

Chapter 5

How Does the Sovereign Money System Work?



The previous chapter assessed our financial monetary system according to four criteria: (1) its economic contribution, (2) its stability, (3) its fairness in the distribution of benefits, costs and risks, and (4) its legitimacy. According to citizens' initiatives around the world (including *Ons Geld* in the Netherlands), fundamental reforms are necessary to fix the flaws in the financial monetary system. Although their proposals for reform differ, many support a *sovereign money system*¹ in which all money is directly or indirectly in public hands.² This means that money can only be created by the central bank; commercial banks lose their ability to create money.³ It also means that the institutions that lend money (we call them financing institutions) are strictly separated from those that make up the payment system.

The sovereign money system has a long lineage. Its forerunners include the architects of the *Chicago Plan* in the 1930s (see Box 5.1), Nobel laureate Milton Friedman in the early post-war period and economist James Tobin in the 1980s.⁴ Since the latest financial crisis, variants of a sovereign money system have been proposed by economists John Kay, Laurence Kotlikoff, Jaromir Benes and Michael Kumhof.⁵ *Financial Times* columnist Martin Wolf has proposed similar ideas.⁶ These ideas have also been debated in national parliaments. A proposal for a sovereign money system was subject of a Swiss referendum in June 2018, in which it was rejected.

¹Also known as full reserve banking, 100% money, limited purpose banking, or *Vollgeld*.

²Dyson et al. (2016); Huber (2017)

³The proposals refer to an independent public institution. *Ons Geld* calls it the monetary authority, others call it the central bank (for the sake of clarity, we use the more common latter term). In our view, the question of whether such an institution should have a balance sheet or the ability to grant loans is a separate matter.

⁴Friedman (1948); James Tobin (1985)

⁵Kay (2009); Kotlikoff (2010); Benes and Kumhof (2013)

⁶Wolf (2014)

Box 5.1 The Chicago Plan

Calls for a sovereign money system often build on ideas advanced in the 1930s by economists associated with the University of Chicago, particularly Frank Knight and Henry Simons. Against the backdrop of the Great Depression and the Roosevelt government's reforms, they called for an even more radical overhaul of the banking system and monetary policy. Their ideas later came to be known as the Chicago Plan.

The Chicago Plan emerged against the backdrop of unprecedented economic contraction, deflation, unemployment and many bank failures. To prevent a further escalation of the banking crisis, all banks in the United States were closed in March 1933. After inspection of banks' balance sheets, some remained shuttered and some were recapitalized, while others were expected to continue operations on their own. To avert further panic, the government provided a temporary, unlimited guarantee for deposits. The Banking Act of June 1933 introduced a deposit guarantee system that set the insured sum at \$2500, which covered around 97% of account holders and 23.7% of the total value of bank deposits. The Banking Act also specified that commercial banks could no longer engage in securities trading (the Glass-Steagall Act), thereby limiting the interdependence of the banking system and securities markets.

Around the same time as the 1933 Banking Act, Knight, Simons and six other economists sent the first version of the Chicago Plan privately to several members of the US government. They advocated a new type of bank that would be required to back all deposits with central bank reserves. Credit would be provided by separate institutions which would no longer be allowed to operate on the basis of self-created bank deposits. In short, the aim was to split the banking system into payment and financing sections. The idea inspired Irving Fisher in his 1935 book *100% Money*, which argued that "there should be a further separation of functions and that the banks which have slow assets [...] should not have demand deposits against them".⁷

But the Chicago Plan came too late, with the most important reforms already having been pushed through in 1933. Subsequent discussion mainly concerned how monetary policy could be adapted to better support economic growth and employment. The Banking Act of 1935 therefore primarily concerned the organization and policy of the Federal Reserve System. The Chicago Plan nevertheless continued to play a background role in one element of the Act, namely in the rules concerning the reserves that commercial banks were required to hold with the Fed. The idea was that by varying these requirements the Fed could curb or stimulate lending. One of the drafters of the 1935 Banking Act, Lauchlin Currie, supported the Chicago Plan and had

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⁷Cited in: Phillips (2015 [1995]: 50)

Box 5.1 (continued)

formulated the rules in such a way that the Fed could demand that bank deposits be backed 100% by reserves. In other words, the rules would open the way to full reserve banking. But in the passage of the Act, Congress capped the figure at 30%.⁸

This chapter addresses the broad outlines of a sovereign money system as advocated in recent proposals.⁹ We do not delve into the details of each proposal but focus on their overarching characteristics. We first outline what these proposals imply for the payment system (Sect. 5.1) as well as for investing and lending (Sect. 5.2). We then turn to the government's role and responsibilities in the new system, including how money is created and enters society (Sect. 5.3), and discuss transition paths to the new system (Sect. 5.4). The advantages and disadvantages of a sovereign money system will be discussed in the following chapter.

5.1 The Payment System

In the sovereign money system, all money is – directly or indirectly – sovereign money, held either at the central bank or at payment institutions where deposits are 100% backed by central bank reserves. In our current system, the only sovereign money is cash, issued by the central bank; bank deposits – which make up more than 90% of the current money supply – are debts owed by a private party (the bank) to the account holder.

