Monetary System for Iceland

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Abstract

In 2015 Sigurjonsson proposed a reform of the Icelandic monetary system. The current fractional reserve system has posed some challenges to the economy of Iceland and is therefore politically questioned. It enabled commercial banks to extensively increase the debt level by money creation which led to a severe recession. In the proposed sovereign money system the central bank would regain the exclusive power of money creation, while commercial banks would concentrate on the matching of savings and investments. Sigurjonsson (2015) claims that the reform would enhance financial stability. This work explores the proposal and outlines some implications of the system on the functioning of the economy as well as its impact on the monetary policy.

Content

1 Introduction

"Today's monetary and banking system is […] opaque, inherently unsafe and unstable, almost impossible to control, and too expensive." (Huber, Robertson, 2000, p.1)

That is how Huber and Robertson (2000) describe the widely applied fractional reserve system. The Icelandic parliament comes to a similar conclusion and, therefore, formed a committee to evaluate whether the functions of money creation and lending could be separated. Commissioned by the prime minister of Iceland, Sigurjonsson (2015) elaborated a comprehensive proposal for a sovereign money system to be implemented in Iceland, which restricts money creation solely to the central bank. The search for an alternative monetary system is the consequence of the past experiences of the country.

It has recently undergone a severe recession in the years of 2008 to 2010 fuelled by the bankruptcies of several Icelandic banks, triggered by the stress in the global financial markets. In the preceding years, the banks had expanded their balance sheets to account for eleven times the country's GDP which was the main reason for the collapse (Central Bank of Iceland, 2010, p. 7-9). Iceland has furthermore a history of very high inflation. In especially, from the 1960s to the 1980s the country faced rapid increases in the price level of up to 80% per annum (Palle and Guðmundsson, 1998, p. 2-3).

To deal with these problems the government is considering to reform the monetary system of Iceland entirely. The idea of the reform plans shall be outlined in this work and its implications for the monetary policy shall be discussed. Therefore, the literature related to the problems of the fractional reserve system and its alternatives is reviewed in section 2 and the proposal by Sigurjonsson (2015) is outlined in section 3. Monetary policy implications are discussed in section 4, with an emphasis on the monetary policy issues discussed in the course. Section 5 concludes by summarizing the advantages and disadvantages of the system.

2 Literature Review

The developments in the past decades have proven, that the money creation in the fractional reserve system and the simultaneously increased debt levels are not in line with the overall developments in the economy. Dyson et al. (2011, p. 18-23) summarize the risks of the fractional reserve system as follows. Commercial banks are in the position to create money, while at the same time making profits of lending money. This creates a strong incentive to extensively increase the volume of lending. While the increase in lending and the simultaneous weakening of credit requirements also inflates the risk for the bank to make losses on defaulting credits, they enjoy the benefits of being systemically relevant. Banks can in principle count on the government to bail them out in the case of illiquidity or insolvency.
This incentive leads to an undesirable increase in debt as well as money supply. Bezemer (2009) outlines at the specific case of the United States how the banks' ability of money creation has led to an increase in the money supply as well as in the level of indebtedness of the economy, that erupted in 2007-2008 in the financial crises.

As a response to these undesired developments in the financial system Huber and Robertson (2000) proposed a, so called, seigniorage reform. Which is based on the idea that commercial banks should no longer be allowed to create money while the central bank would be the only institution entitled to issue money, in cash as well as non-cash. In their comprehensive proposal they develop an approach that could be implemented as a new monetary system.
This monetary system would, according to Huber and Robertson (2000), bring the following advantages. It would better enable the central bank to maintain price stability, reallocate all profits of the money creation to governmental authorities, ensure the safety of customers money in current accounts (without state guarantees), and reduce the risk of overheating as well as depressions in the economy. Similar approaches that confine money creation to governmental authorities have already been in the academic debate, about 80 years ago. An early approach to replace the fractional reserve system is known as "100% Money". This idea, advocated by Irving Fisher (1936) as a response to the great depression, has a lot in common with the recent proposals of sovereign money. It also postulates that only the central bank should be

allowed to create money. In consideration of the historic circumstances during that time the proposed implementation differed substantially, as it requests that all deposits in the banks should be covered by 100% reserves in cash money. In response to the financial crisis in 2007 and 2008, the issue of separating the powers of money creation and lending raised upcoming attention in the scientific as well as in the public debate (for a review of current scientific publications, see KPMG (2016)). Iceland is not the only country that is currently discussing the idea of reforming the monetary system to replace the fractional reserve system (see, for example, Dyson et al., 2011; Vollgeld-Initiative, 2017).

3 Sovereign Money Proposal

In the following subsections, the proposed sovereign money system will be explained, as well as the transition to it and its implications.

