

THE REVIEW OF SHADOW BANKING IN THE WORLD

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Abstract: *Financial innovations and financial instruments such as futures contracts, options, futures have been aimed at reducing risk. Due to government policies and unauthorized companies, instead of using it as a risk management tool, they bring potential risks. These types of activities may lead to shadow banking. Shadow banking activities include securities, money market funds, non-bank financial institutions such as financial companies and hedge funds. In this research, we examine shadow banking and compare common banking with shadow banking in the world. All over the world, shadow banking has reached a very high volume so that the shadow banking system in the United States is growing faster than the European banking system.*

Key words: *Shadow Banking, Common Banking, Banking Sector*

JEL Classification Codes: E58, G01, G20, G30

1. INTRODUCTION

Paul McCully, an economist and former PIMCO fund manager, introduced shadow banking in 2007 to explain the role of financial intermediaries. Shadow banking includes activities such as money market funds, investment instruments of credit investment funds, credit funds of securities brokers, securities and financial companies. One of the advantages of shadow banking is that it reduces the need for traditional banks as a source of credit and acts as an additional source of loans and creates diversity in the financial system. (Adrian and Ashcraft, 2012)

Hervé Hannon, deputy director general of the Bank for International Settlements (BIS), claims that investment banks and commercial banks use the shadow banking system. One of the benefits of shadow banking is that its fees are less compared to official banks, and therefore they provide financing with lower fees and facilitate economic growth. Also, because they are not subject to heavy regulations, they provide better services compared to banks. (Bakk-Simon et al., 2012).

Today, more than 85% of the whole borrowing of companies is related to non-bank lenders (shadow). One reason for the importance of the shadow banking system in the economy was the need for innovation and risk-taking, in addition to the need for a regulatory regime to give early warning of the next collapse because it is unlikely to avoid a crisis." In a general definition, shadow banking is all financial activities that lead to systematic risk and require private or government support to operate". In shadow banking, there should be financial support, unlike other activities in the wealth market, such as mutual funds, leasing companies, etc., which do not work like this.

The result of shadow banking on the relationship between wealth and liquidity in the Chinese banking industry was examined in an article titled "The effect of shadow banking on the



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relationship between wealth and liquidity" (Bengtsson, 2011). In this study, three beneficiaries of trust are considered as representatives of Sayeh Bank's activities. Findings show that these activities tend to overstate regulatory wealth ratios and liquidity measures and distort the relationship between wealth and liquidity ratios. Furthermore, before removing the shadow banking effect, banks with lower wealth ratios generate more liquidity, thus supporting the assumption of financial risk-taking. Conversely, there is a risk assumption that banks have more liquidity when they have more wealth. Regarding the impact of shadow banking, this study contributes to policy making and shows that failure to use appropriate information to assess wealth formation and liquidity can lead to the false impression that Chinese banks are safe, regardless of policy. To further mislead observers

In a study in China, they found that commercial banks were doing shadow banking with interbank trade. In this study, which examined the years 2003 to 2019, 147 commercial banks were selected as a sample and empirically banking. They studied the shadow on individual risk and systemic risk of banks. In shadow banking, credit intermediation is done despite the lack of direct access to the liquidity of credit guarantees. In a study titled "Shadow Banking Rules," he examined regulatory reform efforts to strengthen the stability of shadow banking during financial stress. They found that recovery efforts focused on shadow financing, including asset-backed securities, tripartite repurchase agreements, money market funds, and bonds (Bord and Santos, 2012).