That money largely consists of bank deposits entails risk. As we saw in Chap. 2, banks can fail, suffering such losses on their assets (mortgage loans, corporate loans, bonds, shares, derivatives) that their equity evaporates, rendering them technically bankrupt. Banks can also run out of liquidity when account holders try to withdraw their balances in cash or transfer them to other banks *en masse*. Since the bank only covers a fraction of these deposits with central bank reserves and other liquid assets, it may be unable to meet these requests (see Fig. 5.1).¹⁰ While the failure of a small bank will rarely threaten the integrity of the payment system, a systemic crisis involving a large bank or many banks simultaneously may well do so.

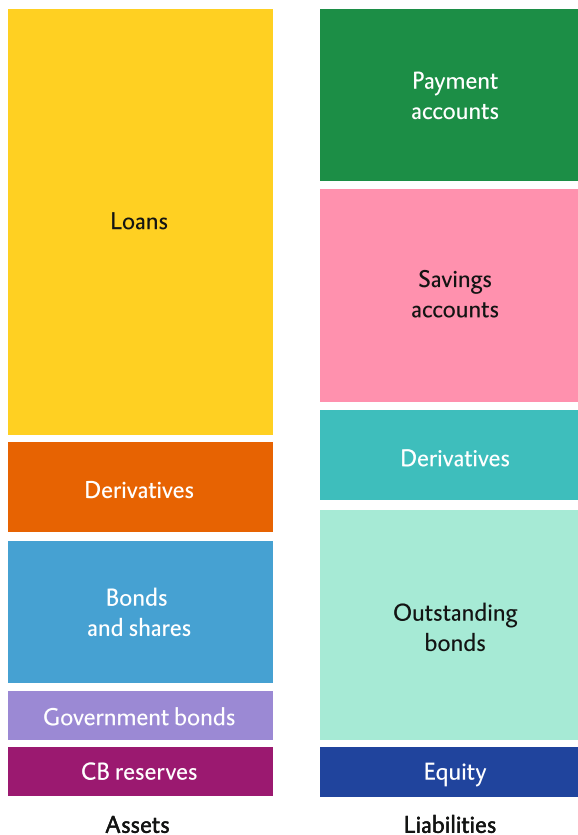
In our current set-up, the payment system is tied up with banks' other, riskier activities. The advocates of an alternative system want to end this. In the proposals,

⁸Phillips (2015 [1995]: 115–135)

⁹Benes and Kumhof (2013); Dyson et al. (2016); Kotlikoff (2010); Huber (2017); Sigurjónsson (2015); Ons Geld (2015); Ons Geld (2016); Kay (2009)

¹⁰Liquidity problems can also arise from the short-term loans banks obtain in financial markets. While these loans are normally rolled over or replaced by loans from other lenders, major funding problems can ensue when lenders doubt the soundness of the institution.

Fig. 5.1 Simplified bank balance sheet



deposits in payment accounts would from now on be entirely sovereign money or covered fully by sovereign money. To that end the payment part must be separated from the rest of the financial system.¹¹ Although the precise design differs between the proposals, we can identify two broad variants: (1) payment accounts at banks are fully covered by central bank reserves or government bonds (Sect. 5.1.1), and (2) payment accounts are held directly by the central bank (Sect. 5.2.2) (see Fig. 5.2).

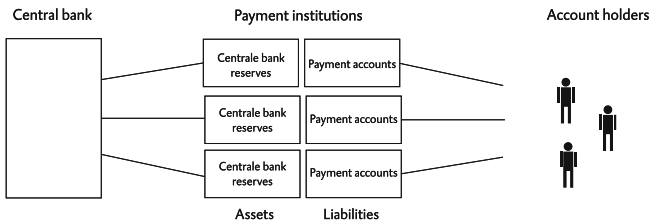
5.1.1 Payment Accounts at Payment Institutions

This option entails separate (or at least separated) banks for payment services. As is currently the case, money would enter the bank's balance sheet as a debt to the account holder. The difference is that the corresponding assets are restricted as

¹¹Benes and Kumhof (2013); Kay (2009); Kotlikoff (2010); Dyson et al. (2016); Huber (2017); Ons Geld (2016)

Option 1

Customers have a payment account at a payment institution



Option 2

Customers have a payment account at the central bank

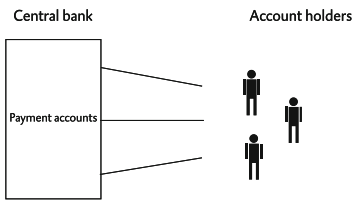


Fig. 5.2 Options for payment

deposits must be fully covered by central bank reserves or, in some proposals, government bonds.¹² This would obviate the need for deposit insurance schemes.

