Why did the Riksbank get a monopoly on banknotes?

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It is not self-evident that only central banks can issue cash. Historically, private banks in Sweden and elsewhere have issued their own banknotes. The decision that only the central bank of a country should be able to issue cash, a so-called banknote monopoly, was taken in most countries in the 19th and early 20th centuries. Today, the situation has changed, and in Sweden, cash is used to a very small extent. This raises the issue of the Riksbank's role as issuer of means of payment and its relationship to private banks in the payment system. This article examines the Riksbank's banknote monopoly, which was introduced in 1904. It concludes that the banknote monopoly should be seen as a political decision to clearly delineate the issue of means of payment from commercial operations, secure the general public's access to risk-free means of payment and make the Riksbank's position strong enough to guarantee the stability of the money and payment system.

1 The issue of the banknote monopoly is current again after over 100 years

Today, the Swedish public can use two main forms of money: cash issued by the Riksbank and digital money held in accounts in private banks. It is not self-evident that cash is only issued by central banks. Historically, private banks have issued their own banknotes in many countries, including in Sweden between 1831 and 1904. Granting the central bank the sole right to issue cash, known as the banknote monopoly, was a political decision taken in most countries in the late 19th and early 20th centuries. The question has been the subject of renewed interest and has been studied internationally in connection with the discussion concerning potential central bank issued digital currencies (Fung 2018, Weber 2014, Weber 2015a, Weber 2015b). In Sweden, the decision was taken to give the Riksbank the sole right to issue cash, the main means of payment in those days, in 1897, with the decision entering into force in 1904. But technological developments and changed payment habits have led to cash being used to a very small extent in Sweden today. The question of who issues and has responsibility for the general public's means of payment is now becoming relevant again, over a hundred years since the introduction of the banknote monopoly. In conjunction with this, the Riksbank has started to investigate steps such as the possibility of issuing central bank money in digital form, the so-called e-krona.

This article provides an overview of central banks' banknote monopolies with special focus on Sweden. The banknote monopoly is a controversial phenomenon. The debate has primarily been driven by advocates of privately issued money, who argue that the banknote monopoly is an infringement by central government of the freedom of private businesses (Hayek 1976,

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White 1984, Dowd 1992). The banknote monopoly was also introduced in many different countries in the 19th and early 20th centuries. The various countries' contexts and justifications for introducing banknote monopolies differed, which makes it difficult to treat the subject exhaustively. The aim of this article is thus not to provide a definitive interpretation but to give an overview and draw a few general conclusions on the similarities between the time of the introduction of the Riksbank's banknote monopoly and today's situation.

In the next section, I will provide a brief international overview of banknote monopolies. According to some researchers, the period of private banknote issue in Sweden, 1831–1904, was characterised by unusual stability compared with other countries. Consequently, I will then provide an overview of the system of private banknote issue in Sweden, followed by a section where I discuss why it was more stable than in other countries. I will then discuss the background to the introduction of the banknote monopoly in Sweden. Finally, I will discuss similarities and differences compared with today's situation.

2 The banknote monopoly from an international perspective

The banknote monopoly was introduced at different points in time in different countries (see Table 1). However, it may be misleading to compare starting years for the banknote monopolies in different countries. This is because, in certain countries, there were no private banks when the central bank was set up. When these later became established, no right to issue their own banknotes was granted. Even so, the table shows that Sweden's decision to wind up private banks' right to issue banknotes was taken at a relatively late stage, in 1897. They had had this right since 1824 and exercised it since 1831. All in all, the period of private banknote issue in Sweden lasted about 70 years.

