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LENNART SCHÖN

From war economy to State debt policy

STOCKHOLM 1989

Preface

In 1989 the Swedish National Debt Office (Riksgäldskontoret) celebrates its 200th anniversary. To mark the occasion a jubilee book has been published in Swedish. Edited by Professor Erik Dahmén, it consists of a number of essays from various experts on economic history and is intended to place the periodically large-scale borrowing operations of the Swedish State in a wider context. Several facts not hitherto generally known have come to light in this publication.

To enable our foreign readers to become more familiar with the Debt Office and its history we take pleasure in presenting "FROM WAR ECONOMY TO STATE DEBT POLICY". Written by Doctor Lennart Schön of the Institute of Economic History at Lund University, it illustrates the development of the Debt Office over two centuries. It is a summary of the jubilee book but contains additional information concerning Debt Office activities in a broader economic perspective. The appendix deals with the more theoretical long-term aspects of State debt policy.

We hope this short history will be of service to financial institutions, researchers and other interested parties who wish to further their knowledge of the Swedish State debt and its management.

Stockholm, April 1989.

Sven Heurgren

Staffan Crona

The Swedish National Debt Office through two centuries

LENNART SCHÖN

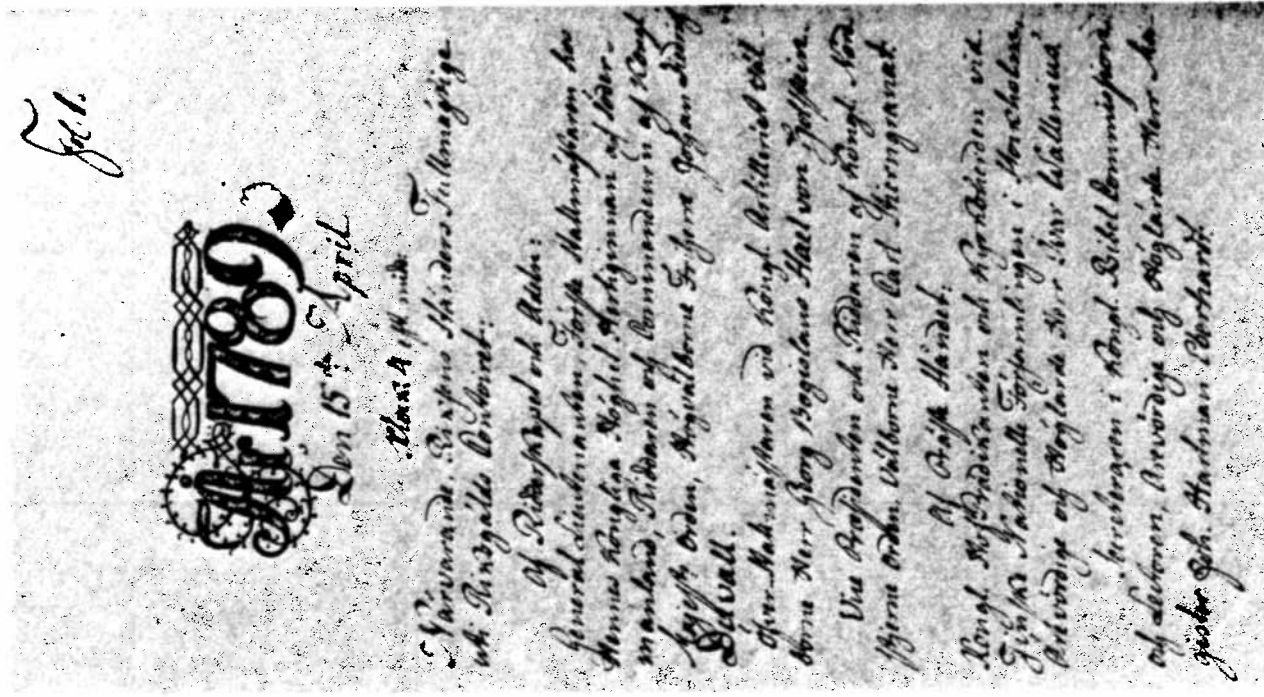
The Swedish National Debt Office (Riksgäldskontoret) was created in 1789 to borrow on behalf of the Kingdom of Sweden and manage the State debt. The reasons behind State borrowing have since then varied considerably. Financing of wars, industrialisation, defence expenditure, stabilisation of economic cycles as well as structural deficits in the budget and current account balance have made different demands on the Debt Office.

Borrowing opportunities and the consequences of borrowing have changed as society has progressed – from borrowing at the end of the 18th century in an agrarian society with its small monetary economy, to borrowing in the highly developed industrial society of today with a large public sector. This review of the National Debt Office 200 year history gives an outline of its activities against the background of economic development in Sweden.

The role played by the State in the economy has changed in many respects during the past 200 years. The history of State debt is of course connected to alterations in the position of the State. But it is mainly a question of how the State could or wished to finance its business. Common to all periods is that the State has had to borrow at times when expenditure exceeded revenue. Such borrowing has been based on fiscal policy, with a borrowing requirement incurred either by current operations or investments. Temporary deficits in State current business have occurred repeatedly and the Debt Office, during the greater part of its existence, has had to cover these with short-term loans. Long-term loans have also been resorted to on a few occasions for this purpose. At other times long-term loans were reserved to finance investments.

State borrowing is also significant to the monetary policy since it affects money supply and interest rate levels, and thereby capital markets and economic activity. These effects have become important ingredients in modern economic policy and borrowing has in some cases been made primarily for reasons of monetary policy.

Borrowing methods and debt management are known today as *State debt policy*. This influences money supply and interest rates as well as State expenditure for the debt – State finances.



Opening page of the Minutes of the First Meeting of the Board of Commissioners 15th April, 1789.

Photo: Kurt Eriksson. Swedish National Archives.

State debt policy is at present an important part of economic policy and a considerable number of borrowing instruments are available. Borrowing opportunities were more circumscribed when the National Debt Office was set up 200 years ago. In Sweden however there have always been strong ties between State borrowing, monetary systems, capital markets and economic development. State borrowing has often been a vital force behind long-term changes in capital markets but the relationship between State borrowing and the financial sector has, historically speaking, often been overlooked. This applies not least to external borrowing (i.e. imports of capital) which has taken place during a few periods in the history of the Debt Office.

A simple division of the economic consequences of State debt policy can be made by the terms expansionist and restrictive borrowing. It has been expansionist when it did not limit credit possibilities in the rest of the economy. Borrowing has then constituted an addition to the money supply and the State deficit an addition to the demand for goods and services in the economy. Restrictive borrowing on the other hand, limits other credit possibilities. The borrowing procedures adopted by the Debt Office—apart from the size of the amount which is determined by State finances and economic policy—have thus been of importance for the effects of the borrowing. Expansionist borrowing to increase money supply has largely occurred when the State deficit was financed abroad or via the printing of bank notes. Even short-term borrowing from banks can have a similar effect on money supply if government securities are regarded as liquid assets i. e. legal tender. Instruments of State indebtedness then become comparable to bank deposits and as such place no constraint on the granting of other credits. By stimulating domestic demand, expansionist debt policy—irrespective of whether loans are obtained for investment purposes or consumption—leads to a weakened current account balance. When funds are borrowed abroad however a corresponding inflow of foreign currency is brought about which means that a possible deficit in the balance of current payments can be covered at constant exchange rates. State indebtedness has at other times worked restrictively or contractively through budget surpluses, through repayment of foreign debt or through investing domestic debt in such a way that other credit granting was curbed. A restrictive debt policy thus limits domestic demand and strengthens the current account balance.

In the history of State indebtedness there have been long periods with either expansionist or restrictive emphasis. The background to reversals of policy has shifted and socio-economic consequences have also differed.

Debt Office operations have not however been exclusively determined by State finances and economic development. The Debt Office was placed under the Riksdag (the Swedish Parliament) which also appointed the Board of Commissioners. This resulted in an unusual situation—State debt administration was independent of both the Government and the Riksbank (The Bank of Sweden). The Debt Office constitutional position under the Riksdag side by side with the Crown, the Government and the Riksbank has influenced its field of activity. It may be of service to recall some memorable years.

When the National Debt Office was created in 1789 the Riksdag took over the guarantee and control of State debt. During the first half of the 19th century Debt Office operations were extended to increase the ascendancy of the Riksdag over the Crown. The 1809–1810 Riksdag decreed that part of the revenue from taxes should go to the Debt Office and distributed from there (the extra budget). The 1823 Riksdag decreed that the special granting and borrowing facilities hitherto administered by the Riksbank should be transferred to the Debt Office. This later became of considerable significance in connection with the construction of railways. In the latter half of the 19th century the position changed through an increased control by the Riksdag over the Government. In 1875 the extra budget was transferred from the Debt Office to the Crown. In the 1911 budget reform the borrowing budget was also inserted in the National Budget and Debt Office responsibilities were confined chiefly to debt management and borrowing to finance budget deficits.

