The political economy of the Riksbank

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What important changes have Sweden's monetary institutions – regarding price stability and a safe and efficient payment system – undergone over time, and what forces have driven these reforms? This article uses modern institutional economics as a starting point, where one regards institutional reforms as the result of large and important events, or of conflicts of interest. The presentation shows how the Riksbank's history over 350 years often repeats itself. With regard to the payment system, the question of competition or monopoly is repeated over and over again. With regard to price stability, the focus alternates between, on the one hand, the importance of a nominal anchor and, on the other hand, the short-run temptation to use the power over money.

1 Introduction

We have gathered here in the Riksdag, the Swedish parliament building, on this beautiful May morning to celebrate the Riksbank's 350th anniversary.

Over these 350 years, the Riksbank has been housed in four different buildings. Its history began with twelve years in Axel Oxenstierna's palace at Storkyrkobrinken in the old town, followed by 225 years in Södra Bankohuset at Järntorget, also in the old town. After that the Riksbank resided here in this building on Helgeandsholmen for several years – one of two good reasons for us to gather here – and finally it has been housed in more modern premises at Brunkebergstorg since 1976.

Now, I do not intend to discuss architectural design – other than in a figurative sense. For those who are curious about the history of Sveriges Riksbank are also curious about the design of Sweden's monetary institutions. When I say monetary institutions, I refer of course to the two objectives that are inscribed in the introductory paragraph of the Sveriges Riksbank Act. As we know, the objective of the Riksbank's activities is to maintain price stability. The Riksbank shall also promote a safe and efficient payment system. In daily speech, we refer to price stability and financial stability. Economics textbooks talk about two of the fundamental functions of money in the economy, namely to function as a store of value and as a means of payment.

History in terms of calendar or function There are different approaches to examining history. One is in terms of the calendar – to consider events on a time line. There is a large amount of material on the Riksbank's time line. The fact is that a great deal of this material came about in connection with earlier anniversaries. One interesting example is Sven Brisman's book from the 250th anniversary about the Riksbank's early history and David Davidson's review of this book in the journal Ekonomisk Tidskrift (Brisman 1918 and Davidson 1919, which I strongly recommend you to read!). A number of newer books also provide important insights. One is Gunnar Wetterberg's magnificent work Money and Power (Wetterberg 2009). Other gems include three books with the same editors, namely Rodney Edvinsson, Tor Jacobson and Daniel Waldenström, who are all present here today. The first two books are Sweden's historical monetary statistics and entail many useful readings

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(Edvinsson et al. 2010 and Edvinsson et al. 2014). The third book, which was written for this year's anniversary, will be presented to us this afternoon, when several of the authors speak about the contents (Edvinsson et al. 2018).

But one can also take a more functional approach to history. This is the angle I have chosen today. It involves asking the question: what driving forces do we see repeating themselves over time? To establish this angle, I shall take a stepping stone in modern institutional economics. Accordingly, institutional reforms arise either in connection with major and important events, shocks, in the surroundings and/or when new and growing conflicts of interest challenge the current order. As we will see, history repeats itself several times, albeit in different forms.

Institutions' driving forces It is possible to illustrate my approach by means of a simple matrix. Figure 1 illustrates that reforms in the institutions regarding price stability or the payment system will arise when the prevailing institutions and various challenges collide with one another. When I say institutions, I mean the existing regulatory frameworks or provisions, quite simply the prevailing system. When I say challenges, I mean important events or growing conflicts of interest. The challenges can have different origins: technological or financial innovations, events outside of Sweden's borders, or developments in domestic policy. We will see a number of collision points that will help us understand the development of the institutions.

Figure 1. Institutions and challenges

Challenges / Institutions	Innovations	Foreign developments	Domestic policy
Price stability			
Payment system			

2 Challenges to the payment system

Let me begin by looking at the payment system. All economies begin their economic transactions with some form of barter system. But this is quite inefficient. When the economy becomes more complex, society instead changes over to some form of coinage. In Sweden this took place during the Middle Ages, although different parts of the country still had different payment systems. As the state became stronger, the payment system became more uniform, even though several different types of coins made of both silver and copper still circulated. During the middle of the 17th century, for instance, ten Daler coins minted in copper plate and weighing 19.7 kg were in use. Obviously, this means of payment did not make for very smooth transactions, even if it was better than the barter system.

