

Research for Policy

Bart Stellinga
Josta De Hoog
Arthur van Riel
Casper de Vries



Money and Debt: The Public Role of Banks

Summary

WRR

THE NETHERLANDS SCIENTIFIC COUNCIL FOR GOVERNMENT POLICY



Springer Open

About the Netherlands Scientific Council

The Netherlands Scientific Council for Government Policy (WRR) is an independent strategic advisory body for government policy in the Netherlands. It advises the Dutch government and Parliament on long-term strategic issues that are of great importance to society. The WRR provides science-based advice aimed at opening up new perspectives and directions, changing problem definitions, setting new policy goals, investigating new resources for problemsolving, and enriching the public debate.

The studies of the WRR do not focus on one particular policy area, but on crosscutting issues that affect future policy-making in multiple domains. A long-term perspective complements day-to-day policy-making, which often concentrates on the issues that dominate today's policy agenda.

The WRR consists of a Council and an academic staff who work together closely in multidisciplinary project teams. Council members are appointed by the Crown, and hold academic chairs at universities, currently in fields as diverse as economics, sociology, law, public administration and governance, health, and water management. The WRR determines its own work programme, as well as the content of its publications. All its work is externally reviewed before publication.

This is a summary of the book *Money and Debt: The Public Role of Banks*, available via www.springer.com. The book is a translation and adaptation of the Dutch report *Geld en Schuld: de publieke rol van banken*, published by the Netherlands Scientific Council for Government Policy (WRR) in 2019. The Dutch report can be downloaded free of charge in PDF format from www.wrr.nl.

Content design: Textcetera, The Hague
Cover image: Textcetera / WRR
Figures and tables: Textcetera / WRR
Translation: Taalcentrum VU

Money, as the saying goes, makes the world go round. Everybody uses it; our modern societies would not function without it. Credit is just as crucial, as borrowing allows businesses to invest and consumers to buy goods and services today against their future income. But although money and debt are of fundamental importance to our society and to our welfare, how they actually function is not easily understood.

The financial crisis of 2007-9 and its social, economic and political consequences have led to debates in many countries about fundamental reform of the financial-monetary system. Citizens' initiatives – such as Positive Money in the United Kingdom – have pushed for a debate on a fundamentally different monetary system, called the sovereign money system.

New cryptocurrencies, such as Bitcoin, have similarly triggered debates on monetary reform. In addition, many central banks are now considering whether they should start issuing central bank digital currency (CBDC), a digital alternative to cash. A common thread in all these debates is that people are reassessing the fundamentals of the financial-monetary system, in particular society's dependence on commercial banks.

In the Netherlands, the citizens' initiative 'Ons Geld' (Our Money) has placed monetary reform squarely on the public and political agenda. In 2015, the initiative – inspired by a popular theatre play that portrayed a financial system ridden by greed, elitism, instability and injustice – proposed placing money creation exclusively in public hands. This proposal gathered more than 120,000 signatures. In the ensuing Parliamentary debate in March 2016, a motion was adopted requesting the government to seek advice from the Netherlands Scientific Council for Government Policy (WRR) on the advantages and disadvantages of different monetary systems. The WRR published this report (in Dutch) in January 2019.

