Towards a Sovereign Monetary System

DR. AHMED BELOUAFI

Associate Professor of Islamic Economics & Finance

Islamic Economics Institute (IEI)

E-mail: ambelouafi@kau.edu.sa

Monthly Seminar of IEI-CEFN (Chair for Ethics and Financial Norms - Sorbonne University)

IEI - King Abdulaziz University

Jeddah - Saudi Arabia

October 14th, 2015

The paper –a hasty draft- is still in its early stages of development. Therefore, it is neither to be quoted nor distributed elsewhere prior to author's consent. It has been distributed in this event to stimulate discussion at the seminar.

Quotes

"***It is essential to have a proper, good understanding of how the monetary system works, in order to reach better alternatives"***, [Charles Goodhart, Professor Emeritus of Banking, London School of Economics (LSE) (2013)]

"***Permit me to issue and control the money of a nation, and I care not who makes its laws"***, [Mayer Amschel Rothschild (1744 – 1812) [A German banker and the founder of the Rothschild banking dynasty]

"*If all nations of the World are in debt, who are they in debt to*? *Rationally, where there is a debtor there should be someone else who is a creditor. If every nation is in debt, who, precisely, owes whom?*" [Michael Rowbotham (1998), author of "The Grip of Death: A Study of Modern Money, Debt Slavery, and Destructive Economics"]

"***I feel like someone who has been forcing his way through a confused jungle … But although my field of study is one which is being lectured upon in every University in the world, there exists, extraordinarily enough, no printed Treatise in any language – so far as I am aware – which deals systematically and thoroughly with the theory and facts of representative money as it exists in the modern world"***. [John Maynard Keynes, 1930]

Abstract

This paper aims at exploring the underlying features and outlines of a '*Sovereign Monetary System*'; a monetary reform agenda that is gaining considerable attention from different circles in different places in the economies of the advanced World. What are the bases and rationales of such a quest? What are its implications and consequences? Is it feasible and plausible? What are the likely benefits and/or costs that might be associated with its implementation? These are, but few queries that this investigation tries to unveil based on historical and current development of the monetary reform agenda and on the present shape of the modern monetary and financial system.

Outline

1. **Introduction**
2. **The Nature of Money in a Modern Economy**
3. **Monetary Reform: A Short History**
4. **Sovereign Monetary System (SMS): Basic Features and Outlines**
5. **Socio-Economic Impacts of the Prevailing Financial System**
6. **The Likely Benefits and/or Costs of an SMS**
7. **The Relevance of SMS to Emerging and Developing Economies**
8. **Concluding Remarks**

1. Introduction

The global financial crisis (GFC) of 2007-2008 has hit the epicenter of the international financial system (i.e. The USA) and, thereafter, the rest of the World so severely. This severity has initiated profound debates to fundamental and basic issues like what has caused the turbulence. Why it was not possible to see it coming? Why it has been so severe and widespread in its magnitude and consequences? Moreover, what can be done to prevent the recurrence of future ones? Academicians, professionals, financial analysts, think tanks, historians, and policy makers have immensely diverged views and recommendations in tackling these questions and many others of the like.

Among the initiatives gaining momentum is the call for a fundamental monetary reform through the establishment of a '*Sovereign Monetary System (SMS)'* instead of the prevailing fractional reserves one. Proponents of the reform claim that: "*In the present system, it is not even attempted anymore to exert control over the quantity of money ... On balance, additions to the quantity of money have overshot not only the growth of productivity and real income, but also the nominal growth of GDP several times. The consequences are consumer price inflation (more importantly before the 1980s) and asset inflation (being to the fore since then). Over-investment and debt bubbles drive business cycles and financial-market cycles to extremes, resulting in banking, debt and currency crises in migrating hot spots around the globe*"[1]. One of the supporting evidence for this claim came from Iceland as Sigurjónsson (2015) attested "*There is indication that the fractional reserve system may have limited the Central Bank's ability to control the money supply while giving banks both the power and incentive to create too much money. Indeed, commercial banks expanded the money supply [in Iceland] nineteen-fold in the fourteen year period that ended with the banking crisis of 2008*"[2].

This paper explores the reality of such a quest by addressing several questions, among them are:

1. What is money? How is it 'manufactured' and measured in a modern economy?
2. What does the SMS reform stand for?
3. What are its basic features and building blocks?
4. What does it share and/or contrast with similar reforms?
5. What are the likely costs and benefits of the reform?
6. Is the reform feasible and plausible?
7. Is the reform relevant to emerging and developing economies?

In addition to this introduction, the paper has seven other sections and, it is structured as follows: Section II unveils the reality of money, its nature, and measurement in a modern economy. Section III puts the SMS reform in a historical perspective in relation

[1] Huber, Joseph. (2001). the Case for Sovereign Money. Retrieved from: www.sovereignmoney.eu.
[2] Sigurjónsson, Frosti. (2015). monetary reform: A better monetary system for Iceland., p. 10.

to preceding attempts and initiatives. Section IV exposes the SMS reforming agenda; its nature, features and outlines. On the other hand, section V looks at some of the socio-economic impacts of the current financial system. After that, section VI analyses the relevance of the SMS to emerging and developing economies with particular emphasis to the Saudi Arabian case. Section VII provides a brief account and analysis of the likely benefits and costs of an SMS. Finally, section VIII concludes with few remarks and reflections for future elaboration.

2. The Nature of Money in a Modern Economy

Without indulging into economists' long and dragging jargon of what money is, in this essay we adopt the practical approach in defining this object; the approach of policy makers and the monetary authorities they represent. There are broadly two categories of money circulating in modern economies; base, narrow or high powered money (MB-HPM) and broad or privately crated money (BM-PCM). The sum of these two entities constitutes what is known as the money supply. This term has been defined by one the most influential financial authority in the world as the "… group of safe assets that households and businesses can use to make payments or to hold as short-term investments"[3]. Encyclopedias[4], like Investopedia, define it as "the entire stock of currency and other liquid instruments in a country's economy as of a particular time" or "the total amount of monetary assets available in an economy at a specific time".

Therefore the stock of money, in a given economy, includes cash, coins[5] and other monetary assets like checking and saving accounts. The various components of money supply are generally classified as "M"s such as M0, M1, M2 and M3, according to the type and size of the account in which the instrument is kept[6]. Not all of the classifications are widely used, and each country may use different classifications. M0 and M1, for example, are also called narrow money and include coins and notes that are in circulation and other money equivalents that can be converted easily to cash. M2 includes M1 and, in addition, short-term time deposits in banks and certain money market funds".

[3] The Federal Reserve System Board: www.federalreserve.gov.
[4] For example see: www.investopedia.com & https://en.wikipedia.org/wiki/Money_supply
[5] These are the two terms used to describe the legal, official or physical money that is issued by governments through central banks or other officially appointed entity. For this reason some unveil this reality in their printed or issued currency. For example, in the United States the paper money includes the statement, "This note is legal tender for all debts, public and private;" and in Australia, the notes include, "This Australian note is legal tender throughout Australia and its territories." [Source: www.investopedia.com].
[6] This is the most widely used method and it is known as "'*simple-sum*' monetary aggregates"; thus the 'M's' are constructed from a simple accounting identity. There is modern or new (D1 & D2) method known as the "*Divisia* monetary indexes"; see Alkhareif & Barnett (2014), for more details of the relevance of the new method to the case of Saudi Arabia, the differences between the two methods and other aspects. In this paper we have followed the traditional method in discussing the case of the SMS proposal.

There is, yet, another simple route pursued by some academicians, and professionals that define money as "… anything widely accepted as payment, particularly by the Government as payment of tax …"[7].

Composition of money supply in nowadays economies

In modern economies money supply comprises of two main elements; base or high powered money (MB-HPM = M0 or M1) and broad or privately created money (BM-PCM = M3 or M4). As we discussed earlier some countries use M0 for base money while others use M1, and for broad money some use M3 and others M4. Also, it has to be noted that countries do differ in their measurement and inclusion for each class; particularly the latter (broad money). According to the findings of some investigations in this matter, Rowbotham (1998: 10) & Zaman (2015), the rates of money created privately have been increasing over time. For instance, in the eighteenth century banks created forty (40) per cent of the stock money in Britain, France and America; Rowbotham, the mid-nineteenth century that rate increased to 60 %, and now it ranges between 90 and 97 per cent in advanced economies, and is between 70 and 90 per cent in emerging economies (1998: 10) and Zaman (2015), and in developing economies the rate is no less than 60%[8]. Thus, the privately created money by commercial banks and other institutions constitute the major part of modern economies.

Measurement of the Money Supply

"Different measures of money supply. Not all of them are widely used and the exact classifications depend on the country. M0 and M1, also called narrow money, normally include coins and notes in circulation and other money equivalents that are easily convertible into cash. M2 includes M1 plus short-term time deposits in banks and 24-hour money market funds. M3 includes M2 plus longer-term time deposits and money market funds with more than 24-hour maturity. The exact definitions of the three measures depend on the country. M4 includes M3 plus other deposits. The term broad money is used to describe M2, M3 or M4, depending on the local practice"[9]. Below are two examples of classification adopted by monetary authorities in Saudi Arabia and India:

[7] Ryan-Collins, Josh. et al. (2011). Where Does Money Come From?: A guide to the UK monetary and banking system, p. 6.
[8] According to the data that I have been able to consult; See appendices for current and some historical records for world as well as some individual countries
[9] The Financial Times. (2015). Definition of M0, M1, M2, M3, M4. Retrieved from: ft.com/lexicon.

Figure - 1 - Money supply Components in Saudi Arabia as used by SAMA

M1 = Currency in circulation + Demand Deposits (DD)

M2 = M1 + Time & Saving Deposits (TSD)

M3 = M2 + Other-Quasi -Monetery Deposits (OQMD)

Source: SAMA 51th Annual Report, June 2015, p. 45

Figure - 2 - Money supply Components in the UK as used by the Bank of England (BoE)

M1 = Notes and coins in circulation + Non-Bank public and sterling private current accounts.

M2 = M1 + Sterling time deposits with up to three months' notice, or up to two years' fixed maturity.

M3 = M2 + repurchase agreements, money market fund units, and debt securities up to years -estimated by the European Central bank (ECB) to be consistent with the M3 measure used by the ECB for the euro zone.

M4 = M3 + other deposits at UK banks or building societies

Source: The Bank of England: www.bankofengland.co.uk & Ryan-Collins et al. (2014: 60-61)

Also it is important to note that "Money, the payment system and the banking in general is now electronic, rather than paper-based"[10]. This development has significant implication on the ability of money creating institutions, like commercial banks in the 'production of money'.