During this period, there were establishments on the continent known as exchange banks, where one could hand over one's coins and receive a certificate of deposit in one's hand that could then be redeemed at a later date. One of the most well-known exchange banks was in Amsterdam.

The birth of the Riksbank Meanwhile, Johan Palmstruch moved from Amsterdam to Sweden and received a special licence to open a bank in Stockholm in the 1650s. His

Stockholm Banco actually became the first bank in Europe to issue banknotes for fixed amounts, in connection with lending to the general public. These banknotes began to circulate in the economy and quickly became very popular. One example was a note that represented one hundred Daler in silver coins. That is, a piece of paper instead of 197 kg of copper. It is easy to see that this was an interesting innovation that many people were willing to adopt.

The Palmstruch bank did not last very long. We experienced Sweden's first banking crisis, the estates of the realm closed the bank, prosecuted Palmstruch and forbade the issuing of banknotes in the economy. But it did not take long before the estates opened the bank again. People remembered the bank and there was considerable demand for a smoother means of payment, as well as for deposits and lending. One could jokingly say that the state needed to borrow money, the aristocracy needed a private bank, the merchants needed a merchant bank and the priests blessed the whole idea. Even if the farmers did not want to climb on board until the 19th century, this meant that Stockholms Banco became a bank under parliament. And this is of course the second reason why today's anniversary celebration is located in the Riksdag.

The bank's position with regard to parliament has changed over the years and its relation to the Crown has varied in line with changes in the constitution. So if one wants to summarise the emergence of the Riksbank, one can say that Sweden's first banking crisis in the bank that issued Europe's first banknotes led to the establishment of the world's oldest central bank. What do you know!

The Riksbank's own innovations Time passed and many people were still interested in a smoother means of payment. Some improvement occurred when the Riksbank began to issue so-called transport bills in the early 18th century. These transport bills were certificates received when depositing copper or silver coins with the bank, showing the depositor's name. The bills could be used in payment, but their administration was rather complicated, one had to formally transfer the transport bill in a legal manner to another person with regard to the original amount of the deposit.

It was therefore a much greater leap forward when the Riksbank began to issue banknotes in fixed denominations in the 1740s. These were anonymous and needed no transfer to another named person. An important driver behind this innovation in the Age of Liberty was that the state needed money. The reigning Hat Party had started a war against Russia. This was very costly and the state borrowed from its own bank and used the new banknotes to buy goods.

The private banks' means of payment A century on, the economy was beginning to grow in earnest, first because of the Great Partition and later on because of industrialisation. As incomes increased, the first savings banks were established in the 1820s and the first commercial banks in the 1830s. Now not only the Riksbank but also the private commercial banks filled the demand for a means of payment. Figure 2 shows two banknotes: a one-krona banknote issued by the Riksbank and a hundred-krona banknote issued by Stockholms Enskilda Bank, both from the middle of the 1870s. Here the private banks became part of the payment system in parallel with the Riksbank, and they competed with the Riksbank not merely with regard to issuing banknotes, but also with regard to deposits and lending.

Figure 2. Private and public sector banknotes

Unclear division of responsibilities public – private But the roles of the private and public banking systems were not clear. The fact is that the relationship between the Riksbank and the private banks became a political bone of contention. The farmers – who at this time had a strong position among the estates of the realm, and later within the new parliament – tried to influence the Riksbank to block the expansion of the commercial banks. But the merchants and the new industrialists wanted to pave the way for these banks and made use of their influence on the government, which had power over economic policy and banking legislation. The separation of powers between the government and parliament in the 1809 constitution made it difficult to agree and to make progress.

