

Financial Stability and Efficiency in the Twentieth Century: the Netherlands

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1. Introduction

Central bank behaviour has been at the heart of a large number of theoretical and empirical studies in macroeconomics and monetary economics over the past two decades. The focus of this research was primarily on the trade-off between inflation and unemployment. Until recently, less attention has been paid to the potential trade-off between macro- and micro-stability. In addition, monetary and supervisory objectives may conflict at the macro- or micro- and meso-level. These trade-offs can be interpreted in a number of ways. The first is the possibility of a conflict between price stability and financial-system stability, *i.e.* between the objectives of monetary policy, and those of the policy directed at safeguarding the financial system. Another potential conflict is that between the objectives of macro- and micro-prudential regulation, or more precisely between stability of the banking system as a whole, and the health and efficiency of individual banks (Crockett, 2000a). At first sight it may seem obvious that if every individual bank is healthy, the financial system is likely to be stable as well. However, the failure of an individual institution may not always be harmful for the system as a whole. Moreover, policy measures to safeguard financial stability may

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reduce market discipline and efficiency. Finally, there is the question of how monetary stability and financial-sector efficiency are interrelated.

These links, and potential trade offs, between the stability of individual banks, financial-system stability and macroeconomic performance present the central bank with potentially conflicting objectives. This paper describes and interprets how these issues have been resolved in the Netherlands during the twentieth century. It is structured as follows.

The next section gives an overview of the relevant issues and potential conflicts between the objectives of central banks. Section 3 describes how the Nederlandsche Bank was established, and how its tasks evolved with the central bank laws of 1903, 1948 and 1998. Section 4 gives an overview of the development of the commercial banking sector in the Netherlands during the period under consideration. Section 5 focuses on the policy dilemmas during the twentieth century, and how the Nederlandsche Bank resolved them. Section 6 gives a summary and conclusions.

2. Monetary policy, financial stability and financial-sector efficiency: potentially conflicting objectives?

Monetary stability and financial-system stability. Traditionally, central banks have been entrusted with the task of safeguarding the value of the currency by keeping prices stable.¹ Another responsibility of central banks is that of guaranteeing financial-system stability.² These goals may conflict, forcing the central bank to choose between competing policy objectives. This can be explained as follows.

¹ The objective of macroeconomic stability is interpreted usually in terms of goods (the internal value, *i.e.* price stability) but sometimes also in terms of foreign currencies (the external value, *i.e.* exchange-rate stability). However, the former is more important than the latter, as exchange-rate stability is a tool for keeping domestic prices stable rather than an end in itself. It is not found explicitly in central bank laws and as a rule it is not the central bank, but the treasury that has the power to decide over the exchange rate. This is also the case for the European Central Bank (ECB).

² The payment system can be regarded as a public good provided by the private sector, which would justify public interference (Freixas and Rochet, 1992).

Thus, monetary stability may require policy measures that affect bank profitability. The liability side of a commercial bank's balance sheet includes short-term deposits with flexible interest rates, whereas the assets side includes the portfolio of bank loans, which are long term with fixed interest rates. Moreover, bank assets are not marketable: it is typical of banks that they grant credit to firms that are unable to borrow in financial markets or to issue shares. The structure of the bank balance implies that, if the central bank increases the interest rate in order to reduce inflationary pressure, the profitability of banks falls.³ There may also be indirect effects of monetary policy on financial-system stability. If the higher interest rate depresses economic activity, it may lead to a growing number of corporate defaults, thus reducing bank profits further. Also, a higher interest rate increases the problems of adverse selection and moral hazard, hence reducing profitable lending activities by banks. Thus, insofar as the stability of the financial system depends on the profitability of commercial banks, the goals of monetary and system stability may conflict.

Another potential conflict between monetary stability and financial-system stability arises as a result of the lender-of-last-resort function of the central bank. If individual banks, or the banking system as a whole, should encounter difficulties and turn to the central bank for liquidity support, this may, in turn, force the central bank to "*de-emphasize its price stability objective at least temporarily in order to perform its lender of last resort function*" (Cukierman, 1996).

According to Cukierman, the trade-off is temporary, provided that the upward and downward movements in interest rates on average cancel out. In that case the lender of last resort function does not require that *on average* liquidity be higher than would be consistent with long-run price stability. There may be a more fundamental problem, however, and that is connected with moral hazard (Freixas

³ Of course, the increase in the short-term interest rate will lead to higher long-term rates. But the bank can charge this higher rate on new loan contracts only. As only a fraction of its loans matures, this is not enough to offset the adverse effect on profits resulting from the higher interest rate paid to depositors.

and Rochet, 1997). If banks are aware that central banks, when making decisions about interest rates, take the effect on bank profitability into account, they may take on too much interest rate risk through a mismatch between assets and liabilities.

Monetary instability and financial instability are often closely associated. The Great Depression is a classic example, with financial instability partly induced by monetary instability (Haldane, Hoggarth and Saporta, 2000). And according to some authors (e.g. Baltensperger, 1992) there is no long-run trade-off between price stability and financial system stability. In this view, both inflation volatility and interest-rate volatility increase the danger of financial crises through fluctuations in the real value of the portfolio of financial institutions. A stable macroeconomic environment therefore reduces the risk of financial system instability.

Financial stability and financial efficiency. Ideally, supervisory and regulatory arrangements should create optimal safety of individual institutions and the system as a whole while at the same time limiting the efficiency loss that market distortions inevitably bring about. But any regulation creates distortions. Several issues that may constitute a trade-off between efficiency and stability come to mind.

