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THE SCANDINAVIAN MODELS FOR DEVELOPMENT AND WELFARE

by

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SCANDINAVIAN MODELS FOR DEVELOPMENT AND WELFARE

I Introduction

The reference to models in plural in the title is motivated by important differences between the current "welfare" states in Scandinavia and the same countries during their development from poor agrarian economies in the mid 1800s to rich industrialized countries a century later.

The Scandinavian countries, Denmark, Norway and Sweden, as well as Finland, have become known for being early and advanced "social market economies" combining predominantly private ownership in a competitive market setting with activist government policies aimed at ensuring an egalitarian income distribution, providing insurance against loss of income due to any inability to earn an income, and at removing negative "externalities" of economic activity.[1] These government activities were of limited importance before the second World War (WWII), but expanded rapidly thereafter. Figures 1 and 2b show that when rapid government expansion began after WWII, Sweden and Denmark were already "upper middle income" countries by today's standards.[2] The period from WWII will be denoted the "welfare phase" of the Scandinavian countries, while the period from the mid 1800s until WWII will be denoted the "development phase". The per capita income in Sweden at the beginning of the welfare phase was at the level of Taiwan of today.

To draw lessons for development policy from the Scandinavian countries and Finland, it is of great interest to study the development phase as well as the welfare phase. By the beginning of WWII Denmark had one of the highest GDP/capita in Europe. Sweden had a higher average per capita growth rate than any country except Japan from 1870 to 1970. She emerged as the richest country in Europe after WWII.

One issue for this paper is to study economic system characteristics and government policies during the development phase. Another issue is how the development of the welfare state affected aggregate growth. Figures 1 and 2a show clearly that growth has continued and even increased for a period during the welfare phase. One hypothesis for explaining growth during both phases is that governments throughout the periods under study have accepted private ownership of industry and financial institutions, and recognized the need for mobility of labor, and structural change with a minimum of social conflict. In other words, a strong consciousness of supply side considerations and the need for social consensus have had a strong influence on government activity in both phases.

Basic facts about economic growth, income distribution, and the size of governments, as well as a review of factors often referred to as explanations for Scandinavian development are provided in Section II. The role of government in the two phases is described in more detail in Section III. Policies and markets of particular importance for structural change are discussed in Section IV. Capital and labor market organization, as well as consensus seeking, are emphasized. Section V draws together potential lessons from studying Scandinavian economic development.

Aggregate data for the three Scandinavian countries and Finland are presented while the more detailed analysis is limited to Sweden. This country has been leading in the welfare phase. Developments in Denmark and Norway have been very similar to Sweden's, while Finland until very recently has lagged behind the Scandinavian countries to a substantial extent. Other important differences among the countries will be noted.

II What Needs to Be Explained?

A) *A Broad Description of Scandinavian Growth, Government, and Income Distribution*

In the mid 1800s the Scandinavian countries and Finland were essentially agricultural societies on the fringe of the industrializing Europe. Denmark was the first country to take off on a slow path of industrialization, followed by Sweden in the 1870s and Norway. Finland remained underdeveloped well into the 1900s.

Figures 1 and 2a show Sweden's and Denmark's GDP/capita beginning 1870 and 1810, respectively. Table 1 summarizes data on per capita productivity growth for a number of countries beginning 1820. Two patterns emerge. First, the Scandinavian countries grew relatively fast between 1870 and 1950. Specifically Sweden grew faster than any other counry the whole period, while Norway was a late starter. Denmark grew at a slower rate than Sweden but started its growth process earlier.[3] Second, per capita growth rates increased in all countries after WWII. Sweden and Denmark grew at a slower rate than other industrialized countries during this period. Both Finland and Norway had higher growth rates; Finland was catching up with the Scandinavian countries while Norway developed oil fields after the oil price increase in 1973.[4]

A large share of the variation across time and countries could be explained by exogenous factors such as rate of technological change or convergence of knowledge of relatively low income countries to knowledge in richer countries.

Questions remain, however. Why did one country start its industrialization before others? Even if the convergence-hypothesis contributes to explaining growth, it is necessary to ask what economic conditions and policies allow or prevent the relatively high growth rate of the late starter.

The start of industrialization in Scandinavia seems strongly associated with agrarian property rights reform and the introduction of freedom of trade, business establishment, and competition. All the countries introduced reforms strengthening land property rights and reorganizing land holdings in the 1800s. Denmark's reforms occurred in the early 1800s. Sweden and Norway followed after the middle of the century.[5] Finland began similar reforms much later. Substantial agricultural reform was introduced first in the 1920s (see e.g. Kokko and Haavisto).

Agrarian reform has been a precondition for productivity growth in agriculture. This growth makes the expansion of manufacturing possible. Kuznets (1965) shows that in most industrialized countries productivity growth in agriculture was nearly the same as in manufacturing while the demand for manufactured goods grew faster than the demand for agricultural goods.

The second precondition for industrialization in the Scandinavian countries seems to have been the abolishment of the guild system and the establishment of freedom of trade, business establishment, and competition in the mid 1800s. Again Denmark was leading the way in Scandinavia with deregulatory reform, followed by Sweden and Norway.

Figures 3a and 3b demonstrate how the share of agriculture in GNP and employment has decreased steadily since 1870 in Sweden. Manufacturing increased its share in both GNP and employment until around 1950. Thereafter services have expanded in both dimensions.

The beginning of the welfare phase is also evident in Figure 3b. The share of employment in public services expanded rapidly after WWII. The expansion of the government's role in society is even more dramatic in Figure 1 for Sweden and Figure 2b for Denmark. In these figures total public spending as percent of GDP is shown. Table 2 shows that government consumption as percent of GNP in Scandinavian countries was as low in Denmark and Sweden as in other industrialized countries. The share of government in GNP of Scandinavian countries during the development phase was smaller than in most developing countries today.

The government share of GDP exploded after WWII in Sweden and Denmark. Starting 1950, all industrialized countries have had rapid government growth, but Scandinavia and, in particular, Sweden and Denmark, "outperformed" the rest of OECD by a substantial margin. The public sector share in GDP peaked in Denmark and Sweden in the early 80s reaching 65%. In 1988, tax revenues were 58% of GDP in Sweden. Denmark was a close second in the world at 53%.[6] Holland was third but most other countries are left behind at a 40% share. Given these figures, many observers may ask why the Scandinavian countries obtained any growth at all. We return to this issue in Section III, where the role of government is described in more detail.

Returning to the development phase it should be noted that the movement of labor from agriculture to manufacturing was not painless. Unemployment was high during long periods during the late 1800s (Figure 4). Population growth was substantial but much lower than in most of the developing countries today. Population pressure in Sweden and Norway was relieved by substantial emigration, however. 25 percent of the Swedish population emigrated to the USA during the period 1865-1920. On the other hand, emigration from Denmark was almost negligible (Paldam, 1990).