But the confusion was dispersed to some extent with the 1897 Riksbank Act. Karl Langenskiöld was a very important figure in bringing about this legislation. He also became the first Riksbank Governor under the new Act. This meant that the Riksbank was given a monopoly on issuing banknotes and the country's only banknote office was located at Södra Bankohuset on Järntorget square in the old town. The Riksbank Act refined the division of labour with regard to the private banks. The Riksbank was given the sole right to issue banknotes and became a bank to the banks, rather than a bank to the general public.

History repeats itself Developments continued during the 20th century. We gained modern payment systems and later on enjoyed further innovations in the private banking-sector: cheques, a giro transfer system, and payment cards, all connected to private bank accounts. And the Riksbank became, as I mentioned before, bank to the banks and cleared transactions between the banks.

Gradually, we gained the latest technology, and are now facing increasing digitalisation of physical transactions. It is quite interesting to see a discussion strikingly similar to that held during the 19th century being replayed today. It applies to the same conflicts of interest and same questions of principle. Should there be competition or should there be a monopoly with regard to means of payment? In favour of competition is the fact that we want to take advantage of private innovations. In favour of a monopoly is the fact that we cannot be certain that a payment system in private banks will remain stable. It is thus not so easy to have a payment system that is both safe *and* efficient at the same time, despite the wording of the Sveriges Riksbank Act. Historically, the development of the institutions has rather been a case of balancing the objectives of safety and efficiency.

3 Banking crises and financial stability

Evidently, the safety of the banking system concerns banking regulations, bank crises, and financial stability, so let me say a few words about these too, before I move on to price stability.

Early crises A number of early banking crises struck the only existing bank at the time. As I mentioned, Sweden's first bank, Palmstruch's Stockholms Banco, had to close down and a ban on banknotes was introduced. The background to this was the first 'bank-run' crisis in 1664, when worried depositors flocked at the bank to withdraw their deposits. Their concern was that the bank had lent too much money and would not be able to pay back all the depositors. There was panic on the streets and the bank was forced to close down.

The Riksbank itself got to experience a bank crisis in connection with the Great Northern War. When Charles XII's war fortunes turned around at Poltava in 1709, those who had deposited money in the Riksbank became worried that they would not get their money back, as the bank had lent large sums to the king. They wanted their deposits returned and it was necessary to freeze deposits and lending and keep them frozen for a couple of decades.

Private bank crises Then we come to the 19th century, when private commercial banks in particular took on an important role in the funding of the new industrial companies, the new railways and other infrastructure projects. Moreover, there was a fairly large capital import during the first real wave of globalisation that swept across the world from approximately 1870. This was the time of the first private bank crises. Some of the crises were imported, others were home-made. Banks come under great stress. During the 'Panic of 1857', the authorities were forced to step in and save Skånska Banken, while during the 1878 railway crisis they had to give emergency liquidity assistance to Stockholms Enskilda Bank. The banks fared a little better during the 1890 Baring crisis, but the authorities were ready to provide credit nevertheless.

20th century regulation cycle In this period we see a number of new public authorities with tasks concerning financial supervision appear, but the division of responsibility between them and the Riksbank is not clear. This applies to Hypoteksbanken and to the Swedish National Debt Office. There are discussions on new regulations and new instruments. Who should provide emergency liquidity assistance? Who should act as 'lender of last resort'? Should the interest rate be used to cool down the economy when it becomes overheated? It was used as a short-run policy tool for the first time during the Baring crisis in 1890, when the discount rate was used to intervene.

One can describe the whole of the 20th century as a kind of cycle between bank crises and regulations. This was especially apparent during the first decade, when we had new banking crises in the years 1903 and 1907 and new banking acts in the years 1903 and 1907. The first proper supervisory authority, the Bank Inspection Board, was established in 1907.

A few decades later came the Kreuger crash and the Great Depression of the 1930s, which had a huge effect, not least psychologically. After the war, both the economy and the financial markets were regulated.