3.1 System

In the sovereign money system the powers of creation and allocation of money are separated. The Central Bank of Iceland (CBI) is the only institution that can create money by determining the money supply. The government of Iceland is in charge of the allocation of money by deciding the channel through which the money will be injected into the economy. Commercial banks have the role of intermediaries, not being able to create money through credit expansion (Sigurjonsson, 2015, p.78).

Customers can choose between two accounts. Transaction Accounts are held at the CBI and are legal property of the account holder, thus cannot be used by commercial banks for loans and investments. Deposits in Transaction Accounts are risk-free and account holders do not earn interest. Investment Accounts are also held at the CBI. Customers who want to invest and earn interest on their deposits are able to transfer money to their Investment Account. These deposits cannot be used as money for transactions and become legal property of the commercial bank, which can use them to give out loans and to invest (Sigurjonsson, 2015, p.72). Although money is held at the CBI, the commercial banks are the ones administering the deposits and

investments. Each commercial bank has on the one hand a Customer Funds Account at the CBI which is the sum of all Transaction Accounts, and on the other hand an Investment Pool which is the sum of all Investment Accounts respectively. Moreover, each commercial bank holds an Operations Account at the CBI to fund their services and to receive their profits (Sigurjonsson, 2015, p.84). Unlike in the fractional reserve system, sovereign money is the only type of money in the economy. Reserves which can only be traded between financial institutions do not exist in the sovereign money system (Sigurjonsson, 2015, p.84).

The Money Creation Committee (MCC) is responsible for the creation of money. Each month the MCC decides on the money supply, considering price stability and economic growth. The newly created money is accorded to the government's Transaction Account, also held at the CBI (Sigurjonsson, 2015, p.81).

The government is responsible to choose a channel through which it will inject the newly created money into the economy, stimulating in this process also economic growth. First, it can decide to increase government spending, such as in health care or education. The second channel is to reduce taxes. The extant money can be either spent or invested by consumers (Sigurjonsson, 2015, p.79). The third channel is to reduce public debt. A smaller public debt reduces future interest payments, leading to a higher government budget. This allows the government again to increase spending or reduce taxes. Furthermore, the government can decide to grant a citizens' bonus, by according a specific amount of money in citizens' Transaction accounts. The impact on economic growth depends on citizens' preferences and their decision to either consume, save the money or repay their debts. Finally, if there is a shortage in credits, the MCC can decide to lend out directly to commercial banks under the condition that the money is only lent out to businesses. Through these channels, the goal of economic growth, which is considered by the CBI in its decision of money creation, can be achieved (Sigurjonsson, 2015, p.80).

If money needs to be removed then the government and the CBI can act. To reduce the money supply from the real economy, the government can decide to cut government spending or increase taxes. If money from the financial sector has to be removed, then the CBI can achieve this by selling financial assets or by reducing commercial banks' access to loans (Sigurjonsson, 2015, p.81).

As Transaction Accounts are securely held at the CBI and commercial banks cannot use them for lending out to household or businesses, deposits are safe. Deposit

insurance by the government thus becomes unnecessary as people do not have the fear of losing their deposits (Sigurjonsson, 2015, p.87). However, no interest is gained by Transaction Accounts, creating an incentive for customers to invest their money. By transferring an amount of money into the Investment Account, commercial banks may use it for investments and credits, without creating money. The interest gained by the investment is transferred into the customer's Investment Account. He can then decide whether he wants his money to be reinvested or transferred to his Transaction Account (Sigurjonsson, 2015, p.85). In another scenario a customer wants to borrow money. The commercial bank will transfer the amount from the Investment Pool to the customer's Transaction Account, meaning that money is only reallocated. The money becomes legal property of the borrower, however he owes a liability to the bank. As the money in the investment pool cannot be used for transactions, money creation through credits is not possible in the sovereign money system (Sigurjonsson, 2015, p.74).

3.2 Transition

On "Day One" of the transition to the sovereign money system all existing deposits are converted into Transaction Accounts with sovereign money held at the central bank. Accordingly, commercial banks become indebted to the central bank, owing them the "Conversion Liability" (Sigurjonsson, 2015, p.83). Each month payments with fair interest rates are made. This process deletes money, therefore the CBI can create new sovereign money keeping the money supply stable. If during the transition period money supply has to be diminished, the central bank can force commercial banks to pay more money in a shorter time (Sigurjonsson, 2015, p.84). Furthermore, in "Day One", savings accounts are converted into Investment Accounts, held together in the Investment Pool of each commercial bank. Payments of already existing investments are accorded to the Investment Pool. Commercial banks' reserves held at the central bank will be converted into an Operations Account with sovereign money, thus being available to lend out to the public (Sigurjonsson, 2015, p.84). If at the beginning of the transition phase there is a shortage of available funds in the Investment Pool, commercial banks can use funds of their Operations Account, allowing a smooth transition to the new system. Deposits in Operations Accounts do

not earn interest, leading to incentives for banks to lend out money. By this transition period, old money will be gradually replaced by sovereign money. This process will take several years, however the system will be functioning from day one (Sigurjonsson, 2015, p.84).

