. It, in turn, transfers the existing risks of the banking system to the market and investors, making them more marketable. And from this perspective, the policy approaches of regulatory bodies in the field of risk management are important. How to regulate and at the same time not hinder the development of the securitization market. Securitisation represents a viable alternative source of funding for the banking sector at a time when funding diversification is needed. The sustainability of securitisation and its adequate regulation depend on a range of complex factors. Increasingly critical factors include the capital requirements imposed on investors through various regulatory initiatives such as Solvency 2 in Europe and liquidity coverage ratios and new risk weights for securitised products under Basel 2.5 and Basel 3.

### **Economic Theory**

The process of securitisation creates asset-backed bonds. These are debt instruments that have been created from a package of loan assets on which interest is payable, usually on a floating basis. The asset-backed market was developed in the United States and is a large, diverse market containing a wide range of instruments. Techniques employed by investment banks today enable an entity to create a bond structure from any type of cash flow; assets that have been securitised include loans such as residential mortgages, car loans, and credit card loans. The loans form assets on a bank or finance house balance sheet, which are packaged together and used as backing for an issue of bonds. The interest payments on the original loans form the cash flows used to service the new bond issue. Traditionally mortgage-backed bonds are grouped in their own right as mortgage-backed securities (MBS) while all other securitisation issues are known as asset-backed bonds or ABS.

Consider the Reasons for Undertaking Securitization. The driving force behind securitization has been the need for banks to realize value from the assets on their balance sheets. Typically, these assets are residential mortgages, corporate loans, and retail loans such as credit card debt. Let's consider the factors that might lead a financial institution to securitize a portion of its balance sheet. A bank may want to reduce the size of its balance sheet for the following reasons (Anuk Teasdale, *The Process of Securitisation* 2003,17-3):

- ✓ *If the returns on assets remain roughly constant but the size of the assets has been reduced, this will lead to an increase in the return on equity ratio.*
- ✓ *The level of capital needed to support the balance sheet will be reduced, which again may lead to cost savings or allow the institution to allocate capital to other, potentially more profitable, businesses.*
- ✓ *To obtain cheaper financing. Often, the interest rates payable on ABS securities are significantly lower than the rates payable on the underlying loans. This creates a cash surplus for the original entity.*

Studying the historical developments of the securitization market, it becomes clear that the driving force of securitization is the banking system. Of course, strict regulations

of the banking system have a positive effect on reducing risks in the system, but they can also negatively affect the quality of banks' loan portfolios and creditworthiness in the economy. Consider the distribution of the loan portfolio of the banking sector of Armenia for the last two decades. Loan Portfolio Trends in Armenia.