The 1920s and the early 1930s were also characterized by high unemployment in Scandinavia. The population in working ages expanded rapidly. Although production in manufacturing increased rapidly, unemployment in Sweden remained above 10% from 1920 until WWII. It jumped briefly to 25% in the early 1920s. It had another peak in 1931-32 but fell back rapidly towards the 10% level. At this time the migrating flows were reversed, as well.

Table 2 shows the role of capital formation in Scandinavian countries from 1870 through 1959. Capital formation as percent of GNP was never relatively high. It reached 12-15% during most of the period 1900-1940. Both the USA and Germany had higher rates for most of the period while the share in the UK was lower. In general, the relatively strong performance of the Scandinavian economies during this period cannot be found in the magnitude of capital formation. The figures indicate that capital must have been allocated to relatively productive use.

It is also interesting to note in Table 2 that the countries had been building up debt for long periods and sometimes at a fast pace. Norway, especially, was a large capital importer for a hundred year period while Sweden imported capital from 1860 through 1920. The countries were lucky, however, in the sense that in the 1920s, when debt-levels were high, international inflation reduced the real value of the countries' debts.

The "Scandinavian" welfare model is associated with an egalitarian income distribution policy. According to Kuznets (1965) income distribution in Denmark, Norway, Sweden, Germany, the UK, and the Netherlands has developed almost identically in the earlier development phase between 1900 and 1950. For the sake of clarity, Table 3a is limited to income distribution data for Sweden and the USA for selected years. There are data for the share of factor income before tax claimed by the top 20% and the bottom 60% of the households in 1935, 1954, and 1972. Between 1935 and 1954 the distribution of factor income before tax moved in favor of the bottom 60% and away from the top 20% of the households in both countries. The tendency is stronger in Sweden and other Scandinavian countries than in the USA (Kuznets, 1965). However, the redistribution of before tax income changed direction in Sweden between 1954 and 1972. Using the "maximum equalization percentage" - the percentage of total income required to achieve a perfectly even distribution - Figure 5 shows the increasing equality of before tax income for households between 1935 and 1950. Thereafter the equalizationpercentage has remained nearly constant until the 70s.

The peak of income equality occurred in the late 70s. Table 3b shows that the maximum equalization percentage for all households has increased from 1975 using factor income. The inequality of disposable income increased less between 1975 and 1980 and decreased until 1980.

According to World Development Report (1990), the Scandinavian countries are among the most egalitarian countries, but other European countries like Belgium, Germany, the Netherlands and the UK are very similar in this respect. Using disposable income shares of the bottom 60% and of the bottom 20% of households to measure income distribution, Japan is the most egalitarian country.

One should of course be careful with income distribution data of this kind. It is not clear that these measures are the most relevant ones. Lindbeck (1975) points out that, according to some studies, life-time incomes have become quite evenly distributed in Sweden.

The shift in the wealth distribution is according to Pålsson (1990) even more pronounced than the shift in the distribution of disposable income. Table 4 reveals that the industrialization process has been characterized by a dramatic redistribution of household wealth. This redistribution is not due to a conscious tax-policy, however, but primarily the result of increased property ownership by the expanding middle class in the industrialization process.

Another way to look at income distribution is to study the shares of income earned by labor and capital, respectively. Such studies generally suffer from at least two problems. First, there is no distinction between labor and human capital. Second, the income of self-employed must be treated either as labor or as capital income.

During the period 1890-1915, characterized by rapid industrial-ization, the wage share in the Swedish national income excluding self employed fell fram 65% to 50% according to Lindbeck (1975). He argues that this pattern is typical for early development stages of market economies. The explanation may to some extent lie in the growth of the number of self-employed entrepreneurs, but the figures reflect also the pressure on wages caused by labor mobility from agriculture to manufacturing.

Figure from Paldam (1990) shows the development of the wage share excluding (l_w) and including (f_w) self-employed in Denmark starting 1920.

Developments in Sweden and Norway have been very similar. The figure reveals the low wage share, l_w, in the early 1900s, and the relatively large share, going to self-employed

between l_w and f_w. After 1950 the wage share excluding the self-employed started to increase but the share going to labor plus self-employed, and thus to capital, remained constant during the 50s and the 60s. Thus, the share of self-employed decreased. Thereafter, the share going to labor jumped dramatically in the 70s. The result was a substantial profit squeeze. This coincided with a period of low real growth rates in Sweden and Denmark compared to Europe as a whole. The trend in both factor shares has been reversed in the 1980s.

An additional aspect of the income distribution is wage dispersion among different labor groups. Figure 7 from Paldam shows the wage distribution among skilled and unskilled men, and among men and women in Denmark from 1920 through 1990. Östlind (1977) shows that developments in Sweden have been very similar. The average differential among skill groups narrowed from 1925 through 1945. It widened during the highly expansionary 1950s and 1960s, when the supply of skilled labor constrained output growth. Thereafter, starting in the late 1960s the gap narrowed again. It is suggestive that the gap started to increase again in the early 1980s when general growth picked up and the supply of skilled labor again constrained it.

Based on the very aggregate data presented here, there are indications that aspects of the "Scandinavian welfare model" were reversed in the early 1980. The share of the public sector started to shrink after the low growth in 1970s, capital started to increase its share of national income, and income differences among some groups in society started to increase again. The "high period" of the model was the 1950s and in the 1960s when the public sector grew rapidly, income distribution became more egalitarian, and real per capita growth remained high.

B) *An Overview of Explanations for Scandinavian Growth*

Most writers on the subject of Scandinavian growth mention a large number of factors that are believed to have contributed to growth or to the specific pattern of growth. In this section the discussion by a number of writers on the Scandinavian-Finnish growth process is summarized very briefly.[7]

i) The important role of agricultural reform was discussed above.

ii) Educational reform came first to Denmark where general schooling was introduced in 1814. In Sweden, basic schooling became compulsory in 1842. The entire population in Scandinavia was literate by the turn of the century. Trade oriented technical and mercantile education was emphasized in the late 1800s. We return to these developments in Section IIIA.

iii) Important deregulatory reforms were instituted in the mid 1800s, as mentioned above. The guild system was abolished in 1846 in Sweden and freedom of trade, establishment, and competition was defined in law in 1864. All the Scandinavian countries were essentially international free traders both by the standards of other industrializing economies around the turn of the century, and especially by the standards of today's developing economies.