Table 1. Year of foundation of central bank and year banknote monopoly was decided

Country	Central bank founded	Decision on banknote monopoly
Austria	1816	1816
Norway	1816	1818
Denmark	1818	1818
United Kingdom	1694	1844
France	1800	1848
Belgium	1850	1850
Netherlands	1814	1863
Spain	1874	1874
Germany	1876	1876
Japan	1882	1883
Finland	1811	1886
Portugal	1846	1888
Sweden	1668	1897
United States	1913	1913 (banknotes backed by the state since 1863–1864)
Italy	1893	1926

Source: Capie et al. 1994 p. 6

Modern central banking developed in most industrialised countries primarily in the 19th and early 20th centuries. It is difficult to describe every country here. Consequently, the rest of this section will focus on the two of the largest economies of this period: the United Kingdom and the United States.

2.1 The banknote monopoly in the United Kingdom

Most of the oldest central banks were privately owned and profit-driven (the Riksbank was an exception, having been owned by the state since as early as 1668). The early central banks were thus competitors to other banks in the financial system (Capie et al. 1994, p. 3). The Bank of England was created in 1694 as a privately-owned bank that conducted lending operations to both the state and the general public in London. It also accepted deposits and issued paper banknotes. The Bank of England was thus not what we think of today as a central bank. Several of the principles we today take for granted that central banks will follow were first expressed theoretically. This also applies to the idea that banknotes should be issued separately from commercial banking operations. For example, David Ricardo, better known for the theory of comparative advantage, established in a posthumous publication that the Bank of England performed two functions: issuing banknotes and other banking operations (Ricardo, 1824). These two, Ricardo argued, should be separated completely to guarantee a more secure monetary system. The background to this was the general debate in the United Kingdom that started in the second half of the 1810s due to financial instability and inflation following the Napoleonic Wars. The debate continued throughout the 1840s, with recurring committees to discuss how a stable monetary and financial system could be achieved. Approximately half of the banknotes were issued by the Bank of England and the rest by smaller banks spread across the country, so-called country banks (O' Brien 1997, p. 595). One conclusion that gained ground was that inflationary pressures were due to the issue of banknotes by the smaller banks. The Bank of England quite simply controlled too little of the issuance of banknotes to be able to manage the total supply of money. Many country banks also failed during bad times and their banknotes thus became worthless, which caused major problems for the owners of these banknotes (Davies 1994, p. 298). The debate also focused on the growing opinion that it was problematic to issue banknotes with the aim of making a profit. The end came with the Bank Charter Act of 1844, which heavily restricted the smaller banks' right to issue banknotes so that the Bank of England held the sole legal right to determine the number of banknotes in circulation. The Bank of England still had far to go to become a central bank in the modern sense. For example, it was still privately owned and had no clearly stated principles for how to act in crises. But the Bank Charter Act was a milestone for starting to set boundaries between central banks and commercial banks.

2.2 The banknote monopoly in the United States

In the United States, the issue of a federal central bank and federally issued money was controversial. This was due to the question of the government's influence on issuing money, but there was also a resistance towards concentrating power in the hands of an individual institution (Erickson 2015). This helps us to understand why it took until 1913 for the United States to set up a central bank, the Federal Reserve. Before the National Bank Act of 1863–1864 (which I describe below), most banknotes were issued by private banks licensed by the states (Rolnick et al. 1998, p. 106). Between 1791 and 1836, two attempts were made at giving federal permission to a national, privately owned bank, the First and Second Banks of the United States. But political disagreements led to permission not being renewed after 1836. These two banks did not act as central banks in the modern sense but more as profit-driven banks that issued banknotes on the same principles as other banks (Wood 2005, p. 134). Neither did they have any banknote monopoly.

After 1836, and the dissolution of the Second Bank of the United States, the legislation for state banks was reviewed. A bank could now be established without the permission of the states, assuming that certain fixed capital requirements were met. The banknotes issued should be redeemable against silver and gold and, in addition, the banks should allocate collateral in the form of federal or state bonds.