Payment accounts would be held either at specially established subsidiaries of financial institutions or at independent institutions. In the former scenario, payment accounts would be separated *within* the bank, with the bank’s riskier activities confined to its other subsidiaries. Such ring-fencing would mean that in principle, the bank’s other activities cannot affect the payment system. In the latter scenario, independent institutions would administer payment accounts, 100% backed by central bank reserves. The banks’ business model would then consist of account holders paying for services (a flat fee or per transaction). This would then be the price account holders pay for the security of their electronic means of payment. Earnings could also be generated by marketing customer data, although financial data quite

¹²Benes and Kumhof (2013); Kotlikoff (2010); Kay (2009)

rightly enjoy special protection. Another possibility is that earnings would be generated by the interest the central bank pays on central bank reserves.¹³

Most proposals for a sovereign money system involve full coverage by central bank reserves and cash.¹⁴ A slightly less radical variant is Kay's narrow banking proposal in which payment accounts are fully covered by secure, liquid assets, mainly government bonds.¹⁵ Although Kay's plan allows narrow banks to hold other (relatively) secure assets on their balance sheets, he believes it both feasible and desirable to restrict eligible assets to government bonds.¹⁶ Whether this plan meets the requirements of sovereign money depends on whether eligibility is limited to government bonds of the bank's home country and whether governments can 'print money' if necessary – the latter no longer being an option for euro area countries that have transferred their powers to the European Central Bank. As Kay's plan is not explicit on this point, it is unclear whether it should be seen as a variant of a sovereign money system.

5.1.2 *Payment Accounts at the Central Bank*

The second option is to transfer all payment accounts to the central bank.¹⁷ The money in these accounts could then be seen as an electronic form of cash (which is also issued by central banks). *Positive Money* argues that account holders in this scenario would have to be the legal owners of the money.¹⁸

Transactions could then be processed in several ways. Responsibility for payments could fall to the central bank or be left in the hands of private payment institutions. These private institutions would not enter the money on their balance sheets but act as administrative intermediaries. The point of deferring tasks to private institutions is that central banks might be unwilling to provide services to millions of individual customers – services that could be offered by private institutions responsible for operations that are currently the preserve of banks: opening accounts, verifying customer identity, enforcing anti-money laundering regulations, issuing bank cards and maintaining the payment infrastructure, including the ATM network. Customers would have to pay for these services per account, per transaction or through a flat fee, while competition would keep these costs as low as possible.¹⁹

¹³Based on the 'normal' situation where the interest paid by the ECB on central bank reserves is not negative.

¹⁴Benes and Kumhof (2013)

¹⁵Kay (2009)

¹⁶Kay (2009: 31)

¹⁷Dyson et al. (2016); Huber (2017); Ons Geld (2016)

¹⁸Dyson et al. (2016)

¹⁹Dyson et al. (2016: 20)

Payment institutions would not be permitted to do anything with the money without the express instruction of the account holder. Were the payment institution to fail, the money would remain at the central bank. If the payment institution is a subsidiary of a financial institution, it would be legally and financially shielded from risks arising from the parent company's other activities.²⁰

Ons Geld argues that the money should not be on the central bank's balance sheet but in a basic register (similar to the land registry) held by a monetary authority.²¹ Money would then no longer represent a debt and would be shielded from financial risks. Given the particular nature of a central bank, the practical difference as compared to entering money on a central bank's balance sheet is limited, however (see Box 5.2).

Box 5.2 The Balance Sheet of a Central Bank

The central bank's peculiar nature is reflected in its balance sheet. In the new system, the right side of the balance sheet comprises electronic sovereign money (similar to cash in the current system). Although cash money is conventionally recorded as a debt in accounting terms, it is not a debt in economic terms; it does not have to be repaid and nothing else can be demanded in its place. The other specific feature on the liability side is that a central bank may have negative equity without having to close down.²²

The left side of the central bank's balance sheet contains its assets. Although in the current system the convention is that new central bank reserves will only be created on the basis of corresponding transfers from commercial banks, the central bank can also create reserves or money when there are no matching assets of actual value. In a sovereign money system, a central bank will be able to create new money by recording corresponding assets without actual value (such as a 'money creation certificate') in its accounts.²³

This peculiarity means that money is equally secure whether it is recorded on a central bank's balance sheet or in a different type of accounting system. Most debts (cash or electronic money) will not be repayable on demand while the central bank cannot go bankrupt (unless it is saddled with foreign debts). This peculiarity also means that accounting practices are irrelevant to the question of whether central bank money can be considered 'debt-free'. Although money held on a central bank's

²⁰Dyson et al. (2016: 19)

²¹*Ons Geld* (2016)

²²Problems may arise if a central bank has liabilities in foreign currencies. Although the central bank can have negative equity, central bankers would be wary of the effect on legitimacy (see Cohen-Setton 2015).

²³Dyson et al. (2016: 30) propose the newly created money to be 'covered' by perpetual zero-coupon bonds issued by the government and bought by the central bank.

balance sheet is recorded as debt for accounting purposes, it is not a debt in economic terms.

5.1.3 Conclusion

All proposals for a sovereign money system assume a separate payment system where all money is 100% sovereign money. While the proposals differ on how this is to be implemented, the differences have no practical consequences. The logical result is that the central bank will assume full responsibility for the creation of *new* money. The proposals assume that payment accounts will be secure and stable (although problems due to cybercrime or failing ICT-systems are not discussed). As money is not exposed to financial risks, no deposit guarantee scheme is needed.²⁴ The underlying principle is that no interest is paid on payment accounts and services will have to be paid for. Guaranteed interest-bearing savings accounts will no longer exist.