Importance of Money Supply:

"Growth of money supply is an important factor not only for the acceleration of the process of economic development but also for the achievement of price stability in the economy. There must be controlled expansion of money supply if the objective of development with stability is to be achieved. A healthy growth of an economy requires that there should be neither inflation nor deflation. Inflation is the greatest headache of a developing economy"[11]. And, as one economist noted about the failure of some of his fellow economists to make a connection between economic ills of modern economies and the state of the money supply, "Most of the doctors are misdiagnosing the real cause of

[10] Jackson, Andrew and Dyson, Ben. (2014). Modernizing Money, p. 25.
[11] Guru, Supriya. (U.D). Concept of Money Supply and its Measurement; www.yourarticlelibrary.com.

the world's economic ills because they often fail to take the patients' monetary pulse. It's as if the diagnosticians were unaware of the connection between money growth rates and economic health."[12]

How Private Money is 'manufactured' or created?

There are two propositions in this regard; the exogenous and the endogenous money theories. The exogenous is the widely held view in academia and many monetary authorities[13]. This theory has, and still is, long been spelled out in standard textbooks of the economics of money, banking and financial institutions. Though some prominent economists, like Charles Goodhart[14], and professionals have for a long time questioned the relevance and accuracy of this theory to the actual working of the banking industry. In spite of this, mainstream academia has not moved from this stand. The theory is based on what is known as the money multiplier (MM). Under such an understanding, the power of the banking industry is related to the money deposited on it by its customers and by the ratio of the statutory (official) reserve that central banking authorities impose on commercial banks. Accordingly, this theory visualizes the causality in the money creation process as follows:

---

[12] Hanke, Steve H. (2012). It's the Money Supply Stupid, Cato Institute; http://www.cato.org

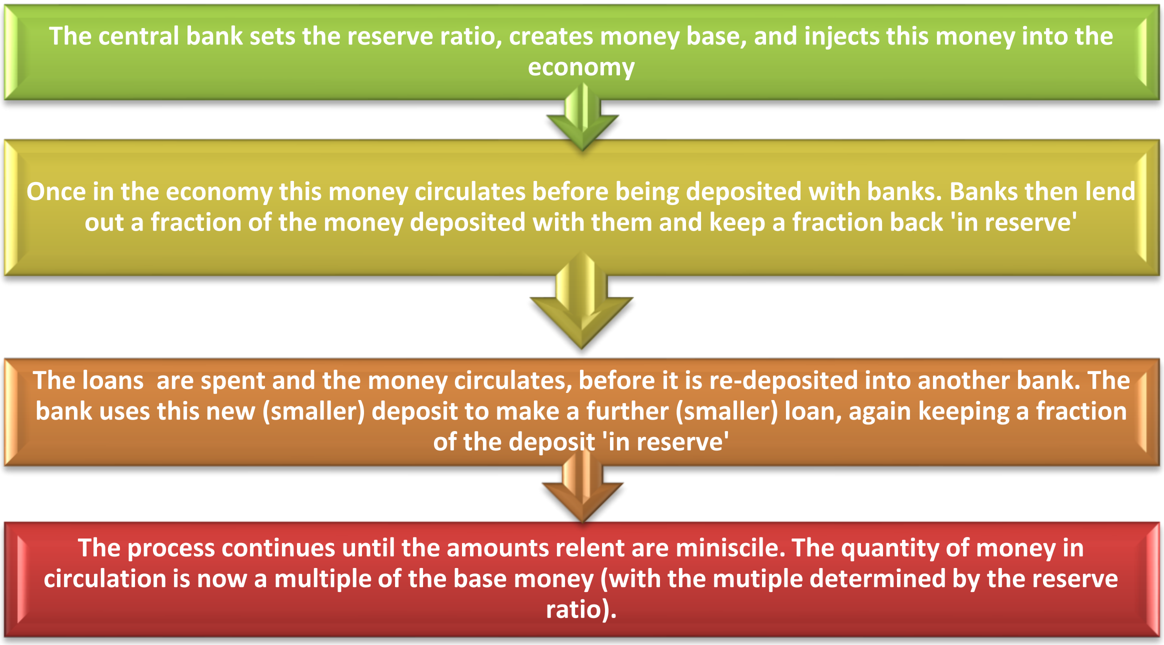
[13] In a recent paper published by the bank of England the reality of this fact has been thoroughly exposed and discussed. The document states "In the modern economy, most money takes the form of bank deposits. But how those bank deposits are created is often misunderstood: the principal way is through commercial banks making loans. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money". The document adds "The reality of how money is created today differs from the description found in some economics textbooks:

- Rather than banks receiving deposits when households save and then lending them out, bank lending creates deposits.
- In normal times, the central bank does not fix the amount of money in circulation, nor is central bank money 'multiplied up' into more loans and deposits".

McLeay, Michael, et al. (2014). Money creation in the modern economy, the BoE, p. 1.
However, well in 1996 Graham Towers, Governor of the Bank of Canada (1935 - 1955) acknowledged: "Banks create money. That is what they are for. . . . The manufacturing process to make money consists of making an entry in a book. That is all. . . . Each and every time a Bank makes a loan . . . new Bank credit is created -- brand new money". Brown, Ellen (2007).

[14] Professor Emeritus of Baking and Finance, London school of Economics (LSE). In 1984, when he was a member of the monetary policy and chief adviser to the Bank of England Goodhart described, as reported by Jackson and Dyson (2014: 75), the money multiplier model used in textbooks as "…such an incomplete way of describing the process of the determination of the stock of money that amounts to mis-instruction". Benes and Kumhof (2012) of IMF, as reported by Zaman (2015: 2) write that "The deposit multiplier is simply, in the words of Kydland and Prescott (1990), a myth".

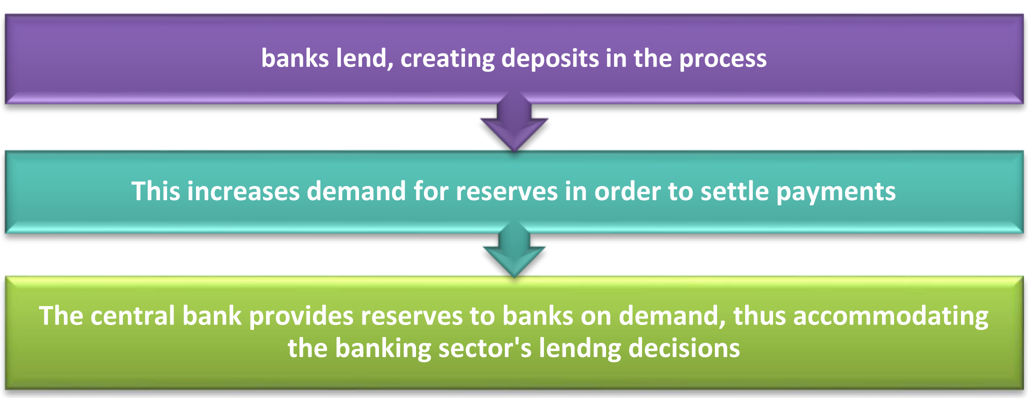
Figure – 3- The process of Money creation under the exogenous theory



Source: Jackson & Dyson. (2014: 77). "Modernising Money …"

The endogenous theory, on the other hand, portrays that 'rather than banks waiting for a depositor to come along with additional money, within certain constraints banks are able to lend as and when they want', Jackson and Dyson (2014: 78). Well back in 1969 this process was spotted and recognized by Alan Holmes, the then senior vice president of the Federal Reserve Bank of New York, Holmes wrote : "in the real world, banks extend credit, creating deposits in the process, and look for the reserve later", [*Ibid*; 78]. Therefore, this theory sees the causality of the money creation process as follows:

Figure – 4- The process of Money creation under the endogenous theory



Source: Jackson & Dyson. (2014: 80). "Modernising Money …"

To spot the significant difference and implications between the two scenarios, below is an illustration (figures 5 & 6) borrowed from an interesting investigation that is trying to visualize the latter case; the endogenous theory. Under such a scenario banks have more power to create the amount of money they want, depending on economic agents demand for credit and loans. The figures show the contrast between the two cases. Under the first; the exogenous or money multiplier banks have some constraints in multiplying money stock in a given economy. Reserve ratios set by central banks play a significant role in limiting or otherwise of the ability of banks to create more money, whereas under the endogenous theory that is not the case. Money base in the latter appears like a drop in an occasion. This has been more apparent, in some countries, during the years of the global financial crisis. For instance, in the UK "at the time of the financial crisis … banks held just £1.25 in reserves for every £100 issued as credit"[15].

Figure -5- The Exogenous or MM theory case (The Money Multiplier Pyramid)

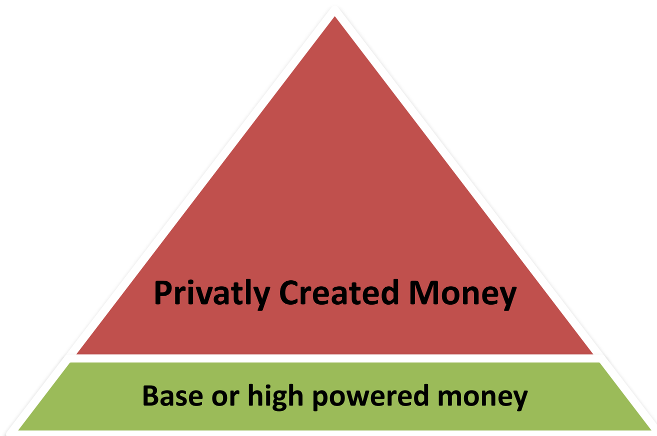
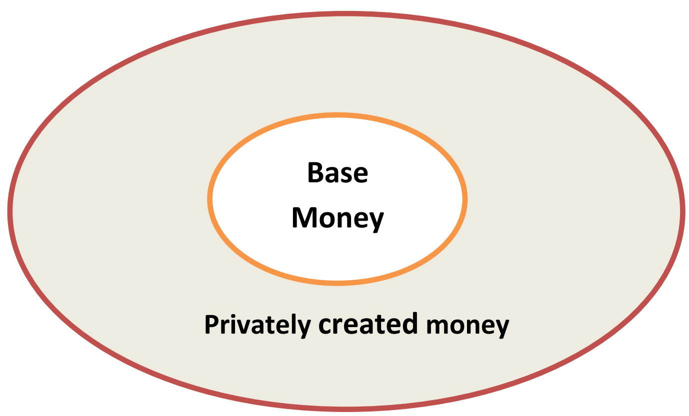


Figure – 6- The case of the Endogenous theory (The "Balloon" of Privately Created Money)



Source: Ryan-Collins et al. (2014: p. 20 & 22). "Where Does Money Come From?, …"

[15] Ryan-Collins, Josh, et al. (2014: 6). Where Does Money come From? A Guide to the UK Monetary and Banking System.

