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Bankalarda Likidite Yönetiminin Bir Aracı Olarak Menkul Kıymetleştirme

Securitization As A Tool Of Liquidity Management in Banks

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ÖZET

Amaç Pandemi sırasında en çok zarar görün sektörlerden biri de bankaçılık sektörü olmuştur. En sık görülen sorun bankalarda likidite sorunu olmuş ve bu yönde özel adımlar atılması gerekiyordu. Gelişmişlik düzeyi ne olursa olsun herhangi bir ülkenin bankalarında likidite sorunları ortaya çıkmıştır. Her ülkenin bu konuya yaklaşımı farklıdır. Menkul kıymetleştirme bu yöndeki en uygun yollardan biri olarak kabul edilebilir.

Yöntem: Menkul kıymetleştirme kavramının daha iyi anlaşılması, olumlu ve olumsuz (avantajlar ve dezavantajlar) değerlerinin ortaya çıkarılması için gerekli araştırmalar yapılmıştır.

Bulgular Son yıllarda hem Azerbaycan'da hem de diğer ülkelerde güvenlikleştirme alanında giderek daha fazla araştırma yapılmaktadır. Bu, hem ulusal piyasaların gelişimi hem de dünya piyasası için yeni finansal teknolojinin önemi ve finansal piyasa katılımcıları için menkul kıymetleştirmenin yüksek pratik önemi ile açıklanmaktadır. Sonuç olarak, parasal değerlemenin bankacılık sektöründe daha başarılı bir şekilde uygulanabilmesi için devlet tarafından desteklenmesi ve menkul kıymetler piyasasının gerekli düzeyde olması gerektiği söylenmelidir. Bu yaklaşımı kullanan herhangi bir ülkede likiditeyi yönetmek için öncelikle daha güçlü bir yasal çerçeve oluşturulmalıdır.

Sonuç bilgileri: Günümüzde en acil sorunlardan biri, menkul kıymetleştirme sonucunda ihraç edilen menkul kıymetlerin kredi itibarını artıracak etkili mekanizmaların olmamasıdır. Küresel ekonomik kriz, kredi destek mekanizmalarının olmayışı nedeniyle, en yüksek dereceli menkul kıymetlerin bile yatırımcılar için güvensiz hale geldiğini gösterdi. Menkul kıymetleştirme sonucunda ihraç edilen Rus menkul kıymetlerinin yüksek riskleri, menşe şirketler için yüksek borçlanma maliyetini etkiler.

Anahtar Kelimeler—Banka; Likidite; Menkul kıymetleştirme; Pandemi

ABSTRACT

One of the sectors that suffered the most during the pandemic was the banking sector. The most common problem was the liquidity problem in banks and special steps had to be taken in this direction. Regardless of the level of development, liquidity problems have arisen in the banks of any country. Each country's approach to this issue is different. Securitization can be considered as one of the most convenient ways in this direction.

Necessary research has been carried out to better understand the concept of method securitization and to reveal its positive and negative (advantages and disadvantages) values.

Findings: In recent years, more and more research has been carried out in the field of securitization, both in Azerbaijan and in other countries. This is explained by the importance of new financial technology both for the development of national markets and for the world market, and the high practical importance of securitization for financial market participants. In conclusion, it should be said that in order for monetary valuation to be implemented more successfully in the banking sector, it should be supported by the state and the securities market should be at the required level. A stronger legal framework must first be established to manage liquidity in any country using this approach.

Conclusion information: One of the most pressing problems today is the lack of effective mechanisms to improve the creditworthiness of securities issued as a result of securitization. The global economic crisis has shown that due to the lack of credit support mechanisms, even the highest grade securities have become unsafe for investors. The high risks of Russian securities issued as a result of securitization affect the high cost of borrowing for companies of origin.

