SHADOW BANKING: AN OVERVIEW

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Abstract

Financial instruments such as future contracts, interest rate/swaps, options, forwards and etc. have appeared as a result of financial innovations. The purpose of these innovations was simple, “reducing risk”. The explosive growth in derivate contracts occurred of 1999 when the Glass-Steopall Act was reported, which allowed banks to operate as breakage houses. Afterwards, financial derivate instruments had become risk objects because of the lax government policies and unaudited firms. In other words collateralized dept obligations were invented to manage risk but they become o source of risk. These occurrences has created new sector: Shadow Banking.

The term shadow banking encompasses activities involving some element of maturity and liquidity transformation, credit extension and risk transfer, conducted partly or wholly outside the “traditional banking” system. It covers a wide range of activities, including securitization, repos and Money market funds as well as some activities of non-bank financial intuitions such as finance companies and hedge funds.

According to Financial Stability Boards (FSB) Global Shadow Banking Monitoring Report 2012 the United States has the largest shadow banking system with assets of 23 trillion dollar in 2011, followed by the Euro area (22 trillion dollar) and United Kingdom (9 trillion dollar)

In this research we explain what the shadow banking is, by providing definitions, a literature review and the advantages and disadvantages of shadow banking also a comparison of traditional banking and shadow banking and shadow banking all over the World are reviewed.

Key Words: Shadow Banking, Traditional Banking, Euro Area

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Introduction

The beginnings of 21th century witnessed the developing of a new banking system, one characterized by a wide myriad of highly leveraged non-deposit-taking institutions that lend long and illiquid and borrow short in liquid markets. These parallel institutions were functionally very similar to traditional banks but barely supervised, regulated or insured. They did not hold any capital for security reasons and were not subject to any meaningful prudential requirements as regards liquidity, leverage or any other feature of their assets and liabilities. They also had very few reporting obligations and have to meet few governance standards. Examples include private equity funds, hedge funds, money market funds, monolines, conduits, and special-purpose, off-balance sheet vehicles, like special purpose vehicles (SPVs) and other structured investment vehicles. (Ordonez, 2010, p. 2)

The term “shadow banking” started to be used widely at the beginning of the 2008 financial crisis. (FSB, 2011, p. 2) The term can be broadly described as credit intermediations involving entities and activities outside the regular banking system. (FSB, 2011, p. 1)

According to (Pozsar, Adrian, Ashcraft, & Boesky, 2010), the shadow banking sector can be defined as “financial intermediaries that conduct maturity, credit and liquidity transformation without access to central liquidity or public sector credit guarantees”, that is, the shadow banking sector contains all financial institutions that perform bank-like activities, however the shadow banking system is not subjected to the same regulatory requirements as banks and do not have access to public safety nets.

Intermediating, credit through non-bank channels can have advantages. For example, the shadow banking system may provide market participants and corporates with an alternative source of funding and liquidity. However, as the 2008 financial crisis has shown, the shadow banking system can also become a source of systematic risk, both directly and through its interconnectedness with the regular banking system. It can also create opportunities for arbitrage that might undermine stricter bank regulation and lead to a build-up of additional leverage and risk in the system. (FSB, 2011, p. 1)

How did shadow banking grow so quickly without being regulated or officially guaranteed by government? What made it so fragile in the absence of collective action problems? In a Washington Post column, R. Samuelson wrote, at the onset of the crisis ”It’s all about confidence. Every financial system depends on trust. People have to believe that the institutions they deal with (their” counterparties”) will perform as expected. We are in a full-blown crisis because investors and financial managers - the people who run banks, investment banks, hedge funds, and insurance companies – have lost that trust. Banks recoil from lending to each other; investors retreat”(Samuelson, 2008). Therefore shadow banking finds a rich environment to emerge and grow rapidly when the intermediaries are confident that unregulated financial institutions behave as if they were regulated. While traditional banking relies on costly regulation to impose discipline to financial institutions, shadow banking is consisted of financial institutions that are self-disciplined by their reputation concerns, that is by their concerns about the market having a good perception of their quality and behavior. When reputation concerns are strong, confidence prevails and shadow banking arises as an alternative to traditional banking, offering the same services but saving on costly regulatory restrictions (Ordonez, 2010, p. 3).