Implications of commercial bank money creation:

The power of commercial banks to create new money has many important implications for economic prosperity and financial stability. Four relevant implications to the SMS reform proposal are highlighted below[16]:

1. Although possibly useful in other ways, capital adequacy requirements have not and do not constrain money creation and therefore do not necessarily serve to restrict the expansion of banks' balance sheets in aggregate. In other words, they are mainly ineffective in preventing credit booms and their associated asset price bubbles.
2. In a world of imperfect information, credit is rationed by banks and the primary determinant of how much they lend is not interest rates, but confidence that the loan will be repaid and confidence in the liquidity and solvency of other banks and the system as a whole.
3. Banks decide where to allocate credit in the economy. The incentives that they face often lead them to favour lending against collateral, or existing assets, rather than lending for investment in production. As a result, new money is often more likely to be handled into property and financial speculation than to small businesses and manufacturing, with associated profound economic consequences for society.
4. Fiscal policy does not in itself result in an expansion of the money supply. Indeed, in practice the Government has no direct involvement in the money creation and allocation process. This is little known but has an important impact on the effectiveness of fiscal policy and the role of the Government in the economy.

3. Monetary reform: A Short History

The history of monetary reform reveals astonishing facts about the voluminous and widespread of the proposals and attempts that have been advanced by various entities and personals. Yet, their impacts have been limited in academia and policy making alike. It is not intended in this section to search deeply and thoroughly the factors that stand behind the stalemate in this area of monetary and financial economics. Rather, it is intended in this paragraph to provide a short snapshot of this delicate history to put the SMS into perspective. According to Rowbotham (1998: 212), a Swedish economist Brynjolf Bjorset records "*that over 2,000 schemes for monetary reforms were advanced during the period from 1925 and 1930*". This record shows how evolving has been, and still is the agenda for monetary reform in the advanced economies of the capitalist world. In what follows a brief account of some these efforts[17]:

[16] Ryan-Collins, Josh. et al. (2011). Where Does Money Come From? A guide to the UK monetary and banking system, pp-7-8.

[17] The main reference for this account is Rowbotham (1998: 186-258). The work of this economist has been deep and thorough in this domain. There are few exceptions like the work of David Ricardo, where

a. The first[18] call to monetary reform dated back to 1705, when John Law offered 'several proposals to remedy the difficulties the nation is under from the scarcity of money. Law called for 'a commission to be appointed by the parliament to create and lend paper money on the security of land ownership'.
b. In 1793 Edward King called for a government control and the issuing of notes for general circulation. Thus he was critical of the practice of allowing private banks to create money. His critic was similar to that of Bishop Berkely in 1746.
c. In 1814 William Cobett wrote against banks and paper money due to the severe economic conditions that England went through between 1814 and 1816.
d. William Anderson and his book '*the Iniquity of Banking: or, bank notes proved to be a fraud upon the public, and the real cause of the present exorbitant price of provisions*'[19] asserted the inherent instability of a financial system dependent largely upon the debt of banks; money created as debt on economic agents.
e. In 1823 David Ricardo[20], six month before his death, wrote an important manuscript about the work of the bank of England. From the outset he states that "*the Bank of England performs two operations of banking, which are quite distinct, and have no necessary connection with each other; it issues a paper currency as a substitute for metallic one; and it advances money on the way of loan, to merchants and others*". For this reason he called for the establishment of a national bank to take out the responsibility of money issuance from the Bank of England, which was a private institution at that time. Some of the ideas and plan of Ricardo were reflected in the Peele act of 1844. That act did not last for more than two years and it has been suspended twice. Though I have not seen a mention of this plan in the work of Rowbothan and advocates of the SMS, I think, this plan of Ricardo represents the clearest seeds for the SMS.
f. In 1842 John Grey called for "a complete replacement of the financial system".
g. In mid 1850s Westminster Review wrote about money issuance after the Peel act of 1844 had twice been suspended. The review states that "the power of issue [of money] is, ought to be, a sovereign right'. This might have been the first passage in the UK to stress upon the 'sovereignty' of money issuance.
h. In 1875 William Gladstone noticed that 'from time to time … the government was not the substantive power, but was to leave money-power supreme unquestioned.

references are cited separately. Moreover, it should be noted that his work concentrated mainly on UK, and USA to some extent.

[18] This is according to Rowbotham, the reference that I have been able to consult at this stage.

[19] The book has been reprinted in its latest edition in 2010 by Gale ECCO, Print Editions.

[20] David Ricardo. (1824). Plan for the Establishment of a National Bank, London: John Murray, Albemarle-Street. & David Ricardo (1838).

i. In 1893 H. D. Maleod, a leading authority on the theory of banking, wrote "at present – the merchants who trade in debts –namely banks- are now the rulers and regulators of commerce; they almost control the fortunes of states".
j. Lord Josiah Stamp (1880-1941), former director of the Bank of England, was very critical and vocal about the role of banks in creating money. He once attested: "The modern banking system manufactures money out of nothing. The process is perhaps the most astounding piece of sleight of hand that was ever invented. Banking was conceived in inequity and born in sin . . . . Bankers own the earth. Take it away from them but leave them the power to create money, and, with a flick of a pen, they will create enough money to buy it back again. . . . Take this great power away from them and all great fortunes like mine will disappear, for then this would be a better and happier world to live in. . . . *But, if you want to continue to be the slaves of bankers and pay the cost of your own slavery, then let bankers continue to create money and control credit*"[21].
k. In America, as Rowbotham reports, there were similar struggles in monetary reform by economists, professionals and even politicians like presidents Thomas Jefferson (1743-1826)[22], Andrew Jackson (US president 1829 -1837)[23] and Abraham Lincoln (1865)[24]. According to Rowbotham, Lincoln was a great financial reformist for this reason Rowbotham devoted chapter 14 of his book to provide a detailed account of that reform and the reform agenda of Major C. H. Douglas; a British engineer who developed interest in money and financial matters and challenges the orthodoxy of the classic doctrine of Say and the like. Douglas created the social credit movement in the 1920s. The impact of his ideas spread outside the UK in counties like Japan, Canada, New Zealand and Australia, Rowbotham (1998: 234).
l. After the efforts of Lincoln and Douglas many other attempts were made in different places in America and European counties until the time of the great depression, which was a turning point in the conviction of the 'laissez passez, laissez faire' ideology. In the aftermath of the shock of this event, there has been

---

[21] Rowbotham, (1998: 35) and [Web of Debt, p. 2]: http://www.webofdebt.com/articles/dollar-deception.php.

[22] Jefferson was very critical of the role played by banks in their issuance and control of money. He 'expressed a dislike and distrust for banks and bankers, and opposed borrowing believing it created long-term debt, monopolies, invited dangerous speculation, as opposed to productive labor' [en.wikipedia.org]. In the midst of a heated debate about the housing sector in the States, Jefferson warned Americans "If the American people ever allow private banks to control the issue of their currency, first by inflation, then by deflation, the banks and corporations that will grow up around them will deprive the people of all property until their children wake up homeless on the continent their Fathers conquered ... I believe that banking institutions are more dangerous to our liberties than standing armies ... The issuing power should be taken from the banks and restored to the people, to whom it properly belongs"., Rowbotham (1998: 34-35)

[23] Jackson echoed Jefferson in denouncing the money power of banks "more formidable and dangerous than the naval and military power of an enemy", Rowbotham (1998: 204).

[24] In 1865 Lincoln revealed his plan for monetary policy that would make money creation and control and "exclusive monopoly of national government [the state], Rowbotham (1998: 220).

a rise to the Keynesian school of economic thought which gave great emphasis to the role of money and the state in economic affairs. As for the monetary reform a well versed and place proposal; the Chicago plan came from one of the strong hold places of the ‘extreme’ liberal ideology; the Chicago University school. Disciples of this school have long advocated the minimal role of the state in economic affairs. In contrast to that, they have proposed an exclusive right of the state to control money through the 100% reserve and other measures that would curtail the power of banks in creating and controlling the supply of money. This plan has been supported by renowned economists like Irving fisher of Yale University and Milton Friedman. Since its appearance till now the plan has received a great deal of attention in either its support or refutation.

m. In the aftermath of the global financial crisis of 2007-2008 the plan was revisited by two IMF economists, Benes and Kumhof (2012). Their work and findings have been published in a working paper titled “The Chicago Plan Revisited”. In their revisit, Benes and Kumhof (2012) studied the Irving Fisher claims ‘by embedding a comprehensive and carefully calibrated model of the banking system in a DSGE model of the U.S. economy. They claim that they have found ‘support for all four of Fisher's claims’. Not only that but they further assert that ‘output gains approach 10 percent, and steady state inflation can drop to zero without posing problems for the conduct of monetary policy’, Benes and Kumhof (2012: 1). In addition to the revisit to the plan the crisis has triggered other reforming agenda like Kay’s Narrow banking proposal from 2009 and Kotlikoff and others (2009, 2010, 2012) Limited Purpose Banking (LPB) proposal.

n. And finally in 2010 the positive money movement, a UK based organization, started campaigning for the establishment of a sovereign money system (SMS) that would bar banks from the privilege of money creation; in 2014 two important publications[25] have been produced to spell-out the reform agenda as envisaged by the movement and its supporters like the new economics foundation (NEF). In 2015 a commissioned report[26] was prepared to the prime minister of Iceland embracing the ideas of the SMS and advocating a monetary reform that would be ‘a better monetary system for Iceland’ after the economic and financial ills that the country went through since 2008.

4. Sovereign Monetary System (SMS): Basic Features and Outlines

According to a Positive Money Movement document [27]“The Sovereign Money Proposal has its origins in a proposal first put forward by Frederick Soddy in the 1920s, and then later by Irving Fisher and Henry Simons in the aftermath of the Great

[25] These are: “Modernising Money …” & “Where Does Money Come From …”
[26] The report appeared in March 2015, it was prepared by Frosti Sigurjónsson, and titled “Monetary Reform: a better monetary system for Iceland”.
[27] “Creating a Sovereign Monetary System”, http://positivemoney.org

Depression. Variations of these ideas have since been proposed by Friedman (1960), Tobin (1987), Kay (2009) and Kotlikoff (2010). However, as we have presented in the previous section the seeds of the idea of a sovereign money system goes beyond the list of personals and initiatives mentioned in this passage. Moreover, two UK former official personals have joined the race in supporting, in one way or the other, the essence call of the SMS reform. These personalities are: Mervyn King, former governor of the Bank of England (2003-2013), and Lord Adair Turner, former chairman of the financial services authority (FSA) (2008-2013)[28].