The status of the Debt Office was further influenced by its relationship to the Riksbank. During most of the 19th century both these agencies worked largely independently of each other. The Riksbank was responsible for reserves of foreign currencies and precious metals but was not otherwise considered as a central bank. When the Debt Office increased external borrowing in the late 19th century, its cooperation with the Riksbank was reinforced, particularly as the latter had in 1897 become a central bank. From World War II onwards and with heightened pressure from the Ministry of Finance, cooperation was superseded by coordination between the two agencies and State debt policy in modern terms evolved. As a token of the increased weight of State debt policy the National Debt Office will from 1989 become a government agency under the Ministry of Finance.

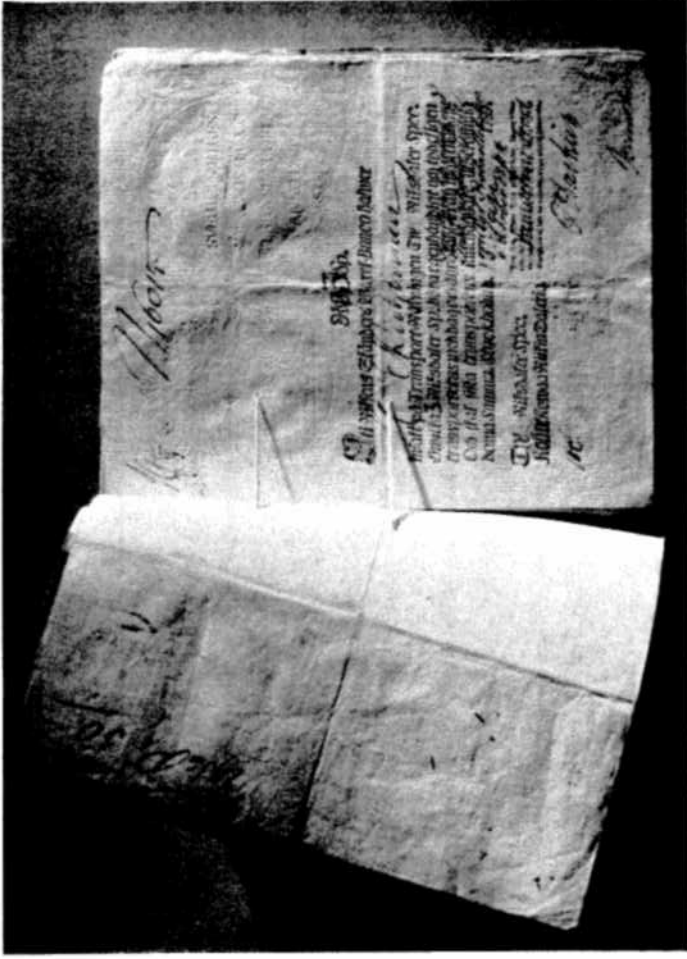
Wars, foreign debt and issue of bank notes

The National Debt Office was founded in 1789 to put State finances into good order. During most of the 18th century confusion had reigned with violent fluctuations in the value of money and a growing State debt. The Swedish State had both military and mercantilistic economic ambitions but were dependent on somewhat immobile resources in a largely self-subsistent agrarian society. When State expenditure rose, two solutions immediately presented themselves: either to borrow in Europe's big commercial cities or print bank notes and mint coins. Both expedients were used on several occasions.

On the death of Karl XII in 1718, the Riksdag became answerable for the State debt he left behind. A cautious restrictive policy to liquidate the debt was however broken off in the 1740s when the expansionist so-called Hatt party took over the leadership in the Riksdag, and State finances weakened once more. When the Hatts fell in 1765 there was a new reversal to a restrictive policy and at this time the management of State debt was transferred from the Riksdag to a section of the State administration called the National Debt Office. During the reign of Gustav III the management of this debt was taken over in 1777 by a National Debt Committee consisting of officials under the king. The financial situation was aggravated when Gustav III went to war with Russia in 1788. State finances were therefore leading questions in the 1789 Riksdag. By way of the Debt Office the Riksdag was entrusted with the responsibility and control of the State debt.

But this did not lead to any order in State finances. The same year the French Revolution broke out followed by one of Europe's long periods of war. Sweden became involved and the Debt Office financed war expenditure by increased borrowing. The 25-year-long European war also resulted in significant economic transformations in the country.

To cover the deficit in State finances the Debt Office during 1789–1802 issued a large volume of credit notes within the country while new external borrowings ceased from 1794. Credit notes soon became non-interest-bearing and in practice, but not formally, irredeemable, although they could be used as legal tender. Note-printing presses had to pay for the war. Both the Debt Office and the Riksbank became institutions for issuing money. Circulating with the silver coin Riksdaler banco was an increasing volume of Riksdaler Debt Office notes. The value of the latter declined and led to domestic rates of exchange between the two currencies. This was inconvenient for the State which was forced to accept the notes at their nominal value. A redemption at a discount of Debt



*Credit note 1789.
Debt Office archives.*

Office credit notes was held in 1803. This required a tight fiscal and monetary policy or the raising of loans and redemption was carried out only to a limited extent. The Finnish-Russian war of 1808–1809 once again led the Debt Office into an expansion of money supply resulting in a new high rate of inflation.

The 1809–1810 Riksdag—in the shadow of the loss of Finland—gave the Debt Office more responsibility as a tool for the Riksdag to control State expenditure. The deficit in State finances grew however, and much disarray was caused in the monetary system when the Debt Office issued further notes in 1812 just before the war against France.

By means of a succession of political decisions in the final stages of the European war era, the Swedish State became free of debt! The war with France was turned to account when a large slice of the foreign debt—to citizens in the “enemy country” and its possessions—was quite simply written off while the remainder was re-deemed by the sale of Guadaloupe. A few years after the war, in 1818, the domestic debt was also written off. Credit notes and bank notes were formally declared irredeemable and a paper standard was introduced. The financing of the State deficit with notes thus

led to a discontinuation of the free right of exchange rates and the direct link with foreign currencies was cut off.

War conditions in Europe and the strong expansionist government policy during the decades around the turn of the century contributed however to fundamental changes in the Swedish economy. The monetary economy and investments improved. Villages and land were parcelled out and market production and investment in new crops were encouraged, partly due to a stiff increase in the price of grain (a result of disturbances in international trade) and partly because tax pressure on land probably eased.

The period of inflation thus brought about a redistribution of income which favoured commercially-minded landowners and tenant farmers. In addition new credit opportunities became available in the form of discount houses. These were connected with the prosperity of Swedish commerce during the Napoleonic blockade of England which led to a lucrative transit trade of colonial products through western and southern Sweden. This profitable trade and the growing commercialism within agriculture helped to begin the construction of the State-funded Göta Canal in 1810.

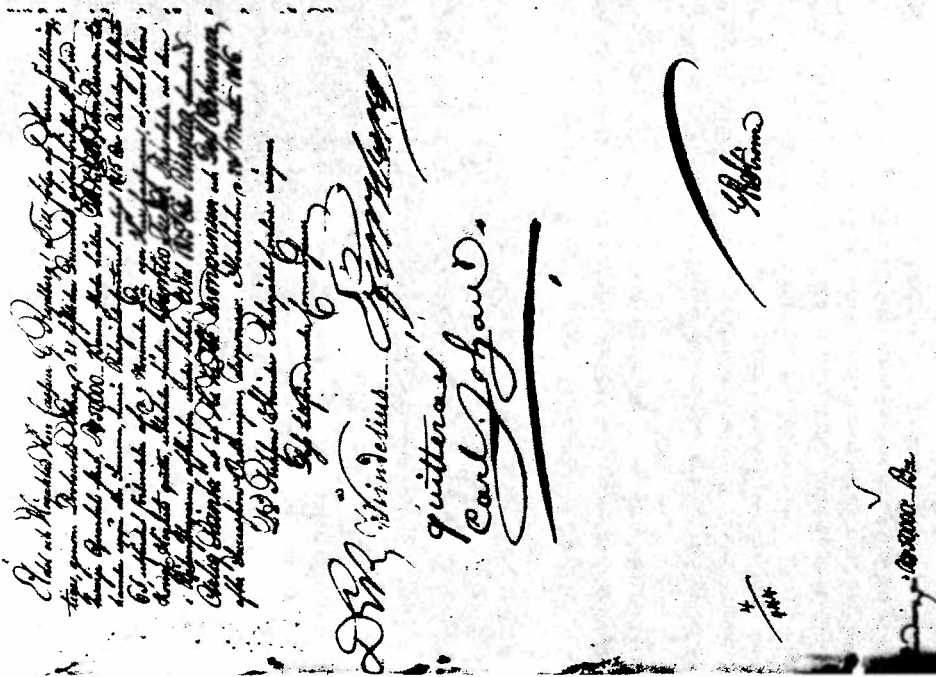
Post-war crisis and agricultural subsidies

With the coming of peace the position changed. World trade was normalised and from 1818 the Swedish State turned away from its earlier expansionist policy to a cautious restrictive policy. In the post-war crisis accompanied by falling prices many of those who had incurred debts during the inflationary boom encountered hardship. Bankruptcies followed. Discount houses collapsed and the capital market weakened. This formed the basis of National Debt Office activities for the coming decades.

