

# How Far is Shadow Banking in Egypt from International Experiences?

Yasmine M. G. Salem

**Abstract**—The 2008 global financial crisis shed the light on Shadow banking System Growth. This paper aims at comparing the shadow banking system in Egypt with most significant international experiences, the USA and China, to determine how far the Egyptian case is from them and draw some learnt lessons regarding shadow banking regulations. The paper concluded that there must be a coordination between the monetary authority and financial supervisory authority, which supervises and regulates shadow banking activities in Egypt, is necessary. Moreover, the monetary authority should consider the shadow banking activities when planning and conducting the monetary policy.

**Index Terms**—Egypt, monetary policy, shadow banks.

## I. INTRODUCTION

With the breadth of financial globalization and financial liberalization in many countries, the global financial system has been subject to significant developments in last three decades as a result of issuing junk bonds and a wide trading of commercial papers, in addition to increasing the role of mutual fund in capital markets. Also, the financial pressure has been increased on the traditional banks' balance sheets, and these banks have become less profitable, which led to transformation from traditional financing resources to new financing resources by shadow banking system. Although the definition of the shadow banking system is arguable in the literature [1], the most commonly used one is the definition of the Financial Stability Board (FSB) of the International Monetary Fund, which states that it is "A credit intermediation that involves entities and activities outside the regular banking system." [2].

The 2008 Financial crisis was a result of a continuous growth in the mortgage loans because of decreasing interest rates and a shortage of shadow banking regulations, which led to mortgage crisis and the bankruptcy of the fourth largest bank in the USA, Lehman Brothers Bank, in September 2008. The size of shadow banking sector in the United States and United Kingdom in 2014 was estimated by 14 trillion USD and 4.1 trillion USD, respectively [3].

Although the shadow banking system in emerging economies doesn't include complicated and long credit intermediation series rather than developed countries, it may create systematic risk directly, by affecting the whole financial system through conditional credit and liquidity risks, or indirectly, by its interconnection with traditional banking

system [4]. The Egyptian economy, which is integrated with the international financial system, is affected by global financial crises, e.g. the 2008 financial crisis. That requires a broader control of the monetary policy to increase its effectiveness in achieving its macroeconomic goals in line with the evolving domestic and global economic challenges [5].

This paper aims at making a comparison between shadow banking systems in the USA, China, and Egypt to know how far Egypt is from these international experiences and exclude some regulations regarding shadow banking monitoring that can be useful in the Egyptian case in order to achieving monetary policy effectiveness. The remainder of the paper is organized as follows. After introduction, Section II discusses the literature review. Section III analyzes the methodology and analysis, Section IV reports similarities and differences between selected countries, while the last section shows the conclusion.

## II. LITERATURE REVIEW

In 2005, Rajan discussed the shadow banking system without referring to its name. Paul McCulley introduced "shadow banking" concept in 2007 to clear the importance of non-bank financial sector [6]. The most common and widely used definition of shadow banking is the Financial Stability Board definition, as mentioned before. There are various types of shadow banking institution, such as non-bank banks, money market mutual funds, and finance companies, which provide different activities, such as repurchase agreements, assets backed commercial papers, and securitizations. Although these institutions increase economic efficiency [7], they could also increase the risk caused by credit, maturity, liquidity transformation, and leverage, since they transfer short-term funding from financial market to investors without relying on bank deposits [8].

There are various empirical studies analyzed the shadow banking system, Verona, as in [9], applied a dynamic stochastic general equilibrium (DSGE) model to assess the impact of the too low for too long interest rate on the Boom-Bust cycle in the USA. The financial intermediaries in the shadow banking sector can transfer a part of stockholders' profit to their own benefits and increase credit at a discounted rate. The model concluded that easing monetary policy applied for a long time is a precondition for, but not a reason itself, a boom-bust cycle. Verona, as in [10], simulated Un/anticipated monetary policy in DSGE models in which bonds funded by shadow banks in normal optimistic conditions only. The model found that the boom-bust cycle is a result of different factors, such as the continuous low

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interest rate and expecting continued good conditions. Sunderam, as in [11], analyzed the role of the shadow banking system in money creation in the USA. The author examined whether shadow banks provide the same services like money creation before the global financial crisis during 2001-2007. By using an econometric model, the author found that shadow banks respond to money-like demand shocks [12]. Dang, as in [13], analyzed the rapid growth of shadow banking in China, and found that there is a close connection between traditional banking and shadow banking. Compared to shadow banking in the USA, the paper found that shadow banking in China is built on different mechanisms and operates on different platforms.