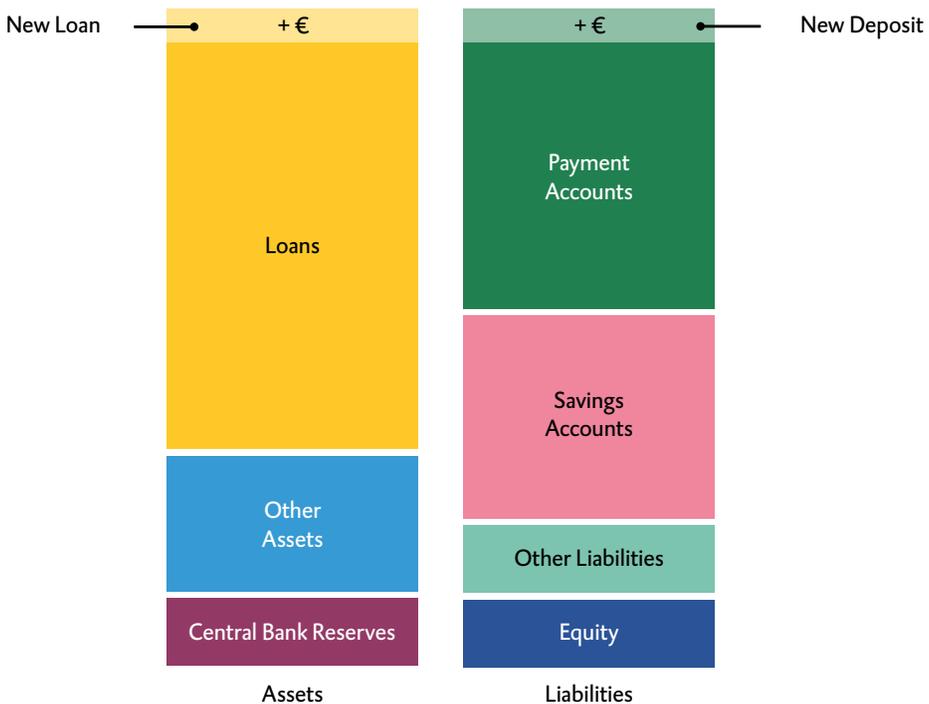
The Springer book *Money and Debt: The Public Role of Banks* is the translation of this report. It explains how money creation works in today's economies and how the circumstances for money creation have changed drastically over time. It discusses the problems of the current system and investigates whether a 'sovereign money system' offers an effective solution to these problems. Finally, it includes a number of recommendations to address these issues. Below we provide a brief summary of the book, and we will also briefly discuss how the report has influenced the Dutch policy debate.

Money creation

When we think of money, we usually picture banknotes and coins. But cash makes up only around seven percent of the money supply in the Netherlands. By far the largest part of the money supply – in the Netherlands more than 90 percent – consists of bank deposits (money in bank accounts). Bank deposits are in fact debts owed by the bank to the account holder. This type of money is created when commercial banks make loans.

How does this work? Whenever a bank grants a loan, the outstanding loan is a new asset for the bank; the borrower has to repay it with interest. At the same time, the bank creates a new deposit in the borrower's bank account, equal to the amount of the loan (*see Figure 1*). This deposit is a debt owed by the bank to the account holder. The account holder can withdraw this money in cash, or use it to make debit card or electronic payments.

Figure 1 - Money creation: changes in a bank's balance sheet



Money, debt and banks are thus intimately related in our current monetary system. But while commercial banks create money by making new loans, this is not an unrestrained process. There are three important factors that influence money creation in the economy.

The first is the behaviour of citizens and businesses. Their demand for loans determines to what extent banks can make new loans and create money. It is also important how the new money from the loans is spent. If it is used to buy goods and services, and the recipients do the same, money creation can lead to additional expenditure. But if the recipients use it to repay their bank loans, the newly created money is 'destroyed' after one step. Just as money is created when banks grant loans, money is destroyed when borrowers repay the bank loans.

The second limiting factor concerns the balance sheet risks banks face when making loans and creating money. Banks run the risk that borrowers will be unable to repay their loans.

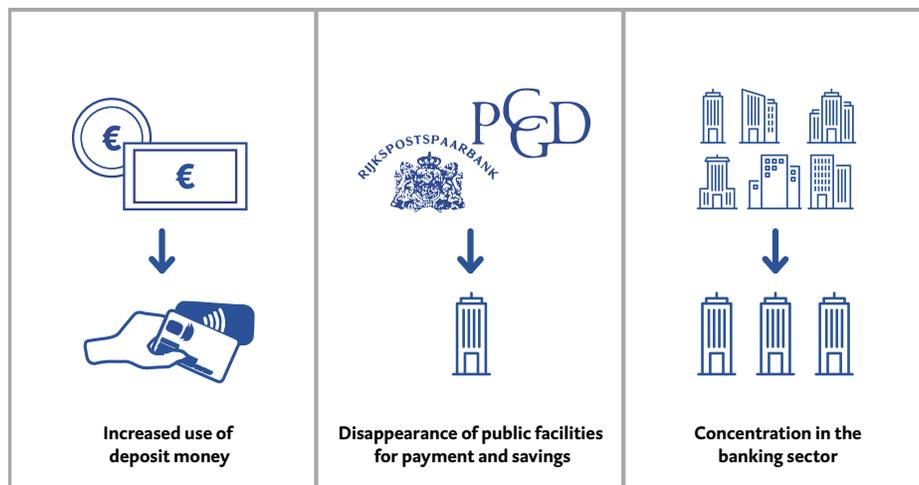
A bank must ensure it has sufficient equity capital to absorb losses. All other things being equal, extending more credit increases the risk of loan losses, potentially endangering the bank's financial health. Creating money also increases liquidity risk, because a bank deposit is a debt owed by the bank to the account holder. Citizens and businesses can convert bank deposits into cash or transfer them to another bank. In such cases banks must have sufficient cash and central bank reserves. These risks act as a constraint on money creation. Since the viability of banks is of key importance for financial stability, there are also legal requirements in this domain (capital and liquidity requirements) that have a constraining effect.