Wijkman (1971) has studied Swedish trade policy and calculated import duties as percent of merchandise imports from 1860 through 1915. Data reproduced in Figure 8 show that this measure of protectionism was around 10% during the period as compared to 6% in 1960. At this time, trade negotiations under GATT initiated a fall in tariff barriers as Figure 8 shows (Wijkman, 1990). Agriculture in Scandinavia became heavily protected after WWII, however.[8]

The figure shows that Canada and the USA were much more protectionist than Sweden 1860-1915. Mitra (1990) refers to an index of tariff levels of fifty industrial products in 1913. With index 100 for Sweden, the level was 51 for

Denmark, 88 for Norway, 110 for Germany, 139 for Austria Hungary, 201 for France, 182 for Italy, and 372 for Russia.

Exchange rate arrangements followed the example set by the UK until WWII. The countries adopted a gold standard when the UK did, and when this standard broke down in the 1930s the Scandinavian countries allowed substantial exchange rate realignments with market determined exchange rates. There was also an increase in tariff-levels when a world-wide trade war broke out.

It can also be noted that non-tariff barriers in the form of administrative protectionism were not extensively used in Scandinavia as a substitute for tariffs.[9] After World War II quantitative restrictions have been applied on textiles, however.

Export ratios are also used to measure openness to foreign competition. In Sweden, the ratio of exports to GNP rose from 10% in 1860, to 15% in 1870, and 20% in 1890. It remained at this level with slight fluctuations for several decades (Wijkman, 1971). Today the ratio is 40%.

Foreign direct investments did not play a major role in Scandinavia. Ownership by foreigners was controlled by the governments but permitted unless "vital interests" were at stake.

iv) Infrastructural investment. During the 1860s, during a raw material export boom, the Swedish government started building up a railway system covering the whole country. It was largely financed by borrowing in international markets. Norway's first major railroad was completed in 1855.

v) Raw materials and natural resources. The abundance of iron, ore, and timber in Sweden and Finland strongly influenced the direction of growth, but most likely not its magnitude. In Denmark exports of agricultural products played an important role at an early stage and early industrialization focused on agriculturally related industries. In Norway, abundant water power played a significant role in industrialization. The first big industries following the textile industry in the early 1900s were electricity intensive (Hveem, 1990).

vi) Technological adaptation and innovation. In the late 1800s technology was imported and adapted. Foreign contacts through trade links rather than foreign investments provided the impetus for adaptation. Around the turn of the century major technological innovation became the foundation for new firms in Sweden, in particular. These firms developed rapidly to become major exporters; several are today large multinational corporations.[10] Educational policy as well as conditions for entrepreneurship, and structural adjustment are critical factors for both technological adaptation and innovation. These factors are discussed below.

vii) Emigration was mentioned above as a factor relieving the pressure on the developing, industrializing towns and cities in Sweden and Norway.

viii) The financial system and ownership. A diverse relatively unregulated financial system existed in the late 1800s.[11] As industrialization progressed, the commercial banks became dominate in the expansion of credit. The Central Banks stepped in as lenders of last resort in times of crises. The role of the financial system is discussed in more detail in Section IV.

ix) Homogeneity and consensus in Scandinavia's population is often considered an important factor in the relatively rapid growth process. I return to the issue in Section IV.

C) *Scandinavian Growth, the Major Issues*

The description of broad developments in the Scandinavian countries leads to a number of questions. What explains the high per capita growth rates relative to most other countries during the period 1870-WWII? What explains that the per capita growth rate was lower than the average within the OECD area after WWII although higher in absolute terms than before WWII? Did the rapid increase in tax rates and the size of the public sector deter growth, stimulate growth, or neither? The poor performance of Sweden and Denmark during recent years and the reversal of trends in, for example, tax rates and the share of labor in national income raise the question of whether the welfare state is in a crisis.

The answer to a number of more specific questions may shed further light on the growth process. Specifically, what kind of services were provided by the government, and what role did it play relative to business activity? How was education policy conducted in terms of emphasis and division of responsibility between the private and the public sector? What explains the relatively high output growth relative to capital investment in the Scandinavian countries during the development phase?[12] In a similar vein, one may ask why technological change was rapid and what causes a favorable environment for innovation? Which are the factors causing and allowing rapid structural change?

These questions are obviously not independent but provide different perspectives for understanding the growth process. The remainder of this paper aims at describing characteristics of Scandinavia that may help ansering the questions. We turn first to the role of government and thereafter to markets and institutions fostering structural change.

III The Role of Government in Different Phases

In this section the focus is on Sweden. The discussion applies also on Norway and Denmark, and on Finland with a substantial time lag. Government activity during the development phase is discussed first, followed by a brief description of the first decade of social democratic rule in the 30s. This period is interesting for its ideological debate. The attention shifts thereafter to the welfare phase and a brief discussion of "crises symptoms".

A) *The Development Phase*

The classical liberal orientation of government policy starting with the domestic trade and property rights reforms in 1864, until WWII has been noted. During this period the government did not get involved in industrial activity or industrial investment decision. It did not use price controls, investment licensing for domestic investors or other direct restrictions on domestic business activity in industry, agriculture or banking. International trade policy was largely free trade oriented.

Government activity concentrated on legal, physical and intellectual infrastructural development in a competitive environment. The court system enforced rights and obligations associated with ownership and contractual obligations. The building of railways and the formation of a public utility to operate them has been mentioned. The later electrification of railways and roadbuilding were similarly state activities.

Intellectual infrastructural support is exemplified by the establishment of government institutions for mineral exploration and mapping (Södersten, 1990). A mixture of private firms and authorities controlled by local governments provided, for example, employment services and power.

Education was early an important government activity.[13] Elementary schooling became compulsory in Sweden in 1846. Trade schools with a technical and mercantile education were established in the late 1800s.

Figure 9 provides an example of the degree of government involvement in education in different periods. It shows that already in the 1920s, state and local government covered 70% of the costs of running trade schools. The share remained nearly constant until WWII, when the share of publicly funded education jumped above 80%. Private shools at different levels coexisted with the public system bud they did not obtain the status of private schools in the USA or England. The reason might be that the quality of the public system was high.

Table 5 shows the percentage of GNP devoted to education by the public sector starting from 1920. The share increased slowly from 2% in 1920 to 2.7% in 1938, when seven years compulsory educaiton was the standard. Figure 109 shows the share of total civilian consumption devoted to public spending on secondary schools (7th-9th grade) and high schools from 1913. The difference between the top curve and the dotted curve represents expansion of the number of students enrolled. Figure 11 shows the expanson of the number of students in trade schools with technical/mercantile orientation and agricultural orientation.

The private sector was involved in educational policy as well, but primarily at a high level. The two engineering universities in Stockholm and Gothenburg founded in the 1870s were private. A private "business school" was founded in Stockholm in 1909.