According to Lazcano ‘this is a familiar scenario for Europe despite these facts. Historically, merchants, money changers and bankers have introduced unregulated financial innovations which were gradually adopted by European institutions. These financial developments evolved gradually and, paradoxically, constitute the cornerstone of our Financial World System’ (Lazcano, 2013).

This paper aims to review Shadow Banking. In the first section Shadow Banking is explained by giving information about Shadow Banking, providing a literature review and also advantages and disadvantages of shadow banking take place in the first section. In the second section comparison of traditional banking system and shadow banking system is given, Shadow Banking in the world is exemplified in the third section. Finally a conclusion is presented.

I. What is Shadow Banking?

The October 2011 Financial Stability Board report was the first comprehensive international effort to explain shadow banking more deeply. The report covers (i) the definition of the shadow banking system; (ii) the initiation of a mapping process to identify and assess systemic risks involved in shadow banking; and, (iii) the identification of possible regulatory measures.

The FSB defined the shadow banking system as "the system of credit intermediation that involves entities and activities outside the regular banking system" in this report. This definition implies the shadow banking system is based on two intertwined pillars.

First, entities operating outside the regular banking system engaged in one of the following activities:

- accepting funding with deposit-like characteristics;
- performing maturity and/or liquidity transformation;
- undergoing credit risk transfer; and,
- using direct or indirect financial leverage.

Second, activities that could act as important sources of funding of non-bank entities. These activities include securitization, securities lending and repurchase transactions ("repo"). (EC, 2012, p. 3)

The FSB has roughly estimated the size of the global shadow banking system at around $61 trillion in 2010, this number was $26 trillion in 2002, that is, shadow banking represents 25-30% of the total financial system and half the size of bank assets. This situation is even more significant in the United States, with an estimated figure of between 35% and 40%. Nevertheless, the share of the assets of financial intermediaries other than banks located in Europe as a percentage of the global size of shadow banking system has preciously increased from 2005 to 2010, while the share of US located assets has decreased according to the FSB estimates. (EC, 2012, p. 4)

Shadow banking is often evaluated as a form of regulatory arbitrage. Shadow banking surely has this kind of aspects, and they played a significant role in the run-up to global financial crisis. However, shadow banking also provides important financial intermediation functions distinct from those performed by banks and capital markets, as confirmed by its continued growth. Shadow banking can be economically useful, and need to be understood and properly regulated. (Claessens, Pozsar, Ratnovski, & Singh, 2012, p. 3)

Shadow banking has two important roles as financial intermediation. Its first role is liability-side in which it provides safe claims (in securitization) or increases the safety of claims (in collateral transformation) for agents in the financial system, including ultimate savers. In the second role of shadow banking is to provide credit to borrowers—enabled by the fact that the safe liabilities created help attract savings. (Claessens et al., 2012)

II. Literature Review

The term “shadow banking” was created by McCulley (2007) and was used mostly by policymakers. One of the first articles on shadow banking published by (Pozsar, 2008). The shadow banking system can be found comprehensively in the articles of (Pozsar et al., 2010). A recent study on regulatory reforms relating to shadow banking can be found in Adrian and Ashcraft (2012). (Adrian & Ashcraft, 2012, p. 10)