One of its immediate assignments was to deal with the phasing out of private discount companies. Long-term guidelines were drawn up by the 1823 Riksdag. The problem was as follows. On one hand were the substantial credit requirements of market-oriented and indebted farmers—well represented in the Riksdag—whose investments gave long-term returns. The low price of grain also caused anxiety. Added to this was a need for long-term investment in infra-structure to facilitate domestic trade. On the other hand, unwillingness was expressed to incur new State debt. Instead another redemption at a discount was proposed, to restore silver mint standards, in order to obtain stability in price levels and a working system of credit. To achieve this, restrictions were needed on State expenditure and money supply.

The dilemma was resolved when the Debt Office—which guar-

Crown Prince Karl Johan's first receipt from the Guada-loupe fund 1816.
Photo: Kurt Eriksson.
Swedish National Archives.



anteed control by the Riksdag—took over the administration of State allocations and lending policies, chiefly directed at the canal construction and agrarian requirements. Funds for these were taken from State revenue in the form of taxes.

Via grants and loans, tax revenues were steered over to agriculture and transport. The work of the Debt Office can be seen as a substitute for a Swedish capital market at a time of early commer-

cialisation when basic industries lacked access to long-term credit. Borrowing to control monetary policy was approved by the Riksdag. The objective to return to a substantive monetary standard with negotiable notes brought foreign loans once more to the fore. But the Debt Office attempt at a so-called silver loan in 1830 failed. In 1834 riksdaler banco and riksdaler Debt Office became redeemable in silver according to the prevailing exchange rate (3/8 of their value when paper standards were introduced, an adaptation to a factual devaluation.) Debt Office notes were gradually withdrawn from circulation. The redemption at a discount of the notes made Swedish currency negotiable and the foundation was laid for free movements of capital and integration with international capital markets.

Development of credit markets

Swedish credit markets now became more organised and savings banks, private banks and mortgage societies founded during the 1830s increasingly replaced the Debt Office as creditors to agriculture.

By mortgage society issues of bonds to foreign countries in 1835, long-term capital was imported privately into Sweden. Credit granting by banks, partly with their own issues of notes, probably also acted as expansionist. The Riksdag restrictive fiscal and monetary policy, based on a restraining attitude to the State, and liberal opposition to funded State debt, was accordingly offset by market forces. The centre of gravity for growth was transferred from the State to the market.

Riksdag opposition to State debt did not however apply to short-term domestic loans. The Debt Office could for instance borrow these to finance budget deficits and temporary outlays caused by crop failures or epidemics. Bonds with short maturities were issued on a small scale in the 1820s and 1830s. The Debt Office however found it difficult to obtain purchasers for them – not surprising in view of the earlier treatment of the State debt.¹ Issues at the end of the 1840s were more successful. In that decade a new element was introduced to Debt Office operations: the 1840–1841 Riksdag decided that the Office should invest, for interest purposes, its cash assets in the capital market. This gave the Debt Office a central position in the Swedish capital market but also caused conflict with the Riksbank which managed the currency reserve. The first of these clashes arose at the end of the boom period 1848–1849 when exports stagnated and a scarcity of credit resulted. The Debt

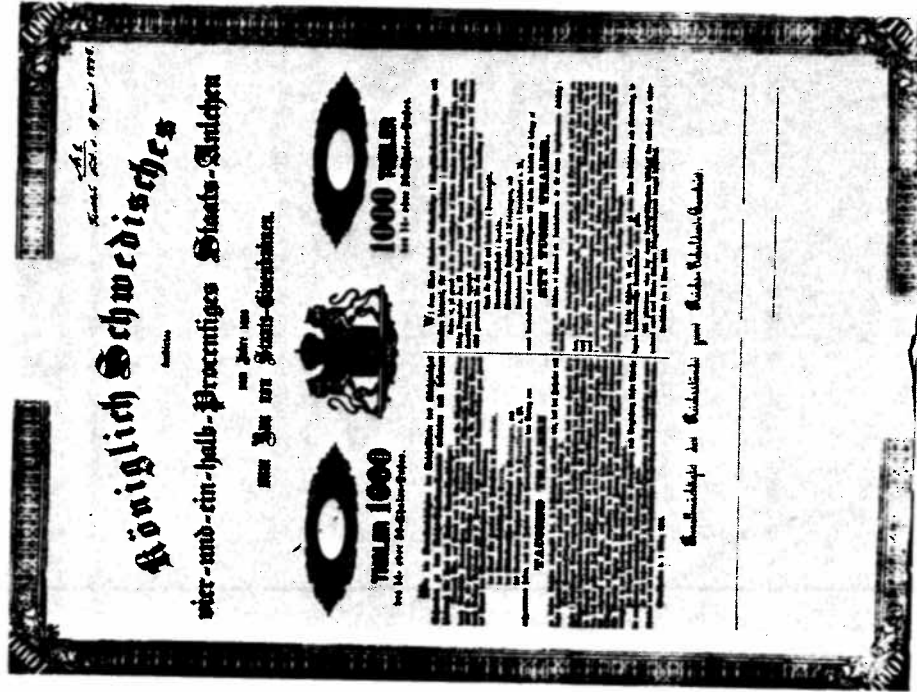
Office, by request of His Majesty the King – then boosted the economy by purchasing or pledging bonds, while the Riksbank withdrew outstanding loans to restrain demand and imports.

Both The National Debt Office and the Swedish economy now stood on the threshold of revolutionary innovations. During the 1830s and 1840s new forces had grown in the economy, originating chiefly in agriculture and home market industries. Agrarian and industrial capitalism expanded. Markets grew and industrial legislation was liberalised. The Riksdag restrictive attitude to State expenditure and indebtedness was one of the expressions of liberalism. The market economy broke through during the boom of the middle 1850s with a growing freer foreign trade. Paradoxically enough, this led to an enlargement of the activities of both the State and the Debt Office and a rapidly increasing State foreign debt.

Railway construction, industrialisation and foreign debt

The question of State indebtedness entered a new phase by the 1853–1854 Riksdag decision to speed up the construction of railways. Sweden is a sparsely populated country and the building of a railway system entailed comparatively large costs. It was also a question of long-term investment of great interest to the community but with an uncertain direct return. The State would therefore be responsible for the construction and running of main lines and facilitate the financing of supplementary private lines of local or commercial interest. The Debt Office was authorized to obtain funds for the financing of State railways and grant loans to private railways. To this end it was essential for the Debt Office to borrow heavily in long-term loans which could not be redeemed by the lender, i.e. funded loans. It soon became apparent that Debt Office bonds could not be placed in Sweden and the international capital market was sought. Riksdag opposition to State funded foreign debt evaporated perceptibly fast when confronted with the enormous investment activity caused by the railway construction.

The economic boom of the 1850 decade led to a rapid extension of the railways not only in Sweden but also on the Continent and to an increased spread of industrialisation. In several agrarian countries the need for investment now became urgent. In more advanced industrial countries such as England, France and Germany, savings increased in relation to the demand for capital for invest-



Bond from the first foreign railway loan 1858, printed in both Swedish and German.
Photo: Kurt Eriksson.
Swedish National Archives.

closer cooperation with Swedish commercial banks which, after interest rates had been decontrolled in the 1860s, were given new opportunities to operate in the credit market. This cooperation was of advantage to both sides and made it easier for the Debt Office to place its issues. The banks broadened their international contacts and earned brokerage fees. Credit markets became integrated.

State external debt increased dramatically from the end of the 1850s up to the end of the 1870s. This was a period of intensive railway construction. It was also an age of fast development in branches of Swedish industry based on raw materials, such as saw-mills, iron foundries and grain-centred agriculture. Three staple commodities, wood, iron and oats, dominated our exports.

Expansion was particularly strong during the 1870s. In addition to the financing of railway construction, the Debt Office now gave comprehensive short-term credit grants in the Swedish market. Imports of capital were obtained by large bond issues in foreign markets to cover requirements for planned investments. Before the funds were made available to the investors they could be lent out and the Debt Office could take advantage of interest rate differentials. This contributed to a pronounced easing of the credit market in Sweden during the economic upswing. The 1870s reflected too a period of expansion for new commercial banks as well as for traditional trading houses with a big increase in deposits and credit granting.

The import of capital and the new Debt Office profile in credit markets intensified the dialogue on the question of a central bank. During most of the 19th century Sweden had no real central bank. The Riksbank shouldered central bank responsibility only with regard to the foreign exchange reserve. It did not act as a bankers' bank but rather as a competitor to commercial banks. The Riksbank in consequence possessed weak instruments for controlling the volume of credit and money supply.