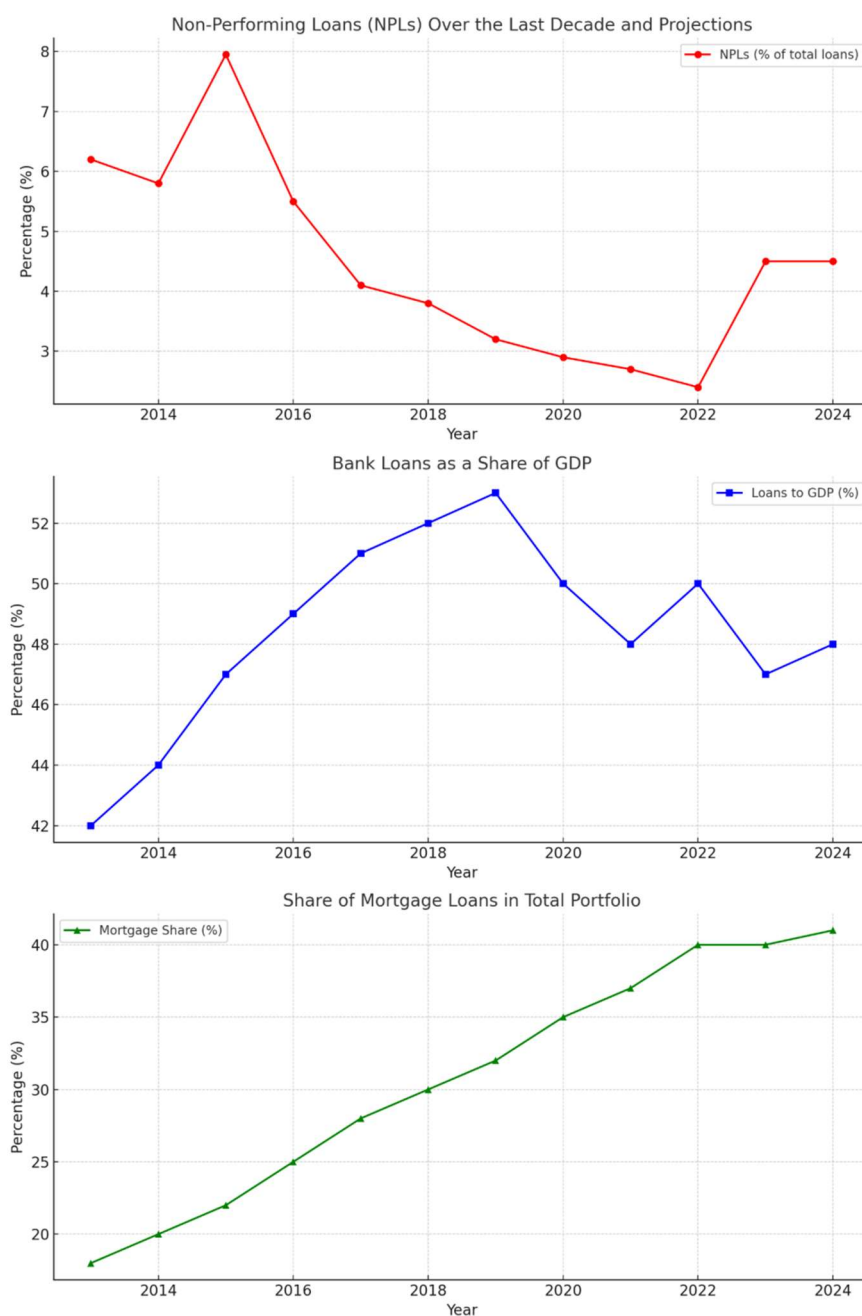
Looking at Non-Performing Loans (NPLs) in the Armenian banking system from 2013 to 2024, we see that the share of NPLs in Armenia's total loan portfolio has fluctuated significantly (see figure 1). In 2015, NPLs peaked at 7.95%, reflecting economic challenges. However, due to improved risk management and economic recovery, NPLs have decreased to 2.4% by 2022. A slight increase to 4.5% in 2024, according to the latest data, highlights the potential emerging risks. As for the share of Mortgage loans, we can see that Mortgage lending has grown significantly, from accounting for 18% of total loans in 2013 to an estimated 41% by 2024. This growth demonstrates a robust demand for housing finance, spurred by favorable interest rates, government initiatives, and increased consumer confidence. Finally, as the chart shows the ratio of bank loans to GDP has remained steady at around 50% over the past decade (see: [https://www.cba.am/EN/ppperiodicals/Stability\\_Report\\_2023.pdf](https://www.cba.am/EN/ppperiodicals/Stability_Report_2023.pdf)). This balance underscores the importance of credit in supporting Armenia's economic activity while raising questions about potential over-leveraging.

International regulatory standards have been introduced in the banking system of the Republic of Armenia, the primary goal of which is the prevention and detection of existing and uncertain risks. From this perspective, the financial system of the Republic of Armenia is no exception with its market regulation and behavioral requirements. Asset securitization essentially intersects two poles that are different from the point of view of financial regulation. The need for securitization regulation was more deeply understood especially after the crisis, where the need for a systemic approach and a common approach to risk recognition became clear.

For this purpose, the Basel Committee, which The Basel Framework is the full set of standards of the Banking Supervision (BCBS), which is the primary global standard setter for the prudential regulation of banks. The membership of the BCBS has agreed to fully implement these standards and apply them to the internationally active banks in their jurisdictions. Let us consider the standards for the application of the Basel international standards for the Republic of Armenia and the consequences of their possible effects on the activities of issuers.

There is a wealth of research on this topic, particularly on how Basel III encourages banks to use securitization to remove assets from their balance sheets and reduce capital requirements. (See: Acharya, V., Schnabl, P., & Suarez, G. (2013). "Securitization without Risk Transfer.") or the impact of securitization on securitization, where the authors examine how regulations aimed at ensuring transparency and risk assessment contribute to increasing investor confidence, ensuring stable market growth, while pointing out that excessive bureaucracy can also hinder development. (see: Keys, B. J., Mukherjee, T., Seru, A., & Vig, V. (2010). "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans."). At the same time, international comparative analyses show that the development of the securitization market has been most stimulated in countries with balanced regulatory approaches. This study examines how different regulations in the US and Europe have affected the volume of securitization and the distribution of risks. At the same time, the growth of securitization volumes and their impact on the financial crisis have been analyzed, indicating that securitization has contributed to the increase in market liquidity, but also contributed to the accumulation of risks. (Gorton, G., & Metrick, A. (2012). "Securitization.").

