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The Origins and Nature of Scandinavian Central Banking

Steffen Elkiær Andersen

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Steffen Elkiær Andersen
Rungsted, Denmark

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Preface and Acknowledgements

The very early and tender seeds for this book were sown in the mid-1990s, when I was travelling in Italy with my bridge club. One of the bridge club members, my old friend, Flemming Farup, asked me: "Steffen, what is really the difference between a central bank and an ordinary bank? What sort of an animal is a central bank really?" Flemming Farup, a jurist from the University of Copenhagen, was employed all his working life at Danmarks Nationalbank, ending his career as head of department for HR, organization, and security. However, he is neither an economist nor a banker. His question demonstrates that even for high ranking officials of a central bank, the nature and essence of central banking can be elusive concepts. I am by no means implying that all, or even the majority of, economists, financial journalists, and politicians have captured the idea. To what extent I have understood it, I will leave to others to judge.

There were two reasons why Flemming thought he might get some sort of answer from me. One reason was that I am an economist and was a banker most of my working life. While studying at the University of Copenhagen, I specialized in monetary theory and economic history. I was fortunate to count among my teachers Ms. Bodil Nyboe Andersen, the later head governor of Danmarks Nationalbank, as well as the internationally well-known professor Niels Thygesen, a member of the Delors Committee and thus one of the founding fathers of the euro. The second reason was that my father, Svend Andersen, was a governor of Danmarks Nationalbank at that time and in that capacity Flemming's boss. Flemming probably thought that he could not ask his boss directly: "Mr. Andersen, what are you really doing?" so he asked me instead.

My father died many years ago, but I hope he would have liked this book. It is dedicated to his memory. I learnt much about life from him, not only about the perennial problems of balance of payments, foreign exchange shortage, inflation, and government profligacy. His understanding of politics and history was certainly also an inspiration for me.

However, while Flemming Farup's question from the 1990s kept lingering at the back of my mind, another event sparked new life into the question. In 2014, in commemoration of the outbreak of the Great War, the Banque de France organized a conference on the subject of how the Great War affected the central banks of belligerent as well as neutral countries. As a member of the European Association for Banking and Financial History (EABH), I was invited to present a paper at that conference. Chapters 1, 2, 6 and 7 in this book are (substantially) expanded versions of the paper I presented at the Paris conference in November 2014. I am grateful to both the Banque de France and to the EABH for having provided me with that opportunity.

In the spring of 2015, I suggested to Palgrave Macmillan that the paper prepared for the Banque de France conference be expanded to a book on the origins and nature of Scandinavian central banking. I am happy that the proposal was accepted. I also saw it as an opportunity to produce what could be seen as a sort of "Volume II" to my earlier book, *The Evolution of Nordic Finance* (Palgrave Macmillan, 2010).

I am happy and grateful that I have had the assistance from a number of people without whose helpful support this book would have been far less meaningful, if it would have appeared at all. I am particularly in debt to Jens Thomsen, a former member of the board of governors of Danmarks Nationalbank. He reviewed for me the above-mentioned paper I presented at the Banque de France conference and, later, the Chap. 9 of the present book. I took due note of his comments. Jens Thomsen and I are both members of the Copenhagen Executive Forum, a private "discussion group", chaired by the above-mentioned Flemming Farup. Together, we have visited a number of the European central banks and other European institutions, including the ECB.

I am also indebted to Jan E. Qvigstad, a former member of the board of governors of Norges Bank and a co-author of writings celebrating the 200-year anniversary of the founding of Norges Bank (2016). He spent much of his precious time patiently answering my questions.

Mention should also be made of Hans Dellmo, for whose help I am grateful.

Finally, I am eternally indebted to Marie Holm Hvidt, my lovely niece, who took upon herself the arduous task of transforming my manuscript into a format the publisher could accept.

Of course, I also have to thank my delightful wife for the patience and forbearance she has shown during my years of preoccupation with this work. If my preoccupation has occasionally made me appear short-tempered, I apologize.

In spite of all the help I have had, any remaining errors, misrepresentations, and misunderstandings are, of course, my sole responsibility.

Steffen Elkiær Andersen
Rungsted, Denmark
July, 2016

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The Nature of Central Banking

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Some General Remarks on "Central Banking"

1.1 The Emerging Public Interest in "Central Banking"

The paradox is that although no generally accepted definition of a "central bank" seems ever to have existed, everybody will recognize a "central bank" when they see one. However, the question could very well be asked if they are banks at all, or whether or to what extent they are just special government offices staffed possibly by a few bankers, countless numbers of a peculiar type of economists, bureaucrats, and occasionally even politicians. This, of course, also raises the question whether "central banks" are really necessary. After all, the world did quite well (from an economic point of view) a long time before anybody had invented the term "central banking" or "central banks". The answer is, of course, that the concept of a "central bank" has developed over time, and that the concept has, historically, differed considerably between countries.

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Until sometime around the 1960s, there does not seem to have been much general public interest in "central banking". What "central banks" did or did not do was almost exclusively discussed in a rather closed world of bankers, academics and government officials. Some public debate grew up in the late 1950s in connection with what has been called a "revival of monetary policy". After several years of virtually unchanged rates of interest, some central banks reactivated the discount rate instrument. Still, the interest from the general public seems to have been limited.

When focus on "central banking" and monetary policies increased around 1960, it probably had much to do with two quite separate developments:

> First, since the mid-1950s rates of inflation accelerated in most of the western world leading to increased and unpopular rises in mid- and long- term rates of interest. The Bank of England and the Federal Reserve Bank of the United States (FED) responded by raising their respective discount rates, the main policy instrument at that time. This was highly unpopular in the UK and other countries, where housing has mostly been financed with loans carrying variable rates of interest, and where changes in short- term rates therefore have a direct and immediate impact on people's expenses. In Scandinavia (particularly Denmark), the interest increases were also noticed, but they had little impact, because fixed property has always (until fairly recently) been financed at fixed rates of interest with bond loans of up to 30 years maturity (before the early 1970s, even up to 60 years) supplied by mortgage institutions or—to a lesser degree—by savings banks. However, even if the central banks responded to accelerating rates of inflation, nobody at the time suggested that the central banks could be held responsible for whatever rate of inflation happened to materialize, let alone expected the central banks to "target" any particular rate of inflation.

Second, the publication in 1963 by Milton Friedman and Anna Schwartz of the seminal *A Monetary History of the United States 1867–1960* no doubt triggered an intense interest in the causes and effects of monetary changes and therefore in "central banking". The term "monetarism" had been born. Monetarism implied a new interest in monetary policy not only among specialists, but also among readers of other papers than the *Financial Times* and *The Wall Street Journal*.

Friedman and Schwartz placed a great deal of blame for the severity and duration of the American depression of 1930–33 on the FED. In the same vein, Alan Greenspan, chairman of the FED 1986–2006, was first praised for pulling the world out of the 1988–92 recession and thereby creating the glorious 1990s, but was later seen by some economists as at least somewhat guilty of the bubble of 2005–07 and the subsequent recession. By his own admission he "did not get it" until late 2005.[1] As if by seeing the mounting problems earlier he could have prevented the madness of crowds and the resulting property bubble. Similarly, Ben Bernanke, Greenspan's successor as FED chairman, has been seen as a pupil of Friedman and Schwartz with his monetarist efforts at dragging the USA out of that recession (by "quantitative easing"), in contrast to the FED's inaction of 1930–31.

Since 2014 similar tactics have been implemented by the European Central Bank (ECB), which is expected to send Europe on a real growth rate of 3 % p.a. with inflation hitting precisely 2 % p.a., and with unemployment not exceeding 5 %. Signals of this nature are constantly being sent out, and the public is swallowing them eagerly. Since governments cannot deliver the results everybody wants, the central banks must step in to do it.

Since the late 20th century there seems to have been almost no limits to the miracles that central banks were supposed to be able to perform, or to the troubles for which they could be held responsible. They are expected to deliver precise results on all macroeconomic targets, including specific inflation, growth, and employment rates. Few observers question even the theoretical ability of central banks to deliver the expected results.

Ensuring stability in capital markets, including the prevention of bank failures and stable "asset prices", all now seem to be regarded as not only natural tasks for central banks, but also achievable goals for these venerable institutions. To many observers, central banks seem to be almost almighty.

[1] "I really didn't get it until very late in 2005 and 2006." Statement made by Alan Greenspan in the CBS television program *60 minutes*, Sept. 7, 2007.

It seems tempting to paraphrase Oscar Wilde: "Really, if central banks do not set us a good example, what on earth is the use of them?"[2]

Yet, at the 1920 meeting of finance ministers et al. in Brussels the final communiqué recommended that countries which did not have a central bank establish an independent one as soon as possible in order to help maintaining orderly monetary conditions.

Of course, this communiqué did not specify the definition, nature, or character of a "central bank", other than it should be "independent".

1.2 Some Preconditions for Having "Central Banks"

For the idea of "central banks" to have any meaning, a few conditions have to be fulfilled:

> First, a monetary economy has to exist. In Scandinavia, this was not generally the case until rather late in the 19th century. The process of monetization of the Scandinavian economies is difficult—if not impossible—to follow statistically, but some indications are available.[3] In Sweden and Norway money circulation was probably very limited outside the coastal towns until the second half of the 19th century. In Denmark the process of monetization probably developed a bit faster and earlier than in Sweden and Norway because of a denser population and the proximity to Hamburg. However, until 1847 neither Denmark nor Norway could boast of more than one bank. The development in deposits with banks and savings banks can to some extent cast light on the degree of monetization of a country, and this development is demonstrated in Table 1.1.

In all three Scandinavian countries, hundreds of savings banks sprang up during the early decades of the 19th century, but they were tiny and

[2] Oscar Wilde (1895) *The Importance of Being Earnest* : "Really, If the lower orders do not set us a good example, what on earth is the use of them ?" (Act I).

[3] E.g., in Finland a tax reform in 1840 stipulated that each tax ruble was to be settled with three cups of seed, three pounds of butter, three pounds of lard, and a money amount between 5 and 24 kopeks depending on county, cf. N. Meinander (1962): *Penningpolitik under etthundrafemtio år* (Finlands Bank), p. 16.

Table 1.1 Deposits in Scandinavian banks and savings banks 1860–1915

Mill Kroners	Deposits with Banks	Savings Banks	Total	GDP	Deposits in per cent of GDP (%)
Denmark					
1860	13	56	69	464	15
1880	78	254	332	840	40
1900	310	582	892	1.323	67
1915	1.077	995	2.072	2.887	72
Norway					
1860	16	44	60	(480)	(13)
1880	81	139	220	720	31
1900	311	306	617	1.115	55
1915	1.007	724	1.734	2.594	67
Sweden					
1860	18	27	45	704	6
1880	247	146	393	1.233	32
1900	772	494	1.266	2.162	59
1915	1.999	1.113	3.112	4.710	66

Sources:
Denmark: Danmarks Statistik (1969*) Kreditmarkedsstatistik* (Statistiske Undersøgelser nr. 24) and Sv. Aa. Hansen (1983) *Økonmomisk Vækst i Danmark*, vol. II (Københavns Universitet)
Norway: Statistisk Sentralbyrå (1994) *Historisk Statistikk*, and (1965) *Nasjonalregnskabsstatistikk 1865–1960*, and H.I. Matre (1992) Norske forretrningsbanker 1848–1990, (NORA rapport nr 41). The 1860 estmate relates to 1865. There is no estimate for 1860
Sweden: S. Brisman et al. (1918–30) *Sveriges Riksbank 1668–1918,* vol. V (Sveriges Riksbank) and Statistisk Sentralbyråen *Historisk Statistik* and *Statistisk Årbok*
Note: The amounts are all denominated in Kroners of equal value against each other and are therefore directly comparable

primitive. Like elsewhere, the savings banks preceded the commercial banks.

The development of financial deposits is used here as an indicator of the degree of monetization of the economy. The figures show that monetization advanced rapidly during the second half of the 19th century, and that there were some, but no sharp differences between the Scandinavian countries in this period. These macro figures cannot, of course, disclose the difference in the degree of monetization between the major cities, the harbour cities, and the inland provinces. In the inland provinces, barter economy was common until late in the 19th century, at least in Sweden and Norway. The type of economy referred to in footnote 3 was probably not confined to Finland only.

Secondly, paper money (bank notes) has to be widely circulating as the predominating means of settling cash payments.

Minting has, in virtually all Western countries, been a royal or a government prerogative since mints were first invented. The seigniorage has often been an important source of income for cash strained monarchs and governments. Coins remained the primary money supply long after bank notes had been invented, albeit with very large swings in both, depending on circumstances. As long as coins (of silver or gold) remained the basis of the money supply, the concept of "central banking " was both impossible and irrelevant. Monarchs or governments minted coins, i.e. "real" money. Banks issued only paper money. The relative "weight" of paper money versus species is not a matter of statistics only. Rather, it is a matter of public sentiments and regulation. When paper competed with "real money", paper money was usually subject to strict regulation regarding silver or gold coverage. Issuers of paper money issued only second-class money.

This was clearly demonstrated in the last quarter of the 19th century. Few, if any, politicians bothered to discuss the gold standard or the creation of the Latin Currency Union with the four or six "central banks". They did not matter. It was purely a matter of government policy.

Third, the term "central bank" can only have a meaning, if a "central bank" is the centre of something. A centre is no centre if there is nothing around it. For a "central bank" to exist it has to be the centre of a banking scene of some substance.

In Sweden, a few bank-like discount houses (*diskonterne*) grew up during the 1770s and 1780s, but they disappeared in the slipstream of the Napoleonic wars. A number of provincial private partnership banks (*enskilda banker*) grew up from the 1830s and onwards, but the banking scene could not be considered "substantial" until joint stock banks began to be formed in the 1860s. In Denmark, the banking network was very limited until the 1870s, and in Norway until the 1880s.[4]

[4] For a description of the growth and changing pattern of the Nordic capital markets see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan).

Table 1.2 Number of banks and savings banks in Scandinavia 1840–1915

	Denmark		Norway		Sweden	
	Banks	Savings banks	Banks	Savings banks	Banks	Savings banks
1840	1	1	1	26	7	60
1850	2	35	1	90	8	86
1860	16	57	3	174	12	151
1880	41	443	21	311	44	341
1900	87	512	82	413	67	388
1915	142	513	127	527	66	444

Sources: See sources for Table 1.1

In all three Scandinavian countries hundreds of savings banks sprang up during the early decades of the 19th century. They were tiny and quite primitive in their operations, even if the total volume of their deposits exceeded the bank deposits during most of the 19th century (see Table 1.2).

The conclusion is that the prerequisites for the existence of central banks in the Scandinavian countries seem to have been in place since the last decades of the 19th century. The economy was largely monetized, and a substantial banking scene had been established.

The fact (hereby at least semi-established) that the preconditions for the existence of central banks in Scandinavia were fulfilled as from around the 1880s does not, however, necessarily imply that any bank at that time existed, which would qualify as a "central bank" in any useful meaning of that term. The question of a useful meaning of the concept of "central banking" is the subject of Chap. 2.

Indeed, to talk of "central banks" in Scandinavia (and probably most other countries) before the end of the 19th century would be somewhat anachronistic. In the UK, the Bank Charter Act of 1844 signified a great step towards "central banking" by separating the Bank of England's commercial business from its function as an issuer of bank notes.[5] It was then recognized that printing bank notes was something beyond purely commercial interests. However, not even Walter Bagehot in his celebrated

[5] Cf. Davidson & Green (Princeton University Press, 2010), *Banking on the Future. The Fall and Rise of Central Banking*: "…Others argue that the modern-day notion of central banking should be dated from the 1844 Act…or even from 1870 when the Bank first accepted the function of lender of last resort. The other main European central banks took on this responsibility in the last decades of the 19th century." P. 11.

Lombard Street made any direct mention of the concept of "central banking". In fact, Bagehot stated that "In ordinary times the Bank is only one of many lenders."[6] Neither did E.T. Powell in his *The Evolution of the Money Market 1385–1915*,[7] nor Cottrell and Anderson in *Money and Banking in England. The Development of the Banking System 1694–1914*.[8]

Nonetheless, in 1886 D. Davidson, a Swedish professor, published a book titled *Europas Centralbanker*, which was updated by I. Hultman in 1909. This work describes only essential facts (year of foundation, capital, management, etc.), but makes no attempt to specify the difference between "central banks" and other banks, nor to discuss the concept of "central banking" in broader terms.

The Great War changed the picture completely, not only in the belligerent countries, but also in neutral Scandinavia. The classical gold standard broke down, as did both the Latin and the Scandinavian Currency Unions. When the gold standard was revived in 1924–25, it was based on gold bullion, not gold coins. Paper money had taken over, and "central banks" became almost real central banks. However, in several cases, including Sweden and Norway, the "central banks" were reluctant to give up their commercial profit driven activities.

Therefore, this work will focus much on the way the outbreak of the Great War prompted the transformation of the "central banks" into central banks.

[6] W. Bagehot (1873) *Lombard Street*, p. 206 (the 1878 edition).

[7] Frank Cass, 1966.

[8] David & Charles, Sources for Social and Economic History, 1974.

2
Defining "Central Banks": Four Criteria

2.1 From Chartered Banks to Central Banks

Virtually all of today's central banks in the Western world have been founded by special royal charters or direct legislation. That does not by itself make them "central banks". Those charters were issued long before the concept of "central banking" was born. Originally, they were just commercial banks endowed with special privileges laid down in their charters or the legislation. Their charters had been given because of special circumstances at the time they were granted, but they were still just commercial banks with ordinary shareholders expecting a profit. In some cases charters were granted in return for favours given to the king/government (war financing). That was not the case in Scandinavia. In all cases, however, their charters gave the respective banks a more or less special status, from which they gradually developed into central banks. They steadily fulfilled the four criteria discussed below. Eventually, some of them became so immersed in government business and politics that they became more of a department of the country's ministry of finance than

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a central bank. In 1946–49, some of them were nationalized (e.g., the Bank of England, the Banque de France, and Norges Bank).

The problem is where to draw the line between commercial banks and central banks, and between central banks and integral parts of the financial government machinery. This is what the four criteria presented below intend to clarify.[1]

2.2 The Four Criteria Defining Central Banks

2.2.1 Criterion I: Being the Sole Note-Issuing Bank in the Country

During the last quarter of the 19th century, many European countries had privately owned banks, either in the shape of personal partnerships or joint stock companies, which issued bank notes. That, of course, did not make them "central banks".

However, for various reasons most European countries started in the 1880s and 1890s to introduce incentives for the purely commercial banks to give up their note-issuing rights or forced them to do so through legislation. It is not entirely clear what exactly motivated the respective governments to take these steps. It seems plausible that a general wish to strengthen central government control was a strong motive, not least in newly formed countries like Germany and Italy. In this sense, giving a single state chartered bank a monopoly on note-issuing was a political rather than an economic consideration. Similarly, concentrating note-issuance in a single, usually state chartered, bank would be seen as symbolic of the nationalistic feelings, which had become increasingly widespread, perhaps even fashionable, during the 19th century.

In any case, all of today's central banks have had a monopoly on issuing bank notes since around 1900 (in some cases much earlier), and it

[1] Other authors have raised the same question, e.g., Davies and Green (2010): "But what exactly do we mean by a central bank? The answer is not straightforward." In *Banking on the Future. The Fall and Rise of central Banking*. e Princeton University Press) p. 11. These authors raise the question, but they do not really answer it.

is difficult today to imagine a central bank without such monopoly.[2] For the same reason, it also seems difficult to imagine the existence of central banks much before the end of the 19th century, or indeed the early 20th century.

In 1844 the Bank of England was forced to accept the separation of its function as an issuer of banknotes from its commercial business, but for other future central banks a similar change did not happen until 60–70 years later.

2.2.2 Criterion II: Being the Guardian of the Value of the Country's Currency

In the days of the silver and/or gold standard, and even under the standards of the Bretton Woods system, defining the value of a country's currency was simple. Governments declared the value of their country's currency in terms of silver or gold (or the US dollar under Bretton Woods), and it was left to a combination of a government's general economic policies and actions by a state chartered bank (or "central bank") to maintain that value. Before 1914, the actions that could be taken by the "central banks" rarely went beyond setting the bank's discount rate, and taking lending (discounting) decisions like other banks. The objective of such actions would be to maintain a level of silver or gold holdings, which would make the maintenance of the announced exchange rate credible. This would usually imply full convertibility of banknotes into real money, i.e. gold or silver coins.

This is the question of the currency's external value.

In practical terms, and in a modern world, this also means that the central bank is the holder of the largest part of the country's foreign exchange reserves. Otherwise it could be difficult for the central bank to control the external value of the currency through buying and selling of foreign exchange in the market.

With a regime of floating exchange rates, defining the external value of a currency becomes more tricky, and defending such value therefore more

[2] Note issuance by the Bank of Scotland and the Royal Bank of Scotland is strictly controlled by the Bank of England.

problematic. It has for many years been fashionable to measure exchange rate changes against trade-weighted baskets of foreign currencies, but the fact remains that trade weights change over time, and sometimes fast. Commodity prices have a habit of displaying wild swings.

For members of the European Currency Union, the respective central banks have been relieved of the problem. It is an issue for the European Central Bank (ECB) to think about. However, the Euro currency bloc is now so large that the ECB can (almost) allow itself to take an attitude of benign neglect, similar to the attitude taken by successive US governments and the Federal Reserve, at least since the Bretton Woods treaty was signed (maybe since the US went off gold in 1933). At any rate, it is far from clear who is ultimately responsible for the cross exchange rates between the euro, dollar, yen, and the renminbi (the latter, however, unofficially loosely tied to the dollar). What is clear is that the respective authorities, be they governments or central banks, do not always have identical interests (not even inside the euro area). Three of the world's four main currencies are, in fact, floating freely against each other with the rest circling as satellites around them in more or less stable ratios.

The formation of the Euro currency bloc has not only relieved the Euro bloc's individual central banks of responsibility for the external value of their (former) currencies, but it has also reduced the weight of that responsibility for some other central banks outside the Euro bloc. The focus has shifted from the external value of individual currencies to both the internal values and the cross exchange rates between the three (or four) big currency blocks. The choice for countries outside the Euro bloc has been between a free float, a link to a trade-weighted basket, or a link to one of the three main currencies. The choice is a political one, but once a decision is made, the central bank is chiefly responsible for making it work, at least in the short run (in the longer term there is no way a central bank can counterbalance the effects of a government's broader economic policies).

Therefore a number of central banks have been given explicit responsibility for maintaining a degree of internal value of their respective currencies, usually defined as targeting a specific rate of inflation (mostly

2% p.a. in the years 2010–17). Nobody knows exactly how a central bank can hit that target precisely. After 5–6 years of monetary easing (i.e. printing bank notes in vast quantities) in both the US and the UK, rates of inflation have hardly moved at all, much to the surprise of many economists. The real economy has picked up, but nobody knows whether or to what extent that would have happened even with much less monetary easing. The ECB has also pursued a policy of monetary easing for several years (in a slightly different form from the FED and Bank of England), but also with no visible effect on the rate of inflation or the real economy in the Euro bloc (at least not by 2016) also known as quantitative easing.

Under any of the above-mentioned currency regimes it is clear that the actions and policies pursued by a central bank will have to reflect overall government economic policies, either in the shape of a counterbalancing or of a supporting nature. For this to work satisfactorily, the central bank has to be able to act as a reasonably independent institution and adviser to the government on matters relating to both the external and internal value of the currency.

If the central bank cannot act independently as an adviser to the government it might as well be just another office in the government machinery. It seems reasonably clear that government/state ownership of a central bank does not facilitate its role as an independent institution and adviser. Nor do systems where a central bank governor is subject to reappointment by the government with limited intervals (which is the usual practice in most western countries).

The idea of "independent central banks" is usually associated with the Bundesbank from the incident in the mid-1950s when it defied Konrad Adenauer, the chancellor, over the question of an increase in the Bundesbank's discount rate. However, the notion is much older. In the words of the communiqué from the 1920 Currency Conference in Brussels: "Banks, and especially Banks of Issue, should be freed from political pressure and should be conducted solely on the lines of prudent finance."[3]

[3] Here quoted from the Norwegian 1983 report on central banking prepared for the 1985 Lov om Norges Bank og pengevesenet (NOU, 1983:39), p. 45.

2.2.3 Criterion III: Being the Bank for the Government

Being "the bank for the government" means being the only bank in the country operating a current account for the government.

The government's current account is where all current receipts are paid in, and from which all ordinary expenses are paid out. Occasionally, the current account may also be used for extraordinary receipts or expenses, but these could also be handled through other banks, or other accounts with the central bank.

The important principle is that the current account is not used as a source of finance for the government. Occasional overdrafts of minor magnitudes and short duration may sometimes happen in exceptional circumstances, or for special technical reasons. However, the central bank is not a central bank if it is expected more or less routinely to supply the government with financing. In that case it would be reduced to an automatic printer of banknotes—and a government office.

The danger is always, of course, that what was originally intended as a minor short-term and excusable overdraft grows and becomes long term without any powers for the central bank to prevent it. A big question for many central banks is whether they have a formal right to refuse the government an overdraft, or whether this is a question of a power struggle between the government and the central bank. Regardless of formalities, this question will often be decided against a background of the personalities involved, their personal relationships, their political preferences, and actual circumstances.

A central bank may well advise the government on major bond loans or syndicated credits taken from domestic or foreign capital markets. It may even participate in such loan transactions with minor amounts from time to time, but only after free negotiations, if the central bank is to be seen as a reasonably independent central bank.

Similarly, a central bank's role as banker for the government may well include acting as an agent for selling government securities in the domestic or foreign capital markets. However, it should not be expected to invest major amounts in such securities. Nor should it be expected to act as a market maker in government securities, since the latter could soon lead to the former.

2.2.4 Criterion IV: Being the Bank for the Country's Other Banks

Being the bank for the country's banks—and for other financial institutions known as "eligible counterparts"—implies, first, that the central bank does not pursue commercial profit-driven business for its own account in competition with its customers. Secondly, it implies that it is—under suitable circumstances—a "lender of last resort" to its customers. Third, it would be natural for the central bank to provide further services to the financial community, particularly offering current accounts, clearing facilities, and quotations of official exchange rates for the main currencies. Fourth, the role implies that the central bank is where other financial institutions naturally deposit the bulk of their liquid reserves.

Giving up their commercial business seems to have been one of the hardest pills to swallow for those banks, which are now regarded as central banks. After all, they all started life as commercial banks. In several cases they kept discounting bills for "prime" commercial customers and taking deposits from the general public, all in direct competition with the commercial banks.

Being the "lender of last resort" is probably the biggest problem. The idea is (of course) that the failure of a single bank—or a number of them—should not be allowed to destroy the confidence in the general financial system to the detriment of commerce and industry at large.

Probably the first instance where the concept of "the lender of last resort" was practised was the 1866 failure of Overend & Co, London's largest bill broker. It sent shock waves throughout national and foreign financial circles. The Bank of England stepped in, supplying liquidity to those who had receivables from Overend. Overend was not rescued. Overend's creditors were. The Bank of England (correctly) estimated that Overend's creditors were solid but illiquid if their claims on Overend were not honoured. Not honouring those claims would have caused incalculable ripple effects throughout the world.

This is where much misinterpretation has come up in the media, and where reality is the problem. The real problem is the distinction between solvency and illiquidity. Admittedly, the distinction can never be clear. The one will very often lead to the other, not only for a single financial institution, but also for a country's entire financial system.

The widespread perception is that when Bear Stearns failed in early 2008, it was rescued by the FED, but when Lehman Brothers failed six months later, it was not. The fact is that Bear Stearns (like Overend & Co) was not rescued. It does not exist anymore. Bear Stearns's creditors were rescued (like the Overend creditors), because at the end of the day, it turned out that Bear Stearns had after all been solvent, but "only" illiquid. In contrast, Lehman Brothers was found to be both illiquid and insolvent. That seems also to have been the problem for, for example, both Northern Rock and the Royal Bank of Scotland. Still, the Bank of England stepped in to rescue creditors fully, and shareholders partially.[4] Northern Rock no longer exists, but its creditors were rescued. Royal Bank of Scotland still exists. Its shareholders were partly rescued by the government, i.e. the taxpayers.

The principle was discussed in great length by Walter Bagehot.[5] In order to protect confidence in the credit system and financial stability, Bagehot recommended that the Bank of England extended credit freely, but at high rates of interest and only against undoubted collateral. The problem is, of course, that what is good collateral one day may prove to be less good collateral a few days later. Or the other way round. Cases like Lehman Brothers, Northern Rock, and Royal Bank of Scotland do not seem to have satisfied the Bagehot criteria for rescue. Those banks do not seem to have had satisfactory collateral to offer as security. On the other hand, letting a large bank like the Royal Bank of Scotland fail and go through 10–15 years of bankruptcy procedures would have caused such immense havoc that some sort of rescue was the lesser evil. The question is mainly whether the shareholders and holders of junior debt should also

[4] The Bank of England was compensated with government means, so the bill ended up with the taxpayers.

[5] Bagehot (1873) *Lombard Street*, pp. 160–207, particularly pp. 196–98 (1878 edition).

have been (partly) rescued. Cutting the share capital down to zero by an administrative stroke of a pen would have caused much shouting and screaming, and probably lengthy court battles.[6]

Bagehot was very much concerned with the importance of maintaining financial stability, and therefore concerned about the Bank of England's responsibility for acting as a "lender of last resort" to solid financial institutions. He did not address the question of the treatment of financial institutions deemed to be insolvent. Such cases were, in his opinion, minor and rare.[7] Later generations have a somewhat different experience. Since the end of the Great War, many large banks have failed.[8] In most of those cases, the respective central banks stepped in to rescue not the individual banks or their shareholders, but their creditors. In several of these rescue operations the central banks were reimbursed by their respective governments for any losses they might have suffered in the process. The central banks were used just as intermediary practical instruments for what were, in reality, government actions. Depending on the precise circumstances, the distinction between central banks and the general government machinery may sometimes appear blurred.

Quite often, press reporting fails to distinguish between the rescue of an institution (when the institution survives and its shareholders suffer less than 100 % loss), and the rescue of an institution's creditors (where the institution rarely survives, i.e. shareholders are wiped out, but where creditors are bailed out, often at the expense of the taxpayers).

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[6] That model was used in Norway in the early 1990s, cf. Chap. 10.

[7] "No advances indeed need be made by which the Bank will ultimately lose. The amount of bad business in commercial countries is an infinitesimally small fraction of the whole business…the 'unsound' people are a feeble minority." W. Bagehot (1873) *Lombard Street*, p. 198 (the 1878 edition).

[8] The examples include the Den Danske Landmandsbank, Scandinavia's largest bank in 1923, the Austrian Credit- Anstalt, one of Europe's largest banks in 1931, Danat and Dresdner bank, two of Germany's largest banks, 1931, and Continental Illinois, one of the world's 10 largest banks, in 1984. In these cases there was no mercy for the shareholders, but the creditors were rescued by government interventions.

2.3 What Is Not Mentioned?

The Four Criteria discussed above are not presented here as "facts of life". They are the results of studies of the past, observations made by this author, and conclusions drawn from these observations and studies. Other observers might have drawn different conclusions, added more criteria, or deleted some. As initially stated, there has never been any generally accepted definition of a "central bank".

To some readers it may look strange that certain aspects of what is generally seen to be part of "central banking" have not been included in the Four Criteria.

First, it will be noticed that virtually nothing has been said about conducting "monetary policy" as a criterion for being a "central bank". This may seem somewhat paradoxical, since conducting "monetary policy" is generally seen as the perhaps most obvious and natural task of a central bank. It is the very essence and raison d'être of a central bank. However, the term "monetary policy" is not very precise, and its purposes and means have varied considerably over time.

Changing discount rates, now called "policy rates", is used quite inconsistently, and in any case it is unclear to what extent central banks actually control interest rates. They can, of course, decide their own rates of interest (usually only very short-term rates), but in some cases they seem to follow "market" trends while in other cases they seem to try to influence the "market" (in both types of cases sometimes acting or not acting under some form of government pressure).

Whatever central banks do, they do it as some sort of reaction to the monetary flows out of and into the government coffers, and across borders. Central banks try all the time to either support or counterbalance both, but they have little control of either. Therefore, the concept of "monetary policy" is here treated under the headings of the role of central banks as guardians of the value of the country's currency, their roles as the bank for the government, and their role as bank for the banks.

Until some decades ago, it was considered the first duty of a central bank governor to keep silent and stay in the background. However, since around 1990, the idea seems to have emerged that it is a natural part of "monetary policy" that the central bank governor regularly makes public announcements regarding the future path of interest rates. In the second decade of the 21st century, the "markets" seem to be genuinely offended if such "guidance" is not forthcoming. In the third decade of this century, this attitude may have change again.

Secondly, the thorny question of bank supervision has not been mentioned as a criterion for being a "central bank". The reason is that although bank supervision has been entrusted to central banks in several countries, it is difficult to argue that this should be a natural role for a central bank. Central banks may very well be consulted on rules and regulations, but someone else should be policing the adherence to such rules and regulations by individual institutions. To perform such policing against its customers cannot be a criterion for being a "central bank". The subject will, however, be touched upon under the heading of the role of central banks as banks for the banks. A central bank may lend to a commercial bank against undoubted collateral, but it cannot be the task of a central bank to evaluate the quality of the loan portfolio of a commercial bank, its business model, or the structure of its liabilities.

A central bank, at least as much as any other bank, lives or fails by its reputation. Banks fail from time to time, sometimes in droves. When banks supervised by central banks fail—for whatever reason—the supervisor's reputation takes a knock. Central banks should be too wise to take that risk.[9]

Third, it will be noticed that nothing has been said about the responsibility for maintaining "financial stability". The reason is that "financial stability" is the product of all the rest. If governments pursue sound economic policies, and central banks do not go outside their jobs (as described above), it will take major external shocks to disrupt "financial stability". Large banks may fail, and other banks may fail in droves, but they may do so even if they have adhered strictly to rules and regulations.

[9] Mervin King, the former governor of the Bank of England, was lucky that the Bank was no longer responsible for bank supervision when the financial crisis emerged in the UK in 2007–08. In 1997, that responsibility was transferred to another government body by the Tony Blair government. Still, Mr. King could not escape criticism. Similarly, when an Italian bank failed, Mario Draghi, the newly appointed president of the European Central Bank, came under fire, because the failure occurred when he was president of the Banca d'Italia, which had the supervisory authority.

There is not much central banks can do to prevent managers of commercial banks from taking unwise business decisions inside established rules and regulations. It is unrealistic to expect central banks to scrutinize the books of commercial banks more thoroughly than the respective auditors do.

Fourth, controlling "asset prices" has recently been added to the list of miracles central banks are now expected to perform. The general public, and hence the press and politicians, look to central banks to hopefully prevent the emergence of bubbles (which they can't), and thereafter the bursting of bubbles (which they also can't), and finally to clear up the mess caused by burst bubbles (which they can to some extent do).

However, the notion that it should be a central bank responsibility to control or just advise on the prices of shares, commodities, and property belongs in a different world of a "planned economy" nature. It is difficult to see why economists employed by central banks should be expected to have better crystal balls than economists employed elsewhere. They all have access to nearly the same statistical information and use almost identical econometric models. Judging "sustainable" price levels for different assets, or judging the timing of turning points, has much in common with medieval alchemy. A "bubble" is not proved to be a bubble until it bursts with a big bang.

If there is one lesson history should have taught commercial and central banks alike, it is that they should stay away from alchemy, i.e. efforts to predict the future. Advertising the likely path of future central bank actions has so far mostly demonstrated both the inability of central banks to predict the future, and the inability to foresee the effect of their own inaccurate predictions. Forward "guidance" by central banks seems to have a dangerous similarity with alchemy. Predicting the future should be left to certified alchemists.

Part II

Before the Deluge. The Very Different Origins of Scandinavia's Central Banks, the Great War, and the Four Criteria

3
Sveriges Riksbank, and the Four Criteria

3.1 The Origins. Stockholms Banco (1656) and the Invention of Banknotes

3.1.1 The Political Scenario

From the 15th century until 1866, Sweden was governed by a combination of the king/government and the Ständerförsamling (representatives of the "Four Estates", i.e. the nobility, the burghers, the clergy, and the farmers). For the history of "central banking" in Sweden, the year 1544 is of some relevance.

In 1544 King Gustav Vasa ensured a hereditary kingdom for his descendants against a promise that the representatives from the Four Estates would have a substantial influence on important matters of state, including financial affairs.

During most of the next three and a half centuries, the Estates fought fiercely with the crown/government over the control of government expenditures and revenues.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_3

During most of the 17th century (den karolinska tiden),[1] the kings had the upper hand and ruled almost as if they held absolute power. The disastrous defeat at Poltava in 1709 and the death of King Karl XII in 1718 reversed the balance of power. During most of the 18th century, in a period known in Sweden as Frihetstiden (the "period of liberty", 1719–72), the Assembly of the Estates had the upper hand, particularly in financial matters. They normally met every three years in sessions usually lasting a couple of months, but occasionally much longer. When they were in session, they were referred to as the "Riksdag".

King Gustav III (1771–93) reversed the scenario. During his reign the Estates would only meet when the king summoned them, and they lost the right to appoint members to the king's council. In the opinion of several opponents, he amassed too much power for himself. In addition to his autocratic style, he no doubt overstretched the country's financial resources. Consequently, in 1793, at a ball in the opera, he was assassinated.

From then on, the Assembly of the Estates reasserted itself. However, the king and his council retained control over the government budget, even if the Estates retained control over the Riksbank; therefore, conflicts between the Estates and the government over the control of government financial affairs continued. This power struggle culminated with the monetary reform of 1776/77 and the formation in 1789 of the Riksgäldskontor (the "Realm's Debt Office," see below).

In 1866, the Assembly of the Estates ("Riksdag" when in session) was replaced by a permanent and directly elected Riksdag ("Parliament"), eventually paving the way for a more harmonious co-operation between the elected assembly and the king and his council.

The conflict over government finance resulted in a splitting of financial power between the Riksbank and the Riksgäldskontor which lasted at least until the outbreak of WWI, and which could be seen even long after, in spite of the changes made in 1989 in in preparation for Sweden's accession to the EU (see below).

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[1] The period was named after three kings, all named Karl (Karl X Gustav, 1654–60, Karl XI, 1660–97, and Karl XII, 1697–1718).

3.1.2 Stockholms Banco, War Finance and the Invention of Banknotes (1656–1664)

On the face of it, Johan Palmstruch may well seem to have contemplated something approaching the idea of a "central bank". Obviously, he did not. However, Palmstruch's bank, officially known as Stockholms Banco, undoubtedly forms the roots of today's Sveriges Riksbank.

Johan Palmstruch, born 1611 in Riga by Dutch parents, moved to Sweden where he rose to become a highly trusted and centrally placed servant of the Swedish court and the king's council. He was evidently quite familiar with the Amsterdam Wisselsbank, founded in 1609, which became the pinnacle of finance in Europe during the 17th century.[2] In a letter dated January 12, 1652, Johan Palmstruch proposed to the Swedish royal council that a bank be formed in Sweden, modelled after the Amsterdam and the Hamburgische Bank, both of which had been modelled after the Banca della Piazza di Rialto in Venice, formed in 1587.[3]

From the point of view of central banking history, it is of some interest to note that none of these venerable institutions issued any type of paper that could possibly fit the definition of a banknote. Although the receipts made out for the deposits they had received were, to some extent, used as means of payments, they were made out in odd amounts matching the deposits actually made, and seem to have had limited circulation.

The bank's charter, dated November 30, 1656, mentions two purposes of the bank, which are now usually seen as responsibilities of a central bank (my translation):

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[2] For a more detailed account of the history of Stockholms Banco (in English), see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 21–24.
The history of Stockholms Banco and Sveriges Riksbank has been analysed in great detail (in Swedish) by Professor Sven Brisman et al. in (1918-30) *Sveriges Riksbank 1668 -1918, bd. I-V.* (Sveriges Riksbank), the official history of Sveriges Riksbank. In references below this work will be referred to just *as Sveriges Riksbank I–V.*

[3] The letter is reprinted (in German) in *Sveriges Riksbank* I-V, bd. I, Bilaga II, pp. 19–21 together with the statutes for the Amsterdamsche Wisselsbank (Bilaga III, pp. 23–25, in Dutch). In the words of the letter: "…durch anstell und einrichtung einer Wechsel Bancq, umb nach der Venetianer, Amsterdammer, Hamburger etc. gebrauch undt weise…"

"…as we consider it a useful, healthy, and necessary thing for commerce in our Realm that exchange banks here should be erected and formed, …" And: "Our own domestic copper mint should probably thereby be brought to its proper and just value, and the…unreasonable rise of foreign currencies…be hindered." [4] This statement of "mission and vision" for the bank was only a slight rewording of the ideas presented to the king by Johan Palmstruch in his above-mentioned 1652 letter. The charter was issued to Palmstruch personally (and his heirs) and gave him a clear monopoly for organizing banks in Sweden.

The first part of the above quotation gives attention to the importance of the flow of credit to commerce and industry. With only minor changes of wording, this is also mentioned in the later charters for both Sveriges Riksbank and Danmarks Nationalbank (see below).

The second part of the quotation gives attention to the assumption that the bank would have responsibility for the domestic currency's external value, or at least have a positive effect on the external value. The problem was that the extensive wars fought by Sweden in the first half of the 17th century (the Thirty Years War, 1618–48, the later wars against Denmark–Norway, 1658–60, and against Russia, 1660–61) had largely been financed by sales of copper, and Sweden's money system in those years mostly consisted of copper mints. Sweden's need to export vast volumes of copper had caused its value to drop against silver.[5]

Stockholms Banco was organized in two halves (each with its own separate charter), but in reality it worked as one unit. One of the two parts was a deposit-taking bank, or "wechsel bank",[6] which accepted depos-

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[4] "….at emedan wij erachta én nyttigh, helsosam och nödigh ting for negotierne i Wårt Rijke, at Wexelbäncker ther uthi må blifwa anstälte och oprättade…"…..and: "Wårt egne inländska Kopparmynt skal förmodentligen therigenom til thess rätta och skälig valor kunna bringas, och här emoot alt …obilligt stegrande aff fremmande Mynt …hindrat blifwa."

Here quoted from the preamble to the Charter for the Stockholms Banco, as reprinted in *Sveriges Riksbank I – V*, bd. I, Bilaga IV, p. 26.

[5] In the latter half of the 17th century, Swedish copper production and exports equalled between half and two thirds of Europe's copper consumption, cf. Svensk Uppslagsbok 1947–55 (Malmö), and S.Kristiansson (Falun, 1997): *"Strömningar till och från Stora Kopperberget*", p.82.

[6] The name "wechsel bank" was copied from the Amsterdam Wisselsbank, but not all the Wisselsbank's ways and means were copied in Stockholm, cf. below. For a detailed comparison of the Amsterdam Wisselsbank with Stockholms Banco/Sveriges Riksbank, see E.F. Heckscher: *The Bank of Sweden in Its Connection With the Bank of Amsterdam* in J.G. van Dillen (ed), 1934, reprinted 1964): *History of the Principal Public Banks (Frank Cass & Co. Ltd).*

its of valuables of almost any kind against receipts specifying the exact value and nature of the asset which had been deposited. The depositor could always withdraw exactly the deposited asset against presentation of the receipt. No interest was paid on such deposits. The receipts started to circulate and to be used as means of payment. After all, real money could always be had at the bank against presentation of the receipts (*Kreditifzedler*).

The other half of the bank was a lending bank. It could also take deposits. These deposits carried interest, because the depositor knew that the assets thus deposited would be lent to credit seeking borrowers, and that risk was consequently involved. The deposit-taking half of the bank would, to a gradually increasing extent, redeposit its deposits with the lending half of the bank.

In the early 1660s, the Swedish government, already heavily indebted because of the earlier wars, felt a need to rearm in preparation for expected foreign conflicts. One of the means to finance this rearmament was to borrow from Stockholms Banco. Johan Palmstruch obediently obliged. The bank definitely became a bank for the government, but not quite in the sense suggested by the third of the Four Criteria (see Chap. 2). Soon the amounts lent by the bank far exceeded the amounts the bank had received as deposits. The government's drawings on the bank were consequently paid out in the form of the usual "receipts", but since there were no corresponding deposits, the receipts were made out in round sums, representing nothing but an empty promise to cash the notes with silver on demand.

The banknote had been born. Johan Palmstruch thereby gained immortality in the annals of financial history.

In addition, the government had issued a currency decree (the "1660 Mynt Placat"), which had defined an unrealistic ratio between copper and silver mints. This had caused people to convert their copper deposits into silver. Since the Bank could not satisfy the demand for silver, the depositors were given paper notes instead (in fact, they were "IOUs," promising later payment in silver) in round amounts, i.e. banknotes.

Until 1663, it worked. In the end, however, the volume of circulating banknotes grew to such proportions that people started doubting their value and wanted to cash the notes against real money. That, of course, was impossible.

Unfortunately, it is impossible to illustrate the development with figures, because no balance sheet or profit and loss figures were ever produced.[7]

In 1664, the party was over. Johan Palmstruch, once a beloved, trusted, and honoured friend of the king, was arrested. Following several years of investigations and a trial, he was sent to prison for life. A year later he was released because of ill health. He died in 1670, a few months after his release.

It could be argued that Stockholms Banco satisfied about two and a half of the Four Criteria. It issued banknotes with a monopoly, it was supposed to secure the external value of Sweden's main currency and to provide a fair and stable credit mechanism for the business community, and it was certainly the government's bank, but not in the sense described in Chap. 2. In fact, it was very far from being anything like a "central bank" for the simple reason that the preconditions for having a central bank in the first place (see Chap. 1) did not exist.

However, the fate of Stockholms Banco had a profound impact on the future march towards central banking in Sweden.

3.2 Sveriges Riksbank (1668–1866–1914)

3.2.1 The Formation, Organization, and Operation of the Bank

In the "karolinska tiden" the kings and their councils (government) had the decisive power over foreign policy, but after the demise of Stockholms Banco, the Estates took control over financial matters. Clearing up the mess left by the fall of Palmstruch's Bank could result in some financial responsibility and costs for those who took responsibility. Therefore, the

[7] cf. *Sveriges Riksbank I-V*, bd. I, p. 76. The commission set up to investigate the course of events made some efforts to establish a closing balance sheet. The result was not quite as bad as might have been imagined, but still far beyond what Palmstruch and his associates could have reimbursed. Palmstruch did not particularly enrich himself.

king and his council were not too keen to get themselves involved in the reconstruction.

For the Estates, it was an opportunity to gain control over the government's finances, but there were three essential lessons to be learnt from the fate of Stockholms Banco:

First, paper money was poisonous and should be forbidden.

Second, it was dangerous to give the king and his council too easy access to money and credit.

Third, in essence it was a good thing to have a bank where savings could be deposited, and where borrowers with legitimate borrowing needs could be financed against sound collateral. Neither the king's council nor the Estates doubted that the bank should be reconstructed. The only question was how the reconstruction should be shaped.