The Debt Office could to some extent be a "lender of last resort" by assisting bankers in straitened economic circumstances, but the granting of loans was decided by its own access to liquid assets. In the 1870s the Debt Office did at times place bonds abroad although it had adequate domestic supplies in the form of claims. Consideration for a debtor's situation then took precedence over the immediate mandate of the Debt Office which was to provide funds for objectives earmarked by the Riksdag and manage the State debt. Demands were now made for a closer coordination of the Riksbank and the National Debt Office.

The expansion of the 1870s ended in deep crisis during 1878-1879. This struck at trading houses and banks which had been over-optimistic in granting credits. It is also possible that private railway

ment purposes and a lower level of interest rates resulted. Capital markets developed and Swedish foreign borrowing became part of the rapid growth of international capital movements.

The new assignments however, caused headaches among the collegially organised Debt Office Board of Commissioners. Knowledge of international capital markets, secret negotiations and prompt decisions would now be demanded. A certain amount of criticism was also levelled at the Board's placement of the first loan, chiefly aimed at the German capital market. Added to this was the difficult situation of international capital markets in the 1850s and 1860s which resulted in recurring monetary crises.

Working formulae for the Debt Office now developed towards

construction was fomented too strongly by capital assets during the expansion and now intensified the crisis. The Debt Office rescued some of the most hard hit, among them Stockholms Enskilda Bank, by borrowing from abroad and then lending the money to the banks against their railway bonds.

Structural imbalance and restrictive policy in the 1880s

The crisis led to a more restrictive State debt policy. Railway construction slowed down appreciably in the 1880s and investments were largely financed by the budget. State debt decreased through amortisations. The substantial Debt Office borrowings during this decade were for refinancing earlier loans (converting) at a lower rate of interest. This handling of State debt was successful from the Debt Office point of view and gave rise to a favourable opinion of its operations. The Debt Office had now acquired a good reputation as a borrower in the international market. Well-managed debt commitments and active utilisation of the various possibilities in capital markets led to high creditworthiness and low interest costs, and gave openings for negotiating new loans. Swedish borrowing thus entailed comparatively low costs. The Debt Office was considered too as a pathfinder for other Swedish borrowers in international capital markets.

The financial sector was also consolidated during the 1880s. An earlier quantitative expansion of various types of banks was interrupted at the same time as resources – caused partly by the aforementioned crisis – were transferred from trading houses and money brokers to commercial banks. Furthermore a brake was put on production growth in former leading industries. This was an international phenomenon when the spread of industrialisation and communications led to stiffer competition and tumbling prices. Traditional branches of industry such as agriculture and ironworks found themselves in structural crises with bankruptcy and rationalisation as a result.

Despite these restrictive and repressive factors large imports of capital to Sweden continued through the 1880s, partly due to the need to finance interest costs for previous loans.

But net borrowing also continued, causing a considerable deficit in the current account balance. The former growth had engendered new expansionist forces bringing increased housing construction and municipal investment. Then the Allmänna Hypoteksbanken (General Mortgage Bank) borrowed large sums from abroad and

took over to a great extent the role of the Debt Office as a granter of short-term credit.

Within industry sights were being set on new and innovating industries still in an early stage of development. Deficit in the current account balance, high compared to the level of investment, was a sign of the structural economic crisis in which the old vigour of growth was weakened while new forces were not yet strong enough, but in which consumption could be maintained by external borrowing.

Breakthrough of the industrial society and new borrowing expansion

The middle of 1890s saw the breakthrough of the industrial society. New corporations were formed and old ones reorganised towards new products, new technology and new markets. The rapid growth of urban societies which was related to the decline of raw-material-based industrial production, played an important role both in market developments and in a generally high level of investment.

From 1899 the Debt Office borrowed substantial amounts from abroad and foreign indebtedness rose sharply until 1913. The French market continued to dominate for new loans as it did during the 1890s. It was characterised by a big supply of capital from savings and a preference for high creditworthiness and thereby lower interest rate requirements. These loans were not only used for railway construction but also for hydraulicpower and telecommunications, the manifestation of increasing industrialisation. In this the consolidated and now strongly expansionist commercial banks in Sweden played a decisive part by granting credits to all sectors of development. With the help of external loans, banks were on various occasions given short-term access to cash. The increasing integration of international capital markets (partly brought about by improved telecommunications) with reduced transaction costs led, however, to lower proceeds and less commission for dealers when bonds were issued. On the other hand the banks, through integration, were given more opportunities to borrow from abroad. In addition, French banks deposited money in Swedish bank accounts.

The status of the Debt Office was further altered by the decision in 1897 to make the Riksbank a real central bank. The latter received sole right for issuing notes at the same time as other banks were given the right to rediscount bills in the Riksbank. This move



Interior of the Debt Office Board of Commissioners assembly room in Hessenstein Palace on Riddarholmen. Photo 1906. Stockholm City Museum.

gave the Riksbank new controlling instruments for money supply and interest rates. Cooperation between the Debt Office and the new central bank now increased. Debt Office liquid funds were transferred by giro to the Riksbank even though its own lending operations continued on a smaller scale. New opportunities were presented for coordinating State long-term borrowing requirements (with the Riksbank short-term requirements conditioned by fluctuations in currency reserves) when the Debt Office in 1908 was given the right to issue short-term loans (Treasury bills) abroad – chiefly in the London money market – while marking time until a date became favourable for borrowing long-term.

The wave of industrialisation culminated in a period of economic prosperity between 1905 and 1907. These were also peak years for imports of capital. Thereafter the founding of new corporations fell back and investments were used for rationalisation and market expansion. Capital exports from industry began to develop at the same time as the Debt Office borrowed large sums from abroad.

The Swedish economy, for reasons of interest costs on foreign debt was as a whole an importer of capital until the outbreak of World War I.

Import of capital, industrialisation and indebtedness

Debt Office operations and State foreign indebtedness were crucial during industrialisation from the 1850's up to World War I both for financing railway construction and for further activating the credit market. Imports of capital at this time were of much greater scope than State foreign borrowing. Side by side with the Debt Office, municipalities, mortgage societies, mortgage banks, commercial banks and corporations participated in the import of capital. Recent calculations show that direct investment and the capital assets of immigrants also played a prominent part in the supply of capital. For almost 60 years deficit in the current account balance and interest costs for foreign loans were financed by import of capital. By allowing both investment and consumption to thrive without continual restraint, industrial growth and progress in Sweden were stimulated.

Domestic financing for infrastructure and industry would have involved a lower growth rate and an industrialisation entailing considerably greater economic and social convulsion. There would have been a more uneven distribution of income with a higher level of profits for corporations and a lower level of consumption among broad sections of the population, in particular the new working class, which would have weakened the incentive for change in both the labour and product markets. Moreover, domestic savings were, internationally speaking, placed to an exceptionally high degree in commercial bank deposit accounts. These savings provided the financial sector with substantial resources with which flexibility and innovations in production could be effected.

The heavy debt contracted by the State during the railway construction and industrialisation epoch caused some misgivings for the future. A government committee issued a report at the outbreak of World War I which discussed the principles for State borrowing. The norm that the State should borrow for productive purposes only, was strictly interpreted in so far as its direct revenue from investment should cover the cost of the loans.

When an investment was not expected to yield a corresponding income, budget funds were to be allocated to prevent a future rise in taxation. The factual outcome of State borrowing and investment was also calculated. During the first decades of State foreign

borrowing, costs for loans had exceeded income from investments. From the 1880s onwards the norm for borrowing had however been more stringently applied with a greater share of budget funds going to investments, resulting in a small annual surplus for the State. After the turn of the century the share of the loan in investment costs had again augmented, but investments were nevertheless calculated at giving an annual State surplus of a few million kronor. The report urged, however, moderation in investment programmes and restraint in borrowing so as not to jeopardize Swedish State high creditworthiness abroad.

It further recommended that a larger share of borrowing should be made within the country and that societies for pensions schemes, savings banks, insurance companies etc., should be obliged to place assets in government securities. The report thus advocated restrictiveness in State debt policy.

World War I—budget deficit and export of capital

The outbreak of war altered dramatically the implications of Swedish foreign debt and State borrowing. While hostilities intensified Swedish State borrowing requirements transformed the country into a capital exporting nation—the result of healthy industrial progress in the foregoing decades and the special situation occasioned by the war.

International price increases during 1914–1918 signified that the burden of Swedish foreign debt, accumulated in the industrialisation epoch, had in real terms become lighter. In addition, Swedish export prospects were bright while imports were held in check by the war. A considerable surplus in the current account balance ensued. On the other hand, the belligerents mobilised their assets of Swedish bonds to pay for imports. This applied chiefly to Germany from whom mortgage bonds, government securities and municipal bonds worth large amounts of money were re-purchased. Swedish exports of capital were by this means partly used to finance German warfare. Immediately after the Armistice further big re-purchases of government bonds were made in France to cover part of her import requirements and reconstruction programme. In the course of a few years Swedish securities could thus be re-purchased and the greater portion of foreign debt was liquidated. For the State, external debt was now transformed into domestic debt.