The third factor is that monetary policy influences money creation. The interest rates set by the central bank have a major influence on other interest rates, exchange rates and stock and bond prices. All these factors in turn affect demand for loans and banks' willingness to grant these. In the wake of the financial crisis, many central banks also engaged in large-scale asset purchases ('quantitative easing'). This lowers interest rates and potentially increases demand for credit. Insofar as quantitative easing involves purchases of assets from non-bank institutions, it also increases the money supply.

Money creation in a changed environment

Banks' ability to create money by making loans has existed for a long time. What has changed, however, is the context in which this money creation takes place.

The Dutch monetary system has changed remarkably over the past decades (*see Figure 2*). First, there has been a shift from cash to deposit money. In the 1950s, bank deposits accounted for just over 50 percent of the money supply. Today the figure is more than 90 percent. Second, public payment and savings facilities have all but disappeared. Before the 1990s, many citizens and businesses had deposit and savings accounts with public facilities (the Postcheque- en Girodienst and the Rijkspostspaarbank, which later merged into the Postbank). But in the 1990s, public authorities privatized the Postbank, which thus became part of the bank-insurance company ING. Third, the Dutch banking sector became much more concentrated and homogenous. A diverse banking landscape with several different types of banks slowly changed into a landscape with three large and very similar banks. These three developments – the shift to deposit money, the disappearance of public banks, and the concentration of banking sectors – have also affected the monetary systems of many other developed economies.

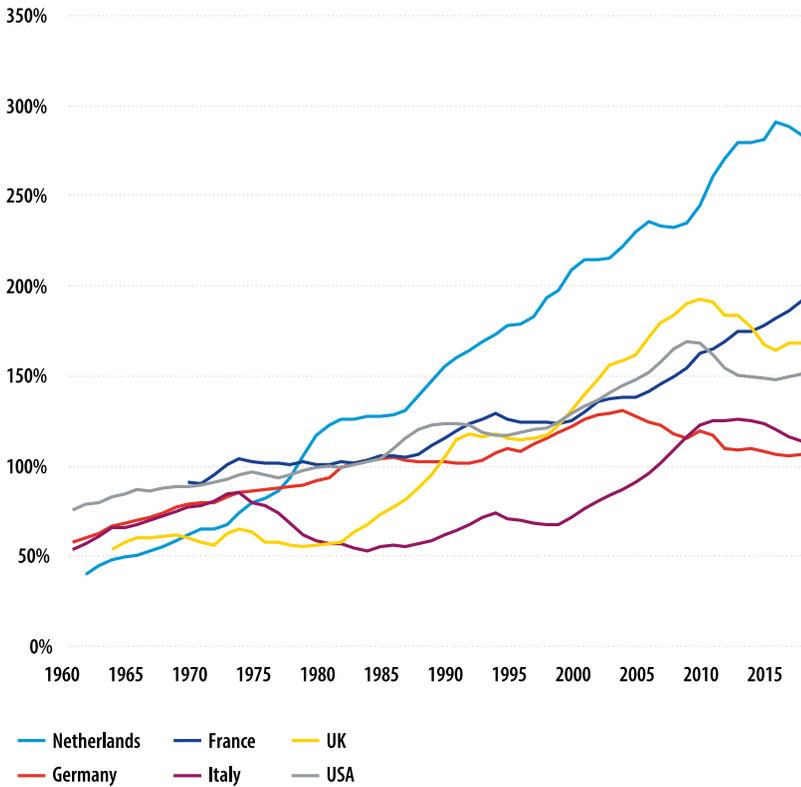
Figure 2 - Changed circumstances: three key developments