After a relatively short period of negotiations during the summer session of the Riksdag of 1668, an agreement was reached resulting in a charter for a new bank—or a reconstructed Stockholms Banco. It remains a matter of legal taste and opinion whether it was a new bank or a continuation of a reconstructed bank.[8] Some of the wordings of the documents seem to indicate that the government, if not the Estates, saw it mostly as a continuation of a reconstructed bank. The facts are that the "new" bank took over all assets and liabilities from the defunct bank, and that the "mission and vision" statement given to Palmstruch's bank (see above) was repeated almost verbatim for the new bank. However, it is also a fact that its legal form differed fundamentally from that of the old bank.

Whereas the old bank had been based on a charter given to Johan Palmstruch personally, the new bank became based on a charter placing the bank directly under the responsibility of the Estates. The preamble to the new royal charter, dated September 17, 1668[9] states (my translation):

> So have We now at this Riksdag[10] graciously asked all the Estates to examine and decide what would be best and most useful…and, We have fur-

[8] Sveriges Riksbank celebrated its 300-year anniversary in 1968, which shows that it considers 1668 as the year of its foundation.

[9] Reprinted in *Sveriges Riksbank* I–V, bd. I, Bilaga VII, pp. 78–81.

[10] In this period the Estates convened with a few years of intervals and with sessions lasting a couple of months.

> thermore, at their request, and to further strengthen it, found it good to give the bank the statutes which the Estates will now decide and which are written below… [11]

The constitutional documents consisted of the above-mentioned brief royal charter (11 paragraphs), and the much more detailed statutes (*Beslut och Förordning*) decided by the Estates (76 paragraphs). In addition, there were instructions from the Estates to those of their representatives, who would form the board of directors of the bank (fullmäktige), and the kommissionärer (the daily managers).

Like the Venetian, Amsterdam, Hamburgische, and Palmstruchse Bank, the new Stockholm Bank was split in two different departments, officially intended to be operated as two different banks. One part, known as the Wechsel Bank (the "Exchange Bank") would take non-interest-bearing demand deposits. This part of the bank would also make account-to-account transfers against written instructions. The problem in this connection was that in the "Karolinska" period, Sweden had four or five different currencies,[12] and that the 1644 Royal Decree said that all contracts had to be settled in the currency in which they had originally been agreed. The exchange rates between the five different currencies were fixed from time to time by Royal Decrees (Mynt Placater, with death penalty for violations). So, the bank had to keep accounts and cash reserves in five different currencies, because according to the above-mentioned 1644 Decree deposits could only be withdrawn in the same currency as originally made, and account-to-account transfers could only

[11] "…Wij nu widh thenna Rijksdag hafwe allernådigst gifwit samptlige Rijksens Ständer vnder händer thet at öfwerläggia, och så sluta som thet allmenne bästa kunde vara tient medh…; altså hafwe Wij än wijdara, på theras …begiäran, och til bädre styrkia..theraf, för got funnit..at tillägia… Banken, som nu efter …Ständernes …förodning blifwer inrättat…efterskrefne wilkor... . "

Kongl. May:tz nådige Försäkring gifwen Rijksens Ständer, på några wilkår och Fördelar til Bankens Bästa

Stockholm, den 17. September 1668. Reprinted in *Sveriges Riksbank* I–V, bd. I, Bilaga VII.

[12] The gold ducat (used only in foreign transactions), the silver riksdaler (the species daler, an almost full value silver coin, also used mostly in foreign transactions), the silver daler (a less-than-full-value coin), the Karoliner daler (a silver coin minted almost only in the Karolinska period) and the copper coins/plates. The Karoliner daler was not minted after the death of King Karl XII although it was still circulated.

be made in identical currencies.[13] Very few exchange transactions, if any at all, took place in this exchange bank. It was an exchange bank in name only. People could change one currency into another in the market at the going exchange rates (or in the bank at the official exchange rates). The death penalty for violating the official exchange rates is not known ever to have been practised.

The other part, known as the Lähne Bank (the "Loan Bank"), would take interest-bearing deposits and loans, and would lend its funds to anybody with legitimate borrowing needs and satisfactory collateral.

Both parts of the bank were, however, subject to identical constitutional documents (in contrast to Palmstruch's bank). The two parts were to be known, collectively, as Rijksens Ständers Bank.[14] When the terms Wechselbank and Lähnebank were not used directly in the documents, it has to be deduced from the contents of the individual paragraphs which part of the bank they referred to.

For all practical purposes the Riksbank was operated as one bank (with two departments), but in terms of accounting it was not until the late 1820s that the balance sheets of the two parts were completely amalgamated.[15]

According to the Instruction from the Estates (September 21, 1668), the bank was to be controlled by six "fullmägtige", whose responsibilities would be somewhat like those of a board of directors in a modern world (my translation): "Since both the Exchange Bank and the Loan Bank…have come to depend on the Rijkzsens Ständer…, so have Rijkzsens Ständer found it good to give power of attorney to two members of the Nobility, two members of the Clergy, and two members of the Burghers to…have close supervision over… both of the planned banks…

[13] This is where the Stockholm Banco/Riksbank differed fundamentally from the Amsterdam and Hamburgische banks, whose main principle was to accept deposits in any currency offered, convert them to a single accounting unit, and to pay out withdrawals in any currency demanded, all at exchange rates decided by the bank, and to make account-to-account transfers in that accounting unit.

[14] The spelling in the 17th century documents differs between rijksens, rijkens and rijkzens. The spelling sometimes differs even within the same document. The concept of "correct" spelling had not yet been invented…

[15] The accounts of the Riksbank have been reprinted in *Sveriges Riksbank I–V*, bd. V.

."[16] Similarly, the daily management was to consist of six kommissiarier ("commissioners"), two from each of the guaranteeing Estates (see below).

The Fourth Estate (the farmers) had decided not to participate because of the obligations and risks involved. Their concern was that not only had the new bank taken over all assets and liabilities from the old one, but the Estates had also issued a statement amounting to a guarantee for all the new bank's future obligations (my translation): "…We, Rijksens Ständer have…further promised that…anybody with deposits in the Bank…shall immediately and without exception have full command over their assets, just as if they had kept the same money in their house, office or barn… which We in all manners shall protect and defend, and to which We shall be particularly and forcefully obliged."[17]

This, clearly, is a full guarantee that the Estates will always ensure that depositors can always get their money back on demand. Presumably, this guarantee covers only the Exchange Bank, but it does not emerge directly from the text that it does not also cover the obligations of the Loan Bank.

The wording of this guarantee was later simplified. In connection with Gustav III's coup d'état in 1772, it was reconfirmed that the bank was placed directly under the guarantee and protection ("...Garantie och Wård…") of the Estates. The guarantee has been maintained ever since, albeit with slightly different wordings. In the groundbreaking 1897 Act, the § 1 reads (my translation): "Sveriges Riksbank, which is guaranteed by the Riksdag, conducts banking business according to this act."[18] (For the present wording, see Chap. 8).

The Fourth Estate, the farmers, did not join in this guarantee until 1800, after much discussion and in connection with the pending currency reform. In that connection, the number of the "bankfullmägtiga"

[16] "…altså hafwa Rijkzsens Ständer…och så gott funnit twennne af Rijkzsens Ridderskap och Adell, med sampt twenne af Prästeskapet och twenne af Borgerskapet, efter ther på utgifne Fullmacht att förordna…hafwa med begge föber:de Bankor een noga upsicht… ." Instruction from the Estates to their representatives, as reprinted in *Sveriges Riksbank I–V, bd, I, Bilaga VIII*, p. 104.

[17] "Wij Rijksens Ständer, …yttermera lofwat …at then, som…Penningar i Banken insätter…skal ofelbart och vthan någon exception kunna them commandera…icke annorlunda än hade han samma Penningar vthi sitt eget Hus, Contor och Låda, hvaröfwer Wij och I alla måtto hand holle och thet beskydda och försvara wela och skola, Oss sampt och synnerligen på thet kraftigste ther til förbindandes."

Sveriges Rijkes Ständers Beslut och Förordning om Banken I Stockholm, 22. Septemb. Åhr. 1668, § 1 as reprinted in *Sveriges Riksbank*, bd. I, Bilage VII, p. 83.

[18] "Sveriges Riksbank, som är städ under Riksdagens garanti, drifver bankrörelse enligt denna lag". Lag för Sveriges Riksbank av 12. maj, 1897, § 1.

was increased to eight representatives, so as to include two representatives from each of the four Estates. For a period in the first half of the 19th century the number of fullmägtige was three from each of the estates.

In connection with the governmental reform of 1866, when the Assembly of the Estates was replaced with a permanent and democratically elected two-chamber Riksdag ("parliament"), the bank's name was changed to the present "Sveriges Riksbank". The fullmägtige would thereafter represent the different political parties roughly in proportion to their respective size, and they were appointed by members of the new Riksdag. The 1897 Riksbank Act stipulated six fullmägtige elected by the Riksdag, and a seventh appointed by the king/government, who would be "riksbankchef".

3.2.2 Sveriges Riksbank as an Issuer of Banknotes (Criterion I)

For a bank which considers itself the world's oldest still existing central bank, art. LXXI of the *Sveriges Rijkes Ständers Beslut och Förordning* (September, 22, 1668) is of particular interest. It reads (my translation):

> Since a large misuse and swindle has occurred through credit notes, no such notes or any other notes which could look like them…may hereafter be issued by this Bank…but are totally abolished and forbidden.[19]

The risk of any repetition of the experience suffered from the bank notes invented by Palmstruch was to be absolutely prevented.

However, a good idea cannot be kept down by legislation. In 1703, the receipts issued by the bank started circulating as means of payments. Eventually, this practice became so widespread that in 1726, the Estates officially decided that all taxes, duties, and other government revenues, whatever their nature, could be settled with paper money issued by the

[19] "Såsom igenom Creditiff Zedlar för thetta ett stort missbruk och oreda är förlupen; altså skola inga sådane Zedlar eller andre, som ther til kunna hafwa lijknelse,…här effter i thetta wärket brukas, men aldeles wara afskaffade och förbudne", as reprinted in *Sveriges Riksbank*, vol.I, bilaga VII, p. 102, § LXXI.

Riksbank. Consequently, its notes became legal tender 58 years after they had been totally forbidden and abolished.

This is remarkable, since it happened only six years after John Law's Banque Royale and the "Mississippi Scheme" in Paris had absolutely ruined the reputation of paper money in most of continental Europe.

For the notes to be credible, they were, of course, convertible into silver.

However, wars and the resulting scarcity of silver made the notes inconvertible for long periods of time between 1745 and 1776, and again between 1803 (the second "myntrealisation") and 1834. Between 1875 and 1914, and again between 1924 and 1931, they were convertible into gold (see Chaps. 7 and 8).

Until 1789, the Riksbank had a note-issuing monopoly. The year 1789 changed the scene for the Riksbank quite significantly. Wars and war preparations had put heavy financial burdens on the Crown, and the Crown now asked the Riksbank for large amounts of new credit. The Riksbank fullmägtige (i.e. the Riksdag) refused, but came up with an idea. After all, they recognized that the country had a problem. The Estates, at their 1789 session, decided that they would create a new institution[20] that would manage the Crown debt, which would also be guaranteed by the Estates. In return, certain government revenues would be allocated directly to this new institution, named the "Riksgäldskontor" (the "Debt Office of the Realm").[21]

Besides managing the Crown debt (including taking up new loans on behalf of the Crown), it also issued banknotes. Between 1789 and the mid-1850s, the Riksgäldsnotes circulated alongside the Riksbanknotes. In fact, Sweden became flooded with Riksgäldsnotes. In 1803, it was decided that no more Riksgäldsnotes should be issued, and that those in circulation should be redeemed over some years at market value against Riksbanknotes, i.e. between 33 % and 50 % of their face value. Their advantage was their small denominations, which made them satisfy the demand for petty cash. They were not formally abolished until 1858.

[20] This "new institution" was, in fact, not new, but rather a reorganization of a government debt office dating from 1716, and set up to arrange loans to finance king Karl XII's wars.

[21] For further discussions on the Riksgäldskontor and its role, see the section below on the Riksbank as bank for the government, and Chaps. 6 and 8.

The Riksbank regained its note-issuing monopoly in 1803, but not for long.

In 1824, the first banking act in any Nordic country was passed by the Estates and signed off by the Crown. It was a four paragraph act saying that banks could be formed by private individuals on certain conditions: their statutes had to be approved by the government; they had to be formed as partnerships with joint and several liability (*solidariska*); they could charge a maximum of 6 % interest on their loans, and loans would have maturities of a maximum of one year (the loans could, however, be prolonged). These banks usually carried the word "enskilda" (i.e. "private") in their name.

It took six years before any such bank was formed.[22] The delay can probably be explained by the uncertain monetary conditions still prevailing in the 1820s, and the fact that a monetary reform in 1830 had stipulated the reintroduction of convertibility of the Riksbanknotes into silver by 1834, promising a more stable value of the currency. In that connection, the Estates decided that the Riksbank notes were to be covered by holdings of silver equalling five-eighths of the amount of circulating notes. The 1824 Act said nothing about note-issuing, but soon after their formation, the enskilda banks did it anyway. Nobody asked any questions, but later it was decided that the enskilda banknotes were to be partially covered by claims on the Riksbank. During the rest of the century, some 30 note-issuing enskilda banks were formed. By the end of the 19th century, about 20 of them still existed. In 1900, they accounted for 56 % of the country's note circulation.[23]

In 1897, a new Riksbank Act[24] changed the scene again. This act provided a new world for the Riksbank in 43 paragraphs. With respect to note issuing, the §§s 3–8 are crucial (my translation):

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[22] The first such bank to be formed (1830) was Skånska Privatbanken (Ystad), later renamed Skånes Enskilda Bank. The best known and largest of these banks was the Stockholms Enskilda Bank (1856), which merged in 1972 with Skandinaviska Banken (1864) to become Skandinaviska Enskilda Bank (SEB).

[23] cf. *"Sveriges Riksbank, I-V,* bd. IV, Avsnitt 1914–24", p. 7.

[24] Lag för Sveriges Riksbank, May 12, 1897.

§ 3: "The Riksbank is…exclusively authorized to issue banknotes. These notes are…legal tender…and are to be redeemed by the Riksbank at face value on demand." [25]

§4: "Notes issued by the Riksbank shall carry the obligation for the Riksbank to redeem them with gold coins on demand according to the Currency Act of May 30, 1873."

§5: (Face value of notes.)

§6–7: Notes can be issued only subject to cover by gold held in the Riksbank's vaults or gold claims on foreign financial institutions, or (§7), for an amount up to Kronor one hundred million, other easily sold domestic or foreign assets.

§8: (Further specifications relating to the gold reserves.)

The note-issuing monopoly given to the Riksbank by the 1897 Riksbank Act had a transitory period during which the enskilda banks had to adapt themselves to the new environment. All their banknotes had to be withdrawn from circulation by the end of 1903 (§41).

To the official historians of the Riksbank (Professor Brisman et al.), the 1897 Riksbank Act signified the birth of the Riksbank as a "central bank". At least it now fulfilled Criterion I (as from 1903).

3.2.3 Sveriges Riksbank as Guardian of the Currency (Criterion II)

To prove that the Riksbank did not satisfy the Criterion II before 1914 (or after) is almost like proving that an unborn child has, in fact, not yet been born. The reason for doing it here is to demonstrate the long tradition in Sweden for having either the "Parliament" (before 1866 the assembly of the Estates) or the king and his council decide monetary affairs without much influence from any "central bank". The three monetary reforms ("myntrealisationer")[26] of 1776/77, 1803, and 1834 all demonstrate

[25] "Riksbanken är….ensam berättigad att utgifva banksedlar Dessa sedlar utgöra lagligt betalningsmedel…och skola, n-ärhelst sådant påfordras, af Riksbanken inlösas eftger deras lydelse."

[26] In this context the word "myntrealisation" basically means no more than a reorganization of the monetary system and/or suspension of convertibility. It did not necessarily imply a devaluation against any foreign currency or accounting unit. With several different national currencies in circu-

this point. These reforms had a strong taste of a power struggle between the Riksdag and the Crown, without any noticeable influence from the Riksbank commissioners. This was also the case with the 1873/75 transition to the gold standard and the creation of the Scandinavian Currency Union (see Chap. 7).

Apart from the brief reference to the "proper and just value of Our copper mint" and the hindrance of the "…unreasonable rise of foreign currencies…" quoted above from the Stockholm Banco's 1656 charter (see Section 3.1 above), there was not much official discussion of the value of the currency (external or internal) until the 1760s. Unofficially, things were, of course, different. Although the costly wars of King Karl XII had largely been recovered by the end of the 1730s, the Russian war of the 1740s posed serious financial challenges for the government. The financial strains made the government turn to the Riksbank for credits. The Riksdag, reluctantly, made the Riksbank grant much of the needed credits. Other credits were obtained from abroad (mainly Amsterdam and Genova).[27] Sweden again became flooded with banknotes. The value of the banknotes dropped dramatically. In 1745 the convertibility of the Riksbanknotes into silver had to be suspended. The note circulation continued to expand rapidly during the 1750s, not least because the 1755–56 Riksdag had agreed to cut the interest on Crown loans from 6 % to 3 %. In essence, the borrower decided the rate of interest on its own loans. The bank's commissioners and directors (*fullmägtige*) had little influence. So, the Palmstruch experience was repeated after all.

In the 1760s, the value of the Riksbanknotes became a central theme of the debates in the Riksdag. The big question of the time was how to restore convertibility of the Riksbanknotes into silver, and at what exchange rate (a discussion replicated in most of the Western world in the 1920s). The six commissioners constituting the daily management of the Riksbank were, of course, not consulted—with one exception, see below. Opinions differed not only between the government and the Riksdag,

lation, a "myntrealisation" usually meant devaluation of one national currency against another national currency.

[27] Figures for Sweden's foreign debts during the18th century are presented in: James C. Riley (1980) *International Government Finance and the Amsterdam Capital Market*, Cambridge University Press, pp. 144–50.

Table 3.1 The riksbank balance sheet. Selected years 1740–1776

	1740	1745	1762	1769	1776	1776
Assets Cash						
Claims against the Crown	6.044	1.030	2.067	3.779	16.481	4.408
Mortgage	9.422	15.304	42.970	43.726	50.161	8.050
Loans	540	2.174	29.157	22.701	24.073	4.046
Other	2.022	1.698	10.137	6.575	8.510	1.976
Total assets	18.027	20.206	84.331	76.781	99.225	18.480
Liabilities						
Banknotes	5.265	7.136	45.055	31.771	46.997	7.833
Other creditors	9.227	7.105	16.056	10.979	9.283	1.913
Capital	3.534	5.965	23.219	34.031	42.945	8.734

Source: *"Sveriges Riksbank" I–V*. Vol. V., pp. 5–10. Amounts are in Daler Silver Mint (DSM). For 1776 amounts are shown in both DSM as before the currency reform, and in Riksdaler Silver Species (after the reform)

In the Riksbank accounts, reprinted in *"Sveriges Riksbank I-V"*, vol. V, the assets are presented consolidated for the "Wechselbank" and the "Lähnbank", whereas the liabilities are shown separately for "creditors" but consolidated for "capital". In this table above also the liabilities have been consolidated simply by adding the figures from the two halves of the Bank. This has not affected the figures shown for "capital" and total assets and liabilities

but also inside the Riksdag (between the "hats" and the "caps", both of which groups contained members of all of the four Estates). The end result of many years of discussions was the "myntrealisation" of 1776 with effect as from January 1, 1777. Silver convertibility was restored at nearly the original value.

The problems and consequences for the balance sheet of the Riksbank are shown in Table 3.1).

In order to make the "myntrealisation" work, the Riksbank went into "sleeping mode". During the 1760s and early 1770s, it virtually stopped all lending and deposit taking. It concentrated on managing its portfolio of mortgage loans and withdrawing notes from circulation.

The "austerity" preceding the "myntrealisation" of 1776/77, and which made it—temporarily—successful, was largely due to the efforts of

Samuel Söderling,[28] one of the six bank commissioners (governors), who quite exceptionally had persuaded not only his fellow commissioners, but also the "fullmägtige" and the banking commission in the Riksdag[29] that this was the right way to go. The exchange rate against the Hamburg Banco gradually strengthened. He was proof that personalities sometimes matter.

However, with Gustav III's coup d'état in 1772, the scene changed. The new men at the helm, particularly Johan Liljencrants (1730–1815), the king's leading economic adviser, had no patience with Söderling's slow-working methods. After much discussion in the first half of the 1770s, Liljencrants forced through the 1776/77 currency reform, against the advice of both Söderling and the "fullmägtige", who considered it premature. Söderling retired in 1776.

In 1772, the government's debts amounted to some 509 million daler silver mint, or about two and a half times the government's annual revenues, but through Söderling's efforts it had been substantially reduced by 1777.[30]

The essence of the reform was to make the riksdaler species the main currency unit at the rate of 72 marks (18 daler copper) against the Hamburg banco (i.e. a small devaluation compared to the rates of the 1760s), and to abolish the copper mints, and to reintroduce convertibility. The intention was also to simplify Sweden's bewildering mess of different currencies (see section 3.2.1. above). The operation was successful in the sense that it convinced the foreign capital markets. A large foreign loan was easily obtained (at 4 %),[31] for which silver was purchased and old and more burdensome debts repaid.

With respect to simplifying Sweden's currency system, the reform was less successful. Sweden was still left with three different currencies:

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[28] Samuel Söderling (1722–98) had been employed by the Riksbank in 1737 and had worked his way up in the system. In 1761 he was appointed "commissarie" (one of the six governors in the daily management).

[29] In the Riksdag, the affairs of the Riksbank were taken care of by the Banking Committee inside the "Secret Committee" (det Secrete Utskottet), which dealt with secret affairs of state. Since the financial strength of the state depended on the silver holdings of the Riksbank, the affairs of the Riksbank were considered a national secret.

[30] cf. G.Wetterberg (2009) *Pengarna & Makten, Sveriges Riksbank*, p. 110.

[31] cf. G.Wetterberg (2009) *Pengarna & Makten, Sveriges Riksbank*, p. 122.

The silver daler species, the convertible Riksbank notes, and (after 1789), the inconvertible Riksgäld notes. The exchange rates between these three currencies continued to fluctuate. The Riksgäld notes were popular because they were issued in small denominations and therefore served the need for petty cash. Riksbank notes were issued only in large denominations.

However, the success of restoring convertibility was not long-lasting. Again, wars upset the applecart. In the continuing power struggle, the Riksdag-controlled Riksbank defended the convertibility of its notes by again virtually stopping all lending and note issuing. In contrast, the Crown-dominated Riksgäldskontor expanded its lending and issuing of inconvertible notes, (see Section 3.2.1 and Table 3.2), largely because of failing export incomes and mounting war expenditures in the late 1790s.

In 1803, it was decided that the Riksgäld notes, which had now flooded the country, should be gradually withdrawn and be replaced by Riksbank notes.

The problems can be seen from the changing composition of the Riksbank's balance sheet, as shown in Table 3.2 below:

The rapidly growing amounts of "claims on the Crown" were caused by the Russian war of 1809. The exploding amount of "Other" (both among assets and liabilities) mostly represent claims and liabilities taken over from the Riksgäldskontor in the process of the "myntrealisation".

Table 3.2 The riksbank balance sheet, selected years, 1799–1815. RD species

	1799	1803	1808	1809	1815
Assets Cash	1.161	3.462	5.437	5.224	4.827
Claims on the Crown	162	27	1.000	6.910	9.992
Mortgage loans	2.533	3.236	3.000	2.962	2.916
Other	2.109	5.755	19.959	20.292	20.693
Total	5.965	12.480	29.396	36.388	37.728
Liabilities					
Notes	2.083	2.654	17.607	21.489	20.210
Deposits	308	1.519	1.075	2.366	1.515
Other	44	4.329	6.615	7.257	10.275
Capital	3.530	3.978	4.099	4.276	5.738
Total	5.965	12.480	29.396	35.388	37.728

Cfr. "*Sveriges Riksbank I* – V, vol. V, pp. 12–15. Since the figures are in silver species, they are directly comparable to the last column of Table 3.1. Notes to Table 3.1 also apply to this table

The circulating Riksgälds notes were booked as liabilities, with similar claims against the Riksgäldskontor.

In 1803, the convertibility of the Riksbank notes had to be rationed. Various limits on conversions were imposed. In 1809, convertibility was suspended completely and not reintroduced until 1834. The road to the reintroduction of convertibility is illustrated in Table 3.3.

In modern parlance, the period of 1815–35 would have been termed "austerity", like 1760–77, and like elsewhere in Europe. There was no credit growth. Depending on the composition of people's assets and liabilities, some people gained, while others suffered.

The development is mirrored in the balance sheet of the Riksbank as shown in Table 3.3.

It is clearly seen that there was very little credit expansion between 1815 and 1834. In 1834, convertibility was restored at the 1777 silver value of the riksdaler.

Convertibility at that value was maintained until 1875, when it was changed to an equivalent gold value (see Chap. 7).

The conclusion with respect to Criterion II is that the Riksbank never had an easy role to play. It was never an independent adviser to neither the Riksdag nor the king/government. It could never be even a semi-effective guardian of the value of the currency (except for a brief spell in the 1760s). It was always subject to power struggles between the Crown

Table 3.3 The riksbank balance sheet, selected years, 1829–1840. RD species

	1829	1833	1834	1840
Assets Cash	16.895	17.621	17.346	18.325
Claims on the Crown	4.401	4.400	4.400	3.872
Mortgage loans	5.603	5.929	5.508	11.586
Other	17.019	14.180	13.487	26.408
Total	39.958	42.130	40.741	43.191
Liabilities				
Notes	24.596	24.623	23.995	26.761
Deposits	4.979	4.962	4.212	5.820
Other	5.983	6.971	7.534	1.492
Capital	4.400	5.574	5.000	9.118
Total	39.958	42.130	40.741	43.191

Cfr. "*Sveriges Riksbank I – V, vol*. V, pp. 15 – 19. Notes to Table 3.1 also apply to this table and the Riksdag, and much of the time also between various factions inside the Riksdag. Since it was guaranteed by the Riksdag it was always subject to the moods of the Riksdag, particularly in the Secrete Utskottet (the "Secret Committee"). Obviously, the Riksbank was powerless against the Government's foreign policies.

There were currency reforms in 1776/77, 1803, 1834, 1858, and 1873/75. On none of these occasions did the governors (*kommissarier*) appear to have had any noticeable influence, if any at all. Söderling, in the 1760s and early 1770s, was an exception. Even the directors (*fullmägtige*), who were appointed by, and some of them were members of, the Riksdag, rarely had much influence, even if some of them occasionally tried.

The periods of austerity (around 1760–76 and 1810–40) were more the result of decisions made by the Riksdag's Secrete Commission, including its Banking Committee, than the consequence of any power wielded by the Bank's *fullmägtige*, let alone its *commissarier* (respectively the board of directors and governors).

3.2.4 Being the Banker for the Government (Criterion III)

In contrast to Criterion II, the third criterion was always fulfilled—with strong modifications since the formation of the Riksgäldskontor in 1789. The King's Decree of September 17, 1668, clearly stipulated that all Crown revenues, from whatever source, were to be paid into the Crown's account with the Riksbank, see §§ 1–3 of the Decree (my translation)[32]:

[32] "§ 1. Såsom Banken här i Stockholm blifwer stående, så wele Wij, at alla Wåre Räntor af Store Sjötullen samt Portetullen och accisen…skola uti Banken …upbäras…"

"§ 2. The andre Wåre och Cronenens inkomster, som annorstädz vpbäreas…allahanda extraordinarie medel, eller hwad Namn the hafwa kunna…skal och Banken hafwe mackt och tilstånd…til sig at indraga."

"§ 3. Wij bewillie och särdeles, at all Wår och Chronones Kopperränta, antingen Kopparen tå förmyntas eller för redbare medel försäljes, skal och gå igenom Banken…".

> "§ 1. Since the Bank will remain here in Stockholm, We want all our income and rent from sea duties and port customs, and excises…to be received by the Bank…"
>
> And
>
> "§ 2. The Bank shall also have authorization and permission to collect all other income We and the Crown may enjoy from elsewhere…of whatever nature, including extraordinary means..."
>
> And
>
> "§ 3. We also will, in particular, that Our and the Crown's income from copper mining, regardless whether the copper has been minted or sold, shall pass through the Bank…"

Previously, the various tax, customs and excise offices had had their own receipts and cash administrations, but this was now abolished in favour of the Riksbank.

From a formal point of view, the formation of the Riksgäldskontor in 1789 changed very little of this. In some respects it could even be seen as if the Crown had been placed under administration by the Riksdag. Formally, the new Riksgäldskontor was controlled by the Riksdag. It looked like a humiliation for the Crown in spite of the king's successful coup d'état 17 years earlier.

Reality was different. It was part of the deal that the Crown could place two senior aids in the Riksgäldskontor, and that they would always have access to the "fullmägtige" forming the board of the Riksgäldskontor, and that they would promote the interests of the Crown. The loans requested by the Crown from the Riksbank, but refused, were subsequently granted by the Riksgäldskontor, and financed by a combination of note issues (see Section 3.2.1 above) and domestic and foreign loans.[33]

In essence, the Crown had obtained a lending and note-issuing institution, and had been relieved of concerning itself with the administration of the mounting Crown debts.

Although the notes issued by the Riksgäldskontor were gradually withdrawn from circulation between 1803 and the mid-1850s, the Riksgäldskontor and the Riksbank kept struggling for the position of

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[33] For a comprehensive analysis of the background and history of the Riksgäldskontor, see Sveriges Riksdag: *Historisk och Statsvetenskablig Framställning, Senare Avdelingen, trettonde Bandet,* Stockholm, 1934.

"Banker for the Government" until the outbreak of the Great War, or even beyond (see Chap. 7).

By 1914, Criterion III was only partially fulfilled.

3.2.5 Sveriges Riksbank as Bank for the Country's Other Banks (Criterion IV)

With only two minor qualifications, there were no banks in Sweden for the Riksbank to be bank for until the last decades of the 19th century.

The two minor qualifications are, first, the discount houses (*diskonterne*) starting from the early 1770s, and secondly the private banking partnerships starting from 1830.

The discount houses were mainly private bill discounting establishments enjoying the benefits of having rediscounting facilities and other credit facilities with the Riksbank and even more so with the Riksgäldskontor.[34] A total of 7–8 discount houses were set up between 1772 and 1803 with various combinations of stakeholders (e.g., the Göta Canal Company, the government, and private investors).

All of the discount houses crumbled in the aftermath of the Napoleonic wars, and it fell upon the Riksbank to pick up the pieces and organize a suitable winding up. It took the Riksbank about 30 years to close the final books.[35] In this respect, the Riksbank, under instructions from the Riksdag, acted as a lender of last resort.

It seems unclear if any creditors suffered any losses in this process, but the tax payers did (through the reduced profits of the Riksbank, which accrued to the government).

The second qualification relates to the private partnership banks, the first of which was set up in 1830 (see Section 3.2.1 above). Theoretically, the Riksbank could have been a bank for these banks since the 1850s, but in reality the Riksbank (i.e. the "fullmägtige") regarded the private note-issuing banks as competitors.

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[34] For a more detailed account in English of the discount houses, see Steffen Elkiær Andersen (2010): *The Evolution of Nordic Finance,* pp. 36–41. Palgrave Macmillan, 2010.

[35] In Tables 3.2 and 3.3, a substantial amount of the assets and liabilities headed "Other" relate to the winding up of the discount houses.

Two events, and the Riksbank's attitude to interest rates, are illustrative of the nature of the relationship between the Riksbank and the commercial banks in the second half of the 19th century. One particular occasion also demonstrated how the interaction could be influenced by the relationship between two individuals (A.O. Wallenberg, who controlled the Stockholms Enskilda Bank, and A.W. Dufwa, the Riksbank head governor (*riksbankchef*) 1868–83.

The first of these events was the case of a large swindle undertaken by a broker, who fled the country in 1864. The discovery of this swindle shocked the entire financial establishment in Sweden and threatened the trust in the banking system. A general run on the banks was feared, because two banks in particular had suffered deadly wounds by the swindle. The Riksbank did nothing. A.O. Wallenberg had Stockholms Enskilda Bank step in with liquidity for the two stricken banks and saved the day (much like the role played by J.P. Morgan in connection with the "Knickerbocker" crisis in New York in 1906–07). A few years later, A.O. Wallenberg called for a "central bank" to be established for the purpose of securing financial stability and liquidity in the financial system. Wallenberg argued that not even the three largest banks acting together would have the capacity to stabilize the markets in case of a severe financial storm. Wallenberg had seen how the Bank of England had intervened in 1866 to provide liquidity to the banking system, when Overend & Co failed and threatened to disrupt the system.

It was not until the special circumstances under the Great War that Wallenberg's idea was realized.

The second event was the result of the feverish railway construction taking place in Sweden in the 1870s. Much of this was financed by the Stockholms Enskilda Bank. In 1878, one of Stockholm's largest iron merchants and rail producers got into serious problems, and Stockholms Enskilda Bank was the largest creditor. The bank tried to reconstruct the iron merchant, but when large unrecorded liabilities were revealed, the merchant was declared bankrupt with a huge loss for the bank. The incident was extensively covered by the press, and the bank's depositors started moving their money elsewhere. Unfortunately, Stockholms Enskilda Bank also had large holdings of railway bonds. They dropped to 40–50 % of their face value.[36] Several bankruptcies followed, some of which also hurt Stockholms Enskilda. The acute crisis lasted some eight months. In a demonstration of confidence, King Oscar II deposited Kr. 10,000 in the bank, and a month later another Kr. 10,000 (the bank was his main bank, and a collapse would have cost him considerably more). The amounts were a trifle, but the psychological effect of this vote of confidence sufficed. Hambros Bank in London opened a credit of Kr. 1 million, and shareholders paid in fresh capital. The decisive aid, however, came from the Riksgäldskontor in the shape of a Kr. 4 million credit, equalling one third of Stockholm Enskilda's outstanding loans.[37] The Riksbank did nothing, probably because it saw Stockholms Enskilda as a competitor. The Riksgäldskontor was the "lender of last resort", not the Riksbank.

The Riksbank's attitude to interest rates was probably not much different from the generally prevailing attitude elsewhere in Europe until the Hamburg crisis of 1856–57. There were interest ceilings everywhere, but not in identical shapes.

At the height of the Hamburg crisis, interest rates were raised by the Bank of England, the Banque de France, the Nationalbank in Copenhagen, and others to prevent outflows of silver and protect liquidity in the banks. Not so in Sweden, where interest was seen only as a cost, not as an instrument of monetary policy. The Riksbank, i.e. the members of the Riksdag's Banking Committee, preferred credit rationing (*kredit stryping*) to using interest rates as an instrument. The reason was a combination of the fight for market share for the Riksbank, and the interests of the farmers, who were large scale borrowers and had much influence in the Riksdag.

When the Riksbank finally did make use of the interest rate weapon, it was not for reasons of monetary policy.

In a fight for market share, and possibly in envy of the strong and influential position of Stockholms Enskilda Bank, in March 1980, the Riksbank invited a number of the largest banks to a meeting. The pur-

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[36] Wetterberg (2009) *Pengerna & Makten,* Sveriges Riksbank, p. 228.

[37] Wetterberg (2009) *Pengerna & Makten*, Sveriges Riksbank, p. 230.

pose of the meeting was to agree on wider interest margins.[38] Wallenberg was not invited. He could read about it in the newspapers the next day. Hardly a behaviour to be expected from a central bank. Wallenberg reacted by narrowing the interest margins in Stockholms Enskilda, which subsequently gained market share. In the words of the official history of Sveriges Riksbank (my translation): "The Riksbank…was just as much a commercial bank as a central bank, with the same kind of business as the private banks and in continuous competition with these."[39]

The 1897 Riksbank Act was concerned with both the note-issuing rights of the enskilda banks and the commercial banking activities of the Riksbank, and the Commercial Banking Act of 1911[40] did not distinguish between the commercial banks and the Riksbank. It seems that the Riksdag and the Riksbank were reluctant to let go of the Riksbank's commercial activities.

However, during the last third of the 19th century, the Riksbank increasingly showed signs of developing into a bank for the banks. The Riksbank started offering current accounts and short-term credit facilities to savings banks already in the 1860s. Similar services were offered to joint stock banks[41] since the 1870s, but they were generally not offered to the enskilda banks until the 1890s. Rediscounting of bills did not become "ordinary business" until the 1890s. In 1901, a compensation for giving up their note-issuing rights was offered to the enskilda banks in the shape of credit facilities with the Riksbank in a total amount equal to the volume of enskilda notes circulating in 1901. However, these credit facilities were to be phased out by the end of 1910.

A very substantial step towards becoming a bank for the banks was taken in1899, when the Riksbank took over from the Skandinaviska Kredit AB the role of clearing bank for 12 Stockholm banks. In 1918,

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[38] Wetterberg (2009), p. 215.

[39] "Riksbanken…var lika mycket en affärsbank som en centralbank, med samma slags rörelse som de enskilda bankerna och levande i en ständig konkurrens med dessa". Sv. Brisman et al. *Sveriges Riksbank* (I– V), vol. IV (1931), 1860–1909, p. 211.

[40] Lag om bankrörelse, 22. Juni, 1911.

[41] The formation of joint stock banks had been allowed by the Companies Act of 1864, which accepted that companies with limited liability could also conduct banking business, but without note-issuing rights.

the Riksbank's Göteborg branch assumed a similar role for seven banks in that province.[42] A total national clearing was not organized until much later, but this, of course has much to do with communications techniques.

During the banking crisis of 1907, when about one third of Sweden's roughly 75 banks got into various degrees of trouble, the Riksbank helped organize a number of mergers and takeovers, but it did not act as a lender of last resort.

The 1897 Riksbank Act also put an end to interest-bearing accounts in the Riksbank, except for clients who discounted bills in the Riksbank, but this Act also clearly authorized it to continue its commercial lending business (§13). However, the question whether the Riksbank should offer interest-bearing deposit accounts to the general public continued to be discussed in the Riksdag for many years, and also after the war.

During the last 14 years before the war, the Riksbank nearly doubled the number of its branches (from 13 to about 22) in direct competition with the commercial banks. It was directly pointed out that one of these branches was more profitable than even the head office,[43] a consideration which ought to be irrelevant for a central bank.

The Banking Act of 1911[44] did nothing to enhance the Riksbank's status as a "bank for the banks", see § 1 of the act (my translation):

> Besides Sveriges Riksbank, banking in this country can be conducted by no other than
>
> 1. Joint stock banking companies,
> 2. Mutually liable banking firms,

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[42] cf. K.Kock (1932) *Svenskt bankväsen i våra dagar*, Kooperativa förbundets bokförlag, pp. 32–33, and G. Wetterberg (2009) *Pengarna och Markten* (Sveriges Riksbank), p. 240.

[43] *Sveriges Riksbank* I–V, vol. IV (1904–1924). p. 33.

[44] Lag om bankrörelse av 22. juni 1911.

§ 1: "Förut om Sveriges riksbankmå ej annan här i riket drifva bankrörelse än (1) bankaktiebolag, (2) solidarisk bankbolag, (3) enskild man eller handelsbolag, i hvars firma ingår personnamn. Med bankrörelse förstås i denna lagsådan verksamhet, i hvilken ingår inlåning från allmenheten på räkning, som av bank almänneligen begagnas. Angående emissionsbank, postsparbanken, sparbank, järnkontoret, så ock angående aktiebolag, som uteslutande har til ändamål att idka fastighetsbelåning eller pantlånerörelse, är särskildt statgadt."

3. Private individuals or trading firms whose names include a personal name.

In this Act, banking business means activities involving the taking of deposits from the general public on current accounts, as normally done by banks.

Banks issuing securities, the postal savings bank, savings banks, and the Iron Office (The Iron Office was set up in 1747 to offer credits and market operations to the numerous iron works scatteredover mid-Sweden, and who were otherwise mostly dependent on the large iron merchants in Stockholm. It stillexists, but has ceased to have its original function a long time ago.), as well as companies exclusively engaged in property mortgage business or pawn business, are subject to separate legislation.

It is clearly seen that the Riksbank according to this act can do normal commercial business in full competition with commercial banks. The conclusion is that by 1914, Criterion IV was fulfilled only to a limited extent.

4

Danmarks Nationalbank and the Four Criteria

4.1 The Origins. The Copenhagen Bank (1736–1813)

4.1.1 The Political Scenario

Between 1660 and 1848/49, Denmark (until 1814 the dual monarchy of Denmark–Norway) was governed by kings, who held absolute power. The background for the transition to absolute power was the recently lost wars against Sweden and the resulting financial stress on the government's financial affairs. In 1660, the Danish nobility, who had so far ruled in co-operation with the king through the King's Council (*Rigsrådet*), now had to accept the loss of power and their tax-exempt status. In that connection the kingdom was also made hereditary. Denmark–Norway became an "enlightened" hereditary kingdom with a king holding absolute power.

The name "Danmarks Nationalbank" is used here for ease of reference. This was not the official name of the Bank until 1936. Between 1818 and 1936, the official name was "Nationalbanken i Kiøbenhavn", cfr. below. Danmarks Nationalbank considers 1818 as its year of foundation.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_4

The implication was that although there were plenty of intrigues among those seeking the king's favours, there were no power struggles between different factions or classes like the struggles seen in Sweden between the Crown and the Assembly of the Estates, and between the "hats" and the "caps" among the Estates.

In 1730 King Frederik IV died, to be succeeded by his 31-year-old son, King Christian VI. The new king wanted new brooms. During the early 1730s, he sacked most of his father's advisers, and appointed new ministers.

The general mood was for things to happen. Approximately one third of Copenhagen had burnt down in 1728, and a new royally chartered fire insurance company had been formed in 1731 (which is still in existence). Several royally chartered trading companies had been formed in the late 17th century. The largest of them, the Asiatic Company, had its charter renewed in 1732 with special privileges. Royally chartered companies were in vogue in these mercantilist times.

Nobody knows how the idea for a bank[1] was begot, bred or nourished.[2] Several earlier banking projects had reached various stages of realization, but none of them ever got off the ground.[3]

What is known is that a certain Mr. Desmerciéres, a gentleman of dubious reputation, had arrived from London in the early 1730s with an enormous fortune. King Christian VI had a vast hunger for credits to finance his fancy for new castles, including the first Christiansborg Palace.[4] However, following the recent Great Nordic War (1709–20),

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[1] The official name was "Den Kiøbenhavnska Assignation – Veksel – og Laane.Banque" normally referred to as "Den Kiøbenhavnske Banque" (the Copenhagen Bank). The name "Kurantbanken", was adopted in 1791 to distinguish it from the Dansk-Norske Speciesbank formed that year, cfr. below.

[2] The birth of the Copenhagen Bank has been examined by Dr. E. Rasmussen (1950–52) in: *Kurantbankens Oprettelse*, Historisk Tidsskrift 11.13, pp. 137–75.

[3] Cfr. A. Nielsen (1903) *Danske Bankprojekter fra Tiden før Kurantbankens Oprettelse*. Nationaløkonomisk Tidsskrift, pp. 581 ff. All of these proposed banks had been copied after the Amsterdamsche Wisselsbank and the Hamburgische Bank, just like Stockholms Banco (cfr. chapter III).

[4] The present Christiansborg, which houses the Danish parliament and prime minister's office, is the third Christiansborg Palace to stand on that site, which has been fortified since the middle ages. Before the first Christiansborg Palace, it was just the Copenhagen Castle.

money was still in short supply. Mr. Desmerciéres accommodated the king by financing a large part of his new Christiansborg Palace.

4.1.2 The Copenhagen Bank (or the *Kurantbank*)

Having spent many years in London, Mr. Desmerciéres was no doubt familiar with the Bank of England, so it seems very possible that he should have suggested to the king that a bank of a similar nature be formed in Copenhagen. There is no shred of evidence that Mr. Desmerciéres was the spiritual father of Denmark–Norway's first bank, nor is there any evidence that the Bank of England served as model for the Danish bank. However, it seems a plausible guess. Mr. Desmerciéres certainly had the king's ear, and the bank certainly had many features in common with the Bank of England. In addition, Mr. Desmerciéres had his son placed in the newly created Ministry of Economics and Commerce,[5] which advised the king on commercial and financial matters.

In any case, on October 29, 1736, the royal charter for the formation of the bank was signed by the king.[6]

Like the Bank of England, the new bank was formed as a joint stock company with certain privileges and obligations. The most important privilege was the permission in itself to form a bank at all, although it seems unclear what would have happened if somebody had tried to do so without royal permission. Secondly, the permission to issue bank notes was considered a necessary privilege. Third, the bank's commissioners (governors) were free to run the affairs of the bank as they wished.

The main purpose of the Bank was described in the preamble to the charter (my translation):

> "…a well-organized bank adapted to the circumstances of this city and these Kingdoms can be most useful for the benefit of commerce and

[5] "General Landets Økonomi-og Kommercekollegium".

[6] "Allernaadigste Octroy for den Kiøbenhavnske Assignation-Vexel-og Laane-Banque". This is a 21-paragraph document mostly dealing with administrative details. An undated copy of the document is kept at the State Library in Århus. It is printed in a style and on a paper quality which makes it look contemporary with a fragment of a similar document kept in the National Archives, and which almost certainly dates from 1735 or 1736.

manufacturing as well as for the maintenance of a safe and stable credit system…"[7]

It is a wording not much different from the wording found in the 1656 preamble for Stockholms Banco (see above), or from the 1936 Act on Danmarks Nationalbank (see below).

The note issuing was regulated by the Art. VII:

Art. VII.

> So, graciously would We that the Bank Notes…should circulate freely and be unhindered everywhere in Our Realm and Countries and pass from hand to hand as cash money until their amount is requested to be converted into species in the Bank… [8]

It is here stated clearly that the notes issued by the bank should always be legal tender and convertible into silver upon demand. For about ten years, this worked beautifully. Then war expenses changed the scene, like in Sweden. Convertibility was suspended between 1745 and 1747, and again from 1757 until 1845.

In spite of original doubts, the planned share capital was easily raised. Mr. Desmerciéres and his son subscribed for 10 %. The royal family and people close to court circles subscribed for most of the rest.

The basic story of this bank is that it never served its original intentions. The bank was always primarily a source of finance for the Crown rather than the business community.[9] The accounts of the large trading companies (chartered or purely private) rarely showed any balances with the Copenhagen Bank. Similarly, the bank never developed any significant deposit base. The number of depositors never exceeded 60,

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[7] "….som en saadan efter denne Stads og disse Rigers Omstændigheder vel indrettet Banque kand være af største Nøtte, saa vel i henseende til Commerciens og Manufacturers Befordring, som til et retskaffen Credit-Væsens sikre og uforanderligere Vedligeholdelse…"

[8] "Ville Vi allernaadigst, at Banqvens Billetter…skullle over alt i Vores Riger og Lande, have deres fri og ubehindrede Løb og som reede Penge gaae fra Haand til anden, indtil deres Beløb udi Myndt in natura i Banquven affordres…"

[9] For an analysis of the bank's balance sheet between 1738 and 1812, see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance*, (Palgrave Macmillan), pp. 53–57.