The war however, had caused large State budget deficits and rapidly increasing indebtedness. Over and above grants to State railways, the National Power Administration and the Telegraph Service, the Debt Office was forced to make substantial payments to additional State expenditure in order to uphold neutrality, and for relief work via wartime commissions to maintain supplies of food, fuel, raw materials and industrial products.

The circumstances of war brought close cooperation between the Debt Office and the Riksbank. Borrowing was now transacted in the Swedish market and new methods had to be found. Until 1918 the volume of temporary short-term loans increased dramatically. The Debt Office placed Treasury bills in the Riksbank and some of these were then transferred to commercial banks. The Debt Office concluded agreements with commercial banks for credits to wartime commissions.

The funded loans which grew until the post-war crisis of 1921, were taken over by a consortium consisting of Sweden's biggest commercial banks and the Riksbank. The exception was a dollar loan transacted in 1919 to cover the steep rise in imports caused by the need for companies to replenish their stocks directly after the war. To reach bigger sections of the population and encourage new savings a lottery bond loan was issued in 1918 which the Post Office helped to sell.

The ample money supply, State issues of bonds and the chance to re-purchase bonds from abroad led during the war to a heightened interest and a marked upswing of the trading of bonds in Sweden.

Inflation, speculation, deflation

Borrowing operations during the war were effected chiefly via the Riksbank and commercial banks. The method of borrowing by means of a large number of short-term loans only slightly restricted other bank credit grants and these brought a growing supply of money and inflation in their trail. Credit facilities, shortage of commodities and uncertainty about post-war developments created strong speculative features in the economy while the war was still on and during stockpiling in the first years after it had ceased. A rapid consolidation of the State floating debt and the restoration of a balanced State budget contributed however to the violent deflationary crisis which followed in 1920–1921.

Economic policy during the 1920s was characterised by the monetary policy aim to return to pre-war parity with gold which meant that, through a tight policy, costs and price reductions

should be achieved. After the heavy fall in prices at the outset of the 1920s a slower decline in price levels persisted during the decade.

For the Debt Office this implied only a minor new borrowing requirement and its operations came to be dominated by conversions to new and lower interests on loans previously transacted. The 1920s brought fierce international competition after the fast industrial expansion around the turn of the century, and a different world market with new industrial nations such as the U.S.A., Japan and Sweden. Structural problems were exceptionally complicated in the formerly dominating industrialised countries and caused stagnation there. In addition, international capital markets worked less well than before the war, partly because big industrial nations were anxious to defend their established but now enfeebled industries. As far as Sweden was concerned this was of minor immediate significance as she was now transformed into a net exporter of capital. Re-purchases of Swedish securities continued to some extent in the 1920s but capital exports came to consist increasingly of the purchase of foreign securities. The poorer agrarian societies of eastern and southern Europe began however to have defrayment problems and when borrowing possibilities petered out they suffered economic crises and political instability.

Swedish industries too had structural problems and were in need of rationalisation but at the same time new developments came into being. The situation was now very similar to that of the 1880s. Structural tension between the need to phase out and the need to develop was further aggravated by fluctuations in price levels and the restrictive economic policy. Many of the firms which had borrowed during the war and the first inflationary post-war period found times difficult or even impossible. Banks were forced by a stringent credit policy to file a bankruptcy order or take over the management and rationalisation of a failing company. Coincidentally, the banks themselves underwent a crisis and in the 1920s extensive steps for concentration and rationalisation were taken in both industry and the banking system.

1930s crisis and new economic policy

The deep depression, triggered off by the Wall Street crash of 1929, reached its nadir with several bank failures in Europe during 1931. It changed the basis for economic policy and provided new tasks for the Debt Office with increased State borrowing as a result.

During the 1931 crisis the Swedish foreign exchange reserve was exposed to great strain. To stay on the gold standard the Debt



Queue outside the Debt Office for 1936 Lottery bonds. Debt Office archives.

Office tried to negotiate an American loan. The attempt failed, Sweden went off the gold standard and the krona was depreciated. With hindsight the negative upshot of the attempted loan was shown to be fortunate for the Swedish economy. Depreciation of the krona became, internationally speaking, one of the reasons for the strong economic development in Sweden spanning the 1930s.

Another element in the crisis was the break-up of the Kreuger AB, consequent to the bank's deep commitment in the concern, led to Debt Office intervention with funds put at its disposal by the Riksbank against Treasury bonds. By this the threat of a bank crash in the Swedish economy was averted.

The crisis also marked the beginning of a new economic-political regime in Sweden, of an active stabilising fiscal policy linked to the Keynesian and so-called Stockholm School theories, represented politically mainly by the Labour Party. State borrowing became a part of this policy. Short-term loans could now be contracted and used to stimulate demand, investments and employment. Debt Office short-term borrowing increased strikingly, particularly be-

tween 1933 and 1935. Deficits in the State budget would be followed by surpluses when the economy improved. In 1938 short-term debt was in most respects eliminated.

Debt Office borrowing during the 1930s was however less than had been expected in the initial crisis period. The chief reason was that the Skandinaviska Kredit Company could repay its debt earlier than had been estimated and that economy-stimulating measures were of limited scope. The Swedish economy during the 1930s was, compared to the rest of the world, nevertheless marked by strong expansion, stable prices and the continuing favourable effects of depreciation. Greatly improved profitability in industry meant that investments increased at a faster rate than demand for credit and the credit market eased. There was a lively expansion in new firms, especially those tied to electrification, motor vehicles and housing construction. In these spheres which to a high degree coloured post-war growth in the industrial world, the Swedish economy was now among the leaders in the field.

World War II and monetary policy borrowing

The Second World War entailed a substantial increase in Debt Office borrowing. At the same time the role of State borrowing in economic policy and the status of the Debt Office changed. The background for this was the new economic policy which was introduced only to a limited extent in the 1930s, and the experience gained from State borrowing during World War I.

Apart from the first years of exaggerated imports and strengthening of defences, the Swedish economy in World War II was marked by a considerable surplus of liquid assets in relation to opportunities for investment. State borrowing was thus given an extended role as a means for attaining a series of economic-political objectives and Debt Office borrowing became mainly subordinate to the Riksbank and Ministry of Finance. Loans were not only to be used to finance increased State expenditure for defence purposes but also to stabilise interest rates and increase savings. Alongside with other measures such as price and wage freezes, full employment and stable prices were to be achieved.

State borrowing was therefore more sweeping than was in fact necessary to finance increased expenditure. Furthermore the Riksbank was a deciding factor for the timing, volume and terms of Debt Office loan issues. These issues were mostly justified for stabilising or controlling the price trends of bonds, placement re-

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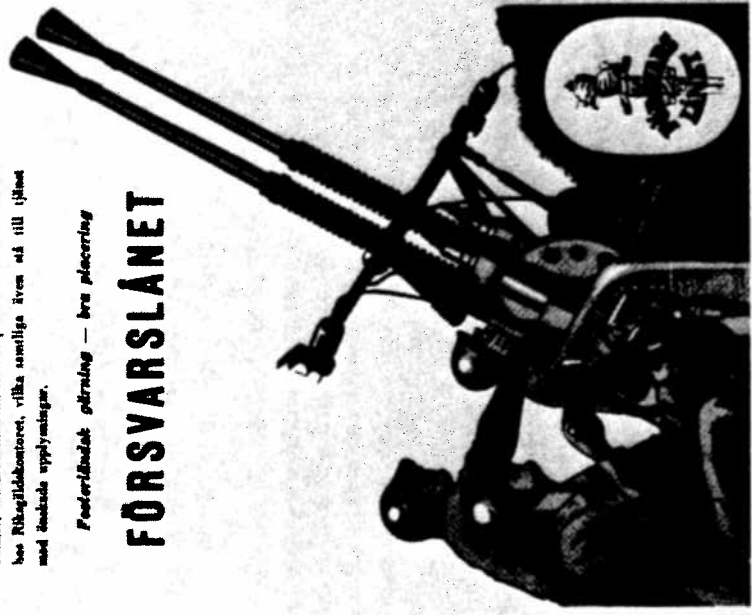
De högpresterade Beforskanonen vi redan ha och de som skola ytterligare anskaffas kostar stora pengar. Staten måste betala dem — med Din ekonomiska hjälp.

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*Propaganda for Defence Loans made use of the good reputation enjoyed by the Swedish arms industry.
Photo: Kurt Eriksson.
Swedish National Archives.*

quirements in market institutions and levels of savings. Loans from banks were to be restricted and Debt Office borrowing was to be increasingly aimed at the general public to encourage new savings. The last-mentioned loans were marketed with nationalist propaganda for the defence of the realm.

Behind the scenes of Debt Office borrowing lay a fundamental clash between on one hand the Debt Office Board of Commissioners, and on the other the Riksbank and Ministry of Finance, concerning the role of State borrowing in capital markets. A majority of the Board regarded the Debt Office's main task as a mandate to protect the interests of State borrowing and thereby maintain a stable relationship with the big lenders, above all the commercial banks, on terms which guaranteed good opportunities for placing loans. Provision for borrowing should be adapted to market developments. The Riksbank and the Ministry of Finance on the other hand, stressed the possibilities of using the position of the State as a predominant borrower to control the market, in conformity with economic-political objectives. The Labour Party also wished to restrict the influence of commercial banks on State borrowing.

