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ASSET SECURITIZATION: AMERICAN AND RUSSIAN PRACTICE

Abstract. This paper covers such aspects as: concept of securitization, functions of securitization, risks in securitization transactions, asymmetric information in the securitization in the crisis of the late 2000's., mortgage securitization of assets in the U.S: current situation and problems, mortgage securitization of assets in Russia: current situation and problems.

Keywords: securitization, assets, mortgage.

According to the *Investopedia*, securitization is the process of taking an illiquid asset, or group of assets, and through financial engineering, transforming them into a security.

A typical example of securitization is a mortgage-backed security (MBS), which is a type of asset-backed security that is secured by a collection of mortgages. The process works as follows. Firstly, a regulated and authorized financial institution originates numerous mortgages, which are secured by claims against the various properties the mortgagors purchase. Then, all of the individual mortgages are bundled together into a mortgage pool, which is held in trust as the collateral for an MBS. The MBS can be issued by a third-party financial company, such a large investment banking firm, or by the same bank that originated the mortgages in the first place. Mortgage-

backed securities are also issued by aggregators such as Fannie Mae or Freddie Mac.

Regardless, the result is the same: a new security is created, backed up by the claims against the mortgagors' assets. This security can be sold to participants in the secondary mortgage market. This market is extremely large, providing a significant amount of liquidity to the group of mortgages, which otherwise would have been quite illiquid on their own.

Basic functions of securitization are refinancing, risk insurance, and liquidity management.

1. Refinancing function. Output of credit institutions on the securities market allows them to compensate for the deficiency of credit resources, attracting funds under its credit portfolio. Traditionally mortgages were issued by customer deposits as the main source of financing banks. Provision of sub-prime mortgages was possible either through additional resources, or after the expiration of loans. From the bank's perspective, it is more reasonable to immediately after the issuance of mortgage sell their rights on the stock market, previously turned them into securities, and thereby attract additional funds for new loans.

2. Insurance risk management. Asset Securitization means the appearance of the secondary loan market. The formation of secondary market for securitized assets can reduce the likelihood of risks inherent in banks such as credit, interest rate, liquidity. Many Western economists believe that banks no longer take on interest rate risk. Currently the main specialization of depository institutions is granting of loans and deposit operations, but interest rate risk transposed to other financial institutions. However, to completely get rid of the interest rate risk, even with securitization, bank is unable. Securitization function is not to eliminate the credit risk of the creditor bank, but to divide it between the bank, investors and intermediaries. By selling obligations on loans commercial bank transposed part of the credit risk on the third parties. For investors investing money in securitized assets safer than in traditional securities. Banks usually make out in certain securities not loans, but a combination of different loans, creating pools of assets. This leads to diversification of the risk of losses due to the credit risk and the risk of early payment are reduced.

3. Liquidity management. Securitization is an important asset management tool allows you to quickly and effectively realize the assets in terms of movable and saturated market competition. Equally important securitization is to improve liquidity, which is the main tool to control liquidity by regulatory authorities. To solve this problem after giving loans banks transfer some risky assets to the investor, putting them out of balance. Bank may apply for the securitization in the case when its assets are too frozen as compared with the established banking legislation. Thus, the benefits of manag-

ing liquidity through securitization are to create opportunities for risk transfer of assets to third parties.

Securitization can be seen as an integrated unity of three major parts: assets, participants and asset-backed securities. These parts are characterized by various risk factors, which allow us to offer the appropriate classification, in other words, to share risks in three main categories: the risks of the securitized assets, structural risks and risks associated with the securities.

The main transactions in the process of securitization include:

1. Asset transfer – purpose of the transaction process may be achieved by using two models of the treaty – the sale and donation. The main risks in this category are:

- Documentation risk – the possibility that the court does not qualify for a deal on the transfer of the asset pool as a true sale.
- Operational risk – includes all losses associated with procedural errors, regardless of the cause, which resulted in losses.

2. Payments to investors of principal and interest on the securities – being the issuer of the securities, a special project company, of course, is responsible for the return to investors of principal and interest (indirect distribution) or for transfers received funds (for direct distribution). Although these two methods differ greatly from each other, the principal risks SPV similar in both cases.

These risks include:

- Arbitration (margin) risk – margin (difference) between the purchase price and the selling price or between two financial flows.
- Calculated risk – payments of principal and interest to holders of securities backed by assets performed paying agents. Typically, issuers list payment agents necessary funds so that they were on the bill agent the day before the date of payment to holders of the securities. Recently, however, issuers prefer to transfer funds so that the agent account has been credited directly to the date of payment. Thus, there is a risk that the money will not come on the securities in the accounts of the period.
- Currency risk – appears when the securities are denominated and payable in a currency different from the currency in which nominated and paid by the underlying asset.
- Legal risk – there is the possibility of changes in the law, infringe or restrict the rights and interests of the parties to the transaction. Especially serious risk in this area consists of tax law.