5.2 The Financial System

The financial monetary system must not only ensure an efficient and reliable structure for payments but also facilitate the financing of economic activity. This section examines how proposals for a sovereign money system envisage the operation of financial institutions. A key issue is how these institutions finance *themselves*. In our current system, banks are largely financed by bank deposits, created when they grant loans. In the new system, financing institutions would not be allowed to do this; they would have to raise money before lending it. Here the proposals point to two broad possibilities: financing based on debt (discussed in Sect. 5.2.1) and financing based on equity (discussed in Sect. 5.2.2) (see also Box 5.3). The proposals also differ in the envisioned extent of public lending, which we discuss in Sect. 5.2.3.

Box 5.3 Financing: Equity and Debt

A company can be financed in two ways: through equity or debt. In the former, the financier buys a share in a public or private company.²⁵ This share gives

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²⁴Van Dixhoorn (2013: 15); Dyson et al. (2016: 19)

²⁵For cooperatives it is more complex. In principle, members are liable for operations, thereby guaranteeing solvency. But in practice, this liability is almost always excluded in the articles of association or limited to a specific amount. Equity can then be accrued in different ways. Some

Box 5.3 (continued)

the investor a degree of influence over the company's decisions and a share of profit in the form of dividend. The financier has no guarantee of recovering the invested sum. To do so he must sell his share, if possible, to another party or back to the company. The value of the share may fluctuate. If the company goes bankrupt, the shareholder is at the back of the queue when it comes to distributing the company's residual value. The creditors must be repaid first.

When a loan (debt finance) is granted, lender and borrower enter an agreement with provisions on the repayment terms and interest payments. In principle the invested money is thus fully repaid to the financier. If the company goes bankrupt, its debts may have to be repaid through the sale of its assets. Some debts are negotiable; these are generally referred to as bonds. Bank deposits are a special form of debt as they are in principle repayable on demand and are easy to transfer, including in specific amounts.

5.2.1 *Financing Institutions Operating on the Basis of Debt*

In this variant, private financing institutions operate largely on the basis of debt and partly on the basis of equity (to absorb any losses). These institutions must first borrow money from households and companies before lending it to other households and companies. When companies and individuals take out loans, the financing institution transfers them money in exchange for a debt contract. Conversely, those who lend money to the financing institution receive debt securities in return. Financing institutions then have debts to those who have deposited money. These can be registered debts (investment accounts) or negotiable debts (bonds). In contrast to our current system, these debts are not repayable on demand.

Figure 5.3 illustrates this process with the aid of balance sheets. While this example uses investment accounts, the same process applies in principle to negotiable debts (bonds). For convenience, we assume that the central bank administers the payment system and that financing institutions have accounts at the central bank. We can see how the process operates when Elisabeth makes €1000 available to the financing institution, which then lends it to Company X. This is a simplified example, with the illustration showing the *changes* that ensue from lending.

We note that financing institutions borrow and then lend *existing* money; they thus operate as true intermediaries. The money supply does not grow or contract as a result of these activities, but remains unchanged at €2000. At the same time, something happens in the financial system, where *new* claims are created. Elisabeth now has a claim of €1000 (plus interest) against the financing institution and this

cooperatives have members' accounts where members deposit money. Cooperatives can also build up equity through retained profits, with equity certificates purchased by members or in exceptional cases by external parties (Van der Sangen 2012).

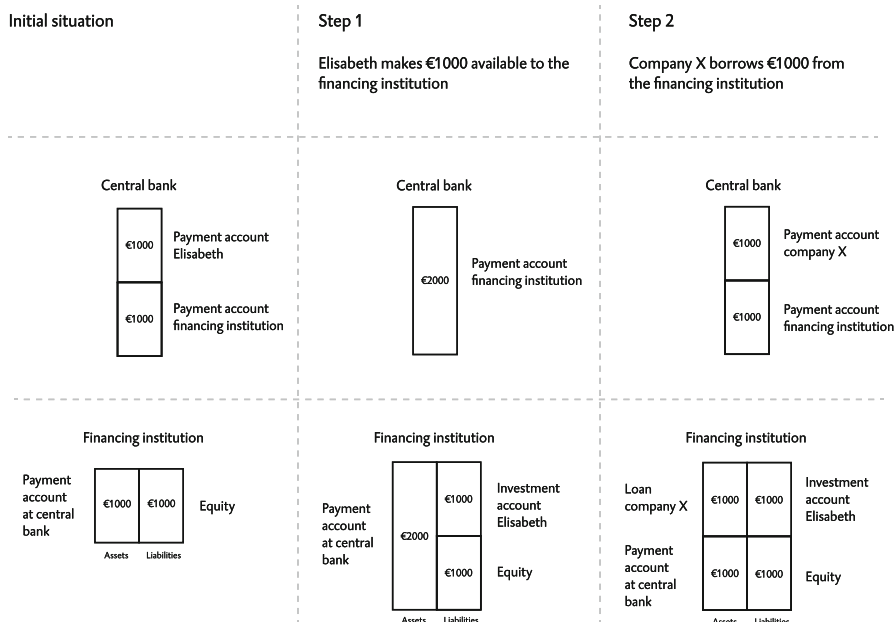


Fig. 5.3 Lending in the sovereign money system

institution has a claim of €1000 (plus interest) against company X. These claims disappear if the company repays its debt and the financing institution then repays Elisabeth. Finally, note that although the lending has no effect on the *money supply*, it does affect the size of the claims. If the company borrowing the money purchases something from another company, it is possible that this other company makes the money available to a financing institution. New loans can then be granted. Hence the credit supply is not fixed (see also Sect. 6.1).