Table 1: Literature of Shadow Banking

Authors	Subject	Basic Findings
(McCulley, 2007)	The term "shadow banking" was created by McCulley. McCulley has stated the shadow banking, for non-bank investment intermediaries and tools.	Shadow banking system is very sensitive to sudden panics and sales. According to Mc Culley shadow banking, is the reason of systemic risk.
(Adrian & Shin, 2009)	Outlines the shadow banking system that caused the crisis system causing systematically identify and examine.	Study offers two important suggestions to prevent financial crisis and to minimize the effects of shadow banking on financial losses. First one is systemic regulator to gather information about shadow banking, analyze this information and report them. The second step is to focus on the systemic regulator's capital rules in a business.
(Davies, 2009)	Investigated the effect of the financial crisis, to the balance sheets of non-legal financial institutions.	The expansion of the balance sheets of the banking sector, the main cause of the crisis. The shadow banking have played an important role in the sinking of Bear Stearns and Lehman Brothers.
(Hsu & Moroz, 2010)	The relationship between the shadow banking system and the 2008 Financial Crisis has been introduced.	Review states that have escaped the shadow banking system up to the crisis. At the same time a very small amount after the Great Depression in the United States in 1929 marked a failure of the banks and the overall situation prior to the 2008 crisis underlines the highly positive.
(Cabral, 2010)	Investigates the causes of the financial crisis is what. Explores the relationship between profitability and the development of banking and shadow banking.	His important contribution to the literature of the study was carried out in good faith posed by changes in legislation, incentives and constraints affect the banking sector and attaches to cause the financial crisis.
(Ferguson & Johnson,	They studied shadow banking, political, and economic	Ferguson and Johnson claim that no one had tracked the shadow banking until he

2009)	framework. Investigated how to create the financial meltdown in the U.S. outside of the mortgage market.	financial crisis happened. Also they say that FED put too much too risy assets in to the system and even during the negative situation of the markets FED was against the putting some rules to the mortgage loans markets.
(Gorton & Metrick, 2010)	Investigates the general mechanism of functioning of the characteristics of shadow banking system that caused the Crisis of 2008.	In their study Gorton & Metrick research about he development of the financial system and the shadow banking system. Also thay claim that shadow banking and repo market are the main reason for the financial crisis.
(Bengtsson, 2011)	Investigates the relationship between the MMF’s and financial instability in Europe.	MMF’s cited as a cause of financial instability in Europe.
(Bouveret, 2011)	This study is one of small number of studies examining the Europe shadow banking activities. At the same time the first study examining the shadow banking in Europe literature.	Study focuses on the differences of shadow banking in Europe and in the USA. There are two differences between European Shadow Banking and USA Shadow Banking. The first difference is when the shadow banking was ignored by financial instituion in the USA, it was stable in Europe. The second difference is that while in Europe shadow banking system is around the expiry axis, in the USA it is around the credit axis.
(Hu & Mahendran, 2011)	Defines the shadow banking system in China and the framework of its own unique characteristics of Chinese banking system.	Hu and Mahendran viewed Shadow Banking through the investment trust funds (trusts), bank acceptances, wealth management products relics, letters of credit and informal lending in China.
(Adrian & Ashcraft, 2012)	In their studies outlines the shadow banking, have demonstrated through the literature on the shadow banking.	Adrian and Ashcraft proposed the three main points, money market reforms on public funds, shadow banking regulations for banking regulation and adaptation, and the regulation of securitization and credit

		rating system legally.
(Bakk-Simon et al., 2012)	Investigates the existence of the shadow banking sector in the EU.	Other financial institutions in the EU within the framework of the so-called shadow banking submitted that the OFI.
(Bord & Santos, 2012)	Investigates the relationship of banks with non-bank financial intermediaries.	The study has states traditional banking changed the management of banking, banks' funding sources and bond financing increases the activity of the repo market.
(Brañanova, 2012)	One of the few studies investigating the shadow banking in Spain.	Brañanova proposed that financial intermediation in general is less than in Spain. He also stated that the securitization transactions carried out by banks, financial intermediaries between banks and asset acquisitions and securitization transactions based on the joint commission.
(FSB, 2012)	Global Shadow Banking Monitoring Report	In general, the change between years, and the shadow banking sector in the world as of 2012, reached the point are determined.
Fein (Fein, 2013)	Investigated the concept of the shadow banking with emphasis on the main definition of the shadow banking sector.	Shadow banking, an important part of the traditional banking sector. Fein says the authorities should pay attention to this issue to be considered is the external shadow banking 'tale of the shadow banking' has been called as.