During the 1980s, a process of deregulation took place. One reason for this was the global wave of deregulation; when other countries were deregulating, Sweden's capital controls began to leak like a sieve. The controls became difficult to maintain and were phased out during the second half of the decade. Another reason is that the state needed to finance a large budget deficit within Sweden. This meant that the interest-rate regulation became unsustainable; one cannot force the banks to hold an unlimited amount of government bonds. So during a few years at the beginning of the 1980s, the domestic fixed-income market was set free from regulation.

In the wake of this deregulation came the 1990s domestic banking crisis. We also experienced the global financial crisis in the 2000s, which demonstrated how quickly contagion works in today's interconnected global economy. This led to a new discussion on banking regulation. The cycle between bank crises and regulation thus goes back and forth.

Summary Let us try to summarise the history of reforms to the payment-system institutions with the aid of Figure 3. We see a development towards more efficient payment systems, which are driven by technological or financial innovations in the private sector. However, the risk of crises in the private banking system entails other reforms that try to balance the requirement for a safe and efficient payment system. The same questions that arose with regard to issuing banknotes in the 19th century arise today with regard to digital payment systems.

Figure 3. Institutional reforms in the payment system

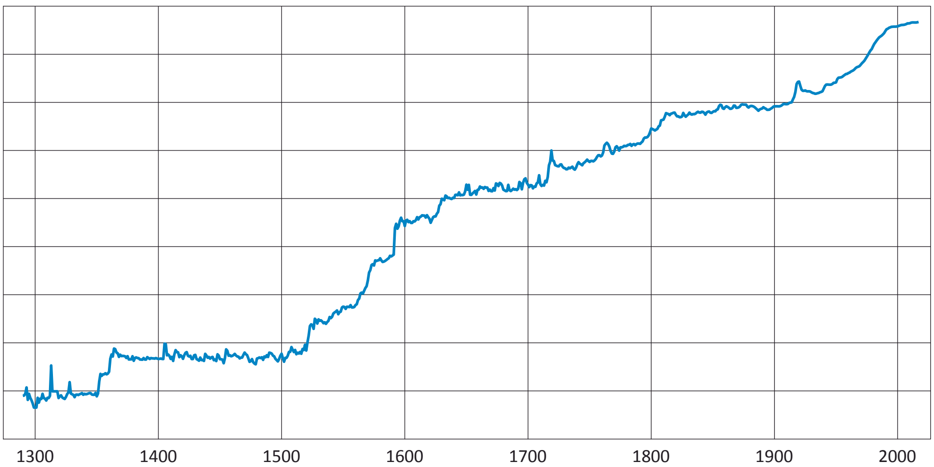
Challenges / Institutions	Innovations	Foreign developments	Domestic policy
Price stability			
Payment system			

4 The value of money and price stability

Let me now move on to the history of the institutions concerned with the value of money.

Price developments since 1290 The discussion of these becomes clearer as we can measure what we are talking about. Thanks to Rodney Edvinson's and Johan Söderberg's path-breaking research, we now have a price index that traces Swedish prices all the way back to 1290. Figure 4 shows this price index for every year from 1290 and onwards on a ratio scale. Here we can clearly see the long-term trends in the Swedish price level. An 'odd pattern' emerges across centuries. During the 14th century we see rising prices, partly due to the plague, while in the 15th century prices were more stable. The war-torn 16th century was a disaster, with substantial inflation, while the 17th century was once again marked by relatively stable prices. During the 18th century, prices rose again and in the 19th century they were stable. The 20th century was a new century of inflation. It still remains to be seen whether the 21st century will follow the same pattern with stable prices – at least, it has started well.