The accounts of the bank, as well as those of the largest trading companies, are neatly preserved in the National Archives (Rigsarkivet).

mainly consisting of members of the royal court and people close to the court.

In 1773, the Bank was taken over by the Crown, its largest debtor. The shareholders were paid out with fixed interest bonds. In this transaction there were many conflicts of interest, illustrating for later generations the subtleties of government finance, macroeconomics, and the personal interests of the relevant ministers.

In this particular case, the chief decision maker was Heinrich Carl Schimmelman, (1724– 82) a financial wizard brought in from Hamburg in 1761 to get the Danish government finances under some sort of control. His formal title was "Schatzmeister", i.e. finance minister. He succeeded through ruthlessly efficient tax collections.

His vast fortune was mainly generated from the successful purchase and reselling of the Meissner porcelain factory, and from deliveries to the Prussian army. He became a major shareholder in the Copenhagen Bank, and developed large business interests in Denmark and its West Indian colonies (sugar, probably slave trading, gun manufacturing, real estate, etc.). He became one of Denmark's richest men. He used the bank for his personal businesses as well as for government finance. Paying the shareholders off gave him a free hand for manoeuvring.

This is hardly the stuff central banks should be made of. H.C. Schimmelman died in 1782, just before the end of the first part of the "flourishing trading period", and real trouble emerged. The king appointed Schimmelman's son, Ernst Heinrich Schimmelman (1747–1831), his successor. The younger Schimmelman may very well have been a nicer person than his ruthless father, but he certainly did not have his father's understanding of finance. Under his stewardship the bank, now owned by the Crown, declared its bankruptcy in January 1813 (see below). That incident had profound consequences for the future of central banking not only in Denmark, but also in Norway.

The summary balance sheet for the Kurantbank[10] shown in Table 4.1 clearly illustrates the road towards bankruptcy.

[10] Because of the constant weakening of the Copenhagen Bank's silver reserves, two minor banks were created: Den Slesvig-Holstenske Speciesbank (owned by the Crown) formed in 1788, and Den Dansk-Norske Speciesbank (a private joint stock company) formed in 1791. They would issue notes with strict requirements for silver coverage. Because of the scarcity of silver, these banks never

Table 4.1 The balance sheet of the Copenhagen Bank (Kurantbank"). Main figures 1767–1812. Selected years

000 Rigsdaler kurant	1767	1772	1790	1805	1810	1812
Silver holdings	146	84	830	125	58	82
Circulating notes	4.512	6.046	15.583	20.666	43.422	85.046
Capital	539	708	660	99	–	–
Other liabilities	2.173	959	16.670	12.137	7.730	13.870
Total assets and liabilities	7.224	7.723	32.913	32.902	51.182	98.916

Source: The Kurantbank's accounts, Rigsarkivet (the National Archives). The amounts are not necessarily accurate in a bookkeeping sense. Particularly in the last year of the Bank's life, simple addition errors can be observed. During the last months of the Bank's life, the bookkeeping could not keep track of events. By some estimates, the volume of circulating notes was about 140 mill, but that figure would include treasury bills circulating as banknotes (both were claims on the Crown)

Silver holdings dwindled. Crown expenditures exploded in war costs financed by note printing. The note printing by the Kurantbank in 1811–12 was later described as "… in this way the country was filled with notes, a sort of theatrical snow, which had that in common with big white snowflakes, that they were dissolved the moment they hit the ground…"[11]

After the taking over by the Crown, and particularly after the death of C.H. Schimmelman, the value of the Kurantbank notes as a percentage of their Rigsdaler species value dwindled. It was 76 % in 1800, and 13 % in 1811. In 1813, the average value was 1.6 % of its Hamburg Banco par value.[12]

had much significance, but in order to distinguish between these "species banks" and the Copenhagen Bank, the name "Kurantbank" became the name used for the latter. It issued "current" money (*rigsdaler kurant*), inconvertible since 1757, in contrast to the two others, which issued convertible *rigsdaler species*. Den Dansk-Norske Speciesbank became a model for the later Norges Bank, see. Chap. 5.

[11] "…på denne Måde fyldte man Landet med Sedler, en slags Theatersne, der havde det til fælles med den virkelige Tøsnes store Fnugger, at den opløstes, idet den naaede Jorden." M. Rubin (1892) *1807–14. Studier til Københavns og Danmarks Historie*, p. 258.

[12] cf. P. Thestrup (1991) *Mark og Skilling, kroner og ører. Pengesedler, priser og lønninger i Danmark i 250 år (1640–1989)*. Rigsarkivet og G.E.C. Gad, p. 13.

4.1.3 An Interlude. The Rigsbank, (1813–1815)

On January 5, 1813, a monetary reform was announced,[13] known as the "Crown bankruptcy" ("statsbankerotten"). This reform was a highly complicated affair, which had different stipulations for debts owed by private individuals among themselves, and debts owed by the Crown. The structure of the reform seems mostly to have been inspired by a similar reform undertaken in Austria shortly before.

The main points of the 1813 reform were primarily that the Kurantbank was dissolved to be replaced by a new "Rigsbank", which would issue new "Rigsbank daler notes" (RBD). Although this new bank would be owned by the Crown, it was to be operated completely separate from the Crown/government. Calculated in silver, the par value of the new RBD was one-tenth of the old species daler.[14] Count Heinrich Ernst Schimmelman was dismissed (but later appointed foreign minister).

The plan was intended to achieve a value of 100 RBD = 200 Hamburg Banco, and to make the RBD convertible into silver at the old par value over a number of years. As in Sweden, the plan had much in common with the post-World War I monetary intentions.

A ceiling was placed on the amount of notes the new bank could issue (RBD 46 million) of which 27 million were to be used for the redemption of the 100–140 million circulating Kurantbank notes (see Table 4.1). The remaining 19 million were to be at the disposal of the Crown. In addition, the Crown was granted a special credit of RBD 10 million in silver.

Claims against the Crown and Crown institutions could be repaid on demand with one RBD for six of the old RD kurant. Alternatively, creditors could choose to accept 1:1 silver value Crown bonds, repayable over an uncertain period. Nobody considered that an attractive alternative.

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13 "Forordning om Forandring i Pengevæsenet for Kongerigerne Danmark og Norge, samt for Hertugdømmerne Slesvig og Holsten." January 5, 1813. Summarized in Danmarks Nationalbank, 1968: *Dansk Pengehistorie*, Vol. IiI, pp. 217–21.

14 See Chap. 5. cf. S.Aa. Hansen (1960) *Penge og kredit 1813–1860",* Fyns Stifts Kreditforening, p. 64.

An important feature of the 1813 Reform was that the new Riksbank was given a first mortgage of 6 % of the value of all property in the dual Kingdom and the duchies of Slesvig and Holsten.[15] This mortgage was to carry an interest of 6.5 % and could be repaid to the Riksbank at any time. This mortgage secured a steady income for the bank for many years. It was, in fact, a tax secured by mortgages.

In spite of all the good intentions, the Riksbank was no success. Between 1814 and the first half of 1818, the value of the Rigsbank notes varied between 23 % and 50 % of their par value.[16] The necessary austerity was not implemented; a fact already realized by the government a few months after the January 1813 Reform.

On July 30, 1813, an "open letter" was issued from the Crown's finance administration.[17] This letter can be seen as a decisive instrument for the future establishment of central banking in both Denmark and Norway. It was (almost certainly) authored by Ove Malling, a central figure in the government, who has also been referred to as the "father of Danmarks Nationalbank".[18] The open letter stated that the bank had to be privately owned, and that the problems had been "unforeseen" (my translation):

> To give the monetary system in the royal realms and countries more purity, order, and stability; to secure more stable values to public and private assets; are the main purposes of the January 5, 1813 Resolution, and for the even dated statutes of the Rigsbank, so founded by the king. Since He has never lost these goals from his sight, the achievement of which have, however, been hindered by subsequent circumstances unforeseeable at that time, so has He considered how more and stronger means could be employed for the same goals. For this purpose He has taken the following decisions and resolutions:

[15] The Reform had special provisions for the duchies of Slesvig and Holsten, and after the 1814 separation of Norway from Denmark, a special arrangement was also made for Norway.

[16] cf. A. Rubow (1918) *Nationalbankens Historie 1818–1878*, (Nationalbanken i Kiøbenhavn) p. 35.

[17] Kongeligt aabent Brev ang. Bank og Pengevæsenet i Danmark og Norge.

[18] A. Rubow (1918) *Nationalbankens Historie 1818–1878*, Nationalbanken i Kjøbenhavn, p. 65.

The Riksbank shall be changed into a national private company managed by its own administration and board…[19]

It took "only" five years to accomplish this goal. The unforeseen circumstances referred to were primarily military costs in connection with Denmark's unfortunate association with Napoleon.

Of course, neither the Kurantbank nor the Riksbank were central banks in the sense discussed in Chap. 2. They enjoyed a monopoly on note-issuing, and they were certainly banks for the Crown, even more so than healthy for either, but the preconditions for having a "central bank" in the first place (as set out in Chap. 1) were not fulfilled.

4.2 Nationalbanken i Kiøbenhavn (1818–1936)

4.2.1 The Scenario

By the peace treaties of Kiel (1814) between Denmark, Prussia and England, confirmed at the Congress of Vienna in 1815, the nearly 400 year-old Denmark–Norway union was dissolved. Instead, Norway was subjected to a personal union with Sweden (see Chap. 5).

This, obviously, changed the conditions foreseen for the Riksbank in 1813. The traditional links between Denmark and Norway were cut. Sweden imposed new tariffs on trade between Denmark and Norway. Traditional Danish–Norwegian trade and finance links were severed. The property mortgages referred to above had to be released in respect of

19 "At give Pengvæsenet i de Kgl. Riger og Lande mere Renhed, Orden og Fasthed; at tilskrive den offentlige og private Formue stadigere Værd: ere Hovedformålene for For. 5. jan.1813 og for den Fundats af samme Dato, ved hvilken Kongen har stiftet Rigsbanken. Da Han ingensinde taber disse vigtige Formåal af sigte, for hvis Opnåelse imidlertid senere indtrufne, den gang uforudsigelige Omstændigheder have lagt nye Hindringer i Vejen, saa har Han været betænkt paa, hvorledes der til samme kunde fremvirkes ved flere og kraftigere Midler. Til den Ende har Han taget følgende Beslutninger og Bestemmelser:Rigsbanken skal gaae over til at blive privat, under et national Interessentskab, og sættes under dettes forvaltning og Bestyrelse…" Aabent Brev af 30 July, 1813. (National Archives/Rigsarkivet.)

the Norwegian properties. Danish agricultural exports to England were reduced by new tariffs.

In addition, economic conditions were difficult all over Europe in the wake of the Napoleonic wars.

The new bank announced in the open letter of July 1813 had to overcome all these difficulties and build up a new and reliable monetary system. The intention was to restore the paper notes to their old silver par value.

The charter for the new Nationalbanken i Kiøbenhavn was finally issued by King Frederik VI on July 4, 1818. It was based on the lessons learnt from the fates of the Kurantbank and the Rigsbank, and with inspiration from the species bank of 1791 for Denmark–Norway, and with direct reference to the 1813 open letter.

That the above mentioned open letter was a direct inspiration for the new bank's charter is clearly seen in the preamble to the charter (my translation):

> "…With Our open Letter dated July 30, 1813, We have announced how it was Our wish and determination to see the firmness and order in the nation's monetary system intended by the Rigsbank foundation of January 5 of that year promoted by even more and stronger means, and for that purpose ordered that the Rigsbank…shall become privately owned under a national partnership with the nation's landowners as its main shareholders[20]

It will be seen that some of the wording ("more and stronger means") was taken directly from the open letter. It will also be seen that the 6 % mortgages levied on the country's landowners would make them shareholders in the new bank. This idea was also taken directly from the open

[20] "…ved vort aabne Brev af 30te Julii 1813, have Vi kundgjort, hvorledes det var Vores Ønske og Villie, at see den, ved Rigsbank-Fundatsen af 5. Januar s. A. tilsigtede Orden og Fasthed I Statens Pengevæsen fremvirket ved endnu flere og kraftigere Midler, og til den Ende tilsagt, at Rigsbanken… skulde gaa over til at blive privat, under et nationalt interessentskab af Statens Grundejere som Hoved-Actiehavere.," Octroy for Nationalbanken i Kiøbenhavn paa 90 Aar, af 4.Juli 1818, as reprinted in A. Rubow (1918) *Nationalbankens Historie 1818–1878* (Natikonalbanken i Kiøbenhavn), pp. 67–120.

letter. As times gradually improved, the majority of landowners repaid the mortgages to the bank and enjoyed the dividends.

It was recognized that it would take time to withdraw all the circulating notes issued by the Kurantbank and the Rigsbank and to restore stability and confidence in the monetary system. Therefore, the charter given to the new bank was issued for the unusually long period of 90 years.[21]

As of August 1, 1818, the Nationalbanken i Kiøbenhavn took over all assets and liabilities from the Rigsbank, which was then dissolved.

Shortly before the expiry of the 1818 charter, it was renewed for another 30 years with no substantial changes.[22] The 1818 charter had 58 paragraphs. The 1907 renewed charter had only 17, because § 1 of the new charter said: "The Charter for the Nationalbank dated July 4, 1818…is hereby prolonged for a period of 30 years with the changes and additions contained in this law."[23] The changes and additions were mainly of a technical or administrative nature.

4.2.2 Nationalbanken as an Issuer of Banknotes (Criterion I)

With the exception of the short lives of the Slesvig-Holstenske Speciesbank (1788–1813) and the Dansk-Norske Speciesbank (1791–1813), the Kurantbank and the Riksbank had monopolies on note issuing. Two minor institutions were formed during the crisis of the late 1790s (one private institution formed by the merchants, and one Crown institution, the *Depositokasse*), but they were too small and short-lived to be of any significance). For all practical purposes, the Kurantbank enjoyed a note-issuing monopoly between 1736 and 1813, and the Riksbank a similar monopoly from 1813 to 1818.

[21] The custom elsewhere in Europe in those days was to issue charters for 10–20 years, whether the charters were for trading companies or for banks.

[22] Lov af 12. Juli, 1907, om forlængelse af Nationalbankens Oktroj.

[23] "Octroi for Nationalbanken af 4. Juli 1818….fornyes for et Tidsrum af 30 Aar…med de i nærværende Lov indeholdte Ændringer og Tilføjelser."

When the Nationalbanken i Kiøbenhavn was formed in 1818, it was given an explicit note-issuing monopoly. In contrast to the old Kurantbank, Nationalbanken i Kiøbenhavn was given metal coverage requirements for its notes to be fulfilled when convertibility was reintroduced (1845).

Criterion I was fulfilled by 1736, with minor modifications 1788–1813.

4.2.3 Nationalbanken as Guardian of the Currency (Criterion II)

The 1818 Charter stated (§ 3, my translation): "The Bank's first purpose is and shall be to work towards ensuring a stable monetary system in the country. To that end it will endeavour with all means at its disposal to restore and maintain the silver par value of the Riksbank notes taken over from the Riksbank."

And

> § 5 (my translation): "The…purpose of the Bank is to promote the money circulation by loans and discounts in order to facilitate production, commerce, and trade…"[24]

These stipulations could be seen as an early intention to give the Nationalbank some characteristics of a central bank, but they should primarily be seen as a reaction to the difficult credit conditions in the 1790–1813 period, and the government bankruptcy in 1813, see above. The aim of these two paragraphs was both to restore convertibility into silver, which was achieved in 1845, and to re-establish a credit system of use to the business community. Both had been lost in the turbulent years between the 1790s and 1813.

The history of its predecessor also explains § I of the 1818 Charter, which is of particular interest for the concept of a central bank (my translation):

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[24] "Bankens…Bestemmelse er: ved Udlaan og ved Discontering, at fremme Peng-Omløbet, til Lettelse for Production, Handel og Omsætninger;…"

"Hereby we give for Ourselves and Our governing Descendants our Royal Promise that no Instruction from Ourselves or Them shall ever directly or indirectly influence the Management of the Bank, which is bound alone by its Management as governed by the Charter and Instruction;…"[25]

In other words, the crown/government[26] renounced for itself and its successors all rights whatsoever to influence in any way any decisions taken or policies pursued by the management of the bank. The value of a promise given by an absolute king on behalf of his equally absolute successors can, of course, be discussed. The main point is that the general public seems to have believed in it.

Although § 1 of the 1818 charter was not changed, the 1907 amendments to the charter gave the finance minister the right to attend rate-setting meetings of the bank's governors, but without voting rights (§ 8). This was a compromise. During the parliamentary debates of 1906–07 on the renewal of the charter, this point was the subject of some discussion. The Social Democrats wanted a much stronger governmental or parliamentary influence on the Nationalbank's decision-making. They were voted down by a vast majority. The arguments advanced against the Social Democratic proposals included envisaged dangers of irresistible demands from credit-hungry governments, the dangers that governors of the bank would be appointed from political motives, the envisaged more dangerous position of a state bank in case of war, and the difficulties of having satisfactory lending decisions under political influence.[27]

Consequently, the promise given in 1818 by the king remained in force. The Nationalbank also maintained its independent status after the 1907 changes to its charter.

Criterion II must be considered reasonably fulfilled since 1818 in the sense that the bank was not under political control or influence. However, under the general circumstances prevailing before 1914 it could hardly be expected that the government made much use of the Nationalbank as

[25] "Octroy for Nationalbanken i Kløbenhavn", § 1, as reprinted in Rubow, Vol. I, p. 68.

[26] Denmark–Norway was an absolute monarchy until 1849 (Norway until its separation from Denmark in 1814). There was little formal distinction between the king/crown, the government, and the state.

[27] These arguments are here summarized from A. Rubow (1920) *Nationalbankens Historie 1878–1908,* (Nationalbanken I Kiøbenhavn), p. 144.

an "adviser" either on economic issues in general or on monetary matters in particular. Until 1914, the Nationalbank was primarily a commercial bank.

4.2.4 The Nationalbank as Bank for the Government (Criterion III)

Since no other bank existed in Denmark until the mid-19th century, it can be concluded that the Kurantbank had always officially been the Crown's bank, and that the Nationalbank was the government's main bank at least until alternative banking arrangements became available in the very late 19th century. Competition for government business became intense since about 1890 or possibly a few years earlier.

In April 1914, the Nationalbank agreed with the government and the other private banks that in the future, all government revenues should be paid into a government account with the Nationalbank, and that all government cash holdings were to be deposited in the Nationalbank (roughly as prescribed for the Riksbank in Sweden since 1668). In return for that agreement, the Nationalbank offered the other private banks cheaper discount rates and rediscounting facilities (which ended in July 1914). The main background to this agreement[28] was that the risk that competition among the banks and savings banks for government business could lead to corruption and dangers for banks that unpredictably or unexpectedly won or lost such business. The sums involved could be very large for smaller institutions.

In this sense, the Nationalbank became the government's official banking connection in April 1914.

No government capital was ever invested in the Nationalbank,[29] nor were any government or parliamentary guarantees on its behalf ever issued, much in contrast to Norway and Sweden. As part of its money market operations, the Nationalbank has occasionally bought short-term

[28] According to C. Th. Ussing, the newly appointed governor of the Nationalbank, who explained it in an article in Nationaløkonomisk Tidsskrift, 1914.

[29] Except for the transitory arrangements in connection with the 1936 National Bank Act, cf. Chap. 9.

government bills or bonds, but the Nationalbank was not a direct lender to the government, nor an arranger of foreign loans to the government, except during the Great War (see Chap. 6).

The conclusion is that the Kurantbank and the Rigsbank satisfied Criterion III throughout their existence, in fact too much so, and that Nationalbanken i Kiøbenhavn satisfied this Criterion between 1818 and the late 19th century, and again as from 1914.

4.2.5 The Nationalbank as Bank for the Country's Other Banks (Criterion IV)

Until 1846 Nationalbanken i Kiøbenhavn was the only bank in Denmark. In 1846 a joint stock bank was formed in Odense (the largest provincial town at that time). The local business community had requested that the Nationalbank open a branch in that city, as it had done in two other cities a few years before, but when the Nationalbank declined, the local business people formed a bank themselves.

During the 1850s, the Nationalbank reluctantly had to accept the creation of other commercial banks. In 1856 the Nationalbank unsuccessfully tried to stop the formation of Privatbanken i Kiøbenhavn—a name strikingly and probably intentionally opposing it to Nationalbanken i Kiøbenhavn. However, the growth of commercial joint stock banking did not really catch on until the 1870s.

In the years 1844–1901, the Nationalbank opened branches in six major provincial towns, initially supplying banking services in the absence of other banks, but later in direct competition with local banks and savings banks.

By the 1890s, some of the larger banks in Copenhagen competed amongst themselves and with the Nationalbank to become the prime correspondent bank for the provincial banks (for clearing, foreign loans and payments, etc.). Eventually, the Nationalbank won this battle, primarily at the expense of the Privatbanken i Kjøbenhavn.

The main reasons why the Nationalbank won this battle were probably that (1) as the royally chartered note-issuing bank, it was clearly seen as the "leading main bank" in Denmark; and (2) during the banking crisis of 1906–07, it did to some extent step up as a lender of last resort. However, it was never consistent in this role, neither in 1906–07 or in the much worse banking crisis of 1922–26.[30]

During the years around 1900, the Nationalbank gradually reduced its commercial business, but it did keep discounting bills for large companies, and it continued to offer interest-bearing accounts to the general public until the early 1960s.

Overall, the Nationalbank could probably be said to have partially played the role of bank for the banks since 1906–07 and more fully during the Great War, when it supplied the commercial banks with much needed liquidity (particularly in1914) or acted as a repository for their excess liquidity in the later war years.

In conclusion, before 1914 the Nationalbank only partially fulfilled Criterion IV. We can also conclude that by 1914, even by around 1900, conditions for having a central bank seem to have been fulfilled (see Table 4.2).

Table 4.2 The Danish Banking scene 1845–1914

Total assets mill. DKK	1845	1860	1880	1900	1914
Nationalbanken	66	73	68	143	269
Privatbanken		15	34	72	153
Landmandsbanken			45	137	472
Handelsbanken			24	72	210
Other commercial banks		8	40	167	512
Total	66	96	211	591	1.616
Number of banks	1	15	41	46	140
Savings banks, deposits	12	56	254	582	909
Number of savings banks	28	57	443	512	510

Sources:
Danmarks Statistik (1969): "Kreditmarkedsstatistik", Statistiske Undersøgelser, nr. 24
"Dansk Pengehistorie" (1969), vol. III, v. K. Mordhorst, Danmarks Nationalbank
A. Rubow (1920): "Nationalbankens Historie 1818–1878 and 1878–1908" (I and II), Nationalbanken i Kiøbenhavn
Privatbanken: Privatbanken i Kiøbenhavn, 1989 merged into Unibank and later into Nordea
Landmandsbanken: Originally Den Danske Landmandsbank Hypotek og Vekselbank (formed 1871), later Den Danske Bank af 1871, merged 1990 with Kiøbenhavns Handelsbank to become Danske Bank
Handelsbanken: Formed in 1872 as Kiøbenhavns Handelsbank. Merged with Den Danske Bank in 1990

[30] cf. K.Mordhorst (1968) *Dansk Pengehistorie*, Vol. III (Danmarks Nationalbank), pp. 114–155.

5
Norges Bank and the Four Criteria

5.1 The Political Scenario

For about 400 years Denmark and Norway had constituted a dual kingdom with the Danish kings as heads of state. In Norway, the king was represented by a statholder (governor)[1] and a local administration residing in Christiania (spelt Kristiania since 1877, and renamed Oslo in 1925). The local administration was comprised mostly of civil servants educated in Copenhagen and recruited from the Danish central administration. The local administration would collect taxes, customs, and duties and remit the proceeds to Copenhagen where these incomes would contribute to the joint defenses and administration of the kingdoms.[2]

[1] The statholders were usually members of the aristocracy close to the royal family. Even before absolutism was introduced in 1660 (see Chap. 4), the statholder would often be a younger brother, a cousin, or a son in law of the king. The last governor was prince Christian Frederik, the son of an uncle to King Frederik VI. He was elected king of Norway in the spring of 1814, but abdicated three months later when Norway's union with Sweden proved inevitable. In 1839 he became King Christian VIII of Denmark, succeeding King Frederik VI.

[2] Whether Norway contributed more or less than its "fair share" of the joint expenses has been a frequently and hotly debated issue among older historians.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_5

Denmark was on the losing side in the Napoleonic wars. In the peace treaties with Prussia and England (the Treaty of Kiel, January 14, 1814), Denmark had to accept the separation of Norway from Denmark. Jean-Baptiste Bernadotte (1763–1844), the Swedish regent and later king under the name of Karl XIV Johan, had understood that Sweden could not regain Finland, which had been lost to Russia in 1809. Both Russia and Sweden were on the winning side, so at the Congress of Vienna, Russia was allowed to keep Finland as a grand duchy, and the Kiel peace treaty was confirmed. The consequence was that, as from the autumn of 1814, Norway became part of a personal union with Sweden. Under this arrangement Sweden and Norway had a joint king and a common foreign policy directed from Stockholm, whereas Norway would keep its May 1814 Eidsvoll constitution (slightly amended in the autumn to reflect the new situation), and home rule government.

Under the new accordance, economic matters, including government budgets, defence, and monetary arrangements, were domestic issues. The Norwegian government was very keen to maintain and demonstrate its authority over domestic financial affairs, even if the Swedish regent often tried to intervene or meddle in the business.

Among the top priorities for the Norwegian government was to get the messy monetary system sorted out. Norway and Denmark had shared the same currency system for 400 years, so the mess was no less in Norway than in Denmark. With the separation from Denmark, Norway also had to accept its share (nearly 40 %) of the dual monarchy's combined crown debt. Plans had to be made for soaking up the circulating Kurantbank notes, Rigsbank notes, and notes issued by the Dansk-Norske Speciesbank (see Chap. 4), and replacing them with a new national currency.

During the 1807–14 war, the British had captured about half of the Norwegian merchant fleet. Trade, shipping, and financial relationships with Denmark and the continent almost ceased. During the years 1813–20, the number of bankruptcies among shipping companies and merchants exploded. In 1814, Norway had to dissolve not only a political, administrative, and monetary union with Denmark, but also a commercial and financial one.

In addition, Norway was far from a united economic area, and very thinly populated. Western and northern Norway was mostly dependent on fishing, while southeastern Norway depended mostly on forestry, shipping, and some mining. Communication between the different parts of the country was not easy. The first telegraph line was not installed until 1855. Until then it was easier to transmit money from Oslo to London than from Oslo to Bergen.[3]

During the 1807–14 war, the British had captured not only half of the Norwegian merchant fleet, but also the entire Danish-Norwegian navy, the latter after the bombardment of Copenhagen in September 1807.[4]

In 1814, the credit standing of Norway's newly born government was less than junk. It was a newly formed semi-independent country with no track record on any capital market. It had substantial government debts, and considerable government expenditures. During his three-month tenure of the Norwegian throne, King Christian Frederik tried hard, but in vain, to obtain loans from London or Amsterdam.[5]

Sweden's regent may have taken pride and pleasure in his future position as king of both Sweden and Norway, but no financial aid was offered from Stockholm. Probably none was asked for.

In 1820, the Norwegian government finally succeeded in raising a foreign loan to provide the country with some silver. The loan was obtained from the Brüder Benneche in Berlin. The terms, of course, reflected Norway's lack of creditworthiness. The proceeds of the loan were only 61 % of its nominal amount (900,000 Hamburg Banco). The collateral would consist of a re-mortgaging of the mortgage loans the government had over Norwegian private property, and an assignment over the government's incomes from customs and duties. The administration of the loan was entrusted to a five-member commission, to which the lender would appoint one member, and the borrower could choose four members among eight people proposed by the lender.[6] Norway was under foreign financial administration.

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[3] See Å. Egge (1978) *Kredittvesenet i Norge under industrikapitalismens gennombrudd* in G. Authén Blom (ed.) *Utviklingen av kreditt og kredittinstitusjoner i de nordiske land ca 1850–1914* (Trondhjem) p. 9.

[4] The British feared that Denmark–Norway would be unable to resist pressures from France following the Tilsit agreement between Emperor Napoleon and czar Alexander I. The issue was who would come first to gain control of the considerable Danish-Norwegian navy.

[5] See Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 år* (0slo), p. 8. Jahn was head governor of Norges Bank between 1946 and 1954.

[6] See Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 År,* Oslo, pp. 31–32.

One of the consequences of the dire economic and monetary situation in 1813–14 was that the Eidsvoll congregation decided that in order to improve the country's creditworthiness it was imperative that monetary considerations be given top priority and be taken care of at the highest level of authority. Therefore, the 1814 Eidsvoll constitution had a paragraph assigning to the Storting (parliament) the responsibility for Norway's monetary stability. The Storting has had this responsibility ever since. In the wording of the present constitution,[7] § 75 (my translation): "It is the Storting's responsibility to…supervise the monetary system of the country…"[8]

5.2 The Origins. The Formation of Norges Bank in 1816

The Dansk-Norske Speciesbank (introduced in Chap. 4) had set up three branches in Norway (Christiania, Bergen, the largest Norwegian city at the time, and Trondhjem). When the bank terminated its lending activities in 1799 because of excessive note-issuings, the Deposito-Casse was created to take its place. It was less bound by silver coverage rules for its notes than the Speciesbank. However, the branches of the Speciesbank still existed, managing their outstanding loans and note circulation. Also the Rigsbank, formed under the January 5, 1813 monetary reform, had a branch in Christiana (see Chap. 4) with a local note circulation.

The Eidsvoll Constitution of May 1814 (as amended in the autumn) provided for the formation of the Storting, which convened for the first time on July 1, 1815. At this meeting the Storting was informed that the government's credit limits with the local branches of the Rigsbank, the Dansk-Norske Speciesbank, and the Deposito-Casse were almost fully used.

The Storting decided to form a committee to propose a system for Norway's future currency and credit system. In the meantime, the government continued to draw on the Riksbank and the Deposito-Casse resulting in a further flooding of the country with notes issued by these institutions.

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[7] After the latest amendments of May 27, 2014.

[8] "Det tilkommer Stortinget…å føre oppsyn med rikets pengevesen."

Two years and two committees later, a final proposal was approved by the Storting. The proposal resulted in two main acts, both passed by the Storting on June 14, 1816. This date is, therefore, considered Norges Bank's birthday, although its operations did not start until about one year later.

One of the two acts was the "act on the monetary system,"[9] which stipulated inter alia that Norway should have a monetary system based on a speciedaler (SD). The silver content was to be equal to that of the old speciedaler, i.e. approximately 25.2 grams of fine silver to be minted by the government only. The act also stipulated that special acts should be passed regarding the transcription of existing loan contracts, government salaries, and so on, from the existing system to the new one. These special acts were also passed on June 14, 1816.

The other main act was the "act on Norges Bank".[10] The full official name of this act shows that the Storting had its doubts about what could realistically be done (my translation): "Charter for Norges Bank in case the Bank's fund can be subscribed voluntarily, and in that connection a Letter of Foundation to govern the Bank instead of the Charter, in case its fund is raised by compulsory contributions."[11] The Charter and the Letter of Foundation were identical on most points, but they differed on some technical and administrative details, including the location of the bank. The Charter had stipulated Christiania as the location for the Bank's head office, while the Letter of Foundation stipulated Trondhjem.

Both the Charter and the Letter of Foundation (73 paragraphs) were modelled closely after the old charter for Danmark-Norges Speciesbank (1791),[12] and also influenced by the open letter dated July 30, 1813.[13] After all, the Charter and the Letter of Foundation had been authored by civil servants educated and trained in Copenhagen.[14] The only important point not copied from the Speciesbank was the prohibition against

[9] Loven om pengevesenet af 14. juni, 1816.

[10] Loven om Norges Bank af 14. juni, 1816.

[11] "Octroi for Norges Bank, saafremt Bankens Fond ved frivillig Subscription tilveiebringes, og i forbindelse dermed Fundation, der, istedenfor Octroien, skal være gjældende for Banken, dersom dens Fond tilveiebringes ved tvungent Indskud."

[12] See Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 år (*Norges Bank, Oslo), p. 31.

[13] See Chap. 4, section 4.1.3.

[14] I am grateful to Jan Qvigstad, a former governor of Norges Bank, for pointing this out to me.

mortgage lending. Therefore, Norges Bank soon developed into a major mortgage lender and thus founded the tradition in Norway for having mortgage lending undertaken by state institutions.

The Bank's fund was stipulated to be RD 2 million (in silver). Efforts to raise that sum through voluntary subscriptions failed dismally. Less than half of the planned amount was raised. The remainder had to be raised through compulsory means, just like a tax. Each region was told to raise a specific sum fixed in proportion to the estimated wealth of the inhabitants in the respective regions. Within each region the local customs officers and other civil servants had to collect the money based on their personal knowledge and estimates of the wealth of the individuals from whom they would collect it. Since actual information on wealth was scant, this mechanism resulted in rather arbitrary collections, which obviously became highly unpopular. The collection of the fund was an arduous process. It was planned to take little over one year, but it actually took more than three years to become nearly completed.

In return for the compulsory contributions, people received shares and became shareholders in Norges Bank. The shares could be traded and gave the holder the right to receive dividends, but nothing else. The shares gave no voting rights.

The Letter of Foundation stipulated that beside the Trondhjem head office, the bank should open branches in Christiania, Bergen, and Christiansand, all in southern Norway. By 1914, the bank had 20 branches. Following many heated debates, the head office was transferred to Kristiania in 1897.

The Bank's declared purpose was to be a loan, giro, and deposit bank. The lending policy was developed from the Letter of Foundation and it was later decided that loans should be offered geographically in proportion to the funds collected from the respective regions. The main lending business soon turned out to be long-term mortgage loans. In the charter for the Dansk-Norske Speciesbank such business had been forbidden. This was one of the few principles that had not been copied in the Letter of Foundation for Norges Bank.

The bank was to be managed by a board of representatives consisting of 15 members, and a board of 5 governors (same numbers as in the Nationalbanken i Kjøbenhavn). Representatives and governors were all appointed by the Storting, as were the management boards of the branches. This indicates that the responsibility of the Storting to supervise the monetary system was taken very seriously. This is still reflected in the present act on Norges Bank.[15]

Since monetary affairs were domestic issues, the dissolution of the union with Sweden in 1905 made no difference in this respect.

5.3 Norges Bank and the Four Criteria

5.3.1 Norges Bank as a Note-Issuing Bank (Criterion I)

Norges Bank was born with a note-issuing monopoly and, therefore, always fulfilled this criterion. Other notes were circulating in large volumes at the time of the birth of Norges Bank, but the clear intention was that these notes—issued by the Danish Kurantbank, the Rigsbank, and the Dansk-Norske Speciesbank—should be withdrawn from circulation over a number of years, so that notes issued by Norges Bank would eventually become the only legal tender in Norway. It is hardly a surprise that this process took much longer than originally anticipated. The process, including the winding down of the branches of the Rigsbank and the Dansk-Norske Speciesbank, was finally concluded during the 1830s.

The Norges Bank Act was changed many times during the 19th century, mostly to make adjustments to the metal cover for its bank notes and the amount of bank notes the Storting would authorize the Bank to issue, and maximum and minimum values of the currency in relation to its par value. Convertibility of the banknotes into silver was introduced in 1823, but at a discount of approximately 30 %. The principles of the note-issuing regulations were largely copied from Sweden.

[15] Lov om Norges Bank og pengevesen mv (sentralbankloven) af 9. sept. 1985. See also Chap. 10 of this book.

5.3.2 Norges Bank as Guardian of the Currency (Criterion II)

There is no doubt that Norges Bank, the government, and the Storting, saw it as a main priority to restore convertibility of the country's new currency into silver at the pre-Napoleon par value. Convertibility at par was achieved in 1842 (since 1878 gold).

If a reasonable degree of independence from government interference in the policies of the central bank is considered important for safeguarding the value of the currency, it should be noticed that Norges Bank was set up as probably the least independent of any central bank, with the possible exception of Sveriges Riksbank. In the words of the official history of the Norges Bank (my translation): "The activities of the Bank were decided by the Storting, and the bank has to comply with the law passed by the Storting. In other words, it was the Storting's bank…"[16]

With respect to the external value of the currency, the attitude taken by Norges Bank in the first half of the 1870s seems quite revealing. Norges Bank had been heavily criticized by the opposition in the Storting for not having intervened in the foreign exchange market and for not having done anything to reduce the spread between buying and selling rates. Norges Bank replied that it did not see it as its job to try to steer prices on the exchange market, and (my translation): "…nor was it allowed to act as a speculator in the foreign exchange market."[17]

Criterion II has never been satisfied by Norges Bank (except, perhaps, since 2003, see Chap. 10).

5.3.3 Norges Bank as Banker for the Government (Criterion III)

Since Norges Bank was the only bank in the country during the first 40 years of its existence, it had no competition for government business. Also, the growth of the bank's provincial branch network, each with

[16] Jahn, Eriksen & Munthe (1966) *Norges Bank gjenom 150 år*, (Norges Bank), p. 17: "Bankens virksomhet var fastsatt av Stortinget, og det er dettes lov Norges Bank har å rette sig etter. Den var med andre ord Stortingets bank…"

[17] Jahn, Eriksen & Munthe (1966) *Norges bank gjennom 150 år*, (Norges BanK) p. 119 "…heller ikke måtte den opptre som spekulant på valutamarkedet."

a government appointed management, made Norges Bank the natural choice of conduit for payments of taxes, duties, and customs. The formation of numerous private commercial banks in the second half of the 19th century does not seem to have made much difference in this respect, except in districts not covered by Norges Bank branches.

Since its birth, the Norwegian state had held a certain percentage of the share capital of Norges Bank. The reason was that many of the individual shareholders originally had little faith in the prospects for the bank, and had sold their shares to the government (there were few other buyers). In 1863, the state increased its stake considerably. The background was that the government had placed a large deposit with the bank in 1842 in connection with the introduction of full silver convertibility. In 1863, the question was raised what to do with the accumulated interest on this deposit. After much discussion and disagreements between the government and the Storting it was finally decided to convert the amount into shares paid for with the amount of accumulated interest.[18]

Its role as banker for the government did not include being a lender to the government, except during the earliest years of its existence, and during the Great War. Indirectly, however, Norges Bank helped finance government expenditures by funding state banks set up to finance projects and purposes favoured by the government.[19]

The conclusion is that Norges Bank always satisfied Criterion III.

5.3.4 Norges Bank as Bank for the Country's Other Banks (Criterion IV)

Until 1857, Norges Bank was the only bank in Norway (although hundreds of tiny savings banks had been formed all over the country, like in the rest of Scandinavia). From the mid-1890s the formation of private commercial banks gathered pace. Their number increased from 39 in 1897 to 116 by 1913. During this time, Norges Bank slashed its own direct business with commercial customers substantially, but it did not stop completely. In 1890, about one third of all bills discounted

[18] Lov om Norges Bank af 6. Juni 1863.

[19] See Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 128–32.

in Norway were discounted by Norges Bank. By 1913, this had been reduced to about 20 %.[20] It mostly restricted itself to funding the state banks, the commercial banks and savings banks by lending to them or rediscounting their bills of exchange. Also, it made occasional loans to local authorities.

During the banking crisis of 1899–1904, Norges Bank also took upon itself the role of lender of last resort. As a result of heavy speculations in the stock and property markets half a dozen of banks, primarily in the Kristiania[21] (Oslo) region found themselves in various degrees of trouble and asked Norges Bank for assistance. The requests for assistance soon outgrew the capacity of Norges Bank, so in the later cases the assistance was given through a co-operation between Norges Bank, the government, which refinanced Norges Bank, and the larger commercial banks.[22]

Table 5.1 The Norwegian Banking Scene 1848–1915

Total assets Mill Kr	1848	1860	1880	1900	1915
Norges Bank	30	32	35	51	234
Commercial banks	0.4	17	71	425	1.334
Number of banks	1	4	18	82	127
Savings banks	17	49	157	344	816
Number of savings banks	40	174	311	413	527
State banks	2	18	57	131	240
Number of state banks	1	1	1	1	2

Norges Bank: The amounts shown for 1848–1900 are for outstanding loans. The 1848 amount is for 1850.

Commercial banks: The amounts shown for 1848–1880 are for outstanding loans.

Savings banks: the amount shown for 1848 is the average of 1845 and 1850.

State banks:

Kongeriket Norges Hypotekbank, est. 1851, and Arbejderbruk-og Boligbank, est. 1903.

For a summary in English on the Norwegian state banks, see Steffen Elkiær Andersen: "The Evolutiion of Nordic Finance" (Palgrave Macmillan, 2010), pp. 128–32.

Sources:

Norges Statistiske Sentralbyrå: *Historisk Statistikk*, 1994

H. Skånland: Det Norske Kredittmarked siden 1900 (Statistisk Sentralbyrå, 1967), p. 75

[20] Jahn, Eriksen & Munthe, *Norges Bank gjennom 150 år*", Norges Bank 1966, p. 141.

[21] Kristiania was renamed Oslo in 1925.

[22] This pattern was also seen in Denmark during the banking crises of 1906–08 and 1922–26.

This course of events confirmed the role of Norges Bank as a "bank for the banks" by 1914, in spite of its continuing, but limited, commercial business.

By 1914, Criterion IV was mostly fulfilled. At least, the conditions for having a "central bank" at all would seem to have been satisfied since about 1890 (see Chap. 1 and Table 5.1).

In conclusion, Criterion I was fulfilled from the birth of Norges Bank (apart from a few transitory problems), and Criterion II was never satisfied. Criterion III was automatically fulfilled from the start, and Criterion IV was mostly met by 1914. Thus, by 1914, Norges Bank could almost have been considered a "central bank".

6
The Scandinavian Currency Union (1873–1914)

6.1 The Formation and Workings of the Scandinavian Currency Union

By the mid-1860s, the interest in switching from the predominantly silver standard to a new gold standard, or a bimetallic standard, was spreading throughout Europe, including the Nordic[1] countries. The background was the declining price of silver relative to gold. It became increasingly difficult to maintain the traditional 15½:1 price relationship between silver and gold.

In the Nordic countries, the first of a number of meetings of economists and bankers took place in Göteborg in 1863. The currency standard was one of the subjects discussed at this meeting, but only in terms of silver. When the second meeting was held in Stockholm in 1866, opinions had changed. The economists and bankers concluded that a switch to a gold standard was recommendable. They also advocated that a common Nordic currency based on gold should be introduced. The source

[1] The term "Nordic" is used here, because Finland also participated in these discussions.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_6

of inspiration was the Latin Currency Union formed the previous year. Over the next few years, discussions in the Nordic countries continued in an atmosphere where the thought of a common Continental currency system centred on the French 20 franc gold coin was gaining weight, but as a bimetallic standard. In particular, it had been recommended by a Swedish committee set up in 1869.

The Franco–Prussian War 1870–71 and the German decision to adopt its own gold standard put an end to any ideas of a common Continental currency. It took another 110 years and two world wars to revive that idea. Or, put somewhat differently, in spite of two world wars, the idea of a common Continental currency was revived, but it took about 120 years to do so, and another 10 years to implement it.

When in December 1871 Germany decided to switch to gold, a similar move by the Nordic countries appeared urgent. The reason for the urgency was that one of the consequences of the German unification and switch to gold was that the Hamburgische Bank would be closed in its centuries-old form and incorporated into a new Reichbank now being planned. The Hamburgische Bank had been based on the banco accounting unit defined in silver. It had been a traditional source of finance for much of Scandinavia's business community until this time, when local banking facilities scarcely existed. Therefore, the Scandinavian note-issuing banks had kept large reserves of silver in Hamburg. It was feared that, in connection with the winding down of the Hamburgische Bank, its silver reserves would be sold on the market thereby depressing the price of silver and the value of the silver reserves held by the Scandinavian note-issuing banks.

In Denmark, the Nationalbank recommended a swift transition to gold (my translation): "The faster such a transition can take place, the better we can safeguard ourselves against the loss the bank would suffer in connection with the conversion of the silver bullion to gold."[2]

A nine-member committee (*Den Skandinaviske Mønt Commission*) was set up in the summer of 1872, with three members from each of

[2] "Jo hurtigere en sådan Overgang skete, des bedre ville man sikre sig mod det Tab, som der for Banken ville være forbundet med Sølvbarrenes Omsætning til Guld." Direktionsprotokol Nr. 2, pp. 317–18, Sag. 1386. National Archives.

the three Scandinavian countries. This committee, chaired by the Danish Nationalbank governor, concluded in a report dated September 20, 1872, that a transition to gold was so obviously necessary that there was no reason to investigate that matter any further (my translation): "…we have had to assume that the question of the necessity of a switch to the gold standard did not require any investigation…and that we agree with the presumed idea of the necessity of this transition."[3]

The committee had considered the relative advantages and disadvantages of joining the French system, the English pound sterling, or the new German reichmark, but rejected all of these. Advantages in the shape of close trading relationships ("optimum currency area" considerations) were outweighed by purely practical short-term aspects. England and Germany were Scandinavia's largest trading partners, but one of the objectives considered of great importance in all three countries in this connection was to introduce a decimal currency system. This ruled out the English pound sterling. The German reichmark was ruled out because of its awkward value. Too many prices, contracts, wages, and salaries would have to be recalculated in too messy fractions. The committee's report included a proposal for a Mint Convention with 17 articles. The first two articles read (my translation):

> Art. I: The Nordic kingdoms adopt gold as the basis for a common mint system…
>
> Art. II: A common main coin is to be minted for the three countries, which is to be known as a gold crown…From one kilo of fine gold, 248 pieces of gold crowns are to be minted.
>
> The common unit of calculation shall be the crown daler, which is one tenth of a gold crown. The crown daler is divided into 100 øre.[4]

[3] "…vi have maattet gaa ud fra, at Spørgsmaalet om Nødvendigheden af en Overgang til Guldfoden ikke behøvede nogen Undersøgelse, og… vi slutte os til den forudsatte Tanke om denne Overgangs Nødvendighed."Betænkning fra Kommissionen angaaende Antagelsen af et fælles paa Guld grundet Møntsystem for de tre nordiske Kongeriger. Ministerialtidenden ("Ministerial Bulletin") for 1872, p. 545.

[4] "Art. 1: Dr tre nordiske Kongeriger antage Guld som Grundlag for et fælles Møntsystem…" "Art. 2: Der udmøntes for de tre Riger fælles Hovedmønt, som kaldes Guldkrone…Af et Kilogram fint Guld udmøntes 248 Stykker Guldkroner….den fælles Regningsenhed skal være Krondaleren, som er Tiendedelen af en Guldkrone. Krondaleren deles i 100 Øre."

Most of the other articles are concerned with numismatic descriptions of the coins to be minted.

The Committee's report resulted in an inter-Scandinavian government conference in Stockholm on December 18, 1872, where a Scandinavian Mint Convention was agreed upon. The Mint Convention of December 18, 1872, was soon ratified in Denmark and Sweden. In Denmark it was implemented by the passing of the *Mint Act of May 23, 1873*. The main points of its 25 articles were (my translation)[5]:

> § 1. In the future, gold shall be the basis for Denmark's mint system, with the use of silver and base metals for small change.
>
> § 2. Two main coins shall be minted. One shall be 1/248 of one kilogram…. of fine gold, the other shall be 1/124 of one kilogram…of fine gold. One tenth of the former…shall be the unit of calculation and shall be known as a crown. The crown shall consist of 100 øre.
>
> § 3. The gold coins shall be minted from mint gold consisting of 90 % fine gold and 10 % copper.