If financing institutions operate on the basis of debts (bonds or investment accounts), a crucial question concerns their maturity period. Some proposals do not require debts and loans to have the same maturity period; as in our current system, we will then have maturity transformation. But although a financing institution may have outstanding loans with an average maturity of 10 years against debts with an average maturity of one year, the debts are not repayable on demand. Investment accounts will also have either a predetermined maturity or a particular notice period before they can be turned into central bank deposits.²⁶

If financing institutions operate on the basis of debts with shorter maturity than their assets, bank runs and failures remain possible. If large numbers of people simultaneously seek to convert their investment accounts into central bank deposits, at maturity or after the notice period, the financing institution may have difficulties honouring their requests. The financing institution will likewise encounter problems

²⁶Dyson et al. (2016); Huber (2017)

if it cannot issue new bonds, as it will then have to sell its long-term loans. If this happens in a recession at below cost price, the institution may collapse. This would amount to a slow-motion bank run. The sovereign money proposals consider this risk as part of the game; hence they do not support public guarantees for investment accounts or bonds issued by financing institutions.²⁷ Positive Money argues that the financial part of the system should operate on the basis of shared losses, with investment account holders also suffering losses if that is necessary to prevent bankruptcy.²⁸

5.2.2 *Financing Institutions Operating on the Basis of Equity Only*

In another variant – for example in Kotlikoff’s *Limited Purpose Banking* plan – financing institutions are financed only with equity. They thus only issue negotiable *shares*; in other words, they offer investment funds. Many different types of investment funds can be created, each with a different risk profile and maturity: mortgage funds, corporate loan funds, etc.²⁹

The main difference with the former variant is that profits and losses are now shared evenly among all financiers. In the Kotlikoff plan, everyone is a shareholder. If the value of the portfolio falls, the value of the share also falls. No risk transformation takes place within the investment fund as all shareholders reap the profits as well as the losses; nor is there any maturity transformation. Funds can be differentiated by the *type* of maturity. A fund with a 30-year maturity is liquidated after 30 years, at which time shareholders receive the proceeds.³⁰ But shareholders can try to sell their shares at any time.

The allocation of risks in a financial system where financing institutions operate on the basis of debt differs substantially from a system where institutions operate entirely on the basis of equity. The latter suffers neither bank runs nor refinancing risks. On the other hand, investors are directly exposed to losses on their investments.

²⁷See e.g. Dyson et al. (2016: 24)

²⁸Dyson et al. (2016: 25)

²⁹Cf. Chamley et al. (2012). Kotlikoff’s proposal also includes money market funds, which are in fact payment institutions. These funds are only permitted to hold government bonds or central bank reserves, so their value is stable. A share of this money market fund can be used to buy a share in an investment fund. Conversely, borrowers can receive money from a financing institution in the form of new shares in the money market fund.

³⁰Kotlikoff and Goodman (2009: 8); Van Dixhoorn (2013: 28)

5.2.3 *Private and Public Lending*

The proposals for sovereign money differ amongst themselves regarding the government's role in lending. Benes and Kumhof allow for the possibility that private financing institutions are partly financed by the central bank.³¹ The central bank would lend money to the financing institution at a particular interest rate; this would mean that, in principle, the central bank can influence the interest rates charged by private financing institutions. If the central bank finds that sufficient credit is unavailable or only available at an excessive price, it can make more money available at a lower rate. Conversely, excessive lending can be curbed by reducing central bank loans or raising their price.

Other proposals acknowledge the advantages of this set-up but remain more cautious.³² In normal circumstances, lending should be a purely private matter; lending sovereign money to private financing institutions should only happen in exceptional circumstances. The caution is understandable given the aim of stopping financing institutions from creating money by granting loans. We can imagine a situation in which financing institutions, being 'short of money', cannot meet the demand for credit. If the central bank then creates new money to lend to financing institutions, this resembles the current situation in which money is created in response to demand for credit.

5.3 Monetary Policy and Financial Regulation

A fundamental reorganization of the financial monetary system would have major consequences for monetary policy and financial regulation. We first address the creation, allocation and destruction of money before turning to financial regulation and the independence and legitimacy of the central bank.

5.3.1 *The Creation, Allocation and Destruction of Money*

A common feature of the proposals discussed in this chapter is that new money can *only* be created by public institutions. The liabilities of private financing institutions no longer serve as money; at any rate, this is the aim. In most proposals for an alternative system, the task to create money is assigned to an independent public institution or commission.³³ Various proposals refer to this body as a fourth,

³¹Benes and Kumhof (2013)

³²Huber (2017)

³³Huber (2017: 147); Ons Geld (2016)

money-creating power alongside those of the legislature, executive and judiciary.³⁴ For the sake of convenience, we assume the responsibility of money creation rests with the central bank.