Deposit insurance, aimed at protecting depositors and limiting the probability of bank runs, can result in a sub-optimal amount of monitoring by depositors. A safety net, in the form of liquidity support (the function of lender of last resort) may create the impression of a bank that it is 'too big to fail', increasing the incentive for risk-taking. From the point of view of efficiency, it may be optimal to let an insolvent bank fail. However, this may harm confidence with the results that solvent banks, too, can become subject to a run (Diamond and Dybvig, 1986). That this is not merely a hypothetical problem is evidenced by the events in the United States in the 1980s. Designed as a response to the Great Depression and in order to prevent panic among bank depositors, the United States deposit guarantee system is regarded by some as one of the factors that led to the Savings and

Loans Crises in the United States.⁴ There is evidence that deposit insurance schemes may even threaten the stability of the financial system as a whole. Demirguc-Kunt and Detriache (2000) show that the likelihood of a financial crisis depends positively on the existence and generosity of deposit-insurance schemes. This effect is mitigated, however, in countries with an efficient infrastructure of regulation and supervision. A trade-off between financial efficiency and financial stability may also arise through liberalisation of financial markets, which may reduce financial-sector inefficiencies while at the same time increasing the probability of banking crises, although this may be true especially for developing countries (Demirguc-Kunt and Detriache, 1999).

Disclosure policy is another field in which the trade-off between efficiency and stability is obvious. Disclosure of information about sanctions imposed by the regulator can act as a disciplining device, thus preventing banks from behaving in a manner that requires sanctions. On the other hand, if sanctions are imposed, disclosure may reduce confidence in the banking system, thus putting stability at risk.⁵

Taking a bottom-up perspective, efficient behaviour from the point of view of an individual bank may result in financial instability if all banks behave in a similar manner (credit crunch, lending boom). It implies, that focusing on the micro-dimensions of financial stability does not guarantee financial-system stability, as was recently stressed by Andrew Crockett, General Manager of the Bank for International Settlements (Crockett, 2000).

Still, when discussing the distortionary effects of regulation it should be kept in mind that the banking sector has several characteristics that make it likely that appropriate regulation *enhances* efficiency instead of reducing it. Asymmetric information may result in a collapse of credit, for example. If regulatory policy aims at

⁴ However, Kaufman (1996) argues that, in the absence of a formal depositor protection scheme, the government would fully compensate depositors anyway.

⁵ Goodhart *et al* suggest, however, that 'commercial banks may submit to sanctions if and only they are kept confidential'. See Goodhart *et al.* (1998), p. 41

reducing informational asymmetries, it contributes to both efficiency and stability.

Monetary policy and financial efficiency. Thus far, only a limited amount of research has been devoted to the relationship between monetary policy, or macro-economic stability, and financial sector efficiency. According to English (1999), a country's inflation rate affects the size of its financial sector, especially at high inflation rates. The mechanism is, that high inflation makes households switch from non-interest bearing money balances to transactions services provided by banks. As a result, the financial services sector expands above its socially efficient level: resources could have been put to more productive uses. In this case, monetary instability and financial-sector inefficiency go hand in hand. Still, in some situations monetary policy may have adverse effects on financial efficiency. Thus, credit ceilings that are introduced with the aim of limiting monetary expansion at the macro-economic level may create inefficiencies by limiting the competitiveness of banks, especially in circumstances of growth and development of the banking sector. As will be shown in section 5, this was the reason why the Nederlandsche Bank changed its monetary policy instruments in the 1960s.

3. The Nederlandsche Bank: a brief history

The early years. The Nederlandsche Bank was founded in 1814 on the initiative of King William I. Initially its purpose was to help restore the Dutch economy, which had suffered from the French occupation. There was no mention of responsibility for monetary or financial stability and the bank in those days should be thought of as mainly a commercial bank. During the first decades of its existence the activities of the Bank were limited in size. The public did not have much confidence in the new bank notes. And as long as there was no economic upswing, the corporate sector demand for loans was small.

During the second half of the nineteenth century the Netherlands saw distinct economic recovery. Around 1860, the Nederlandsche

Bank had established a nation-wide network of branches. This enabled it to closely monitor its borrowers. The existing financial institutions, which were marked by a low degree of sophistication at the time, could not meet the demand for credit. In order to encourage economic growth, the Nederlandsche Bank created a new discount arrangement, enabling banks to grant credit to their customers by rediscounting, thus in fact receiving credit from the Nederlandsche Bank. After 1870 the private-banking sector gradually took over the credit function of the Nederlandsche Bank. The Bank's monitoring activity thus came to be concentrated on the commercial banks rather than private-sector entrepreneurs. With hindsight, these were the first, albeit informal, supervisory activities undertaken by the Nederlandsche Bank.

The 1903 Bank Act. The Bank Act that was adopted in 1903 confirmed that the Nederlandsche Bank was allowed to act as bank of issue. No mention is made of any responsibility for macroeconomic stability neither does the Bank act refer to a supervisory function. And although the Bank was, in fact, the lender of last resort, this was not explicitly laid down in the law.⁶ As was the case in the period 1870-1900, supervision was realised through persuasion, not law, as is clear from the terminology used at the time, 'paternal supervision' (De Vries, 1994).

During the first decades of the twentieth century the Nederlandsche Bank gained importance as a banker's bank or, in other words, as the lender of last resort to the banking sector (Vanthoor, 1994). Thanks to its nation-wide network of branches, it was able to monitor the commercial banks as it had its former clients, private enterprises that had been granted business loans. Thus, its focus was on the creditworthiness of the banks as borrowers, not as key institutions in the system of payments and financial intermediation. However, as the

⁶ However, this is not exceptional. As a rule, the lender of last resort function is not made explicit in Bank laws out of fear that the explicit mention of a safety net might induce moral hazard behaviour by banks. This is even the case for the European Central Bank, which is, of course, authorised to inject liquidity into the system, but no explicit mention of the lender of last resort function is made in its Charter.

advisor to the government the Nederlandsche bank had, if only informally, a public duty and De Vries (1992) therefore stresses its role in those days as an 'economic watchtower'.