By the mid-19th century, there were over 1,500 private banks issuing banknotes in the United States (Gorton 2012, pp. 13–19). These banknotes did not just circulate regionally but nationwide. Consequently, as a rule, every bank had a large proportion of other banks' banknotes on its balance sheet (Rolnick et al. 1998, p. 105). The overall problem was that banknotes issued by different banks were not worth as much. The reason was probably that the banks had different risk profiles. As mentioned above, the banknotes were supposed to be backed by state bonds and so on, but several states suspended payments of their debts, which undermined the banks' collateral. The value of the bonds held as collateral also fluctuated. The result was a highly impractical system in which traders were forced to have special handbooks to determine how much different banknotes deviated from each other in value. For example, a ten-dollar banknote issued in one state could be worth USD 9.90 in another state and USD 9.40 in a third (Gorton 2102, p. 22).

The triggering factor for introducing a system with federal, state-backed banknotes was the need to fund the American Civil War, which started in 1861. However, it is important to note that work on this legislation also had the central aim of resolving the problems that had previously existed with the private banknotes (Million 1894, p. 261). The result was the National Bank Act, which was implemented in two phases, 1863 and 1864. The state banks' right to freely issue banknotes was eliminated and many of them were forced to close. A new category of banks was created, national banks. These were privately owned but issued banknotes which were worth the same in all states and were backed by federal government bonds. The equal value of the banknotes was thus based on the legal requirement for them to be backed by risk-free government bonds. In other words, the federal government acted as guarantor for a safe payment system, even if no central bank was to exist in the United States for almost another fifty years (Gorton 2012, p. 19).

Over this period, another form of money became more important: deposits in transaction accounts that could be used to make payments by cheque. The general public now had confidence in the banknotes, as these were backed by the federal government, but, in less favourable times, there was a tendency towards distrust in the account money. In the decades after the introduction of the national banknotes, no fewer than seven crises occurred in which bank runs were a central element (Gorton 2012, pp. 21–23). A bank run here means that the general public wants to rapidly change insecure bank money for federal banknotes that were considered safe. The rationale for creating a central bank in the United States, with banknote monopoly, was therefore mainly provided by the need to create a central lender of last resort (Wood 2005, p. 158). In connection to the creation of the Federal Reserve the decision was also taken to dismantle the national bank system, and replace it with government bank notes issued by the Federal Reserve (Weyforth 1925). The last national bank notes however did not cease to circulate until the 1930s.

3 The Swedish period of private banknotes 1831–1904

The Riksbank was long the only bank in Sweden. Banknote-issuing private banks were therefore allowed by the Swedish Riksdag in 1824 as a conscious strategy to promote the growth of a banking system in Sweden. It took until 1831 for the first private bank to be started. After this, the number of private banks increased, finally totalling 26. These banks accepted deposits from

the general public, albeit on a very limited scale. Reasons for this included the limit placed on interest rates by older legislation on usury, which meant that the general public did not find depositing money particularly attractive. Consequently, from the start, issuing banknotes was the private banks' main source of funding (Lilja 2010, p. 47).

The Swedish system of 1831 to 1904 has been pointed out by researchers as a particularly successful example of the private issue of banknotes (Ögren 2006, pp. 69–70). But the system was not entirely private. On the contrary, banknotes from the private banks could be redeemed for Riksbank banknotes, namely government banknotes, which could, in turn, be redeemed for precious metals. The Riksbank thus issued banknotes which were then used as reserves by the private banks, on the basis of which they issued their own banknotes. The relationship between the Riksbank and the private banks thus had strong similarities with an early central bank system. Sweden differs here from the classic example of a free banking sector, for example the one in the United States before the National Bank Act, which issues banknotes on a profit-making basis with no link to government money. The amount of private banknotes in circulation periodically exceeded the amount of Riksbank notes largely because the banks collected these as reserves (Engdahl and Ögren 2009, p. 84). However, this legislation changed in 1873 when Sweden joined the gold standard in an economic union with Norway and Denmark. The private banknotes would now be directly redeemable against gold (Ögren 2006).

In addition, the system was under very strict government regulation. Permission to open a banknote-issuing bank was given by the central government and was issued very restrictively. The legislation was also clearly formulated to limit what we today call moral hazard: The banks should be organised like partnerships with unlimited economic responsibility and should not expect any government support in difficult periods (Jonung 2007 [1988], pp. 5–6).