To be clear, our current system allows central banks to create or destroy money, both cash and (indirectly via commercial banks) deposit money. The crucial difference is that in the current system the central bank does so only in exchange for the financial assets of other institutions. In the proposals for an alternative system, the central bank can create money ‘out of nothing’. This raises numerous questions, which we briefly address below. What objectives should central banks pursue? How do central banks know how much money should be created or destroyed? Who determines the *allocation* of the newly created money? Will central banks still pursue an interest rate policy?

What goals central banks pursue is ultimately a political decision. We saw earlier that monetary policy does not have fixed goals. In response to runaway inflation in the 1970s, many European countries decided that central banks should aim primarily for price stability, generally defined as inflation stabilized at around 2%. In the United States, the Fed has additional formal objectives, namely contributing to maximum employment and low long-term interest rates. Central banks also often have a range of other goals such as financial stability, an efficient and reliable payment system and protecting depositors. In any case, the money-creating authority could pursue a range of goals or limit itself to the common objective of price stability.³⁵

How does the central bank determine how much new money to create? One possibility is adhering to a particular rule, for example allowing the money supply to rise as fast as nominal economic growth (i.e. real growth plus price rises). Another possibility, one closer to the current situation, is to give the central bank decision-making discretion. Although it could apply a rule of thumb (‘let the money supply rise in line with economic growth’), it would be possible to deviate from it. Because the interplay between consumer prices, asset prices, interest rates, exchange rates and debt volume are complex and variable, and because economic cycles are influenced by more than just money supply, Huber argues that it is impossible to adhere to a fixed rule.³⁶ Both Huber and *Ons Geld* therefore give the money-creating authority discretionary powers.³⁷

All this relates to the transmission mechanism of money creation: the effect of the central bank’s actions on the ultimate policy goals. The *allocation* of the new money plays an important role in this regard. New money can be used to:

- increase government spending (or maintain it at current levels while cutting taxes);

³⁴Dyson et al. (2016); *Ons Geld* (2016)

³⁵Dyson et al. (2016)

³⁶Huber (2017: 157)

³⁷Huber (2017); *Ons Geld* (2016)

- pay down outstanding government debt;
- transfer money directly to households (helicopter money);
- lend money to financing institutions.³⁸

How new money enters the economy will affect the macroeconomic impact. For example, transferring money directly to households will have a different effect on price stability than lending it first to financing institutions. *Positive Money* argues that the central bank cannot predict with precision the effects of new money entering the economy.³⁹ If people use it to purchase consumer goods, it can cause immediate price pressure. But households may also decide to save the money. The creation of money affects purchasing power, but how this translates into wider objectives such as employment, economic growth and inflation depends ultimately on the decisions of a large number of actors.

Who decides how the new money is allocated? Most proposals assume a clear separation of responsibilities. *Positive Money*, for example, argues that politicians should decide how the new money is spent.⁴⁰ The central bank would then decide on the appropriate *size* of the money supply in light of monetary policy objectives. We thus see a convergence of money creation policy and fiscal policy, requiring the central bank to be well informed of political decisions. Consultation between central banks and politicians is nothing new; monetary policy affects fiscal policy in the current system through interest rate policy, inflation (which reduces the value of government debt) and the buying up of government bonds. Nevertheless, the relationship between the central bank and politicians would change in a sovereign money system. We address this in greater detail in the next chapter.

Although the proposals for an alternative system devote a great deal of attention to how new money enters the economy, there is scant attention to what should happen if, in the central bank's view, too much money is in circulation. On this subject *Ons Geld* states: "The government would be given the power to adjust the demand for and distribution of these funds. Redistribution traditionally takes place through taxation. Instruments can also be put in place which restrain or boost demand for government money."⁴¹ Huber, *Positive Money*, and Benes and Kumhof do not address this issue.⁴² Whether the threat of inflation should be tackled only by *reducing* money creation or also by 'taking money out of circulation' (for example by increasing taxes) remains unclear.

³⁸See for example Huber (2017: 162); Dyson et al. (2016: 28); Wortmann (2017)

³⁹Dyson et al. (2016: 51)

⁴⁰Dyson et al. (2016: 30)

⁴¹*Ons Geld* (2016). Our translation.

⁴²Huber (2017); Dyson et al. (2016); Benes and Kumhof (2013)

5.3.2 *Regulating the Financial System*

Most advocates of sovereign money emphasize that the government would not need to regulate financing as intensively as in the current system. Since the payment system would be protected from financial risks, the government can afford to be less involved. The plans thus mainly emphasize what will *no longer* be required: deposit guarantees, thousands of pages of financial legislation and costly bailouts.⁴³ Most proposals nevertheless acknowledge that a degree of government involvement would be desirable. What responsibilities would the government have in the new system?

Kotlikoff argues that the government should be in the business of assessing credit risks. He calls for a new supervisory body, the Financial Authority, to examine and rate all financial instruments.⁴⁴ People looking to invest their money would thus know that a public authority has examined all available products and assessed their risks. Financing institutions could also make use of private rating agencies, as could the Financial Authority to help with risk analyses, provided that these rating agencies have no financial interests in the companies being assessed. The government's primary responsibility would thus be certification and verification to ensure that financing operates smoothly.