In this study, the tensions that arose over time between banks and non-bank intermediaries were investigated and the failure that occurred because banks tried to play a supporting role. In the meantime, governments and central banks also engaged in activities that made non-bank intermediation use less risk, leverage and change in maturity. Another study, "Shadow Banking and Financial Rule: A Small-Scale DSGE Perspective," estimates a small-scale DSGE model of the US economy through the interaction of common and shadow banks. In this study, they find that shadow banks increase the transmission of structural shocks by helping to escape the constraints of common intermediaries, and that this leakage to shadow institutions reduces the power of macroeconomic policies to target common credit to reduce economic volatility. . In a counterfactual experiment, they found that a countercyclical buffer, if applied only to common banks, actually boosted the boom and bust associated with the 2007-2008 financial stress. In addition, a broader regulatory framework targeting both common and shadow credit would contribute to economic stability.

In addition, regulatory reforms are focused on adapting costs and more incentives for banks to prepay assistance for these activities, with the aim of inducing a more significant social scale of shadow banking activities. Other reforms focus on reducing the trust of common institutions in the shadow of common banks, which is provided by banking institutions in the shadow of providing credit and necessary liquidity support and the maturity of changing investors in the shadow of full economic costs. One of the problems with current regulatory efforts is that the incentive for shadow banking has increased as the gap between wealth and liquidity requirements in common and non-common institutions widens. Reforms should aim to reduce the risks associated with shadow maturity transformation through better, more affordable and clearer protection. According to this study, the legislation is somewhat appropriate, but we still need more work. In his article "Shadow Banking and Banking", Jay Haung defines shadow banking as a form of off-balance sheet financing in the macro time frame. He examines that shadow banking is regulated and that shadow banking carries internal risk. He argues that tighter banking rules increase the capacity for shadow borrowing and financial instability. Moreover, a limited degree of risk sharing generally does not improve shadow banking. Also, in an article titled "Shadow banking effects on bank risks from the perspective of wealth adequacy", it is stated that a bank that operates in shadow banking. It has a tendency to accept important risks and it is called the hypothesis of risk taking. The results of their study show that the hypothesis of risk-taking and

good governance significantly reduces the effect of shadow banking on risk-taking (Gorton and Metrick, 2010).

In the reviews, shadow banking is considered a type of arbitrage and also It has different procedures from the functions performed by banks. Shadow banking has two procedures in the role of financial intermediary. The first role is debt that creates risk-free claims in securities. The second role is to create credit for borrowers (Adrian and Shin, 2009), therefore, considering the importance of capital banking and its role in the economy, it should be properly understood and investigated. This study examines shadow banking and its difference from traditional banking. In the first part of this article, there are explanations about shadow banking, an overview of previous researches on shadow banking. In the second part, the difference between traditional banking and shadow banking is discussed, as well as the shadow banking of other countries is described in the third part. At the end, the conclusion is presented.

2. LITERATURE

Shadow banking is defined as "a network of specialized financial institutions that provide credit, maturity, and liquidity conversion without direct and explicit access to public support." Losing such access to government liquidity sources and credit backers makes shadow banks inherently fragile. Shadow banking activities are complicated by the operations of major regulatory institutions such as insurance companies and bank holding companies, thus becoming a systemic risk to the financial system. The shadow banking system is created as a result of supply and demand. By using shadow banking, financial companies are able to circumvent rules as well as increase the chances for financial changes and thoughtful activities (Bouveret, 2011). Banks want the risky assets on their balance sheets to be reduced to the same amount of wealth required to cover the risks.

Shadow banking also provides an opportunity for investors to acquire different forms of money throughout the financial system. The phrase "shadow banking" was made by McCulley (2007) and is mostly used by policy makers. Many studies have examined shadow banking, which according to the only feature of these articles. We have classified them in a separate research current by themselves. In many studies such as Kanatas and Greenbaum (1982); Bernanke and Lown (1991); Duca 1992; Berger and Udell 1994 is explained by a process that uses regulatory requirements, such as storage needs, creating other options for bank loans. Stijn (2013) has described shifts. In expenses, it helps to increase the long-term shadow banking, although the experimental evaluation is only done (Noeth and Wolla, 2012). The prior experimental study on the makes of shade banking was operated by Barrow et al., Austria, Belgium, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Luxembourg, Norway, Romania, Slovenia, Spain and Sweden covered. Independent GDP changes, interest rates (both short and long-term), M2 ratio/GDP ratio, GDP share of investment fund assets, and stock market indicators. 2016 to linear relationships between the bank the shadow and themany macroeconomic indicators mentioned. Their information indicate direct relationships between shadow banking size and long-term interest rates and stock market indicators. However, they see the negative relationships between shadow banking size and short-term interest rates, investment fund development, GDP development and M2/GDP ratio (Brañanova, 2012).