Education policy provides a good example of the interaction between the private and the public sector in Scandinavia. The public sector was responsible for most of the funding but the private sector made important investments in high level education, leading the public sector.

Table 5 shows also that other types of public spending remained constant or grew very slowly relative to GNP until 1938 and even 1946. Spending on health services expanded with GNP growth. These services were also supplied by a mixture of public and private organizations. The access to a broad range of medical services at a low cost for all citizens did not become a reality until after WWII.

Before 1930, local governments were to a large extent responsible for unemployment policy. The National Unemployment Commission was created in 1914 to advise and, later, to provide some employment in public work programs. These programs were on a minor scale, however.

B) *Social Democracy and the Planning Resistance*

The international depression affected Sweden relatively late and relatively lightly, partly due to an expansionary monetary policy with the Central Bank as the lender of last resort and a flexible exchange rate (Jonung, 1979). The Social Democratic party, closely associated with the labor movement, won the elections in 1932 with an ambitious program to combat unemployment, improve welfare policies, and to take more control over industrial activity.[14]

The social democratic government started, for the first time, public works programs on "Keynesian" principles, i.e. financed by loans.[15] Their scale was limited but they represented a break in policy-principle. The government also enacted a law in 1935 stating that all individuals should have easy access to an employment agency. Increased funding was provided and these agencies, acting as job intermediaries, doubled their activity. The first steps to an active labor market policy had been taken.

The most interesting aspect of the period 1930-1950 was the ideological debate around the government's role in industrial and labor market policy. The intense debate during these decades on the government's role in economic activity has been called "the economic planning resistance" (see Levin, 1967, and Hjalmarsson, 1990).

The social democrats' party program developed in the 1920s expressed the intention to nationalize large parts of Swedish manufacturing and banking activities. It is remarkable that this part of the program has never been implemented although it is still officially in the party program. In other words, the economic planning resistance was highly successful.

After gaining power in 1932, the social democrats assigned committees to suggest efficiency increasing measures for different sectors. One important conclusion of these studies was that tariff protection of import competing industries creates a burden for exporting industries. The foundation for the social democrats' free trade stance was laid.[16]

The Rationalization Committee (SOU 1939:13) proposed that a specific institute should regulate and obtain public control over rationalization programs. Immediately after the war a "Postwar Economic Policy Program of the Labor Movement" proposed even more radical and large scale government planning of industrial activity (Hjalmarsson, 1990). The controversial suggestions about the formal creation of a "corporate state" in which employers, unions, and the government would jointly plan economic activity were fought vigorously and never implemented.

The proposals were nevertheless important in themselves, since they demonstrated the political intentions of the social democrats of the time, and also their focus on structural change and productivity growth. In fact, these were the primary objectives. Nationalization and proposals for a "corporate state" proved to be secondary matters for the party as a whole and were willingly sacrificed, as long as major objectives regarding real income growth, income redistribution, and full employment could be met.

Important aspects of the thrust of the social democrats' policy came from the labor unions. They were strongly in favor of structural change and the creation of efficient size firms, in order to enhance productivity growth. Full employment and a more egalitarian income distribution were other important objectives. However, they were skeptical about government intervention in wage determination and wished to remain independent although they also pushed for influence on investment decisions.

In order to keep the government outside the wage determination process the central union organization (LO) made an agreement in 1938 with the employers' federation (SAF) regarding rules for labor market negotiations and the handling of conflicts. This "Saltsjöbads-agreement" (after the location of negotiations) laid the foundation for the centralized, relatively conflict-free wage determination process after WWII.

Besides industrial policy, welfare policy was a key ingredient of the Social Democrats' program. The term "the people's home" (folkhemmet) was coined to describe the relationship between the government and the people. As within a family the members should share the income, and members should help each other when sick, old, handicapped etc. The ideological foundations for the "welfare model" had been laid, but not yet shaped.

C) *The "Welfare Model" 1950-*

The political situation since the war has been characterized by a slim but nearly uninterrupted majority for the social democrats plus the fringe communist party. The fragility of the governing base has obliged social democrats to govern through political compromise and pragmatism. As a result some of the social democrats' ambitions have been implemented while others have remained political rhetoric.

The ideals of socialization as well as detailed or even crude long term planning have remained rhetoric. Apart from the contineud dominance of private ownership, the most striking aspects of the "welfare model" were the rapid expansion of the public sector's share in GDP, the increasing share of transfers in public sector spending, active stabilization and labor market policies to ensure full employment, and the heavy regulatory burden on the financial sector with the primary intention to provide low cost financing for housing construction.

Figure 12 shows total public sector spending as a share of GDP 1950-1987, as well as sub-categories of this spending. Among sub-categories it is striking how transfers have increased to above 30% of GDP. Real growth of the same spending items is shown in Figure 13. Transfers increased dramatically from the mid 60s and onwards. Earlier, investments grew rapidly. Thus, initial public sector growth after WWII is explained primarily by the expansion of investment in hospitals, schools, roads, etc. In Table 5 it was shown how these items expanded in government consumption after 1960. The rapid growth in transfers took the form of pensions, housing subsidies, cash grants per child, compensation during maternity and parental leave, as well as conventional welfare payments.

Most importantly, the pension reform in 1958 has led to a substantial increase in the transfers to the retired.

The primary targets for direct market intervention were financial and housing markets. Rent-controls have remained in effect since WWII. As a result excess demand for housing in major cities has been strong periodically. In order to provide low cost housing and to meet the demand, a low interest rate became a policy objective. In order to fund housing construction at low interest rates, lending by financial institutions became heavily regulated as well. In Section IV capital and labor markets in the welfare state are discussed in more detail.

D) *Decline of the Welfare Model?*

The tax burden increased rapidly in the welfare state as is obvious from the data presented. Inside and outside observers predicted over and over again that the tax burden could not be increased further. Incentives to work would decline. However, each tax increase has an income and a substitution effect and there is no clear evidence which one dominates at different levels of taxation.

There is little doubt that taxes throughout the perioed were pushed to the limit of political acceptability for a majority of the population. This acceptance of the increased tax burden might be explained by four factors. First, until 1973 growth was sufficiently rapid for the majority to obtain increased real ioncome after tax. Second, there was wide-spread agreement that most benefits, such as low cost medical care for all citizens, were basically fair. Third, the public sector in the Scandinavian countries is relatively non-corrupt and reasonably efficient in the provision of services. Fourth, the ruling social democrats repeatedly retreated on proposals for increased nationalization of industry and influence on industrial activity.[17]

After 1973 when growth slowed down, the negative effects of the increasing tax burden have become more pronounced. Resistance to taxes increased since real incomes after tax stagnated. The distortions in the labor-leisure choice became more obvious. The "black economy" expanded (see Fig. 14). Generous payments for sick-leave from day one has lead to absenteeism at rates up to 25 percent in industry (see the Economist, March 3, 1990).