The May 1873 act does not directly mention anything about Swedish currency being legal tender in Denmark, but refers to the December 1872 Mint Convention.

Denmark and Sweden signed the final Convention on May 27, 1873, with effect as from January 1, 1875, from which date one kilo of fine gold would equal 2480 kroner, and one DKK would equal one SEK, and the coins would be legal tender in both countries.

The Russian czar did not allow Finland, a Russian grand duchy since 1810, to join, and the Norwegian home rule government hesitated. It was reluctant to join what it feared to be a Swedish dominated system and still hoped for a more general European arrangement. When this proved impossible, the Storting decided in 1875 to join the Danish–Swedish Convention as from January 1, 1878.

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[5] § 1. For Fremtiden skal Guld være Grundlag for Danmarks Møntsystem med benyttelse af Sølv og ringere metal til Skillemønt.

§ 2. Der udmøntes to Hovedmønter, den ene saaledes, at 248 Stykker indeholde et Kilogram …fint Guld, den anden saaledes, at 124 Srykker indeholde et Kilogram …fint Guld. Tiendedelen af førstnævnte Mønt …skal være Regningsenhed og kaldes en Krone. Kronen deles i 100 Øre.

§ 3. Guldmønterne udpræges af Møntguld, som er en Legering af 90 Vægtdele fint Guld med 10 Vægtdele Kobber."

The silver contents of the Norwegian species daler was 25.2966 grams of fine silver, the two Danish rigsdaler coin was 25.2816 grams and the Swedish four riksdaler coin was 25,5044 grams of fine silver. The differences were so small that there was no problem with taking them as one Norwegian daler = two Danish rigsdaler = four Swedish riksdaler.[6] So, one Norwegian daler (eventually) became four kroner, one Swedish riksdaler became two kroner, and one Danish rigsdaler became two kroner.

After the signing of the Convention, the Currency Union developed in several consecutive steps.

The arrangement was intended only for the new gold coins and related small coins. Bank notes were not part of the bargain, but soon the bank notes also flowed freely across the borders. It should be noted that in all three countries, the Royal Mints, which had always minted the coins, were government institutions with no formal links to the note-issuing banks (see Chap. 1). Officially, the 1873 Mint Convention had nothing to do with the note-issuing banks, other than the resulting obligation for the latter to buy and sell coins[7] minted by any of the Royal Mints at par value.

Until this time any co-operation between the Scandinavian note-issuing banks had been practically non-existent (in Sweden, note-issuing banks at this time included the "enskilde banks" (see Chap. 3). In 1866, the Nationalbank in Kiøbenhavn had proposed to open an account for Sveriges Riksbank, offering 3 % on credit balances and charging 4 % on debit balances. It took about one year of deliberations in Stockholm to accept this offer.

As noted in the first official history of the Nationalbank (my translation):

> Prior to 1886, the connections between the Nationalbank and the main note-issuing banks in the two other Scandinavian countries were quite insignificant. No correspondence seems to have taken place at all with Norges Bank before 1884…. The formation of the Currency Union

[6] Cfr. Jahn, Eriksen & Munthe (1966) Norges Bank gjennom 150 År (Norges Bank), p. 120.

[7] In this connection, "coins" were both the "main coin", i.e. the 10 krone coin with 90 % gold value (and small circulation), and the decimal coins with much lower metal value and much larger circulation.

> 1873–75 did not immediately lead to any co-operation whatsoever between the note-issuing banks of the three countries."[8]

This, however, was about to change.

In 1885, the note-issuing banks signed an agreement (effective as from January 1, 1886)[9] that they would open interest-free accounts with each other and process remittances drawn on each other without commission, so that payment transfers could be made truly 1:1 regardless of the balance of the account from which a payment was to be made. Further, the "central banks" granted each other unlimited credits, albeit only short term. This system made the Scandinavian Currency Union much more far-reaching than the Latin Currency Union. Since the intra-Scandinavian payment flows seem roughly to have netted out in this period,[10] no major problems came up, even if occasional gold shipments were made to settle debit balances.

Twenty-one years after the signing of the Mint Convention, Sveriges Riksbank and Norges Bank signed an agreement officially accepting their respective bank notes as legal tender and convertible into gold in the other country at par value (1894). The Nationalbank was sceptical, although this practice had been followed since 1875. The Nationalbank did not officially join this agreement until 1901.

In 1905, the union between Norway and Sweden was dissolved. A week later, the Riksbank cancelled the 1885 agreement with both Norges Bank and with the Nationalbank. The Nationalbank and Norges Bank, however, kept the agreement in force among themselves, and the Riksbank continued its business almost as usual, just without the agreement, but now with commissions for remittances. In this connection, the respective "central banks" also introduced credit limits for each other. When the limits were reached, gold had to be shipped. Perhaps the payment flows no longer netted out as neatly as before.

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[8] A. Rubow (1920) *Nationalbankens Historie I+ II*,(Nationalbanken,1918+20*)*, Bd.II, pp. 113–114.

[9] This 14 paragraph agreement is reprinted in Rygg (1918) *Norges Banks Histore I+II* (Norges Bank) II, pp. 58–59.

[10] There is no hard statistical evidence for this assumption. The assumption is that since no major problems surfaced, the flow of payments cannot have been totally out of equilibrium for any length of time.

When all three countries/central banks suspended convertibility into gold in August 1914, the Scandinavian Currency Union was mortally wounded, but it took a few more years to die. The associated central bank agreements had become inoperative, amended, or cancelled. Only the original 1873 Mint Convention remained, theoretically, still in force. The Convention was originally proposed to have a lifetime of ten years, but would remain in force if none of the participants had revoked it. It seems to have been revoked in 1926 by one of the participants (Sweden). Norway and Denmark made diplomatic efforts to revive the Currency Union, but since Sweden did not have similar intentions, these efforts soon died.

The world of unlimited credits among the Scandinavian central banks, and mutually legal tender 1:1 currencies had gone forever. In 1914 it took DKK 100 to buy SEK 100. After the Nov.1967 currency realignment it took DKK 147 to buy SEK 100. In Oct.2016, 100 SEK can be had for just 78 DKK.

6.2 Some Comparisons with the Latin Currency Union

Like the Scandinavian Currency Union (the SCU), the Latin Currency Union (the LCU) was aimed only at a free circulation of uniform coins at par value among the member countries. Bank notes were only paper, and they were much less used in the Mediterranean countries than in Scandinavia. After all, bank notes were a Swedish invention (see Chap. 3), and in France and Italy the disasters of John Law's schemes (1719–20) were still remembered.[11]

Therefore, the de facto free intra-Scandinavian circulation of notes, formalized in 1886 (see above) was of more significance for the SCU than it would have been for the LCU, had such an arrangement existed. The short-term unlimited credits among the Scandinavian note-issuing banks (apart from the Swedish enskilde banks) was a feature not seen anywhere else (and lasted only for about 20 years).

However, the fact was also that the Danish, Norwegian, and Swedish silver coins had circulated freely in Scandinavia for several years before

[11] cf. C.P. Kindleberger (1984) *A Financial History of Western Europe* (Allen & Unwin), p. 140.

the signing of the 1873 Mint Convention. The reason was that they had always been very similar (see Sect. 6.1 above). The conversion to a common krone was, therefore, easy from a purely practical point of view.

All three countries had been through state bankruptcies (or similar monetary reforms) early in the century, and had worked hard to re-establish convertibility, credibility, and to maintain it.

A fundamental difference was that the LCU was a bimetallic system until the late 1870s and that the convertibility into gold was uncertain and deliberately made cumbersome. Most of the time in most of the member states conversions into metal could only be done at the central bank's head office and only for certain minimum amounts,[12] and under the bimetallic system it was optional for the central bank to convert into gold or overvalued silver. Also, the currencies of the LCU members never became totally harmonized as in Scandinavia. In France, Belgium, and Switzerland, they had the franc. Italy retained the lira, and Greece the drachma, even if they were all defined in terms of the French 5 franc gold coin, and their coins looked very much alike.

Since the temptation to flood the market with base metal small coins could be large, the LCU agreement stipulated that only a maximum of six francs per head could be minted (presumably meaning circulating) in each member state. This was difficult to monitor, and was probably exceeded by Italy as well as the Papal States, and Greece (at least these states dropped out of the "club" or were expelled in certain periods).

In the SCU the problem was handled differently. The December 1872 Convention and the May 1873 Mint Act stipulated a maximum amount, which individuals were forced to accept in small coins in single payments: § 10 of the Mint Act (my translation):

> Nobody shall be forced to accept, in a single payment, more than 20 crowns in one or two crown pieces, five crowns in small silver coins, and one crown in bronze mints. However, for the payment of taxes and duties to the government and municipalities any amount will be received in one and two crown pieces…[13]

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[12] When convertibility into silver at par value was introduced in Norway in 1842, it could also be done only at Norges Bank's head office in Trondhjem.

[13] "Af Skillemønt skal Ingen være pligtig til i én Betaling at modtage et højere Beløb end 20 kroner i 1- og 2-Kronestykker, 5 kroner i mindre Sølvmønt og 1 krone i Bronzemønt…"

In the LCU it was stipulated that public offices would accept payments in small coins up to amounts of 100 francs.[14] Larger amounts had to be settled in gold.

Monetary policy had scarcely been invented in these days, at least not by minor countries that did not yet have real "central banks" (see Chaps. 2, 3, 4 and 5). Anyway, they were more or less compelled to be passive followers of greater waves in the global financial centres,[15] i.e. mainly London and, to a lesser extent, Paris and Berlin (Hamburg, which used to be the financial centre for Scandinavia, had disappeared in the German unification). Yet, since monetary policies in the sense of setting interest rates seem to be at the core of nearly all discussions about the classical gold standard and currency unions, a brief look will here be taken at the discount rates set by the Riksbank and the Nationalbank between 1858 and 1878.[16]

It should be noted that in the Riksbank the board of directors (*bankfullmägtige*) had decided the discount rate since 1856 (since 1875, all the bank's interest rates). Prior to 1856 all the Riksbank's interest rates were decided by the Banking Committee of the Assembly of the Estates, (*Bankutskoddet*). The directors were not full time employees of the bank, but mainly representatives of the Estates or, since 1866, of the Riksdag. They met occasionally to deal with those affairs of the Riksbank, which were not delegated to the daily managers (i.e. the governors). Setting interest rates was not delegated to the governors. In the Nationalbank, the daily management, i.e. the governors, had always taken all interest decisions, subject only to general legislation on usury (Table 6.1).

It is clearly seen that the Nationalbank used the discount rate instrument much more actively than the Riksbank. At the time when the transition to the SCU was being planned, the Riksbank kept its discount rate unchanged at 4 % for one year (July 1871–July 1873). In the same period, the Nationalbank changed its discount rate eight times (from 3½ %

[14] cf. L.B.Yeager (1966 & 1968) *International Monetary Relations* (Harper & Row, New York), p. 252.

[15] The role or fate of smaller countries under the classical gold standard has been examined in A. Ögren & L.F. Øksendal (eds. 2012) *The Gold Standard Peripheries* (Palgrave Macmillan).

[16] Those are the years for which the necessary statistics are available. No similar statistics have been found for Norway.

Table 6.1 Number of discount rate changes 1858–1878

	Nationalbanken I Kjøbenhavn	Sveriges Riksbank
1858–64	16	9
1865–73	45	17
1874–78	29	12
Max. rate	7½ %	7 %
Period(s)	June-66	June–Oct. 66
Min. rate	3½ %	4 %
Period(s)	Jan.62, Feb.63, Mar.67, June 67 Mar.70, Jul.71, Jul.74	July 71–July 73

Nationalbanken: A. Rubov (1918) *Nationalbankens Historie 1818 – 1918 I+II* (Nationalbanken), bd.I, pp. 448–50
Sveriges Riksbank: Brisman et alt (1918–30) Sveriges Riksbank I-V, bd. V, pp. 136–37. (Sveriges Riksbank)

up to 5 %, and down to 4 %). It is also seen that for both banks the highest rates were seen in the summer of 1866, maybe caused by international tensions in connection with the Prussian–Austrian war.

The Danish rates in the 1858–78 period were generally slightly lower than the Swedish (mostly in the range of 4–4½ %, against 4½–5 %).

While it is certainly possible that the SCU had a disciplinary effect during the first 10–15 years of its existence, it did not last. From about the mid- or late 1880s and until 1914, all three Scandinavian countries developed hefty balance of payments deficits and therefore built up large foreign debts. Even though savings rates were high by modern standards, domestic savings were insufficient to finance the rapid expansion of railway systems and other infrastructure investments in addition to an exploding urbanization and residential construction.[17]

There can be little doubt that the SCU was more successful than the LCU in terms of stability and constantly free convertibility of banknotes into gold.

One of the possible reasons is that there is no evidence that any of the three Scandinavian countries persistently developed debit balances with the others. Another reason was that the markets for the exports from Scandinavia improved substantially during the 1870s and 1880s, thus enabling the note-issuing banks to build up nice gold reserves. This, of

[17] For a summary of this development in English see e.g. Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 64–67, 141–42, and 119–21.

course, worked only to the extent that fiscal policies were prudent and kept domestic demand at sustainable levels. This was largely the case in the 1870s and 1880s.[18]

A third reason was that all of the Scandinavian countries had easy access to the international capital markets between the late 1880s and 1914. In that period debts started to pile up. It remains a big counterfactual historical speculation what would have happened to the SCU if it had not been for the outbreak of the Great War (see Chap. 7). At some point of time the foreign credit sources would probably have dried up, and some serious issues would have had to be addressed.

6.3 Some Comparisons with the Post-World War II Systems

6.3.1 Some Comparisons with the Bretton Woods System

The overall impression is that both the LCU and the SCU had more in common with the Bretton Woods system than with the classical gold standard in general. The reason is that both the LCU and the SCU were based on multilateral formal conventions signed by their respective members, just like the Bretton Woods system.

In contrast, the classical gold standard rested purely on unilateral declarations from individual countries that they intended to maintain a certain nominal gold value of their respective currencies. In principle, and formally, all of those declarations could be changed overnight. This was not supposed to happen, but in many cases it did.

[18] It is outside the scope of this work to go into theoretical discussions of the adjustment mechanisms under the classical gold standard. The standard works on this subject still seem to be A.I. Bloomfield (1959) *Monetary Policy under the International Gold Standard 1880–1914*, (New York), and O. Morgenstern (1959) *International Financial Transactions and Business Cycles* (Princeton), both usefully summed up and commented upon by A. G. Ford (1962) *The Gold Standard 1880–1914* (Clarendon Press), and, more recently, B. Eichengreen & M. Flandreau (eds. 1985) *The Gold Standard in Theory and History* (Methuen, 2nd ed. Routledge, 1997).

In the case of a few large countries, particularly England and France, the confidence that no changes would be made was virtually unlimited before the Great War, just like the confidence in the US dollar between 1945 and the late 1960s—a mere 25 year period. Not yet fully implemented by the late 1950s, Bretton Woods broke down in 1971–73.

Starting with some 40 members, quickly growing to more than 150, cohesion and strict observance by the Bretton Woods members on contractual rules are, of course, difficult to expect. It was easier with the three-member SCU.

The really new aspects of Bretton Woods (from an institutional point of view) was, first, that it was officially recognized that exchange rates could be changed—in case of "fundamental imbalances"—and, secondly, that multilateral credit institutions were set up to finance deficit countries (the IMF for short-term credits and the IBRD for long-term structural requirements). Rules were established for changing par values of currencies, even if those rules were unclear and difficult to enforce.

In spite of the multilateral finance institutions created to support the fixed exchange rate regime of Bretton Woods, it lasted much shorter than either of the LCU or the SCU, except that the Bretton Woods institutions still exist and operate much as originally intended.

6.3.2 Some Comparisons with the European Currency Union

With the present European Currency Union in mind, including a common central bank, a "stability pact", and several government and central bank committees, it seems surprising that the Scandinavian Currency Union could work smoothly for nearly 40 years with a minimum of co-operation among the three governments and the three note-issuing banks, and a minimum of contractual framework. The 1873 Mint Convention consisted of only 17 brief paragraphs, and nothing was said or done about co-ordination of economic or monetary policies.

The only thing hinting at the thought that some sort of co-operation among the Scandinavian countries might be useful at some point of time was the § 13 and § 14 of the 1873 Mint Convention. § 13 gave each of the three countries the right to examine the coins minted by the two others to see if they conformed to the agreed standards of weight and fineness. § 14 is, perhaps, more revealing (my translation):

> The financial authority of each of the countries will inform the financial authority in the two other countries about all laws, decrees, and general stipulations relating to the mint conditions, which might be decided for the execution of this Convention, or which might be cancelled in the future. Likewise, the financial authorities will provide each other with an annual report on the minting of new coins in the past year, and on withdrawals and melting down of old ones. Samples of new coins to be minted will also be exchanged.[19]

It could seem that with § 14 in force, the three countries might just as well have created a common minting institution (had it not been for the problems and costs of distributing the coins). The word "financial authority" (*Finansbestyrelse*) takes into account the different formal arrangements in the three different countries. Essentially, it meant the respective ministries of finance and the Royal Mints, but not the central banks.

Apart from the absence of a common monetary authority, the lack of co-ordinated monetary policies, and the weak co-operation among the central banks, the SCU was very much like the eurozone. However, during its lifetime it worked.

[19] "Ethver Riges Finansbestyrelse vil meddele Finansbestyrelsen i de to andre Riger all, Møntforholdene vedkommende love, Anordninger og almindelige Bestemmelser, som måtte blive udgivne til Udførelse af nærværende Overenskomst, eller som i Fremtiden måtte udgå. Ligeledes ville Finansbetyrelserne meddele hverandre en aarlig Beretning om de af. dem i Aarets Løb foretagne Udprægninger af nye Mønter og om Inddragelser og Indsmeltninger af gamle Mønter samt oversende hverandre Exemplarer af alle Mønter, som herefter udpræges."

7
How the Great War Formed Scandinavian Central Banking

7.1 The External Financial Position of the Scandinavian Countries in 1914

The rapid industrialization and urbanization sweeping through Scandinavia during the 1890s and early 20th century left all three countries with sizeable net foreign debts by 1914. Large sums were owed to German, British, French, Swiss, and American banks, and large amounts of Scandinavian bonds and stocks were circulating on the stock exchanges, particularly in Berlin and Paris.[1] Also, large blocks of real estate in the Scandinavian capitals had been acquired by German and British insurance companies.

[1] Estimates of the amounts have been made, and some figures are known (public sector debts), but comprehensive and reliable statistics including private sector assets and liabilities are not available for these years, except for Denmark (to some extent). For Sweden the amounts of foreign debts and assets are available for the banking sector (Sveriges Riksbank, Vol. V), and various estimates have been made for the period 1850–1940, cfr. L. Schön (1989) *Kapitalimport, kreditmarknad och industrialisering 1850–1910,* in E. Dahmén, ed, (1989.) *Upplåning och utvrckling I 200 år* (Riksgäldskontoret).

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The eruption of the Great War changed the scene completely. The new situation crystallized the role played by or assigned to the note-issuing banks, and helped clarify their responsibilities. The Four Criteria emerged more clearly, because the issues became more clearly carved out. The effect was that the Four Criteria became fulfilled more quickly and to a higher degree.

From 1914 and throughout the war, all three Scandinavian countries mostly had large surpluses on their foreign payments, both because of reduced imports and because of better prices for their exports. By the end of the war, the foreign debts had largely been repaid.

All three Scandinavian countries were heavily dependent on foreign trade. When war broke out the problem was to maintain foreign trade without compromising neutrality. Negotiations on foreign trade, embargoes, and mining of traditional shipping lanes became crucial.

Table 7.1 illustrates the case of Denmark. It is clearly seen that in the first ten years of the 20th century the Danish foreign net debts exceeded one year's export income and that already in the second war year the net debts could be paid off with a few months of exports. There is not much reason to believe that this picture was very different in the two other countries, although this is more difficult to substantiate.

On August 1, 1914, the Norwegian government issued a declaration of neutrality, followed by a similar Danish declaration on August 3 and a joint Norwegian–Swedish declaration of neutrality on August 8. A joint Scandinavian declaration came in November following much discussion.

Table 7.1 Danish foreign debts and assets, selected years 1907–22

Mill. DKK	1907	1912	1915	1916	1920	1922
Fixed assets	69	70	60	250	–	75
Current assets	52	64	120	200	850	500
Total assets	111	134	180	450	850	575
Short liabilities	608	941	858	350	–	835
Long liabilities	100	70	70	–	1.200	565
Total liabilities	708	1.011	928	350	1.200	1.400
Net assets	–587	–877	–748	100	–350	–825
Visible exports	417	597	979	1.177	1.591	1.176
Gross domestic product	1.739	2.159	2.857	3.767	7.396	5.406

Sources: Assets and debts: Statistisk Årbog, 1923. GDP and exports: H. Chr. Johansen (1985) *Dansk økonomisk statistik (vol 9 of Danmarks Historie, vol. 1–9*, (Gyldendal)

Because of differences in their geographical locations and the composition of their foreign trade, the Scandinavian countries did not have completely identical interests. Sweden's neutrality policy had to take into account the special relations with Finland, shipping in the Baltic Sea, and trade with Germany. For Denmark, its location controlling the approaches to the Baltic Sea, and the agricultural exports to the UK, were of particular importance for the neutrality policy. For Norway, the Atlantic shipping lanes and the overseas markets for fish were of special concern.

These aspects could hardly escape having implications for the role played by the major Scandinavian banks including those, which, at that time, were developing into "central banks". As elsewhere, the emergence of "central banking" in Scandinavia followed the growing capital intensity of agriculture, commerce, and industry with the resulting heavier dependence on capital markets and monetary conditions. However, by 1914 the concept of central banking as understood in later ages had hardly been born in the in the Scandinavian countries as we have already seen in Chaps. 1, 2, 3, 4 and 5.

In Denmark, the Nationalbank was usually referred to as "the leading bank among the five main banks". It seems to have referred to itself as a "central bank" for the first time in its 1916 annual report (my translation): "At a meeting in Göteborg on Oct 7, 1916, delegates from the three Nordic central banks discussed if a common currency policy was possible. It was unanimously agreed that this was not possible as long as foreign trade policies differed between the countries."[2] This statement is interesting not only because it seems to be the first official use of the term "central bank" in Scandinavia, but also because of its substance. It refers to foreign trade policy, but not to monetary policy or general economic policies as a precondition for a common currency or exchange rate policy. At this point of time, the Latin Currency Union was dead, the Scandinavian Currency Union was essentially dead, and both Bretton Woods and the euro were way out in a distant future.

In Norway the Scandinavian note-issuing banks were referred to as the "national banks" because of their history and government connections.

[2] "Ved Møde den 7. Oktober 1916 af delegerede fra de tre nordiske Centralbanker overvejedes det, om en fælles Valutapolitik var mulig, og man kom enstemmig til det Resultat, at den var uigennemførlig, saalænge Landenes Handelspolitik var forskellig." Annual Report from Natiionalbanken i Kjøbenhavn, 1916/17.

In Sweden these banks do not seem to have been referred to as central banks until the late 1920s.

Neither Norges Bank nor Sveriges Riksbank discussed the question of a common currency policy in their annual reports from these years. For them it was a political issue to be dealt with exclusively by their respective parliaments (Storting and Riksdag), at least in public statements.

When the Great War broke out, it had some immediate effects, and some consequences which materialized only gradually. Both of these groups of effects had a direct impact on the capital markets and monetary conditions in Scandinavia. This helped affirm the transformation of the note-issuing banks from mostly commercial banks with a special standing, to almost central banks in the modern sense.

7.2 The Central Banks, the Outbreak of the War, and the Aftermath

7.2.1 Sveriges Riksbank

When war broke out, the Riksbank's main concern was to prevent an outflow of capital. The fear was that the Swedish securities circulating on the foreign stock exchanges (mainly government and municipality bonds) would be sold back to Swedish investors in large volumes. Large amounts of securities were, in fact, sold back to Swedish buyers. However, the damage turned out to be much less than feared, because the trade balance soon swung into surplus. The dreaded outflow of gold, therefore, did not materialize.

For the Riksbank, the immediate actions taken included:

1. On July 30, the Riksbank's discount rate was raised by 1% to 5½ %, and to 6½ % on August 4 (broadly like elsewhere).
2. On August 2, 1914, the Riksdag decided to suspend the convertibility of the krona into gold (like elsewhere). Between July 31 and August 3, the Riksbank had lost 2½ % of its gold reserves from conversions of bank notes. However, the positive swing in the balance of payments

enabled the Riksdag to reintroduce convertibility on January 1, 1916 (only to be suspended again in 1919).

3. Fearing a run on the banks and a shortage of coins, the banks and the Riksbank agreed to close the banks between August 3 and August 6, and the one-krona note was reintroduced; a denomination not seen since 1875 (and forbidden in the 1897 Act).
4. On November 19, exports of gold and silver were forbidden, but allowed again as from March, 1916.
5. Fearing a steep drop in share prices, the stock exchange was temporarily closed, and the government initiated the creation of a support mechanism (*Lånekassan av 1914 Ab*), funded with a credit from the Riksbank. It turned out that there was no need for this mechanism. Share prices soon recovered.
6. Most of the Riksbank's reserves of foreign exchange were kept in Reichsmarks, since Germany was Sweden's largest source of imports. In July, 1914, the Riksbank sold most of its Reichsmarks assets to Sweden's four largest banks. The reason being that in case Sweden got involved in a European conflict, it was thought less likely that privately owned assets would be sequestered than assets held by government institutions. The assets consisted of short-term treasury bills issued by the German empire, the Kingdom of Prussia, and certain cities, in amounts totaling about RM 55 million.

On July 31, four Swedish bankers were sent off to Hamburg to collect about half of these treasury bills from the banking house of MM Warburg (the other half was kept in Berlin). Having arrived in Hamburg on August 1, the Swedish bankers knocked on the Warburg doors, but since August 1 was a Sabbath, they were asked to return the next day. On August 2, Germany declared war on Russia, and the Swedish bankers were advised against travelling through Germany and crossing the border with their bags full of German treasury bills. They returned to Stockholm empty handed. The bills remained "frozen" in Germany until July 1, 1920.[3]

[3] The original documentation for this incident is kept in the archives of the SEB bank in Stockholm, including the names of the four bankers and their powers of attorney. The incident is described in

The consequences of the War, which showed up only gradually, included:

1. The balance of payments swung around from a large deficit to a large surplus. The reason was a combination of stronger demand from central Europe for Swedish goods (iron, machinery, and timber), and an increasing shortage of the goods that Sweden wanted to import (food and fuels). In 1914, Sweden had foreign debts equalling about 75 % of GDP, reduced to about 10 % by 1919.[4]
2. Because of the positive swing in the balance of payments, the exchange rate of the krona appreciated against most other currencies. This made it attractive for Swedish banks and other Swedish investors to buy back the Swedish bonds circulating in Germany and France. In 1913, the volume of circulating Swedish bonds totalled about SEK 2.400 million, of which some 1.250 million are estimated to have been in foreign hands. By 1921, the total amount had swollen to roughly SEK 4.100 million, of which only some 600 million was held abroad. Foreign debts had mostly become domestic debts.[5]
3. In order to address the shortage of food and fuel at least three war commissions were created with the task of buying up the scarce goods and selling them under a rationing system aiming at some sort of "reasonable" distribution. These commissions were, initially, financed directly by the government (through its account with the Riksbank), but from 1917 they were financed by the Riksgäldskontor (through bills sold in the market and often rediscounted with the Riksbank). Under both scenarios, the financing ended up as government debts, money printing, and inflation. In 1914, the government had debts of SEK 650 million, of which 90 % were bond debts held abroad. In 1918, government debts had risen to about SEK 1.650 million, of which 90 % were domestic short-term bills. Along with the shift from foreign to domestic government debts, long-term debts had become short term. A by-product of this "system" was a bewildering flow of

R.Lundström "Bank, Industri, Utlandsaffärer, Stockholms Enskilda Bank 1910–1924", Handelshögskolan I Stockholm, 1999. It is repeated in G. Wetterberg: "Pengarna & Makten", Sveriges Riksbank, 2009, pp. 257–58.

[4] cf. L.Schön *En modern svensk ekonomisk historia*, SNS Förlag, 2000, p. 281.

[5] cf. C.Franzén: "När utlandsk statsskuld blev inhemsk", pp. 290–94, in E.Dahmén (ed.) *Upplåning och Utveckling, Riksgäldskontoret 1789–1989*, Riksgäldskontoret, 1989.

credits, payments, and repayments between the Riksbank, the Riksgäldskontor, and the commercial banks. As later described by a historian (my translation): "Hard necessities had results, which neither recommendations from government advisers nor events had so far accomplished: an intimate co-operation between the Riksgäldskontor and the Riksbank."[6] In this process, the Riksbank also expanded its rediscounting of bills for commercial banks (now including enskilda banks), and so intensified its role as "bank for the banks".

4. During the later war years, the Riksbank increased its lending rate to unprecedented levels (7 %), but this had no visible effects, since real rates were strongly negative because of accelerating inflation. Therefore, in the autumn of 1917, the government set up a *Kapitalkontrollnämnd* (Capital Control Council) chaired by the Riksbank's head governor. Its purpose was to control new issues of shares and bonds, the formation of new joint stock companies, and the lending by commercial banks against such securities.[7]
5. Considerable amounts also had to be spent by the government simply to maintain a credible status as neutral. These expenses also ended up as increased domestic government debts materialized mainly by government bills and bonds sold by the Riksgäldskontor to banks, which borrowed against them in the Riksbank. The end result was a sharp increase in the note circulation as illustrated in the balance sheet summary shown below.

The Riksbank Balance Sheet, 1897–1920

Table 7.2 shows the changes in the structure of the Riksbank's balance sheet between 1897 and 1920. It is seen that the Bank's total assets increased about two and a half times between end-1913 and end-1918. Much of the increase was a reflection of the accelerating inflation, but the increase was smaller than in the two other Scandinavian countries (see below).

[6] K. Hildebrand (1939) *Riksgäldskontoret 1789–1934* in "Sveriges Riksdag", Senera Avdelingen, Band XIII, p. 207.

[7] This kind of "capital market control" was reinforced after 1945 and continued until the mid-1980s, cf. Chap. 8.

Table 7.2 Summary balance sheet for Sveriges Riksbank 1897–1920

% of total	1897–03	1904–12	1913	1914	1915	1918	1920
1. Assets	Annual average	Annual average					
Gold & foreign liquid assets	43	44	57	41	61	46	44
Domestic bills	28	41	36	35	21	27	53
Loans	24	14	5	8	5	17	2
Other	6	0	1	15	13	9	0
Total, %.	101	99	99	99	100	99	99
Mill. SEK	231	352	430	504	549	1.052	1.018
2. Liabilities							
Notes	43	57	54	60	60	77	75
Current a/cs	17	17	26	22	24	15	18
Foreign	2	2	1	2	2	0	0
Other	7	1	-	-	-	-	-
Capital	31	21	18	16	14	8	7
Total, %	100	99	99	100	99	100	100

"Sveriges Riksbank" I–V, vol. V, which contains detailed accounts from 1668 to 1924

Among the assets, it is seen that the gold and foreign exchange holdings peaked relatively in 1915 and absolutely in 1918. The item "loans" declined relatively compared to the pre-war years, but grew sharply in absolute terms during the war to explode both relatively and absolutely during the final war years. Also "domestic bills", having dropped relatively in the early war years increased strongly both in relative and absolute term in the later war years, and during the early post war years. This was mostly caused by the financing needs of the above-mentioned "War Commissions".

Among the liabilities, it is seen that circulating notes financed most of the expansion of the balance sheet. This probably fed the accelerating inflation.

Seen against the Riksbank's objectives and its role in the Swedish economy, the verdict must be that it was quite successful in the years 1897–1922. The external value of the krona was largely maintained. It enhanced its role as bank for the banks, it mended its differences with the Riksgäldskontor, and inflation was not worse than elsewhere. However, it remained essentially an instrument of the Riksdag.

7.2.2 Nationalbanken i Kjøbenhavn

Most of the actions taken by the Nationalbank and the government were very similar to those taken in Sweden and Norway. In some respects, however, the actions taken in Denmark were different because of the differences in geographical location and composition of imports and exports. Having Germany as a neighbour and important supplier of fuels and having the UK as Denmark's most important export market made the upholding of Danish neutrality a delicate matter. Foreign trade became a subject of intense negotiations.

Among the immediate effects, the following were particularly eye-catching:

1. In the final week of July, 1914, people started cashing in their notes for gold, and stock exchange prices started to drop. Consequently, on July, 29, the Nationalbank and the four other main banks agreed not to make margin calls on their loans against securities. On July 31, the Nationalbank raised its discount rate[8] from 5 % to 6 %, and stopped rediscounting bills for the other banks at favourable rates. Also on July 31, the Stock Exchange decided to close. In contrast to Sweden and Norway, the closing of the stock exchange became long-lasting. The reason was the fear that the approximately one billion DKK worth of Danish securities circulating abroad would be thrown back to Denmark.
2. During the first week of August, the Rigsdag passed several laws addressing the problems of private hoardings of cash, gold, and strategic goods. One of these laws relieved the Nationalbank of its obligation to convert its notes into gold (like everywhere else). However, in contrast to Sweden and Norway, the final decision to convert or not was left at the bank's discretion. Convertibility was reintroduced in March 1916 (as in Sweden and Norway), but at gold's market value,

[8] This was one of the rare occasions when the finance minister made use of the right given to him in the 1907 Charter to attend a rate setting meeting of the governors, without voting rights, see Section 4.2.3. above.

which was at that time ca. 6 % lower than the 1873 value, i.e. the krone appreciated for a brief period.

3. To prevent the budding run on banks, withdrawals from bank accounts were restricted to a maximum of DKK 300 per week (much like in Sweden and Norway).
4. Gold coins were being melted down, and on August 6, exporting gold was forbidden.
5. To satisfy the need for means of payments, the Nationalbank Charter was amended (August 15) to allow the printing of small denomination notes (like in Sweden and Norway).
6. In response to moratoria introduced abroad, a moratorium was made on foreign debt payments, lasting from August 20, 1914, to October 15, 1915, in connection with a limited moratorium on domestic debt payments.
7. To relieve the immediate liquidity problems arising from the sudden cutting off of foreign credits and cash hoardings by the general public, the Nationalbank nodded its acceptance of the government's issues of one-year interest-bearing treasury bills in small denominations, which were designed to circulate as means of payment. Two such issues (totaling DKK 25 million) were made in the autumn of 1914, both repaid a year later.
8. The 1907 Charter had stipulated (§ 7) that the metal coverage of the bank's note issues would consist of (my translation): "…gold…and net non-interest bearing demand deposits in Norges Bank, Sveriges Riksbank, and…in the German Reichbank."

At the request of the Nationalbank September 1914,[9] this stipulation in the Charter was amended by the Riksdag to (my translation): "…gold…and…claims on foreign correspondents and foreign government bonds at official value." This was approved by the Riksdag in November. The amendment also included a reduction of the required metal coverage from 50 % of the note issues to 40 %.

[9] cf. Rubow (1918) I *Nationalbankens Historie*, p. 149, and "*Dansk Pengehistorie II*", pp. 29–30.

The amendment provided the Nationalbank with much more flexibility to place its gold and foreign exchange reserves where circumstances would make it seem prudent.

One of the more conspicuous medium term effects of the war was—like in Sweden and Norway—a substantial swing in the balance of payments from hefty deficits to large surpluses. The reason was a combination of less availability of imports from abroad (almost regardless of price) and increased demand (even at higher prices) for Danish exports, particularly from Germany. The importers wanted this to be financed by the exporting country. So, in November, 1915, the Nationalbank received a request from the Reichbank for a loan of DKK 30 million to be used for the purchase of Danish agricultural products. The Nationalbank was reluctant. From a banking point of view, the amount was much too large. It was equivalent to the entire equity capital of the bank. The bank had to look after the interests of its shareholders.[10] On the other hand, there could be severe foreign policy implications for refusing a request from the Reichbank. The Nationalbank consulted the government, and the credit was approved in December. The "pussy-footing" by the Nationalbank can be seen from the loan conditions[11]: no collateral, interest to be equal to the Nationalbank's discount rate and repayment only after friendly negotiations between the two parties, i.e. an open-ended unsecured credit. This was the first of several similar requests from the Axis powers (Germany and its allies) as well as from the UK and France, all of which were approved, but on less benevolent conditions.

For the later loans the Nationalbank insisted, with support from the government, that the other main banks also participated. Eventually, neither the Nationalbank nor the commercial banks had appetite for more of this mounting risk, so in January 1918, the Nationalbank persuaded the government to guarantee future bank loans to the belligerents. It was considered unrealistic to let the exporters share the risk. Because of the foreign policy implications, these loans had to be kept so secret that not

[10] C. Th. Ussing, the newly appointed governor, pointed out that according to the 1907 charter, the interests of the shareholders should be the dominating consideration. Ussing (1926) *Nationalbanken 1914–1924*, p. 48.

[11] Handwritten protocol of meeting of the governors (National Archives).

Table 7.3 War loans from Danish Banks to Banks in Belligerent Countries 1915–1918. DKK (millions)

Lenders	Axis borrowers	UK & French borrowers	Total
The Nationalbank	74.3	23.5	97.8
Other main banks	134.7	66.5	201.2
Total	209.0	90.0	299.0

Cfr. *"Dansk Pengehistorie"*, Danmarks Nationalbank 1968, bd. II, p. 55

even the boards of directors of the participating main banks were fully informed.[12] These loans are summarized below (Table 7.3):

The borrowers were banks, and all loans were denominated in DKK. There was little confidence in the foreign currencies.

For comparison, Denmark's GDP was about DKK 3.000 million in 1915, so the loan amounts equalled about 10 % of the 1915 GDP.

The bulk of the loans were made in 1916 and 1917. Approximately 93 % of the 13 loans made to the Axis powers in 1915–18 were made to German banks (mainly the Reichbank). Two loans (DKK 10 million) were made to Austrian banks, and two smaller loans were made to Hungarian banks. The reason why the bulk of the war loans went to Germany is that Danish exports were diverted to Germany early in the war. Esbjerg, the main port for Danish exports to the UK, became blocked by mines and so on.

Nearly all of these credits were repaid in DKK during 1918–1922.

The Balance Sheet of the Nationalbank, 1902–1920

Table 7.4 shows the structural changes in the balance sheet of the Nationalbank from the early years of the 20th century up to 1920.

First, it will be noticed that the total balance sheet more than trebled during the four war years, increasingly caused by inflationary money printing and feverish speculation by banks and others in commodities, stocks, and real estate. The fast rate of expansion continued during 1918–20.

[12] Ussing (1926): *"Nationalbanken 1914-1924"*, p. 77.

Table 7.4 Summary balance sheet of the Nationalbanken i Kjøbenhavn, 1902–1920

Pct	1902–06	1907–12	1913	1914	1915	1918	1920
1. Assets	Annual average	Annual average					
Gold & foreign	58	49	52	52	55	59	31
Liquid assets							
Domestic bills	20	20	19	23	19	9	20
Loans	13	24	22	18	11	7	8
Other	7	7	7	7	15	25	40
Total, %	98	100	100	100	100	100	99
DKK (millions)	160	185	201	269	295	651	925
2. Liabilities							
Notes	70	71	76	77	75	69	60
Current a/cs	4	5	4	6	6	15	7
Foreign	0	1	0	2	3	1	1
Other	5	3	2	2	3	8	26
Capital	21	20	18	13	13	7	6
Total, %	100	100	100	100	100	100	100

Calculated from (1968) "*Dansk Pengehistorie*", Danmarks Nationalbank, vol. III, pp. 12–23

Among the assets, the steep relative decline of gold and foreign exchange reserves will be noted. The strong relative increase in "Other" between 1915 and 1920 is explained by overdrafts on the government's current account, mostly caused by defense-related spending. During the later war years and in the early post-war years, the Nationalbank asked the government several times if it had political approval for these overdrafts.[13] The finance minister promised to repay.

Among the liabilities, the most obvious changes during the war years were the large relative drop in capital and the hefty relative and absolute rise in "Other". The latter is mostly explained by deposits from various government entities.

The net effect was, however, that the government and government entities became heavy net borrowers at the Nationalbank in the years 1915–20. Whether the Nationalbank had a realistic possibility or desire

[13] According to the Danish Constitution, the government can only take loans with parliamentary approval. The legal and political question in this case was whether making an overdraft on a current account should be regarded as taking up a loan. There were no loan documents.

to have it otherwise, is an open question. It was definitely a deviation from the Nationalbank's usual role, but times were unusual.

In contrast to Sweden, the note circulation saw a relative decline in the balance sheet during the later war years. However, in absolute terms, it more than trebled between end-1913 and end-1918.

In Denmark, as in Norway and Sweden, the steep increase in the note circulation drew strong criticism from academic circles. Economists saw this as the main reason for the galloping rates of inflation (30–40 % p.a. in 1916–1920). The growing note circulation was caused particularly by the government overdrafts, but also by the loans from the Nationalbank to foreign banks in 1915–17 to finance Danish exports (see above). This should have been neutralized, the professors argued. However, inflation in Denmark was slower than in most countries south of Denmark, but faster than in Sweden. Anyway, inflation can hardly be said to have been part of a central bank's responsibility in those days, as long as it maintained the external value of the currency, which it largely did until 1918–22 (see below), albeit with some hefty swings. All exchange rates showed wild fluctuations in the aftermath of the war.

7.2.3 Norges Bank

By the end of 1913 Norway had net foreign debts of at least NOK 850 million,[14] or somewhere around 75 % of GDP. According to a later calculation,[15] roughly 38 % of the 1913 debt was government debt and 28 % other public debts, while some 35 % consisted of foreign capital in Norwegian companies.[16] Private commercial debts are not included in these calculations because of lack of information. It is clear that with only relatively small holdings of gold and foreign exchange and heavy dependence on shipping and foreign capital markets, Norway's position was

[14] cf. N.Rygg (1954): *"Norges Bank's Historie"*, Vol. II, pp. 321–23 (Norges Bank).

[15] Statistisk Sentralbyrå, 1919, cfr. Rygg, Vol. II, p. 323.

[16] The foreign investors were mainly Swedish and French. Norsk Hydro, for example, was originally built mainly with Swedish (Wallenberg) money, which was later refinanced with capital from Banque Nationale de Paris, which had seats on the Norsk Hydro board until 1940. Elkem and Hafslund are much the same story, except that in the case of Hafslund, German banks were the main capital suppliers.

precarious when war broke out. In 1913–14, Norway's official gold and foreign exchange holdings were equal to about 15 % of annual imports and 10 % of net public sector foreign debts.[17] Fortunately, during the war, fish prices and freight rates at least trebled. This was nearly enough to make up for the reduced shipping volumes.

The actions taken by Norges Bank in 1914 did not differ much in substance or principle from the steps taken by the other Scandinavian central banks, but there were differences in detail and timing. In 1914, the Norwegian balance of payments still showed a loss, but big surpluses were generated in the following two years. A small deficit was recorded again in 1917 (shipping was not what it used to be), but in 1918 another large surplus was recorded.

In any case, one of the first steps taken by Norges Bank was to raise its discount rate, like other central banks (from 5 % to 6 % on August 1, to 6½ % on August 4, only to lower it again to 5½ % on August 20). Another early step was to introduce a moratorium (August 4) by which all private debts due after August 5 were prolonged for one month (except wages, salaries, and rents). This moratorium was, however, lifted on November 14. In the meantime a (short-lived) ceiling on withdrawals from bank accounts (NOK 100 per account per day) had been introduced by mutual agreement between the banks, savings banks, and Norges Bank, because there had been a run on the banks for cash (much like in Sweden and Denmark). It reflects on the relationship between the government and Norges Bank that the instructions to the banks on this matter were issued by the Ministry of Finance, not by Norges Bank.

On August 4, the *Provianteringskommisjon* was created with wide-ranging powers to undertake forced sales and purchases of strategic goods and to set maximum prices for important consumer goods, and to impose export and import prohibitions. Many consumer goods and food items were rationed. Its financing needs were taken care of by Norges Bank either directly or indirectly through rediscounting of bills for the commercial banks and underwritten by the "Provianteringskommisjon" (i.e. the Ministry of Finance). Much like in Sweden, and somewhat like in Denmark.

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[17] cf. Rygg, pp. 322–3.

On August 5, three days later than Sweden and two days later than Denmark, the Norwegian government suspended the convertibility of the NOK into gold. The decision was delayed, because one of the governors of Norges Bank had argued that, according to the Currency Acts of 1857 and 1892, a suspension of convertibility would imply that the NOK would no longer be legal tender in Norway.[18]

In late July and early August the run on the Norwegian gold reserves had been less severe than in Sweden, but this did not last. During the autumn of 1914, Norges Bank lost about 10 % of its gold holdings. However, the gold flow soon reversed, and on March 8, 1916, gold convertibility was restored, only to be suspended again in 1920.

The result was that throughout the war, Norges Bank expanded its lending activities not only to domestic companies, local authorities and financial institutions, but also to British and German banks – although the latter came mostly during the later war years.

The large loans granted by Norges Bank to British and German banks, totalling some NOK 200 million, were the result of direct orders by the Norwegian government. The first such loan was negotiated with the British government in the autumn of 1916.[19] The background was that German and British purchases of Norwegian fish had driven prices up threefold, which starved Norwegian consumers. In August, 1916, the UK and Norway signed a Fish Purchase Agreement under which the UK would buy the all the Norwegian fish not consumed in Norway, provided such purchases could be financed with Norwegian credits. The credit part of the deal was quite illustrative of the relationship between the Norges Bank and the government. In the bank's protocols dated September 7, 1916, it is recorded[20] that two gentlemen from the British government, equipped with a recommendation from the Norwegian prime minister, had visited the Norges Bank in July with a request that Norges Bank finance the British purchases of fish from Norway. Norges Bank had received no prior notification of this visit or its purpose.[21] The credit

[18] Rygg, Vol. iI, pp. 356–57. The matter was formally settled by law on August 18, 1914.

[19] These negotiations and the views of the government and Bank are summarized in Rygg, Vol. II, pp. 389–96, and Jahn, Eriksen & Munthe, p. 205.

[20] As reprinted in Rygg, p. 391.

[21] cf. Rygg, p. 393.

amount was NOK 140 million, i.e. more than the combined sum of all other credits from Norges Bank at this point of time. The bank's equity was about NOK 37 million (the share capital was increased from 25 to 35 million the following year). There could be no doubt that this credit was way out of proportion to the size of Norges Bank from commercial banking perspectives, even with good collateral. Norges Bank requested that the borrower would be C.J. Hambro & Son,[22] and that the loan would be secured by British Treasury Bills. Norges Bank discussed the details with representatives from the Norwegian government and from the different parties in the Storting. The loan was signed in September and drawn in tranches over the next ten months. It was repaid during 1918–1919. In return for the Fish Purchase Agreement and its financing, the UK undertook (vaguely) to provide export permissions for supplies needed by Norwegian shipping and fishing industries (particularly coal and technical shipping equipment).