In a speech[29] delivered in 2010 Mervyn King discussed some reforms that can be adapted to lessen the ills of the current system, among them has been the call for banking reform. In this regards, King (2010: 16-17) states: "Another, more fundamental, example [of reform] would be to divorce the payment system from risky lending activity – that is to prevent fractional reserve banking … In essence these proposals recognise that if banks undertake risky activities then it is highly dangerous to allow such "gambling" to take place on the same balance sheet as is used to support the payments system, and other crucial parts of the financial infrastructure. And eliminating fractional reserve banking explicitly recognises that the pretence that risk-free deposits can be supported by risky assets is alchemy. If there is a need for genuinely safe deposits the only way they can be provided, while ensuring costs and benefits are fully aligned, is to insist such deposits do not coexist with risky assets. And in 2012 at the Reserve Bank of South Africa Lord Turner reflecting on the root causes of the global financial crisis states: "The financial crisis of 2007 to 2008 was caused by excessive credit creation, excessive leverage, and too much maturity transformation. The fact that these excesses caused such havoc, and that private incentives and market disciplines failed to check their development, reflects three facts which are fundamental to understanding financial system dynamics and risks", Turner (2012; 2)[30].

The focal point of the SMS proposal is to 'remove from the banking industry the ability and privilege to create money, in the form of bank deposits, when banks make loans … transfer that ability exclusively to the state; all money, in whatever format or denomination, is to be created solely by the state'. If such a proposal came into being, that would enact what a 'sovereign money system' is.

The PMM document (p. 7) goes on to explain the main features of the proposal are "Changes to the rules governing how banks operate would still permit them to make

[28] This authority has been recently replaced by financial conduct authority (FCA).
[29] The speech was delivered on Monday 25 October 2010 at the Buttonwood Gathering, New York City; Mervyn King (2010). "Banking: From Bagehot to Basel, and Back Again", the Second Bagehot Lecture, Buttonwood Gathering, New York City: USA.
[30] Adair Turner. (2012). Monetary and Financial Stability: Lessons from the Crisis and from classic economics texts. Speech at South African Reserve Bank, 2nd November 2012.

loans, but would make it impossible for them to create new money in the process. Therefore, Banks would then serve two functions:

1. The payments function: Administering payment services between members of the public and businesses, and holding funds safe until they need to be spent. The payments function would consist of **Transaction Accounts** held by businesses and members of the public. The funds in these accounts would not be deposits created by the banks (an IOU from the bank to a customer), but electronic sovereign money, created by the central bank. These transaction funds would be electronically stored at the central bank and would legally belong to the customer. The transaction funds are entirely risk-free, as they cannot be invested or placed at risk by the bank. The bank would provide the payment systems (such as cheque books, debit cards, internet banking, and ATMs) that allow the customer to use their sovereign money to make payments. The accounts would be interest free, and banks would be able to charge account fees for providing these services.
2. The lending/saving function: acting as an intermediary (middleman) between savers and borrowers. The intermediary function of banks would take place through **Investment Accounts**. A customer wishing to make savings or investments in order to earn interest would transfer funds from their Transaction Account into an Investment Pool owned by the bank. The bank would set up an Investment Account for the customer, which is a liability of the bank representing the investment made and the bank's obligation to repay the funds in the future. The customer would have to agree to either a notice period required before accessing his/her money, or a maturity date on which the investment will be repaid. There would be no 'instant-access' investment accounts. Moreover, Investment Accounts would not be guaranteed by the government, and would therefore be risk-bearing, with the risk shared between the bank and the customer according to the type of account chosen by the customer. Regulators might impose equity requirements and other prudential rules against such accounts to prevent reckless behaviour by banks. Also, **Investment Accounts** cannot be used to make payments or be reassigned to a third party during the term of the investment. So there is a clear-cut separation between the payment and investing and/or lending activities as envisaged in the 1823 plan of the late British economist David Ricardo.

Thus, banks under this proposal would act as 'pure or true" intermediaries; playing the middleman role by passing on funds from surplus to deficit units in accordance with variant terms and conditions, depending on the risk appetite and other factors of would be 'investing' customers. On the other hand, the central bank, or any other appointed public body would be exclusively responsible for creating as much new money as was necessary to support non-inflationary growth. It would manage money creation directly, rather than using interest rates to influence borrowing behaviour and money creation by banks (as is the case at present). Decisions on money creation would be taken independently of government, by a newly formed Money Creation Committee (or by the existing Monetary Policy Committee). The Committee "would be accountable to the Treasury Select Committee, a cross-party committee of Members of Parliament who scrutinise the actions of the Bank of England and Treasury. The Committee would no longer set interest rates, which would now be set in the market".

Any new money the central bank created would be transferred to government and injected into the economy through four possible ways:

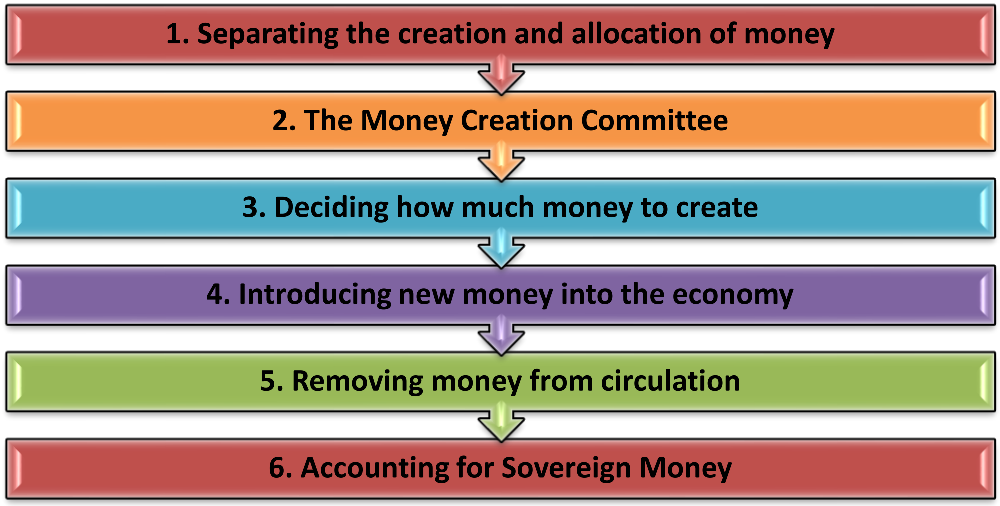
1. To finance additional government spending.
2. To finance tax cuts (with newly created money substituting for the lost tax revenue)
3. To make direct payments to citizens, with each person able to spend the money as they see fit (or to invest or pay down existing debts)
4. To pay down the national debt.

Another possibility allows the central bank to create money for the express purpose of fund lending to businesses. This money would be lent to banks with the requirement that the funds are used for "productive purposes". Lending for speculative purposes, or for the purpose of purchasing pre-existing assets, either financial or property, would not be allowed. The central bank could also create and lend funds to other intermediaries, such as business-orientated peer-to-peer lenders or regional or publicly owned business banks. This ensures that a floor can be placed under the level of lending to businesses, guaranteeing support to the real economy. Within the limits imposed by the central bank on the broad purposes for which this money may be lent, lending decisions would be entirely at the discretion of the lending institutions.

All of the above mechanisms should be transparent to both parliament and the general public. Moreover, due to the complexities and connectedness surrounding the work of nowadays financial systems the switch will not take effect overnight. A transition period is a prerequisite to the success switch to the SMS. However, the PMM document (p. 9) claims that "either a phased-in approach or an immediate switch … can be implemented without disruption to the wider economy".

Here is a summary of the process of money creation under an SMS proposal:

Figure -7- Steps of the process of money creation under a SMS



Source: Sigurjónsson. (2015: 78-82). "Monetary Reform: A Better Monetary System for Iceland"

The above points are just a few illustrative peculiarities of the SMS proposals; details on issues like; how money is created and used? And, how to decide its optimal level for the smooth run of the economy? Should be consulted in references like; Joseph Huber and James Robertson (2001), Jackson & Dyson (2014), Sigurjónsson (2015) and positive movement documents available at its web site.

5. Socio-Economic Impacts of the Prevailing Financial System

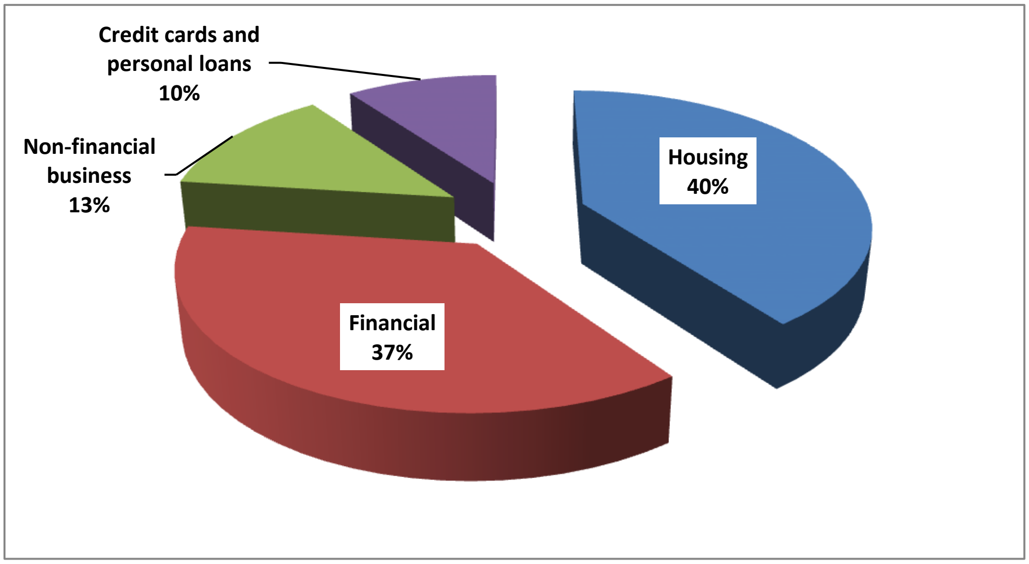
The literature that has explored the economic and social contractions of the prevailing financial system came up with compelling and well documented evidences about the socio-economic woes that the system has brought. Below are few examples extracted from that literature[31]:

1. **Financial instability and 'boom and bust'**: "What is done with money created by banks? If this money is used for highly productive investments, this is beneficial to society. If it is used for wasteful luxuries, speculation and gambling, this is harmful to society. For many reasons, private creation of money leads to highly inefficient investments. One of the arguments made in favor of the current system of private money creation is exactly the opposite: it is argued that this system provides loans for the most profitable investments, the ones that are the most beneficial for society. As against this argument, Keynes wrote in The General Theory of Employment, Interest and Money: "Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when

[31] For more details see: Rowbotham (1998), Josh Ryan-Collins et al. (2011), Jackcson & Dyson (2014), Benes & Kumhof (2012), Sigurjónsson (2015) and Zaman (2015).

enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done…" Keynes argued that instead of investing in productive enterprise, investors borrow from the bank to gamble on the stock market – these gambles determine the investment activities of the economy. For example, the global financial crisis was caused by gamblers who bet on ever increasing house prices in the USA. The stock market channeled money to this market, which was perhaps the most destructive investment, eventually resulting in the blow-up of the global economy", Zaman (2015: 8). Another example supporting this expose is the UK; according to Alistair McConnachie. (2013), "In the last decade (2000-2012) the High Street banks have created over 1 trillion pounds of money". Most of that money, as illustrated in figure (8) below, has been used to finance "bubble assets like mortgages and speculative activities"[32],

Figure - 8- Use of Banks Money Lending in the UK Over 1997 – 2007



Source: Alistair McConnachie. (2013). prosperityuk.com.