The proposals differ on whether financing institutions should be subject to regulation. In Kotlikoff's system, all financing institutions take the form of investment funds and operate entirely on the basis of equity, rendering current policies on capital and liquidity superfluous. A body similar to the Netherlands Authority for Financial Markets (AFM) or the UK's Financial Conduct Authority could ensure that investors are not misled (for example with false promises about returns or incorrect information on investment portfolios) and that no fraud is committed. Competition law could also play a role.

If financing institutions finance themselves through a combination of equity and debt, there is greater need for regulation. *Positive Money* refers explicitly to the need for capital regulations. Here policymakers could choose between *risk-weighted* capital requirements, unweighted capital requirements (a minimum leverage ratio) or a combination thereof.⁴⁵ This would ensure a buffer against losses, thereby protecting the holders of the financing institution's debt.

If maturity transformation is permitted – i.e. a financing institution's assets have a longer maturity than its liabilities – liquidity may also need to be regulated. It is crucial to ensure that financing institutions do not issue deposits that are repayable on demand, as this would look suspiciously similar to current bank deposits. The consequence would be the emergence of a parallel private payment system – shadow money – which is precisely what proposals for an alternative system are seeking to avoid. To prevent them from being used as shadow money, regulators need to ensure

⁴³Dyson et al. (2016: 12–13); Kotlikoff (2010: 132)

⁴⁴Kotlikoff (2010)

⁴⁵Dyson et al. (2016: 25–6)

that the deposits issued by financing institutions have a minimum maturity or notice period.

A key question is how the government should address instability and crises. The proposals all agree that governments should no longer provide guarantees and not be obliged to rescue private institutions from collapse (since the payment system will remain intact). There would be no need for the government to act as a lender of last resort; institutions would simply be allowed to fail. The general principle is that since the payment system is secure, the government can leave financing to its own devices. Chapter 6 will discuss whether this is a tenable position.

5.3.3 Independence and Accountability

In the alternative system, the creation of money is the preserve of public institutions. The proposals therefore emphasize that these bodies must be sufficiently independent from politics and politicians. Although parliament and government can set the objectives of monetary policy and determine how new money is allocated, they would not be permitted to control the money *supply*. The central bank must be independent, much like the judiciary. Huber proposes that the governor and board members of the central bank be appointed for fixed terms with the possibility of reappointment. During this period, their positions would not be at risk. Their independence, however, must include a degree of accountability to elected politicians.⁴⁶

5.4 Transition to the New System

The proposals discussed in this chapter call for a monetary financial system in which all money is either fully covered by sovereign money (central bank reserves) or *is* itself sovereign money. How can this be achieved? The transition has two elements, which we discuss below: (1) the payment system must be kept separate from the financial system, and (2) changes must be made to the current system of financing.

5.4.1 Towards a New Payment System

How do we achieve the new payment system? The first question is which bank deposits are eligible for conversion into sovereign money. Here the proposals differ. *Positive Money* argues that only sight deposits should be eligible, while customer

⁴⁶Huber (2017)

Table 5.1 Payment and savings account deposits on Dutch bank balance sheets (in billions of euros; August 2018)

	Payment accounts	Savings accounts	Savings accounts with fixed maturity	Total	Total as % of bank balance sheet
Dutch account holders	273	406	88	768	32%
Account holders in rest of euro area	58	8	10	76	3%
Account holders outside euro area	118	27	60	205	8%
Total	449	441	159	1048	43%
Total as % of bank balance sheet	18%	18%	7%	43%	

Source: DNB Table 5.2.5

savings and time deposit accounts are not.⁴⁷ *Ons Geld* uses a broader definition comprising “all savings and payment accounts (bank money deposits) that account holders currently consider to be their money, i.e. regardless of the maturity”.⁴⁸ The scope of the deposits to be converted is no insignificant matter. Table 5.1 shows that in the Netherlands the difference amounts to €600 billion (the difference between €449 and 1.048 billion).

A choice must also be made about the design of the new payment system. As discussed above, there are two options. The first is that all payment accounts are placed with independent payment institutions, which are required to cover them 100% with central bank reserves. The central bank would thus have to create and lend to the banks reserves equal to the fully covered bank deposits. The payment part of the institution will then be separated from the rest – either as an independent company or as a subsidiary of the wider financial institution. This transition is illustrated in Fig. 5.4.

The second option is placing all payment accounts at the central bank. This would entail transferring the eligible bank deposits at the commercial banks to the central bank, simultaneously accompanied by new loans from the central bank to these banks to replace the transferred deposits.

The transition could take place gradually or, following a preparatory period, overnight. In the gradual variant, the central bank would offer households the possibility of opening an account. If households transfer their money from a commercial bank to the central bank, the central bank can lend this amount back to the commercial bank in the form of a loan to stabilize the commercial bank’s balance sheet. Bank deposits would gradually be replaced by central bank accounts, giving rise to a parallel *public* payment system. The result would be a hybrid

⁴⁷Dyson et al. (2016: 40)

⁴⁸*Ons Geld* (2016: 15). Our translation.