Post-war expansion and business cycle stabilisation

When hostilities ceased there was widespread apprehension that the history of post-World War I was in danger of being repeated with new deflationary crises after a short inflationary boom. These misgivings were not confirmed. Instead there followed an unprecedented period of strong and continuous growth over the following 30 years. From an economic-political standpoint pre-requisites altered when the experience of the period between the two wars gave rise to new regimes, both internationally with measures to increase flexibility in capital and commodity markets, and nationally through an active fiscal policy.

The basis for growth lay however, in vigorous long-term progressive forces within the economy. Not only post-war reconstruction but also the propagation of new technology, new products and new industries, new infrastructure for housing, communications and new services, created a climate for expansion in Sweden as they did in most of the world.

State borrowing during these 30 years was comparatively modest. The change in status of the Debt Office and the alignment of State debt policy entailed by World War II, remained much the same until 1982. Debt policy as an economic-political instrument

was mainly conducted by the Riksbank. A contributory factor to this was a regulation of the credit market.

At the end of the war State debt to corporations and commercial banks was chiefly in short-term loans or loans with early maturities. This resulted in high liquidity in the economy which only decreased slowly. During the expansion of the 1950s with investments in the public sector, State borrowing increased at the same time as the borrowing requirements of industry augmented. The low interest rate policy gave rise to an excess demand for credit and led to the regulation of the market. Housing construction and State borrowing were given priority. As a result of competition with the housing sector for long-term loans the Debt Office placed an increasing share of its borrowing in short-term loans in the banking sector. State debt policy thus appeared expansionist during the 1950s.

In the 1960s several signs showed that the developing vigours in the economy had weakened. The long period of post-war growth in industrial countries now led to stiff international competition. Profits in industry declined and investments were aimed at rationalisation, characteristics which were reinforced during the 1960s and the beginning of the 1970s. The rise in productivity in industry and the expansion of the public sector meant however a continued high rate of growth.

State debt policy too became more restrictive during the sixties and the debt increased at a slow rate. From 1960 more money was saved through the AP-fond (National Pensions Insurance Fund) which gave new openings for controlling credits. State borrowing requirements were chiefly met by placements of priority bonds in the AP-fond and insurance companies. Placing of government securities in the Riksbank followed the rate of growth of bank note volume and GDP while bank holdings of securities became less significant. There was also some borrowing from households via lottery bonds and savings certificates.

Debt Office placements of government securities were thus supported by the Riksbank regulation of the credit market and could, because of their small scope be made without too much difficulty. State borrowing for economic-political purposes was directed at stabilising business cycles. In time of recession the budget deficit was financed by Treasury bills within the monetary sector and liquidity in the economy was increased. In times of an economic upswing long-term loans were issued while Treasury bills were redeemed in conjunction with a budget surplus.

Through currency exchange controls the Riksbank could prevent the flow of capital into and out of the country from counteracting the objectives of monetary policy. The oil price shock in 1973



The first Debt Office bond loan in the European market was signed in April 1977 by, from right to left, Director Rolf Diel, Dresdner Bank, Chairman of the Debt Office Board of Commissioners Gunnar Hålen, Director General of the Debt Office Lars Kålderén, and Secretary to the Debt Office Board Ingemar Jansson.

followed by a large deficit in the current account balance gave firms and municipalities the chance to borrow abroad. External borrowing would mitigate the immediate effects of disturbances in foreign trade which were considered temporary.

1970s crisis, budget deficit and external borrowing

From 1977 Swedish State debt policy changed dramatically. Latent structural crises were revealed in industry while the deficit in the current account balance and State budget showed growing deficits. Economic policy aspects of State borrowing now had to give way to the dominant need for financing deficits in the budget and deficit in the current account balance.

There were several similarities with events of the 1880s and 1920s which were followed by international crises at the beginning of the 1890s and 1930s respectively. Post-war expansion was accompanied by widespread industrialisation in so-called NICs which

attracted capital to these countries. The oil price shock was another, more telling, expression of changing international circumstances. In some sectors of industry this led to greatly increased competition and reduced profits. As opposed to the earlier periods of rationalisation and crises the Swedish economy now found itself on a par with the crises facing older industrial nations—chiefly in the forestry, steel and shipbuilding industries.

Unlike those of the past, economic structural crises were this time directly linked to State finances—a result of post-war growth in the public sector. In times gone by it was the banking system which decided whether firms should be closed down or given credit. These decisions now became political issues and the Debt Office was immediately involved. Side by side with increased borrowing requirements for the budget deficit the Debt Office took on the task of administering State aid in the form of credit guarantees to the hard-hit shipping and shipbuilding industries.

The combination of big deficits in the current account balance and budget resulted in permission for the Debt Office to borrow abroad. State external debt would counteract rising interest rates in the Swedish credit market and check a steep decline in investments, and private firms would be encouraged to borrow abroad. Furthermore foreign loans would strengthen the Riksbank foreign exchange reserve.

Debt Office external borrowing coincided with great changes in international capital markets. Post-war years had been typified by heavily controlled domestic and international movements of capital. The latter was on a small scale between industrial countries. The oil price shock and the resulting imbalance in international trade caused a big demand for loans and a supply through the oil producing countries' surpluses which were usually channelled into international banking systems. As during the 19th century "railway epoch"—but now at a much faster rate—these imbalances between the demand for credit and savings led to the activation, integration and transformation of the international financial sector.

External borrowing made new claims on the Debt Office. Such borrowing required continual monitoring of rapidly changing international markets. Initially the loans were planned in detail in close cooperation between the Ministry of Finance, the Riksbank and the Debt Office. Gradually when routines and competence developed, control by the Ministry and Riksbank of Debt Office transactions was changed to apply to more overall questions of the direction external borrowing should take.

Borrowing was aimed chiefly at the U.S. and Japanese bond markets which were only open to State borrowers, and in this way the Debt Office was able to avoid competing with Swedish private

borrowers. The increasing deficit—particularly after the second oil price shock in 1979—forced new fast borrowing operations and led to the use of new markets. The substantial amounts borrowed around 1980 caused anxiety among foreign lenders. The Swedish State was warned to follow a more restrictive economic policy to preserve its high creditworthiness.

Pre-requisites for domestic borrowing also altered. State borrowing requirements within the country grew at a faster rate than deposits in the AP-fond and insurance companies. This resulted in heavily increased borrowing in the banking sector, which was supported by Riksbank demands to invest in government securities. At the same time a change-over to shorter maturities took place. To prevent an explosive increase in money supply, short-term borrowing in the banking sector was combined with restrictions on bank loans through stringent liquidity quotas.

Growing State borrowing requirements and the necessary heavily expansionist borrowing abroad and in banks, led to restrictions in the form of increased control of the credit market. This market from the end of the 1970s deteriorated as an allocation instrument for production resources and caused a serious problem in a period of industrial structural crises when the need for flexibility and innovation in production was magnified. The combination of inflation, an unsatisfactory market for assessing different firms and quickly changing conditions for production, laid the foundation for an economy in which financial mobility was achieved by great changes in property and income distribution.

The immediate effects of the debt policy between 1977 and 1982 were thus rising apprehension among foreign lenders and an impaired domestic credit market. A comparatively expansionist policy and free foreign trade combined with external borrowing to finance the budget deficit may, however, have contributed to a strengthening of the pressure for change in the economy pressure towards the liquidation or development of a company. World market prices were allowed to break through even if the effects were mitigated by temporary support to industry. Structural adjustments in the shipbuilding and steel industries were thus more far-reaching and occurred more rapidly in Sweden than in other industrial countries. Comparisons may also be made with external borrowing in, for instance, the 1880s. Borrowing abroad at that time meant that growth of consumption could be maintained during a period of recession and structural changes in industry. This reinforced the dynamics of change during the 1890s. The long-term consequences of present-day external borrowing, which would otherwise have been replaced by a policy of restraint, remain to be seen.