2. **Higher Public and private debt, higher taxes and fewer public services.** 'The deficit made me do it', a title of a report that has been prepared and produced in the beginning of the 1990s by prominent Canadian economists[33]. The report reveals some compelling evidence about the role of interest due on national debts in increasing government expenditures and deficits, with sharp cut on public services like health, education, and housing. Thus, according to this document and

[32] Alistair McConnachie. (2013). How Publicly-Created, Debt-Free Money Addresses the Islamic Concern about Interest. April 2013: prosperityuk.com.
[33] Harold Chorney, John Hotson and Mario Seccareccia. (1992). The Deficit Made Me Do It: The Myths about Government Debt debunked. Ed Finn, Canada.

others like Jackson and Dyson (2014) the creation of money by banks as debt extended to economic agents; including governments has attributed significantly to the rise of the consequences of this stalemate "the Deficit Made Me do It?!" whenever politicians are faced with public vows against the cuts in real and pressing services.

3. **Inflation and price increase:** Ellen Brown (2007) exposed this reality very clearly. She attested that: **"**The problem with inflating the money supply in this way, of course, is that it inflates prices. More money competing for the same goods drives prices up. The dollar buys less, robbing people of the value of their money. This rampant inflation is usually blamed on the government, which is accused of running the dollar printing presses in order to spend and spend without resorting to the politically unpopular expedient of raising taxes. But as noted earlier, the only money the U.S. government actually issues are coins. In countries in which the central bank has been nationalized, paper money may be issued by the government along with coins, but paper money still composes only a very small percentage of the money supply. In England … private banks continue to create 97 percent of the money supply as loans. Price inflation is only one problem with this system of private money creation.

   Another is that banks create only the principal but not the interest necessary to pay back their loans. Since virtually the entire money supply is created by banks themselves, new money must continually be borrowed into existence just to pay the interest owed to the bankers. A dollar lent at 5 percent interest becomes 2 dollars in 14 years. That means the money supply has to double every 14 years just to cover the interest owed on the money existing at the beginning of this 14 year cycle. The Federal Reserve's own figures confirm that M3 has doubled or more every 14 years since 1959, when the Fed began reporting it. That means that every 14 years, banks siphon off as much money in interest as there was in the entire economy 14 years earlier. This tribute is paid for lending something the banks never actually had to lend, making it perhaps the greatest scam ever perpetrated, since it now affects the entire global economy. The privatization of money is the underlying cause of poverty, economic slavery, underfunded government, and an oligarchical ruling class that thwarts every attempt to shake it loose from the reins of power"[34].

   Another economist of the Cato institute stressed on this as well[35]; "one doesn't have to delve deeply into the mysteries of money to realize that money matters.

[34] Ellen Brown (2007). Dollar deception: how banks secretly create money. July 3rd, 2007: http://www.webofdebt.com/articles/dollar-deception.php.

[35] Steve H. Hanke. (2012). It's the Money Supply Stupid. Commentary, Cato Institute. Retrieved from: http://www.cato.org/publications/commentary/its-money-supply-stupid.

But, you wouldn't know it from reading the deluge of polemics on whether a fiscal stimulus is, or is not, the proper prescription for most of the world's economies. Most of the doctors are misdiagnosing the real cause of the world's economic ills because they often fail to take the patients' monetary pulse. It's as if the diagnosticians were unaware of the connection between money growth rates and economic health".

4. **Increasing inequality:** The rise of this phenomenon in an extreme pattern is drawing attention of policy makers, economists and thinkers about digging into the real causes that have attributed to that risk**.** According to an OECD (2011) report: "*the gap between the incomes of the most highly paid individuals in society and the rest has been increasing markedly over the 30 years since 1980*". More recent a briefing report by Oxfam, a UK charitable organization, highlighted further the dimensions and consequences of this malaise, "*Global wealth is increasingly being concentrated in the hands of small wealthy elite. These wealthy individuals have generated and sustained their vast riches through their interests and activities in a few important economic sectors, including finance and pharmaceuticals (healthcare). Companies from these sectors spend millions of dollars every year on lobbying to create a policy environment that protects and enhances their interests further. The most prolific lobbying activities in the US are on budget and tax issues; public resources that should be directed to benefit the whole population, rather than reflect the interests of powerful lobbyists*"[36]**.**

   Therefore, the report has pointed out to some important players of those elite; the financial sector comes on top. In exposing the link between inequality and financial matters; Graham Hodgson of the PMM (2013), examined some factors like credit expansion, asset prices, household and corporate debt and remuneration practices in the financial sector. He found that "*the operation of the current banking and financial system encourages the perversion of the behavioural traits of aspiration and emulation (which can otherwise be socially beneficial) into greed and envy, and a socially destructive distancing of the majority from an increasingly wealthy and powerful elite*".[37] . Zaman (2015:), on his part asserted that "clearly, if one segment of society can create money at will, they will acquire an increasing share of the wealth produced. Following the Great Depression in 1929, a large number of rules and regulation were made to restrict the power of

[36] Oxfam. (2015). Wealth: having it all and wanting more. Oxfam Issue Briefing, January, 2015. Retrieved from: www.oxfam.org.

[37] Graham Hodgson. (2013). Banking, Finance and Income Inequality. Positive money movement (PMM). P. 13

banks. The financial sector and the wealthiest segment of society lost out while the bottom 90% increased their income shares for the next 50 years".

5. **Injustice**: "Banks have the power to manufacture money by the stroke of a pen, but only in response to requests for loans. This power to create money gives them a tremendous advantage over all other segments of society. This is inherently unjust. Why should one particular class of the wealthy be granted this privilege when others are not? Money is a social good and the power to create it should belong to the society as a whole. If the government is not representative, or is subject to capture by powerful elites, or special interest groups, then it can also abuse the power of money creation, and cause harm and injustice. A related problem with the present system is that banks will profit from the power of creation of money only if they can make loans. Therefore it is in the interest of banks to create the desire for credit. This can be done, and has been done in many ways. Facilitating instalment sales, use of credit cards, encouraging consumers to borrow money to gamble on stocks, etc. have all been used to increase the demand for loans. As Mian and Sufi (2014) have pointed out, the interest based debt is a highly unjust contract. If a homeowner loses his income, or if an investment project fails, the poor borrower loses all his money. However, the wealthy creditor retains all his money, and can even profit from the failure", Zaman (2015: 6).

6. The Likely Benefits and costs of an SMS

Proponents and advocates of the reform claim that, if the SMS enacted, economies would benefit from the following[38]:

1. **Creating a better and safer banking system**
2. **Increasing economic stability:** A reliable money supply; Aligning Money Supply Growth with Economic Growth**.**
3. **Reducing the dependence on debt (Reduction of debt levels in the Economy)**
4. **Supporting the real economy:** Directing resources for productive not 'bubble' and 'speculative non-producing' activities. Thus supporting the real economy.
5. **More effective monetary policy**
6. **Better government finances:** The income from creating money will accrue to the state; Public at large would benefit, not only private corporations.
7. **Tackling unaffordable housing**
8. **Slowing the rise in inequality**
9. **More regulation and other precautionary measures did not increase system's safety.** For this reason, if SMs is enacted there will be no need for deposit

[38] See for instance Jackson & Dyson (2014), Positive Money "Positive Money. (2014). 9 Benefits of Switching to a Sovereign Money System., Sigurjónsson (2015) and Zaman (2015).

insurance, as Investment Accounts would be risk-bearing **(**i.e. risk is to be r-aligned with reward (Return).

Opponents, on the other hand, have raised some doubts with regards certain elements and features of the SMS proposal[39]:

1. **The 'misuse' and maybe 'abuse' of the money creation power by a public entity. Furthermore, "***the proposal is central planning or requires control by an army of technocrats*."
2. **Safety of the banking system without deposit insurance.** Is that possible with the removal of this procedure?
3. **Better and enact regulation might suffice, without all this transformation and long process 'hassle'.**
4. **Just Remove State Support for Banks and Let Markets Hold Them To Discipline**
5. **Switching to a system where lending is dependent on pre-existing savings would constrain the level of credit (lending), harming growth and the real economy.**
6. **The reform would be deflationary, or it may be inflationary or hyperinflationary.**
7. **It's impossible for banks to be profitable in this model." / "banking would be unviable.**
8. **Interest rates would be too high.** This is because (PMM document, pp. 43-44):
    a. That banks working in a sovereign money system would be unable to provide sufficient credit for the economy, meaning that interest rates would rise to harmful levels.
    b. Savings accounts would no longer be guaranteed by the government, savers would demand much higher interest rates in order to encourage them to save.

7. The Relevance of SMS to Emerging and Developing Economies

Since all economies of the world have embraced, with certain degrees of differences, the conventional capitalist arrangements to run their economies and organize their financial systems the essence of the SMS reform is very relevant. We have seen that, like in the advanced economies, the vast stock of the money supply in emerging economies is also privately created. Moreover, the case of these economies might be more pressing as the access to finance is lesser than that of advanced countries. Indeed, there has to be an elaboration of the agenda to the cultural and socio-economic peculiarities of these societies. There is no doubt about that, however the 'search' for financial reform does

[39] Positive Money (204: 40-49). Creating a sovereign monetary system; Huber and Robertson (2000); and Weir (2011).

exist. ***I would prefer that to hear and exchange ideas and views with the attendees to spell out specific peculiarities of the emerging and developing economies form professionals, practioners, policy makers and other participants***.