Figure 4. Price level: index since 1290

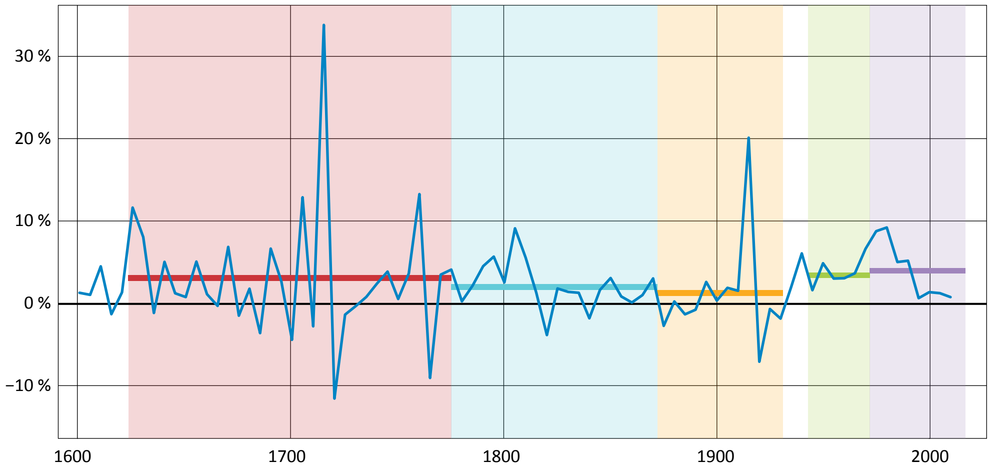


Source: Edvinsson and Söderberg (2010)

The average rate of inflation calculated over these 730 years is around 2.5 per cent, a figure which – interestingly enough – is fairly close to the current inflation target.

Inflation since 1600 If one is more interested in the short-run fluctuations in the value of money, it is easier to see them in a figure depicting the rate of inflation. Figure 5 shows average inflation during each five-year period from the year 1600 and onwards, so we can focus on the period that overlaps with the existence of the Riksbank. We see fairly substantial variations in the five-year inflation rate. The highest listing is 36 per cent while the lowest is −12 per cent. The obvious question is: What is the driving force behind these fluctuations in prices and inflation and how are they linked to the underlying institutions?

Figure 5. Swedish inflation 1600–2018
Five-year inflation



Note. The thick colored lines are period averages.
Sources: Edvinsson and Söderberg (2010) and the author's own calculations

Different standards An old Swedish institution attempts to anchor long-term price stability by choosing a suitable standard – attaching the value of money to a precious metal or a foreign currency by giving the citizens the right to redeem their domestic currency at a given rate. Of course, this requires a certain measure of state capacity. One can view the right to redeem as an attempt to tie oneself to the mast with a long-term regulation to credibly stabilise the value of money. This type of standard naturally becomes more stable – and more difficult to manipulate – if its anchor has a relative price that is determined outside of the country's borders.

Let us take a look at the standards that Sweden has adopted during this period. Each of them corresponds to one of the colourful fields in Figure 5. From 1624 to 1725 we had a kind of double metal standard that was based on the redemption of both silver and copper. In addition, there were two different coins in circulation: Marks and Dalers. This was a fairly complicated regime. Copper was not a random choice of anchor: during this era Sweden accounted for 50 per cent of the world production of copper, and from time to time also tried to push up the copper price, for example by trying to withdraw metal from commercial use by minting copper coins and then using the large copper plates. This hybrid regime lasted around 150 years, with an average inflation rate around 3.5 per cent.

In 1776, Gustav III and the Riksbank introduced a silver standard, which was to last around 100 years. The silver standard was linked to a coin reform where the Riksdaler became the only domestic currency. The rate of inflation during this century was around 2.5 per cent on average.

Then we had the gold standard in 1873. This was not a unilateral regime, but part of an international agreement, where around twenty of the most important economies all undertook to redeem their currencies for gold. The gold standard was also linked to the Scandinavian Monetary Union, where Sweden, Norway and Denmark all introduced Crowns and exchanged them one for one. The gold standard lasted until 1931 and the average rate of inflation during this time was down at 1.5 per cent.