In a study in 2008, Duka looked at the effect of wealth rules and other elements on the role of shadow banking in financing short-term commercial debt. Their data show that changes in costs and storage expenses and changes in bank validity original regulation had a negative and long-term impact on the share of shadow banking in short-term commercial debt funding (Cabral, 2010). Also, with the increase of short-term liquidity insurance premium, premium term and securities market events, their share decreased in the short term. With the improvement of the economic

outlook, risk tolerance and interest rate decreased. Kim investigated the direct impact of insurance companies and pension funds on the development of shadow banking. And he claimed that the size of bank assets has a positive and significant relationship with shadow banking. Hudola and his colleagues investigated shadow banking in Spain in a study. common banks' properties were expanding, real GDP and interest rate (short -term) free variables. They argued that the measure of the traditional banking part affected the measure of the shadow bank, and in most cases, the Shadow Banking part responds professionally to the expansion of real GDP. They also found that increasing the duration of expansion and less interest rates would affect the development of the Spanish shadow-banking part (Claessens et al., 2012). In a study, Apostoaie and Bilan examined eleven central and Eastern European countries in the year 9, and both considered the extensive and measures of shadow banking as dependent variables. The independent variables included real growth rate of GDP, funds and insurance companies, money market interest rate, growth rate of total reserves (excluding gold) and growth rate of total assets (Davies, 2009). In a study, Tiwari (2019) investigated bank risk and reported a negative relationship between shadow banking and monetary policy and claimed that as shadow banking increases, banks reduce their risk in the market (EC, 2012). Hudola et al showed that strict financial regulation and development and the demand for long-term institutional investors have a positive effect on shadow banking. They also reported that the factors affecting the development of shade banking may be different in different countries (Pozsar et al., 2010).

3. AN ANALOGY OF COMMON BANKING AND SHADOW BANKING

The shadow banking system is called "shadow banking" because it operates outside of rules. To examine shadow banking, we must examine borrowing and loans (Samuelson, 2008). Borrowing and lending can be done in two ways. The first is direct, where funds are transferred directly from the lender to the borrower, this is the most difficult type of loan. In the second method of lending, which is called indirect financing, savings or funds are transferred to the borrower through an intermediary (bank). One of the most common financial intermediaries is common banking, which follows rules to ensure financial health. Among other things, banks must have a certain amount of wealth to protect themselves in case of losses (Noeth and Wolla, 2012). In the United States, in case of bankruptcy, banks can save their deposits up to \$250,000 from risk with the help of the government through deposit insurance. Although common banking and shadow banking work in the same way they give loans to their customers, but their funding methods are completely different. This is their first difference. Another difference is related to government expenses, which are common banking and its amount is high. Also, the interest rate of shadow banking is lower, and the development rate of shadow banking is higher (Lazcano, 2013).

4. SHADOW BANKING IN THE WORLD

In 2017, the share of shadow banking was 13.6% (52 trillion dollars) in total global banking assets, which experienced an increase of more than 30 trillion dollars per year. The shadow banking system in the United States is growing faster than the European banking system, with almost twice as many shadow banking assets in Europe. The amount of shadow banking in European countries is 13% for British intermediaries, 8% for Dutch intermediaries, 6% for French intermediaries and 5% for Danish intermediaries (Ferguson and Johnson, 2018).