The changed circumstances are important because they have changed the risks for banks associated with money creation. The risk that money creation leads to a net outflow of funds, either because it is converted into cash or transferred to other banks, has declined considerably, along with the need to maintain a high level of reserves and readily saleable assets. The large banks' systemic relevance also means that these have an implicit government bail-out guarantee, reducing the risk of failure. This means that constraints on money creation are less strong.

The history of monetary systems shows a permanent need to balance stringency and flexibility. Too many constraints can ultimately prove problematic for economic growth, and exacerbate crises. Too much flexibility creates credit and asset bubbles, increases the risk of crises or fuels inflation. The changed environment, along with financial liberalization and central banks discarding more direct policy tools (such as reserve requirements and credit ceilings), has significantly reduced the constraints on money creation and lending that existed in the decades after the Second World War. The balance has shifted too far towards flexibility.

Two core problems

We identify two core problems in our current system: the high level of debt and the imbalance between public and private interests. The level of private debt is historically unprecedented. While the Netherlands is exceptional, private debt has also risen sharply in other countries (*see Figure 3*). In addition to the aforementioned flexibility in the monetary system, various other factors play a role. These include the debt bias in taxation, indirect government support for banks, and housing market and pension policies. People commonly assume that high debts pose no problem as long as there are sufficient matching assets and the debts are fully repaid in a timely manner. But even then, high debt levels can create problems: they contribute to financial instability, longer recovery after a crisis and increased economic volatility.

Figure 3 - Private debt as a percentage of GDP

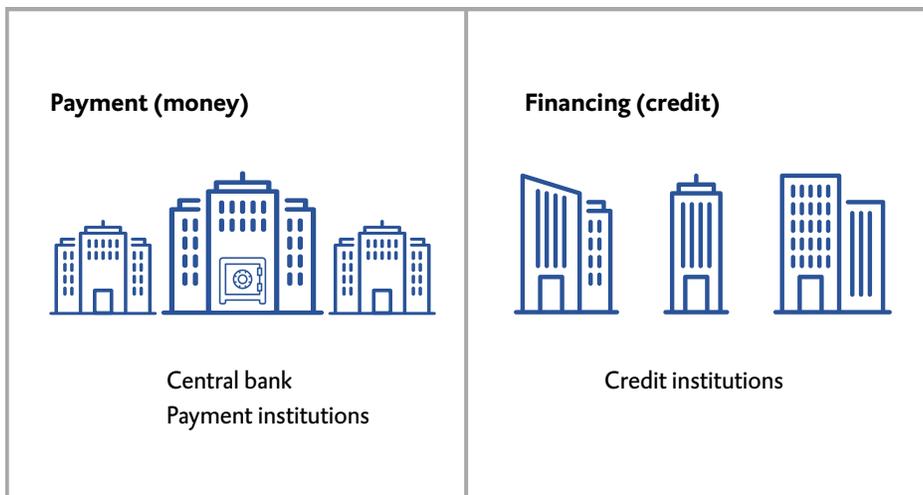
The second problem is the imbalance between public and private interests in the banking sector. Over the past 50 years an ever-larger part of the banking sector has started operating as purely commercial institutions. At the same time, the public role of banks has grown considerably. The growing importance of bank deposit money, the disappearance of public payment and savings facilities, and concentration in the banking sector have led to a limited number of banks becoming essential for key public services, such as the payment infrastructure, lending and financial stability. Simultaneously, public authorities have become ever more involved in the functioning of the banking sector. Banks' size and the important role they play in payments and lending mean that the implicit and explicit government guarantees have increased – witness the numerous and substantial bank bail-outs during the 2007-9 crisis. Banks have thus become de facto semi-public institutions. There is a need to restore the balance between public and private interests.

The ‘sovereign money system’ as the solution?