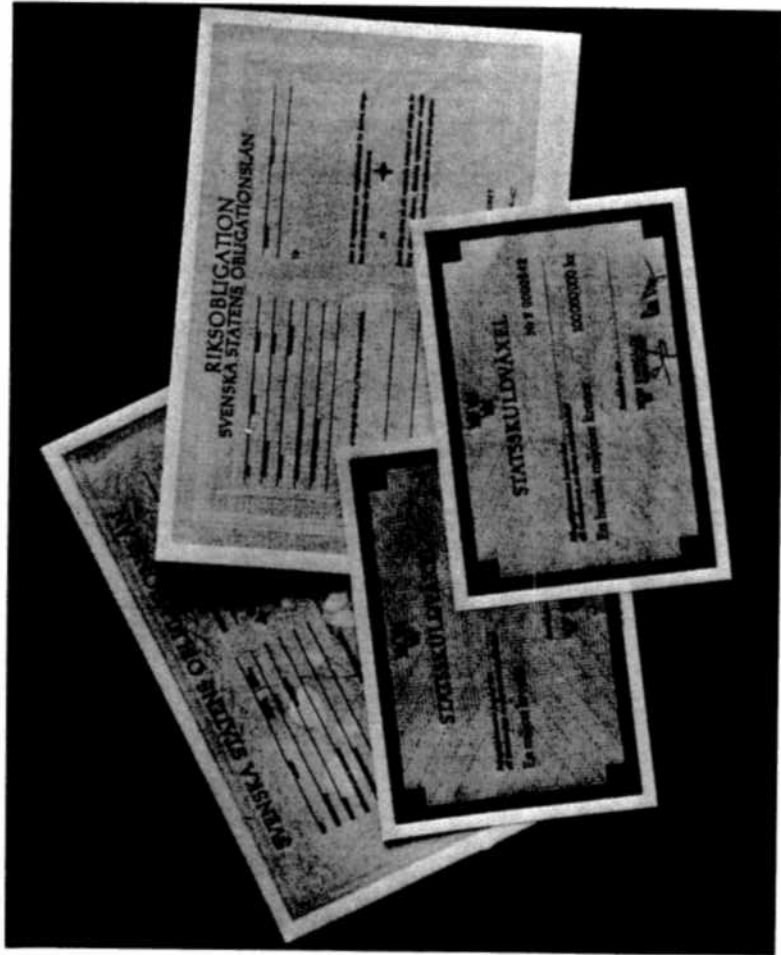
Restrictiveness and deregulation

From 1982 a series of changes occurred which probably marked a dividing line in Swedish economic development comparable to that of 50 years earlier. The substantial devaluations of 1931 and 1982 form a striking parallel. These devaluations increased profitability for the export industry and for the domestic industry competing with imports. If devaluation stimulates innovations in production—and is not used solely as a temporary cover—more competitive structures can be created. In the 1930s strong expansionist forces in the economy worked towards this aim which may prove to be the case for the 1980s. The acute industrial structural crises were largely over by 1982 and room for new expansion increased. Moreover, State debt policy now changed—partly due to the effects of devaluation—and contributed to a deregulating of the credit market, giving better opportunities for flexibility and renewal in the economy.

Devaluation in autumn 1982 and the ensuing international upswing in 1983 led to an improved current account balance and 1984 even showed a surplus. Justification for new State external borrowing thus disappeared. Devaluation, however, incurred a rise in State foreign debt interest expenditure, at the same time as return on capital and liquidity of companies increased. Debt Office operations from 1983 were now pointed at fresh objectives both internationally and within the country.

Its work in foreign markets has been mainly active debt management in a period when international financial markets have been increasingly integrated and deregulated, when interest rate levels have fallen and when new borrowing instruments have developed, in several cases with the Debt Office as the innovator. Older loans have been replaced by new ones at lower interest rates, both long-term and short-term borrowings have been transacted and currency swaps have been used to change the interest rates and currency exposure of the foreign debt. Active debt management has thus meant that earlier loans were redistributed with regard to currency, repayment periods and interest rate terms, and State costs for foreign debt have been reduced while the risks have been spread out. As was the case in the 1880s—when similar consolidatory debt management was carried out—the Kingdom of Sweden has again won recognition as one of the shrewdest borrowers in the international market.

Increased State borrowing requirements within the country have had considerable repercussions in the domestic credit market and on monetary policy. Debt Office borrowing became more and more targetted at the large liquid assets of companies and municipi-



Examples of new types of borrowing instruments in the domestic market during the 1980s: Debt Office archives.

palties. Borrowing therefore had to be adapted to conditions on the free credit market and new borrowing instruments evolved. Treasury discount notes were introduced in 1982 to fit into the investment needs of companies. The following year Treasury notes were introduced aiming at societies and insurance companies. The terms for these new loan instruments followed credit market developments. Borrowing from households was also restored in 1984 through the National Savings System. Further progress towards market conformity was made in 1986 when the obligation to invest in government securities for the AP-fond and insurance companies was abolished.

The big increase in borrowing from companies and households brought about a restriction in bank deposits and credit expansion. Together with changes in foreign borrowing patterns this meant a marked reversal in State debt policy from expansionist to restrictive. The reversal may of course be viewed from business cycle aspects but it can even signify a different long-term direction of debt policy. These questions will be further discussed in the appendix.

National Debt Office new status

From a monetary policy point of view, changes in State debt policy have meant that general controlling instruments such as interest rate policy have to a large extent replaced regulations, and Riksbank market operations have been directed towards a growing secondary market for government securities with varying maturities. Thus the need has lessened for direct control of issues of securities reflecting the aims of monetary policy.

This has given the Debt Office better opportunities as a market operator to favour primary aims such as low borrowing costs for the State and the preservation of well-functioning markets for government securities. Hence the Debt Office at the outset of the 1980s returned to the position the majority of its Board of Commissioners sought during the clashes on new economic policies in the course of World War II.

During the latest decade State debt policy has at the same time carried more weight from both fiscal and monetary policy aspects. This will be written into the Constitution when in 1989 the National Debt Office ceases to be an agency of the Riksdag and becomes a government agency under the Ministry of Finance.

Appendix

Expansive and restrictive State debt policy in a structural model*

In this survey, Swedish State debt policy has in different periods been characterized as expansive or restrictive according to its impact on money supply and the demand for goods and services. Thus, a change in the volume and composition of the State debt is one factor behind changes in the Swedish price level. The relation of State debt policy to the development of prices provides a starting point for a discussion of the debt policy in a wider, long-term context of economic development.

Changes in the price level 1789–1988

During the two centuries since the creation of the National Debt Office the Swedish price level has risen a hundredfold (figure 1). A comparison of price levels in the 1780s and the 1980s is, however, of minor interest. More significant to the present analysis, is that two periods of long duration saw steady price increases—the period up to 1810 and from the First World War until today. They encompass almost a century of long-term price stability. These periods were institutionally different with different conditions for debt policy. During the epoch of price stability, Sweden and many other countries aimed at and achieved a monetary metal standard, which enforced harsh restrictions on economic policy. Expansive debt policy which resulted in deficits in the current account balance, required financing by loans in foreign currency. During the epochs of price increase the scope for national economic policy was greater and goals other than price stability had high priority. Imbalances in foreign trade were regulated through alterations in exchange rates.

Because of differences in the institutional framework, restrictive debt policy may lead in one epoch to deflation and in another to a lower rate of inflation. Thus, a discussion of debt policy and prices should originate in yearly deviations of prices from their long-term development (figure 2).

* The structural analysis in this appendix is based on results within the research programme of structural economics at the Department of Economic History, Lund University. The research is supported financially by the Bank of Sweden Tercenary Foundation.

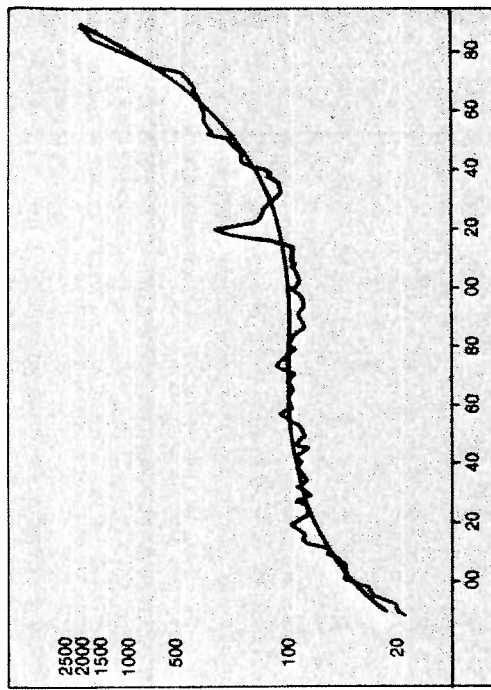


Figure 1
A Swedish price index (industrial production) 1789–1988. Annual observations and trend. Price level 1910/12=100. Log scale.
Sources:
1789–1800: Jörberg, L., *A History of Prices in Sweden 1732–1914*. Lund 1972.
1800–1980: Schön, L., *Historiska nationalräkenskaper för Sverige: Industri och hantverk 1800–1980*. Lund 1988.
1980–1988: SCB, *Statistiska meddelanden ser. P*.