Keywords—*Bank; Liquidity; securitization; Pandemic*

INTRODUCTION

The financial and economic crisis marked its dominance since the mid-1970s of the global financial system. The post-crisis period coincided with the formation of a new paradigm for the future development of the global financial market, the basic contours of which are already being considered today. One of the most important trends in post-crisis development is the gradual reduction of bank lending and its replacement by alternative methods of financing, including the number and methods of attracting capital to the market. However, the traditional methods of financing the market of securities are subject to their own shortcomings. In particular, the placement of shares on the stock exchange or over-the-counter markets is associated with the loss of control over the company, which is far from always the main owners of the business. The issue of debt paper is complicated by the high cost of attracting capital. In this connection, all enterprises are increasingly turning to alternative means of attracting capital to the market of securities, including and to securitization.

ARTICLE CONTENT

Managing the bank's liquidity and keeping it in constant is one of the most important targets of bank management. Thus, banks must be able to repay their existing liabilities at the expense of their assets in a timely manner and create a special control mechanism in the management of liquid assets. The high solvency of the bank is assessed as one of the main indicators of the stability of the banking sector.

Crisis management requires special attention to liquidity management. This is one of the issues in the centre of attention after COVID-19 pandemic.

One of the undeniable facts in banking practice is that bank management does not take full control of events that could lead to liquidity problems when the root causes of those events arise. When these events lead to serious problems, bank management try to restore that liquidity at the expense of greater resources (losses, etc.) and reduce liquidity risks. That is why banks are more affected during the crisis.

In general, liquidity is a factor that affects everything from a bank's reputation to its share price. Therefore, proper management of liquidity is important. Banks have several choices for

managing liquidity. For example, some banks manage their liquidity by controlling their assets and others by controlling their liabilities. In our opinion, the management of liabilities is not good way to deal with the crisis. Because in a crisis, the bank considers the possibility of converting assets into liquid funds in any case, as well as the solvency of borrowers to fulfill its obligations. Although the banking sector is generally affected in the same way during an economic recession or crisis, each bank will be affected differently as a result of these waves of economic events. The main reasons for this are that the distribution of assets and liabilities in banks may be different, banks may have different areas of financing or investment, banks may take different precautionary measures (buffers) for the crisis, and so on. Each of these factors will have a different effect on banks during a crisis.

The mechanism of securitization in the mortgage refinancing system was invented in the USA several decades ago. At that time, a real revolution took place in the financial and banking sector of the country's economy. Despite all the shortcomings, securitization is still considered the main impetus that gave impetus to the development of financial markets at the turn of the 20th and 21st centuries. In fact, the mechanism is reduced to the transfer of assets to a more liquid format. In a narrower sense, we are talking about the transfer of assets with a low level of liquidity into securities. The subject of the transaction is secured in the form of proceeds from the original assets. Thus, it is possible to more evenly distribute risks between investors, the guarantor and asset owners.

Recent days more bank is prefer to securitization of their assets. This term is used to refer to the transformation of illiquid assets into liquidity through the issuance of securities secured by these assets.

In order to get a new stream of money in its order, the bank can try to more actively attract funds from the population in the form of deposits. However, this process is quite long and it is unlikely that it will be strongly reflected in the level of current liquidity.

Many commercial banks need sources of long-term financing. For this purpose, they initiate the securitization of loans from the mortgage segment. Large players in the credit market are able to issue the necessary securities at the expense of the resources available on the balance sheet. Such processes take place within the framework of programs developed by development institutions, as well as through SPV (special company) with the support of the originator. Small and medium-sized players initiate joint releases or organize the process with the participation of several originators. Asset securitization is a truly attractive source of long-term financing for most Russian commercial banks. Unfortunately, the imperfect legislative framework will not allow to maximize the potential of the popular destination

Issued bank loans will be repaid sooner or later (if not all, then most of them) and interest will be paid on it. That is, in other words, they represent the same money, but not only at the moment, but in the future. Therefore, they can be used as security for new value-added paper. And these are the new, issued valuable securities that can be sold among investors for their living money.

Generally, there are two ways of securitization:

1. With the write-off of assets;
2. Without writing off assets (they remain on the balance sheet of the company).

The mechanism of securitization in both cases is the same, except that in the first case the assets of the securitization are transferred to the balance sheet of another company. This can be, for example, a subsidiary or specifically created for these purposes a financial intermediary - SPV (Special Purpose Vehicle).