As a result of increased dissatisfaction, the trend towards higher taxes were broken in Denmark and Sweden in the early 80s (see Fig. 1 and 2b).[18] A major tax reform was enacted in Sweden in 1990, cutting the maximum marginal income tax rate from 75 to 50 percent.[19]

One major problem caused by the high tax burden remains unresolved. The public sector employed by the late 70s such a large share of the work-force (Fig. 3b) that the wage-setting mechanism agreed upon between unions and employers had been upset. The public sector unions became leading in setting wage demands without facing an unemployment threat for excessive wage increases. Throughout the 60s the private sector unions and employers had been leading the process. World-inflation and productivity gains determined a reference point for wage increases at unchanged unemployment.

The result of the increased weight of public sector unions has been a stronger wage push from these unions combined with a refusal by private sector unions to accept a decline in their relative wages. The 70s and the 80s have been characterized by recurring cost-crises, devaluations and relatively high inflation. This development partly explains the relatively poor performance of the Swedish and the Danish economies in the late 70s and the 80s. It will be argued below that labor market policies contributed to the process.

There are two ways to alleviate this problem. Either exchange rates must be allowed to float enabling prices to compensate firms for cost increases or the share of the public sector in employment must be reduced. It has been proposed that government services should be supplied by private firms subject to market discipline, while the government continues to pay for the services.

Crisis and recovery are indicated by Fig. 15 showing market values and replacement values in Swedish industry 1951-85. Market values started to fall in the late 1960. In the early 1980s after substantial devaluations market values increased to normal levels relative to replacement values. The picture is clarified by Fig. 16 describing real rates of return in industry relative to the real interest rate. The rate of return fell relative to the interest rate in the early 70s. Profits remained squeezed until 1984 when the rate of return again increased relative to interest rates. The oil crisis in the early 1970s can explain part of the pattern but the duration was too long and specific to Sweden to be explained by external factors alone. Crises and recovery in Swedish industry can also be seen in Fig. 17 for the ratio between the market value and the replacement value of firms, the q-value, in Sweden and the rest of the world. The cost disadvantage from 1974 is reflected in the low q-value until profits were restored by a devaluation in 1982. Towards the end of the 80s the profit squeeze at a fixed exchange rate has once again become a reality and reduced the q-value in Sweden relative to the world.

IV Markets and Conditions for Restructuring

A) *Capital Markets, Financial Institutions and Ownership*

During recent years economic analysis of growth has increasingly returned to the Schumpetarian perspective, emphasizing markets' and firms' ability to induce innovation, and to organize and reorganize themselves, as technological and competitive conditions change.[20] This type of analysis highlights the role of financial institutions, capital markets, and labor markets.[21] In Appendix the role of banks and capital markets in the Swedish industrialization process is described. It is noted that an efficient form of ownership and control was developed before WWII. It remained intact throughout the welfare phase and was allowed to exert control over industrial restructuring. In the Appendix it is also argued that heavy regulation of lending activities by banks have retarded entrepreneurship in small firms and favored large corporations. The desire to keep interest rates low and to channel funds to construction at the expense of households and small firms, was the reason for the regulation of financial markets. They have been deregulated in the 1980s.

B) *Labor Market and Employment policy*

The limited scope of labor-market policy pre WWII was described in Section III B. Post WWII a multidimensional policy developed and expanded rapidly. It had the objective to alleviate frictional unemployment by improving the services of employment agencies and reducing the costs of mobility for individuals. Structural unemployment should be reduced by retraining programs and subsidies to moving households, and cyclical unemployment should be reduced by relief work to complement conventional macroeconomic policy including incentives to shift investments over the business cycle. A social dimension was given to labor market policy by protected work-shops for disabled, and work-programs for others who for social and medical reasons found it difficult to find or hold on to a job.

The programs grew out of an ideological debate initiated by two economists associated with labor unions, Gösta Rehn and Rudolf Meidner.[22] Their policy proposals had the objectives of full employment, low inflation, an egalitarian income distribution, and structural change. The so-called Rehn-Meidner model had the following components:

1 *Solidaric wage policy* meaning that low income groups should obtain proportionately higher wages than others
2 A *contractionary aggregate fiscal policy* should, in combination with a fixed exchange rate, keep inflation and the general profit level low
3 An *active and selective labor market policy*
4 *Investment incentives* should be provided to increase productivity growth in expanding sectors and help absorb labor laid off due to the solidaric wage policy

The model is obviously predicated on centralized wage negotiations. Free trade principles were not questioned, and laid off workers in non-competitive industries would be employed in sectors with a higher ability to pay.

The first three components of the Rehn-Meidner model were implemented. Unions pushed up the wages of low income groups. Resources going to labor market authorities increased. In 1965, 1.5% of GDP was spent on labor market policy in Sweden. The scale was similar in Denmark, Norway and Finland. Fig. 18 shows the expansion of the number of persons covered by labor market programs.

Labor market policies have undoubtedly been successful in keeping unemployment low as Fig. 4 demonstrates. They may have had social non-budgetary costs, however. Lundberg (1953) argued that the policies underestimated the role of wage differentials as inducement for labor mobility. He feared that structural change and growth would actually be slowed. Öhman (1969) asked how authorities could distinguish between cyclical and structural unemployment, fearing that retraining programs would become an expensive form of unemployment insurance that would not be mobility increasing. Another problem discussed above in connection with the size of the public sector is that if unemployment is kept low continuously, then the market discipline in wage negotiations is absent. The social responsibility of unions becomes the main restraint on wage demands, when employment or at least income is more or less guaranteed.

The empirical evidence on the effects of labor market policies is ambiguous. Fig. 19 shows the development of different kinds of expenses between 1956 and 1966. The two bottom cathegories are mobility increasing measures and retraining programs covering individuals respresented by the difference between the two highest curves in Fig. 18. It can be seen that there was a trendwise increase in the share of these expenses. Like those on relief works, they are cyclical indicating that they serve not only to smooth structural change but also as a counter cyclical device. However, Björklund and Holmlund (1980) argue that the policies have had a net positive effect on labor mobility among sectors.

In Fig. 20 it can be seen that wage dispersion among different labor groups has decreased in spite of the substantial "wage drift" in excess of negotiated wages in some industries.

Östlind (1977) shows that the low unemployment figures hide an increasing number of permanently unemployed. Fig. 21 shows the increasing number of prematurely retired in age groups in pcercent of the whole age group, 1964-1974. Individuals who would seek employment if they thought they could get a job (latent work-seekers) were also increasing during the same period. Östlind estimates that in the early 1970s unemployment including these groups had increased to well above 10%. These figures indicate that the policies prevented an excess supply of some types of labor from exerting a downward pressure on wages. Lindbeck (1975) argued that the labor force became divided into A and B teams, the latter including the less competitive in labor markets relying to an increasing extent on the government for their income.