8 - **Concluding Remarks**

In this investigation the syntheses of the sovereign monetary system has explored through historical, analytical and deductive methodologies. Based on the discussion carried out in preceding sections, the following quick remarks can be made:

1. Privately created money is the predominant component of the money supply of modern economies. This situation has many implications and consequences on the conduct of monetary policy as well as the socio-economic fronts of these economies.
2. Due to the several socio-economic woes that the present system produces, there have been vows to overturn this situation through a long history of monetary reform 'agendas'. Yet, the change did not take place; why? And is it possible? These are profound questions that have not been addressed thoroughly in this investigation. However, I think there is a real and strong case behind the call that deserve due consideration from policy makers at the political as well as economic and financial levels. The aftermath of the global financial crisis of 2007-2008 and the Euro-Sovereign debt crisis that came after are sending signaling alarms that the financial world has not moved from its pre-crises contexts and convictions. Thus, this long struggle of the history of the monetary reform 'movements' and personals reveal a very firm fact 'reform in this area is easy said, difficult to implement'. This is probably due to the 'concrete' resistance of the establishments that benefit 'greatly' from the current shape of the system.
3. From an Islamic perspective the SMS reform agenda is still far from addressing deeper issues like the issue of interest; its role and contribution to the many malaises that world economic and financial systems suffer from. Some Western conventional economists and green-activists have pointed to some of these, but they did not get beyond that by considering its demise as part of the monetary reform agenda. Examples of these economists and thinkers are:
   a. Margrett Kenndey, a green-activist, in her treatise about money and inflation, found that "The solution to the problems caused by present exponential growth is to create a money system which follows the natural growth curve. ***That requires the replacement of interest by another mechanism to keep money in circulation***"[40].
   b. Willem Buiter, an ex-Professor of economics at the LSE and ex-member of the monetary policy of the bank of England, reflecting on the principles of

[40] Kennedy, Margrit. (1995). Interest and Inflation Free Money. p. 8.

Islamic finance (IF) and how can they help in restoring effectiveness to monetary policy during crisis era. He noted that "Debt, characterised by fixed financial commitments, can be a poor financing choice in a risky, uncertain world where the private and social costs of default are high"[41].

c. In their book "Rethinking Money"[42], economists Bernard Lietaer and Jacqui Dunne (2013: 37- 54) dealt with the 'hidden consequences of interest' and observed that "Interest, however, has hidden dynamics that result in detrimental costs not only to personal relationships, commerce, and society at large, but also to the sustainability of our fragile planetary home, Earth. The effects are so well concealed, in addition to being so deeply embedded in the money system, that they go, for the most part, utterly unnoticed". One of these hidden consequences is the fact that its payment in full by all indebted persons and entities would require "… [an] endless [economic] growth because borrowers must find additional money to pay back the interest on their debt … Compound interest implies exponential growth in the long run, something mathematically impossible in a *finite* world", Lietaer and Dunne (2013: 42).

d. However, Clive Menzies, a Critical Thinker, was very explicit on interest ban; this is because as he spells out "***Interest on money creates no wealth but systemically drives inequality, environmental destruction, conflict and exponential, unsustainable debt growth. Debt must be unenforceable in law and usury (lending money at interest) illegal. Debt must revert to a social construct rather than its current role of facilitating wealth extraction, exploitation and oppression***"[43].

Indeed, there are many other renowned economists like Keynes and Allais who have investigated thoroughly into the issue and came with more illusion and despair. Moreover, interest contributes primarily and significantly to the detachment; in fact 'divorce' of financing from real activities. A dichotomy the world is suffering severely from under the 'finacialization' phenomenon. For this and other reasons the SMS will not meet its all noble goals; particularly the culmination of debt to unprecedented levels.

---

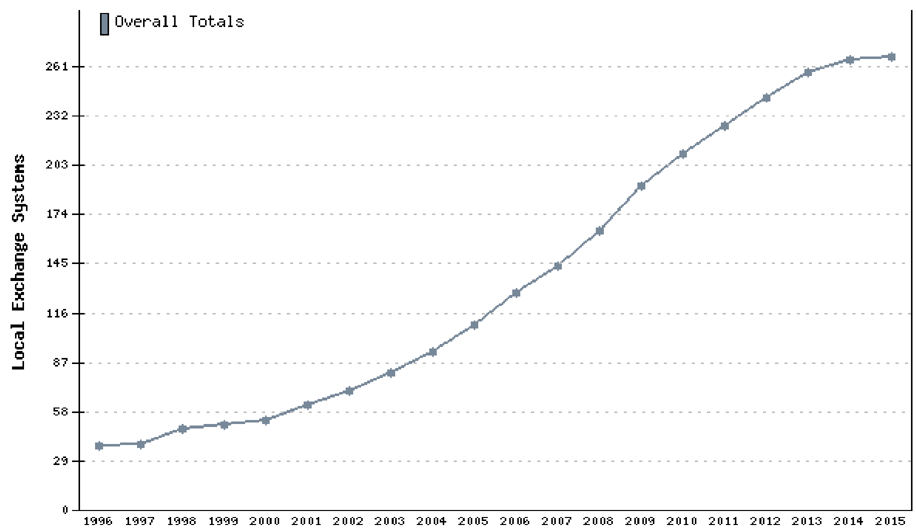
[41] Willem Buiter. (2009). Islamic finance principles to restore policy effectiveness, blogs.ft.com/maverecon , July 22, 2009.

[42] The title of the chapter that dealt with this issue is very interesting and thought provoking; "A Fate Worse than Debt: Interest's Hidden Consequences". Yet, they still hold firm that "Undoubtedly, there are solid reasons for applying interest to a loan. It protects against default and works as a fair precaution by the lender to ensure that he receives back at least the amount he lent out" (p. 41). Really a 'puzzling' stand!!?

[43] BBC. (2014). Viewpoints: What should capitalism do?, : http://www.bbc.com/news/business-27517577

4. The World is changing and moving. This has been manifested in many facets; one of them is complementary currencies[44] that have evolved dramatically over the past decades. According to the online d-base of these currencies, as displayed in figure (9) below, in 1996 their total number was about thirty, now it stands for more than 260 brands. Another is alternative financing and the digital currencies practices are growing and over spreading; for instance according to the latest report of the Cambridge Centre for alternative finance; "the European alternative finance market as a whole grew by 144% [in 2014] … [and the industry] grew with an average growth rate of 115% over the [past] three years [2011-2013]"[45]. A third is digital currencies whose number in circulation has grown as well. For instance, the Statistical portal, found that "The number of Bitcoins, since the creation of this virtual currency in 2009 … reached approximately 14.33 million in June 2015 from 2.41 million in March 2010"[46].

Figure - 9 - Complementary Currency Systems - Annual Growth (1996-2015)



Source: Complementary Currency Resource Centre
Online Database of Complementary Currencies Worldwide (www.complementarycurrency.org)

These rapid and growing changes need proper understanding, follow-up, and may be accommodating from financial and economic policy makers to make their 'would-be

[44] "Complementary Currencies (CCs) may be defined as means of payment with a built-in target. They are not meant to replace the existing national or international currencies but to complement them. Mainly in social, cultural and ecological areas in which the present system does not work very well, new liquidity can be created without burdening the taxpayer or governments with additional costs", Margrit Kennedy. (2012). Financial stability a case for complementary currencies. P. 5.

[45] Robert Wardrop et al. (2015). Moving Mainstream: The European Alternative Finance Benchmarking Report. University of Cambridge and EY.

[46] The Statistical Portal. (2015). Number of Bitcoins in circulation worldwide from 1st quarter 2010 to 2nd quarter 2015 (in millions). Retrieved from: www.statista.com.

benefits', available to the public at large, and/or protect the public form their 'would-be' harmful effects.

Bibliography

Ali, Robleh; Barrdear, John; Claws, Roger; and Southgate, James. (2014). Innovations in Payment Technologies and the emergence of digital currencies. Quarterly Bulletin Q3, the Bank of England. Available at: www.bankofengland.co.uk.

Alkhareif, Ryadh M., and Barnett, William A. (2014). Modern and traditional methods for measuring money supply: the case of Saudi Arabia, SAMA Working Paper, WP/14/1, December, 2014, Riyadh: Saudi Arabia.

Askenazy, Philippe ; Coutrot, Thomas ; Orléan, André ; and Sterdyniak, Henri. (2010). Manifesto of the appalled economists. *real-world economics review*, issue no. 54. Available at: www.paecon.net/PAEReview/issue54/whole54.pdf.

BBC. (2014). Viewpoints: What should capitalism do?, Retrieved from: http://www.bbc.com/news/business-27517577.

Benes, Jaromir and Kumhof, Michael. (2012). The Chicago Plan Revisited. IMF Working paper, WP/12/202, The IMF, Washington D.C., USA.

Boait, Fran. (2014). MPs debated Money Creation and Society. November 27, 2014. http://www.positivemoney.org.

Brown, Ellen. (2007). Dollar deception: how banks secretly create money. July 3rd, 2007: http://www.webofdebt.com/articles/dollar-deception.php.

Buiter, Willem. (2009). Islamic finance principles to restore policy effectiveness, blogs.ft.com/maverecon , July 22, 2009.

Casey, Eileen. (2008). "Catholic C-olleges & Universities: Financial crisis as a learning opportunity". Mendoza College of Business, University of Dame. Available at: http://business.nd.edu.

Chesney, Marc; Dembinski, Paul; Hörisch, Jochen; Priddat , Birger P.; Seele, Peter; and, Christoph Weber-Berg. (2011). Basel Manifesto on the Economic Enlightenment. Basel, 4. November 2011. Available at: www.zrwp.ch/uploads/basel_manifesto.pdf.

Chorney, Harold; Hotson, John; Seccareccia, Mario. (1992). The Deficit Made me do it!. Canadian Centre for Policy Alternatives, Ottawa, Canada.

Cournède, Boris; Denk, Oliver and Hoeller, Peter. (2015). Finance and Inclusive Growth. OECD Economic Policy Paper, June 2015 No. 14, OECD, Paris, France.

De Mooij, Ruud A. Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions, IMF Stuff Discussion Note, May 3, 2011, SDN/11/11, Washington: IMF.

Dune, S., Harney, S., and Parker, M. (2008). " The Responsibilities of Management Intellectuals: A Survey". *Organisation*. 15:2, 271-282.

Dyson, Bob; Greenham, Tony; Ryan-Collins, Josh and Werner, Richard A. (2010). Towards a twenty-first century banking and monetary system: Joint submission to the Independent Commission on Banking. 15 November 2010. Rerieved from: www.positivemoney.org.

Fatica, Serena, Hemmelgarn, Thomas and Nicodeme, Gaetan. The Debt-Equity Tax Bias: Consequences and Solutions. July 2012, Brussels: European Commission.

Greenwald, Bruce and Stiglitz, Joseph E. (2003). Towards a New Paradigm for Monetary Economics. Columbia University: www0.gsb.columbia.edu.

Guru, Supriya. (U.D) Concept of Money Supply and its Measurement. Retrieved from: www.yourarticlelibrary.com

Hanke, Steve H. (2012). It's the Money Supply, Stupid. Commentary, Cato Institute: http://www.cato.org.

Harris, Lucy and Kamana, Janet. (2014). M-PESA: How Kenya took the lead in mobile money. Available at: www.mobiletransaction.org.

Hernæs, Christoffer, O. (2015). The Sharing Economy and the Future of Finance. http://techcrunch.com.