In general, the order of securitization is as follows:

- ♣ A portfolio of assets securing securitization is created;
- ♣ The created portfolio is separated from the remaining assets of the organization and either stays on the balance sheet, or is transferred to the balance sheet of the subsidiary company or in the SPV;

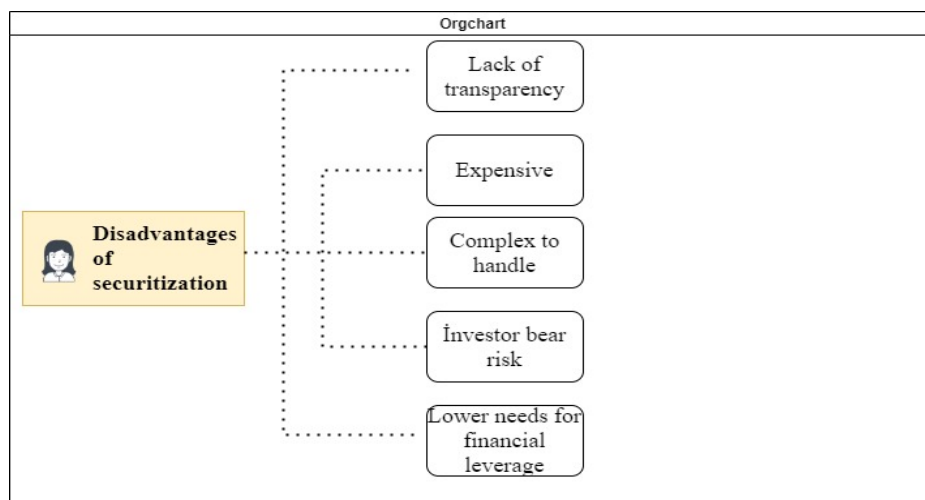
Assets selected in the portfolio are divided into tranches depending on the degree of their reliability and under each of these trenches are issued valuables corresponding to the level of income (below the level of income), the greater the percentage of hope;

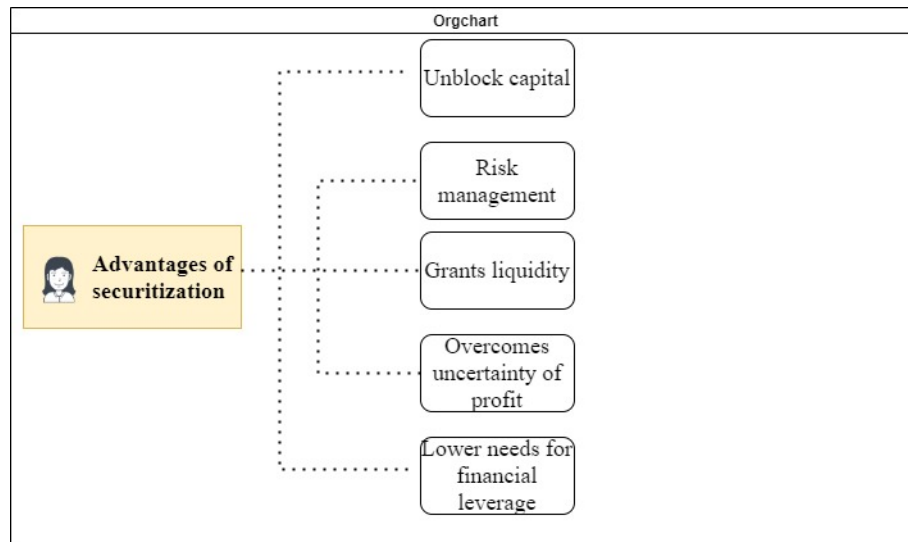
- ♣ Investors buy these valuables and get a profit from them, which are the payments of borrowers on the loans, which are mainly based on the issued valuables.

The effectiveness of the application of the securitization mechanism is determined by the goals and benefits of the process itself. Securitization appeared due to the high cost of borrowed capital. The reason for the high cost of loans is the low level of development of the stock market and the banking sector. Thanks to their presence on the securities market, credit institutions raise additional funds on more favorable terms. As a result, financial institutions seem to be killing two birds with one stone: they receive additional funds for business development, and also get rid of assets with low liquidity.