In several countries, including the Netherlands, there is an active debate as to whether a so-called ‘sovereign money system’ could solve the problems of our current system. These debates are inspired by a plan developed in the 1930s in the United States, known as the Chicago Plan. In the Netherlands, the citizens’ initiative ‘Ons Geld’ proposes a shift to such a sovereign money system. Similar proposals have also been discussed in other countries, such as Iceland, the United Kingdom (Sovereign Money) and Switzerland (Vollgeld).

These proposals vary in some ways, but essentially propose separating the payment and credit roles of banks (*see Figure 4*). The banking sector would be split into two parts: one for payments, the other for financing. In the payment part, money is either held in accounts directly at the central bank or in accounts at payment institutions that are fully backed with central bank reserves. These payment institutions would therefore be ‘full reserve banks.’ In this system, new money can only be created by the central bank. Newly created money enters the economy through government spending, loans or possibly direct transfers to citizens. The new money can also be used to reduce taxes or repay government debt. In the financing part, credit institutions must first raise money before they can grant loans. This means that these institutions cannot create new money. People who lend money to these credit institutions may suffer losses and cannot demand instantaneous repayment of their loans.

Figure 4 - A sovereign money system



While the wish to separate money and credit is understandable, it would bring many new uncertainties. If money creation is the sole preserve of the central bank, the central bank could, in theory, ensure the money supply does not get out of hand. The opposite is also conceivable. Without adequate checks and balances, centralizing the power to create new money could lead to excessive money creation. Another issue is whether there would still be enough credit available to facilitate the growth of the economy. How likely is it that money-like instruments (shadow money) would develop in the financing part, which would make the new system rather similar to our current system? What happens when there is a crisis in the financing part? Is it realistic to completely rule out public support for financial institutions in trouble?

The monetary system is ultimately not a technical but a social system. The behaviour of citizens, businesses, banks, politicians and policymakers is of fundamental importance. It cannot entirely be predicted or steered. What works well on the drawing board may therefore turn out to be very different in practice. Furthermore, a sovereign money system as envisaged by its proponents has never been implemented. This means it is impossible to determine conclusively whether the intended system will perform better than our current system.

Finally, transition risks and the international context are major barriers to its introduction. Because of the uncertainties faced by citizens, businesses and banks, it is impossible to rule out a crisis during the transition. It is also unclear how the system would operate in a context of major international interdependencies, such as the Dutch membership of the eurozone. Given the fundamental importance of our monetary system, the WRR considers a transition to a sovereign money system to be a risky experiment with the backbone of the economy.

Proposals for a sovereign money system, however, are worth studying for several reasons. These plans enable us to reflect on our current system from a different perspective, reveal a number of major problems therein and may act as a source of inspiration for fundamental reforms.

Recommendations

To achieve more sustainable debt levels and to restore the balance between public and private interests, our financial system needs to change in several important ways. We make four recommendations:

- Promote diversity in the financial sector
- Curb the excessive growth of debt
- Be better prepared for the next crisis
- Safeguard the public responsibilities of the banking sector

Promote diversity in the financial sector

Diversity in the financial sector is important for a number of reasons. These reasons go beyond increasing consumer choice or reducing prices. Diversity in the financial sector is even more important than in other sectors, because it is essential for financial stability and is a prerequisite for a more balanced development of money and credit. Although there has been considerable debate about the need for more diversity in banking sectors, post-crisis reforms have not achieved the desired results. On the contrary, in terms of balance sheet size the three large Dutch banks' share increased from 71 percent in 2006 to 75 percent in 2016.

To genuinely increase diversity in the banking sector, we propose the introduction of an alternative payment and savings option, alongside the existing banks. This could take the form of a public or private full reserve bank (a payment institution). A more ambitious reform would be the introduction of a central bank digital currency, the electronic equivalent of cash. Such an alternative payment and savings option would definitely require changes in how commercial banks operate, for example in how they are financed. We can expect the mere existence of such an alternative to have a disciplining effect on the other banks, thereby reducing their dominance.