Securitization was heavily criticized after the late 2000's financial crisis mainly due to several related agency problems which stem from the asymmetry of information about the quality of sold loans between the issuers of securitized products and their final buyers. However, these problems were not new. Securitization design in practice embedded tools that were supposed to

alleviate these problems such as tranche retention schemes or implicit recourse. Despite these tools during the boom preceding the crisis many low quality loans were issued, securitized and sold to the investors, which contributed to the depth of the crisis. In comparing the recent subprime crisis to previous financial crises, Calomiris (2008) notes that the asymmetry of information about the true financial positions of borrowers made banks reluctant to lend to each other. Caballero and Simsek (2009) examine the interaction between falling asset prices and liquidity provision using a model where the interlink ages between banks are so complex that banks have to worry not only about the counterparty risk of their neighbors, but also of their neighbors' neighbors. As asset prices collapse, more banks are likely to fail, which increases each bank's likelihood of being hit indirectly from counterparty risk.

The increasingly complex environment banks have to understand in order to provide liquidity can make them liquidity hoarders, further driving down asset prices to "fire sale" levels. As discussed in Gorton (2008) and Brunnermeier (2009), another factor explaining the collapse of certain segments of the ABS market during the 2007–2008 financial crisis is the asymmetric information that arises between the buy-side and the sell-side of structured financial products (e.g. CDOs) that are typically highly complex and opaque. The asymmetric information story we are focusing on begins with the creation of subprime mortgages. As described by Gorton (2008), the particular design feature these mortgages is "the idea that the borrower and lender can benefit from house price appreciation over short horizons" (p.12). The bursting of the housing price bubble prevented many subprime mortgages from being refinanced, and consequently some borrowers were faced with negative equity in their homes and higher interest payments after their "teaser" rates expired. With higher expected delinquencies and default rates, investors viewed subprime mortgages as increasingly risky. Gorton (2008) describes how subprime mortgages were successively securitized by a long chain of financial intermediaries to generate complex securities and structures. When the housing price bubble burst, investors were unable to determine the size and location of the expected losses because information about the underlying loans was lost along the securitization chain. "The available information was on the side of the market that produced the chain of structures; outside investors know much less" (p.76).

Since the inception of the securitization of mortgage loans in the 70s, U.S. securitized mortgage market securities (MBS) has become a huge segment of the debt market. Mortgages and refinancing form closely bound at the features of each country's jurisdiction and financial national traditions, tax rules, housing policy. U.S. is the first country that used mortgages as an asset securitization. Mortgage system with the use of securitization actively began to develop in the '80s, when was a heavy slump in the property market. Today housing finance system in the United States is a complex market on a

national scale, acted on by huge number of institutions, including mortgage banks, savings and loan associations, commercial and savings banks, insurance companies, pension funds, etc. Critical success factor in this direction have been building activities of the secondary mortgage market, which decided the main problem of housing finance – the problem of credit resources. U.S. legal system refers to a system of common law, so to start the securitization market took relatively few changes in tax laws and legislation governing the offering of securities. On behalf of the state, it is reallocated financial resources coming to the secondary mortgage market. Thus, the system of mortgage lending in the United States is two-tier system. Were created specialized organizations: Federal National Mortgage Association “Fannie Mae”, Federal Home Loan Mortgage Corporation “Freddie Mac” and The Government National Mortgage Association “Ginnie Mae”.

First of all, these the organization had been established for the purposes of the acquisition of 30-year mortgages issued at a fixed rate with the possibility of early repayment. “Fannie Mae” and “Freddie Mac” are similarly organized and enjoy the same federal benefits. And she and the others are pre-crisis private equity corporations whose shares traded in 2010 to the New York Stock Exchange. Both corporations are limited to one line of activity (residential mortgages), and various official privileges to aid in completing a task. The main ones are:

- 1) the right to sell securities corporate bonds without limitation through financial institutions regulated by the state;
- 2) the determination of mortgage securities they issued or guaranteed by, to the second-lowest credit risk to depository institutions;
- 3) the right to sell their securities through the Federal Reserve open market.

Liabilities of “Fannie Mae” and “Freddie Mac” is not an obligation of the Government, were not guaranteed by the U.S. Treasury. Nevertheless, the government supported them, that the crisis was confirmed when the salvation of agencies was spent considerable amount of money.

By 2008, the U.S. mortgage market was estimated at \$ 12 trillion. Since September 2008, the Ministry of Finance announced that “Freddie Mac” and “Frannie Mae” pass under the control of the state – partially nationalized. To rescue mortgage agencies of the federal budget allocated about \$ 150 billion (figure 1).

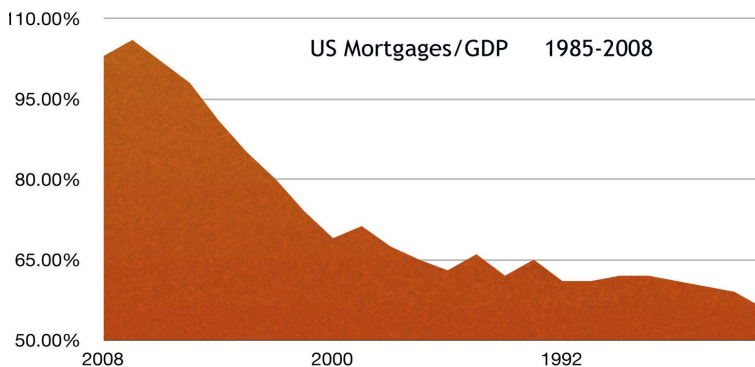


Figure 1. US Mortgages/GDP, 1985–2008

U.S. market of mortgage-backed securities by the end of 2010 is the largest debt market in the world (\$ 10,6 trillion – the amount of the mortgage market).