One of the most pressing problems is the lack of effective mechanisms to increase credit reliability of securities issued in securitization results. The global economic crisis' showed that even valuable papers with the highest level of rating turned out to be unsafe for investors, including the reason for the lack of credit mechanisms support. The high risks of Russian securities, secured by the results of securitization, are reflected in the high cost of borrowing for the original companies.

Therefore, there are advantages and disadvantages of securitization: There are above mentioned:





Picture 1: Advantages and disadvantages of securitization

These and other problems of the market securitization show a sharp need for their theoretical, methodological and practical solutions. Even fragmentary listing of existing problems testifies to the relevance of the study Risk securitization consists in organizing the process of risk transfer to the financial market zone. In this case, the risk owner issues securities linked to the securitized risk. The first placement of securities allows the formation of a reserve, which is used as collateral for the securitized risk.

Securitization of catastrophic risks has become widespread. Bonds for a period of 12 months are used as an instrument. Income and face value are distributed among investors depending on whether the catastrophic risk has been realized.

Therefore, securitization allows you to turn illiquid assets of a company (bank) into liquid. It has a positive image on the balance sheet indicators (illiquid assets are removed from it) and reduces expenditures on fundraising. In addition, securitization can be positively reflected in the current credit rating of the organization (by talking into account the write-off of assets with a low level of reliability).

If you look at this process from the point of view of the investor, then on the one hand it gives him the opportunity to expand his arsenal of financial instruments and choose the necessary long-term obligations from the degree of risk to the extent of the risk of investing it. But on the other hand, the investor does not have complete information about it, loans of any quality will be packaged in the price of the purchased paper. And the whole risk of default on these loans lies entirely on his shoulders.

Anlık Basınç Yüğü Altındaki Kompozit Plakların Farklı Elyaf Oryantasyon Açılarında Dinamik Davranışının Genelleştirilmiş Diferansiyel Kareleme Yöntemiyle İncelenmesi

Investigation of Dynamic Behavior of Composite Plates Subjected to Blast Load at Different Fiber Orientation Angles by Using Generalized Differential Quadrature Method

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Özet: Bu çalışmada, anlık basınç yüğü altındaki kompozit plakların farklı elyaf oryantasyon açılarındaki dinamik tepkisi genelleştirilmiş diferansiyel kareleme metodu (GDKM) ve sonlu elemanlar metodu (SEM) ile incelenmiştir. Tüm kenarları ankastre mesnetli kompozit plağın hareket denklemi Hamilton prensibi kullanılarak elde edilmiştir. Geliştirilen bir kod yardımıyla, GDKM kullanılarak bu denklemler çözülmüş olup plağın orta noktasının yer değiştirmesi incelenmiştir. Sonuçlar, halihazırda literatürde var olan bir çalışmanın sonuçları ve sonlu elemanlar paket programı analiz sonuçları ile doğrulanmıştır. Sonrasında, elyaf oryantasyon açısının değişiminin plak orta nokta deformasyonuna etkisi parametrik olarak incelenmiştir. Sonuç olarak, elyaf oryantasyon açısının değişiminin plak orta noktasının deformasyonuna büyük etkisi olduğu görülmüştür.

Anahtar Kelimeler: Kompozit, Patlama, Genelleştirilmiş Diferansiyel Kareleme Metodu

Abstract: In this study, the dynamic behavior of composite plates subjected to blast load at different fiber orientation angles was investigated by using the generalized differential quadrature method (GDQM) and finite element method (FEM). The equation of motion of the fixed support composite plate obtained using the Hamilton principle. Equations of motion have been solved by GDQM and displacement of the midpoint of the plate has been investigated. Results were validated by the already existing results in the literature and by finite element software package. Afterwards, effect of change in fiber orientation angle on plate midpoint deformation was parametrically investigated. As a result, it was observed that the change of the fiber orientation angle had a huge effect on the deformation of the plate midpoint.

Keywords: Composite, Blast, Generalized Differential Quadrature Method