In 1944 (we will temporarily skip the period in between), Sweden introduced a greenback regime. This was a dollar standard, or actually a reciprocal paper standard in that all of the Western world countries pegged their currencies to the US dollar, and the United States in turn allowed redemption for gold. The paper-note standard was part of the global Bretton-Woods Agreement that also included a number of other rules. For instance, the countries undertook not to change their exchange rates, as long as their economies were not in fundamental disequilibrium. The rate of inflation during this period was around 4 per cent, or 3.8 per cent to be more precise.

Following the breakdown of the Bretton-Woods system in 1973, we had a unilateral paper standard. Initially, we tried to peg the Swedish crown to various currencies, followed by a period with a floating exchange rate and an inflation target. The rate of inflation was now on average 4.5 per cent, with much higher inflation at the beginning of the period.

Rules with escape clauses One can describe Sweden's different standards as rule systems. But even the best rules fail to apply under all circumstances: there is always an escape clause to the rule. In this case, the exception reflects the sovereign's temptation to utilise his or her power to undermine the value of money, either to give the state income or to expand the economy. The rule concerning a long-term anchor aims to reduce the credibility problem linked to this temptation. But almost all our anchors in history have been raised and then dropped again. As Figure 5 shows, the result is a reasonably distinct inflation cycle.

High-inflation periods During the upswings of the inflation cycle, we observe episodes of higher inflation. These entail a departure from the right to redeem, expansion by minting new coins with a low metal content, printing new banknotes, or devaluation. Since the year 1700, we have seen five occasions with an inflation rate higher than 10 per cent (in terms of five-year averages).

The first and highest inflation came during the Great Northern War of 1700 to 1720. Charles XII minted new copper coins with a very low metal content and these were used to buy goods while the general public was demanding higher prices when selling their own goods to maintain the value of their incomes.

The second inflation episode occurred during the 1740s and 1750s when the Hat Party was at war against Russia and later against Pomerania. They borrowed from the Riksbank (and printed new banknotes) to finance the war and prices rose quite sharply.

The third episode took place in connection with Sweden's final period of war, from 1788 to 1814. During this time, the state was also printing banknotes, but in a new way. The King established the Swedish National Debt Office, and borrowed money from this new institution in exchange for new banknotes. However, these could not be redeemed for silver. On the other hand, the Riksbank was left alone, and its banknotes could still be redeemed for silver, although the Swedish National Debt Office's banknotes gradually took over from the Riksbank's notes.

The fourth period of high inflation was during the First World War, when the gold standard was put out of action, Swedish goods were in great demand and prices rose. Finally, we have the inflation period in the 1970s and 1980s when the government decided on repeated devaluations to prevent cost crises due to rapid domestic wage increases and price rises.

Costly deflation How can one restore credibility and stability in the wake of such inflationary impulses? It is tempting to try to drop anchor by restoring the earlier right to redeem. But what should one do about the exchange rate? Should one return it to the earlier peg, which could provide better credibility – if one succeeds? Or should one accommodate the rising prices through an internal devaluation and thus reduce the value of money?

To avoid costly deflation, the stabilisation of the economy often becomes a compromise between these courses of action. However, after the five high inflation episodes we encounter three marked deflation periods. The first of these took place in the 1730s, when Arvid Horn had to clean up after the many wars at the cost of a fairly heavy deflation. The second period came during the Age of Liberty in the 1760s, when the Caps took over from the Hat party. They had a secret plan to withdraw banknotes and then to reintroduce the Riksdaler copper value at its original level, but their plan was halted to avoid a deflation spiral. There were nevertheless widespread expectations of new price falls and these made their mark on Swedish poet Carl Michael Bellman's 24th epistle:

'Times are bad! People are sad - but with a lower nicker comes cheaper liquor'.

And finally, we have the period after the First World War, when the government brought Sweden back to the gold-standard regime, with the right to redeem at the earlier gold price. This led quickly to falling prices and the most severe depression in modern times.