Hodgson, Graham. (2013). Banking, Finance and Income Inequality. Positive money movement: http://www.positivemoney.org.

Huber, Joseph and Robertson, James. (2000). Creating New Money: A monetary reform for the information age. New Economics Foundation, London: UK.

Huber, Joseph. (2001). The Case for Sovereign Money. Retrieved from: www.sovereignmoney.eu.

Huber, Joseph. (2014). Modern Money Theory and New Currency Theory A comparative discussion, including an assessment of their relevance to monetary reform. real-world economics review, issue no. 66, pp. 38-57.

Jackson, Adrew & Dyson, Ben. (2014). Modernizing Money: Why Our Monetary System is Broken and How It Can Be Fixed. Positive Money Movement, London, UK.

Jackson, Andrew; Dyson, Ben; and Hodgson, Graham. (2013). The Positive Money Proposal. Positive Money Movement: www.positivemoney.org.

Kennedy, Margrit. (1995). Interest and Inflation Free Money. Seva International. Retrievable from: margritkennedy.de.

Kennedy, Margrit. (2006). Complementary Currencies: New Paths to Sustainable Abundance. Retrievable from: margritkennedy.de.

Kennedy, Margrit. (2008). If Money Rules the World Who Rules Money? Green Money. Available at: www.margritkennedy.de, pp. 66-69.

Kennedy, Margrit. (2012). Financial stability a case for complementary currencies. Prepared for the China-Europa Forum, Workshop 32: Tasks and Responsibilities of Institutions of the Financial Sector, Paris and Brussels 4th – 7th of October.

King, Mervyn. (2010). “Banking: From Bagehot to Basel, and Back Again”, The Second Bagehot Lecture, Buttonwood Gathering, New York City: USA

Kurtzman, Joel. (1993). The Death of Money: How the Electronic Economy Has Destabilized the World's Markets and Created Financial Chaos. Simon & Schuster.

Leslie, Brian (2013). Where’s the Money to Come From?, the Monetary Reform Policy Working Group of the Green Party of England and Wales, Eighth edition, February 2013.

Lietaer, Bernard and Dunne, Jacqui. (2013). Rethinking Money: How New Currencies Turn Scarcity into Prosperity. Berrett-Kohler, San Francisco, USA

Lucas, Robert. (2009). In defense of the dismal science. The Economist, Aug 6th 2009. Available at: www.economist.com.

McConnachie, Alistair. (2013). How Publicly-Created, Debt-Free Money Addresses the Islamic Concern about Interest. Seminar on “Ethical Finance – Understanding the Money System and its Consequences”, Glasgow University, Scotland, UK. Available at: prosperityuk.com.

McLeay, Michael; Radia, Amar and Thomas, Ryland. (2014). Money creation in the modern economy. Quarterly Bulletin 2014 Q1, Bank of England, London, UK.

OECD. (2012). “Debt and Macroeconomic Stability”, OECD Economics Department Policy Notes, No. 16 January 2013. Retrieved from: www.oecd.org/eco/public-finance/Debt-and-macroeconomic-stability.pdf.

OECD. (2015). “How to restore a healthy financial sector that supports long-lasting, inclusive growth?”, OECD Economics Department Policy Notes, No. 27, June 2015. Retrieved from: www.oecd.org/eco/monetary/finance-growth-inequality.htm.

Oxfam. (2015). Wealth: Having It All and Wanting More. Oxfam Issue Briefing, January 2015. www.oxfam.org.

Phillips, Ronnie J. (1995). “The Chicago Plan and New Deal Banking Reform, Forward by Hyman P. Minsky, Routledge , UK.

Positive Money. (2014). 9 Benefits of Switching to a Sovereign Money System. Positive Money Movement, London, UK. Available at: www.positivemoney.org.

Positive Money. (2014). Creating a Sovereign Monetary System. Positive Money Movement, London, UK. Available at: www.positivemoney.org.

Ricardo, David. (1824). Plan for the Establishment of a National Bank, London: John Murray, Albemarle-Street.

Ricardo, David. (1838). Plan for the Establishment of a National Bank. C. Roworth Bell Yard, Temple Bar, London: John Murray, Albemarle-Street, MDCCCXXIV, Digitized by Google.

Rickards, James. (2014).The Death of Money: The Coming Collapse of The International Monetary System. Portfolio / Penguin, New York, USA.

Robertson, James and Huber, Joseph. (2000). Creating New Money: A monetary reform for the information age. The New Economics Foundation, London, UK.

Rowbotham, Michael. (1998). The Grip of Death: A Study of Modern Money, Debt Slavery, and Destructive Economics. Jon Carpenter Publishing.

Ryan-Collins, Josh, Greenham, Tony, Werner, Richard and Jackson, Andrew. (2014). Where Does Money Come From? A Guide to the UK Monetary and Banking System, New economics foundation, London, UK.

Sigurjónsson, Frosti. (2015). Monetary Reform: A Better Monetary System for Iceland. A Report Commissioned by the Prime Minister of Iceland. Edition 1.0 March 2015, Reykjavik – Iceland.

Soddy, Frederick. (1934). The Role of Money: What It Should be, Contrasted with What It Has become. George Routledge and Sons, London, UK.

Sraffa, Piero. (N.D). The Works and Correspondence of David Ricardo. (Ed) in collaboration with M. H. Dobb, Volume IV, Liberty Fund, Indianapolis, pp. 271-.

Stiglitz, Joseph E. (2012). The Price of Inequality: How Today's Divided Society Endangers Our Future. W. W. Norton & Company, New York and London.

The Economist. (2013). Why does Kenya lead the world in mobile money?. The Economist, May 27th 2013 (www.economist.com).

The Economist. (2015). Ending the debt addiction: A senseless subsidy. May 16th 2015. http://www.economist.com.

The Economist. (2015). The size of the subsidy: Finance's Bermuda triangle. May 16th 2015. http://www.economist.com .

The Economist. (2015). Why the world is addicted to Debt. May 17th 2015. http://www.economist.com.

The Financial Times. (2015). Definition of M0, M1, M2, M3, M4. Retrieved from: ft.com/lexicon.

The London School of Economics. (2010). The Future of Finance and the Theory that underpins it. The London School of Economics, London, UK.

The Statistical Portal. (2015). Number of Bitcoins in circulation worldwide from 1st quarter 2010 to 2nd quarter 2015 (in millions). Retrieved from: www.statista.com.

Turner, Adair. (2012). Monetary and Financial Stability: Lessons from the Crisis and from classic economics texts. Speech at South African Reserve Bank, 2nd November 2012.

Vizcaino, Bernardo. (2015). Researchers take scientific approach to Islamic finance. Thursday, Feb 19th. http://www.reuters.com.

Walker, Justin. (2012). Bankers, Bradburys and the carnage on the Western Front!. UK Column Publication. Available at: www.ukcolumn.org.

Wardrop, Robert; Zhang, Bryan; Rau, Raghavendra and Gray, Mia. (2015). Moving Mainstream: The European Alternative Finance Benchmarking Report. University of Cambridge and EY

Weir, Diarmid. (2011). Public and Private Money Creation: Reform the Banks, not the System. 21st May 2011. Retrieved from: http://www.futureeconomics.org.

Werner, Richard A. (2010). Towards Stable and Competitive Banking in the UK – Evidence for the ICB. CBFSD Policy Discussion Paper No. 3 /1-10, Centre for Banking, Finance and Sustainable Development, 15 November, Southampton University, UK.

Wolla, Scott A. (2015). Would a Gold Standard Brighten Economic Outcomes? PAGE ONE Economics Newsletter, Federal Reserve Economics Bank of St. Louis, January, 2015.

Web sites:

www.bankofengland.co.uk
www.positivemoney.org
www.federalreserve.gov
www.sama.gov.sa
www.webofdebt.com
www.complementarycurrency.org
www.statista.com
www.investopedia.com

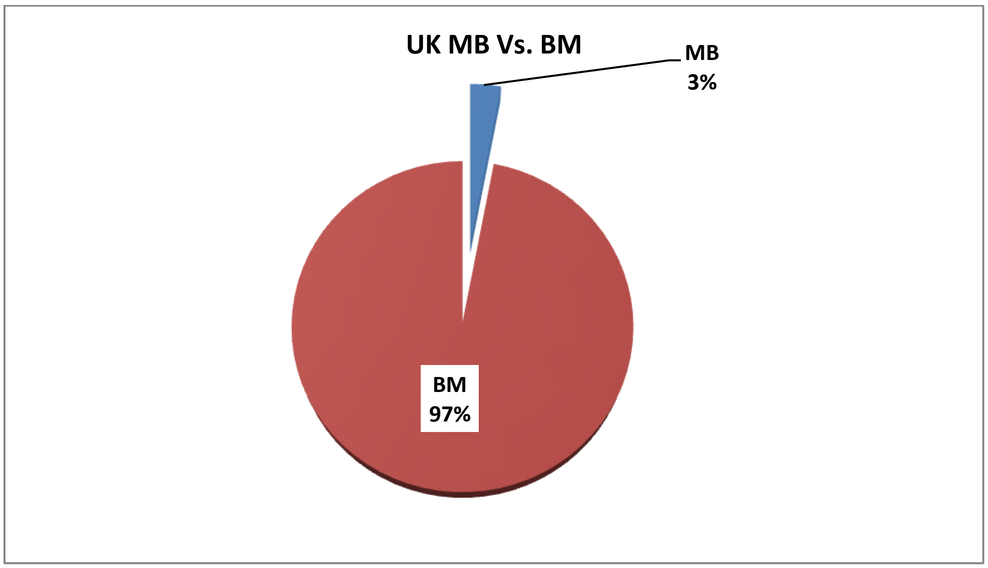
Appendices

Appendix 1

Composition of Money Stock (i.e. Base or high powered money vs. broad or privately created money) in some economies

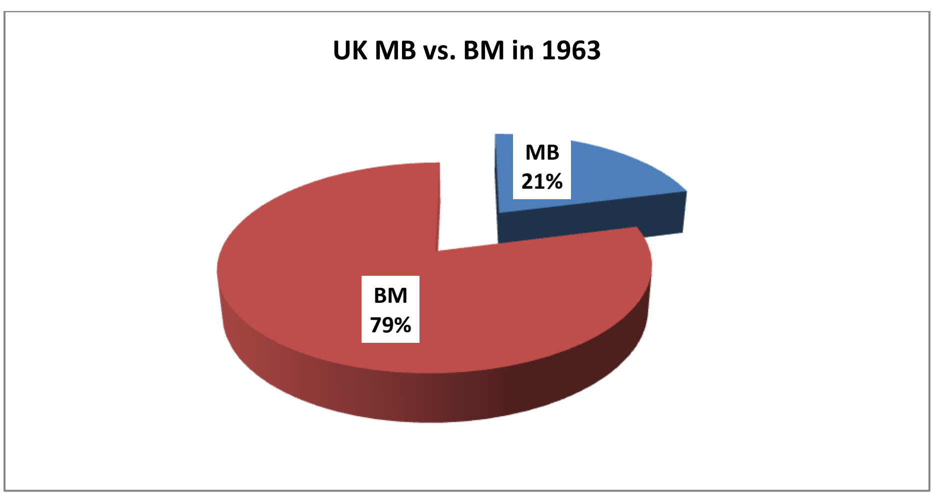
1 - The case of UK; which is the most extreme case according to the data that I have been able to consult for some countries.