The 1916 loan was not publicized, but in contrast to Denmark, it does not appear to have been a priority to keep it secret. Probably, too many people had been involved for secrecy to be realistic. In any case, the German government soon found out about it and was displeased. The result was that a fish purchase agreement and financing also had to be agreed with Germany, but the amounts were much smaller. In addition, the German government negotiated a copper purchase agreement with Norway, also to be financed with Norwegian loans. The British government found out about it. It was not amused.

Later loans from Norges Bank to the belligerents were smaller and usually shared with other Norwegian banks. As late as October 1918, a loan of NOK 30 million was arranged to a consortium of five German banks. Norges Bank syndicated the loan out to several Norwegian banks and kept only NOK 3 million for itself. The private commercial banks also made substantial loans to German and British banks, but they often rediscounted the resulting bills of exchange with Norges Bank, which had little power to refuse such rediscounting.

[22] The Hambros have had close connections to both Denmark and Norway since the late 18th century.

Norges Bank's Balance Sheet 1914–1924

Because of the history and position of Norges Bank, its balance sheet figures shown below are more a reflection of government policies than decisions taken by Norges Bank itself. Although Norges Bank occasionally argued against the government, either in its own interest or from an general economic policy point of view, it always ended up as the government's obedient servant (for example, the 1916 British loan).

The Table 7.5 shows that the total assets of Norges Bank increased nearly fourfold during the war. Loans were the fastest expanding item among the assets. Out of the total loan volume in 1918, nearly half consisted of loans to foreign banks (German and British). Other loans consisted of borrowings by the government, local authorities, and financial institutions. During the early war years the government frequently overdrew its current account with Norges Bank, but it was not until the later war years that the amounts became significant. In 1918, the government borrowed NOK 300 million from Norges Bank (*Provianteringslånet*), much of which was a refinancing of existing loans. It became syndicated to circa 115 banks and savings banks, but since Norges Bank had promised to rediscount the resulting bills, much of this amount ended up in Norges Bank. In 1919 this loan was renewed and raised to 380 million. In 1913,

Table 7.5 Norges Bank. Main balance sheet figures, 1914–1920

Mill NOK, Dec. 31	Gold & Foreign Exch.	Loans	Other	Total	Current accounts	Note circ.	Equity	Other	Total
1914	70	127	19	216	71	139	39	17	216
1915	131	88	15	234	27	162	37	8	234
1916	204	161	23	388	81	252	36	19	388
1917	197	411			225	326			
1918	195	435	14	644	127	436	52	29	644
1920	205	506	16	727	132	492	89	14	727

Cfr. Jahn, Eriksen & Munthe (1966): "*Norges Bank Gjenom 150 år*", Norges Bank pp. 190, 195 and 198. For "Total": Statistisk Sentralbyrå: "*Historisk Statistikk*", 1994, p. 618, which gives figures only for five years intervals until 1920. For comprehensive balance sheet figures for the period before 1920, see Norges Bank's annual reports the government had a debit balance of NOK 16 million. By the end of 1918, it had grown to 155 million.[23]

It is also seen that gold and foreign exchange holdings nearly trebled during the war as a result of the balance of payments surpluses.

Like the two other Scandinavian central banks, Norges Bank tried to curb the note printing effects of the balance of payments surpluses by refusing to buy gold. This policy was, however, not pursued without exception. When the Reichbank and the Bank of England needed Norwegian currency to buy fish and other goods with payments in gold against NOKs (1916), Norges Bank obliged them. Initially, Norges Bank took a commission of 5 % for its purchases of gold from the Bank of England. Whether Norges Bank had a keen eye for profits or the commission was a reflection of its dislike for these purchases seems unclear. In any case, the commission was soon negotiated down to 0.5 %.

Among the liabilities, the note circulation was clearly the fastest growing item and the item which, essentially, financed the growth of loans. Since the note circulation was a matter of legislation, it was frequently debated in the Storting, and either the legal maximum circulation was changed, or a dispensation from existing limitations was given.

Current accounts grew because the expanding liquidity of the banking system had to be deposited somewhere. Deposits from the government also grew, but not from necessity. Norges Bank considered it in its best interest to have the government's liquid assets concentrated in Norges Bank, with which it could outcompete other banks with high interest rates on the government's current account.[24] Like in Denmark, the years between the late 1880s and the Great War was a period when the government surfed around among the commercial banks with its business.

Like in Denmark and Sweden, the actions taken by the central bank were heavily criticized. The 1916 loan was criticized from several corners for having been provided by Norges Bank alone. It should have been syndicated among Norwegian banks, as with the later (smaller) loans. The defence was that time was in short supply. The fast growth of the note circulation was heavily criticized by academic circles. Norges Bank

[23] Jahn, Eriksen & Munthe, p. 206, and Rygg, p. 517.

[24] Rygg, p. 515.

could have contained the inflationary effects of the explosion in note circulation by increasing its discount and rediscount rates, the professors said.[25] The fact was that Norges Bank did not see the containment of inflation as part of its objectives, as long as inflation in Norway was no worse than elsewhere, and as long as the external value of the NOK did not suffer. The problem was, of course, that during the war years and until 1924–25, the "external value" of any currency was highly fluctuating against most other currencies. This did not make it easy to define the external value of any currency. The concept of "trade-weighted exchange rate movements" had not yet been invented.

The reality was that towards the end of the war and the following years, inflation in Norway did run a bit faster than in Denmark and Sweden, and the NOK exchange rate dropped against the DKK and the SEK.

Collection of financial information had not been a priority for either the government or for Norges Bank. However, in 1918, the government felt a need to know more about the country's financial standing and created the "Finansråd" ("Financial Council").[26] One of the first tasks this council set for itself was to investigate the amounts of Norway's foreign assets and liabilities. This resulted in the "Finanstelling" of May 1, 1919.[27] It was the first Norwegian effort of this kind. It was comprehensive, but nobody considers it complete (it did not, for example, include fixed property). It is seen that the figures are of quite a different order of magnitude from the 1913 figures given above. Inflation had increased everything three or fourfold.

The main result from the *Finanstelling* was, as of end 1918 (million/NOK)[28]:

Assets:	Commercial:	2,000 + foreign securities (410) = 2410
Liabilities:	Commercial:	300 + Norwegian securities (750) = 1050
Net assets:	1360	

[25] cf. Jahn, Eriksen & Munthe, pp. 203–4.

[26] "Finansrådet", created by Royal Resolution of Feb.1, 1918, chaired By Norges Bank's governor Bomhoff. On its first meeting (May 23, 1918), its agenda included Norwegian investments in foreign assets, gold trade, and foreign exchange rates, cf. Rygg, p. 503.

[27] The main results have been published in *Meddelelser fra Det statistiske Centralbyrå*, 1919.

[28] cf. Rygg, p. 546, and Statistisk Centralbyrå (1994): "*Historisk statistikk*", p. 647.

Table 7.6 Scandinavian exchange rates 1914–1927

Scandinavian Exchange Rates 1914–27[a] July, average	Danish Kroner per 100		Danish Kroner per	
	NOK	SEK	£	100 $
1914	100	100	18.16	373.00
1916	100	100	16.50	350.00
1918	98	100	15.27	324.00
1919	98	112	19.58	426.00
1920	106	109	24.17	612.00
1922	100	134	20.62	469.00
1924	83	165	27.20	618.00
1927	98	100	18.16	373.00

[a]cf. *"Dansk Pengehistorie" II* (1968), pp. 50, 51, 66, 67, and Rygg II, pp. 490, 495., and Danmarks Statistik: Statistisk Årbog, 1920–29. The 1916 and 1918 figures are either end-July figures or year-end figures

According to this statistics, Norway had changed from being heavily indebted before the war into a net creditor position by the end of the war. This, however did not last for very long.

In the last two years of the Great War, Sweden's balance of payments showed larger surpluses than those of Denmark and Norway, and the exchange rates became difficult to defend. Since 1917, the Scandinavian exchange rates began to deviate substantially from their parities. The table below illustrates the size of the exchange rate diversions during the War and the following years (Table 7.6):

It will be noted that all three Scandinavian currencies appreciated against their 1873 gold values during 1916–18. However, by 1924, the NOK had lost about 50 % of its value against the SEK (165/83 = ca. 2, i.e. it would take about NOK 200 to buy SEK 100). Eventually, they all landed back where they had started. Sweden returned to gold in 1924. In 1925, Denmark also decided to return to return to gold with effect as from January 1, 1927. So did Norway.

7.3 Some Preliminary Conclusions

There can be no doubt that the Great War and its immediate aftermath caused plenty of challenges for the governments of the Scandinavian countries as well as for what can now be called their central banks. The

Table 7.7 Comparative wholesale price developments 1913–1920

	Denmark	Norway	Sweden	UK	USA
1913	100	100	100	100	100
1918	295		339	226	194
1920	374	382	359	307	226

For Denmark, Sweden, the UK, and the USA: Danmarks Nationalbank (1968) *Dansk Pengehistorie*, vol. II, p. 68. For Norway: Jahn, Munthe & Eriksen (1966) Norges Bank gjennom 150 år (Norges Bank), pp. 211 and 262

main reason why Sveriges Riksbank, Norges Bank, and Nationalbanken i Kjøbenhavn can be seen as central banks since about 1914 is that during the war they clearly showed that they took their responsibilities for guarding the value of their respective currencies very seriously. One of the questions which can be raised in this connection is how good they were at carrying out this task.

A brief look at the price developments 1913–20 will illustrate the problem (Table 7.7):

It can be clearly seen that inflation (as measured by wholesale prices) had been running faster in Scandinavia than in the UK and the USA during the war.

As mentioned above, the Riksbank was relieved from its duty to accept exports payments in gold and to mint gold at the official price. Swedish exporters should be paid in goods that Sweden needed. The money circulation in Sweden would thereby expand more slowly. The Swedish government and the Riksbank urged their Norwegian and Danish counterparts to stop accepting export payments in gold, but that did not quite happen. Because of the Scandinavian Currency Union, gold minted in Norway and Denmark would flow freely into Sweden and so contribute to an expanding and inflationary money supply in Sweden.

The money supply argument was put forward in the press by internationally well-known Swedish economic professors like Knut Wicksell, David Davidson and Gustav Cassel. In Denmark the leading critic was Professor Axel Nielsen, who said of the Nationalbank governors that (my translation) "…during the war there was absolutely no knowledge of the money and credit theories of that period."[29]

[29] "…(man) stod i Danmark under verdenskrigen ganske uden kendskab til tidens penge- og kreditteori." Here quoted from *Dansk Pengehistorie II,* p. 46.

When Professor Cassel published similar views in a Swedish newspaper (August 8, 1917), the Nationalbank retorted in a Danish newspaper (Politiken, August 11, my translation): "What Professor Cassel otherwise says about the Nationalbank's lack of understanding of the gold blocking policy, hangs in the air, since the professor does not have, cannot have, and until further notice will not have any knowledge of that policy, which it pursues and will have to pursue for important considerations towards Danish society and governance … but of course not from motives of profit, as the professor allows himself to insinuate…".[30]

The professors were of the opinion that the Nationalbank and Norges Bank just bought gold when they could acquire it at a good price. The Nationalbank counter-argued that it considered it more important to do what was good from an overall economic policy angle than what might be correct from a (narrow?) theoretical point of view.

The above-mentioned Professor A. Nielsen was highly critical of the relatively passive way, the Nationalbank used the discount rate instrument. In its 1918/19 annual report the Nationalbank made the comment that there would be a high demand for credits for repairs and rebuilding of stocks, but that the bank did not expect that (my translation) "… it could stop speculation, turn around consumption, or reduce prices by increasing its discount rate. In times like these, the ordinary mildly changing discount rate changes will achieve little…"[31]

The Nationalbank was more concerned that a sharp increase in its discount rate could hurt the investments and rebuilding of stocks, which it regarded as necessary.

The money supply problems of the Scandinavian countries during the Great War demonstrate the problematic value of gold. The countries that could, in spite of the war, pay with plenty of gold could not spare the "real goods" (steel, coal, machinery, and so on), which the exporters of foodstuff, timber, and fish would much have preferred as payments for their exports.

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[30] "Hvad Professor Cassel i øvrigt udtaler om Nationalbankens Mangel på Forståelse af Guldspærringspolitikken, svæver i Luften, da Professoren ikke har, ikke kan have og ikke indtil videre vil få Kendskab til den politik, som Nationalbanken følger og må følge af vægtige hensyn til dansk Samfunds- og Statsliv, men selvfølgelig ikke, som Professoren tillader sig at insinuere, af Gevinsthensyn…" Here quoted from *Dansk Pengehistorie II,* p. 53.

[31] "…det forventedes ikke, at man ved Discontoforhøjelsen kunde standse Spekulationen, vende Forbruget, nedsætte Priserne. I Tider som disse forslaar de almindelige, svagt varierende Diskontoændringer kun lidet… " Nationalbanken i Kjøbenhavn, Aarsberetning 1918/19, p. 6.

Part III

The Interwar and Postwar Period

8

Sveriges Riksbank and the Four Criteria

8.1 The Interwar Years

8.1.1 The Evolution of the Governance of the Riksbank

Since its foundation in 1668, the Riksbank had been governed by the six "fullmägtige", appointed by and representing the three guaranteeing estates (two from each estate—see Chap. 3). They had a role comparable to non-executive directors. The practical daily affairs were taken care of by six "kommissarier", each reporting to the relevant fullmägtiga. Some fullmägtige were members of the Assembly of the Estates, but mostly they were not. They reported to the "Sekrete Utskott", (the "Secret Commission") i.e. the commission of the Estates dealing with secret matters of state.

In 1800, the farmers (the "fourth Estate") joined the three other estates as guarantors, and the number of fullmägtige and kommissarier was consequently increased to eight. In the early 19th century, the number of

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_8

fullmägtige was increased to 12 (three from each estate), but they were soon reduced to eight again, and then to seven.

Until 1860 all the fullmägtige had equal rank in the bank governance, and each was responsible for a particular business area (for example, discounting of domestic bills, discounting of foreign bills, mortgage lending, internal administration, and so on), but their jobs as fullmägtige were still spare time jobs.

By the 1850s it was clear that the governance of the Riksbank was outdated and made it difficult for it to compete with the private banks. Reforms had to be made. Following lengthy discussions, the Banking Committee of the Assembly of the Estates (part of the "Secret Commission") finally decided, in 1860, that a full-time fullmägtig should be appointed, who should be responsible for the Bank's inner administration. He was unofficially referred to as the "riksbankchef". The first riksbankchef was A.W. Björck (1812–85), a lawyer and a member of the Göteborg city council. He had been elected bankfullmägtig in 1860. He retired in 1868.

After the constitutional reform of 1866, when the Assembly of the Estates was replaced by the two-chamber elected Riksdag, the composition of the fullmägtige, of course, had to change. The fullmägtige were now appointed by the Riksdag in proportion to the party composition of the Riksdag. So, the old principle that the composition of the fullmägtige should reflect the composition of the people was preserved—and still is.

The 1897 Riksbank Act (see Chap. 3) changed the picture slightly. It stipulated (§ 27–30) that there was to be seven fullmägtige. Members of the state council, fullmägtige in the Statsgäldskontor, and board members of other banks and savings banks could not be fullmägtige in the Riksbank. According to different parts of Sweden's Constitution (§ 71 of the Riksdagsordning and § 72 of the Regeringsform) the king, i.e. the government, would appoint one of the seven fullmägtige, and he would be the president, or "riksbankchef" (the six others were appointed by the Riksdag). A few years later he was joined by a co-riksbankchef, but this did not seem to work. In the 1890s a system was implemented with a formally appointed riksbankchef and a full time fullmägtig as "viceriksbankchef". Their salaries were adjusted accordingly. The fullmägtige would be appointed for three year periods, but could be reappointed.

The §§ 31 and 34 of the 1897 Riksbank Act form the background of much of the later discussion on the role of the Riksbank and its independence from the government (see Sect. 8.1.4 below). § 31 stipulated that if the government wished to talk to the fullmägtige, the fullmägtige would have to participate in such discussions, but they could not make any decisions in the presence of any government representative.[1] §34 stipulated that the fullmägtige could receive instructions only from the Riksdag and its Banking Committee, i.e. no instructions could be received from the government.[2] (For later changes to the governance, see Sect. 8.2.3 below).

These stipulations reflect that even 33 years after the constitutional reform of 1866, there were still frictions between the Riksdag and the king/government, at least with respect to the Riksbank. A faint echo of the 1544 concord between the king/government and the representatives of the people remained (see Chap. 3).

8.1.2 The Role of the Riksbank in the Crisis of the 1920s

Like elsewhere, the aftermath of the Great War was a highly turbulent period also in Sweden. The years 1918–20 was a period of feverish speculation in commodities, stock prices, real estate, and roaring inflation. These years were followed by a period of sobering up—"austerity" like in the 1820s and 1830s. Commodity prices, stock market prices, and real estate all collapsed. The reason for the turnaround in 1920 was a combination of a burst of speculative bubbles and economic policies, including what later ages would have termed monetary policy—all, of course, heavily influenced by similar developments in nearly all parts of the world.

The Riksbank had satisfied Criterion I since 1903, but the question is what the Riksbank did in the interwar years to guard the value of the country's currency (Criterion II), being the government's banker

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[1] "…men det är det fullmägtige förbjudet att i ombudets närvaro fatta beslut."

[2] "Fullmägtige kunna ej i och för sin befattning med Riksbanken emottaga föreskrifter af någon annan än Riksdagen och dess bankoutskott…"

Table 8.1 The Swedish Banking Scene 1916–1940. Amounts in mill/SEK

	Number of banks	Deposits	Assets
1916	60	2.497	4.207
1920	41	5.095	8.114
1922	35	4.325	6.706
1926	31	3.453	5.570
1930	30	3.631	5.905
1940	28	4.321	6.021

Sources: Assetts and deposits: K.G. Hildebrandt (1971*) I omvandlingens tjänst. Svenska Handelsbanken 1871–1955* (Sv. Handels banken, pp. 394–96)
Number of banks: Statistiska Centralbyrån (1960) *Historisk Statistikk*, bd.IV, p. 98

(Criterion III), and being the bank for the country's other financial institutions (Criterion IV).

The political and economic background during the inter-war years tested the Riksbank on all of the three criteria not settled by 1897/1903 (Criterion I). The toughest test was the banking crisis, which followed the rollercoaster of 1918–20 and its reversal in 1920–24. When the bubble burst in 1920, a vast number of investors/speculators defaulted on their loans, and the banks which had financed these activities—i.e. nearly all banks[3]—made deadly losses (10–15 % of their loans). The effect of these developments on the banking scene and, therefore, on the Riksbank's field of operation, is illustrated in Table 8.1.

It is clearly seen that the number of banks had dropped dramatically—the number had topped 80 in 1910. Some had been absorbed by others, some had merged, and some had folded up. It is also seen that not even by 1940 had the volume of deposits regained the levels of 1920. The reason was not only the 1930s depression; in 1940, the price level was, after all, not much different from its 1920 level, and GDP was substantially higher. The drop in bank deposits (both absolute and relative) was mainly caused by the flight of deposits to the hundreds of tiny savings banks and co-operative banks (*föreningsbanker*) scattered all over Sweden.[4] Banks

[3] Stockholms Enkilde Bank had been cautious. The Wallenbergs still remembered the painful experience of 1879, cf. Chap. 3 of this book, and Wetterberg (2009) *Pengarna & Makten* (Sveriges Riksbank), p. 274.

[4] For details of this development, see e.g. Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave MacMillan), pp. 254–55.

had suffered a severe loss of confidence in the early 1920s, and this continued in the 1930s, following the depression and the "Kreuger affair" (see below).

The reaction to the many bank failures in 1921–22 was primarily the foundation of the Kreditkassan AB av år 1922. The initiative came from the commercial banks, but it was realized only with the assistance of the government.[5] The direct reason for the creation of this institution was the failure of a large provincial bank (Sydsvenska Kredit AB). Rescuing this bank needed more money than the rest of the banks could or would offer. It was recognized that the problems of this bank—and other expected casualties—exceeded what could be managed by the private banking sector itself. To let all, or most, of the stricken banks go under would be a disaster for society. Setting up the Kreditkassa was a pragmatic solution. The political and ideological overtones would emerge only in later discussions and events (see below).

The Kreditkassan AB av år 1922 was set up as a joint stock company with a share capital paid in by the government, the Riksbank, and the commercial banks. It was majority owned and guaranteed by the government. The commercial banks injected nearly 10 % of the capital, and the Riksbank about 90 % (SEK 55 million in total). Apart from its share capital, the Kreditkassa was funded almost exclusively by government loans. The losses suffered by the Kreditkassa have been estimated at approximately SEK 70 million. Svenska Handelsbanken had to write off SEK 95 million (about 10 % of its loans), and Skandinaviska Banken SEK156 million (15 % of its loans).[6]

The purpose of the Kreditkassa was to guarantee the deposits in weak banks, buy out bad assets from the commercial banks, or to inject new share capital or hybrid capital into insolvent banks, or any combination of these. The original intention was that the Kreditkassa was to be closed down by 1927. That proved over-optimistic. The crisis turned out to be deeper and more enduring than anticipated in 1922. In the early 1950s it still nursed some credits stemming from the 1920s or 1930s. In a way,

[5] cf. Wetterberg (2009*) Pengerna och Makten* (Sveriges Riksbank), pp. 273–74.

[6] Wetterberg (2009) *Pengarna & Makten* (Sveriges Riksbank), p. 274.

the Kreditkassa still lives, but in its present shape there is no government ownership.[7]

The rescues arranged and financed by the Kreditkassa meant that no depositors suffered any losses. There was no depositor insurance scheme. The losses were suffered by the shareholders and tax payers. It does not seem that any of the failed banks went through formal bankruptcy procedures in court. Matters were handled with diligence, and shareholders accepted their misfortunes.

In addition to the Kreditkassa, the largest commercial banks assisted by taking over weaker banks or by offering them credits in cases where good collateral could be offered. The largest banks in trouble were the Svenska Handelsbank[8] and the Skandinaviska Kredit AB. The Svenska Handelsbank was saved in 1922 by assistance from its two closest competitors, the Skandinaviska Kredit AB and Stockholms Enskilde. No action from either of the Riksbank, the Riksgäldskontor, or the government. When later that year the Skandinaviska Kredit AB had problems, it was saved by bond issues and guarantees to the tune of SEK 100 million, which could be placed only because 40 % of the bonds were guaranteed by two commercial companies both belonging to the Kreuger Group.[9] The dire consequences of these guarantees showed up ten years later.

The role of the Riksbank during the 1921–22 banking crisis was limited to paying in the above-mentioned capital to the Kreditkassa, and to help orchestrate some bank mergers and takeovers. It did not act as a "lender of last resort" (except in a single case considered too big for the

[7] The Kreditkassa was used in the continuing banking problems of the 1920s and 1930s. In 1951 it was reorganized to become Sveriges Kreditbank AB, a fully-fledged government-owned commercial bank. In 1974, Sveriges Kreditbank was merged with the AB Postbank to become the PK Bank, at that time the third largest bank in Sweden (and 100 % government owned). The Postbank was the result of a 1960 merger between the Post Giro Office and the Postsparebank, dating from the 1883. In 1989, the PKbank took over the troubled Nordbanken, and the state ownership was diluted. The combined banks took the name Nordbanken AB, which later merged with the Finnish Merita Bank and later with the Danish Unibank and the Norwegian Cristiania Bank og Kreditkasse into what is today Nordea, headquartered in Stockholm, and the largest Scandinavian bank—and with no government ownership.

[8] In 1919, the Stockholms Handelsbank had changed its name to Svenska Handelsbank in connection with its acquisition of two provincial banks.

[9] cf. U. Olsson (1997) I utvecklingens centrum. Skandinaviska Enskilda Banken och dess föregångere 1856–1996, (SEB), pp. 138–39.

Kreditkassa to handle). Perhaps none of the stricken banks were able to offer enough collateral of sufficient quality for the kind of central bank support advocated by Walter Bagehot: generous lending, but only at high rates of interest and against undoubted collateral. The central bank should not run the risk of making any losses.[10]

The supply of liquidity to the banking system was not quite the problem one might have expected from the massive flight of deposits from the banking sector to the savings and co-operative banks, and from the large volumes of government bonds sold to household investors. First, the amount of liquidity in circulation in 1918–20 was enormous and had to be mopped up, and secondly, many of the deposits received in the savings banks were redeposited with the large commercial banks. Third, the balance of payments was in surplus, so liquidity came in from abroad. The sale of government bonds helped mop up excess liquidity. This was an essential operation to carry out the government's 1920 decision to return to the gold standard at the pre-war parity by 1924. So, in spite of the mopping up of liquidity during the 1920–24 years, the need of the commercial banks to rediscount bills with the Riksbank was limited.

8.1.3 Practical Matters. The Riksbank and the Kreuger Affair

The crash of the Kreuger conglomerate and Kreuger's suicide in Paris in March 1932, can arguably be seen as the biggest corporate collapse in history.[11] It certainly dwarfs Enron and Lehman Brothers, at least in relative size. The Enron collapse in 1996 was spectacular in terms of the

[10] cf. W. Bagehot (1873) *Lombard Street* pp. 196–98, the 1878 edition. Bagehot did not use the term "central bank", but referred to the Banking Department of the Bank of England. The Note Issuing Department was something else, and should, in Bagehot's opinion, not be involved in any lending business. It is, of course, impossible to guess what Bagehot would have advocated in cases (i.e. everywhere else) where there was no distinction between a "Note-issuing Department" and a "Banking Department" of a "central bank".

[11] "The…view that the Match King had perpetrated the greatest financial fraud in history, quickly became cemented in the public mind", F. Partnoy (2009) *The Match King*, Public Affairs, New York, p. 201.

Table 8.2 Kreuger's domestic bank debts and their relative size. SEK/bn

	Swedish	Swedish government		Kreuger's domestic bank debts
	GNP	Debt	Revenues	
1928	8.8		0.7	
1930	9.4		0.8	0.5
1931	8.6	1.7	0.8	0.8
1932	7.9		0.8	

Swedish GNP, government debt and revenues: Statistisk Centralbyrå, *Histoisk Statistikk*, pp. 214, and 265
Kreuger's debts: Jan Glete (1981) *Kreugerkoncernen och Krisen på Sensk Aktiemarknad* (Almquist & Wicksell), p. 507. Glete's work is the most detailed and penetrating analysis of the Kreuger affair so far produced

amounts involved and the accounting methods used, but it was limited in scope and general consequences. When Lehman Brothers imploded in 2008, the consequences were—indirectly—more severe and much more far reaching than anybody had anticipated, but these indirect consequences happened primarily because it was the third or fourth large bank to collapse in a year and so was the straw that broke the camel's back (a complete freezing of the inter-bank credit markets), not because of the amounts themselves. It is, of course, difficult to compare the size of failures with several decades and inflation in between, but the figures shown in Table 8.2 will give an impression of the relative size of the Kreuger affair.

It can be seen that the domestic bank debts of the Kreuger conglomerate equalled 10 % of Sweden's GNP and about half the size of the government's debts when the Kreuger Group collapsed. In addition, there were debts abroad. Neither of the collapses of Enron or Lehman was anywhere near this relative size.

Even with the lax accounting rules and fraud laws of those days, Ivar Kreuger (1880–1932) would probably have been convicted of swindle or fraud if he had been brought to trial. Originally, he probably did not intend any swindle in the criminal law sense at that time, but he was certainly a gambler who gambled with very high stakes, and his bookkeeping became increasingly deceitful as his affairs went downhill. The public had been warned already in 1922.[12] He did use questionable accounting methods, which would almost certainly have been considered criminal today, but rules were less strict in the 1920s and 1930s. The Kreuger concern was extremely highly geared, but being highly geared is not equivalent to being a swindler, as long as one is open about it. Kreuger was not. Nor was one of his closest associates, a prominent Swedish banker who was, therefore, sentenced to ten months in jail. When luck did not strike sufficiently, the stakes had to be increased for the next gamble, unfortunately at the cost of other people's money. When bad luck really struck—the stock market crash of 1929—the house of cards crumbled.

The Riksbank, reluctantly, got heavily involved.

Ivar Kreuger started his business life in the construction and manufacturing business. He gradually transformed himself into a financier on a large international scale. He constructed a conglomerate of industrial holdings, match manufacturing, and banks in Eastern Europe and the United States. He organized large credits to cash hungry governments in Eastern and central Europe and Latin America in return for obtaining monopolies for selling matches in those countries. By 1929, the assets of the Kreuger empire consisted mainly of long term illiquid holdings of shares in industrial companies in Sweden and elsewhere, and loans to foreign governments close to bankruptcy. The liabilities consisted of short-term loans from nearly all banks in Sweden plus several foreign banks and an American bond issue (USD 100 million, a rather large sum in those days).

Following the stock market crash in 1929, the value of his investments dropped severely, and he could not roll over his bank debts. In 1931, when all credit sources had dried up, Kreuger approached the Riksbank for help. The Riksbank refused, unless the Skandinaviska would guarantee the loan. Unfortunately, Skandinaviska was already too heavily engaged. Mr. G. Rydberg, the head of Skandinaviska's corporate Banking Division, had known Ivar Kreuger for a long time. Kreuger had

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[12] In 1922 the banking inspector raised questions over the vast loans made by Swedish banks to Kreuger and his companies. An investigation was arranged, and a report was made by a professor from Handelshögskolan in Stockholm, who characterized the Kreuger Group as the largest casino in Sweden ("Sveriges största spekulationsföretag"), cf. Wetterberg (2009) *Pengerna och Makten* (Sveriges Riksbank), p. 288.

orchestrated Rydberg's appointment to his position in Skandinaviska, and Kreuger had appointed Rydberg chairman of the board of directors in Kreuger & Toll, one of the two core companies in the Kreuger Group. Since Kreuger had rescued Skandinaviska in 1922, and Rydberg was a central figure in the Kreuger empire, Skandinaviska had some difficulties refusing credits to Kreuger. By the late 1920s, Skandinaviska's credits to Kreuger were already out of all proportion—twice the size of Skandinaviska's equity capital. Rydberg certainly had conflicts of interest.

In 1932, when half of the Kreuger concern's domestic bank debts were owed to Skandinaviska,[13] that source of credit was, in the end, stopped.

After several refusals from the Riksbank, the prime minister got involved. On two occasions in the autumn and winter of 1931–32 the prime minister leaned heavily on the Riksbank to grant the requested loans. Against this pressure, the Riksbank finally gave in against a promise of a complete disclosure of all debts of the Kreuger empire. A meeting was arranged in Paris, because Kreuger was on his way home from New York. After the first day of the meeting it was agreed to continue the next day, but during that night Kreuger had shot himself.

Subsequently, it was found out that a few weeks prior to the two occasions when the prime minister had persuaded the Riksbank to grant the loans, he had received two cheques to the value of SEK 50,000 each directly from Ivar Kreuger. First he denied having received the second cheque, and then he argued that those cheques had been ordinary donations to his political party. Unfortunately, these amounts had never been recorded in the party's books.[14] The prime minister had to resign.

Mr. Rydberg, who had served on several government committees on banking matters, was sentenced to ten months in jail for having misrepresented the financial standing of Kreuger & Toll when he was chairman of the company.

Skandinaviska Kredit AB never regained the leading position in the Scandinavian banking world it had gained after the collapse of Den Danske Landmandsbank in 1923–26 (see Chap. 9). It had to take over

[13] A detailed survey of the Kreuger Group's loans from Swedish banks is given in Jan Glete (1981) *Kreugerkoncernen och krisen på svensk aktiemarknad* (Almquist & Wicksell international), pp. 494–510.

[14] cf. Wetterberg (2009) *Pengerna & Makten*, (Sveriges Riksbank), pp. 288–98.

from the Riksbank those Kreuger credits it had guaranteed. This would have crushed Skandinaviska if it had not been saved by a large loan from Riksgäldskontoret (under government instructions). Riksgäldskontoret, not the Riksbank, acted as lender of last resort. It was recognized that Skandinaviska was too big to be allowed to fail.

Many bits and pieces of the Kreuger conglomerate were picked up by the Kreditkassan av år 1922 and were sold over the following 20 years at great losses compared to the 1932 book values. For the Kreditkassa, the book was finally closed in 1952. The commercial banks probably closed their books earlier, but no doubt also with heavy losses.[15]

8.1.4 The Debates Over the Role of the Riksbank

During the 1920s and 1930s the role of the Riksbank was the subject of numerous discussions in political as well as academic circles. The discussions were prompted particularly by the turbulence of the early post-war years and the events of 1931, when the gold standard was abolished by a majority of the Western countries. The economic depression of 1930–33, including a severe labour market dispute in 1931, occasioned several discussions, and so did the changes of government in 1930, 1932, and 1936 (1930–32 liberal governments, 1932–36 a social democratic government).

The discussions centred on three main topics: (a) the commercial activities of the Riksbank, (b) the monetary policy issues, and (c), the question of the independence of the Riksbank from government interference.

With respect to the few remaining commercial activities of the Riksbank (Criterion IV), the question was whether the Riksbank should offer interest-bearing deposit accounts to the general public in competition with the commercial banks and savings banks. It had been part of the 1897 banking act, which ended the note-issuing rights of the enskilde banks (see Chap. 3), that the Riksbank would stop offering interest-

[15] One of the consequences was a reorganization in 1939 of the Skandinaviska Kredit AB into Skandinaviska Banken AB. In 1972 it merged with Stockholms Enskilda Bank to become the Skandinaviska Enskilda Bank AB (SEB).

bearing deposit accounts. The conclusion of the later discussions was that it should not resume such activities.

In some political circles the question was raised that if the Riksbank could not do any commercial business on its own, perhaps the government should either create a government owned commercial bank or split the Riksbank into two different parts like the Bank of England. This discussion had been going on since about 1910, but it was intensified by the banking crisis of the 1920s and 1930s. In 1928 a social democratic proposal in the Riksdag that the government should form a commercial bank was defeated, but the idea did not die.

In 1941, the Riksdag[16] asked for a report on the function of the Riksbank and the capital market. A commission was set up to investigate whether the Riksbank should be a "pure central bank" or a bank competing with the commercial banks, and if the Riksbank was to be a "pure central bank", whether the government should form a state-owned commercial bank. When the report was delivered in 1949, it recommended that the Riksbank's remaining commercial business (mainly discounting bills for a few select customers) should be transferred to a new government bank, and that the Riksbank's branches should be closed. The Riksbank protested strongly, and the committee's proposals were partly buried. The end result was that the government's bank holdings resulting from the rescues of the 1920s and 1930s were amalgamated in 1951 with the restructured and merged postal savings bank (est. 1883) and the postal giro bank. Shortly afterwards, the resulting institution was merged with the leftovers of the Kreditkassa av år 1922 (see Sect. 8.1.1 above) to become the PK Banken. So, after some forty years of discussions, Sweden finally had a 100 % state-owned fully-fledged commercial bank. The few remaining commercial activities of the Riksbank were discontinued. By 1952, Criterion IV was fully satisfied.

With respect to monetary policy issues, opinions differed widely between academic economists, such as Sven Brisman, David Davidson, Gustav Cassel and Eli Heckscher, and politicians in the government and Riksdag. The head Riksbank governor (*Riksbankchefen*—a posi-

16 Between 1939 and 1945 Sweden had an all party coalition government led by a social democratic prime minister.

tion informally created in the 1860s and since 1897 appointed by the government)[17]—was sometimes torn between the academics and the politicians.

In the years 1918–20, the Riksbank was criticized by the economists for keeping its discount rate too low (4½–6 %). In the early 1930s, it was criticized for maintaining a high discount rate (7 %) for too long. In the Riksdag the loudest voices were those representing the farmers. The farmers were notoriously highly indebted and therefore anxious that interest rates were kept low.

The discussions seem a bit silly, particularly in the homeland of Knut Wicksell, the internationally renowned economist (1851–1926), the father of the concept of "real interest rates", i.e. the rate of interest corrected for the rate of inflation.[18] The banks mostly set their own interest rates quite regardless of the Riksbank's discount rate, and the rate of inflation gyrated between 20 % p.a. and 30 % p.a. in the immediate post-war years and negative rates in the early 1920s, as the krona was brought back to its pre-war gold parity. It is difficult to imagine that under those circumstances one or two percentage points of central bank discount rates changes some 6 or 12 months sooner or later would have made any difference to either the rate of inflation, employment, or economic growth. It is equally difficult to imagine that the Riksbank's fullmägtiga would have agreed to discount rate changes of 20–30 percentage points, which was probably what it would have taken to make any difference.

It is quite conceivable that the Riksbank's discount rate in 1930 implied a "real rate of interest" of 10–15 %, but since the financial institutions borrowed very little from the Riksbank, or rediscounted only small volumes of bills, the Riksbank's discount rate could not possibly matter very much.

Mr. Victor Moll, the chief Riksbank governor 1912–29, understood this, but in spite of his many years in office, his voice was weak. He had been appointed by lottery because of the Riksdag's peculiar appointment process (see Sect. 8.2.3). He also did not speak up in the debate over the question of the Riksbank's independence.

[17] On the governance of the Riksbank, see Sect. 8.2.3 below.

[18] cf. Knut Wicksell (1898*) Geldzins und Güterpreise.*

With the farewell to the gold standard in the autumn of 1931, and the social democratic election victory in September 1932, the debate over the main objectives and independence of the Riksbank intensified.

In October 1931, the finance minister declared that the aim of Swedish monetary policy was to maintain the domestic purchasing power of the currency with all available means.[19] For this purpose, the Riksbank was assisted by external economists who helped the Riksbank construct a price index, by which the Riksbank could monitor the purchasing power of the krona. It has been claimed that this made the Riksbank the first central bank in the world to have domestic price stability officially declared as its main objective.[20] It is significant that the Riksbank's programme was discussed in detail (May 1932), first by the Banking Committee ("Bankutskottet") of the Riksdag, and then in the full Riksdag. The Riksbank's programme was accepted with the additional comment that while consumer prices were to be kept stable, wholesale prices should be allowed to rise to stimulate production. However, the Riksbank's interest rate policy was sharply criticized.

A parliamentary debate of that nature clearly did not leave much independence to the Riksbank. The Riksbank was not much of an adviser to the government. It mostly took note of what the Riksdag and the government wanted from it. Criterion II was not fulfilled.

It might have been an interesting question to discuss by which means the Riksbank (or any other central bank) was supposed to keep consumer prices stable while "allowing" wholesale prices to increase, in a world of floating exchange rates and highly fluctuating business cycles.

With the conditions of 2008–17 in mind, it is somewhat amusing to see that in Sweden in 1932 zero inflation was the declared aim, which was never achieved, while in today's world we actually have zero inflation while a 2 % inflation rate is the declared goal, which seems difficult to achieve in spite of nearly endless monetary easing.

With respect to the Riksbank's independence from political interference, Ivar Roth, who had succeeded Victor Moll in 1929 as head governor

[19] "…den svenska penningpolitiken skulle inriktas på att med till buds stående medel bevara- den svenska kronans inhemska köpkraft." Here quoted from G. Wetterberg (2009*) Pengarna & Makten*, Sveriges Riksbank, pp. 299–300.

[20] Wetterberg (2009), p. 300.

of the Riksbank, tried his best to keep a distance from the government.[21] He succeeded to some extent and still managed to be reappointed six times. Still, in 1948, he had to resign (see Sect. 8.2.1). In 1933 he had made the Riksdag issue a statement confirming that the Riksdag set the goals for the monetary policy, but the Riksbank was responsible for choosing the means. However, when in 1937 the finance minister issued an instruction to the Riksbank, which encroached on the Riksbank's rights to decide the instruments to use, the fullmägtige reminded the minister of the 1933 statement. The minister had to come out with a statement of exemplary diplomacy, essentially saying that under the actual circumstances a co-operation between all authorities with responsibility for monetary policy was necessary.[22] Part of the problem was that the Riksbank was an institution under the Riksdag (see Chap. 3), not under the government. The Riksdag, and therefore the fullmägtige, appointed as they were by the Riksdag, guarded their prerogatives carefully. This, of course, did imply that the Riksbank was still almost fully dependent on the Riksdag.

Meanwhile, a number of economists were of the opinion that the central bank, particularly in a regime of floating exchange rates, had to be part of the government machinery. Eli Heckscher, the well-known economist, declared in the autumn of 1931 (my translation):

> …since the government's power over the monetary system has never been delegated, and ought not be delegated, to any subordinated institution, however august, so is it undeniable that the Riksbank continuously has to stay in contact with the government's nearest representative on this subject, i.e. the finance minister…The steering of the monetary policy must come from the country's government.[23]

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[21] Ivar Roth was head governor of Sveriges Riksbank 1929–1948, and IMF president 1951–56.

[22] The statement is extensively quoted in K. Kock (1961) Kreditmarknad och räntepolitik I + II (Sveriges Allmänna Hypoteksbank) Bd. I, p. 115.

[23] "…eftersom statens makt över penningväsendet aldrig har delegerats och icke rimeligvis bör delegerats åt något underordnat borgan, hur upphöjt som helst, så är det oavvisligt att riksbanken ständigt behöver hålla sig i kontakt med statsmaktens närmaste representant på detta område, nämligen finansministern…Ledningen av penningpolitiken …måsta ligga hos landets regering." Here quoted from Wetterberg (2009) *Pengerna & Makten*, Sveriges Riksbank, p. 307.

Gunnar Myrdal, another well-known professor, published similar views.

Another professor (E. Lindahl, 1935) was of a different opinion (my translation):

> The responsibility for regulating the business cycle must…primarily be borne by the central bank, since it can hardly be separated from the responsibility for the value of the currency. The use of fiscal policy as instrument in the business cycle policy can, therefore, only be of supplementary nature and only be part of the policy led by the central bank.[24]

Since the mid-1930s, this debate died out. When a discussion of the role of the Riksbank resurfaced in the early post WWII years, it was on a different background and with a different purpose.

Criterion I was fulfilled since 1903, and Criterion IV seems to have been largely fulfilled since the Great War. The debates of the 1930s show that neither Criterion II nor III could be considered fully satisfied at that time.

The problem here is that in the definitions of Criterion II and III (see Chap. 2) it is assumed that no distinction has to be made between "parliament" and government. In Sweden, this distinction had to be made, at least with respect to the Riksbank, and at least until the 1950s. The reason for the necessity of making this distinction is partly the 1544 accord between king Gustav Vasa and the Estates, and partly the circumstances surrounding the formation of the Riksbank in 1668 (see Chap. 3).

8.2 The Post-War Years

8.2.1 Social Democratic Rules and Regulations

During WWII, Sweden was ruled by an all-party coalition government led by the social democratic prime minister, who came to power in 1932.

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[24] "Ansvaret för konjunkturpolitiken måste…primärt åvila centralbanken, då det knappast kan särskiljas från ansvaret för valutans vård. Finanspolitikens användning som konjunkturpolitisk instrument kan därför endast bli av supplerande art och bör helst indgå som ett led i den av centralbanken ledda politiken." Here quoted from Wetterberg (2009), p. 308.

This quotation, as well as the quotation given in note 23 above can also be found in K. Koch (1961) Kreditmarknad och räntepolitik I + II (Sveriges Allmänna Hypoteksbank), Part I, pp. 113–14.

He remained prime minister until 1946 (except in 1936–39). When he died in 1946, he was replaced by the renowned Tage Erlander, prime minister until 1969, when he was replaced by the controversial Oluf Palme, prime minister 1969–76, and 1981–86 (assassinated 1986), and succeeded by another social democratic prime minister holding office until 1991. This means that Sweden has had social democratic prime ministers in 51 years of the 59 years between 1932 and 1991.

When Sweden acceded to the EU in 1995, it was again under a social democratic prime minister. The parliamentary situation made it possible to implement a substantial number of social-democratic ideas.

This was the scene on which the Riksbank had to play its role—or rather, was given its role to play. An important additional backdrop on this scene was that during the post-war years the government always commanded a majority of the seats in both chambers of the Riksdag.[25] This had not always been the case in the 1930s. After the WW II, the centuries old frictions between the government and the Riksdag gradually vanished. The consequence was that, in the words of the latest official history of the Riksbank (my translation): "With the stable political majorities (in the Riksdag) of the post-war period, the special position of the Riksbank had lost much of its significance."[26] Times had changed fundamentally.

Already in 1944, a social democratic working group including Mr. Wigforss, the finance minister, and the above mentioned professor Myrdal had worked out the goals for Sweden's future. The highest priorities should be given to investments in infrastructure and housing. A million dwellings were to be constructed over the following ten years at a defined subsidized cost (*millionprogrammet*), initiated in 1946. To stimulate investments in these areas, interest rates had to be kept low, preferably not exceeding 3 % p.a. Credits for other purposes were to be rationed. Bank lending to industry, bond issues and share issues by industrial and commercial companies were given second priority. They had to queue up waiting for permissions. Financial institutions were forced to buy the bonds issued by the government and government-sponsored

[25] In 1971, the two-chamber system was replaced by a one-chamber Riksdag.

[26] "Med efterkrigstidens stabile majoriteter fölorade Riksbankkens särställning mycket av sin praktiska betydelse." Wetterberg (2009) *Penningarna och Makten*, (Sveriges Riksbank), p. 415.

mortgage institutions with less than market yields (prioritized bonds). It was a system reminiscent of the arrangements during the Great War (see Section 3.7.1) when the "Kapitalkontrollnämnd" (Capital Control Council) was controlling the allocation of capital.

The political attitude was clearly expressed by Erik Wickforss, the finance minister, in 1948 (my translation): "…the social-democratic party should strengthen and hold on to the right of the general public to limit the scope for private financial interests to govern interest rates and monetary policies as they pick and choose."[27]

No new Capital Control Council was created. The Riksbank was given the honour of doing the job to organize the credit rationing and control interest rates.

The mechanism was sometimes subtle. The Riksbank would impose liquidity ratios on the banks and define liquidity in a way that could almost only be satisfied by holdings of "prioritized" bonds, for which there was no real secondary market.

In the beginning of this era Ivar Rooth, the riksbankchef (head governor since 1929), tried to act in the traditional way. When in 1947–48 he saw inflation accelerating and foreign exchange holdings dropping, he proposed a modest increase in the Riksbank's discount rate. This was strictly against the social democratic policy as explained above. He could persuade neither the other fullmägtige, nor the Banking Committee of the Riksdag, nor the finance minister. In December, 1948, Ivar Rooth resigned.

During the 1950s, the Riksbank's grip on the capital market institutions tightened, as the government increasingly moved in the direction of a planned economy. There were monthly meetings with the banks and savings banks, which had to submit detailed statistics on their lending. Lending for "non-prioritized" purposes was criticized. The Riksbank would warn the financial institutions of various sanctions if they did not keep their "non-prioritized" lending within limits. The ultimate threat

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[27] "…skal socialdemokratin förstärka och hålla fast vid samhällets rätt att begränsa enskilde finansinteressens möjlighet att efter sitt omdömme och behag styra räntepolitiken och penningpolitiken." E. Wickforss (1948) Frihet – för vem? (Socialdemokratisk skriftserie nr. 18, Tidens förlag), p. 27. Here quoted from L. Jonung. *Kreditregleringens uppgang och fall* in L. Werin, Ed. (1993) *Från räntereglering till inflationsnorm*, (SNS), p. 325.

was nationalization of the banks. This was not an empty threat. It was a frequently raised proposal at the annual meetings of the social democratic party.