III. A Comparison Of Traditional Banking And Shadow Banking

As an indicator of well-functioning economy we can use the size of borrowing and lending activities in an economy. If this function works well than individuals who use credit—money lent by an individual or financial institution—to buy homes or cars, go to college or spend it for educational purposes, and overall make general purchases. Companies use credit as start-up money and to buy property, build plants, and purchase equipment and raw material or goods. For these purposes there are two ways the first is the traditional banking system that matches borrowers and lenders. As a second way there is a parallel system, often referred to as “shadow banking,” that performs a similar function but through specialized financial institutions. The shadow banking system works outside the regulation of banking system that is why it is called as ‘shadow banking’. To better understand shadow banking system we need to focus on the borrowing, lending, and credit in general.

There are two ways or borrowing and lending channel. First one is known as direct finance channel which occurs when funds move directly from a lender to a borrower, that is, there is no middleman. Direct finance lending is the hardest way to lend or borrow Money because of finding a lender and determining the conditions etc. The second way of lending is termed i indirect finance. In this case, savings or funds are channeled indirectly through a third party—or intermediary—such as a bank, in a process called financial intermediation. Traditional banking is the most well-known form of financial intermediation.

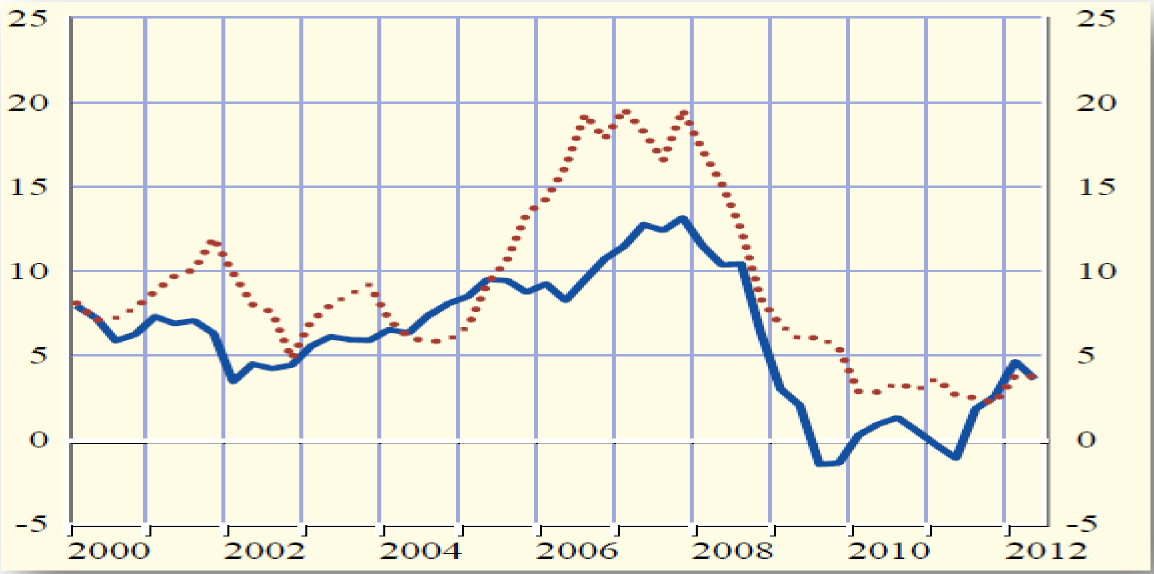
Traditional banks are subject to regulation to ensure soundness of the financial system. For example, banks are legally required to hold a certain amount of capital to ensure the stability in the banking system to protect itself against losses. Banks are also supported by government in the form of deposit insurance, which guarantees individual accounts up to $250,000 (in the USA) in the event of bank failure. In addition to that Federal Reserve may assist banks as a lender of last resort. If a bank need short-term funding, it can borrow from the Fed’s discount window, which provides an added cushion. These conditions is a safeguard to prevent bank’s collapse. So far everything is good for traditional banks, however regulation is costly, a shadow industry has risen for regulatory arbitrage.