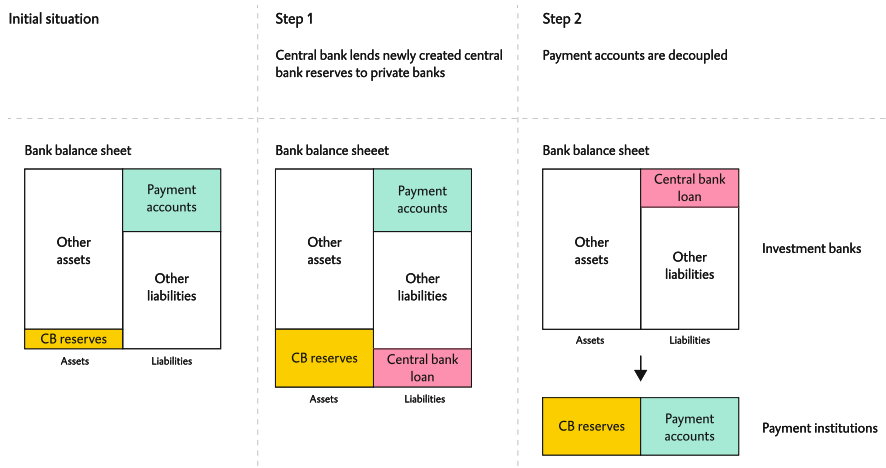


Fig. 5.4 Towards separate payment and financing institutions

Note: The ratios in the bank balance sheet are merely indicative. They would depend on how ‘payment accounts’ are defined and whether the deposits of non-Dutch account holders are also transferred.

system – with payment accounts that are not yet fully covered by central bank reserves and banks that are still able to create new money through lending.

To move from the hybrid system to a fully sovereign money system, there must be an end date by which all payment accounts have been transferred to the central bank. After this date, bank deposits (except central bank loans) would be converted into investment accounts, bonds or shares, while banks would no longer offer payment accounts.

5.4.2 Towards a New Financial System

Once the above transition has been completed, adjustments would need to be made in the financial system. After the transition, as shown in Fig. 5.4, financing institutions would have substantial debts to the central bank. How could this debt be reduced? Financing institutions could use the government bonds they hold to repay part of it. The remainder could be repaid over the long run on the basis of interest payments and repayments of outstanding loans from households and businesses. This could take a long time, for example in the case of mortgages. Benes and Kumhof suggest the government could create sovereign money to pay everyone a citizen’s dividend to instantly reduce private debt.⁴⁹

⁴⁹Benes and Kumhof (2013)

There is also the question of what would happen to the financing institutions' other liabilities (savings deposits and bonds). In the limited purpose banking model, all outstanding liabilities would have to be converted into shares.⁵⁰ The lenders to the bank would thus become shareholders. If financing institutions were still permitted to operate on the basis of debt, savings accounts would be converted into investment accounts or bonds.⁵¹

Positive Money devotes specific attention to whether the financial part of the system would continue to operate during and immediately after the transition period. As financing institutions will need to raise money before they lend it, they may initially have no or little money to lend. *Positive Money* leaves the option open for a temporary period in which financing institutions can borrow new money from the central bank in order to meet the demand for credit. At the same time, they can increase their stock of money through interest income on outstanding loans and raising money from the payment system. In their view, financing must ultimately be able to operate on an entirely private basis.⁵²

5.5 Conclusion

This chapter examined plans to restructure our current financial monetary system into a sovereign money system. All proponents agree that the system for payments must be strictly separated from the system for financing. In the new payment system, all money is directly or indirectly sovereign money. New money can no longer be created by private institutions; only the central bank can do this. Lending by financing institutions must take place on the basis of *existing* money. Financing institutions must raise money from households and businesses before they can lend it.

Alongside these commonalities, the plans harbour some significant differences. Some want payment accounts to be held directly at the central bank; others, at payment institutions that fully back this money with central bank reserves. The plans also envision different ways in which new money enters the economy. In some plans, financing institutions are only permitted to operate on the basis of equity; in others, they are also permitted to issue debt certificates. The proposals also differ in the type of policy and supervision to which financing institutions are subject; nor are the objectives of monetary policy and relationships between the central bank and politicians set in stone. Finally, there are multiple – gradual or rapid – transition options. Table 5.2 provides an overview of the differences and similarities.

While this chapter has discussed variations in the design of the sovereign money system, we have yet to consider its possible advantages and disadvantages.

⁵⁰Kotlikoff (2010: 152)

⁵¹Dyson et al. (2016)

⁵²Dyson et al. (2016)

Table 5.2 The core and variations of the sovereign money system

	The core of the sovereign money system	Variations in the sovereign money system
Money	All money is directly or indirectly public.	Money is placed in an account at the central bank or in a payment institution that covers it 100% with central bank reserves.
Money creation	Money cannot be created by commercial banks, only by the central bank.	Newly created money can be used for: (1) government spending, (2) paying down government debt, (3) direct transfers to households, and (4) lending directly or indirectly through financing institutions.
Lending	The institutions that grant credit (financing institutions) are clearly separate from the payment institutions (or the central bank) at which the money is held. Financing institutions cannot create new money to grant loans; they must raise the money first.	Proposals disagree on the extent to which the maturity of loans and the maturity of the institution's financing can differ, and on how institutions finance themselves: Are deposits fixed in value (a debt contract between institution and financier) or do they rise and fall with the performance of the institution (such as shares in an investment fund)?

Proponents contend that it scores much better on economic contribution, stability, fairness and legitimacy than our current system. The following chapter considers their arguments and the objections from critics.

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