This sort of regulation could be done fairly easily, partly because of the concentrated nature of the Swedish capital market, and partly because of the absence of a secondary capital market.

Not only were the volume and purposes of bank lending controlled by the Riksbank according to government wishes, but also the interest rates. When, in the early 1950s, inflation and interest rates were going up everywhere else, the Swedish government reluctantly had to accept an increase in the Riksbank's discount rate (1951). This initiated a procedure where the Riksbank told the banks and savings banks which rates of interest it wanted the institutions to set.

Thus, between the early 1950s and the mid-1980s the Riksbank was highly active controlling both the volume, distribution, and prices of bank credits and bond issues. [28]

The monthly meetings between the Riksbank, the Bankers Association, and the banks were not particularly cordial. The Wallenbergs had become billionaires through their industrial and banking empire. They did not much like to be told by Per Åsbrink, originally a social democratic party functionary and riksbankchef 1955–73, how they should set the interest rates in Stockholms Enskilda Bank, which bond issues they should or should not arrange, which amounts of government or mortgage bonds to buy, and on what conditions. After such meetings with the Riksbank, the bankers would immediately start discussing among themselves how the agreements with the Riksbank could best be circumvented.[29]

Under these conditions, the Riksbank barely fulfilled either Criterion II or III. It was far from an independent adviser to the government, nor was it a guardian of the value of the currency, internal or external. Since Ivar Rooth's departure, the Riksbank had become a highly "politicized" institution. It had been reduced to just another government office, or

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[28] cf. L. Jonung *Riksbankens politik 1945–90* in L. Werin, Ed (1993*) Från räntereglering till inflationsnorm* (SNS), p. 403.

[29] cf. L.Jonung *Riksbankens politik 1945–90* in L. Werin, Ed. (1993) *Från räntereglering till inflationsnorm*, pp. 339–85. Based on protocols from the meetings and interviews with some of the participants , Jonung gives several examples showing the nature of the meetings with the Riksbank.

perhaps something like the lower left drawer of the finance minister's desk.

The Riksbank's role in its relations with the banks (Criterion IV) developed into something like a mixture of a strict classroom teacher and a police officer, rather than an understanding father.

This development was facilitated by the sources from which the head governors were recruited. Since 1951, all of the next seven head governors (*riksbankchefer*) had previously been junior ministers (*statssekretär*) in a government department. Per Åsbrink, who occupied the chair in the decisive 18 years between 1955 and 1973, had previously been the editor of the social democratic periodical *Tiden*, and a junior minister in the Ministry of Communications (*Kommunikationsdepartementet*), when he was appointed riksbankchef. Five of the others had been junior ministers in either the economics or finance departments, including Bengt Dennis, who had the chair from 1982 to 1994, a period which included the crisis years of 1988–92. Between 1948 and 2003, they were all of solid social democratic stock.

The latest two head governors have a different background. Lars Heikensten (riksbankchef 2003–05) had been chief economist at Handelsbanken before becoming vice riksbankchef and then riksbankchef. Stefan Ingves, the present riksbankchef, is an economist, who has a past in the IMF and was financial adviser (*finansråd*) in the Ministry of Finance, when he took the chair on January 1, 2006. In 2012, he was reappointed for a second six-year term expiring at the end of 2017.

For a while, it worked. Until the late 1960s, or perhaps even into the 1970s, no major problems were visible on the horizon. By the late 1960s, Sweden had one of the highest standards of living in the world, exceeded, perhaps, only by the USA and Switzerland. The main reason why this "planned economy" could work so well for so long was that Sweden's balance of payments was strong. During the 1950s and 1960s Swedish exports of all sorts of industrial goods boomed, because these goods were needed to rebuild war-torn Europe. Swedish production capacity had not been disrupted by the war. Swedish timber, paper, steel, copper, machinery, telephone systems, dairy machinery, cars, ships, and so on were needed everywhere almost regardless of price.

Even when in 1967 the UK devalued the sterling by nearly 15 % against the dollar (and Denmark and Norway by 7.9 %), Sweden could maintain an unchanged dollar rate. After this devaluation of the DKK, it took about DKK 145 to buy SEK 100. In 1931, they had been 1:1.

However, in the long run problems occurred. By the end of the 1960s, the rest of the world had largely overcome the industrial disruptions of WWII, and had re-equipped their respective industries with modern technology. Sweden was losing its competitive advantages. From about 1975, the balance of payments as well as the government's budgets turned negative (the 1973 oil price shock was only part of the reason). During the following years these deficits worsened dramatically. Inflation in Sweden started to run faster than elsewhere. Problems of all sorts were mounting up.

8.2.2 Deregulation and the Crises of 1988–93

The many capital market controls and restrictions set up by the Riksbank could, in the end, not prevent capital to flow in directions where profits were perceived to be within reach. The restrictions stimulated inventiveness.

From the early 1980s, property prices and stock market prices had started an increasing trend everywhere, including Sweden. By the mid-1980s, it had developed into a bubble (as everybody could see afterwards).

According to Riksbank regulations, investments in property and stocks could not be financed by banks, savings banks or bond issues if they were considered "speculative" investments. So, banks and others co-operated to create finance companies, which were not subject to the Riksbank regulations. These finance companies borrowed large amounts abroad (against collateral and bank guarantees) and injected the borrowed funds as equity in subsidiaries, which could therefore show solid balance sheets. Their balance sheets did not show their "double gearing". These subsidiaries could, therefore borrow (abroad) and use the proceeds to invest in property and stocks (mostly pledged as collateral for the loans and guarantees).

By the mid-1980s, some 300 "special" finance companies of all sorts, from consumer finance to property finance, had been established.[30] The Riksbank gave up counting them, let alone controlling them. In the early 1980s, the Riksbank reached the conclusion that the control system had made a mockery of itself and caused more harm than good. The many controls had resulted in the emergence of a vast "grey" and uncontrolled credit market. The Riksbank approached Kjell-Olof Feldt, the finance minister, and convinced him that the controls did not work anymore (if they ever had). Mr. Feldt approached Oluf Palme, the prime minister, explaining to him the need to dismantle what had been a firm social democratic bastion for 40 years. In his memoires, Mr. Feldt described how the meeting ended. Having listened to the finance minister for some time, Palme, in an irritated mood, said: "Do as you please. I still don't understand anything."[31]

The gradual deregulation started cautiously in 1983 and was completed by 1990.

Some observers have seen the crisis of 1988–92 as a result of the deregulation. However, since property bubbles were building up everywhere else at the same time, and since the regulations had been circumvented anyway, the case for assigning the blame for the crisis to the deregulation seems weak. In particular, Swedish economic policies had been inflationary for years, and the normal reaction when inflation is a threat, is a flight to fixed property. The Swedish property bubble of the 1980s dwarfed anything else, with the possible exception of the London Docklands in the same period. It exceeded what was seen in most places during the 2005–08 bubble. The subsequent price collapse was also at least as, if not more, dramatic than the market collapse experienced in the years 2008–12 (Table 8.3).

The accumulated write-downs made by the banks and savings banks, 15–18 % of their loan stocks, implied that the entire equity capital of the banking system was considered lost. However, most of the write-downs were concentrated on just three banks (Första Sparbanken, Götabanken,

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[30] cf. Larsson & Sjögren (1995) *Vägen till och från bankkrisen* (Carlssons), p. 135, and Statistisk Årbok.

[31] "Gör som Ni vill. Jag begriper ändå ingenting". K.-O. Feldt (1991) *Alla dessa dagar – i regeringen 1982–90* (Nordstedts förlag), p. 260.

Table 8.3 Property prices and bank losses 1980–1993

	Price index of apartment properties	Price index of office properties	Bank Losses Bn. SEK	Bank losses, % of loan stock
1980	100	100		
1986	300	700		
1988	550	1.100	3	0.4
1989	540	1.450	4	1.1
1990	500	1.300	10	4.0
1991	350	800	34	6.4
1992	325	600	69	6.2
1993			45	

Sources: Price indices and bank losses: A. Boksjö & M. Lönnborg-Andersson (1994*)* *Svenska finanskriser* (Rapport nr. 2, Uppsala Univeritát, Dept. .of Economic History), p. 43. Bank losses as per cent of loan stock: M. Larsson (1998) *Staten och kapitalet* (SNS), p. 214

and Nordbanken), which had lost two or three times their capital, and were all nationalized and merged with the state-owned PK Banken.[32]

The new PK Banken was renamed Nordbanken AB and could start its life with a clean balance sheet, because the bad assets were sold to Securum and Retriva, two state-owned "special purpose" vehicles created for this purpose. They were given a share capital from the state (SEK 24 bn in the case of Securum) and further funded with loans from the Riksbank (SEK 27 bn in the case of Securum). For Retriva, the amounts were of a similar size, i.e. a total of some SEK 100 bn. In 1991 the combined equity of all Swedish commercial banks was about SEK 75 bn with somewhat less for the savings banks. There is no doubt that the banks and savings banks were hopelessly undercapitalized at that time.

By the late 1990s most of the bad assets had been hived off, and some had even turned into good assets.

During the crisis years, the government formed the *bankstödsnämnd*, headed by an economist named Stefan Ingves.[33] Its role was to advise the government (and the Riksbank?) on how to handle the crisis.

[32] The merged bank was renamed Nordbanken, which later merged with the Finnish Merita Bank to become Nordea, which initially had the Swedish government as its largest shareholder because of the state-owned Nordbank. The Swedish government's shares in Nordea have since been sold.

[33] In 2005, Stefen Ingves was appointed Riksbankchef as from January 1, 2006.

With the later sale of the Nordea shares it is conceivable that after 20–25 years of hard work the Swedish taxpayers (government and Riksbank) have recouped the money they "invested" in Securum and Retriva in the early 1990s. Over a time span of that length, a precise calculation is impossible or even meaningless. The taxpayers, who had to foot the bill in 1990, are not identical to those who reaped the benefits from the asset sales 10 or 20 years later.

Scarcely had the banking crisis been overcome, before a new crisis emerged. This time, it was the Swedish krona, which came under attack on the foreign exchange markets. Essentially, the background for the currency crisis was almost identical to the background for the banking crisis. There was currency unrest elsewhere (as there were property bubbles elsewhere), and the Swedish government had for many years failed to curb the deficits on its budget.

During 1991, the finmark was devalued twice, each time with negative effects on the krona, and in September 1992 the UK left the EU fixed exchange rate mechanism (ERM). So far, the Riksbank, in close co-operation with the government, defended the krona with the interest weapon. On September 9, 1992, it was agreed that a foreign loan equivalent to SEK 120 bn should be raised. The Riksbank borrowed 25 bn from the Bank for International Settlements, with the gold reserves as collateral, and the rest of its share of the loans from Norges Bank and Danmarks Nationalbank. The Riksgäldskontor became the single largest borrower on the international interbank market.[34] Part of the proceeds of these borrowings were replaced as loans to the Swedish banks, which found it increasingly difficult to raise loans abroad, or even rolling over existing loans. On September 15, 1992, the Riksbank decided to raise the price for additional lending to the banks to 500 % p.a. On September 17, the fullmägtige agreed with the finance minister that the rate could be raised to 4,000 % if necessary.[35]

In the meantime, the Riksbank had actually tried to act seriously as an adviser to the government. On September 18, 1992, Bengt Dennis, the Riksbankchef, had advised Carl Bildt, the newly elected centre-right

[34] Wetterberg (2009) Penningarna & Makten (Sveriges Riksbank), p. 427.

[35] Wetterberg (2009) Penningarne & Makten (Sveriges Riksbank), p. 428.

prime minister, that public spending had to be cut by at least 3 % of GDP to balance the budget and stabilize the currency.[36] A crisis package was produced. It fell short of the Riksbank's recommendation, but the Riksbank still lowered the 500 % to 50 %.

It took only two days for the Riksbank to conclude that further efforts to defend the krona exchange rate would be a waste. On September 19, 1992, the Riksbank announced that the krona would be left floating with immediate effect. The krona dropped heavily.

There were strong interconnections between the currency crisis and the property crisis. During the build-up to these crises, the banks had borrowed substantial amounts in foreign exchange in the international interbank markets. The downward float of the krona cost the banks a large slice of their capital.

8.2.3 EU Membership and the Riksbank Acts of 1987 and 1999

In the early 1970s, Oluf Palme had declared that Swedish membership of the European Communities was incompatible with Swedish foreign policy. Less than five years after the assassination of Oluf Palme, it was official Swedish policy to become a member. Membership was obtained in 1995 after several years of negotiations, and after the signing of the Maastricht Treaty.

Membership of the EU required a change in the legal status of the Riksbank.

The Maastricht Treaty required an "independent central bank". A central bank guaranteed by a government controlled parliament was not independent. The § 1 of the 1897 Riksbank Act[37] had to be rephrased, even if its fundamental meaning dating from 1668 (see Chap. 3) was not intended to be changed.

In anticipation of the future EU membership, a new Riksbank Act was passed in 1988, effective as from 1989. On two points it loosened gov-

[36] Wetterberg (2009) *Penningarne & Makten* (Sveriges Riksbank), p. 428.

[37] "Sveriges Riksbank which is guaranteed by the Riksdag, conducts banking business according to this Act", cf. Section 3.2.1 above.

ernment's control over the Riksbank. First, it abolished the right of the government to appoint the riksbankchef (part of the 1897 Act). Instead, seven fullmägtige were to be appointed by the Riksdag, and they were to select the riksbankchef from among themselves. Secondly, the three-year office term for the fullmägtige introduced in 1897 was extended to five years. In Sweden, this was considered sufficient to establish "central bank independence". In Brussels, the opinion was different. There was still too much political control. Consequently, the Riksbank Act was amended in 1999. In its present wording,[38] the main points are (my translation):

> §1: "The Riksbank, which is the central bank of the realm…, and an authority under the Riksdag, can only conduct or participate in such activities as are assigned to it by law."

Comment:
It is seen that the former Riksdag guarantee has been replaced by the words "an authority under the Riksdag" ("…en myndighet under riksdagen…")

> §2: "The Riksbank is…responsible for monetary policy. The aim of the Riksbank's activities shall be the maintenance of a stable value of the currency ("…upprätthålla ett fast penningvärde.")
>
> The Riksbank shall also stimulate (*främja*) a safe and efficient payments system."

Comment:
In its substance, this does not differ much from the 1668 charter or the aims set for Danmarks Nationalbank or its predecessors. The wordings are very similar (see Chaps. 4 and 9).

> §3: "…the Riksbank has eleven fullmägtige elected by the Riksdag. The fullmägtige appoint among themselves a spokesman (*ordförande*) and a vice spokesman. (*vice ordförande*).

[38] Riksbanklagen (1988:1385) om Sveriges Riksbank, i dess lydelse den 1 januarie 2015.

§4: …the Riksbank is governed by a 'direktion', appointed by the fullmägtige. The 'direktion' consists of six members, appointed for a period of five or six years. The fullmägtige select the spokesman from among the six, who shall be the head of the Riksbank (*riksbankchef*) and at least one….. vice riksbankchef…"

Comment:
Originally, the fullmägtige acted like part time non-executive directors, and the top of the daily management were the "kommissarier". As time went by, and business and responsibilities expanded, it became expedient to have some of the fullmägtige as full-time executives (1860 onwards), and to have one of them as "head of business", i.e. "riksbankchef". This was formalized in 1897, but for the majority of the fullmägtige it was still a part-time job. By the 1999 Act, the fullmägtige have now been given the position they originally had, i.e. that of non-executive directors.

The main responsibility of the fullmägtige now is to appoint the daily management ("direktionen", i.e. the six governors who now have the position originally held by the six "kommissarier").

The fullmägtige no longer discuss monetary policy with any Riksbank representatives. The fullmägtige normally have declared party political adherences. Mostly they have backgrounds in regional local politics, as mayors of major cities or counties, but some have also been members of the Riksdag, or represented other political organizations. Fullmägtige cannot have government positions, be a Riksbankdirktör, or be a director of any other bank.

The number of fullmägtige has increased because of the growing number of political parties, which are to be represented proportionately in the board of fullmägtige. However, it will be remembered that in the first half of the 19th century the Bank had 12 fullmägtige (three from each of the four guaranteeing estates).

The spokesman and the vice spokesman have the right to attend and speak at meetings of the governors (*direktionssammenträdninger*), but without voting rights.

The fullmägtige meet on a monthly basis. At such meetings they are informed of the Riksbank's policies and actions. The agendas are published ahead of the meetings.

3. Kap. Direktionen

§1. The six "direktörer" (governors) cannot be members of the Riksdag, adviser to a minister (*statsråd*), be an employee in the Government Chancellery (*Regeringskansliet*), be an employee of a political party administration, be a board member of a financial institution supervised by the banking inspectorate, or have to do with anything else, which might make them unsuitable for the job.

§2. Members of the "direction" cannot receive nor seek instructions when they address monetary policy tasks ("…när de fullgör penningpolitiska uppgifter.")

Comment:

With the 1989 Riksbank Act as amended in 1999, the Riksbank can now be said to satisfy all of the Four Criteria. Between 1946 and 1989, Criteria II and III were hardly fulfilled at all.

That the number of governors should still be six may seem a puzzle to those who are unfamiliar with the history of Sveriges Riksbank. Although the number varied in the 19th century (because of changes on the political scene), and although the present kommissarier/governors no longer represent any particular social groupings, and although it seems unlikely that there is sufficient work for six governors to be required, the Riksbank still has six governors, just as in 1668.

9

Danmarks Nationalbank and the Four Criteria

9.1 The Nationalbank in the "Roaring" 1920s

9.1.1 The Banking Crisis of the 1920s

The developments and problems in Denmark during the early post-war years and later in the 1920s were generally not much different from elsewhere. First, soaring inflation and a speculative boom (1918–20), followed by depression (1920–24), bank failures, and a renewed boom in the second half of the 1920s.

In the summer of 1920, Carl Th. Ussing, doctor-at-law and a governor of the Nationalbank[1] 1914–24, issued a popular booklet titled *Økonomisk ABC for enhver* ("An ABC of Economics for Everybody") in which he

[1] Between 1907 and 1936, the Nationalbank had four or five governors, one of whom had to have special knowledge of agriculture. Two of them were appointed by the government, and three by the board of representatives. All five governors were of equal seniority. The position of chairman of the board of governors was not created until 1936.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_9

encouraged everybody to demonstrate honourable patriotism by saving foreign exchange, curbing private consumption, and wearing worn down coats and patched-up shoes. The background was the emerging foreign exchange shortage caused in particular by the failing agricultural exports. Bankruptcies in all sectors of commerce and industry soared as the speculative boom of 1918–20 imploded.

For the Nationalbank, the 1920s presented two main challenges: One was how to react to the bank failures, which were, to some extent, a natural result of the 1918–20 bubble and the 1920–24 depression. The other was to prepare for the return to the gold standard at the pre-war exchange rate as decided by the government. The bank failures were not all purely results of the recession. Several failures were the result of quite unnecessary speculative transactions undertaken by the banks themselves, including fraudulent behaviour by bank managers and board members.

Neither the government nor the Nationalbank had any clear ideas of how to handle the problems. The first Danish banking act had been passed in 1919, and a banking inspectorate had been set up, but these were so new that they could not provide any guidelines or controls in the early 1920s, except that bank managers could be prosecuted for violations of the banking act after 1919, or, of course, for other criminal actions.

Table 9.1 below gives an overview of the banking crisis of the 1920s. "Failed" banks are defined as cases where the share capital of a bank had to be written down partially or totally.

It will be noticed that the numbers do not add up exactly. The reason is that some banks were subject to more than one reconstruction, or were reconstructed in one year and went bankrupt a few years later (e.g. Den Danske Landmandsbank was reconstructed twice over a four-year period, before it was finally taken over 100 % by the state in 1928), and in some cases it is debatable whether the nature of the Nationalbank involvement could be classified as a "rescue" (e.g. a deposit with the stressed bank on "unusual" terms to ease a "temporary" liquidity problem). It is not possible for the information given in Table 9.1 to be precise. The table is a summary of 50 pages of descriptions in the source, including the definition of "failed bank".

Table 9.1 Bank failures and their treatment 1920–1930

Years	Number of failed banks	– of which "rescued" with assistance from The Nationalbank	– of which State aid was used	– of which losses were suffered by depositors	Bankruptcies and liquidations
1920–22	25	15	–	7	10
1923–25	17	5	1	4	6
1926–28	21	1	1	3	7
1929–30	3	3	–	–	–
Total	66	24	2	14	23

Sources: Danmarks Nationalbank (1968-2010) *Dansk Pengehistorie* (I-V), vol. III (K. Mordhorst) pp. 114–155

In 1919, Denmark could boast of nearly 200 banks. Table 9.1 shows that during the 1920s about one third of them had to be either liquidated or reconstructed one way or the other with a total or partial writing down of the share capital.

It will be noticed that in 14 of these cases, depositors lost money, and that in only two cases was there any financial involvement by the state of Denmark. One of these cases was a small bank in the newly reunited part of southern Jylland[2] (Tønder), where the reason for government involvement was purely nationalistic.[3] The other case was Den Danske Landmandsbank, which was too big for anybody else to handle. In 1919, this bank was the largest bank in the Nordic region, measured by total assets.

The Nationalbank evidently felt some kind of responsibility. In slightly more than one third of the distress cases, the Nationalbank participated actively with a solution. It declined more requests than it accepted. In the second rescue attempt for the Landmandsbank, the Nationalbank lent the state DKK 40 million, which the state injected as share capital in the bank. In 1929, the government asked the Nationalbank to assist

[2] Southern Jylland (Schleswig) had been lost to Prussia in the1864 war. By a 1920 plebiscite the northern half of the duchy was returned to Denmark.

[3] The province of southern Jylland was scarcely bankable at that time. Denmark's two largest banks set up branches there primarily because of political pressures.

the Landmandsbank with a loan of DKK 10 million. The Nationalbank declined with the explanation that it was not in the business of assisting state-owned banks.

Since there was no pre-conceived policy on bank rescues, decisions were taken ad hoc. In major cases,[4] the governors of the Nationalbank discussed the issues with the finance minister, the minister of commerce, the prime minister, and the banking inspector. They did not always agree, and several cases ran through a number of discussion rounds.

The considerations taken by the Nationalbank were primarily the prospects for survival of the distressed bank, the importance of the distressed bank for its local community, and the general impact of a bankruptcy on the confidence in the banking system as a whole. In particular, three of the four largest cases were considered banks too large to be allowed to fail.

The "rescue package" supplied by the Nationalbank differed from case to case. It could include injections of ordinary share capital (rarely), subordinated preference shares, guarantees, or temporary liquidity support.[5] The unsystematic approach was, of course, also caused by the fact that nobody was able to foresee the coming events, and therefore no systematic policies existed or were even deemed necessary.

The handling of the larger of these cases was not a matter only for the Nationalbank to decide. It seems, however, that the Nationalbank in this respect was in the driver's seat, although the relatively newly formed Banking Inspectorate also wanted to be heard. If the Nationalbank said NO, it usually ended up with a no, or with a "yes, but…" on conditions mainly decided by the Nationalbank. The Nationalbank was generally satisfying Criterion IV, but it was not an uncritical or an indiscriminate "banker of last resort". Walter Bagehot would probably have nodded his head in approval, even if with the benefit of hindsight, the individual decisions would not necessarily qualify as "scientific" or "correct" from the point of view of later winding-up results.

[4] The largest cases were Den Danske Landmandsbank (1922–28), Privatbanken i Kjøbenhavn (1925–28), Andelsbanken (1925), and Kjøbenhavns Diskonto og Revisionsbank (1922–24).

[5] For details, see Danmarks Nationalbank (K. Mordhorst, 1968) *Dansk Pengehistorie*, vol III, pp. 114–155. Per. H. Hansen (1996) *På glidebanen til den bitre ende* (Odense Universitetsforlag) does not add much to K. Mordhorst's exposition in *Dansk Pengehistorie.*

The shareholders were the main losers. Some depositors were also losers. Taxpayers lost nothing (it would be meaningless to try to calculate the state's profit or loss on its rescue of the Landmandsbank over its 25 years of full or partial ownership of the bank). In 1928 the Landmandsbank was fully taken over by the state and the shareholdings of the ordinary shareholders written down to zero (without normal bankruptcy procedures). In 1936, the shares were reintroduced on the stock exchange. This was a condition imposed on the social democratic government by the opposition in return for its support for the new Nationalbbank Act (see 9.2.2 below). However, it was not until the early 1950s that the state had sold its last shares in Den Danske Landmandsbank.[6]

9.1.2 The Exchange Rate Problem

The other problem for the Nationalbank in the 1920s was how to implement the necessary monetary conditions for a return to the gold standard at the pre-war parity. In 1920, the krone traded at rates of 50–60 % of its pre-war gold/dollar parity. In May 1923, the Nationalbank asked the government to organize a conference to discuss the question of the external value of the krone. The government found it more convenient that the Nationalbank should organize such a conference, and so it did (fulfilling Criterion II).[7] It will be noted how very different this was from procedures in Norway (see Chap. 10). The Exchange Conference, comprised of representatives from most sectors of society, lasted from August till September 1923, chaired by Carl Th. Ussing, governor of the Nationalbank 1914–24.

The question of the return to gold was not controversial in itself. Everybody agreed on that. Most other European countries, including Sweden and Norway, had already taken that decision. The big question was the exchange rate. Should it be at the prevailing exchange rate (as chosen by France, Germany, and a few other countries), or should it be at the pre-war level (as decided by the UK, Sweden, and Norway), or some-

[6] Around 1980 Den Danske Landmandsbank, Hypothtek- og Vexelbank simplified its name to Den Danske Bank af 1871. After the1989 merger with Kjøbenhavns Handelsbank, and the 1990 taking over of Den Danske Provinsbank, it became Danske Bank.

[7] cf. Danmarks Nationalbank (1968) *Dansk Pengehistorie*, I–V, vol II, p. 87.

thing in between? And if the pre-war exchange rate was decided upon, how fast should it be brought about?

Hardly to anybody's surprise, opinions differed wildly. Some professors pleaded for fixing the exchange rate at the prevailing level, implying a formal devaluation of some 25–35 %, while other professors, the Nationalbank, and representatives from the business communities preferred a return to the pre-war exchange rate, implying a period of declining prices. The agricultural representatives did not oppose the pre-war rate very strongly, but argued that if this was the outcome then the adjustment should be stretched over a period of 20–30 years. Many of the arguments used were of a purely moral nature. One of the professors argued that to devalue the krone would make Denmark look like (my translation) "…one of those countries, which have not really got started yet." Another academic, C.V. Bramsnæs, the later social democratic finance minister (1929–33) and head governor of the Nationalbank (1936–50) said that (my translation) "…occasionally, it is good for a business community to have the cold shower of a falling price level."[8] The Exchange Conference issued a joint statement in September 1923, saying that Denmark's economic condition was now just as good as before the war, and that this should make an appreciation of the currency possible without major difficulties for society. It was further stated that in order to reach the goal, a close co-operation between the state, the Nationalbank, and the commercial banks would be necessary. The joint statement recommended savings on the public budgets, higher taxation, and temporary import restrictions, as well as some moral encouragement for buying Danish goods instead of foreign goods.

Possibly the most central result coming out of the Exchange Conference was the establishment of the "Exchange Equalization Fund" (*Kursegaliseringsfonden*), quickly approved by the Rigsdag in November, 1923. This fund was based on a foreign loan of GBP 5 million taken up jointly by the Kingdom of Denmark and the Nationalbank, and with 20 % recourse to the four largest commercial banks. The fund was to

[8] The two statements were quoted in the minutes taken from the meetings of the Exchange Conference (Valutakonferencens forhandlinger) and are reprinted in *Dansk Pengehistorie* (Danmarks Nationalbank, 1968), vol. II, p. 89.

be operated by the Nationalbank for the purpose of both supporting a gradual appreciation of the krone, and smoothing day-to-day swings in the exchange rates.

The joint statement largely reflected the Nationalbank's original points of view, although the Exchange Equalization Fund had never been the Nationalbank's cup of tea.[9] The Bank feared that with this fund in place, the other recommendations of the Conference would soon be forgotten. The bank's fears turned out to be correct. The general public also did not see the fund as a long-term solution, so capital still fled out of the country. The fund was soon depleted, and the krone dropped on the exchange market (with sterling going from DKK 24.50 in December1923, to 27.85 in August 1924).[10] The bank raised its discount rate from 6 % to 7 %, much against the government's pleadings (Criterion II fulfilled).

The weakening of the krone, which was the opposite of everybody's intentions, caused the fall of the government in the spring of 1924. The social democrats won the election. They were eager to demonstrate a sense of economic responsibility, and went to work with measures intended to strengthen the krone, including a fiscal tightening. Shortly before the election, the outgoing (central/liberal) government had already formed the "Valutacentral" (the "Central Foreign Exchange Office"), which in essence worked as an advisory office for rationing foreign exchange purchasing. For a while, it worked. It inspired confidence. Also, the balance of payments improved, and capital outflows stopped. Within two years the krone was back to its pre-war gold parity.

On December 27, 1926, gold convertibility was reintroduced at the pre-war parity, effective as from January 1, 1927. During the process leading up to this decision there were continuous discussions between the government and the Nationalbank. While there was full agreement about the ultimate aim, there were—not unexpectedly—differences of opinion regarding timing and means. The government (both before and after the elections of 1924 and 1926) wanted the Nationalbank to restrict credit (without raising the discount rate), and the Nationalbank wanted the

[9] cf. Dansk Pengehistorie, vol. II, pp. 87–96.

[10] In the "golden age" (1875–1914) it had taken only about DKK 19.00 to buy one pound sterling.

government to tighten fiscal policies and delay the process. The result was a bit of both, but in contrast to Sweden and Norway, the process was not a case of the government telling the Nationalbank what to do.

The macro economic problems of the early 1930s caused a few banking problems and a rearrangement of an agricultural mortgage institution, but the problems were much smaller than in the 1920s.

Like in most other countries, the return to the gold standard took the form of a gold bullion standard. Gold coins, never having circulated in great volumes, were disappearing from circulation. However, the fact that 20 krone gold coins were still minted (although not circulated) demonstrated the government's expectation that things would soon return to "normal".

9.2 The Nationalbank and the Challenges of the 1930s

9.2.1 Foreign Exchange Shortage and Rationing

The forces bringing the krone up to its pre-war parity in 1925–26 proved relatively short-lived. Technical as well as psychological problems turned up, and with the eruption of the international problems of 1930–32, the krone came under pressure.

When convertibility was reintroduced in December 1926, it was done by a currency act valid for only one year. In 1929, the Nationalbank, after consultations with Montague Norman (the Bank of England governor),[11] asked the government to have the currency act prolonged for five years in expectation of the stabilizing effects of the planned formation of the Bank for International Settlements. The interests of the Bank of England as well as those of the Nationalbank were to create a system and an atmosphere of stability. The government declined. The currency act was prolonged for just one more year. After all, the government wanted to demonstrate that it was not completely without influence on monetary matters.

[11] cf. Danmarks Nationalbank (1968) *Dansk Pengehistorie*, vol. II, p. 109.

The problem was that the balance of payments turned negative in the late 1920s onward. In early September 1931, the Nationalbank raised its discount rate by 1 % against the wishes of C.V. Bramsnæs, the finance minister and later "head governor" of the Nationalbank. The foreign exchange reserves had dropped dramatically. The convertibility and the exchange rate became threatened.

The exchange rate policy was politically controversial, because of the opposing interests of the export dependent agricultural sector and manufacturing industry, which was heavily dependent on imported raw materials. When the UK went off gold in September 1931, unpleasant decisions had to be taken. The Nationalbank wanted to leave it to the government to decide the exchange rate policy. The government, for exactly the same reasons, wanted to unload the responsibility to the Nationalbank and pointed out that it was the Bank's responsibility to fulfil its convertibility obligations according to its charter. Hard-nosed discussions followed. The result was the passing of the Exchange Act (*Valutaloven*) of September 29, 1931, in which the government tried to subject the bank to its instructions (*pålæg*). The word "instructions" was unacceptable to the Nationalbank, and was replaced with a wording whereby the bank undertook an obligation to act in accordance with the bank commissioner in respect of its currency trading and other matters in that connection ("…handel med valuta og de dermed i forbindelse stående forhold.").[12] It was agreed that setting the discount rate was not included in the term "other matters in that connection"). This agreement also specified special legal procedures to be followed in case of questions over its interpretation (no such occurrence ever happened).

When the UK left the gold standard in late September 1931, Denmark followed Sweden and Norway. The government's policy was that an effort should be made to maintain a reasonably stable exchange rate against the sterling. Again, the interests of the exporters (agriculture) and the importers (manufacturing) clashed.

The September 1931 agreement between the Nationalbank and the government set the scene for the next five years of relatively relaxed rela-

[12] cf. Danmarks Nationalbank (1968) *Dansk Pengehistorie*, vol. II, pp. 166–67.

tionship between the Nationalbank and the government, although there were also periodic frictions. The administration of the comprehensive import restrictions and rationing of foreign exchange, which was the focus of the monetary and foreign exchange policies of the 1930s was left in the hands of the Nationalbank.[13] Criterion II was not fully satisfied in these years, but the Nationalbank governors did not disagree with the government that the objective was to maintain a relatively stable exchange rate against the pound sterling. The idea of pursuing any specific rate of inflation had not yet been invented.

Legislation of the early 1930s, amended and amplified several times later in the 1930s, made it compulsory for exporters to bring home their foreign receivables as soon as possible and to sell their foreign exchange only through financial institutions designated by the Nationalbank at exchange rates quoted on the stock exchange.[14] The Exchange Control Act of January 30, 1932, authorized the minister for trade and industry to prescribe that imports could only take place provided a certificate had been obtained from the Nationalbank. A "Board of Administration of the Exchange Office" was created (with later changes of names and authority) to administer applications from about 18,000 individual importers. It was chaired by the Nationalbank and had representatives from the government as well as the business community (agriculture, industry, and trade unions). The Nationalbank, with a sharp eye on the foreign exchange reserves, had the decisive power and was in charge of the administration of the import licencing.

It is clearly seen that this sort of central bank/government relationship was worlds apart from the arrangements and legal positions in Norway and Sweden (see Chaps. 8 and 10). However, the 1907 Nationalbank charter was about to expire. The charter had been given for 30 years only. This fact probably influenced the positions taken by the Nationalbank and the government during their many discussions in the first half of the 1930s.

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[13] For details of these arrangements, see P. Nyboe Andersen (1942) *Danish Exchange Policy 1914–1939* (A Report to the Geneva Research Centre) pp. 51–75.

[14] In Denmark, as well as in Norway, exchange rates were quoted on the stock exchange based on supply and demand. It was not until after WWII that this task was made more formal and taken over by the Nationalbank and Norges Bank.

9.2.2 The Nationalbank Act of 1936

Discussions about what should happen upon the expiry of the 1907 charter started already in the 1920s, but did really gather pace until September 1931 when the sterling convertibility was suspended. That event sharpened the focus on the division of responsibility between the bank and government for the country's foreign exchange policy. A committee was set up consisting of representatives from the Nationalbank, the government and the Rigsdag. Several ideas were discussed, and there was not always full agreement among the board of representatives of the Nationalbank and its governors (or perhaps not even among the governors).

The central points of the political discussions for the next three years were, as 30 years earlier, the legal status of the Bank and the degree of government influence on the bank and its activities. The social democrats (in government throughout the 1930s) wanted a central bank almost fully controlled by the (social democratic) government. Nationalization had been proposed at an early stage, but this idea did not find much support. The opposition parties wanted a more independent central bank. The chairman of the Nationalbank's board of representatives does not seem to have been adverse to an arrangement where he would rubbing shoulders with the ministers, i.e. a rather close co-operation between the bank and the government with the board of representatives forming the centre of power in the bank, while the governors wanted less interference from government and the board of representatives.

The result was, of course, a compromise involving a three-layer governance. With today's "business school theories of management" in mind, three layers of governance would, of course, never work as intended.

Main points of the Nationalbank Act of 1936:

> First, it is important to notice that the original charter, as renewed in 1907, was now replaced by a law passed by the Riksdag[15] (in 1907 the charter of 1818 had been prolonged by an act of parliament making only few changes to the charter; see Chap. 4). In 1936, the charter was not renewed.

[15] Lov om Danmarks Nationalbank af 7. april, 1936 ("the Nationalbank Act of April 7, 1936").

The Nationalbank Act is a relatively brief document of only 33 paragraphs, of which the most important are presented below (in my translation):

> § 1 "Danmarks Nationalbank, which shall…take over Nationalbanken i Kjøbenhavn, has, in its capacity as the country's central bank the task to … maintain a safe monetary system in this country, as well as to smooth (*lette*) and regulate the flow of payments (*pengeomsætning*) and the supply of credit."

Comments:
Just as the Rigsbank had taken over the assets and liabilities of the Kurantbank in 1813, and Nationalbanken i Kjøbenhavn had taken over the assets and liabilities of the Rigsbank in 1818, the Danmarks Nationalbank took over the assets and liabilities of the former bank in 1936. There is definitely a degree of continuity since 1736. That Danmarks Nationalbank was born, or at least baptized, in the year when the Kurantbank could have celebrated its 200-year anniversary, is a serendipity. In any case, Danmarks Nationalbank considers itself founded in 1818.[16]

In 1736 the purpose of the bank was described as being, inter alia, "… useful for the benefit of commerce and manufacturing as well as for a safe and stable credit system." (See Chap. 4). In the 1818 charter, (part of) the purpose was stated (§3) to be to "…work towards ensuring a stable monetary system in the country….(and) promote the money circulation by loans and discounts in order to facilitate production, commerce, and trade." This was left unchanged in 1907. In 1936, not very much had changed in this respect compared to 1736 and 1818. There is also little difference compared to the "mission & vision" statements given in the charters for the Stockholms Banco (1656) and Sveriges Rijksens Ständers Bank (1668); see Chap. 3.

The takeovers of 1813, 1818, and 1936 included staff and offices. With respect to the manner and details of the takeover by Danmarks

[16] In 1968 the Nationalbank celebrated its 150-year anniversary with substantial festivities.

Nationalbank of Nationalbanken i Kjøbenhavn, see the discussion of § 27 below.

> § 2. "The Bank's fund (*Grundfond*) amounts to DKK 50 million. Its head office and domicile is in Copenhagen."

Comments:
See the discussion of § 27 below.

> § 3. "The governance of the bank consists of the board of representatives (*repræsentantskabet*), the board of directors (*bestyrelsen*), and the board of governors (*direktionen*)."
>
> § 4. "The board of representatives consists of 25 members, of whom eight are members of the Rigsdag…" (now Folketing) reflecting the composition of the "parliament" and appointed by the political parties in Parliament (Folketing), two members appointed by the government (occasionally professors, but usually permanent undersecretaries of the relevant ministers, and 15 members representing commercial, agricultural, and trade union circles, who cannot be members of parliament, and who are appointed by the representatives themselves on a rotating basis for five years. Three members are retired every year.

Comments:
The board of representatives normally meets four times a year. Its main function is to approve the quarterly and annual accounts, appoint five of the seven members of the board of directors, and two of the three members of the board of governors, and to decide salaries of senior staff. Proceedings are confidential.

Between 1818 and 1936, the board of representatives consisted of only 15 members who acted as a board of non-executive directors, essentially representing the interests of the shareholders. The ten additional political members provided for by the 1936 act reflected the wish of the Rigsdag to follow the affairs of the Nationalbank more closely. However, the board of representatives lost the role of "non-executive directors" because of the creation of a separate board of directors (see below). Between 1818 and 1907, the board of representatives was self-supplying. Between 1917 and 1936, the representatives were elected by the shareholders. From 1936 onwards the 15 members representing the business community are self-supplying. The two members appointed by the government are born members of the board of directors.

> § 5. The board of directors consists of seven members, all of whom are also members of the board of representatives.

Comments:
This is a new body created by the 1936 act. It forms an "inner circle" of the board of representatives to further ease the channels of communication. During the majority of the last 50–60 years, the chairmen of the representatives and the chairmen of the board of directors have been identical, but this is not a requirement. The chairman has usually been a prominent businessman or a professor. The party leaders of the main political parties are usually members.

The main function of the board of directors is to appoint senior staff and make recommendations to the representatives for vacant governor positions, as well as to serve as a channel of communication and information between the governors and the government and the business community. In addition, the governors can discuss matters with the directors which do not directly affect monetary policy issues, or which could be considered particularly controversial or politically sensitive. In such cases the governors can sometimes consider it expedient to have the matter cleared with the directors, for example, regarding aid to stressed banks, or major donations to charitable organizations. The board of directors is routinely informed of the monetary policies pursued by the Nationalbank as well as the reasons for such policies, but monetary policy is not normally a subject for discussion. There is no formality preventing members of the board of directors from raising monetary policy issues at board meetings beyond the information given to the directors by the governors, but this rarely happens. In reality, if not formally, the 1818 declaration by king Frederik VI still stands (See Chap. 4). Again, worlds apart from Norway (at least until 2017) and Sweden (at least until 1999).

Proceedings in the board of directors are confidential, much in contrast to Norway and Sweden.

§ 6. "The board of governors (*direktionen*) consists of three members. One of the governors is appointed by the king. The two others are appointed by the board of representatives upon recommendation by the board of directors. The royally appointed governor is chairman of the board of governors….The governors cannot have leading positions in business organizations or commercial companies, nor can they participate in the management of private enterprises. The governors are obliged to give notice by the end of the month they reach the age of 70."

Comments:

It will be noticed that although the Nationalbank has a three-layer hierarchy of governance, and that only the board of governors decide monetary policy matters, subject to the provisions of § 7. It will also be noted that, much in contrast to most other central banks, the governors are not subject to periodic re-appointment. The chairman of the board of governors (here for short, the "head governor") is appointed by the government in power when the position becomes vacant, but there is no tradition for appointing anybody with known party political allegiances.[17] The royally appointed governor and one of the two others usually have university degrees in economics, while the third is usually recruited from the banking world (with or without a degree in economics). In six cases during the post-war years, governors have been internally recruited, including two head governors. Erik Hoffmeyer, Head governor of Danmarks Nationalbank for 30 years (1965–95), and ptobably the world's longest serving central bank governor, was a professor of economics, who had served a brief stint as the general manager of Denmark's secod largest savings bank, when he was appointed head governor of the Nationalbank (- he died in Sept. 2016).

Before 1936, there were four or five governors (one or two royally appointed). Before 1907, they were not necessarily full-time governors, and they were all of equal rank. There was no chairman of the board of governors until 1936.

[17] The exception is C.V. Bramsnæs, the first head governor under the new Nationalbank Act. He had been social democratic finance minister 1924–26 and 1929–33, and governor of the Nationalbank 1933–49 ("head governor" since 1936). He was very active in negotiating the 1936 Nationalbank Act.

In Norway, the position of a "head governor" was created in 1892, and in Sweden formally in 1897 (*riksbankchef*), in practice during the late 1860s (see Chaps. 8 and 10). In Denmark, this happened in 1936. In recent years, the governors have organized press conferences in connection with the publication of the Bank's quarterly *Monetary Review*.

> § 7. "The minister for trade and industry is royal bank commissioner (*Kgl. Bankkommissær*) and will in that capacity oversee that the Bank fulfills its obligations according to this act…."

The royal bank commissioner chairs meetings of the board of representatives. He has access to meetings of the board of directors, and he may request such information on the circumstances of the Bank as he wishes. Decisions of particularly wide-ranging character (*særlig vidtrækkende Karakter*) cannot be made at meetings of the board of directors without the presence of the royal bank commissioner, unless he has been informed in advance that the matter in question is to be discussed."

Comments:
This is, of course, the central paragraph regulating the sensitive relationship between Bank and government.

It is a reflection of the September 1931 agreement referred to above (which said that the Nationalbank should act in accordance with the bank commissioner in matters regarding foreign exchange trading). The usual interpretation has been that the government decides foreign exchange policies while the Nationalbank decides interest rate policies. The understanding of the phrase "decisions of particularly wide ranging character" hangs in the air. The interpretation will depend on circumstances and personalities, except that certain practices and precedents will, of course, develop over time. Monetary policy decisions are never taken at meetings of the board of directors, so in spite of its heavy wording, in real life this paragraph is nearly void of meaning.

A professor of economics wrote in a 1936 comment (my translation):

> In reality, the relationship between Bank and state has always been of the nature that in critical situations, the government has been able to throw the responsibility onto the Bank, and that the Bank has been able to refer to

> considerations for government policies. In the future, this game will probably be played with even greater effect. This is probably also the kind of arrangement which was intended.[18]

The position of the "bank commissioner" goes back to the 1818 charter. It was probably meant primarily as a communications link between the government/king and the bank. In particular, the bank commissioner was supposed to ensure that the bank did its duty with respect to withdrawing the existing Kurantbank and Riksbank notes from circulation. In 1907 the position was reserved for the minister of justice and, since 1936, usually the minister of commerce or the minister of economic affairs, but never the finance minister. In practice, the bank commissioner never attends meetings of the board of directors, but he is represented by his permanent undersecretary, who is usually a member of the board.

The chairman of the board of directors and board of representatives has an office in the bank, but is used only as a cloakroom[19] for his hat and overcoat when he attends meetings of either of these boards. This is a far cry from Norges Bank, where the board of representatives has a fully staffed secretariat in the bank.

> § 27 "In this paragraph it is stipulated that the shareholders of Nationalbanken i Kjøbenhavn hand over their shares in return for bonds to be repaid over time from the profits of the Bank, and that these bonds are guaranteed by the Kingdom of Denmark (plus some technical details)."

Comments:

In separate decisions it was stipulated that the bonds would be issued at a conversion price of 200, i.e. shareholders would receive bonds of nominal 200 for each 100 nominal shareholding. The bonds would carry 4 % interest.

[18] Professor Jørgen Pedersen in an article in a leading Danish newspaper, March 23, 1936. Here quoted from Danmarks Nationalbank (E. Hoffmeyer, 1968) *Dansk Pengehistorie*, vol. II, p. 224.

[19] According to information given to me by a former governor of the Nationalbank.

In December 1935, the bank's accounts showed a share capital of DKK 27 million (total assets and liabilities: 692 million),[20] and various reserves totaling DKK 64 million, i.e. an equity capital of DKK 91 million. This could indicate an inner value of the shares around 337, depending on dividend expectations (the shareholders had always had to share the profits with the government according to a somewhat complicated formula).

Although it could seem that the shareholders were shortchanged, the redemption price was not far away from the prices recently quoted on the stock exchange. In any event, the deal was accepted at an extraordinary meeting of shareholders. The shareholders got a state-guaranteed fixed income for many years in exchange for the uncertainties of a shareholding and the proceeds of a liquidation of the bank two years later. The last of these bonds were redeemed in 1961. For the shareholders, the alternative could have been either to reject the deal and risk having their shares expropriated at a lower price, or liquidating the bank at the expiry of the charter, with an uncertain outcome. Neither of these alternatives appeared attractive.