### III. METHODOLOGY AND ANALYSIS

In order to similarities and differences between shadow banking systems in the USA, China, and Egypt, the paper depend on the comparative analysis by introducing shadow banking in the USA, China, and Egypt and draw learnt lessons. The paper focuses on these countries as The USA has the largest shadow banking system in the world with percentage 40% from the total global shadow banking, and China has the largest shadow banking system in the emerging economies with percentage 8% from the global shadow banking system, and the shadow banking system in china is different from other countries as the traditional banks cooperate with shadow banks in introducing shadow banking products. Logically, the paper tackles the Egyptian case as Egypt is the author's mother country and to know how far Egypt is from international experiences either in developed or emerging countries.

#### A. Shadow Banking in the USA

The Federal Reserve Bank Governor defines Shadow Banking as different institutions and markets perform traditional bank functions, but outside the traditional system of deposit institutions or with weak interconnection. Ben Bernanke tackles in his definition some shadow banking components, like Securitization Vehicles, Asset-Backed Commercial Papers (ABCP), Money Market Mutual Funds (MMMF), Repo Markets (bilateral and triple), Investments Banks, and mortgage companies [14].

The shadow banking system in The USA has established in the seventies of the twentieth century and developed rapidly in the last forty years, as the percent of the on- balance sheet finance to off-balance sheet finance increased from 0% in the 80's to more than 60% in the before the second world war [15]. The Shadow banking in the USA has not been regulated by the same regulations of traditional banking. The regulation system of the traditional banks of the USA consists of the Federal Reserve System which includes 12 federal reserve banks around the USA, while the regulating system of shadow banking includes: (1) Securities and Exchange Commission (SEC), (2) Commodity Future Trading Commission (CFTC), (3) Federal Housing Finance Agency (FHFA), (4) Bureau of Consumer Financial Protection (BCFP), and (5) National Association of Insurance Commissioners (NAIC) [16].

The factors behind shadow banking growth in the USA are

regulatory arbitrage, banking restrictions, low real interest rates, increasing the demand of investment, and investors desire of higher returns [17]. Otherwise, there are some regulations can be applied by regulators in the USA, and all over the world to control shadow banking and avoid another financial crisis such as: increasing transparency in US shadow banking transactions and markets, decreasing runs in money market mutual funds by enhancing determining structural drawbacks of these funds, and processing triple repos settlement operations [18].

#### B. Shadow Banking in China

The shadow banking system in China Can be classified into three categories: (1) traditional banks as a direct intermediary which sell wealth management products (WMPs) by them, but these products are off- balance sheets so they are not subject to bank regulations (2) Non – Bank Financial Institutions, such as trusts, brokers, finance companies, and securities companies. (3) Micro credit companies, pawn shops, unground black market. This category is the riskiest in shadow banking system [19].

Despite the small relative size of shadow banking system in China comared to developed countries, it can not be ignored because of its Continous growth of non bank financial intermediaries in China during recent years. The Financial Stability Board estimated the shadow banking system in China with 3% of total global shadow banking asseys in 2012 and increased to 8% in 2014 (Financial Stability Board, 2015).

The regulation system of the traditional banks of the USA consists of both People's Bank of China (PBOC) and China Banking Regulatory Commission (CBRC), while the regulating system of shadow banking includes China Securities Regulatory Commission (CSRC) and China Insurance Regulatory Commission (CIRC).

The factors behind shadow banking growth in China are financial innovation, increasing investors demand on alternative investments, commercial banks' desire of circumventing banking regulations because of financial repression, and imbalance liquidity. However, China Banking Regulatory Commission (CBRC) has imposed some regulations on WMPs to decrease risks and avoid financial crisis, as the traditional banks were obligated in May 2009 to take acceptance of trading WMPs before issuing them, and they were prevented from July 2009 from trading WMPs in secondary markets and banks have to share information with clients starting from August 2011.