After the First World War, liquidity increased sharply and the commercial banks increasingly became money-creating institutions. The strong growth of the banking sector and the establishment of specialised credit institutions (for agriculture, small- and medium-sized enterprises, mortgages) put an end to direct lending by the Bank to the public. It was in this period that several banking crises occurred, and the Nederlandsche Bank had to put its lender of last resort role into practice (see sections 4 and 5). Important for the issue of financial stability and efficiency was the establishment, in 1937 by the Dutch parliament, of a State Committee for the banking sector (De Jong, 1960). Its task was twofold: to investigate whether the institutional design of the Nederlandsche Bank ensured that the policy of its Board could not thwart government policy, and to study how central-bank policy could contribute to a policy directed at the well-being of society as a whole (De Vries, 1994, p. 169). The issue of the regulation and supervision of the banking sector in the Netherlands was one of the relevant elements. The initiative for the State Committee is to be seen as a response to the banking crises in the years prior to 1937, but no doubt an impulse was also given by the adoption of regulatory laws in the United States⁷. Owing to the Second World War the committee was unable to publish an official report. However, it is generally acknowledged that the committee's discussions and preparatory work laid the foundation for the institutional design of central banking and supervision in the Netherlands (see section 5 below).

The Bank Acts of 1948 and 1998. In 1948 the Dutch Parliament adopted a new Bank Act which implied nationalisation of the Nederlandsche Bank. The central government became the owner of the shares. The Act gave the Bank explicit responsibilities for both macroeconomic

⁷ The Glass-Steagall Act of 1933, which created a separation between banking and securities activities, and the Regulation Q which forbade interest payments on deposits

stability and the stability of the financial system.⁸ The supervision of the credit system was laid down in greater detail in a separate Act, the so-called 'Wet Toezicht Kredietwezen' (Act for the Supervision of the Credit System) which was adopted in 1952. In this Act, a distinction is made between monetary supervision, aimed at supporting monetary policy, business supervision, aimed at safeguarding the interests of the creditors, and structural supervision, aimed at creating the conditions for a healthy and efficient banking sector.

Based on this Act and its later amendments, the Nederlandsche Bank disposes of various instruments to supervise credit institutions. Banks must meet certain conditions to be granted a licence. The Nederlandsche Bank is entitled to impose quantitative (solvency, liquidity) and qualitative (composition of asset portfolio) conditions on the operations of banks, directed at minimising the probability of failure. Also, it carries out the deposit insurance scheme, which may also help to prevent panic and thus limit the probability of dangerous bank runs. As lender of last resort it can grant credit against collateral to banks with liquidity problems. This helps to maintain confidence in the banking system. Still, the possibility of a bank failure is explicitly recognised in the Act, as this is believed to reduce moral hazard by banks (Van der Zwet, 1999). The relationship between the Bank and the government in the Netherlands was regulated in Section 26 of the Bank Act. This section stipulates that the Minister of Finance is entitled to give directions to the governing board of the bank '*... as he thinks necessary for the Bank's policy to be properly coordinated with the Government's monetary and financial policies.*' (De Nederlandsche Bank, 1994).⁹

⁸ The tasks have been laid down in Section 9:

1. *It shall be the duty of the Bank to regulate the value of the Netherlands monetary unit in such a manner as will be most conducive to the nation's prosperity and welfare, and in so doing to keep its value as stable as possible.*

2. *It shall supply bank-notes for circulation in the Netherlands, and facilitate domestic and external money transfers*

3. *It shall supervise the credit system in pursuance of the Act on the Supervision of the Credit System*

(De Nederlandsche Bank, 1994)

In view of the establishment of the Economic and Monetary Union and the single currency on January 1, 1999, a new Bank Act was adopted in the Netherlands in 1998. With this Act, the right for the government to give directions to the Nederlandsche Bank was abolished. The supervisory task is laid down in Section 4, which states that: *'The Bank shall have the task of supervising financial institutions in pursuance of the relevant statutory regulation.'*

The establishment of the ECB has two immediate implications for supervisory policy. The first is that liquidity support by the Nederlandsche Bank should not interfere with monetary policy. The second is that in case of systemic crises at the European level, the ECB will act as the lender of last resort. Indirectly, an implication is that there is not a single authority that makes the choices in the trade-off between monetary objectives and supervisory objectives.

Within the framework laid down by the Bank Act of 1948 and the 1952 law on the supervision of the credit system, the regulatory and supervisory tasks have evolved over the past decade in order to respond to the rapidly changing financial environment. In 1992, a new Act for the Supervision of the Credit System was passed, partly to adapt legislation to the directives and demands of the single market for financial services in the European Union. The globalisation and the creation of financial conglomerates (see section 4) have had their impact on the design and implementation of regulatory and supervisory policy.

4. Commercial banks in the Netherlands: a brief history

The early years. In the first half of the nineteenth century the activities of the banking sector in the Netherlands were limited. The banks traded securities, and there were international lending activities as a remnant

² If the minister of finance gave a direction, he was to explain it in Parliament. The right to give directions was never used. However, it may have acted as the big stick and thus have influenced central-bank policy in an informal manner. According to some authors, this has made the institutional set-up chosen in 1948 in the Netherlands an outstanding example, unique in the world, of how central bank independence can be designed without sacrificing parliamentary control (Lohmann, 1992).

of the colonial past. But what are nowadays called the traditional activities of banks – taking deposits and granting credit to private-sector enterprises – were virtually absent at the time. Thus, up to around 1860 the Nederlandsche Bank was the largest commercial bank in the Netherlands (De Vries, 1989). From 1860 onwards, the Dutch banking sector started growing and by 1900 it had taken over from the Nederlandsche Bank the leading position as measured by its balance sheets. However, its clientele consisted mainly of the wealthy few. In 1881 this had even prompted the state to create a bank with the purpose of enabling households with small savings to deposit their money.¹⁰ Somewhat ironically, this proved to be an impulse for the private banks to develop these activities at a later stage.