Since the shadow banking is outside of the regulation for example it does not have to hold a certain amount of money as security deposit but at the same time shadow banking performs the same function as traditional banking; it channels money from lenders to borrowers. In shadow banking system, borrowers still get funds from financial institutions to buy homes, pay their student loans or their credit card’s debt. The basic difference occurs here in contrast to traditional banking, however, in shadow banking loans are not funded or serviced by deposits. Instead, the loan originator sells the loans to another financial institution, which pools the loans with many others. These loan pools are securitized in a multistep process; that is, various financial instruments are created from the underlying loan payments. (Noeth & Wolla, 2012, pp. 1,2)

Even though traditional banking and shadow banking function at the same way and they provide loans to their customer, the ways of funding their capital are totally different. This is one of the first difference between them. Second one is since the traditional banking system are regulated by governments, it cost a lot of expense to them but in the parallel system, shadow banking does not have endure these kind of cost. Since shadow banking’s interest rates are lower than traditional banking system’s interest rates, the growth rate of the shadow banking is higher than the traditional banking.

In the table 2 assets of banks and other intermediaries in the euro area annual growth rate can be seen.

Table 2: Assets Of Banks And Other Intermediaries In The Euro Area Annual Growth Rate(%)



-------- Shadow Banking Growth Rate Traditional Banking Growth Rate

Source: (ECB, 2013, p. 93)

Looking at Table 2, the traditional and shadow banking growth rates is seen between 2000 and 2012. According to this it seems to be growth rate of the shadow banking is higher than the traditional banking. By 2002 the decline occur in traditional banking, shadow banking is observed that the increase in contrast. As of 2007, experiencing the peak of the global financial crisis and the volatility experienced a fall in the two banking type. Albeit at a slower growth observed in 2012 is correct.

IV. Shadow Banking in the World

United States shadow banking system is bigger than the European that in the, measuring at about double the size of total banking assets, as opposed to equal to the size of total banking assets in the Europe. European countries with relatively larger shares in the global shadow banking system include 13% for UK intermediaries, 8% for Netherland intermediaries, 6% for French intermediaries, and 5% for Danish intermediaries (EC, 2012, p. 4)

When we evaluate the size of the shadow banking system in the euro area is not obvious. A quantitative assessment of the activities and markets of the shadow banking sector can only be based on data sources that unfortunately there are no official data available. The analysis shows that shadow banking activity in the euro area is smaller than in the United States. According to reports about shadow banking in the United States the size of the shadow banking system, measured as the total amount of its assets, was comparable to the size of the banking system in the second quarter of 2011, while in the euro area it represented less than half of the total assets of banking sector. However, the size of assets held by financial intermediaries that are not regulated as banks is still important in the euro area, especially in some countries. (Bakk-Simon et al., 2012, p. 2)