1930s experiment Let me conclude by pointing to two periods of stabilisation that stand out. The first occurred when the Riksbank launched a new regime that had never been tried before, namely a paper note standard with a domestic rather than a foreign anchor. This began in 1931, when Sweden – unlike the monetary policy line following the First World War – did not return to the gold standard, but instead gave it up. As a result, the Krona was devalued and the interest rate cut to keep prices up, avoid deflation and the global depression as far as possible. The Riksbank became the first central bank to introduce a direct target aimed at a stable domestic price level, and this lasted until 1939.

Many economists were involved in the discussions leading up to this experiment, including Sweden's leading economists of the time – such as Cassel, Lindahl and Ohlin. With the 1920s deflation fresh in their memories, most commentators felt that a domestic anchor was a better means of anchoring the value of money. Irving Fisher, possibly the world's most famous economist at that point, describes this strategy as 'the Swedish experiment' in his book Stabilized Money (Fisher 1935), which deals with inflation and how to combat inflation – very interesting reading! To get the new regime to work, the authorities wanted to measure prices more often than once a year and they therefore began to gather a weekly price index. The task of putting this price index together fell to a young, promising economist named Dag Hammarskjöld, who later went on to pursue other endeavours.[1]

Inflation target The second stabilisation episode began in the year 1992, after two decades of inflation. Once again, the Riksbank was forced to give up its fixed exchange rate and once again a depression was lurking around the corner during the domestic crisis of the 1990s. Now Sweden introduced a floating exchange rate, and the Riksbank became one of the first central banks to formulate a domestic inflation target (after New Zealand, Canada and the United Kingdom, who had done so about a year earlier). This time, too, the reforms coincided with a discussion among academic economists, which this time was more international than domestic. After a few years, the Riksbank was also given formal legal independence, although it had been dependent de facto since 1993. There were discussions in Sweden regarding this institutional reform by the commission of inquiry into the Riksbank, on which I had the pleasure of being an expert.[2] But the EU Treaty also contained a requirement for central bank independence. Depending on who you are talking to, you will receive one of these explanations with regard to the Riksbank reform. One can possibly mention that the provision in the EU Treaty largely reflected arguments within the international academic discussions.

Summary Allow me to try to summarise the institutions surrounding the value of money with the aid of Figure 6. Over the past 350 years, the governing powers and the Riksbank have in different ways tried to anchor the value of money in the long term, often by pegging the value of money to a precious metal or to a foreign currency. These attempts at rulemaking reflect a latent credibility problem, which stems from domestic politics: the ruling powers' temptation to use their power over money to create income or to expand the economy. A number of exceptions to these rules give rise to inflation cycles. The institutional reforms in the area are often linked to foreign shocks or to reforms of global institutions.

1 Dag Hammarskjöld was Chairman of the Governing Council of the Riksbank 1941–1948, cabinet minister in the Swedish government and member of the Swedish Academy before serving as Secretary-General of the United Nations.

2 See SOU 1993:20.

Figure 6. Institutional reforms regarding the value of money

Challenges / Institutions	Innovations	Foreign developments	Domestic policy
Price stability			
Payment system			

5 The future history

What will be discussed at the Riksbank's 400th anniversary? I would not like to make a forecast about this right now, but the subject will most probably arise during the panel discussion that is the next point on the programme. But it would appear that a number of eternal questions will recur time after time in the discussions regarding the Riksbank. They will probably also crop up again over the coming 50 years. One such question concerns the balance between private and public sectors in the payment system. Given technological developments, this will certainly include the question whether we should have domestic or international payment systems, especially digital payment systems. Will we then see another nuance in the balance between a safe and an efficient payment system? It is very likely that we will see a new turn of the cycle between bank crises and bank regulations. I would also guess that the division of labour between the Riksbank and other public authorities will remain a bone of contention, not least in the current Riksbank Committee of inquiry. Another subject this committee is discussing is the independence of the central bank. However, the Riksbank has two related tasks: to safeguard the payment system and price stability. Can one be independent in one task but not in the other? How could that be achieved? Finally, we may perhaps have had a further exception from the long-term rule for price stability. I hope not. But if we rely on history, we usually see at least one inflation cycle in every monetary policy regime. So who knows?

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