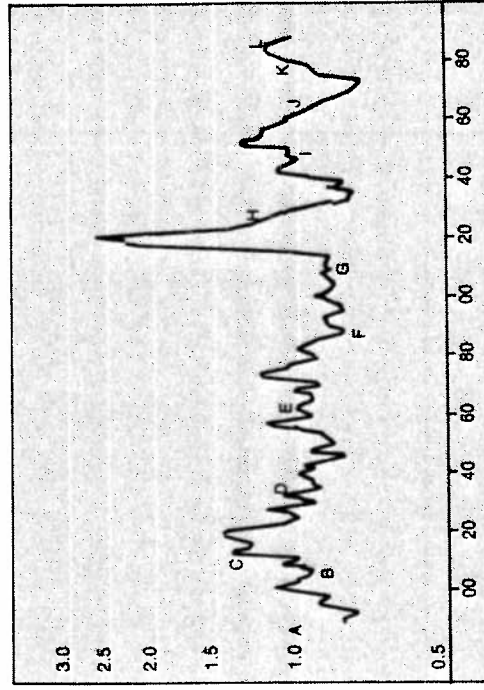


Figure 2
A Swedish price index (industrial production) 1789–1988. Annual observations through trend with periods of expansive (full line) and restrictive (dotted line) State debt policy. Log scale.
Sources: See figure 1

- A: War – external borrowing and note printing
- B: Attempt to redeem credit notes at a discount
- C: Another war and expansive domestic debt policy (Göta canal etc.)
- D: Long restrictive period and return to substantive monetary standard
- E: A period of foreign borrowing for railway construction ended with borrowing to support banks in crisis
- F: Conversions, amortization
- G: New foreign borrowing for railways, hydroelectric power etc. was followed by short-term domestic borrowing during World War I
- H: Funding of short-term loans and conversions
- I: New economic policy, World War II, 1950s expansion and borrowing from banks
- J: The AP-fund (National Pensions Insurance Fund) gives new openings for restrictive borrowing
- K: Expansive external borrowing and short-term domestic borrowing from banks
- L: Conversions and restrictive borrowing outside the banking system etc.

Business cycles and long waves

In price deviations from trend, there is a clear cyclical pattern with four long fluctuations or waves with troughs at the end of the 1840s, around 1890 and 1930 and at the beginning of the 1970s. These fluctuations fit very well into an international dating of so called Kondratieff cycles in prices. Their relation to State debt policy and economic development will be discussed below.

There are too, a large number of short fluctuations or business cycles. Up to the 1860s these fluctuations were comparatively short and sharp. This can be explained by the undeveloped state of the credit market with a low degree of integration both nationally and internationally. In times of expansion, a strong credit demand arose in some regions, while savings were left untapped in others. After a short credit expansion with a rising price level the Riksbank "strangled" credits. This led to a money shortage and falling prices. From the 1870s credit markets were rapidly integrated both in Sweden and abroad. Railways and telecommunications, liberal legislation and foreign borrowing by the State contributed to the foundation of modern banking. Fluctuations in credits and prices became less dependent on shortcomings in the credit market and more dependent on fluctuations in "real" factors such as investments and employment. From the 1930s, economic policy was directed at stabilizing investments and employment and these short term fluctuations were reduced. An anticyclical State debt policy became one instrument—in a growing orchestra—to achieve these ends. Hence, from the late 1950s short fluctuations have been strikingly weak while the long fluctuation dominates.

In this survey, the direction of debt policy is characterized as expansive or restrictive from a longer time perspective than that of the business cycle. It is remarkable how well State debt policy has varied procyclically with the waves in prices. With long-term rising prices debt policy has been expansive, while downswings in prices have been connected to a restrictive debt policy. Such a co-variation gives rise to questions whether State debt policy has been a primary cause of the waves in prices or whether it has been part of, and a reaction to, broader economic developments.

A structural model

Long term co-variation is not limited to prices and State debt policy but includes a co-variation with investment behaviour according to a structural analysis of the Swedish economy from the 1850s up to the 1970s. Periods of rising prices and expansive debt policy are

marked by investments rising more rapidly than income and by long-term investments increasing their share of total investments. In an analysis of the fluctuations, investments are a key factor affecting credit and money supply and, with differing time lag, the supply of goods and services. A set of generalizations of the historical development will be presented here as a structural model of the relationship between investments, debt policy and prices. The model refers to Swedish history but it is not necessarily confined to Sweden since domestic development has been highly dependent upon and consonant with international trends. A model of historical development over such a long period is of course a bold simplification, but at the same time it is essential in order to clarify some long-term forces not otherwise apparent.

Expansive periods in prices, debt policy and investments have been marked by a strong transformation of society with the development of new industries and infra-structure—new buildings and plants for production, transport, new housing etc. These investments are highly complementary.

Development in one area rapidly gives rise to new needs of expansion. A positive pressure towards transformation with rising profits emerges. Investment in plants are capital demanding and have a long-term perspective. The credit market expands when there is strong pressure from demand. New instruments of credit appear. At the same time the stock market is activated to raise capital for the large-scale formation and reorganization of enterprises. The State is confronted with a growing need to finance transport development, energy supply, housing, education etc. Due to its central position on the market for money and capital the State is capable of supporting—deliberately or forced by the keen competition for savings—a credit expansion by expansive methods in its debt policy.

The overall long-term character in investments means that the positive effects on supply, income and savings tend to lag behind the credit expansion and lead to rising prices. However, the more flexible the supply side reaction is—as regards labour, entrepreneurial activity, innovations, organisational changes etc.—the lower the rate of inflation will be.

The expansion is an international phenomenon and rising demand for input material stimulates increased production and industrialization in new countries. Expanded production and transport capacity leads, however, to more severe competition and profits are squeezed. With less room for expansion in dominant lines of production in developed countries as well as growing financial strains, investments in new industrial plants stagnate and regress. Investments shift towards new machinery and new equipment within

existing plants in order to rationalize production. These investments have a shorter time lag to supply reactions than the earlier investments in new constructions. Hence, productivity, income and savings rise comparatively more rapidly. One effect is a changeover to a fall in prices in relation to their long-term trend. There is, further, an overall financial consolidation. For companies, burdened with debts from the earlier expansion, this consolidation is undertaken in a situation of sharpening competition. Banks, also in need of consolidation after a credit expansion, play a key role in the movement towards concentration and rationalization of industry. When incomes rise, household savings increase either as deposits in banks or in pensions funds. The increase in income and supply of funds supports a second peak in housing construction. Lastly, the financial position of the State is strengthened both by growing tax revenues and by the supply of long-term savings enabling the State to pursue a more restrictive budget policy and carry through conversions of loans at lower rates of interest.

In this period of rationalization, financial consolidation and restrictive debt policy, structural tensions grow between, on one hand, decreasing profitability in established production and, on the other, new potentials for development caused, *inter alia*, by rises in real income. Contributing to these tensions is the spread of industrialization to new countries needing big investments for infrastructure. Consequently, a high rate of growth in investments is maintained in these countries even after the slackening of investment growth in developed countries. This is also favoured by increasing capital export from the developed countries. Acquisition of bonds for instance, provides an outlet for their savings in the "restrictive phase" and foreign investment becomes part of a growing internationalization of enterprise in this phase of harder competition, specialization and market expansion. For some time, higher growth rates in industrializing countries are a stimulus to the world economy. Their accumulation of debts calls, however, for a larger volume of exports when demand stagnates for traditional industrial products and raw materials. Falling prices and emerging structural crises lead either to structural transformation or debt crises.

These growing structural tensions in established as well as new industrial states became acute international crises in the 1840s, the 1890s, the 1930s and the 1970s. Historical circumstances and the position of nations have differed. Sweden was a new industrial country in the 1890s carrying out rapid structural alterations but in the 1970s she was one of the leading industrial countries to be severely hit by crisis. On a general level, however, history tends to repeat itself and crises have served to tear down obstacles to new expansion.

According to this structurally based analysis, the long-term changes between expansive and restrictive debt policy were accommodations to, but also part of, the dynamics of a world-wide economic system. The importance of the structure in determining the outcome of debt policy is further emphasized by the various results of the enforced expansion of money supply during the two world wars. In the years preceding the First World War, Swedish industry increased its foreign investments while domestic investments were more directed towards rationalization. State debt policy was still expansive but a changeover to restrictive policy was discussed. The strongly expansive debt policy during the war stimulated speculation and mis-investments which were hard hit by the dramatic pricefall in the 1920s, when prewar trends reappeared. The more limited but still significant expansion in money supply during the Second World War was, on the other hand, rather easily matched by long term investments after the war when expansive trends were strong.

Recent developments—from the structural crisis in the 1970s—give room for different interpretations of the role of debt policy. In the light of historical experience of the relation between debt policy and prices, a new phase of expansive debt policy may then have been part of an intensive transformation of production and finance, eliminating obstacles to growth. In this case expansive policy may have coincided with investments in both human and material capacity in new technology that augmented demand but had as yet only a weak influence on the supply of goods and services. The quick turnover of debt policy to restrictivity in 1983 could then have been of a short-term stabilizing character and a new expansive policy is to be expected. Another possibility is that the expansive policy engendered by the crisis resulted only in inflation, had no supply reaction because of structural rigidities, and necessitated early consolidation. The former established pattern between investments, debt policy and prices might also alter and involve institutional changes in the role of the State and its debt policy. It is still too early to assess the long-term significance of developments in the 1980s.

During the 200 year history of the National Debt Office Sweden has progressed from an agrarian economy to a developed industrial society—a transition in which State debt policy has played an important part, both in periods of expansion and in periods of consolidation.