In the second half of the 19th century, a gradual change took place, which changed the conditions for the banking sector and laid the basis for another means of payment than cash. This was the so-called deposit market revolution. In 1834, the total value of deposits constituted about 0.4 per cent of GDP. By 1913, it constituted 107 per cent of GDP (Lilja 2010, p. 42). This development is connected, above all, with industrialisation and increased incomes among households, but a contributory factor was the increasingly liberal financial legislation. Firstly, it became easier for new banks to set up. From the start, the Riksbank had a monopoly on issuing banknotes in Stockholm, but, in 1856, Stockholms Enskilda Bank was permitted to set up in Stockholm and compete directly with the Riksbank. Stockholms Enskilda Bank was also innovative in terms of attracting deposits (Lilja 2010, p. 48). In 1864, the legislation underwent further liberalisation. It became even easier to set up new banks, banks were permitted to be limited companies and the ceiling on interest rates was removed. The latter became important to make deposits more attractive for the general public (Jonung 2007 [1988], p. 12). The Riksbank's activity also declined in terms of lending, while that of private banks increased. In 1840, the Riksbank lent the equivalent of 8 per cent of GDP and the private banks lent around 2 per cent. In 1880, the corresponding figures were 2 per cent for the Riksbank and 20 per cent for private banks (Ögren 2010, p. 85). Overall, therefore, deposits started to become an increasingly important source of funding for individual banks, while issuing banknotes became less important. By the 1880s, the significance of banknotes as a source of funding for the banks had decreased heavily, compared with deposits (Brisman 1931, p. 204). At the same time, the Riksbank started to withdraw from the commercial operations it had historically been involved with.

3.1 The stability of private banknote issuance in Sweden

As was mentioned above, the period of private banknotes in Sweden has been pointed out as unusually stable. Unlike the United Kingdom and United States, for example, no banknote-issuing banks entered into bankruptcy. Different banknotes were also worth as much across

the entire country and similar practical problems in trade as in the United States therefore did not exist. There were probably several reasons for this.

Local monopolies

The private banks largely had monopolies in their region. The banknotes and the issuing bank also carried the region's name, as a rule. This means that each bank had stable demand for their banknotes and stable profits (Jonung 2007 [1988], p. 26). It may also have played a part in the banks not having any greater incentive to take risks to increase their profits. The regional division of the banks also probably meant that they had reliable information on the local economy and could therefore avoid lending money to doubtful borrowers. And, conversely, local bank customers knew the regional bank well. A comparison can also be made with the United States' banking laws, where absolutely anybody could open a bank without the state's approval as long as they complied with basic capital requirements (Gorton 2012, p. 12). Consequently, around 1850, there were about 1,500 private banks issuing banknotes in the United States, in comparison with a peak of 26 banks in Sweden. The lower number of banks, with their regional specialisations, may therefore also have contributed towards the banknotes not being considered as insecure as in the United States.

Unlimited economic responsibility

The banks' owners themselves had economic responsibility for their banks' losses. This probably contributed to a more risk-conscious governance of the banks' operations. The US system instead had limited economic responsibility for the owners (Gorton 2012, p. 13).

The redeemability for Riksbank banknotes

From 1821 until the introduction of the gold standard in 1873, private banknotes were redeemable for Riksbank banknotes (Ögren 2006). As the ultimate guarantor of their value, the Riksbank's credibility contributed to and was an important factor in the credibility of the private banknotes. After that, in conjunction with the gold standard and the subsequent new banking legislation from 1874, the banks were instead required to base their issuing of banknotes on gold. However, in practice, the banks preferred to hold Riksbank banknotes instead of gold, which suggests that Riksbank banknotes were considered to be as secure as gold (Ögren 2006, p. 76). The close link between the private banknotes and the Riksbank's banknotes, even when it did not exist in a legal sense, may therefore have further strengthened the credibility of the private banknotes. In comparison, the private US banknotes were redeemable for gold or silver and federal or state bonds were required as collateral for the issue of banknotes (Gorton 2012, p. 13). The problem was that several states suspended payments on their bonds and the value of the banks' collateral was also dependent on the value of the bonds. The result was that the backing of different banknotes was of varying strength so, in practice, the banknotes were not worth the same value (Gorton 2012, p. 17).