Shadow banking in the United States was about \$14.8 billion in 2020. In other words, it includes 29.48% of the global market share. Also, the world's second largest economy, China, is projected to grow to US\$12.8 billion in 2027. Japan, Canada and Germany will also grow by 4.3%, 5.1% and 4.4%. But the rest of Europe will increase by 12.8 billion dollars by 2027.

Figure 1 shows the development of shadow bank assets (narrow measurements) from 2006 to 2019.

As can be seen in the chart, this trend is increasing, and despite fluctuations, the chart is upward.

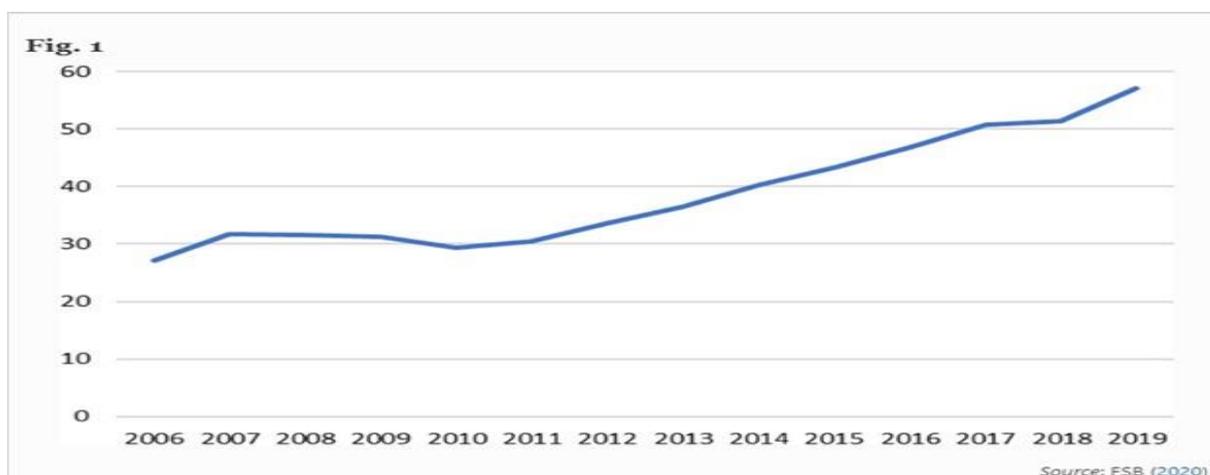


Figure 1: Shadow-banking assets in the World (USD trillion)

The FSB (2022) report also reveals shadow banking assets in 29 regions. In Figure 2, you can see the percentage of shadow banking assets in 2019 in 29 regions. The euro zone includes Belgium, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and Spain, and the rest of the regions of the 29 FSB countries.