Since the equity had now been replaced with a bond loan, the bank needed a capital base. Therefore, the kingdom injected DKK 50 million as a kind of subordinated loan to be repaid from the bank's future profits. This loan had been fully repaid by the early 1950s. Since then, Danmarks Nationalbank has been a fully self-owned institution.

It is, of course, an undeniable fact that the Nationalbank Act of 1936 can be changed any day a parliamentary majority might choose to do so. This has never been seriously proposed, but the governors are no doubt aware that changes can be made if the bank should happen to step too heavily on sensitive political toes. However, the Danish EU membership ensures that a certain minimum of central bank independence will be maintained.

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[20] Danmarks Nationalbank (K. Mordhorst, 1968) *Dansk Pengehistorie*, vol. III. The figures are month end figures, i.e. before year-end adjustments.

9.3 The War Years

The war years consisted of two different periods of very different character. The first of these periods lasted from the breakout of the war in September 1939, until Denmark and Norway became occupied by Nazi forces on April 9, 1940. The second period consisted of the five years of occupation.

The first of these two periods saw import prices rising much faster than export prices, resulting in rapid inflation and falling incomes for the agricultural sector. Between 1939 and 1941, retail prices had gone up by 50 %. Through partially successful negotiations with the UK and Germany the volumes of foreign trade was largely maintained, but the deteriorating terms of trade as well as changing payment patterns (prepayments for imports) meant that the Nationalbank's foreign exchange reserves were nearly depleted. The lack of convertibility also meant that the proceeds of a trade surplus with one country could not necessarily be used to settle a deficit against another country, implying that foreign exchange reserves had to be maintained in several different currencies. Emergency measures of various sorts were introduced, including rationings, price controls and a ceiling on weekly permissible withdrawals from bank accounts (in the same amounts as at the beginning of WWI), as well as special aids for the farmers. By mid-October, the foreign exchange reserves had dropped to DKK 17 million[21] (excluding the unavailable gold reserves, which had secretly been shipped off to New York in April 1939, after the Nationalbank had asked the government for permission to do so in October, 1938).[22] The Nationalbank rationed foreign exchange and informed the minister of trade that import restrictions were absolutely necessary. The Nationalbank was highly conscious of its role as guardian of the foreign exchange reserves and its advisory role in that connection (Criterion II).

[21] cf. Danmarks Nationalbank (1968) *Dansk Pengehistorie*, vol. II, p. 230.

[22] A government permission was required, since the 1936 Nationalbank act had certain restrictions on where the gold could be physically held. The removal of the gold had to be done in deep secrecy, because the government's official stance was that Denmark was not under any kind of threat. The removal of the gold was a clear sign that the government did not believe its own statements. The removal of the gold became known only several decades after the war. It is not mentioned in the 1968 *Dansk Pengehistorie*.

The irony was that in the second period, the occupation was a great help in this narrow sense. Exports to the UK virtually stopped, and Germany's share of Danish exports increased from about 20 % in the late 1930s to some 80 % in the early 1940s, and the Germans paid much better prices than the British had done. The balance of payments turned quite positive, and the farmers stopped complaining. It has been estimated that for the total 1939–45 period, monetary incomes in the agricultural sector increased by around 150 %.[23]

Like during WWI, export developments showed up as a strongly expanded money supply.

However, what really expanded the money supply and created big headaches for the Nationalbank was the financing of the occupying forces. This was a subject of several negotiations between the Danish and the German authorities in Copenhagen as well as in Berlin. In these negotiations Mr. C. V. Bramsnæs, member of the board of governors since 1933, and the Bank's first head governor since 1936, played a central role.

The first arrangement agreed upon was a "clearing account" in the Nationalbank where export proceeds were credited as receivables from the German Reichbank, and cleared against payables for imports from Germany. Since the receivables represented claims on a central bank they were booked as part of the Nationalbank's foreign exchange reserves. The German government acknowledged this as German debt to be settled in the future. The second part of the arrangement consisted of the payments for expenses of the occupation forces in Denmark. These expenses accumulated in an account with the Nationalbank, implying that the Nationalbank lent the Germans the funds needed for their expenses in Denmark, including the fortification of the west coast of Jutland. From the start it was clear that any repayment of these debts would be highly uncertain. All payments from the German forces to Danish recipients were carefully recorded, except that it could not be totally prevented that some payments were made in cash.

For the Nationalbank, two basic aspects were of essence: First, it was avoided that German money of some sort would be circulating

[23] *Dansk Pengehistorie*, vol. II, p. 227.

Table 9.2 The Nationalbank's balance sheet, 1938–1960 (DKK/million)

	Assets			Total assets & liabilities	Liabilities		
Dec.	Gold & foreign exchange	Gov'nt accts	Other		Note circulation	Gov'nt accts	Other
1938	277	119	369	765	441	–	324
1939	150	278	524	952	600	–	352
1940	983	–	326	1.309	742	–	567
1941	1.868	–	250	2.118	842	148	1.128
1944	7.215	107	196	7.518	1.658	2.327	3.535
1945	366	7.650	203	8.219	1.561	2.737	3.921
1946	348	7.578	211	8.137	1.633	2.653	3.851
1950	536	4.086	456	5.078	1.709	1.285	2.084
1960	1.669	2.800	1.235	5.704	3.006	1.527	1.171

Source: Danmarks Nationalbank (1968) *Dansk pengehistorie*, vol. III, Table I and II
Notes: Throughout this period the gold holdings have been booked at the value decided in the Mint Act of May 23, 1873, i.e. one kilo of fine gold = DKK 2.480
In the years shown in Table 9.2, the value of the gold holdings was approx. DKK 117 million in the early 1940s, and after the war sunk to about DKK 60–70 million, remaining unchanged at 58 million between 1949 and 1960
"Other" is mainly loans to and deposits from other financial institutions, including discounted bills and current account balances

in Denmark. Secondly, the debts mounting on the accounts in the Nationalbank were guaranteed by the Kingdom of Denmark.

The effects of these arrangements are clearly seen in the Nationabank's balance sheet; see Table 9.2.

It can be seen that the Nationalbank's balance sheet expanded more than tenfold between 1938 and 1945. This is mainly explained by the lending to the German forces, which accumulated to nearly DKK 8 billion in the spring of 1945. In the autumn of 1945, the government honoured its guarantee and paid the German debts to the Nationalbank. Bookkeeping wise, this meant that the Nationalbank replaced a large "foreign exchange asset" (claim against the Reichbank) with a DKK claim against the Kingdom of Denmark. This claim was gradually eliminated over the next 20 years.

It will also be seen that the note circulation quadrupled between 1938 and 1944. The column "Other" mainly represents deposits received from banks and savings banks.

The figures demonstrate that in 1945 Denmark was flush with liquidity which had to be neutralized.

In January 1942, the Nationalbank took the initiative to discuss the matter with the government. Since the actions suggested by the Nationalbank would require legislation, the matter was discussed both by the board of directors and the board of representatives, followed by negotiations with the minister for trade (the royal bank commissioner). The result was a proposal for legislation, which, however, did not satisfy the Nationalbank. The Nationalbank returned with suggestions for stronger measures. This finally resulted in two acts passed by the Rigsdag on July 3, 1942, introducing special deposits to be made by banks and savings banks with the Nationalbank, and five-year bonds to be issued by the state, which could not be bought by financial institutions, as well as ten-year bonds without buyer restrictions. The special deposits ("cash reserve requirements") were gradually dismantled in 1948–50.

Another cash absorbing mechanism employed by the Nationalbank and the government was the "note substitution" (*pengeombytningen*). The Nationalbank had actually prepared this since about 1943, so in the summer of 1945 existing bank notes were declared invalid unless exchanged for new notes within a very short time span. This was done with much more determination in Denmark than in Norway, where it was feared that a move of this kind would lead to reduced liquidity and higher interest rates (see Chap. 10). Apart from soaking up excess liquidity, the "note substitution" exercise also served the purpose of bringing to light some illicit or undeclared profits made during the occupation, or nullifying them; an objective not really within the Nationalbank's remit.

9.4 The Post-War Years

9.4.1 Foreign Exchange Shortage and Regulations

During the first 35–40 years after the war, by far the biggest problem for the Nationalbank was the constant shortage of foreign exchange. During the war, prices, production, and foreign trade had all been subject to direct controls and rationing, so there was a substantial amount of purchasing power that could not be satisfied. When the war ended it was impossible to dismantle all the controls quickly, because there were no foreign exchange reserves to pay for the imports which would have been the result. In the years 1946–50 the combined net foreign exchange position of the Nationalbank and the commercial banks was negative. Short-term foreign exchange obligations exceeded short-term claims by DKK 500–600 million.[24] There was political agreement that the wartime restrictions should be abolished as soon as possible. The restrictions, which were maintained, were maintained of necessity, not (as in Norway and Sweden) for ideological reasons (see Chaps. 8 and 10).

The Marshall aid came in with fairly large amounts in 1949 and 1950 (roughly DKK 400 million, equal to about 2 % of GNP in both years). It would have brought the net foreign exchange position up to zero if it had not been used to finance importation of equipment worn down during the war, or other necessary equipment, for example tractors for the farmers. So, the Nationalbank still had a tough job as guardian of the foreign exchange reserves. The experience from the years following the end of WWI also served as a warning of what might happen unless precautions were taken. The Nationalbank took its role as advisor to the government very seriously as seen, for example, in a letter sent to the royal bank commissioner on February 2, 1946 (my translation):

> ….The experience from the First World War shows that the seeds of the inflation which shattered the Danish monetary system at that time surely were sown during the war, but that the years following the war became worse, and that inflation did not fully break out until the war had ended. At that time, the misfortunes were in no small degree caused by the lack of knowledge and experience. Today, conditions ought to be quite different, since we have the experience from the First World War to build upon.[25]

[24] cf. Danmarks Nationalbank (1968) *Dansk Pengehistorie*, vol. II, p. 252.

[25] The letter was reprinted in the Nationalbank's annual report 1945/46 (the Bank's financial year in those years was April 1–March 31).

The Nationalbank is here clearly telling the government to pull itself together and take some tough decisions. That is hardly the way Norges Bank or Sveriges Riksbank would talk to their respective governments.

The wartime restrictions and regulations were gradually abolished during the 1950s (in contrast to Norway), and the low-interest policy preferred by the social democratic governments of the late 1940s and the majority of the 1950s was impossible and had to be given up. However, it took a long time before really tough decisions were taken. When foreign borrowing opportunities reappeared towards the end of the 1950s the government took advantage of them and neglected the mounting balance of payments problem. In 1960, the Nationalbank raised its discount rate from 5 % to 5½ %, much to the surprise of the government.[26] In 1964, when problems became acute, the Nationalbank phoned the prime minister to inform him that the bank would be raising the discount rate. The social democratic prime minister pleaded with the Nationalbank's head governor to abstain, arguing that he had announced an election to be held in September, and therefore an interest rate increase before the election would be inopportune.[27] The discount rate was raised anyway, from 5½ % to 6½ %.

The 1960s and 1970s was a period of constant fighting for the Nationalbank to find means and ways to protect the foreign currency reserves against the consequences of government policies, which produced continuing balance of payment deficits, mounting foreign debts, and higher rates of inflation than elsewhere.

One of the milder instruments used by the Nationalbank was by moral suasion to try to make the banks and savings banks restrict their lending to households for consumption purposes. When this proved ineffective, and efforts to limit the liquidity in the banking system had also failed, stronger medicine was applied. At the initiative of the Nationalbank, an absolute ceiling on lending in Danish kroner by banks and savings banks was imposed in March, 1970. The Nationalbank made it clear immediately that this was only a temporary arrangement, initially lasting only

[26] cf. Danmarks Nationalbank (1993) Dansk Pengehistorie, vol. IV, p. 34: "Beslutningen kom bag på regeringen."

[27] Danmarks Nationalbank (1993) *Dansk Pengehistorie*, vol. IV, p. 42.

for six months. The government liked the idea and fully supported it. It lasted for more than ten years, but with annual upward adjustments. The mechanism was that loan demands from the business community should be satisfied by foreign exchange loans arranged by the banks, which would guarantee such loans. Thus the foreign lending banks would take a credit risk on the Danish banks, and the Danish banks would have a credit risk on their own customers. The customers would pay the interest on the foreign currency (cheap if DEM or Swiss Francs) plus a margin to the foreign bank, a guarantee fee to the Danish bank, and an arrangement fee. This could add up to almost the same cost as for a (unavailable) Danish krone credit. In addition, the Danish borrower would have the risk of devaluation of the Danish krone, which happened quite often in the 1970s. The foreign exchange loans were split into three groups, each with its own set of regulations (import loans, export loans, both short term, and investment loans with a five-year maturity). Since the borrowers were not financial institutions, these foreign exchange liabilities were not offset against the foreign exchange assets of the banks and the Nationalbank in the calculation of Denmark's foreign exchange reserves. It was profitable business for the banks even if it required a lot of administration, but it was highly unpopular in the business community. In addition, there were foreign exchange restrictions (largely dating from the 1930s), which prevented Danish portfolio investments abroad and foreign investments in Danish property, and financial assets other than direct business investments.

It was, of course, beyond the powers of the Nationalbank to change the government's economic policies and eliminate the need for the foreign exchange borrowings. The continuing balance of payments deficits had to be financed somehow. Large loans abroad by the government or other public institutions could, perhaps, have been an alternative, but in any case Denmark was approaching its credit ceiling abroad by the early 1980s. The government's foreign debts had ballooned from DKK 2 billion in 1976 to 200 billion in 1982.[28]

[28] cf. Danmarks Nationalbank, Kvartalsskrift, Nov. 1983.

In a television interview in October 1979, Knud Heinesen, social democratic finance minister most of the years between 1975 and 1982, stated that Denmark was on the brink of an economic abyss. A statement that gave Heinesen a status of almost immortality.[29] When Erik Hoffmeyer, head governor of Danmarks Nationalbank, confirmed this view in a newspaper article on January 10, 1980, the social democratic minister for taxes described Mr. Hoffmeyer's article as "insulting".[30]

Faced with problems that could be solved only with measures unpalatable to the prime minister,[31] the government resigned in August 1982.

During the next four to six years, the Danish economy was turned around by a combination of tax increases (including taxation of pension savings), abolition of the index regulation of wages and salaries, and a slowing down of the pace of increases of public expenditure. While the Nationalbank did "marshall the government on the way to go, it did not advise on the instruments to use"[32] in this process.

Since 1982, it has been Denmark's declared policy (regardless of the colour of the government) to maintain a fixed exchange rate against the DEM (until 2000) and the euro (after 2000), with a fluctuation margin of 2.25 % from the declared "central exchange rate". A few minor exchange rate adjustments were made by a number of the members of the European Monetary System (the EMS) during the 1980s, but the last formal exchange rate adjustment involving the Danish Krone was made in Jan. 1987 (- three % against the DEM). This effectively makes Denmark part of the Eurogroup, without being a formal member of this currency bloc. This policy has succeeded. No changes have been made to the krone central exchange rate since Jan, 1987 (apart from the formal change from the DEM exchange rate to the equivalent euro exchange rate in 2000). While the DKK exchange rate against the euro bloc has remain unchanged for the latest 30 years, it has appreciated by 20–30 %

[29] His nickname has since then been Knud Afgrund Heinesen (afgrund = abyss).

[30] cf. Danmarks Nationalbank (1993) *Dansk Pengehistorie*, vol. IV, p. 175.

[31] The prime minister (Anker Jørgensen) had been chairman of the General Workers Union and could never bring himself to do anything that the trade unions opposed. He died in March, 2016. Most of the obituaries mentioned his lack of understanding of economic fundamentals as characteristic of his premiership.

[32] Slightly paraphrased from "Macbeth", act 2, scene 1.

against the two other Scandinavian currencies (more against the SEK if measured since 1967). In two referendums (1992 and 2000) the Danes refused membership of the eurozone.

The Nationalbank does not pursue any specific inflation target. In an open economy, with some exchange rates fixed and others floating, the rate of inflation is hardly a domestic affair to decide, let alone to execute. The track record of the ability of central banks to steer rates of inflation is not impressive.

In Norway and Sweden they target inflation rates and leave exchange rates drifting. In Denmark, the rate of inflation has been the result of the fixed exchange rate policy against the euro, and the exchange rate has been the focal point after the many (small) devaluations of the DKK during the 1960s and 1970s.

9.4.2 Deregulation

In Sweden and Norway it was also discovered that regulations have a way of defeating themselves over a period of time. This was also the case with the krone lending ceiling described above, the restrictions on mortgage lending, and the foreign exchange restrictions. So, in line with what was happening elsewhere in Europe at this time, the restrictions built up in the 1960s and 1970s (some originating from the 1930s and 1940s) out of necessity, became gradually dismantled during the 1980s.

The ceiling on bank lending in Danish currency had been lifted in 1980 and replaced with a more market oriented liquidity control of the lending capacity of banks and savings banks.

The lifting of the exchange controls was a long process starting with small steps in the early 1960s. The bigger steps taken in the 1980s proved to be politically sensitive. The left side of the Folketing raised a major debate, asking why the Folketing had not been involved. The end result was that in 1985 a majority in the Folketing asked for a report to be worked out by the neutral "Council of Economic Advisors" (*Det Økonomiske Råd*), a body created in 1963 with a chairmanship of three professors, a council with representatives from nearly all major social groups of society, and a secretariat to do the actual work.

The report was discussed in the Folketing in November, 1985. The end result was that the Nationalbank undertook to expand its general information activities, particularly in its quarterly published *Monetary Review*. Nothing was changed with respect to the relationship between the government, the Folketing, and the Nationalbank. Criterion II was still fulfilled.

9.5 The Financial Crisis of 2008–12

Like elsewhere, bubbling optimism permeated through most parts of Danish society in the years 2004–07. Economic growth was fine, inflation had disappeared, and both short-term and long-term interest rates were low and stable. Stock market prices were going up, and so were property prices. In addition, the Basel I and II regulations of bank capital had freed up large amounts for expansion, since Danish capital requirements had always been stricter than in the rest of Europe.[33] Further, the extraordinary expansion possibilities allowed to Danish banks by Basel I and II could not be financed only by domestic deposits. Therefore, from the late 1990s, Danish banks began funding their expansion by short-term interbank loans from abroad. Between 2003 and 2008, they built up foreign debts from almost nothing to about DKK 600 billion[34] (equivalent to roughly one third of Danish GNP, and almost three times the amount of the foreign exchange reserves of the Nationalbank at that time). Approximately 90 % of these foreign debts were owed by the four or five largest financial institutions now classified as "systemically important".

To a number of banks, the prevailing conditions seemed an opportunity to grow into the "big bank league". They found borrowers with opti-

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[33] The first Danish banking act had stipulated that banks must have an equity capital of at least 10 % of all debt and guarantee obligations. This was later reduced to 6 %. This was "core capital", since the "softer" tier II and III capital forms were not used in Denmark until around the latest millennium change. Around 2000, banks' core capital in other countries was rarely above 2 % of "risk weighted assets".

[34] cf. Rapport fra Udvalget om finanskrisens årsager (2014) *Den Finansielle Krise i Danmark* (commisioned by the government in 2012), p. 188. This report is mainly known as the "Rangvid Report" after the commission's chairman, professor Jesper Rangvid.

mistic projects in the real estate sector and—since nobody can predict the future, and a "bubble" is only a "bubble" if and when it bursts—the optimistic borrowers found lenders who were equally optimistic.

In 2008, it proved to have been a "bubble". In Denmark it burst in the summer and early autumn, just as it did everywhere else. The fall of Northern Rock almost coincided with the fall of Roskilde Bank, Denmark's eighth largest bank at that time. Roskilde Bank had lent an amount equivalent to its entire equity capital to just four borrowers with fanciful real estate projects. This was not—and still would not be—a violation of the Danish banking act, which limits a bank's maximum exposure to a single client to 25 % of the bank's equity. This maximum exposure limitation is broadly similar to prevailing rules in the rest of Europe, in spite of Basel I, II, and III. These projects all capsized, and Roskilde Bank's equity was wiped out, as well as its junior debts.

The story of Roskilde Bank in these years is very similar to the stories of ten other small and medium-sized banks in that period. Danske Bank, Denmark's largest bank, had a bit of a problem, because five years earlier it had acquired two banks in Ireland and Northern Ireland. Those acquisitions turned out to be disastrous when all of Ireland turned out to have been a "bubble". Danske Bank wrote its shares in the Irish subsidiaries down to zero and still had to write off substantial amounts on its Irish loan portfolios in the years 2009–12. The ghost of the 1920s had been revived.

The reaction of the Danish government, advised by the Nationalbank and the "Banking inspectorate" (*Finanstilsynet*) was to introduce two legislative "bank packages", which had the general aim of protecting both the Danish depositors and foreign lenders to Danish banks. It was widely understood that Denmark could not afford any loss of confidence by foreign banks in the Danish banking system.

The first of these bank packages (*Bankpakke I*) was a general liquidity guarantee issued by the Danish government. It was issued on October 10, 2008,[35] after the fall of Lehman Brothers and the freezing of the international interbank market. During the three days it took to get

[35] Lov nr. 1003 af 10. okt, 2008 om finansiel stabilitet (the "Financial Stability Act").

the legislation through the Folketing, the guarantee was issued by the Nationalbank, where decision-making was faster. The guarantee covered all obligations of banks in Denmark, including Danish branches of foreign banks, and it guaranteed that all contractual payments from Danish banks would be made in full and on time, except for junior debts and specially secured debts. It implied a guarantee of some DKK 3,000 billion, equivalent to about twice the amount of the Danish GDP and six times the government's annual budget. The guarantee had a maturity of two years and could be prolonged if necessary. At expiry, it was replaced by a somewhat different arrangement as outlined below. It was also part of the package that banks would not pay any dividends as long as this guarantee was in force.

An important feature of this "package" was that the banks paid a "guarantee commission" to the state, which was to cover payouts under the guarantee up to an amount of DKK 35 billion. This was an amount "guesstimated" by the Nationalbank and the Ministry of Economic Affairs. The banks had to pay DKK 7.5 billion each of the two years of the duration of the arrangement, and if this did not suffice, another 10 billion would be collected. If this were still not enough 10 billion more would have to be paid. Any losses beyond that 35 billion would be picked up by the state. At the expiry of this arrangement, the banks and savings banks had paid in DKK 25 billion, i.e. there was no need for the third tranche, and 22.5 billion had been paid out. The state had made a profit of DKK 2.5 billion.[36] Backed by the state guarantee, the banks could roll over their borrowings from the foreign banks.

The background for this guarantee was mainly the large amounts of short-term foreign exchange loans owed by the Danish banks to foreign banks. After the collapse of Lehman Brothers, confidence among banks vanished everywhere. If Lehman Brothers could go down, who would be next? In this environment the Danish banks could not roll over their foreign borrowings as was standard practice up to late September 2008, unless they had a state guarantee. It was recognized that "case-by-case" solutions, as in the 1920s, would not do.

[36] Cfr. Rapport fra Udvalget om finanskrisens årsager (2014) *Den Finansielle Krise i Danmark*, p. 314.

The second "bank package" (*Bankpakke II*) was of a completely different nature. The problem was that in consideration of the general development of the world economy, the banking sector was facing loan write-offs and provisions that would either cause banks to have difficulties satisfying the Basel II capital requirements or restrict their general lending capacity.

Therefore, the "Bank Package II act"[37] was passed in February 2009, aimed at supporting banks satisfying current solvency requirements. The "package" consisted of two elements: The first element was a facility under which financial institutions could apply for injections of government capital in the shape of "hybrid core capital" (*statslig hybrid kernekapital*). Such capital injections would consist of fixed interest loans with maturities and other conditions to be decided on a case-by-case basis, but would be of minimum three-year maturity. According to EU regulations, the interest on such capital injections had to include a risk premium of at least 6 %. At that time, Danish five-year government bonds yielded circa 3 %, so the interest on these hybrid capital instruments would be in the range of 9–11½ %, depending on individual circumstances. Applications were to be submitted to the Ministry for Economic and Commercial Affairs latest June 30, 2009, and decisions would be made by a specially created working group before year end.

A total of 36 arrangements of this nature were arranged for an amount totaling DKK 34 billion. By august 2013, these cases had netted the state a profit of DKK 8.5 billion.[38]

The second element in the "Bank Package II" was an extension of the guarantee arrangement under "Bank Package I", with the difference that the general unlimited guarantee under the former arrangement was replaced by guarantees that could be applied for individually, and which would cover senior unsecured debts. Applications would have to be submitted latest December 2010, and the guarantees would last for three years. The background for this arrangement was that a number of other EU countries had introduced five-year guarantee arrangements, and to restrict Danish banks to the original two-year guarantee scheme would disadvantage Danish banks. A total of 50 individual guarantees were issued for a total amount of DKK 193 billion. Guarantee commis-

[37] Lov nr. 67 af 3. feb. 2009 om statslig kapitalindskud i kreditinstitutter.

[38] Rapport fra Udvalget om finanskrisens årsager, p. 318.

sions varied between 0.85 % and 0.95 %. Profits for the state from this arrangement were about DKK 200 million.

The combined state profits from "Bank Package I and II" amounted to around DKK 10–11 billion.[39] This should be seen against a government budget in the years 2010–12 of roughly DKK 550 billion annually. As of August 2016, there were only very small outstanding amounts under any of these arrangements.[40]

The big losers from the banking crisis of 2008–12 were the shareholders and holders of junior debt of the 10–12 banks taken over and about 50 other banks "co-managed" by the state-owned "bad bank" (*Finansiel Stabilitet*), which was created in connection with "Bank Package I". Its purpose is to take over and wind up banks that do not satisfy the capital requirements, or to orchestrate the merger of such banks with other and stronger banks, and to monitor banks that have received aid under "Bank Package II". It works in co-operation with the Nationalbank and the Banking Inspectorate. Eventually, it will be wound up. At the peak of its activities, it employed about 500 staff.

In one case (Amagerbanken), creditors/depositors (including foreign) with claims exceeding EUR 100.000 lost money, when the bank's directors asked for a declaration of bankruptcy (claims under EUR 100,000 were covered by the depositor insurance).

The Danish banking crisis of 2008–12 was not nearly as severe as those in Finland and Norway in the early 1990s. In those countries most of the largest banks and nearly all of the savings banks and the biggest mortgage institutions (Norway) were wiped out, with large losses for the taxpayers.

In Sweden, Götabank and Nordbanken (both absorbed into Nordea) were the only casualties among the larger banks, but many smaller banks and savings banks failed. The main reason why financial institutions in Norway, Sweden, and Finland escaped serious trouble during the international crisis of 2008–12 is that they were still licking their wounds after the former crisis. They did not have the strength to participate in the bonanza of 2004–7.

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[39] This was the profit calculated as of August 2013. Since then, more assets have been realized, which have brought the profit for the state up to around DKK 20 billion, as estimated in the spring of 2016.

[40] Rapport fra Udvalget om finanskrisens årsager, p. 319.

10

Norges Bank and the Four Criteria

10.1 The Shifting Problems of the Interwar Years

10.1.1 The Crisis of the 1920s

In 1920, in Norway, the mood was bleak. Incomes from shipping, fisheries, and timber exports were decreasingly able to finance imports of necessities. It is significant that in the official history of Norges Bank[1], much space is used to discuss fishing volumes, fish prices, and freight rates, e.g. p. 215 (my translation): "In 1919, fishery was good. 657,000 tons were fished. Prices at first hand were not bad…and substantially better than in 1917 and 1918. In 1920, fishery was less good—only 484,000 tons were fished—and prices were much lower than the previous year." It was explained that the drop in fishing volumes and prices in 1920 was partly caused by the sales of stocks built up during the war years. The stocks were sold in a market where capacities were being rebuilt elsewhere.

[1] Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 År* (Norges Bank) p. 215.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_10

By the end of 1921, the prices of timber, pulp, and whale oil had fallen to one third or one fourth of their 1920 levels, and the number of bankruptcies had increased from about 20–25 per month in 1920 to some 120 in the summer of 1921.[2]

In early 1920, the government formed the Exchange Council of February 13, 1920 (*Valutarådet af 13. Feb.1920*). Its purpose was to find means and ways to prioritize the reserves of foreign exchange, which had been ample two years before, but which were now scarce. The Council strongly advised the banks not to finance anything which was not strictly necessary.

Norges Bank, of course, agreed with its master. On July 8, 1920, it issued a lengthy statement saying, inter alia (my translation): "It is now the duty of the government, the local authorities, and households to avoid expenditures, which are not strictly necessary, and it is the responsibility of every Norwegian man and woman to conduct a frugal life, just as it is everybody's duty—be it worker or employer—to devote all his efforts to doing his best, and to work hard to expand production and reduce imports…" [3] This was stated by Nicolai Rygg, the head governor of Norges Bank 1920–46, a notoriously puritan man who led a very frugal life himself.[4] If Norges Bank was not an adviser to the government in those days, it certainly advised the general public.

It is hardly surprising that these circumstances produced numerous bank failures or near-failures. In the years 1921–28, a total of 84 banks and 21 savings banks were subject to some sort of rescue operation, closed down or involuntarily merged.[5] Between 1920 and 1930, the total number of banks dropped from 192 to 151, with as few as 105 by 1935.[6]

For the banking scene as a whole, the crisis of the 1920s also had the effect that the banks lost a very large part of their collective market share to the savings banks. Whereas the commercial banks had accounted for approximately two thirds of the outstanding stock of credits on the

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[2] cf. E.Engebretsen (1948) *Christiania Bank og Kreditkasse 1848–1948* (Oslo), p. 270.

[3] As reprinted in Jahn, Eriksen & Munthe (1966), p. 216.

[4] cf. Jahn, Eriksen & Munthe (1966), p. 298.

[5] cf. H. Skånland (1967) *Det norske Kredittmarked siden 1900* (Statistisk Sentralbyrå), p. 165.

[6] Statistisk Sentralbyrå (1994) *Historisk Statistikk*, pp. 624–25.

organized credit market in 1920, and the savings banks less than half of that, the market share of the banks had dropped to less than 25 % by 1940, about equal to the market share of the savings banks. By 1940, the state banks referred to in Sect. 10.1.2 and insurance companies also each had market shares of some 25 %, up from very little in 1920.[7]

Norges Bank took an active part in the various rescue operations. In several cases it acted as the lender of last resort. The support initially took the form of guarantees, partly because this was thought to be sufficient, and partly because the government had ordered Norges Bank to reduce the note circulation by NOK 100 million in an effort to eliminate the excess circulation caused by the war (see Chap. 7). However, the guarantees proved insufficient, and loans and the issuing of preference shares became necessary even if the money supply was increased.

One of the difficulties for Norges Bank in this connection was how to judge the requirements of the individual financial institutions as well as those of the entire banking system. There were no guidelines. There was no banking act setting capital and liquidity standards,[8] and the lessons learnt from the "Kristiania Crash" (1899–1902) were too far away. Norges Bank did its best to analyse the problems of each of the troubled banks, as well as their largest customers. The result was a series of pragmatic ad hoc solutions with combinations of various instruments, sometimes in co-operation with private banks. Eventually, the government also participated directly in a number of cases, with capital injections in the form of preferential shares.

A large part of the problem was caused by speculative investments in stocks of fish, timber, other commodities, and real estate. In many cases, far too large exposure had been taken on a too narrow circle of customers, where loans had been made to companies as well as to board members of such customers (much like in Denmark—see Chap. 9).

Norges Bank was involved also in a less flattering role made possible by the decentralized way it was governed. Between 1914 and 1921, the

[7] cf. Statistisk Sentralbyrå (1994) *Historisk Statistikk*, pp. 622–28, and H.I. Matre (1992) *Norske Kredittinstitutioner 1850–1990,* NORAS, rapport nr. 42.

[8] The first banking act was passed in 1924. For a discussion of this banking act, see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 221–22 and 229–30. In 1924, a banking inspection was also created.

branches had been allocated capital for lending virtually without limits or control. Norges Bank still retained much commercial business in the branches. In 1921, some of the central controls were reintroduced. An investigation revealed that (my translation): "…many of the branches had extended loans, which could hardly under any circumstances have been defended."[9] The problem was that the directors of the branches were appointed directly by the Storting, not by the head office. The central control was somewhat tightened by the Norges Bank Act of 1892, which transferred interest rate decisions from the branches to head office. Interest rates could, however, still vary considerably between head office and individual branches, and lending decisions were still taken locally. The reason was, of course, that business conditions could differ substantially between Norway's different regions, and communication between the regions and head office was cumbersome.

In 1921, central control was tightened. Limits were set for the amounts of loans each branch could extend, and larger individual loans were to be approved by head office.

Two groups of commercial loans were made by Norges Bank in the 1920s: shipbuilding in Norway was highly fragmented and, therefore, not competitive. Norwegian ship owners increasingly had their ships built elsewhere. So, in 1927 Norges Bank financed a number of ship buildings, and arranged for the government to finance or guarantee others with Norges Bank as administrator of the loans.

Secondly, the canned foods industry had problems. So, in 1924 and 1926, Norges Bank helped this industry with loans secured by pledges over inventories of, among other things, perishable foods. Hardly a task for a central bank. However, most of the commercial business undertaken by Norges Bank in the 1920s must be considered extraordinary rather than customary.

During the banking crisis of the 1920s, Norges Bank certainly showed itself as "bank for the banks" (Criterion IV), but the fact that it still retained some commercial activities means that this criterion was not yet fully satisfied.

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[9] "…mange av avdelingene hadde gitt lån som neppe under noen forhold kunne forsvares." Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 år* (Norges Bank), p. 229.

The official history of Norges Bank does not state explicitly that any of the troubled banks was ever officially declared bankrupt, or that no depositors lost any money during the banking crisis of the 1920s. However, the impression given is that only taxpayers and shareholders lost anything.

In 1923, Nicolai Rygg, the head governor of Norges Bank, announced that it was the aim of the Storting that the krone should revert to the gold standard at the pre-war parity. Therefore, it was a central part of Norges Bank's policy from 1923 onwards to withdraw notes from circulation. The general price level dropped accordingly (particularly since 1925), and in 1928 gold convertibility at pre-war parity was restored—some years later than for Sweden (1924) and Denmark (1926).

It is a moot point whether Norges Bank in this connection fulfilled Criterion II, or whether it just followed orders. Formally, it was, of course, the latter. In January 1926, the above-mentioned Exchange Council issued a report recommending a stabilization of the exchange rate of the krone and a postponement of the return to gold. In May that year, the government set up a three-member working group that was asked, together with Norges Bank, to propose rules for an effective management of the krone exchange rate. The idea was to prevent the appreciation of the krone to its pre-war parity from happening too fast. The recommendation of the working group was that the government should participate in the stabilization of the exchange rate in co-operation with Norges Bank. At the 1926 annual meeting of shareholders of Norges Bank, governor Nicolai Rygg stated (my translation): "For Norges Bank, the aim is to keep the exchange rate as stable as possible. We need to have much calm, and the Bank will conduct its policy accordingly, as recommended by the Commission."[10] This was a complete reversal of the attitude taken towards the external value of the krone compared to attitude taken by Norges Bank in the 1870s, i.e. in the years leading up to Norway's membership of the Scandinavian Currency Union in 1878 (see Chap. 5).

[10] "For Norges Bank vil målet være å holde kursen mest mulig stabil. Vi trenger sårt til ro og banken vil således, som kommisjonen ønsker, innrette sin politikk derefter." Here quoted from Jahn, Eriksen & Munthe (1966) *Norges Bank gjennom 150 å*r (Norges Bank), p. 249.

It seems that the government was holding the hand of Norges Bank more than the other way round. Hardly in compliance with Criterion II. The background was, of course, the responsibility conferred upon the government by the 1814 Eidsvoll Constitution, (see Chap. 5).

10.1.2 The Problematic 1930s

In some respects, the first third of the 1930s was much of a repetition of 1921–28, but the background was different.

When most of Europe left the gold standard in September 1931, so did Norway. During the subsequent floating, the krone kept an almost unchanged exchange rate against the sterling, which was the most relevant currency for Norway (as well as for Denmark). In the Storting, Norges Bank was much criticized by the opposition for not having let the krone drop some 10–15 % against the sterling. There was criticism also from several business organizations, particularly the farmers. It was largely a repetition of discussions also had in the mid–1920s, when the krone was being restored to its pre-war parity.

The problems resulting from falling prices, more bankruptcies, and soaring unemployment led to many calls from all sections of society for political action to stimulate activity and ease credit conditions and credit accessibility. In 1932, the government decided to set up a "Penge og Valutakommisjon" ("Money and Currency Commission") to investigate matters and advise the government. Referring to Criterion II, it is suggestive that the government did not ask Norges Bank to advise it as a matter of routine. Or that Norges Bank did not do so on its own initiative. Perhaps it was recognized that Norges Bank was too much married to the government machinery to be asked for advice, even if this is what central banks are for.

After four years of discussions, the commission ended up with the rather tame suggestion that Norges Bank could expand its "open market operations", as was being done in the USA at this point in time, i.e. buying and selling bonds in the open market as circumstances might suggest. The recommendation was accepted, resulting in the amendment of June 30, 1936, to the Lov om Norges Bank (the "Norges Bank Act"). Again, even relatively minor adjustments in the bank's operational techniques required legislation because of the responsibility conferred upon the Storting by the Constitution of 1814 (see Chap. 5).

With respect to credit conditions, it was the direct aim of the government, Norges Bank, and the relatively new Banking and Savings Bank Inspectorate to make the commercial banks lower their lending rates. Between 1930 and 1933, wholesale prices had dropped by some 10 %. Retail prices had generally dropped less, but inflation was negative. It seemed natural to expect interest rates to be close to zero. In the early 1930s, most central banks lowered their discount rates (in the USA to 1½ % in 1934, and 1 % in 1938; in the UK to 2 % at end-1932; and in Sweden to 2½ % in 1933). In Norway, the trend was also downwards, but at a somewhat higher level. Between 1929 and May 1933, Norges Bank lowered its discount rate from 4 % to 3½ %, and there it remained until 1936, when it was raised to 4 %.

The Norwegian authorities were disappointed that the commercial banks did not lower their lending rates very much, if at all. Since the banks did not conform to the wishes of the authorities, the authorities resorted to legislation. On June 29, 1934, the Storting passed the "Interest Act". This act authorized the Bank and Savingsbanks Inspectorate to order those banks that charged higher interest rates than others to lower their rates to the level of the others. To modern observers, it seems odd that this authority should be given to the banking inspectorate rather than to Norges Bank, and that a law of this nature would be passed at all. It certainly did not stimulate competition among the financial institutions.

With respect to credit accessibility, the farmers, fishermen, and forest owners all felt they had problems. They were all helped with direct government loans, loans from Norges Bank, and loans from specially created state banks.

The background was that several large banks were in deep trouble, including some of those which had been reconstructed in the 1920s. Again, several banks had to be rescued one way or another.[11] Norges Bank usually provided the necessary liquidity loans, on a few occasions

[11] Particularly Den norske Creditbank (now DNC Nor) and Bergens Privatbank (since the early 1990s part of DNC Nor. After much discussion with the government and in the Storting, the rescue came from Norges Bank alone.

guaranteed new share issues, and assisted with reconstructions and mergers. However, banks still remembered the 1920s and had naturally become more risk averse than in the early and hectic post-war years.

After the first special purpose state bank had been formed (Kongeriket Norges Hypotekbank, 1852, with equity injected by the government), the idea of forming more similar "banks" seems to have come easily. Some were formed in the early 20th century (for example, Den Norske Arbejderbruk- og Boligbank, 1903). A tradition for such "banks" had been created. They were not banks in any traditional sense. They did not take deposits or offer current accounts. They were funded mostly by bond issues, government loans, and occasional loans from Norges Bank. Prior to the Great War, most of their bonds were sold abroad (Berlin, Paris, London, and Copenhagen).

In the 1930s, the idea of government-sponsored state banks was further built upon. They were not all of completely identical structure, but they all had strong elements of government capital. In most cases the bonds were government guaranteed (otherwise they probably could not be sold abroad), even in cases where there was partial private ownership of the institution. The role of Norges Bank in relation to these institutions varied from case to case and from time to time. In some cases it provided direct liquidity support, in other cases it offered administrative support, and sometimes it bought the bonds either directly or in the secondary market. The list of such "banks" dating from the inter-war period includes Den Norske Stats Fiskeribank (1921), Norges Kommunalbank (1926), Lånekassen for Fiskere (1932), Lånekassen for Jordbrukere (1932), A/S Den Norske Industribank (1936), and Driftskreditkassen for Jordbruket (1936). The purpose of each of these credit institutions emerges from their respective names. Some supported investments, and some also offered operational credit facilities.[12]

By 1935, the combined outstanding loans from these institutions were of almost the same magnitude as those outstanding from the commercial banks.

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[12] They did not all exist simultaneously. Some were merged or closed down over the years. For more details, see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 128–2, 223–4, and 228–33.

Criterion II does not seem to have been much satisfied in the 1930s. The job was to a large extent done by specially organized commissions or organizations.

Criterion III was fully satisfied, as was Criterion IV. The (limited) commercial activities undertaken by Norges Bank were not really carried out in competition with the commercial banks, but were mostly the result of the problems in the banking sector.

10.2 The Troublesome 1940s

On April 9, 1940, Norway, like Denmark, was occupied by Nazi-German forces. With respect to the Four Criteria, the five years of occupation would have been a bracket in the history of Norges Bank if it had not been for the longer-term effects on the policies planned by the government for Norges Bank.

Many of the problems for Norges Bank in that connection were a repetition of those seen during the Great War, but the occupation created its own new problems.

Since foreign trade was nearly stopped, shortages of food, fuels, and clothes soon became seriously felt. Rationings were soon introduced, just like during the previous war—and like in most other countries. The quantitative regulations introduced during the war (some of them even before the occupation) seem to have been even more comprehensive than during the Great War. Market mechanisms were, as far as at all possible, abandoned. Prices and quantities were regulated simultaneously. Almost nothing could be bought without some sort of official permission (e.g. rationing cards), and no prices could be changed without government permission.

Since the capital market institutions were also subject to regulations in the shape of credit rationing, Norges Bank was deeply involved.

Already about 1936, Norges Bank had, in anticipation of future trouble, moved that part of its gold holdings to New York, which was not required by law to be kept in Norway as coverage for the note circulation.

Two months after the Nazi attack on Norway, Norway's king, the Norwegian government, and the Norges Bank management relocated to

London. In that connection, the rest of Norges Bank's gold holdings were also physically moved from Norway first to the UK, and then to the USA.

However, for practical reasons Norges Bank continued its normal operations in Norway. Legally, Norges Bank in London separated itself from Norges Bank in Oslo. Norges Bank London was registered in London according to the 1929 Companies Act, but was not subject to British company taxation as long as it abstained from commercial banking activities. A letter circulated to foreign contacts in 1942 stated that (my translation): "…Norway's legal central bank is Norges Bank in London … Norges Bank London has no responsibility for obligations or actions undertaken by Norges Bank in Oslo. Bank notes issued by Norges Bank Oslo… have no validity in relation to Norges Bank London.…Foreign debts owed to Norges Bank can be paid with legal effect only to Norges Bank London…"[13]

In the meantime, life in Norway had to go on.

Comprehensive arrangements were made between Norges Bank Oslo, the local Norwegian administration (*Administrasjonsrådet*) and the occupation forces. The net effect was the building up of a substantial "occupation account" with Norges Bank, and a correspondingly substantial increase in the money circulation. The occupation forces drew money from the occupation account to finance the local expenses of the German forces, including large investments in roads, airfields, and other defense constructions, much like in Denmark and other occupied countries.

One of the first steps to be taken when the occupation ended was a compulsory exchange of existing banknotes for new ones. The purpose was, officially, to mop up excess liquidity created during the war. The new banknotes had secretly been printed during the latest years of the occupation.

However, this banknote exchange was not nearly as complete as it was in other countries with similar problems (e.g., Denmark, Belgium, and the Netherlands). In Norway, the banknote exchange was not designed to mop up all the excess liquidity, because the government feared that a tightening of liquidity would have resulted in higher interest rates. In

[13] Here quoted from Jahn, Eriksen & Munthe (1966), pp. 303–04, where the original English text has been reproduced in Norwegian translation.

January 1946, the social democratic government, with Erik Brofoss as its finance minister and later head governor of Norges Bank, had declared that it would deliberately conduct a low interest rate policy, thereby demonstrating that the government had taken over the control of interest rate policy.[14] Almost simultaneously, Norges Bank lowered its discount rate from 3 % to 2½ %, and government bonds were sold, nearly at par, also with coupons of 2½ %.

10.3 The Post-War Years

10.3.1 Nationalization of Norges Bank and Regulations

Between 1945 and 1961, the social democrats constantly achieved an absolute majority in the Storting. They were under strong influence from the "Oslo School", i.e. the economic thinking of professor Ragnar Frisch, a devoted advocate of detailed economic planning and regulation,[15] and later Trygve Haavelmo, the 1989 winner of the Economics Prize in Memory of Nobel. He was less of a "planned economy advocate" than Ragnar Frisch, but still seen as an economist of the so-called "Oslo School". National accounts and national budgets with associated economic models also comprising the financial sector became central instruments of economic policy at a time, when econometrics was in its infancy, and computers were still far away imaginations.

In the late 1940s and in the 1950s, the social democratic governments, supported by the trade unions, wanted to continue the detailed regulations of society inherited from the war years. In fact, immediately upon the liberalization of Norway in May 1945, the sprawling web of controls and regulations was actually expanded. Imports and exports had to be partially liberalized under the new OEEC rules in the 1950s, but investment controls, price controls, and capital market restrictions were

[14] cf. Hanisch, Søilen & Ecklund (1999) Norsk økonomisk politikk i det 20. århundrede (HøyskoleForlaget), p. 151.

[15] It would be a misunderstanding of Frisch to regard him as a "Soviet style" socialist. To Frisch, a planning of production and investments just seemed more likely to lead to "reasonable" results than the random accidents of market mechanisms.

expanded. Comprehensive models were developed for the allocation of resources between sectors and regions.

In 1945, a “Money and Financial Council” (*Penge- og finansrådet*) had been organized by the government to advise it on monetary and financial policy issues. Its members included both the above-mentioned professors, but Frisch was the dominating figure. In its January1952 report it recommended, inter alia, that the level of interest rates should be kept low, and that investments and the financing of investments should be regulated by quantitative measures.

Other similar committees were formed to advise the government on a new banking act (*Penge- og bankkomitéen af 1950*), which resulted in the new Banking Act of 1961, and on credit regulation in general (*Den penge- og kreditpolitiske komité af 1960*), which resulted in the “credit regulation act of June 25, 1965”.[16] The “bankkomité af 1950” had originally been instructed to include a discussion of the possibility of nationalizing the private banks. When it reported after ten years of deliberations, it evaded this issue, but recommended instead an intensified use of the state banks.