It can be concluded that labor market policies contributed to the "crises" of the welfare state described in Section III D. It is not clear whether their net effect on labor mobility is positive or negative. There is no doubt, however, that the policies have prevented unemployment during down-turns and helped many individuals, who would have been permanently unemployed without protected work shops and relief-work. The unresolved question is whether the positive effects were obtained in the least cost way.

C) *The Role of Social Consensus*

Although Swedish development has been accompanied by intense ideological debate, it has been relatively conflict free in the development as well as the welfare phase. Strikes and lockouts were almost unheard of from 1938 when centralized wage bargaining was established and the late 70s.[23] The pattern is the same in Denmark, Norway and Finland.

It is often said that cultural factors and ethnic homogeneity have contributed to making the Scandinavian countries consensus-seeking and made it possible to build up a large, relatively uncorrupt class of civil servants. Such factors would explain both the conflict free economic development and the acceptability of the heavy tax burden. Substantial speculation about these cultural factors is beyond this paper, but a few aspects of the role of consensus seeking will be speculated about.

In the early stages of development consensus can be achieved relatively easy in countries, where institutions balancing diverse interests exist and have developed over a long period. Sweden and Denmark, in particular, are examples of such countries. Constitutional reforms such as the one in Sweden in 1809 and Denmark in 1850 allowed all major interest groups representation in development policies.

Finland is an example of a country that was colonized (by Sweden until 1810). It was ruled by an "imported" aristocracy that clung to its powers until the 1920s (Kokko and Haavisto, 1990). As noted, necessary institutional reform was delayed as well as the industrialization process.[24]

Consensus seeking played, as noted, an important role in the welfare state as well. The ideological debates between social democrats and the "planning resistance" were resolved by pragmatic approaches to industrial and tax polcy by the social democrats. A simple explanation for this prgamatism is the very slim majority with which social democrats have ruled. Another explanation is that a strong anticommunism and fear of dependence on the government developed in the labor unions during the early 1900s.

The high tolerance of the expansion of the public sector among liberals, conservatives, and industrialists indicates that they saw that many welfare programs and labor market policies as part of a "social contract" whereby rapid structural change, and continued private control over industrial activity were made politically acceptable among workers.

The causality between political consensus and structural adjustment may go both ways, however. It is easier to balance diverse interests in a rapidly growing economy than in a stagnating economy.

V Lessons for Development

Any country's development path depends obviously on complex interaction among a number of economic, cultural, and political factors. In Scandinavia and Finland, these factors have created high per capita income, and welfare insurance against hardship caused by economic conditions as well as individual misfortune.

A number of characteristics of the development process in these countries shed light on factors contributing to aggregate economic growth, and the conditions for development of an advanced welfare state. The last conditions are the easiest to identify. The high expense of the welfare state in absolute terms as well as in percent of GDP requires a high income per capita. By simple arithmetic, a relatively poor country would have to impose higher tax rates on the majority of individuals in order to obtain a given share of tax revenues in GDP.

The Scandinavian tax schedules have probably tested the limits of both economic and political acceptability of tax rates. Economic acceptability would imply that serious effects on work-effort do not arise. Political acceptability of high tax rates may have been relatively high in Scandinavia due to wide-spread agreement on the "fairness" of major welfare oriented policies, and to a relatively efficient and non-corrupt tradition in the civil service administering the welfare state and to high growth rates while taxes were increased. To what extent these factors are cultural or depend on a high level of education of good quality reaching the broad masses is impossible to say.

Since most countries outside the OECD have lower incomes per capita than Scandinavia had at the time the welfare states began to develop, the more interesting question from a development point of view is not how the welfare state works but how to reach an income level at which it can be afforded.

Observation of the order in which the Scandinavian countries started industrialization in the mid and late 1800 indicates that property rights and trade reforms in both agriculture, and other sectors were important conditions for growth.

The reforms established property rights to land and guaranteed the "contents" of property rights for labor and owners of capital. Property rights have contents, if owners of resources have control over the use of resources and if they can trade in voluntary exchange. Such contents decrease as direct regulation of economic activity increases, and the enforcement of contractual obligations becomes uncertain.

Government activity in Scandinavia from the beginning of industrialization to WWII was characterized by lack of direct regulation and a focus on legal, physical, and intellectual infrastructure. An entrepreneurial business environment developed and competitive environments in the small countries were created by relatively free international trade.

Structural change requires efficient, well-informed capital markets, in which ownership and management can be reorganized over time, and free labor markets with information about job-opportunities. In the development phase financial institutions and ownership structures were allowed to develop without government interference. In labor markets, local governments took responsibility for employment agencies.

An important role of governments contributing to growth was in providing educational services. Illiteracy was eradicated at an early stage and substantial resources were devoted to technical and mercantile education.

Turning to the welfare phase one may ask whether Scandinavia reached its advanced welfare phase at too high a cost. It seems that certain characteristics of the welfare states created costs in terms of growth that could possibly have been avoided. First, the heavy regulation of financial markets has put smaller firms and entrepreneurs outside the large corporations at a disadvantage. It has also prevented an adaptation of financial institutions and capital markets to new conditions created by the information revolution and financial innovations abroad. The markets have been deregulated during the 1980s, however.

Second, the large public sector share in employment and employment policies guaranteeing low unemployment has seriously weakened the market discipline on union wage demands. The Scandinavian countries are therefore highly prone to cost crises under fixed exchange rates. Such crises lower profitability and investment in industry. The implementation of proposals to privatize some public services may restore some labor market discipline while the level of public services can be kept high.

The third characteristic potentially limiting growth is the high marginal tax rates for a majority of the labor force. A major tax reform is being implemented in Sweden to alleviate the distortions in the labor-leisure choice and to reduce the extent of "black" labor markets.

Finally, the pragmatic willingness to avoid conflict and to compromise in order to seek consensus in political, as well as economic life has certainly shaped developments in important ways. It is impossible to say whether the search for consensus has contributed to or reduced growth, but it has certainly shaped the particular combination of private and public activity we observe in the Scandinavian countries and Finland.