The banking sector in the Netherlands did show a marked degree of expansion in the first decade of the twentieth century. Still, the banks did not stimulate the industrial revolution that took place around the turn of the century (Van Zanden and Griffiths, 1989; De Vries, 1994). Rather, they benefited from it.¹¹ Banks were growing both in size and in number: in 1910 there were 26 large banks in the Netherlands, and in the period 1894 – 1910 more than 100 new banks were established. Not all of these were successful, however: by 1913, 42 banks had disappeared, of which 38 through liquidation. Whereas previously banks were geographically limited in their activities, the new communication technology – telephone – enabled them to serve large areas, and business growth led to an increase in demand for larger funds. During the years 1914–1920, and especially after the First World War, industrial credit by banks grew considerably.

The banking crisis of the 1920s. By 1920, the banking system was dominated by five large banks. However, there were small banks spread all over the country. The large number of newcomers and bank closures after the First World War is evidence that the banking sector

¹⁰ This was called the Rijkspostspaarbank.

¹¹ From 1980 through 1913, annual average per capita growth in the Netherlands was 0.9 percent. This was low compared to economic growth in other European countries. De Vries (1994), Table 1.

was highly dynamic. In the years immediately following the war the economy was booming and so was the profitability of banks. Again, the banks were not the stimulus: it was a typical example of Joan Robinson's dictum "where output leads, finance follows". And when the boom turned into a recession, it became obvious that many banks had diversified too little, concentrated too much on lending to industries that undertook war-related activities, and failed to screen their borrowers. Lack of experience and integrity added to these factors, as fraud played a role, especially in the smaller regional banks, although even the large Robaver was suspected of irregularities (see Section 5). The result was a banking crisis. Between 1922 and 1927, 61 banks disappeared, of which 14 through bankruptcy (see Table 1). The losses by banks as a result of defaulted loans in the years 1920 through 1922 have been estimated at around 300 mn. Guilders, or about 1.5% of yearly gross domestic product (Keesing 1947; De Vries 1994).

The role played by the Nederlandsche Bank in managing this crisis will be discussed in section 5 below. The large banks survived – some with the help of the Nederlandsche Bank – and as many new banks were established, the number of banks after the crisis was even larger than it had been before. A result of the financial crisis was that banks became reluctant – again – to finance industries, and their activity became concentrated on short-term credit against tradeable collateral (Jonker, 1989).

	1922	1923	1924	1925	1926	1927
Number of banks	344	353	370	375	390	388
Newly founded banks	16	22	25	14	22	14
Disappearing banks	8	13	8	9	7	16
<i>Mergers</i>	0	0	0	0	0	2
<i>Acquisitions</i>	4	4	0	7	1	3
<i>Liquidations</i>	2	5	5	1	6	7
<i>Bankruptcies</i>	2	4	3	1	0	4

Source: De Vries (1994)

The survival of the banks in the 1930s. Thus, the first steps by the banks in the Netherlands towards becoming the main source of finance for industry had turned into a debacle. As a response to the financial crisis the banks in the Netherlands fled to safety. Whereas this provoked a credit crunch and certainly has not mitigated the economic depression, it may have helped the banks to survive the macro-economic crisis years. The banking sector proved to be 'depression-proof': there was no serious financial distress during the nineteen-thirties. The fact that, during the preceding financial crisis the less healthy banks had disappeared may have been helpful. It was in these years that the role of the banks in the Netherlands – as lenders to firms and as providers of the means of payment – became crucial for economic performance. The parliamentary debate about the institutional design of the Nederlandsche Bank and its relationship with the commercial-banking system (described in section 5 below) should be seen against the background of the growing economic power of the financial sector. Some have argued, however, that it was only after the Second World War that Dutch commercial banks took up true universal banking (Tilly, 1995). Support for this view comes from the fact that in 1936 a state-bank was established with the purpose of financing the industrial sector (De Vries, 1992).¹²

The years of stability and development: 1951-1973. After the Netherlands had recovered economically from the Second World War, a period of sustained export-led economic growth followed, and the period from 1951 through 1973 has been characterised as the economic miracle (Van Zanden and Griffiths, 1989). The Netherlands was, in this respect, no exception to the general trend in Western Europe. What was special, however, was the change in the financial structure of the corporate sector. Other than in Belgium and Germany, the links between industrial firms and the banking system were rather weak in the Netherlands. Before the war, banks

¹² The 'Maatschappij voor Industrie-Financiering' (Society for Industrial Finance)

had not been the stimulus to economic growth. This pattern did not immediately change in the 1950s, when firms financed their expansion largely (for over 70%) with internal funds. This picture changed dramatically in the 1960s. Corporate lending increased considerably as a result of increased loan demand thanks to economic growth. At the same time, demand for deposits boomed as a result of the increase in household wealth and the progress made in payment technology. An explosion of retail banking ensued. With an average yearly production growth of 8% during the period 1963-1973, the banking system grew at a higher speed than any other sector (Van Zanden and Griffiths, 1989). This expansion was accompanied by concentration, most likely as a combined result of large-scale credit demand by the industrial sector, international competition, and the high cost of new technologies, which could only be borne by large-scale banks. Thus, in 1964 the ABN was created by a merger between the Twentsche Bank and the Nederlandsche Handel Maatschappij. Another major merger was that between Amsterdamsche Bank and Rotterdamsche Bank into AMRO bank, also in 1964, with the take-over of HBU in 1968 the ABN gained access to Latin America and became the first 'global player' among the banks in the Netherlands.¹³ In 1970, finally, the two large agricultural banking co-operations merged into RABO-bank. Despite the economies of scale that may have been resulted from these mergers, profitability remained low, a process which continued until the early nineties and has led to a diagnosis of 'overbanking' (Wellink, 1990). During this period there was one banking crises that received a lot of attention. In 1966, Teixeira de Mattos, a small bank with only ten (!) extremely large and a large number of very small deposits and with a high risk appetite got into trouble as a result of the withdrawal of some of its larger deposits.