The intention of the social democratic governments, strongly supported by the trade unions, definitely was to make Norway a “planned economy”, not just to get “back on track” after the disruptive war years, but permanently.[17]

It was soon recognized that these “councils” were insufficient for ensuring the desired day-to-day supervision and regulation of the credit system. Therefore, in 1950, the “Penge og finansråd” proposed that a new council be set up with representatives from the financial institutions as well as government departments. This council, known as the “samarbeitsnemnd” (“co-operation council”) was established in January 1951 with the mandate to (my translation) “…be an advisory body and a communications link between the participating institutions. It shall, in particular, discuss the steering of bank lending, their liquidity, and general standing according to the principles of economic policies as defined from time to

[16] ”Lov on adgang til regulering af penge- og kredittforholdene af 25. juni 1965.

[17] cf. Nanisch, Søilen & Ecklund (1999) *Norsk økonomisk politikk i det 20. århundre*”, (HøyskoleForlaget), pp. 150–61, and pp. 181–87.

time by government institutions."[18] The first chairman of the "samarbeitsnemnd" was Gunnar Jahn, head governor of Norges Bank.[19]

While Norges Bank was originally and almost necessarily designed by civil servants born and bred in Denmark (see Chap. 5), the role given to it in the post WWII years was mostly an inspiration from Sweden, reinforced by the "Oslo school" economics professors.

With much inspiration from Sweden, residential construction and infrastructure investments became highly prioritized, while agriculture, forestry, and fishery also had to be supported. The means would be investment plans and financing through the state banks, which would be funded by a combination of government loans and bond issues bought by banks and insurance companies. Investment in these low interest bonds (2½ % p.a.) was made compulsory for banks and insurance companies, first through "agreements" made in the "samarbeidsnemnd" and later through the Credit Act of 1965. Norges Bank would be monitoring that the banks did not lend too much for "unprioritized" purposes (e.g. private consumption or luxurious construction), and that banks made the required investments in the low interest government and state bank bonds.

One of the first steps taken to symbolize that central planning was seriously intended was the nationalization of Norges Bank. The subject had been discussed for some time, and opposed by a majority of the Norges Bank governors. When the governors of Norges Bank were asked, the majority of the governors issued a statement on April 8, 1948, saying, among other things, (my translation): "If one asks the question whether we would strengthen our credit abroad by now having the state redeeming shares in Norges Bank, the answer would unreservedly be no… Our

[18] "…å være et rådgivende organ og et bindeledd mellom de deltagende institusjoner. Den skal særlig drøfte retningslinjene for bankenes utlån, deres likviditet og stilling forøvrig, i samsvar med de prinsipielle linjer for den økonomiske politikk som statsmaktene til enhver tid har trukket opp." Here quoted from Kaare Petersen (1982) *Kredittpolitikken i Støpeskjeen* (A/S Hjemmet-Fagpressen), p. 84. K. Petersen was the general manager of the Norwegian Bankers Association 1961–77, and 1978–82 member of the board of governors of Norges Bank.

[19] Gunnar Jahn had been general manager of Statistisk Sentralbyrå (1920-46), finance minister in the all-party coalition government (1945), and head governor of Norges Bank (1947 – 54). Co-author of *Norges Bank gjennom 150 år* (1966).

experience from all our many contacts with foreign circles is that a realization of this thought will be capable of weakening Norway's credit."[20]

Nevertheless, the Storting passed the Nationalization Act in 1949.[21] Olav Meisdalshagen, the finance minister, argued in the Storting that (my translation): "The government has found it right to confirm, also purely as a matter of formality, that Norges Bank is a state bank fully and totally, just as in our neighbouring countries, Denmark and Sweden, and in a number of other European countries."[22]

Obviously, quite apart from the ideological thinking prevailing in Norway at this time as referred to above, the government had been inspired by what had happened to the Bank of England and the Banque de France a few years before. However, if Mr. Meisdalshagen knew how fundamentally different the legal position of Danmarks Nationalbank was/is from the status of Sveriges Riksbank and Norges Bank, he chose to suppress any such knowledge when he made the quoted statement in the Storting.

According to the Nationalization Act, the Norwegian state was to acquire the shares in Norges Bank at a price of 180 % of their face value, paid cash. At year end, 1950, Norges Bank had a nominal share capital of NOK 35 million, and reserves booked at NOK 65 million. This would indicate an internal value of the shares at about 285. It is quite possible that some of the assets of Norges Bank were booked at unrealistic values (e.g. the awkward problem of the "occupation account" had not yet been sorted out, nor could the tricky question of the NOK value of the gold holdings be easily addressed).[23] The share price would also have to take

[20] "Stiller en sig det spørgsmål om vi styrker vår utenlandske kreditt ved at Staten nå går til innløsning av aksjene i Norges Bank, bliver svaret ubetinget nej…vår erfaring fra alle de ganger vi har været i kontakt med utenlandske kretser er at en realisasjon av denne tanke vil være egnet til å svekke Norges kreditt." Here quoted from Jahn, Eriksen og Munthe (1966*) Norges Bank Gjennom 150 År* (Norges Bank), p. 412.

[21] Lov av 8. july 1949.

[22] "…Regjeringa har funni det rett å slå fast, også reint formelt, at Norges Bank er ein statsbank fullt og heilt, på same måten som i…våre granneland som Danmark og Sverike og i ei rekkje andre européiske land." Here quoted from Jahn, Eriksen og Munthe (Norges Bank, 1966), p. 411.

[23] If the gold was still booked at the 1928 par value, which it seems to have been, it would have been heavily undervalued in the spring of 1949. After the September 1949 devaluation of most western European currencies it would have been even more undervalued. In 1946 the Bank's gold holdings were booked at NOK 406 million, and in 1950 at only 243 million, approximately the same value

into account the dividend policy of Norges Bank. The Bank's profits had always been split between the state and the private shareholders according to a rather complicated formula. Unfortunately, the sources[24] do not reveal anything about how the share price was calculated, or how it was perceived by the private shareholders at the time, but it does seem that the private shareholders were shortchanged.

In any case, the nationalization made no difference whatsoever in the activities of Norges Bank, or the way it was governed. As pointed out in Chap. 5, the shareholders had never had any influence on the affairs of Norges Bank, apart from collecting their dividends.

10.3.2 Deregulation and the Banking Crisis of 1988–92

Just as in Sweden, the strict and detailed regulation[25] of the Norwegian capital market resulted in hefty efforts to circumvent the regulations. A substantial "grey" capital market grew up.

Leasing and factoring, outside the control of Norges Bank, became widespread, and organizations were created busying themselves with loan intermediation either bypassing the banking world, or with bank guarantees not subject to controls.[26]

Like in Sweden, Norges Bank and the government realized that regulations created more problems than they solved. So, around the mid-1980s, a process of deregulation started. This happened also in many other countries at this time, including Denmark, but in Sweden and Norway there were infinitely more regulations to dismantle than in any other Western

as in the second half of the 1930s (*Historisk Statistik*, 1994, p. 618). It is, however, unclear if any gold had been sold in the meantime.

[24] The source here is Jahn, Eriksen og Munthe (Norges Bank, 1966). It is, of course, possible that the cellars of Norges Bank contain material which can cast some light on this question.

[25] cf: K.Petersen (1982) *Kredittpolitikkenni støbeskjeen* (A/S Hjemmet-Fagpresseforlaget), p. 154: "Norge fikk en penge- og kredittpolitisk lov mere omfattende enn noe andet land i den vestlige verden." My translation: "Norway got a money and credit policy act more comprehensive than any other country in the Western world."

[26] Older observers may still remember outfits like Global Finans and Nevi Finans, which arranged credits directly between companies with temporary excess liquidity and other companies with temporary liquidity needs.

country. The irony is for Norway as well as for Sweden that the comprehensive regulatory frameworks built up in the post-war years had concentrated on the allocation of bank lending, but had completely ignored the relatively simple, but quite fundamental, question of the capitalization of financial institutions.

When Norwegian and Swedish banks and savings banks in the second half of the 1980s found themselves basking in a free world, they had equity ratios of 2–3 % (core capital). When credit rationing ended, the demand for loans from the regular credit market was almost insatiable, but the loss absorbing capacity of the banks very small.

The bubble economy described in Chap. 8 was copied in Norway with loan losses of 2–4 % of total outstanding loan amounts. The entire net worth of the three largest banks was wiped out, plus that of some of the largest savings banks and mortgage institutions.[27]

Table 10.1 The composition and growth of the credit stock 1950–2008

Annual averages	Per cent of total: Banks and savings banks	State banks	Others[a]	Total Bn. NOK	Total in per cent of GDP
1950	83	17	–	7	42
1960	51	29	20	13	50
1965–1969	50	31	19	42	64
1970–1974	46	34	20	79	70
1975–1979	42	38	20	165	86
1980–1984	43	35	21	319	79
1985–1989	55	21	23	709	127
1990–1993	56	22	23	821	114
1994–1997	66	20	13	858	88
1998–2001	73	15	12	1.216	90
2002–2005	75	11	14	1.709	101
2006–2008	68	10	21	2.648	112

Sources: Statistisk Sentralbyrå (1994) *Historisk statistikk*, pp. 622–641, and *statistisk Årbok*, relevant years

[a] "Others" include factoring and leasing companies, insurance companies, and companies intermediating loans

[27] Much has been written in the Scandinavian languages on the Scandinavian banking crisis in the late 1980s, including several official reports. For a summary in English, see Steffen Elkiær Andersen (2010) *The Evolution of Nordic Finance* (Palgrave Macmillan), pp. 237–40. An official report in English was produced by Norges Bank (2004) *The Norwegian Banking Crisis* (Occasional Papers no 13).

Table 10.1 illustrates the structural changes on the Norwegian capital markets between 1950 and 2008 reflecting the points discussed above.

Table 10.1 clearly shows the extent to which banks and savings banks collectively lost market shares to state banks and "others" on the unregulated credit markets, and that this development was reversed after the deregulation of the mid-1980s.

The role of Norges Bank in sorting out the mess of the banking crisis was limited to technical assistance. It did not act as a lender of last resort. The largest banks were taken over by the state by law, and the share capital administratively written down to zero.[28] None of the failed banks and savings banks went through formal bankruptcy proceedings.

No depositors lost anything. Two of the nationalized banks were since sold to other banks (Kristiania Bank og Kreditkasse to Nordea, and Focusbank to Danske) with nice profits for the Norwegian government. DnB is still 20 % government-owned, and there does not seem to be much interest in having this stake sold. There is a long tradition in Norway for having the government directly involved in banking.

10.4 The Norges Bank Act of 1985

Several amendments have been made to the two 1816 acts by which Norges Bank and the Norwegian monetary system were created, but two of these amendments were particularly important. One was the 1873 Act by which Norway converted to the gold standard (as from 1874, and as amended in 1875). The other was the 1892 Act which provided for the creation of the position of a "sentralbanksjef" (head governor), strengthened head office control over the branches, allowed the bank to offer overdraft facilities, and expanded the range of foreign assets Norges Bank could hold (securities listed on foreign stock exchanges). The highly debated 1896 relocation of the head office from Trondhjem to Kristiania did not involve any changes in the operations or governance of Norges Bank.

[28] One of the largest banks (DNB) contested this treatment in court, and the shareholders were allowed to keep about 50 % of the share capital.

In the 1960s it was increasingly felt that Norges Bank's legal framework had become outdated, and in 1968 a committee was organized for the purpose of proposing a new Norges Bank act. Its mandate was (my translation): "In connection with an account of the functions to be conferred upon Norges Bank, how it is to be organized and fitted into the government machinery, the committee is asked to propose such changes to the …1875 Act on the Monetary System and…the 1892 Act on Norges Bank, as well as other laws and stipulations….as the Committee finds recommendable…"[29] It took this committee just 15 years to give birth to its 427-page report, which included a thorough analysis of the history of "central banking" and its government relationships in various countries, as well as comprehensive comments to each of the proposed 33 paragraphs of the new Norges Bank Act. The act was passed two years later.

Some of the central paragraphs will be presented below, with a few comments:

> LOV om NORGES BANK og PENGEVESEN (Lov – 1985 – 05 – 24 no.28)
>
> (My translation)
>
> § 1 "Norges Bank is the country's central bank. The Bank shall be an acting and advisory body for monetary, credit, and foreign exchange policies. It shall issue banknotes and coins, promote an efficient payments system domestically as well as cross border, and monitor the money, credit, and foreign exchange markets.
>
> The Bank can take actions which are natural and customary for central banks…."

Comment:

It will be seen that the two 1816 Acts (see Chap. 5) have been merged into one, and that the wording is somewhat circular. It is taken for granted

[29] "I forbindelse med en utredning av hvilke funksjoner Norges Bank skal tillegges, hvordan den skal organiseres og innpasses i styringsverket, bes komitéen komme med forslag til endring av lov av…1875 om Pengevesenet og lov av 1892…om Norges Bank, samt eventuelle andre lover og bestemmelser som komitéen…finner det ønskelig å endre…" Here quoted from the committee's final report ("Lov om Norges Bank og pengevesenet", NOU 1983: 39), p. 20.

that any observer knows what is "natural" and "customary" for central banks to do.

> § 2 "The Bank shall act in accordance with the intentions for economic policies as laid down by the governmental authorities…(*statsmyndighetene*)…
>
> Before the Bank decides on matters of particular importance the matter shall have been discussed (*forelagt*) with the ministry. At government sessions (*kongen i statsråd*) the government can decide on the bank's activities. Such decisions can be general rules or instructions on particular matters (*pålegg i enkeltsaker*). The Bank shall be heard before such decisions are taken. The Storting shall be informed of such decisions as soon as possible.
>
> The Bank is a separate legal entity owned by the state…."

Comment:

On the face of it, this sounds draconian, and it certainly has the potential for a reintroduction of the kind of detailed credit regulation pursued by the Norwegian governments in the 1950s, 1960s, and 1970s, i.e. in the years when the committee was working on its report. This explains the wording "governmental authorities" (*statsmyndighetene*), which could include the Price Regulation Office (*Prisdirektoratet*), one of the core organizations in the planned economy of those years. Until the early 1980s, the head of the Prisdirektorat was probably more powerful than the head governor of Norges Bank.

However, it has so far happened only on one occasion that the government has issued a direct instruction to Norges Bank.[30] It happened in March 2001, when the government instructed Norges Bank that its top priority should be to pursue an inflation target of 2 %. The implication was that the external value of the krone could not be defended effectively at the same time. In any case, it would be difficult to define a target for the external value of the krone in a world of three major currency blocks floating against each other, and two other important currencies floating almost freely against the three blocks (see § 4 below).

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[30] I am grateful to Jan F. Qvigstad, executive director of Norges Bank, for having pointed this out to me.

The other main question raised by § 2 is the definition of "matters of particular importance" (*vedtag av særlig viktighet*), which shall be discussed with the Ministry of Finance (*depatementet*) before decisions are taken. Although not directly specified anywhere, the fact was that since 1945 Norges Bank had never changed its discount rate without having first cleared it with the minister of finance. Based on this tradition, it would appear that discount rate changes were considered of "particular importance", an impression fortified by the rarity of any discount rate changes and by public statements from several social democratic governments. Nevertheless, in December 1986, Norges Bank took the decision to mark up its discount rate without first discussing it with the Finance Ministry. The bank knew that it would be impossible for it to persuade the government of the necessity of higher interest rates. This was a big step in the history of Norges Bank towards fulfilling Criterion II.

> § 3 "The Bank shall give its opinion on questions asked from it by the government (*kongen*) or the ministry. The Bank shall inform the ministry when it is of the opinion that others than the Bank should take action relating to monetary, credit, and foreign exchange policies.
>
> The Bank shall inform the general public about conditions on the money, credit, and foreign exchange markets.
>
> The Bank shall inform the general public of the opinions which have formed the background for the monetary policy decisions taken."

Comment:

The words "other than the Bank" mean the government.[31] In other words, the bank shall tell the Finance Ministry if it thinks the government should take some kind of action relating to monetary policies.

This article also, finally, gives Norges Bank the right to criticize government policies in public in the event that it feels such criticism is justified. This had been inconceivable prior to the 1985 act.

By § 3, Criterion II was, at long last, fulfilled, except for the fact that all the board of representatives and governors are appointed by the government (see below).

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[31] I am grateful to Jan F. Qvikstad, executive director of Norges Bank, for making this clear to me.

> § 4 "…The king decides the exchange rate regime (*kursordningen*) for the krone, and the exchange rate level (*kursleie*)…Such decisions are to be communicated to the Storting."

Comment:
The government has decided that the krone shall float freely. Since priority has been given to the internal value of the krone, the external value has been given second priority. Between 2005 and early 2016, the NOK has dropped nearly 20 % against the euro and the Danish currency. Since the USD has appreciated substantially against the euro during 2014–16, the drop in the external value of the NOK can only to some extent be explained by the drop in the USD oil prices on the world market.

The problem for Norway is that freight rates and oil prices are both quoted in USD, but most of the rest of Norway's exports (fish, timber, fertilizers, electricity, and certain metallurgical products) go to Europe. Some of these export products are also subject to international market prices set in USD, GBP, or euro (e.g. pulp, paper, and fish).

> § 5. "The Bank's top governing bodies (*øverste organer*) are a "board of governors" (*hovedstyre*) and a "board of representatives" (*representantskab*).
>
> According to this act, the "hovedstyre" is the executive and the advising body… It shall provide for a safe organization of the Bank, and a satisfactory framework, aims and principles for its activities…The board of representatives shall oversee the operation of the Bank and that the rules for the activities of the Bank are observed…The board of representatives shall have a secretariat…."

Comments:
The terminology was changed. What was before "direktionen" now became "hovedstyret". In Norway, they like Norwegian words. In both cases the closest translation is "board of governors", i.e. the daily top management.

The "representantskab" can be compared to a "board of non-executive directors", except that the "representanter" in this case do not appoint the daily management (see below).

> § 6. "The "board of governors" (*hovedstyret*) consists of seven members appointed by the king. The "head governor" (*sentralbanksjefen*) and the "vice head governor" (*visesentralbanksjefen*) are full-time employees appointed for six years. They can be reappointed for a second six-year term. The five other "governors" are appointed for a four-year term on a rotating basis. They can be reappointed… for a total of a maximum of 12 years.
>
> Ministers, senior ministerial officials, members of the Storting or political organizations, Storting employees, employees of the Bank, or close relatives of any of these, cannot be members of the 'hovedstyre'…"

Comments:

The daily management is composed of the "sentralbanksjef" (head governor) and two vice governors. The four other "governors" are not employees of the bank, but are called to attend special meetings (e.g. rate setting meetings) or to otherwise advise the daily management.

> § 7. "The board of representatives" (*Representantskabet*) consists of fifteen members elected by the Storting….Every second year, seven or eight members retire. ..Members can be re-elected for a total of 12 years…"

Comments:

Members of the Storting or other representatives of political parties cannot be members of the "board of representatives". The board consists mainly of representatives of various business and professional organizations.

The board of representatives meets as often as they think it expedient. The "sentralbanksjef" and "visesentralbanksjef" shall be present at meetings of the board of representatives.

The remaining paragraphs are mainly of an administrative and technical nature, except for the §s 18–22, which give general directions for lending to the state and banks as well as the acceptance of deposits from banks and others, and trading of securities. From the perspective of Criterion III, § 18 is of particular interest (my translation):

> § 18: "The Bank cannot extend direct credits to the state." (*Banken kan ikke yte kreditt direkte til staten.*)

Comment:
The use of the word "direct" will be noticed. The same thinking was evident in the European Central Bank in the years since 2012, when "monetary easing" could involve purchases of government bonds. It was decided that government bonds could be bought in the secondary market only.

In any case, the Kingdom of Norway is the owner of the world's largest sovereign wealth fund (managed by Norges Bank, derived from North Sea oil). It is inconceivable that the Norwegian state should have any borrowing needs in the foreseeable future. The § 18 mainly satisfies a theoretical point.

10.4.1 Concluding Remark

A new Norges Bank Act is presently being prepared. A proposal will (probably) be presented in 2017. The nature of the proposed changes compared to the present act is presently unknown. A guess would be that the present § 2 will be substantially reworded to be more in compliance with actual practice over the latest 15–20 years, and with Criterion II.

11

Summary and Conclusions

The schedule presented below intends to give an overview of the main points relating to the origins and nature of the Scandinavian central banks (Table 11.1).

11.1 The Idea of a "Central Bank" and the Effect of the Great War

It will be seen that the transformation from what used to be commercial banks (int Denmark's case under a royal charter) into what is today recognized as "central banks" was a rather gradual one. It will also be noted how different the origins of the Scandinavian central banks are, and how differently they are governed. Before Sweden joined the EU, the differences in the latter respect were even bigger. Norway, not a member of the EU, still has a "central bank" very much under the direct control of the Storting. However, a new Norges Bank act is under preparation, so this may change in the future.

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4_11

Table 11.1 Overview of the main points on origins and nature of the Scandinavian central banks

	Sveriges Riksbank	Norges Bank	Danmarks Nationalbank
Origins	Formed 1668 to take over the responsibilities of the defunct Stockholms Banco. Guaranteed by the Assembly of the Estates, since 1866 by the Riksdag	Formed 1816 as a joint stock bank to create a banking and monetary system in Norway. The Storting was given special constitutional duty to oversee monetary affairs	Formed 1818 as a joint stock bank to take over the responsibilities of the Riksbank, which in 1813 took over the responsibilities of the defunct Kurantbank (formed 1736)
Present legal framework (Nov. 2016)	According to the 1999 Riksbank Act, the Riksbank is the country's central bank, and an authority under the Riksdag	Nationalized 1949. Norges Bank Act of 1985 (to be replaced or amended in 2017)	Self-owned institution according to the Nationalbank Act of 1936

Present Governance (Nov. 2016)	Formal top management: 11"bankfullmägtige" appointed by the Riksdag (non-executive directors). Daily: Board of six governors appointed by the fullmägtige for five or six years and headed by the "Riksbankchef". Can be reappointed. The Riksbankchef appointed by the "bankfullmägtge" from among the six governors (since 1999).	Formal top management: Board of 15 representatives appointed by the Storting. Has its own secretariat. Daily: Board of seven governors ("hovedstyret") appointed by the Storting for six years. Only three of them actually employed by the Bank. Four of them called as special advisers when needed. One "head governor" and two "vice head governors". Can be re-appointed	Formal top management: Board of 25 representatives, 15 of whom are self-supplying representatives from the business community, and eight are members of the Folketing. Two members are appointed by the government (usually senior civil servants). Board of seven directors from among the representatives. Daily: Board of three governors, chaired by a government appointed "head governor". The two others appointed by the representatives. Governors must retire at the age of 70
Criterion I	Fulfilled since 1897/1903	Fulfilled since 1816	Fulfilled since 1818 (or 1813, or 1736 with minor exceptions 1791–1813)
Criterion II	Fulfilled since 1988/1999. Main task to target a 2 % annual rate of inflation.	Partially fulfilled since 1986 Never formally fulfilled, but practised since 1986. Main task to target a two % annual rate of inflation.	Fulfilled since 1818. Main task to keep a stable rate of eschange against the Euro (+/- 2.25 %).
Criterion III	Shared with the Riksgäldskontor from 1789 till about 1914. Fulfilled since about 1914	Mostly fulfilled since 1818	Fulfilled since 1914
Criterion IV	Mostly fulfilled since about 1914	Mostly fulfilled since about 1914	Mostly fulfilled since about 1914

It will also be noted that the definition of a "central bank" is far from simple. In this book four criteria have been proposed which, if combined and fulfilled, will provide a portrait of a "central bank" in a modern sense. Since these criteria have only been very partially fulfilled in Norway and Sweden in the second half of the 20th century, Sveriges Riksbank and Norges Bank might as well have been classified as sub-departments of their respective finance ministries in those years. In this respect they did not differ much from the Bank of England (at least until 1997) or the Banque de France, although both of these venerable institutions might protest mildly against this verdict.

It will be noted that several decisive steps in the process of transformation were taken in connection with the outbreak of WWI. The effect of the war (in this respect) was that foreign trade, procurements, government finance, and investments required substantially closer co-operation between the financial sector and the respective governments than in the preceding years. It presented the "central banks" with real monetary policy challenges, which had to be dealt with. The handling of the problems resulting from the war was the catalyst that brought these banks a big step closer to the status of "central banks".

Finally, it will be noted that the transformation of commercial banks into "central banks" had very little to do with the development of monetary theories under the heading of "neo-classicism" as promoted by well-known Scandinavian economists like Knut Wicksell and Gustav Cassel. The transformation came as the result of pragmatic decisions caused by actual circumstances. This did not mean that the theoretical economists did not speak up. In all three countries the central banks were highly criticized in academic circles (in Denmark particularly Axel Nielsen) over their handling of the inflationary forces caused by the Great War.

11.2 The Scandinavian Currency Union

With today's European Monetary Union and the euro in mind, it seems interesting to note how well the Latin and Scandinavian currency unions worked between the second half of the 1870s and the outbreak of the Great War.

Both of these monetary unions were formed mainly from political motives and based on coins of silver and/or gold only. The contractual formalities were minimal. Bank notes were not considered "real" money, and consequently the note-issuing banks were not considered relevant for the workings of the currency unions. In Scandinavia, Sveriges Riksbank, The Nationalbank, and Norges Bank, which had scarcely ever talked to each other before the 1870s, gradually found a modus vivendi.

The Great War ended a system that had worked relatively well in Scandinavia for 40 years with a minimum of formalities.

11.3 Regulation and Deregulation: From 1945 to 1990

Although from rather different philosophical perspectives, the economic policies pursued in Sweden and Norway after 1945 had much in common, and their respective central banks were assigned important roles in those policies. Wartime regulations were maintained or even strengthened as the two countries moved towards "planned economies". Capital market regulations were imposed with the intention of directing capital to its "proper" use, and the central banks were told to work closely with their respective governments to this end.

However, by the mid-1980s it was recognized that the regulations did more harm than good, and they were scrapped.

In Denmark, the war time restrictions were dismantled as fast as possible, but perennial balance of payment deficits and shortage of foreign exchange made a number of restrictions and regulations necessary, until generally more constructive fiscal policies from the early 1980s turned the situation around. All remaining restrictions and extraordinary regulations were abolished in the mid-1980s. The main headache for Danmarks Nationalbank until the mid-1980s (and again in 2007-09) was to ensure the availability of sufficient foreign exchange reserves.

In Sweden and Norway (and Finland) they had their big financial crisis in the late 1980s and early 1990s. Large banks and hundreds of savings banks had to be rescued at great expense to the taxpayers (although in Sweden the government recovered the expenses from the much later sales of its shares in Nordea). The background was, as several times before, bubbles in property markets and stock markets combined with over-optimistic and reckless behaviour by a number of financial institutions.

Denmark did not escape entirely the optimism of the late 1980s, but the damages were very small. In contrast, Danish financial institutions suffered substantial losses in the international financial crisis of 2008–12. However, the losses suffered by Danish financial institutions in 2008–12 were smaller than those suffered in the other Nordic countries in the early 1990s, mainly because Danish financial institutions had always (at least since the first Danish banking act of 1919) been better capitalized than banks and savings banks in the other Nordic countries.

There was probably little Norges Bank, the Riksbank, or Danmarks Nationalbank could have done to prevent the calamities. Optimism was bubbling everywhere in those years. The extent of the calamities was the result of, inter alia, the acute undercapitalization of the Norwegian and Swedish banks and savings banks. That was a question of bank legislation and bank supervision. In Norway, Sweden, and Denmark banking supervision is the responsibility of separate institutions (Denmark: Finanstilsynet, Norway: Finansinspektsjonen, Sweden: Finansinspektionen).

11.4 The 21st Century

With respect to central banking, the first 20 years of the 21st century will probably go down in history as a period of boom, bust, and great expectations for the powers of central banks to sort out the problems.

Norway is not a member of the EU, but Norges Bank is under instruction from its government to engineer an inflation rate of 2 %, just as targeted by the European Central Bank (ECB). Sweden is a member of the EU, but not of the European Monetary Union. Sveriges Riksbank is also targeting a two % annual rate of inflation without success. Neither Norges Bank nor Sveriges Riksbank targets any specific exchange rate (during the first 16 years of the 21st century, the NOK and the SEK have both driopped some 15 – 20 % against the euro and the DKK). Denmark, like Sweden, is a member of the EU, but not of the Monetary Union. In contrast to Norway and Sweden, Danmarks Nationalbank has been asked by its government to maintain a "fixed" exchange rate against the euro ("fixed" means that it can swing up to +/− 2.25 % against the central rate). On this point it has been successful. For 30 years the DKK has stayed within this band against the DEM/EUR.

All of the ECB, the FED, and the Bank of England, Norges Bank, Sveriges Riksbank, and the Bank of Japan have been targeting a rate of inflation of 2 % for several years. The more they try, the more it seems they fail. Governments have given up stimulating the economies of their respective countries, officially for budgetary reasons, but it is doubtful if they could do anything anyway as long as consumers maintain a high level of savings and seem to think that they are spending enough. The conclusion has been to leave it to the central banks, which are then—mysteriously—expected to produce the necessary miracles in the shape of a rate of inflation that is neither too fast nor too slow, virtually full employment, and a reasonable rate of real economic growth, as well as stable prices in the stock markets and real estate markets.

When in connection with the Great War central banks trebled or quadrupled their balance sheets, high-speed inflation was the immediate result. Since 2009, a similar expansion of central bank balance sheets has taken place, and the rate of inflation is still slowing down. Real economic growth is still disappointing, and "asset prices" are bubbling or wobbling.

It seems that Alexander Pope was about 280 years ahead of his time, and that he must have had central banks in mind when he wrote:

Great lord of all things, yet a prey to all,
Created half to rise and half to fall
Sole judge of truth, in endless error hurled
The glory, jest and riddle of the world.
From: Alexander Pope, *Essay on man*, 1734

Appendices

Appendix 1

Year	Survey of Main Events in the History of the Swedish Central Bank
1656	Foundation of Stockholms Banco by royal charter given to Johan Palmstruch.
1660	Stockholms Banco starts issuing banknotes.
1664	Collaps of Stockholms Banco because it had flooded Sweden with banknotes.
1668	Foundation of Sveriges Rijksens Ständers Bank, which took over the assets and liabilities of Stockholms Banco. Guaranteed by three of the four Estates. Forbidden to issue banknotes.
1726	Notes issued by the Bank become legal tender, and made convertible into silver.
1745	The silver convertibility suspended.
1776	Currency reform. Convertibility restored.
1789	Formation of the Riksgäldskontor, which handled the government's borrowings. It also issued inconvertibnle banknotes, which soon started to flood the country.
1803	Second currency reform. Termination of note-issuing by the Riksgäldskontor.

(*continued*)

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4

Year	Survey of Main Events in the History of the Swedish Central Bank
1809	Suspension of convertibility of the Riksbank notes.
1810–17	The Riksbank acts as "lender of last resort" to a number of discount houses.
1830	Private note-issuing banks ("enskilde banker") start to appear.
1834	Third currency reform. Silver convertibility restored.
1855	Fourth currency reform. The decimal system introduced.
1866	Constitutional reform. The Assembly of the Estates replaced by the Riksdag. The name of the Bank changed from Sveriges Rijksens Ständers Bank to Sveriges Riksbank, now guaranteed by the Riksdag.
1873	Switch to the gold standard.
	Sweden and Denmark sign the agreement to form the Scandinavian Currency Union, in force as from 1875.
1897	The Banking Act passed, which gave the Riksbank a note-issuing monopoly.
1907–08	Banking crisis. The Riksbank quite passive.
1914–18	First World War. The Riksbank and the Riksgäldskontor start to co-operate.
	Gold convertibility suspended, reintroduced (1916), and suspended again (1918).
1924	Convertibility reintroduced at pre-war parity.
1931	Convertibility suspended
1931–32	The Riksbank forced to involve itself in the Kreuger affair. The prime minister had to resign.
1945	The government decides that interest rates should be kept low. Forty years of tight regulation of the capital markets and credit rationing followed.
	Riksbankchef Ivar Roth resigned (1948) in protest over the low interest policy.
1985	A process of deregulation started.
1989	New Riksbank Act passed relaxing the government control over the Riksbank.
1989–92	Severe banking crises with the collapse of several major banks and savings banks.
	The Riksbank raised its o/n rate to 500 %. Sharp drop in the international value of the SEK. The SEK floating freely.
1995	Sweden becomes a member of the EU.
1999	The 1989 Riksbank act amended, further relaxing the government control over the Riksbank in order to satisfy EU requirements.

Appendix 2

Year	Survey of Main Events in the History of the Danish Central Bank
1736	Foundation by royal charter of Den Kiøbenhavnske Assignation-Vexel- og Laane Banque (the "Copenhagen Bank", since 1791 known as the "Kurantbank"), as a private joint stock bank with a monopoly on issuing banknotes. The banknotes were convertible into silver.
1745	The silver convertibility suspended. Reintroduced 1747.
1757	The silver convertibility suspended. Remained suspended for the next 88 years.
1773	The Copenhagen Bank nationalized. The shareholders paid off with government bonds.
1791	Formation of the Dansk-Norske Speciesbank as a private joint stock bank with strict requirements for the silver coverage of its banknotes, which therefore never achieved wider circulation. Served as a model for the later Norges Bank.
1813	The country had become flooded with banknotes. Bankruptcy of the nationalized Kurantbank and, therefore, the Kingdom of Denmark. Complicated monetary reform, which essentially meant that claims on the Crown were reduced to one sixth of their pre-Napoleon par value.
	Formation of the state owned Riksbank as replacement for the Kurantbank.
1814	Norway separated from Denmark to become part of a union with Sweden.
1818	The Riksbank replaced by Nationalbanken i Kiøbenhavn, a private joint stock bank with a monopoly on issuing banknotes under a 90 year charter.
	Profits shared with the state.
1845	Convertibility of the banknotes into silver reintroduced at the pre-Napoleon par value.
1873	Switch to the gold standard and a decimal currency system as from 1875.
	Agreement signed together with Sweden to create the Scandinavian Currency Union.
1907	At the expiry of the 1818 charter, it was renewed for another 30 years with only minor changes.
1914	Agreement reached with the government and the commercial banks and savings banks that the Nationalbank was to be the sole bank for the government.

(*continued*)

Year	Survey of Main Events in the History of the Danish Central Bank
1914–18	Convertibilty made subject to the discretion of the Nationalbank. Formally suspended at the end of the war.
	The Scandinavian Currency Union Suspended. Permanently, as it turned out.
1920s	Severe banking crisis. The Nationalbank "lender of last resort" in selected cases.
1926	Convertibility reintroduced at the pre-war gold parity.
1931	Convertibility suspended. Permanently, as it turned out.
1936	At the expiry of the 1907 charter, a new Nationalbank act was passed transforming the Bank from a private joint stock bank to a selfowned institution. The shareholders paid off with bonds to be amortized from the Bank's future profits. Profits accrue to the state.
	Name changed to the present Danmarks Nationalbank.
1930s	Import restrictions partly managed by the Nationalbank through rationing of permissions to buy foreign exchange.
1940	Prior to the occupation of Denmark by Nazi-German forces, the Nationalbank had moved its gold holdings to New York.
1968	Danmarks Nationalbank celebrated its 150 years anniversary.
1973	Denmark joins the European Communities (together with the UK and Ireland).
1970s	Several minor devaluations of the DKK against the DEM. The DEM/DKK central exchange rate unchanged since 1987 (since 2000 against the Euro), i.e. the DKK has had an unchanged exchange rate against the German currency bloc for about 30 years (within a band of +/– 2.25 % of the central exchange rate).
1992	In a referendum, Denmark voted no to the Maastricht Treaty.
2000	In a referendum, Denmark voted no to joining the Euro Zone.

Appendix 3

Year	Survey of Main Events in the History of the Norwegian Central Bank
1814	Norway was separated from Denmark and became part of a union with Sweden. Financial matters were domestic Norwegian affairs. Under the Eidsvoll constitution, the Storting had direct responsibility for Norway's monetary system.
1816	Two acts forming Norway's monetary system passed by the Storting. One of them created Norges Bank as a private joint stock bank modelled after the Dansk-Norske Speciesbank of 1791. Headquartered in Trondhjem. Monopoly on note-issuing.
1834	Partial silver convertibility introduced.
1842	Full convertibility.
1875	Government decision to switch to the gold standard and the decimal currency system as from 1878.
1878	Norway joined the Scandinavian Currency Union.
1897	Norges Bank's head office moved to Kristiania (Oslo).
1898–1900	The "Kristiania Crash", during which a number of banks in the Kristiania (Oslo) area collapsed. In some cases Norges Bank acted as "lender of last resort".
1914–18	Told by the government to make large loans to the belligerent countries. Convertibility suspended.
1928	Convertibility restored at pre-war parity.
1931	Convertibility suspended.
1937–40	Norges Bank moved its gold holdings to New York.
1940	Norges Bank moved its head office to London, together with the king and the government.
1949	Norges Bank nationalized. Shareholders were paid cash for their shares.
1950s, 60s and 70s	Norges Bank became part of a government directed "planned economy", where the country's resources were allocated according to annual plans, which included ways to finance "prioritized" investments.
1966	Norges Bank celebrated its 150 years anniversary.
1972	In a referendum, the Norwegians voted against joining the European communities.
1985	New Norges Bank act passed, which at least formally made Norges Bank an integral part of the government machinery.
1985–87	Period of deregulation.
1990–92	Deep banking crisis. Nationalization of major banks, savings banks and mortgage institutions. Little action from Norges Bank.
2016	Celebration of Norges Bank's 200 years anniversary.
2017	New act for Norges Bank to be passed

Bibliography

I. General

Bagehot, W. *Lombard Street* (London, 1873), 7th ed. 1878.

Bloomfield, A.I. *Monetary Policy under the Gold Standard 1880 – 1914,*

Federal Reserve Bank of New York, 1959

Davies, H. & Green, D. *Banking on the Future. The Fall and Rise of Central Banking*

Princeton University press, 2010

Eichengreen, B. *Golden Fetters. The Gold Standard and the Great Depression 1919 – 1939*

Oxford University Press, 1995

S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4

Eichengreen, B. & Flandreau, M. (eds.) *The Gold Standard in theory and History*

Routledge, 1985 (2nd ed. 1997)

Ford, A.G. *The Gold Standard 1810 – 1914*

Clarendon Press, 1962

Friedman, M. & Schwartz, A. *A Monetary History of the United States 1867 – 1960*

Princeton University press (1963), 9th paperback ed, 1993

Frisseld, L. Rodzback, K., & Spagnolo, G. *Governing the Governors: A Clinical Study of Central Banks*

Sveriges Riksbank, 2008 (CEPR Discussion Paper no. 6888)

Hoffmeyer, E. *Decisionmaking for European Economic and Monetary Union*

Group of Thirty, Washington DC, 2000

Hultman, J. *Europas Centralbanker*

A. Bonniers Förlag, 1909

Central Bank Management
Central Banking Publications, London, 2009. Introduction by Ingves, S.

Sveriges Riksbank, 2009

James H. *Making the European Monetary Union*

Harvard University Press, 2012

Kindleberger, C.P. *A Financial History of Western Europe*

Allen & Unwin, 1984

Ögren, A. & Øksendal, L.f. (eds.) *The Gold Standard and the Peripherals*

Palgrave Macmillan, 2012

II. Denmark

Allernådigste Octroy for den Kiøbenhavnske Assignation- Veksel- og Laane-Banque

Frederiksberg, 29. October, Ao. 1736
Statsbiblioteket i Århus

Andersen, P.N, *Danish Exchange Policy 1914 – 1939. A Report to the Geneva Research Centre*

Københavns Universitet, 1942

Andersen, P.N. (ed.) *Lånerenten*

Copenhagen, 1947

Andersen, S.E. *The Evolution of Nordic Finance*

Palgrave Macmillan, 2010

Danmarks Nationalbank, several publications, in particular

Dansk Pengehistorie I – III (1968)
Dansk Pengehistorie IV (1990)
Dansk Pengehistorie V (2010)
Finansiel styring i Danmarks Nationalbank (2003)
Nationalbankens Opgaver (2008)

Pengepolitik i Danmark, 2009
Finansiel Stabilitet (2013)

Annual reports and quarterly bulletins
Unpublished protocols of meetings of governors, 1914, Rigsarkivet (National Archives)

Danmarks Statistik

Kreditmarkedsstatistik
Statistiske Undersøgelser nr. 24, 1969

Feldbæk, O. *Danmarks Økonomiske Historie 1500 – 1840*

Systime, 1993

Hansen, S.Aa. *Pengevæsen og kredit 1813 – 1860*

Fyens Stifts Kreditforening, 1960

Hyldtoft, O. *Danmarks Økonomiske Historie 1840 – 1910*

Systime, 1999

Johansen, H.C. *Dansk Økonomisk Politik i Årene efter 1984*

Århus Universitetsforlag, 1968

Green, H. *Bankkrisen II*

Kiøbenhavn, 1910

Nielsen, A. *Bankpolitik I + II*

Hagerups Forlag and Københavns Universitet, 1923

Nielsen, A. *Den Skandinaviske Møntunion, 1917*

Olsen, E. *Danmarks Økonomiske Historie*

Københavns Universitet, 1962

Rapport fra udvalget om finanskrisens årsager *Den Finansielle Krise i Danmark,* 2014

Rasmussen, E. *Kurantbankens Forhold til Staten 1737 – 1773*

Københavns Universitet, 1955

Rasmussen, E. *Kurantbankens Oprettelse*

Historisk Tidsskrift 11 – 13, 1950–52

Rubow, A. *Nationalbankens Historie, bd. I, 1818 – 1878, and bd. II, 1878 – 1907*

Nationalbanken i Kiøbenhavn, 1918 (I) and 1920 (II)

Ussing, C. Th. *Staten og Nationalbanken*

Nationaløkonomisk Tidsskrift, 1914

Ussing, C. Th. *Nationalbanken 1914 – 1924*

Gads Forlag, 1926

Wilcke, J. *Specie- Kurant- og Rigsbankdaler. Møntvæsenets Sammenbrud og Genrejsning*

1788 – 1845
Kjøbenhavn, 1929

Wilcke, J. *Sølv- og Guldmøntfod 1845 – 1914*

Kjøbenhavn, 1930

Økonomiministeriet, et alt. *Den Danske Pengeinstitutsektor (1994)*

Økonomiministeriet, et alt. *Redning af Danske Pengeinstitutter siden 1984* (1995)

III Sweden

Brisman, S. et alt *Sveriges Riksbank, I – V*

Sveriges Riksbank, 1918 – 1930

Dahmén, E. (et alt) *Upplåning och utveckling. Riksgäldskontoret 1789 – 1989*

Riksgäldskontoret, 1989

Glete, J. *Kreugerkoncernen och krisen på svenskt aktiemarknad*

Almquist & Wicksell, 1981

Heckscher, E. *The Bank of Sweden in its connection with the Bank of Amsterdam*

in J.G. van Dillen *History of the Principal Public Banks*
F. Cass & Co Ltd, 1964

Hildebrandt, K. *Riksgäldskontoret 1789 – 1934*
– in *Sveriges Riksdag*, senera avd. *Riksdagen från 1866*, 13. bd. 1934

Hildebrandt, K. *Riksgäldskontoret 1789 – 1939*

Stockholm, 1939

Kock, K. *Svenskt bankväsen i våra dagar*

Kooperativa förbundets bokförlag, 1932

Kock, K. *Kreditmarknad och räntepolitik, I + II*

Sveriges Allmänna Hypoteksbank, 1961–62

Larsson, M. *Aktörer, marknader och regleringer, – Sveriges finansielle system under 1900-tallet*

Uppsala Papers in Financial History, Report I, 1993

Larsson, M. *Staten och kapitalet*

SNS Förlag, 1998

Magnusson, L. *Sveriges ekonomiska historia*

Prisma, 1997

Partnoy, F. *The Matchking*

Public Affairs, N.Y. 2009

Schön, L. *En modern svensk ekonomisk historia*

SNS Förlag, 2000

Statistiska Centralbyråen *Historisk Statistik*

Werin, L. (ed.) *Från räntereglering till inflationsnorm. Det finansielle system och Riksbankens Politik 1945 – 1990*

SNS Förlag, 1993

Wetterberg, G. *Pengarna och Makten. Riksbankens Historia*

Sveriges Riksbank, 2009

Ögren, A. (ed.) *The Swedish Financial Revolution*

Palgrave Macmillan, 2010

IV Norway

Berg, S.A. & Eitrheim, Ø. *Bank regulation and bank crisis*

Norges Bank, Working Paper 2009/18

Egge, A. *Statens diskonteringskommisjoner. Finansdepartementet som statsbank i det 19. århundrede*

Oslo Universitet, 1988

Eitrheim, Ø., Klovland, J.T., & Quigstad, J. *Historical Monetary Statistics for Norway*

Norges Bank, Occasional Papers, 2004

Engebretsen, *Norsk bankvæsen, særlig etter verdenskrigen*

Oslo, 1939

Dyrvik, S. et alt *Norsk økonomisk historie 1500 – 1850*

Universitetsforlaget, 1990

Hanisch, T.J. et alt *Norsk økonomisk politikk i det 20. århundrede*

Høyskoleforlaget, 1999

Hodne, F. *Norges økonomiske historie 1815 – 1970*

Cappelen (Oslo), 1981

Hodne, F. & Grytten, O.H. *Norsk økonomimi det 19. århundrede*

Fakbokforlaget, 1994

Innstilling fra den penge- og kredittpolitiske komité, 1964

Innstilling fra penge- og finansrådet, 1952

Jahn, G., Eriksen, A. & Munthe, P. *Norges Bank gjennom 150 år*

Norges Bank, 1966

Johnsen, T. et alt *Bankkrisen i Norge*

SNF projekt nr. 225. Norges Handelshøyskole & Universitet i Oslo, 1992

Keilhau, W. *Den norske pengehistorie*

Oslo, 1952

Matre, H.J. *Norske kredittinstittusjoner 1850 – 1990*

NORAS rapport nr. 42

Moe, T.G et alt The Norwegian Banking Crisis

Norges Bank, Occasional Papers No. 33, 2004

NOU 1980:4 *Rentepolitikk*

NOU 1983:29 *Om mål og virkemidler i penge- og kredittpolitikken*

NOU 1983: 39 *Lov om Norges bank- og pengevæsen*

Petersen, K. *Kredittpolitikken i støpeskjeen*

A/S Hjemmet-Fagpresseforlaget, 1982

Rapport til Stortinget fra kommisjonen somm ble nedsatt af Stortinget for å gjennomgå ulike Årsaksforhold knyttet til bankkrisen ("Stortingsrapporten"), 1998

Rygg, N. *Norges Bank i mellomkrigstiden*

Oslo, 1950

Rygg, N. *Norges Banks historie*

Norges Bank, 1954

Skånland, H. *Det norske kredittmarked siden 1900*

Statistisk Sentralbyrå, 1967

Statistisk Sentralbyrå, several publications, incl.

Historisk statistikk, 1994
Nasjonalregnskabsstatistikk 1965 – 1960
Statistisk Årbok 2009, Finansmarked

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S.E. Andersen, *The Origins and Nature of Scandinavian Central Banking*, Palgrave Macmillan Studies in Banking and Financial Institutions, DOI 10.1007/978-3-319-39750-4

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