More action is also needed to reduce the dominance of the systemically important banks. These banks enjoy several implicit or explicit government subsidies, giving them an unwarranted competitive edge over smaller institutions and newcomers. Taxing systemic risk more heavily is a way to discourage systemic importance. Public authorities could also actively encourage challengers, for example by having different regulatory regimes for different types of banks, as was the case up until the 1980s.

Curb excessive debt growth

Lower debt levels are important for greater stability, a faster recovery after the next crisis and more balanced economic development. Although public authorities have taken several measures to curb excessive debt growth, total private debt is now higher than before the crisis. Additional efforts are therefore required.

An important step in this regard is aligning the tax treatment of debt and equity. This can be achieved by limiting the tax deductibility of debt interest payments. Another strategy is to make equity more attractive by allowing a fictitious return deduction on equity, while simultaneously increasing corporate tax levels slightly to ensure budget neutrality.

Curbing excessive debt growth also requires strengthening existing macroprudential policy frameworks, which specifically target systemic risks. This also requires more attention to be devoted to policy coherence. Macroprudential policy ultimately has a limited effect if other policy areas, such as monetary policy, bank supervision and socioeconomic policies, encourage credit growth. It is therefore important that public authorities pay sufficient attention to other policy domains' impact on debt levels.

Be better prepared for the next crisis

In our report (published in January 2019) we warned that the financial system is inherently unstable, emphasizing the importance to be better prepared for the next crisis. We pointed out that far-reaching measures may be proposed during the next crisis, including more controversial measures such as the option of monetary financing of government expenditures, ‘helicopter money’, or use of the OMT (Outright Monetary Transactions) program. As the time available to take decisions during a crisis is fairly limited, we argued that it is essential to think through and prepare for various unconventional measures in advance, for example by means of scenario analysis.

At the time of publishing the Springer book, the COVID-19 pandemic has swept across the world, with major social, political and economic consequences that we will continue to feel for some time to come. To limit the economic and financial damage central banks and governments have taken unprecedented measures. Although the Springer book does not address the COVID-19 crisis, we believe several of our recommendations remain as relevant today as they were before, or maybe even more relevant.

In the first place it is important to take losses in a timely manner, thereby creating better circumstances for recovery. If problematic financial positions are not tackled, the aftermath of a crisis can be long drawn out. In the Netherlands, almost all of the credit risk is borne by the debtor. Both from the perspective of fairness and with a view to rapid recovery after the crisis, it is important to consider a more balanced allocation of credit-related risks.

We also recommend to consider the possibility of enabling a mandatory general recapitalization of banks, even if some of these banks have not encountered severe problems themselves. The post-crisis recovery experiences of the United States and Europe show that a swift bank recapitalization is essential for a rapid recovery.

Safeguard the public responsibilities of the banking sector

The growing importance of deposit money, the disappearance of public payment and savings facilities, and concentration in the banking sector mean that banks are indispensable for key public functions. The combination of private activities and public functions causes permanent tensions. While these tensions are to a certain extent unavoidable, we argue that the public dimension of the banking sector must be better safeguarded.

First of all, this requires changes in the organization of banks. Societal interests must be better incorporated in banks’ activities. This could be achieved, for example, by requiring banks to set up an advisory council, comparable to the client boards that are common in Dutch healthcare institutions. Other business models – such as the cooperative model – could also contribute to strengthening banks’ focus on their societal roles. It is therefore important that centralization of European regulation and supervision (the Single Rulebook and Banking Union) allows for sufficient variety in banks’ business models.

Increasing banks' sensitivity to their public responsibilities also requires strengthening the position of citizens. One way to do so would be by increasing their 'exit options', by making it easier for account holders to switch to a different bank, and by providing an alternative payment and saving option (referred to earlier). But it is also important to improve their 'voice options', by ensuring that both banks and supervisors pay more attention to citizens' ideas and expectations.

The report's impact on the Dutch debate

In June 2019, the government gave its formal response in a Memorandum to Parliament, in which it acknowledged the importance of the report and its analysis and welcomed many of the recommendations. Additionally, Members of Parliament of both the House of Representatives and the Senate organised sessions to discuss the report with the authors, the citizens' initiative 'Ons Geld' and other financial sector stakeholders. We were also invited to present our findings at conferences organised by the Ministry of Finance and the Dutch central bank (DNB), among others.