Figure –AP1.1- Composition of Current Money Supply



Source: Bank of England (2015)

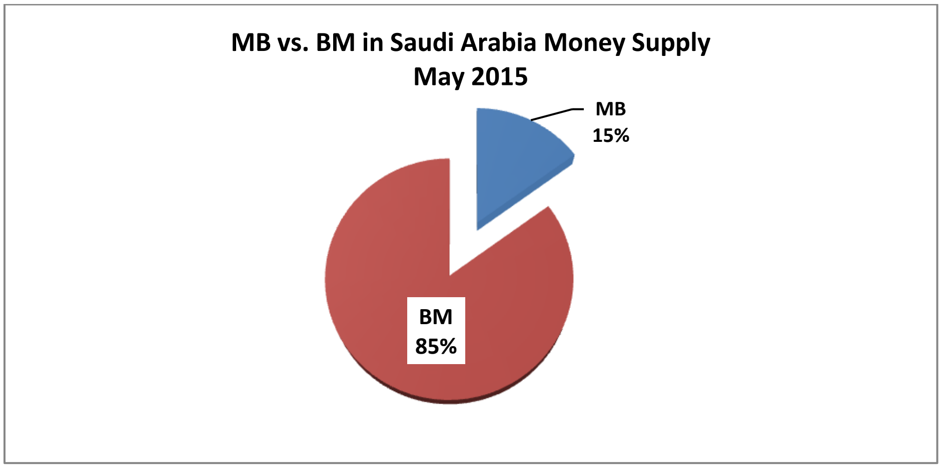
Figure –AP1.2- Composition of Money Supply in UK in 1963



Source: Rowbotham (1998: 13)

2 – **The Case of Saudi Arabia**

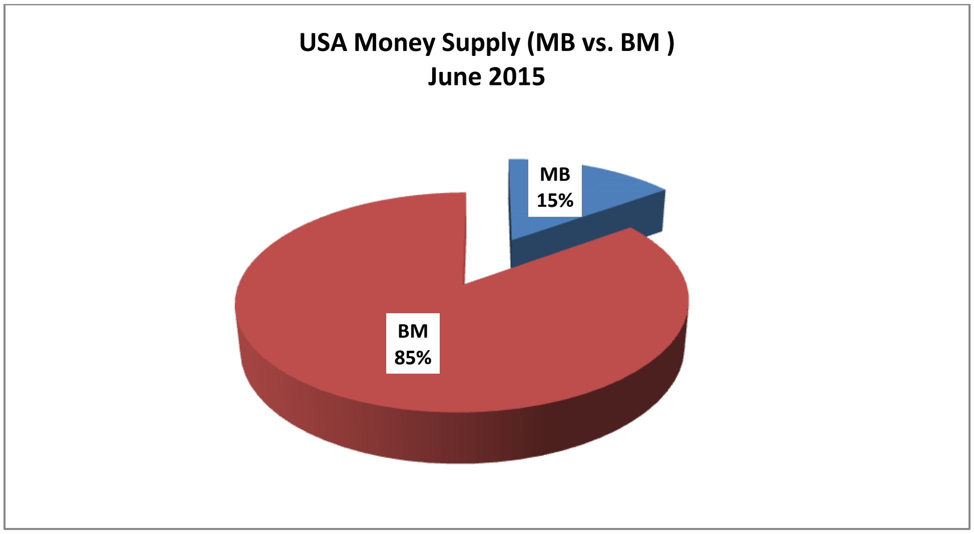
Figure –AP1.3- Composition of Current Money Supply



Source: Saudi Arabia Monetary Agency: http://ieconomics.com/saudi-arabia-money-supply-m0

3 – **The USA case: MB vs. BM**

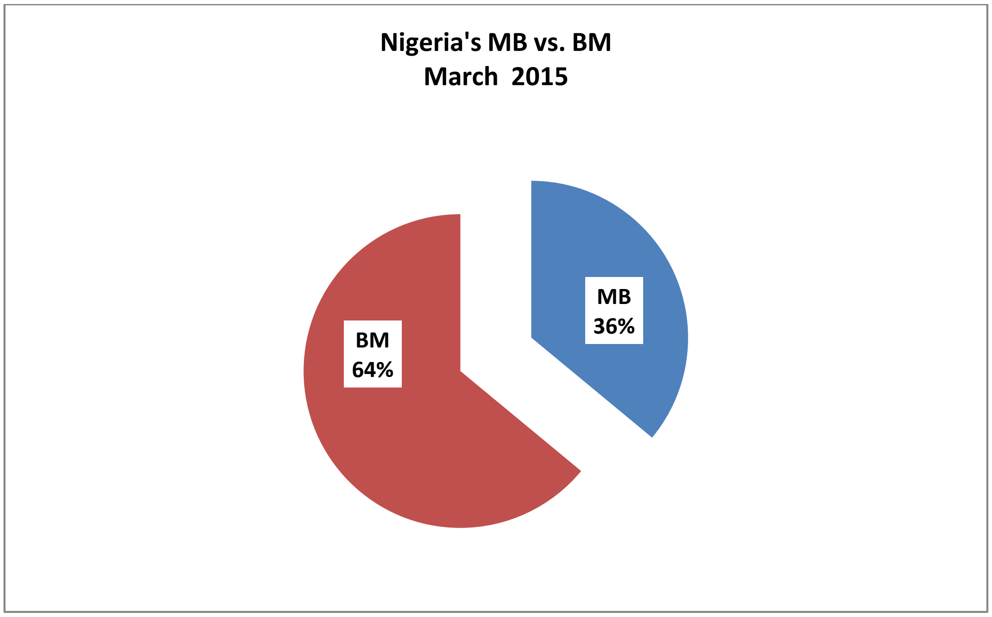
Figure –AP1.4- Composition of Current Money Supply



Source: The Federal Reserve System Board, June 2015

4 – The case of Nigeria

Figure –AP1.5- Composition of Current Money Supply



Source: Central Bank of Nigeria: www.cenbank.org (March 2015)

Appendix -2- Some Historical records

Figure- AP2.1- Composition of Money Supply of 11 Nations in 1913

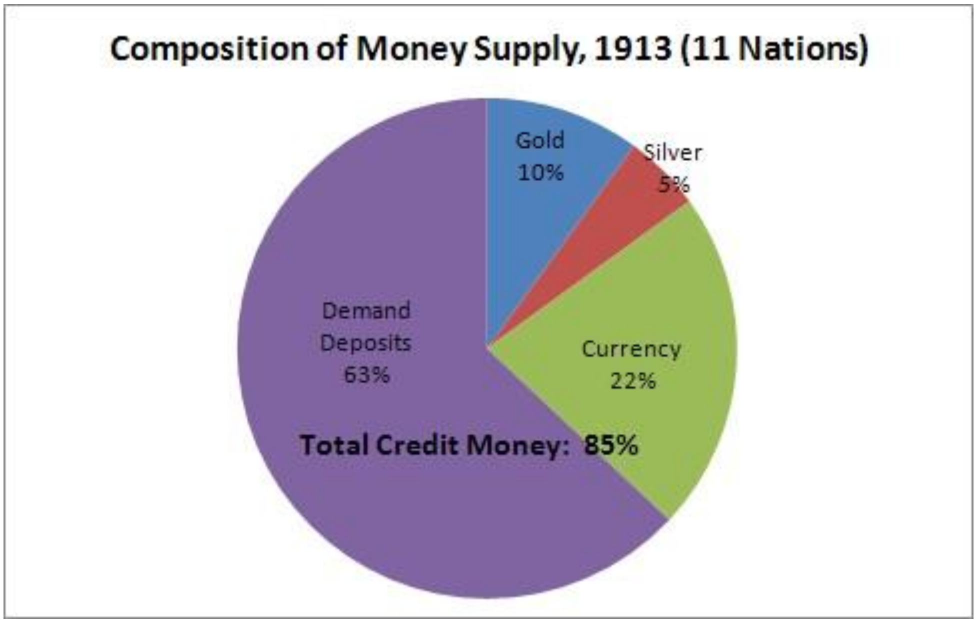
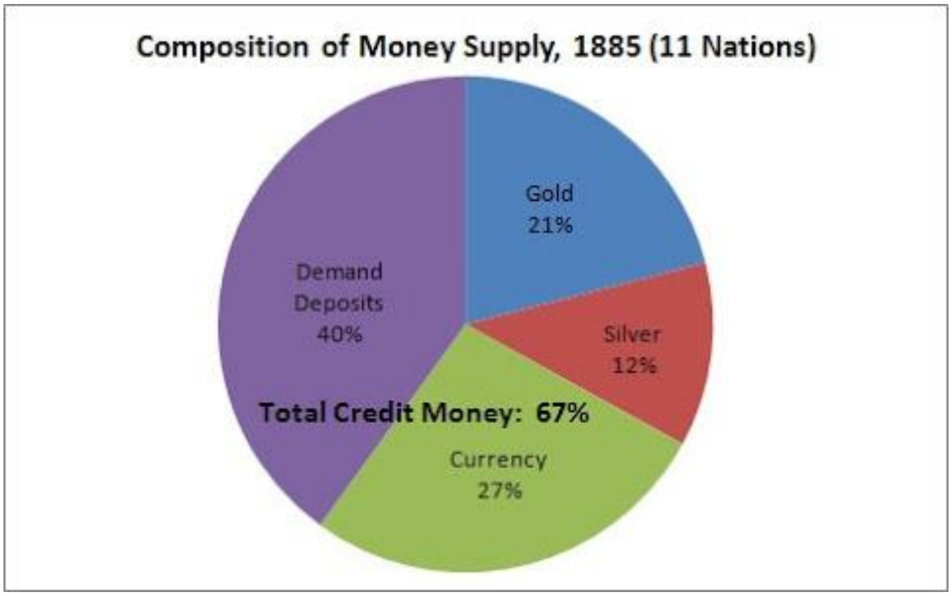


Figure -AP2.2- Composition of Money Supply of 11 Nations in 1885



Source: http://socialdemocracy21stcentury.blogspot.com/2013/03/the-classical-gold-standard-era-was-myth.html (The Classical Gold Standard Era was a Myth. (2013))