¹³ Van de Werff (1999) gives a fascinating insight into the process that led to the mergers, making clear that besides strategic considerations the human factor played an important role as well. Thus, he shows how in an earlier stage one of the board members of NIM, Ragetli, prevented the merger between NHM and Amsterdamsche Bank out of fear that many employees would be made redundant. He thus had a major influence on the financial landscape that was to develop in the Netherlands.

The Nederlandsche Bank was heavily criticised for not having prevented the debacle. However, Teixeira was too small for its liquidation to affect the financial landscape in the Netherlands and it did not harm the public's confidence in the banking system (Het Financieele Dagblad, 1966).

Monetary instability: 1973-1982. The breakdown of the Bretton Woods system in 1971 marked the beginning of a period of stagflation. However, the banking system in the Netherlands kept on growing considerably, be it, with a yearly average of 4.5% between 1973 and 1983, at a slower pace than in the previous decade. There were mergers and acquisitions, too. Thus, in 1975 the ABN took over Bank Mees en Hope, whereas Amrobank acquired Pierson, Heldring and Pierson. The lending boom of the 1970s was followed by serious problems for some banks in the early 1980s. The 1970s were a period of double-digit inflation with accompanying high nominal interest rates. Real rates were low, however, and this elicited an enormous boom in the real estate market. By the end of the decade this bubble burst. The application of the new economic philosophy of the Chicago-school by the Reagan and Thatcher administrations, with its emphasis on curbing inflation, had led to high real interest rates. The housing market in the Netherlands collapsed, and banks with large mortgage portfolios experienced serious difficulties. In practice, it meant the end for the specialised mortgage banks.¹⁴ Moreover, the commercial banks did not remain unaffected by the many bankruptcies among businesses that occurred during the depression of 1980-1982. According to some authors, it was thanks to so-called 'mortuary constructions' and other legal constructs, that confidence in the banking system was not harmed (see sections 5 below).¹⁵ The problems in the financial sector were not limited to the Netherlands,

¹⁴ In 1983 the Tilburgse Hypotheekbank went bankrupt, shortly afterwards Westland/Utrecht Hypotheekbank and Friesch-Groningsche Hypotheekbank were rescued by insurance companies Nationale Nederlanden and Aegon, respectively.

¹⁵ A judicial construct splitting up a firm into viable branches to be saved and non-viable branches to be allowed to fail.

of course. Thus, the high real interest rate in the US became the trigger to the Mexico crisis of 1982. However, the international financial system survived thanks to coordination among supranational institutions (IMF), policy makers (Fed) and the commercial banking system. There are no official estimates, but it can be assumed that the losses to banks in the Netherlands due to the international debt crisis have amounted to several mn. guilders.

Conglomeration and globalisation: 1982 - 2000. The activities and structure of the banking system in the Netherlands changed considerably from the beginning of the 1980s. In the period 1982-1987 there was a boom in the stock market, and banks became active in the field of initial public offerings (IPO'S) and in the securities trade. During this period 'Chinese Walls' were constructed between the various divisions of the large banks. The liberalisation of capital markets legalised cross-border activities for financial institutions. The subsequent technological revolution made them, thanks to facilitated communication, economically profitable. The result was globalisation of financial markets, and this affected the financial landscape in the Netherlands considerably. Profitability was low, partly due to the problem of over-banking mentioned above.¹⁶ In order to be successful players in a global financial market, the banks in the Netherlands had to grow. And the quickest way to do so was by merger and take-over, not merely among themselves but also with insurance firms and cross-border. Between 1985 and 2000, the combined market share of the five major banks in the Netherlands increased from 77% to 82%.

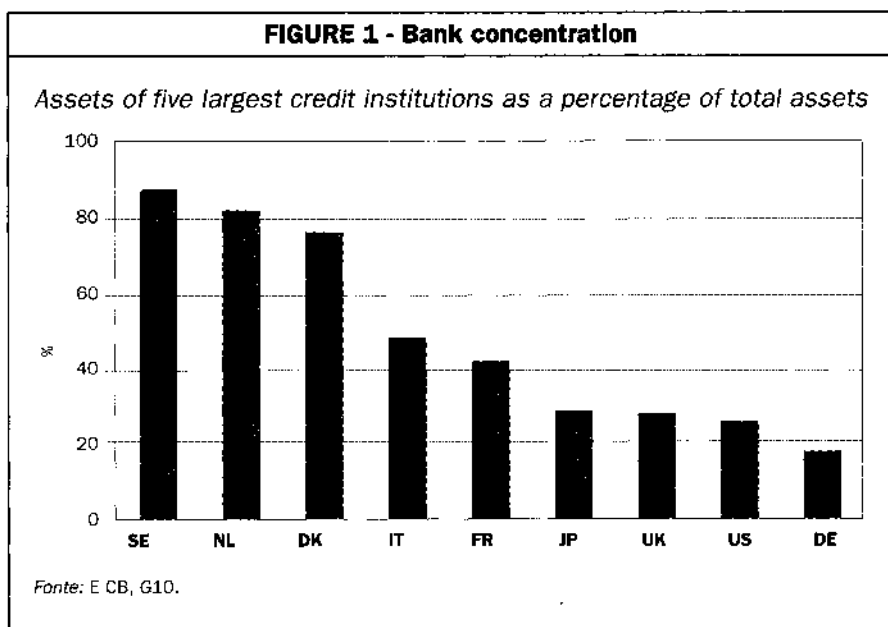
Figure 1 shows the high degree of concentration, not only in absolute terms but also relative to the European average of 55% in

¹⁶ In fact, in 1990 Wellink, who at the time was the Executive Director of the Nederlandsche Bank responsible for the supervision of the credit system, remarked that 'This (*the limited profitability, HP*) may not be permitted to fall further' (Wellink, 1990). In 1996, profitability of banks in the Netherlands and most other European countries was still low as compared to that in the US and the UK. See De Haan and Prast (1999).