**Figure 1**  
**NPLs, Bank loans as share of GDP and Share of Mortgage loans in total portfolio.**



Source: <https://www.cba.am/am/SitePages/statmonetaryfinancial.aspx>

Referring to the regulation of the banking system of the Republic of Armenia, as well as securitization as an object of regulation, we note that, the banking system of Armenia has prudential regulatory approaches towards financial institutions and especially banks, which were introduced taking into account the Basel regulations and methodology. Considering the specific frameworks of Basel II and Basel III regulations, let us present their limitations, especially in the securitization sector. Thus the Basel Committee on Banking Supervision (BCBS) plays a crucial role in regulating the global banking sector, including the securitization process. The committee's regulations are designed to ensure that banks manage the risks associated with securitization and maintain financial stability. Basel II and Basel III introduced specific frameworks for addressing the risks inherent in securitization activities, focusing on improving risk management, capital adequacy, and transparency. So, can these regulations still be an obstacle for the emerging market and slow down the development trends of the market? Let us consider the nuances of the RA regulation. Basel II, introduced in 2004, set out a more comprehensive framework for capital adequacy, risk management, and disclosure, with a particular focus on the following key aspects of securitization:

- *Risk-Weighted Assets (RWA) Calculation for Securitization Exposures:*
- *Capital Requirements for Securitization Tranches:*
- *Disclosure and Transparency:*
- *Securitization Risks:*

At the same time, Basel II also acknowledged the importance of managing specific risks inherent in securitization, such as:

- ✓ Credit Risk: The risk of default on the underlying assets in a securitization pool.
- ✓ Liquidity Risk: The risk that the securitized assets might be difficult to trade in secondary markets.
- ✓ Operational Risk: The risk of failures in the processes associated with securitization, such as inaccurate asset valuations or failures in servicing and managing the assets.

The global financial crisis of 2007–2008 led to a need for stricter economic standards and regulation in all areas. In response, Basel III, which came into force in 2013, introduced stricter requirements to address risks and deficiencies that had been highlighted during the crisis. The main changes in Basel III related to securitization were aimed at strengthening capital buffers, increasing liquidity requirements, and improving risk management practices. The Basel III approach to securitization can be seen in the following areas: These strictures concerned several aspects.

1. Increased the capital requirements for banks, particularly for the riskier exposures, including securitization. The framework required higher-quality capital (Tier 1 capital) and larger capital buffers to absorb potential losses in times of financial stress. This meant that banks engaged in securitization had to hold more capital against their securitized assets, especially for lower-rated tranches or more complex securitization structures.

2. Introduced the leverage ratio to limit excessive risk-taking by banks. The leverage ratio acts as a backstop to the risk-weighted capital ratio, ensuring that banks do not become over-leveraged. For banks with significant securitization activities, this was an important factor to ensure that they held adequate capital in relation to their overall size and leverage.

3. Introduced liquidity requirements to ensure that banks have sufficient liquidity to meet their short-term and long-term obligations. These requirements have

implications for securitization:

4. Basel III revises the treatment of securitization exposures under the risk-based capital framework. For example, it applies a more conservative approach to the risk-weighting of certain securitized products.

➤ Revised Internal Ratings-Based (IRB) Approach, includes modifications to the IRB approach to account for the complexity and risks associated with securitization. Banks using internal models to assess the risk of securitized assets must apply more stringent assumptions about credit quality and risk correlations.

➤ Supervisory Approach for Securitizations: also emphasized more robust supervision of securitization activities. Regulators are required to ensure that banks adequately capture the risks associated with securitization, particularly with regard to off-balance-sheet exposures (e.g., special purpose vehicles or conduits) and hidden risks in complex structured products.

5. Higher Transparency and Disclosure: Basel III continued the push for enhanced transparency, especially concerning complex and opaque securitization structures. Banks are required to provide more detailed disclosures on the composition of their securitization portfolios, including the risk characteristics of underlying assets and the capital set aside to cover potential losses. This improves market discipline and ensures that investors and regulators are better informed about the risks banks are exposed to.