APPENDIX: Capital Markets, Financial Institutions, and Ownership

In Section II, it was noted that Sweden had a diverse, competitive, and largely unregulated financial sector by the turn of the century. Table 6 shows how credit volumes relative to GNP of commercial banks and savings banks expanded from 1871 through 1910. A large proportion of commercial bank loans were backed by equity and banks were not averse to financing high risk projects (Nygren, 1985). During this period the first steps were taken towards creating groups of firms around a bank with substantial control over management. These "banking groups" became, and still are, important in Swedish industry.[25]

The banking group can be seen as one device for efficient ownership and control (see e.g. Glete, 1990 and Dahmén, 1950). A small group of industrialists controls the bank as well as the board of the firms in the group. These individuals have responsibility to select and hire competent managers and fire incompetent ones, as well as to restructure the firms as market conditions change. From the central position of the bank, the industrialists have a pool of competent managers within the group to draw from, and information about firms and management is available. Reorganization of firms becomes relatively simple.[26]

The Swedish banking groups have remained intact through the decades. Since there are shares with very different voting rights, varying from 1 vote/share to 1/1000/share, it is very difficult to take over a majority of the votes in a firm.

From 1913 to 1924 the share of firms with equity capital above SEK 500,000 and dependent on one bank increased from 9% to 34%. By 1924, 70% of the commercial bank credits went to the bank-controlled firms (Nygrens, 1985).

In the middle of the 1920s, firms liberated themselves somewhat from their banks by bond issues and increased self-financing. After the Krueger crash in 1932, the banks were prohibited from owning equity.[27] The bank-groups remained important, however. The banks formed investment firms linked to the banks by individuals in top positions. The investment firms held controlling interests in firms within the group. These groups have survived till today in spite of alternative sources of financing in today's deregulated financial market, to a large extent due to the competence of the leadership of the groups.

The labor unions have been quite favorable to big firms and big groups even during recent decades. Size has been seen as a necessity for competitiveness in the particular characteristics of Swedish industries. Also "internal labor markets" within large units are considered better at providing job security for union members in times of structural change.[28]

The Swedish industrial development can increasingly be pictured as few large multinational corporations as illustrated in Fig. 22 and Fig. 23.[29]

The rapid growth of large firms does not mean that entrepreneurship has been unimportant. Fig. 24 shows the number of new firms in percent of the total number of firms and new employment in these firms from 1920 to 1984. We observe a substantial activity of "entrepreneurs" through the 1940s. The creation of new firms slowed in the 1950s and fell further from 1965 through 1975.

These data are evidence that regulatory credit market policies characterized by rationing pursued after 1950 have favored large firms. A large share of the growth of large firms during this period has occurred through acquisition. Table 7 shows that acquisitions have become increasingly important and predominant after 1976 as a source of corporate growth.

The crises in Swedish industry illustrated in Figures 15-17, as well as by Table 7 and Fig. 24 led to a temporary shift in industrial policy and ownership structure in Sweden in the late 70s. Ironically, it was the first post war non-social democrat government in 1979, that initiated public take-overs of shipyards and steel-producers facing bankruptcy. Before this time major publicly owned manufacturing firms were formed primarily for purposes of regional policy.[30] Direct aid to firms increased from a few hundred million kronor in 1976 to 6 billions in 1979, 5 billions in 1980 and 8 billions (1000 kronor or 160 dollars per capita) in 1981. When the Social Democrats returned to government in 1982, the subsidies to the firms were discontinued. The firms in the crises sectors shrunk dramatically and industrial policy was again limited to pursuing regional policy objectives.

A description of capital market policy after WWII is not complete without a description of the regulatory battery that was put into effect in the 1950s in order to provide a subsidy to housing construction. Sweden as well as Denmark and Norway devoted enormous resources to residential construction throughout the period 1950-1975. The major problem of the Swedish finance minister and father figure, 1953-1976, Gunnar Sträng, was to channel domestic savings into residential construction without reducing industrial investments and without directly subsidizing construction. A low interest rate policy in combination with a severe regulation of lending by financial institutions was implemented after the war. The regulatory battery developed and expanded over time responding to financial institutions' avoidance of regulatory constraints.[31]

Throughout Gunnar Sträng's regime the consolidated public sector was a net saver. It controlled an increasing share of the flow of financial resources. Especially, the pension reform in 1958 led to a rapid increase in the public sector's potential influence on credit allocation.[32]

The substantial financial resources under the control of the public sector was the subject of intense ideological debate at several occasions. Many social democrats saw the potential for a strong public sector influence on industrial investment. The "planning resistance" feared the same and was successful in the sense that the placement of the funds has not had the objective of obtaining control but to earn a high return. Residential construction obtained some "protection", however, in the form of quotas in funds' portfolios.

The heavy regulation of financial market was abolished in the early 1980s, after "grey" credit markets, as well as new forms of financial institutions, not subject to the regulation, developed. Increasing avoidance of exchange controls contributed to their relaxation and plans for their total abolishment in 1990.

Footnotes

[1] Progressive income taxes and housing subsidies to low income households smooth the income distribution. Pensions, insurance against loss of income due to illness and pregnancy, and protected workshops for disabled individuals provide income insurance. Low-cost education, medical care, and day-care for children redistribute welfare and provide insurance of living standard. Consumer protection laws and environmental regulation are examples of policies aimed at reducing externalities.

[2] Fluctuations in government expenditure as a share of GNP before WWII are largely due to recession and boom periods and military build-ups during war time.

[3] In the table, Finland's growth rate seems too high, given the late start of its industrialization in the 1920s.

[4] After developing oil fields in the Norwegian Sea, Norway has become the richest of the countries, although this position is sensitive to oil price changes.

[5] According to Paldam, serfdom was abolished in Denmark in 1788, and tenants and serfs were thereafter allowed to buy the land they tilled from noblemen at a low price.

[6] The Economicst, March 3, 1990

[7] The writers are Wijkman (1971), Lindbeck (1975), Mitra (1990), and contributions by Blomström and Meller, Södersten, Paldam, Hveem, and Kokko and Haavisto in Blomström and Meller (1990).

[8] Tariffs on agricultural products were introduced in the 1880s and tariffs on manufactured goods were raised in the 1890s. Note that aggregate measures of protectionism are controversial. Balassa (1965) discusses alternative measures of aggregate tariff protection.

[9] As Wijkman (1990) puts it: "Complicated customs-procedures, stalling of license-applications, arbitrary closeups of customs offices are well-known measures in certain countries but foreign to the Swedish bureaucratic tradition."

[10] Inventions such as dynamite (Alfred Nobel), and gas-driven light-houses (Gustaf Dahlén) are well known. Other important innovations were safety matches, ball-bearings, separators, and electrical generators. According to Södersten (1990) some of the inventors were technological geniuses without formal training while others were highly educated engineers.

[11] In the early phases of development before the 1860s, trading houses played an important role in financing the relatively primitive industry. Local savings banks serviced the agricultural sector. In Denmark and in Sweden, cooperative credit unions issuing bonds domestically and abroad became a major source of long term finance in agriculture in the middle of the century. These unions allowed property to be mortgaged.