Issue of agency mortgage-backed securities in 2010 (01.01.11) reached \$ 1,1813 trillion (table 1).

Table 1

US ISSUANCE BY COLLATERAL IN 2010

	Q1	Q2	Q3	Q4	Total
ABS	25,0	23,1	19,3	15,2	82,6
CDO	0,4	0,9	0,1	1,2	2,7
Agency MBS	224,7	239,4	320,1	397,1	1,181,3
Non-Agency CMBS	0,0	0,2	1,3	4,5	6,0
Non-Agency RMBS	0,0	0,3	0,5	3,3	4,1
Total	250,2	264,0	341,2	421,2	1,276,7

Thus, we can conclude that securitization in the United States until 2007 was a well-established and widely used for refinancing of mortgage loans of commercial banks in the U.S. However, the crisis in the global real estate market began after the collapse of the once-mighty U.S. mortgage system, to form a «bubble» on the U.S. real estate market.

In the meantime, the demand for securitized paper issued by U.S. federal housing agency, continues to be saturated. Investors are banks, including foreign ones, mutual funds and portfolio managers of mutual funds, as well as foreign investors.

Since 2006, this tool has been actively used in the Russian mortgage market. According to the *Information Agency Cbonds*, in 2006, the share of securitized mortgage loans in the total amount of securitized products ac-

counted for 12 %. However, beginning in 2007 in the U.S. mortgage-backed securities crisis and the subsequent global financial crisis in 2008 slowed down the development of the mortgage market and, consequently, mortgage securitization market (figure 2).

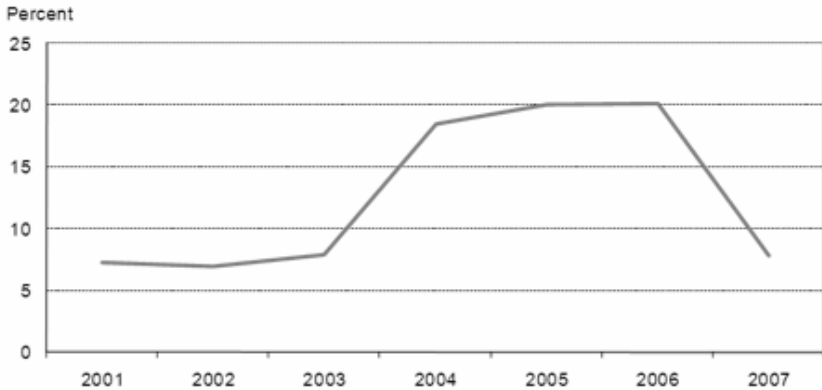


Figure 2. Share of Securitized Mortgage Loans in the Total Amount of Securitized Products

It is necessary to allocate components of the mortgage securitization market in Russia.

The first part deals with cross-border securitization. This situation arises when the company issuing securitized bonds placed in the external market (when the SPV is registered outside the territory of the Russian Federation). The second part – a local securitization, regulated by Russian federal law from 11.11.2003 N 152-FZ “On Mortgage Securities”. The third part is securitization mechanism using closed-end mutual funds. It is based on the Federal Law of 29.11.2001 N156-FZ “On Investment Funds”. In contrast to the developed countries in the Russian market securitization is quite rare. According to A. Kotler, Director of Capital Markets AB “Gazprombank”, “mortgage financing in Russia is carried out mainly by the resources of the banking system, which seems to not be as effective, given its low capitalization and limited access to long-term financial resources in the context of a substantial overall needs of the economy in credit resources”. 2007–2009 crises revealed weaknesses in existing mechanisms mortgage securitization. Obviously, the benefits can be fully felt only after removal of the existing problems.

The role of securitization as a financing innovative technology for the contracting parties is worth reiterating. Value of asset securitization is diffi-

cult to overestimate. There are as pluses, as minuses in this process. As for advantages of the securitization, it could be identified such aspects as:

1. Opportunity to raise additional funds not through traditional sources of funding, and by the sale of assets to the SPV.

2. Opportunity to invest in various types of assets with different degrees of risk and return.

3. International experience suggests that secured securities exposed to fluctuations in assets less and have a yield, as a rule, more than on government bonds of comparable rating.

However, there are also some minuses such as:

1. Transactions are complex from a technical and legal point of view. To construct a securitized product and to continue to provide its service, need to be worked legal framework, infrastructure of the securities market, professionals, transparent information on all elements of the transaction.

2. Huge losses due to mortgage finance companies crisis began in 2007 in the U.S. and grew into a global financial crisis subsequently, plurality bankruptcy of originators, deplorable situation with insolvent borrowers indicate the need to rethink previously used financial technology.

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