#### C. Shadow Banking in Egypt

“Shadow banking” concept is not widely used in Egypt, although it is used worldwide. The shadow banking system in Egypt includes Non-Bank Financial institutions, which is directed by Egyptian Financial Supervisory Authority, such as: primary capital market, insurance companies, Mortgage companies, financial leasing companies. In addition, the shadow banking system in Egypt includes other types, which is not directed by the Authority, such as: Private and public pensions funds, Social fund for development, and Nasser Social Banks which has not been regulated by Egyptian Central bank, like other 40 traditional banks.

The capital market monitoring in Egypt is subject to Twin-Peak Model, which means that there is a duality in capital Market control and supervision, as the Egyptian central bank controls and monitors the traditional bank system, while the shadow banking system is not subject to one regulatory authority and most of them are regulated by the Egyptian Financial Supervisory Authority which is aim at stabilizing and organizing non- bank financial markets and achieving effectiveness and transparency by granting license of non-bank activities, monitoring non-bank financial institutions and markets, and providing information related to these markets and protecting dealers’ rights [20]. However, there is no coordination between the monetary policy and regulatory authorities of shadow banking system regarding the effect of shadow banking activities on money supply, as shadow banking system affects inflation and monetary policy effectiveness in Egypt [21].

In Egypt, there is no composite measure of shadow banking activities. Therefore, Salem, as in [22], attempted to measure it using the economic functions applied in Financial Stability Board report of shadow banking in 2015. Fig. 1 [23] presents the evolution of shadow banking activities measure in Egypt during (2008-2014).



Fig. 1. Evolution of shadow banking in Egypt (2008-2014).

TABLE I: SIMILARITIES AND DIFFERENCES BETWEEN SHADOW BANKING SYSTEMS IN THE USA, CHINS, AND EGYPT

	USA	China	Egypt
Investors	Institutional entities	Non-institutional entities	Non-institutional entities
Complication of products	Financial products with high financial designs	Simple financial products	Simple financial products
Trading financial products	In Capital Market	By traditional banks (intern-bank Market)	In Capital Market
Most important institutions and tools	Money Market Mutual Funds Securitization	Wealth Management Products Trusts products	Insurance sector Mortgage activity
Coordination between financial market regulatory authorities	Exists	Exists	Not Exists
Separation between traditional banking and shadow banking	Exists	Not Exists	Exists

Source: Adapted from [25]

According to previous Fig. 1, the global financial crisis in September 2008 affected the shadow banking activities in Egypt as the measure of shadow banking drooped from about

5.7 LE billions in the third quarter of 2008 to about 5 LE billions in the last quarter of 2008. The January revolution affects negatively on the shadow banking activities according to its measure, as they decreased to about 5.5 LE billions in 2011 compared to about 6 LE billions in 2010 to, then it started to increase again until it reached about 8 LE billions in 2014 [24]. At the end of 2014, shadow banking activities was about 14.5% from GDP and 4.5% from total bank assets, which means that bank assets still dominate the Egyptian financial system assets.

#### IV. SIMILARITIES AND DIFFERENCES

Table I summarizes the most significant similarities and differences between shadow banking systems in the USA, Chins, and Egypt to expect how far shadow banking in Egypt from selected countries.

#### V. CONCLUSION

Despite shadow banking system in Egypt has some similarities with china, except the separation between traditional bank and shadow banking systems, the paper concluded some regulations from the USA China experiences regarding shadow banking monitoring and regulations that can be applied in the Egyptian case. Although all countries call for transparency and information availability, one of the most significant regulation Egypt has to apply is the coordination between the monetary authority and regulatory authorities of shadow banking to be able to control money supply in the economy and inflation to achieve monetary policy effectiveness. Consequently, the monetary authority should consider the potential impact of the shadow banking system when planning and conducting the monetary policy. Furthermore, there should be coordination between the Egyptian central bank and the Egyptian Financial Supervisory Authority responsible for monitoring and supervising shadow banking activities to better control on shadow banking.

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