Clear rejection of government intervention

One possibility is that the formulation of the banking legislation of 1824, which stipulated that the banks should not expect any government assistance, may have contributed towards reducing the banks' risk propensity (Jonung 2007 [1988], p. 27). Despite this, the central government intervened on two occasions to support banks in crisis: in 1857 with Skånes Enskilda Bank and in 1878 with Stockholms Enskilda Bank. It can thus be questioned, at least after 1857, how great a role this legislation played. Paradoxically, however, it is possible that these government interventions increased confidence in the private banknotes – by demonstrating its willingness to support banks in crisis, the government, in practice, backed up the private banknotes.

Cooperation between the banks

The private banks developed a system for redeeming each other's banknotes. This may have made a further contribution to stability (Jonung 2007 [1988], p. 27). The opportunity to build up such a collaboration could, again, have been facilitated by there being so few banks.

In summary, then, there were several factors that could explain why the Swedish system of private banknote issuance was unusually stable. What most of these have in common is that they can be traced back to some form of government regulation or backing. Exactly how private the private banknotes in Sweden actually were is thus a matter for discussion.

4 The political process surrounding the banknote monopoly in Sweden

In Sweden, the profits from the issuance of banknotes, known as seigniorage, played an unusually important role in the discussion of the banknote monopoly. Starting in the 1840s, a political debate was held over how the profits from the issuance of banknotes should be allocated. As described in the section above, the central government stood for a large part of the private banknotes' credibility and, using today's terminology, it could be said that the private banks received an indirect government subsidy. In any case, the banknotes were seen by many as a common social benefit. Consequently, arguments were made in Riksdag motions from the 1860s aimed at giving the Riksbank a banknote monopoly, that the profit from issuance of bank notes should fall to the government instead of the bank owners (Brisman 1931, p. 195). Over the following decades, this matter was the subject of heated debate. Several proposals were tabled in the Riksdag, and voted down, before the final decision in 1897. Resistance was mainly justified by the argument that a monopoly would threaten or even wipe out the Swedish banks (Brisman 1931, p. 196).

The issue of a banknote monopoly led to the appointment of several committees. The most comprehensive of these, whose considerations formed the practical basis of the final decision, was the committee of inquiry of 1881 (Brisman 1931, p. 204). The committee studied experiences of banknote monopolies in other countries and compared them with the Swedish situation. It also noted that more or less all countries in Europe had already introduced banknote monopolies. It is therefore highly likely that the banknote monopoly was also seen as a necessary step to modernise the country and keep up with other countries. However, the committee of inquiry cited the following main reasons for a banknote monopoly:

- Banknotes shall be risk-free. It was emphasised that, even if the private banknotes
 were relatively secure, their security would be even higher if they were issued by a
 single institution (Bankkomitén 1883, p. 235).
- The issuance of banknotes must be uniform and without short-term profit motives.
 Otherwise, claimed the committee, there will be a risk that banknote issuance will be too extensive in good times and too restricted in bad times (Bankkomitén 1883, p. 236).
- Seigniorage is necessary to fund a central bank's social function so that it does not need to act according to a profit motive. Refining the central bank's function in society and clearly differentiating it from the private banks' commercial operations would provide it with greater possibilities to increase banknote issuance in bad times to stabilise the system. The accumulation of funds to the Riksbank would also give it greater possibilities to act forcefully when necessary (Bankkomitén 1883, p. 237).

The committee summarised its justification like this: 'The advantages of such a single-bank system – greater certainty for the redemption of banknotes, greater security due to the authorised restriction of the issue of banknotes, greater solidity and strength in dangerous times – are so great (...) that the committee has found, with no disagreement, that a single

banknote-issuing bank should be established as an objective for the development of the Swedish banking system' (Bankkomitén, 1883, p. 240).