The most tangible result of our report is its impact on the debate on the viability of central bank digital currency (CBDC). In response to a request by the Minister of Finance, the DNB published a report indicating that it has a 'favourable attitude' towards CBDC, noting that it would use this study to contribute to the EU policy debate and plans to take an active part in that policy debate and its further elaboration. Our recommendations have also inspired a Parliamentary report on CBDC, which called for permanent political involvement in decisions on its possible introduction at the EU level. Finally, our report played a role in the Parliamentary debate on the future role and position of 'De Volksbank' (which was nationalized in 2013).

Conclusion and key messages

While the original report was written for a Dutch audience, we believe it contains many insights that should be of interest to policymakers and researchers in other countries and at the supranational (EU) level. The two main problems that we identified – the fact that money and debt can more easily get out of hand in current monetary systems; and banks' indispensable role in the payment infrastructure and lending – to a greater or lesser extent affect all developed economies. This requires policy action at the national and the EU level. We summarize our main recommendations in [Table 1](#).

Table 1 - Main policy suggestions

Recommendation	Policy suggestions
1. Promote diversity in the financial sector	a. consider introducing alternative payment options such as Central Bank Digital Currency (CBDC), as they can contribute to financial stability and safeguard money as a public good
	b. take more direct action to reduce the dominance of systemically important banks, while supporting smaller institutions and newcomers
2. Curb the excessive growth of debt	a. level the playing field between equity and debt finance in national tax policies to limit excessive incentives to go into debt
	b. strengthen macroprudential policy frameworks, which specifically targets systemic risks, and better align them with the monetary policies
3. Be better prepared for the next crisis	a. take losses in a timely manner, thereby creating room for recovery after a crisis
	b. investigate the viability of a mandatory general recapitalization of banks after a crisis (even if some of these banks have not encountered severe problems themselves) to facilitate a swift recovery
4. Safeguard the public responsibilities of the banking sector	a. safeguard the public dimension of the banking sector, in particular by better incorporating societal interests in banks' corporate governance policies
	b. improve citizens' 'exit' and 'voice' options, by providing an alternative payment and saving option and by ensuring that both banks and supervisors pay more attention to citizens' ideas and expectations.

Money and debt are of fundamental importance to society. In the current system these are to a large extent two sides of the same coin. In an expansion, money and credit can drive the economy to great heights, but in a recession the combined collapse of credit and money causes harm to society. The proper functioning of our monetary system is therefore a permanent challenge. Too much flexibility, and credit and money creation get out of hand. But an approach that is too stringent also causes harm. The way in which our monetary system functions depends on the rules, institutions, technological developments and behavioural responses in society. Regulatory frameworks must keep credit and money creation in check, but should also leave sufficient room for facilitating economic development and manoeuvring during

adverse economic developments. They must also ensure that public and private interests are well balanced. The economy is never at rest; new challenges arise all the time. The rulebooks and institutions should therefore strike a proper balance between stringency and flexibility, to be able to face the new developments. With this book we hope to contribute to the ongoing debate on how to strike a balance between public and private interests in our financial-monetary system, and to achieve prudent growth of money and debt.

The Netherlands Scientific Council for Government Policy

Buitenhof 34

P.O. Box 20004

2500 EA The Hague, The Netherlands

Telephone +31 (0)70 356 46 00

Email info@wrr.nl

Money and debt are of fundamental importance to our society, but difficult to understand. This book analyses how money creation works and why money and debt are closely interrelated. It discusses the main problems and possible solutions.

In our monetary system banks create deposit money whenever a loan is granted. This form of money creation has existed for a long time. The context in which money creation takes place, however, has changed slowly but fundamentally in recent decades. The shift from cash to deposit money, the disappearance of public payment and savings facilities, and the concentration and increased uniformity in banking have resulted in a situation in which money and debt creation can more easily get out of hand. This has also led to an imbalance between public and private interests.

To address these issues, we recommend promoting greater diversity in the financial sector, curbing excessive growth of debt, being better prepared for the next crisis and safeguarding the public responsibilities of the banking sector.

The publication *Money and Debt: The Public Role of Banks* is available via www.springer.com. For further information send an email to stellinga@wrr.nl.