6. Risk Retention and "Skin in the Game": Along with related regulations (e.g., the Dodd-Frank Act in the U.S.), it emphasized the need for banks and other originators of securitizations to retain a portion of the risk. This is known as the risk retention rule, which requires that banks retain at least 5% of the credit risk on the securitized assets they originate. The rationale is to align the interests of the originator with those of investors, reducing the likelihood of reckless lending and securitization practices that contributed to the 2008 crisis.

So, to summarize, Basel II focused on capital adequacy, risk weighting of securitized assets, and transparency. It allowed for both standardized and internal ratings-based approaches to risk assessment. Basel III was introduced to impose higher capital requirements, stricter leverage ratios, liquidity requirements (LCR and NSFR), and stronger supervision of securitization activities. It emphasized risk retention by originators (risk retention) and more detailed disclosures to ensure better transparency in the securitization process. Both Basel II and Basel III aim to regulate the securitization process to ensure that banks properly manage the risks associated with these financial instruments. While Basel II laid the foundation for capital requirements and risk management in securitization, Basel III introduced stricter rules to enhance stability, liquidity, and transparency, especially after the financial crisis of 2007-2008. In terms of securitization, the main evolution from Basel II to Basel III is the focus on greater flexibility through higher capital buffers, liquidity requirements and risk containment mechanisms to prevent excessive risk. By introducing both approaches and defining the more stringent Basel approaches within its regulation, Armenia has attempted to contain possible scenarios of risks emerging in the system from a financial stability perspective. However, rather strict approaches lead to increased costs and, in essence, from a financial perspective, do not contribute to banks resorting to securitization due to its inherently low benefits. Thus, strict regulatory requirements or compliance burdens can lead to market passivity, as

compliance costs and additional capital requirements can reduce the profitability of securitization and as a result, financial institutions will prefer to keep the assets on their balance sheets rather than incur these costs. Valuable research has also been done on the barriers to market development and regulation. In particular, how regulations, often aimed at reducing market risks, limit the entry of new participants into the market. And how regulatory transparency has contributed to the liquidity of the securitization market. (Pagano, M., & Volpin, P. (2012). "Securitization, Transparency, and Liquidity." 210-217). With all this, in Armenia, we see essentially the same picture. At the same time, the low level of securitization or the fact that financial institutions do not seek to participate in the securitization process, is due to a combination of practical, regulatory, and economic reasons. At the same time, considering the rapid growth rates of loans in the Republic of Armenia, particularly in the mortgage sector, the regulatory body is faced with a dilemma: whether to develop the market by relaxing some regulatory norms or pursue a risk containment policy by increasing regulatory requirements.

### ***Summary***

In conditions of high activity and profitability, avoiding securitization, financial institutions, in particular banks, reduce risks and optimize their financial strategies in line with economic principles and market realities. From the point of view of financial stability, such regulatory approaches curb the likelihood of risks, but at the same time inadvertently become an obstacle to the emergence of alternative instruments in the market due to their economic and financial "uselessness". At the same time, the growth of the mortgage market in recent years, as well as its impact on GDP, has been gradually increasing, which in turn may lead to risks, the regulation and prioritization of which are considered of paramount importance. A slight increase in NPLs to 4.5% in 2023 may indicate an increase in credit risk. The growing reliance on mortgage lending may expose banks to risks related to the sector, especially if, according to the 2023 Financial Stability Report of the Central Bank of Armenia, the real estate market experiences a decline or a significant depreciation of property values. Proving that the securitization process, due to its structural peculiarity of financial engineering, acts as a "bridge" connecting participants in the banking and financial markets. From this perspective, there is also a need to introduce a new regulatory policy by both regulatory bodies and market participants. Financial system regulation has a significant impact on the development of the securitization market, shaping the level of market transparency, risk distribution and investor confidence. The "successful" development of securitization requires balanced regulations that will simultaneously contribute to ensuring transparency, real risk transfer and market liquidity. In this regard, regulators are encouraged to use "regulatory sandboxes" as a method of "testing" the regulatory easing scenarios under consideration as a possible policy change. The regulator should launch a "regulatory sandbox" that allows banks to test innovative securitisation mechanisms without the full burden of regulation. "Sandboxes" allow regulators to base their regulatory response to innovation on the results of real experiments. This helps regulators make faster and more informed decisions about how to properly regulate (and supervise) new services and providers entering the market.

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