The banknote monopoly was also linked to the Riksbank ceasing to offer the general public interest-bearing accounts. This was a leftover from the time when there were no private banking operations and the Riksbank conducted commercial banking activities with both deposits and lending (Fregert 2014, p. 361). The committee seems primarily to have seen the necessity in closing this activity as a form of risk minimisation. Firstly, there was the risk of lending to 'less good' borrowers and thus incurring a credit risk (Bankkomitén 1883, p. 238). Secondly, the committee considered that deposits in the Riksbank would comprise a further vulnerability in the event that depositors would want to withdraw their deposits rapidly in bad times. However, it is likely that there was also a political motive here: ensuring that the Riksbank did not compete with the private banks in banking operations would placate their advocates in the Riksdag, making them more inclined to accept a banknote monopoly.

The committee was clear that the system of private banknotes had functioned without any major problems and had been an important factor in funding the country's growing economy. However, it reached the conclusion that this system could not guarantee sufficient stability for the future: 'But the circumstance that a house has not burned in fifty years cannot be considered by anybody to assure it is completely fireproof....and the half-century over which our banks have stayed upright is a testimony that does not stretch far (...)' (Bankkomitén 1883, p. 271). The conclusion therefore was that the government had a responsibility to ensure that the risks were minimised for society as a whole: 'The obligation to safeguard the country against such a disaster is just as great before the misfortune has affected us as it would be after we have started to suffer from it (...)' (Bankkomitén 1883, p. 271).

5 Conclusions

The political discussion of the banknote monopoly in the second half of the 19th century focused on the principles for the financial system and the central bank's role in society. The background to this was a growing banking sector and a central bank that was more clearly assuming the character of a public authority. Private issue of banknotes in Sweden was less chaotic than in other countries. This was probably due to the stringent legislation and the Riksbank's role as an early, if undeveloped, central bank. However, the discussion of the banknote monopoly focused on guaranteeing long-term stability rather than rapidly managing an acute problem. This is similar to today's situation, where the question primarily addresses the central bank's ability to guarantee an effective and secure payment system in the long term.

For the commission of 1881, whose analysis formed the basis of the decision to introduce a banknote monopoly, the revenues from the issue of banknotes formed a central part in ensuring that the Riksbank had a sufficiently large income to take long-term decisions and had enough weight in the economy. One important difference from today's situation is therefore that the discussions of the e-krona have not focused on seigniorage, but primarily on the necessity of being able to maintain an efficient and secure payment system (Sveriges Riksbank 2017). This can probably be explained by the fact that the Riksbank also has other incomes and is now firmly rooted as a non-profit central government institution. However, the Riksbank's revenues have decreased, among other reasons due to declining cash usage. Hypothetically, this could lead to decreasing possibilities for the Riksbank to fulfil its role in the economy (see for instance af Jochnick 2015). This is connected with the distribution of work that ensued from the banknote monopoly – the private banks with the sole right to conduct banking operations and the Riksbank with the sole right to issue the primary means of payment – having eroded. As regards the general public's usage of means of payment, today's situation thereby resembles the period before the banknote monopoly.

To sum up, the historical banknote monopoly should be seen as a political decision establishing that the central bank is to have final responsibility for guaranteeing the stability of the financial system, together with the necessary funds. This should be seen as part of a greater political process in which the central banks gradually assumed the form they have today – clearly delimited against profit-making financial institutions and with an overall social responsibility. The banknote monopoly was therefore important for the central banks' identity and task in society as guarantor of a functioning monetary and payment system. This remains the central bank's main task, even if the tools for achieving this have changed since the introduction of the banknote monopoly. At the time of the banknote monopoly, it was not possible to predict that technological developments would result in deposits displacing cash. Today, this is a fact and the Riksbank needs to consider a digital alternative to banknotes and coins.

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