1999, and in comparison with the United States and Japan. Within Europe, the Netherlands takes the second place, in terms of bank concentration, after Sweden. The mergers between banks and insurance companies into financial conglomerates was made possible by the lifting, in 1990, of the prohibition on combining banking and insurance activities in one financial institution. The importance of this phenomenon – which has had significant implications for financial supervision - is illustrated in Table 2. By 2000, ten of the 15 largest banks in the Netherlands had become part of a financial conglomerate.

5. Policy choices

Having set out the organisational structure of supervision in the Netherlands, its evolution in response to the changing financial environment, and the development of the commercial banking sector, it is now time to take a look at the potential conflicts between stability and efficiency in the Netherlands during the twentieth century, and



how they were resolved. The choices made between efficiency and stability may reveal themselves in a number of ways. The drawing up of supervisory regulations and the management of financial crises are of particular importance. But as we have seen in section 2, interest rate measures and credit ceilings are instruments of monetary policy in normal times that may affect the profitability and growth of banks, thus having potential implications for stability and efficiency.

1900-1920: A Passive Role. As we have seen in section 4, in the period up to the First World War about 40 banks disappeared through

TABLE 2 The emergence of financial conglomerates: mergers and acquisitions in the financial sector in the Netherlands, 1989 – 1999	
1989	Merger of NMB Bank and Postbank into NMB-Postbank
1990	-Acquisition by Rabo-bank of insurance company Interpolis -Merger between insurance company AMEV and savings bank VSB Group, followed by the merger with Belgian insurance group AG into the later Fortis bank -Merger of insurance companies De Centrale Verzekeringen and Concordia beheer, and savings bank Algemene Spaarbank Nederland (ASN) into Reaal Groep. Merger of NMB-Postbank Groep bank with securities company Nationale Nederlanden into Internationale Nederlanden Groep (ING)
1991	-Strategic alliance between Rabobank and securities company Robeco
1992	-Acquisition by Fortis of the Belgian credit institution NMKN 17* -VSB/Fortis participate in Belgian savings bank ASLK
1994	-Merger of SNS bank with insurance company NOG Verzekeringen into SNS Groep
1995	-ING takes over Barings Bank
1997	-Rabobank buys 50% of the shares in holding company Robeco -Acquisition by Fortis of the Dutch bank Mees Pierson -Merger between SNS Groep and Reaal Groep Take-over by ING of US investment bank Furman Selz, US insurance company Equitable of Iowa and Belgian Bank Brussel Lambert.
1998	-Acquisition by Fortis Bank of the Belgian Generale Bank; announcement of reorganisation, with bank activities brought in Belgian daughter Fortis AG and insurance activities in Dutch Fortis AMEV
<p>* NMKN stands for Nationale Maatschappij voor Krediet aan de Nijverheid (National Society for Industrial Credit) Source: Van der Zwet (1999)</p>	

liquidation. Unfortunately, no further information about these bankruptcies is available. But the mere fact that this large number of banks was allowed to go bankrupt and, perhaps more importantly, that this did not lead to a financial crisis, is an indication of the relatively minor role of banks in the economy at that time. Those who may have felt responsible for both stability and efficiency of the banking system were not forced to choose between the two: the less efficient banks could be allowed to disappear without anyone worrying about systemic implications and financial panic.

The outbreak of the First World War – the Netherlands remained neutral – led to a turbulent situation in the financial sector. The Amsterdam Stock Exchange crashed and in order to prevent further problems, it was closed on July 29, 1914, to be reopened only six months later. The decision to close the Exchange – and it was expected that the closure would last no more than a few days – was taken during a special meeting of the securities trade organisation, in the presence of some of Amsterdam's 'captains of financial industry', including the deputy central bank governor, and was pressed by the home affairs minister. In order to prevent the economy from collapsing through a lack of finances, a special fund was created in which the commercial banks, securities institutions and the *Nederlandsche Bank* participated. The *Nederlandsche Bank* reluctantly accepted that the legal minimum percentage of cover of bank notes by gold was lowered from 40% to 20%. This decision, which was taken by the government, was necessary for the Bank to be able to feed the fund. One could argue, therefore, that monetary policy was instrumental in creating financial system stability, and this may explain the central bank governor's reluctance. Still, it can be argued that macroeconomic and monetary stability benefited as well: thanks to the fund the Netherlands could, other than the surrounding countries, prevent a moratorium (De Vries, 1989). The Bank's subsequent decision to increase the discount rate – deemed necessary in order to stay tuned to international interest rate increases – was heavily criticised. In response to pressure both by the banking sector and the government, the central bank lowered the interest rate soon

afterwards.¹⁷ These events suggest that the central bank was slow to adapt its policy instruments to the special circumstances in credit markets. The political unrest did not have dramatic implications for the commercial banks in the Netherlands. One reason may be that deposit taking was still limited in those days, hence bank fragility due to depositor panic was not as serious a problem as it would be nowadays. Ironically, it was the lender of last resort who fell prey to a run: on July 31, 1914 people camped in front of the Nederlandsche Bank in Amsterdam in the hope of being able to exchange their bank notes for silver the next morning.

With hindsight, it can be concluded that the Nederlandsche Bank did not use its monetary policy to dampen the business cycle. It did not give in to pleas to increase the discount rate to discourage the excessive lending by banks in the post-war boom, and in no way was monetary policy restrictive during the years 1918-1920, when the economy was booming. Central-bank governor Vissering reasoned that interest-rate policy was not the right policy to fight inflationary pressure. Rather, he recommended a policy of deliberate credit rationing. Demands for loans should in his view be screened and judged according to whether they contributed to economic growth, to a reduction in unemployment and to increasing exports. These observations witness a lack of understanding of the economic cycle. Moreover, Vissering's recommendations were not very helpful in guiding commercial banks in their portfolio decisions. It should be kept in mind, however, that at the time the dominant view in economic theory was that of the inherent stability and equilibrium-restoring ability of market economies.