3.3 Implications

While the sovereign money system appears to solve some of the challenges arising in the fractional reserve system its effect on the economy is quite uncertain. In the sovereign money system the amount of investments is limited to the amount of savings individuals are willing to invest with the risks and interest earnings linked to it. This could lead, according to Margeirsson (2014, p. 257), to a shortage in investments provided to the real economy. On the other hand, the government would decrease its lending needs, as the money creation stimulates its budget. This would cause customers to search for new investment opportunities, especially if they are linked to low risk (Sigurjonsson, p. 87). As it is uncertain which of these effects would dominate, the predicted investment levels differ with regard to the assumptions. Depending on the actual level of investment available after the proposed monetary reform, the productivity in the economy is effected and a lack in investment could limit its potential of growth.

Similarly, the perception of the changes in interest rates varies. The price of lending and the income on savings would solely be determined by the market. Regardless whether one expects the interest rate to be higher or lower than in the current system, it is likely to be more volatile as it is mainly determined by the liquidity preferences of the savers. This impedes a sound planning by the private sector (Margeirsson, 2014, p. 262-266). In extreme cases when the market is unable to provide a reasonable amount of loans, however, the MCC can decide to lend out directly to businesses through commercial banks, thus meeting the higher demand.

Furthermore, the implementation of the proposed system would raise the costs for deposit holdings. Commercial banks would no longer be able to make profits with customers deposits held in their bank accounts, but would rather charge the customers for managing their Transaction Accounts at the central bank (Sigurjonsson, p. 88).

These higher expenses to the individuals could, on the other hand, be offset by reduced taxes due to increased seignorage income by the government.

4 Implications for Monetary Policy

In the proposed system of sovereign money, the way of monetary policy would change remarkably. The central bank would be in the position to set the money supply directly. Therefore, the policy tools would shift from influencing the inflation rate to supplying the economy (through the government budget) with a determined amount of money. This implies that the IS/LM model could indeed be modelled with the money supply being an exogenous variable determined by the central bank, as it is often assumed in economic textbooks.

The change in the monetary policy tool, however, would not be in contrast to the current monetary policy objective of inflation targeting (Huber and Robertson, 2000, p. 14-16), which in case of Iceland aims to keep the inflation rate close to 2.5% annually (Central Bank of Iceland, 2017a).

The transmission channels of monetary policy, on the other hand, need to be reviewed, as the way how money is injected into the economy is substantially different to the current system. Even though the actual transmission channels are yet unknown, central banks are already considering the money supply as a variable to model transmission channels (Huber and Robertson, 2000, p. 16) and, moreover, the transmission is likely to be similar to changes in fiscal policy that are already considered in current DSGE models (see, for example, Ratto et al., 2009).

A strong advantage of the sovereign money system is that the monetary policy tool of setting the money supply does not seem to have a natural boundary as the manipulation of the interest rate does. Currently, many economies worldwide face the challenge of the zero lower bound. Even though, this does, in the current situation, not apply to Iceland (where the monetary policy rate is at 4.25% (Central Bank of Iceland, 2017b)), the proposed system would not face such restrictions. This implies that the central bank will be better enabled to rely on their conventional policy tools to inject liquidity to the system.

5 Conclusion

To put everything into consideration, Iceland has experienced severe economic problems in the past decades including high inflation and over-indebtedness reaching its peak in the financial crisis of 2007 – 2008. The fractional reserve system has allowed commercial banks to create money through credit expansion, making the central bank incompetent to determine the money supply in the economy. To find a solution to these problems, the government of Iceland is currently debating about a new monetary system. In the proposed sovereign money system the powers of creating and allocating money are separated, making the central bank the only institution able to create money. Its policy tools would change. Inflation targeting would still be the primary objective, however it would not be achieved by influencing the interest rate, but through determining the money supply. In the sovereign money system, the problem of high inflation can be annulled. Moreover, debt levels can be significantly decreased, as the government would profit from the seigniorage income. However, there are some concerns about the efficiency of the lending business as well as the capability for companies to finance their investments, which would be detrimental for the economy. Furthermore, the risk of bank runs is significantly reduced, as deposits are risk-free. Thus, overall financial stability would be enhanced.

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