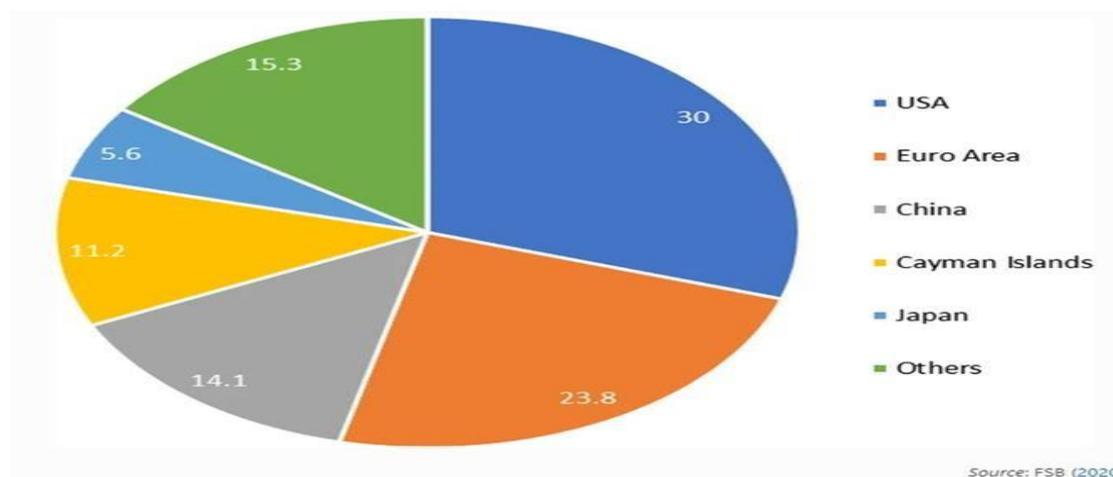
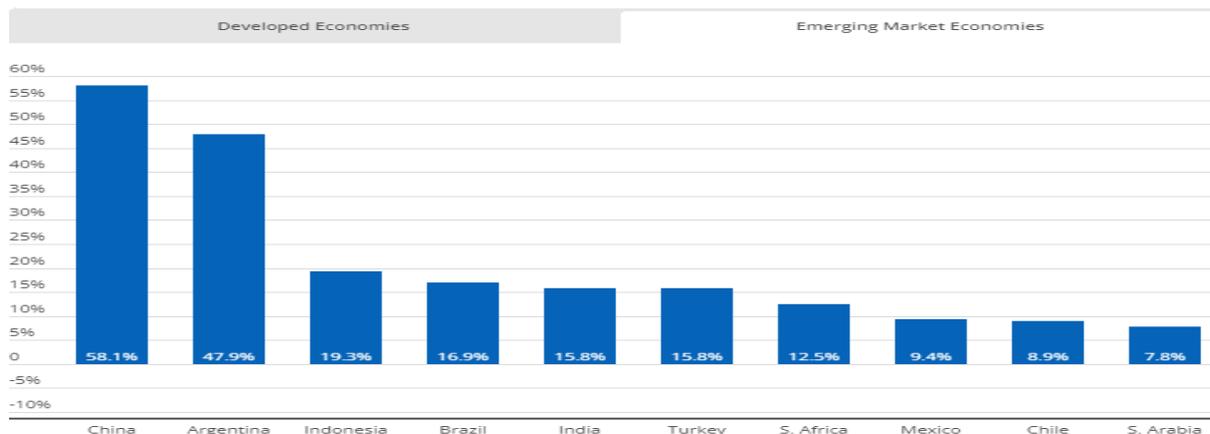


Figure 2: Share of shadow banking assets by area (%)

(Compound annual growth rates 2010-2017)



Note - Median CAGRs: Developed = 6.2%, Emerging Market = 15.8%, adjusted for exchange rates. Growth rates in Argentina reflect a high rate of inflation.

*-Tax-advantaged jurisdiction.

Russia (not presented) CAGR = 241.3% but represented only 0.2% of global shadow banking assets as of fiscal 2017.

Source: Fitch Ratings, FSB's 'Global Monitoring Report on Non-Bank Financial Intermediation 2018'.

Figure 3: Shadow Banking Development in Emerging Market Economies

As can be seen in Figure 3, the development of shadow banking in emerging market economies is more than that of developed markets, which is due to the specific developments of developed markets. In 2017, China and Argentina had the fastest development of shadow banking assets, which are 58% and 48%, respectively. The figure below shows the global shadow banking report in light of the Covid-19 crisis and the specific measures taken to stabilize financial markets and support financing for the real economy in 2020. Global financial assets in 2020 have increased by almost 11% and are 468.7 trillion dollars. Global NBFIs assets, which include pension funds, insurance companies and other financial intermediaries, rose 7.9 percent to \$226.6 trillion. This increase in the assets of banks, central banks and public financial institutions compared to the NBFIs part is due to the COVID-19 pandemic.