Crisis years: Lender of Last Resort. The inter-bellum constitutes an important period as far as the views of the role of both the central bank and the commercial banking sector are concerned. Several distinct, but most probably not unrelated, developments played a decisive role.

¹⁷ It was argued that the central bank profited from the needs of those who had to resort to the central bank for credit (De Vries, 1994).

As we have seen in section 4, the banking sector in the Netherlands underwent a crisis in the 1920s. As the Nederlandsche Bank did not have a formal supervisory task, it had neither the power nor the tools to prevent financial distress, e.g. by monitoring the portfolio behaviour by banks. Insofar it did pay attention to lending decisions, it focused on the quantity, not quality of loans. Implicitly, the focus was on macro-economic conditions – lending on an aggregate level - not on financial sector - stability or the health of individual banks. The Nederlandsche Bank did, however, give emergency assistance. The help offered by the Nederlandsche Bank consisted mostly of liquidity support in line with its unwritten task of lender of last resort. However, in the case of the Robaver¹⁸, one of the five largest banks, the Nederlandsche Bank went even further, as it organised a consortium with the aim of supporting the price of Robaver stock by acting as a buyer on the Amsterdam Stock Exchange. The purpose of this action was the prevention of a bank run (De Vries, 1994). It turned out that fraudulent behaviour was part of Robaver's problems. In May, 1924, Robaver published its accounts claiming a profit of 10.4 mn. guilders. One month later, it turned to the Nederlandsche Bank for support because its loss amounted to 42 mn. guilders. It is also said that the state attorney dismissed an official complaint against Robaver with the argument that accepting it was against the public interest (De Vries, 1994). Apparently, the Robaver was considered 'too big to fail', although this terminology was not used at the time. The initiative for the rescue operation was perhaps taken by the government, which gave the Nederlandsche Bank a guarantee for an amount up to 60 mn. guilders after Rabover's chief executive had visited prime minister Colijn. Another spectacular case of a bank in distress was that of Marx & Co's Bank that was liquidated in 1922. The liquidity support resulted in a loss to the Nederlandsche Bank of 26.9 mn. guilders, the lion's share of its total loss in connection with the banking crisis, which amounted to 31.1 mn. guilders. It comes therefore as no surprise that the Bank was heavily criticised for its support.

¹⁸ Robaver is an abbreviation for *Rotterdamsche Bank Vereeniging*.

Summarising, it can be concluded that the Nederlandsche Bank in this period clearly acted as a lender of last resort to the banking sector during the banking crises in the 1920s, but did no more than that. This is not surprising though, as it did not have a formal supervisory task. As far as the trade-off between stability and efficiency is concerned, the Bank did clearly let the former prevail. It could hardly be expected to act differently, given the gravity of the situation. Still, it is questionable whether the qualification 'paternal supervision', in vogue at the time to describe the Bank's attitude, is really appropriate. 'Old boy network' may be a better way to describe the informal and ad hoc ways in which the problems of the banking sector were solved in the 1920s.

Towards a formal model of banking supervision. Macro-economic performance in the 1930s was turbulent, as the Netherlands felt the devastating effects of the Great Depression. It was during this period that the works of John Maynard Keynes on macro-economic theory, business cycles and monetary policy were published. This naturally resulted in a debate on the role of the government in dampening economic cycles. The banking crises had set in motion a debate on the role of the banking system. And finally, in the US the Glass Steagall Act was passed with the purpose of preventing future financial crises.

In 1934, the Dutch parliament discussed the role of both the commercial banking sector and the Nederlandsche Bank. Some argued, with reference to the views in academia, that commercial banks have an important role to play in influencing the business cycle, and therefore in stabilising output and employment. Pleas were made to nationalise the central bank and to make the commercial banking sector subordinate to the state.¹⁹ However, at the time his view did not gain support, and his proposal was rejected (De Jong, 1960; De Vries, 1994). Three years later, however, the climate had changed and a parliamentary debate on banking supervision culminated in the

¹⁹ Thus, the socialist Van der Waerden argued that whereas banks could continue to be in private hands, they should be under strict supervision by the central bank through directives with regard to corporate credit.

establishment, in 1937, of the State Committee for the banking sector.²⁰ Its task was to investigate the desirability of a legal provision for the supervision of the banking sector, and to assess whether the Statutes of the Nederlandsche Bank should be changed. The Committee was not a decision-making body. Still, its activities give insight into how the discussion of banking supervision evolved in those years. The Committee focused on four questions: is the functioning of the banking system adequate and what enhancements should be made; what is the role of the banking system in the business cycle; are viability and liquidity of commercial banks adequate; and what should be the relationship between the central banks and the commercial banks?

The Committee's interpretation of its mandate shows that both stability and efficiency issues as well as the institutional and legal framework of banking supervision were on the agenda. Some members stressed the 'vocation' of the banking sector and its crucial role in macro-economic performance, including the business cycle. Others argued that banks, if left to themselves, could not be expected to focus their strategy on the public interest. Whereas some made a plea for supervising banks in such detail that every loan should be scrutinised and approved of by the Nederlandsche Bank, this proposal was rejected. The 1952 Act for the Supervision of the Banking System, which was described in section 3 above, clearly shows how society entrusted the Nederlandsche Bank *as banking supervisor* with the threefold responsibility of monetary, business and structural supervision (Klompé, 1992).