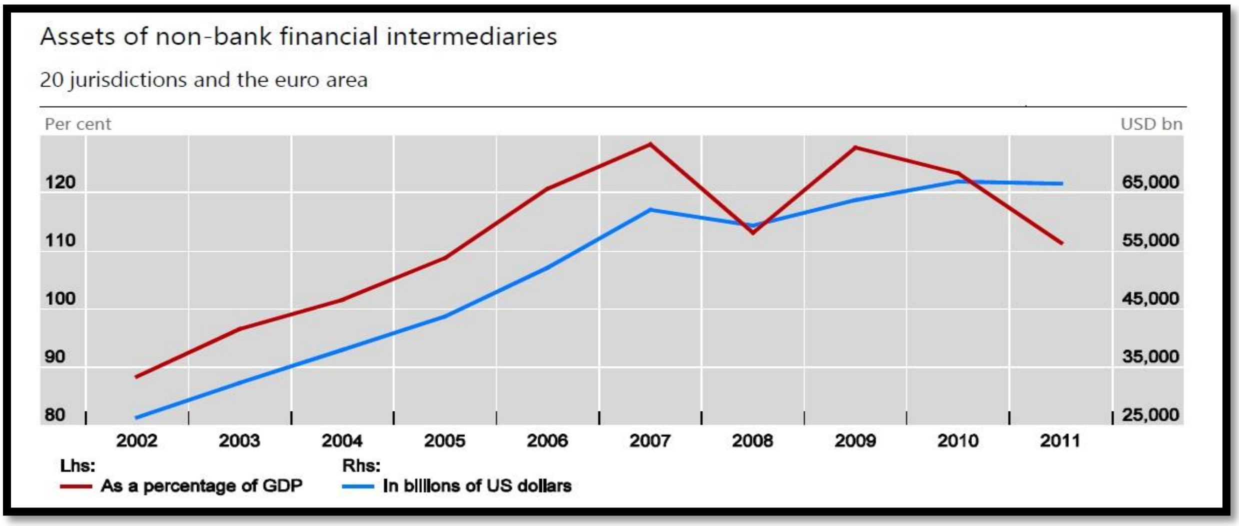
Table 3: Shadow Bankıng Assets As Of 2011

Country	USD trillions	% of 2011 GDP	% of World Total
USA	23	152%	35%
Euro Area	22	168%	33%
UK	9	370%	13%
World Total	67	111%	100%

Source: (FED, 2013, p. 1)

In Table 3, the shadow banking assets to GDP ratio and the size of the countries As of 2011 is seen. According to this the total assets of shadow banking have 152% of U.S. GDP the nearly 1.5 times as much as that, again, the total assets of shadow banking UK GDP's in the about 3.7 times as much as 370% of the total shadow banking entities and the world total GDP of 111% is seen that far. As can be seen from these figures, shadow banking assets has been achieved in very large quantities.

Table 4: Assets of non-bank financial intermediaries



Source: (FSB, 2012, p. 10)

Table 4 in the Euro Area, the inter-annual change observed in the shadow banking. Looking at the table in shadow banking, 2007 reached its peak and in2008, the decline is seen in shadow banking. Shadow banking reached the peak in 2007, there is an important role in the global economic crisis in 2008.

V. Conclusion

The shadow banking system emerged between in the late 1960s in the early 1970s. The shadow banking term consist of activities involving some elements of maturity and liquidity transformation, credit extension and risk transfer, conducted partly or wholly outside the "traditional banking" system. It covers a wide range of activities, including securitization, repos and Money market funds as well as some activities of non-bank financial intuitions such as finance companies and hedge funds. This parallel system to traditional banking system gained rising momentum from the end of 2011 reached a volume of over $ 67 trillion according to Financial Stability Boards (FSB) Global Shadow Banking Monitoring Report 2012. The banking system, with particular emphasis on off-balance sheet transactions being unable to cover the needs of loans granted from the reserve. The declining trust in the credit ratings on the market, investors lost trust in financial markets and act with discretion following the most recent financial crisis.

Even though traditional banking and shadow banking function at the same way and they provide loans to their customer, the ways of funding their capital are totally different. Also, the traditional banking system are regulated by governments, it cost a lot of expense to them but in the parallel system, shadow banking does not have endure these kind of cost. Those are the main differences between traditional and shadow banking systems.

All over the world, especially in America and Europe, including the shadow banking affected the financial markets, has reached a size of very large amounts. However, there has not been enough regulation.

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