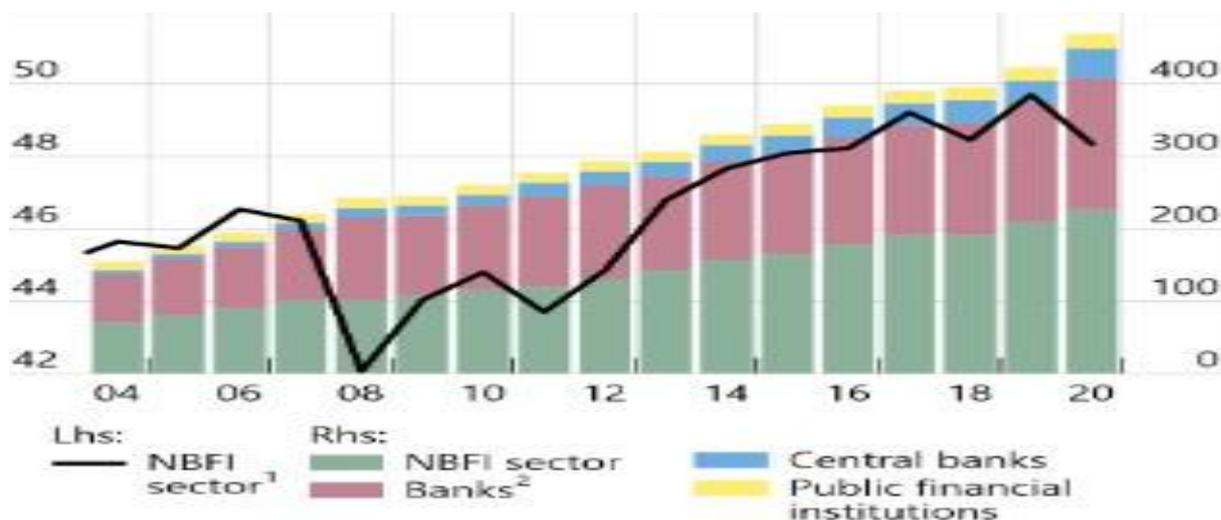


Figure 4: World Report on Shadow Banking (Non-Bank Financial Intermediation) 2021

Source: <https://www.fsb.org/2021/12/global-monitoring-report-on-non-bank-financial-intermediation-2021>

As you can see in Figure 4, in 2020, the amount of NBFIs compared to global assets has decreased to 48.3%. This is the biggest decrease after the decrease in 2008. The development of

the NBFIs part in 2020 is similar to 2009, and this increase was done in insurance companies, pension funds, and mutual investment funds. The increase in mutual fund assets is done due to valuation effects and flows. Bank credit intermediation is growing faster than NBFIs credit intermediation. In 2020, the development of credit assets in the pension fund part was 8%, insurance was 6% and banks was 10.5%, and this development was higher in the bank part.

5. CONCLUSIONS

In this article, we analyzed shadow banking and explained that if shadow banking is not subject to leverage and liquidity regulations like normal banking, it is known as shadow banking. The shadow banking system was first introduced in the late 1960s. Shadow banking issues to activities that include the bases of due date and liquidity conversion, validity extension and risk shift, which are partially or completely carried out beyond the "common banking". It consists many activities, containing securities, refinancing of money market funds, as well as some operations of non-banking financial institutions such as finance companies and hedge funds. It is parallel to common banking.

According to the definition proposed by Pozsar et al. (2010), shadow banking actually arises from specialized financial institutions that provide financing from savers to investors using securities and risk-free financing methods. Shadow banks, unlike traditional banks, transfer overdue and credit without the need for direct financing. Therefore, shadow banking is more vulnerable and requires more extensive investigation and research in this area.

The emergence of shadow banking is beneficial for the economy because the demand for assets without meets the risk. Laws should limit the leverage of shadow banking. Based on the results obtained, the implementation of shadow banking regulations faces the complex problem of identifying assets and leverage.

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