The years of growth: macro-stability at the expense of efficiency. The Act for the Supervision of the Banking System distinguishes between monetary supervision, aimed at supporting monetary policy, business supervision, aimed at safeguarding the interests of the creditors, and structural supervision, aimed at creating the conditions for a healthy

²⁰ According to De Vries (1994), the timing of the establishment of the Committee is surprising, given that the banks in the Netherlands had managed quite well during the recent depression years. It is likely that the developments in the academic world and in US legislation had their impact only with a lag.

and efficient banking sector. The Bank itself was to decide how to act in case of conflicts between these goals. Its task as monetary supervisor enabled the Bank to issue directives for banks in the interest of monetary stability. During the 1950s and 1960s, credit ceilings were an important instrument used to fulfil this monetary task. By imposing quantitative limits on credit growth, the Bank was able to influence aggregate liquidity. These ceilings were imposed on the credit granted by each individual bank during a certain month, calculated as a percentage of total credit granted during the twelve months preceding the restriction. In the 1950s and 1960s these so-called 'direct credit restrictions' were repeatedly imposed with the aim of preventing liquidity to get 'out of hand'. However, they clearly had the potential of restraining financial sector growth and distorting financial sector efficiency. Not only did the credit ceilings limit the growth of the banking sector as a whole, they also prevented individual banks from growing at an above-average speed, thus distorting competition. It can easily be concluded, therefore, that in these years the *Nederlandsche Bank* favoured monetary stability over financial sector growth and efficiency. Or, interpreted in the terms of its formal tasks laid down in the Act on the Supervision of the Credit System, monetary supervision prevailed over structural supervision.

During the 1960s, the system of credit ceilings was criticised by the government because of its paralysing effect on the banking sector. However, it was not until the early 1970s that the *Nederlandsche Bank* abolished it.

Despite the limitations imposed on the banks, the financial sector changed considerably during this period thanks to the two major mergers that resulted in the establishment of two large banks, ABN and Amro. The announcement of the mergers took the *Nederlandsche Bank* by surprise. Its responsibility for structural supervision gave it the power to refuse a declaration of no-objection if it were of the opinion that a merger would 'lead to an undesirable development of the credit system'. In their request for approval, the banks mentioned cost efficiency, adaptation to the growth of their clients and, last but not least, the need for the banking system to strengthen its position

in the international financial playing field (Van der Werff, 1999). It was especially the latter argument that convinced the Nederlandsche Bank that it could not refuse its approval, despite the risk that the new institutions would gain too much market power.

Financial liberalisation and globalisation. As described in section 4, the final decades of the twentieth century saw a distinct change in the financial landscape in the Netherlands, with conglomeration and the blurring of distinction between banking, insurance and securities activities posing a challenge to the design of regulatory and supervisory policy. At the same time, monetary policy came to be focused exclusively on maintaining a fixed exchange rate of for Dutch guilder with the D-mark. This commitment implied a rule for monetary policy, and thus no discretionary changes were taken in the field of monetary policy. There were no banking crises that might have called for monetary policy to be instrumental in financial stability, however. The recent period is, of course, dominated by the explosion of cross-border and cross-sector activities of financial institutions, and the creation of the single market for financial services in the European Union.

The Netherlands was one of the pioneers in the area of 'bancassurance'. In some countries, these developments – coupled with bank failures and the ensuing discussion about the question whether supervision and regulation were adequately designed - prompted the authorities to create a single supervisor for the various financial sectors (Lannoo, 2000). However, the Netherlands has preserved the existing institutional set-up, with regulation and supervision of the banking system entrusted to the central bank, and with insurance and securities firms having separate supervisors. The rationale behind this design has to do with stability considerations. Given the high degree of concentration of the banking sector, the failure of a large bank in the Netherlands would by definition make for systemic instability. For this reason, it is important that banking supervision is entrusted to the central bank which has by definition the responsibility for systemic stability and the function of lender of last resort. The Nederlandsche Bank being the supervisor makes for continuous exchange for

information and the ability to respond quickly to any threats to system stability.

Recently, new structures have been created that enable the various supervisors to exchange information, avoid overlap and prevent regulatory arbitrage. Thus, in 1990 a Protocol was created with the aim of ensuring adequate supervision of the newly-born financial institutions. The Protocol establishes rules for the conditions to be fulfilled by conglomerates in order to be granted a licence. Depending on whether the conglomerate is primarily engaged in banking or in insurance, it is the banking or the insurance supervisor, respectively, that decides upon the solvency requirements at the holding-company level.²¹

6. Conclusion

The banking sector in the Netherlands was slow to gain a key role in the functioning of the economy. It was only after the Second World War that commercial banks developed into institutions with a key-role in the economy. Simultaneously, the *Nederlandsche Bank* evolved from a commercial bank into a banking supervisor, at first informally and later with a legislated role. During the financial crises between the two World Wars, the *Nederlandsche Bank* played a passive role. It did not mitigate the economic cycle, neither did it take measures to prevent financial instability. It did act as a lender of last resort during the banking crises of the 1920s, however. Most likely this prevented the collapse of the banking system. The banking system was of limited importance to the functioning of the economy in the first half of the twentieth century. Therefore, the Bank was not faced with a serious trade-off between stability and efficiency. After the Second World War, the objectives of monetary stability supervision clearly prevailed over those of financial-sector efficiency in the policy by the *Nederlandsche Bank*. The commercial-banking sector responded by growing through

²¹ As a further response to the blurring of distinctions between different types of financial firms, a council of the banking, insurance and securities supervisors was established recently. The aim of this so-called *Raad Financiële Toezichthouders* (RFT, Council of Financial Supervisors) is to give an additional impulse to cross-sector co-operation.

mergers and acquisitions. This has led to a highly concentrated banking sector. The Nederlandsche Bank was slow in recognising that its focus on monetary stability led to distortions in the banking market. In the two decades preceding the turn of the century, the financial landscape changed considerably. Financial liberalisation and technological developments paved the way for banks to undertake cross-border and cross-sector activities. This being a process in motion, an analysis of its implications for stability and efficiency is left for future research.

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