[12] See Jörberg and Krantz (1976). These authors argue that the role played by other factors than endowment growth was substantial in Scandinavia.

[13] The church was originally a major provider of education. The church was and is a state church. It was intolerant of non-Lutheran teachings into the 1900s.

[14] They have remained in power ever since, except during the period 1976-1982, although rarely with absolute majority.

[15] The "Stockholm School" of economists developed a Keynesian view of stabilization policy in parallel with Keynes.

[16] The party had to compromise on agriculture in order to get the farmers' party's support for labor market legislation. Thereby started the strong protection of agriculture. Protectionism within low-wage unions in the textile industry has increased after WW II and quantitative restrictions have been imposed.

[17] A major ideological debate concerned the use of pension funds in the 1960 (see also Section IV A). The latest intense debate on socialization concerned "wage-earners'" fund. A scheme was proposed by some social democrats and union-leaders to obtain "economic democracy". Corporate profits were to be used for directed issues of equity to be held by collectively owned funds. These funds would slowly gain influence in corporations. The planning resistance revived and the actual implementation of the funds was limited to a one-time essentially meaningless creation of wage-earners' funds without economic power. The planning resistance won again while faces of leading proponents of the funds were saved.

[18] Norway never reached the same tax burden as Sweden and Denmark, since royalties from oil production financed large parts of public expenditures.

[19] The revenue neutral reform is financed by higher taxes on gasoline, property, and a wider application of value added taxes.

[20] See Day and Eliasson (1988)

[21] Financial and capital markets are important, since limited financial resources should be channeled to firms with high return projects. Since project return is inseparable from management performance, an important role for these markets becomes one of inducing and selecting competence in charge of projects and firms (see e.g. Eliasson, 1989). Markets for ownership and control have become a popular area of research in modern financial economies.

[22] The Rehn-Meidner model is summarized in LO (1961)

[23] There was a strike lasting several months in the mechanical engineering industry in 1945. Peace has also been broken by an increasing number of wild-cat strikes in specific sectors since the mid 70s. The centralized wage bargaining was abolished in the mid 80s.

[24] Norway was part of Denmark until 1814, when she was transferred to Sweden. Norway did not become dominated economically by the Swedes, however. Norway and Sweden formed a union under the Swedish king until 1905.

[25] The most well-known is the Wallenberg group but groups were formed around other major banks, as well. The Wallenberg family started and controlled Stockholms Enskilda Bank. It was merged in the 70s with the Skandinaviska Banken and is now the SE-Bank (Skandinaviska Enskilda Bank).

[26] An alternative form for a market for ownership and control is the Anglo-American model in which the stock-market plays a much larger role. In such a system inefficient management is "controlled" by the threat of take-overs in the decentralized market. The advantage of this model is that it seems less vulnerable to the competence of a limited group of individuals in control of a banking group. On the other hand, a banking group might be able to take a more long-term perspective. Many observers argue that the decentralized stock-market forces a short-term bias on investment decisions in firms.

[27] The Krueger crash in 1932 was the collapse of an industrial empire. Krueger "built up" a monopoly position for Swedish Match in many countries with the help of governments, of which some obtained loans from the Krueger group.

[28] Note that within one firm there is only one union in Sweden as opposed to, in for example, the UK. Thus union leader and management can work out arrangements for internal labor mobility as job specifications change.

[29] The comparison in Fig. 16 of the 10 largest firms' share in manufacturing in 1985 with the share of the 15 largest in 1924/25 and 1944/45 demonstrates substantial stability of the group of large firms. The ten firms included in Fig. 16 are listed in Table 7. This table shows the start up year of the firm (between 1862 and 1926) and employment in Sweden and abroad. Only Volvo and ASEA (now ABB) had more domestic than foreign employees in 1983.

[30] Eliasson and Ysander (1984) show that central government owned joint stock companies increased their share of employment from 1.5% in 1970 to 2.9% in 1979, and their share of ivnestment from 2.8% in 1970 to 4.4% in 1979.

[31] For example, liquidity ratios for the share of banks' assets invested in government and morgage bonds, were enforced until the early 80s. There were periods of credit rationing when household loans in particular seemed to expand "too much", and corporate bond issues had to be permitted by the central bank. Exchange controls put into effect during WWII were strictly enforced in order to keep savings within the country and to force multinational corporations to finance foreign investments abroad. Finally, "moral suasion" through conversations between the finance minister and the governor of the central bank, on the one hand, and directors of the few big commercial banks, on the other, was an important policy tool.

[32] Public insurance institutions, primarily pension funds, were responsible for one percent of the supply of credit during the period 1951-1955 and 34 percent in 1971-1973 (Lindbeck, 1975).

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Table 1 Annual Growth Rates per Capita, 1820-1985. Constant prices

	1820 -70	1870 -1913	1913 -50	1950 -73	1973 -79	1950 -60	1960 -70	1970 -80	1980 -85	1950 -80	1950 -85
Denmark	0.9	1.6	1.5	3.3	1.8	2.6	3.5	2.1	2.5	2.8	2.7
Finland	(n.a.)	1.7	1.7	4.2	2.0	4.0	4.3	3.1	1.9	3.8	3.5
Norway	1.0	1.3	2.1	3.1	3.9	2.8	3.6	4.6	2.6	3.6	3.5
Sweden	0.6	2.1	2.2	3.1	1.5	2.6	3.7	1.8	2.2	2.7	2.6
Australia	(n.a)	0.6	0.7	2.5	1.3						
Austria	0.7	1.5	0.2	5.0	3.1						
Belgium	1.9	1.0	0.7	3.6	2.1						
Canada	(n.a)	2.0	1.3	3.0	2.1						
France	1.0	1.5	1.0	4.1	2.6						
Germany	1.1	1.6	0.7	5.0	2.6						
Italy	(n.a)	0.8	0.7	4.8	2.0						
Japan	0.0	1.5	0.5	8.4	3.0						
Netherlands	1.5	0.9	1.1	3.5	1.7						
Switzerland	1.7	1.2	1.5	3.1	-0.2						
UK	1.5	1.0	0.9	2.5	1.3						
USA	1.4	2.0	1.6	2.2	1.9						
Arithmetic average	1.1	1.4	1.2	3.8	2.0						

Sources: A Maddison, Phases of Capitalists Development, Oxford University Press, New York, 1982
Blomström and Meller (1990)

Table 2

Distribution of Gross National Product by Final Use, Selected Countries, Long Periods
(based on totals in current prices)

	Share in GNP (%)				
	Private consumption (1)	Government consumption (2)	Gross domestic capital formation (3)	Capital exports or imports (−) (4)	Gross national capital formation (5)
United Kingdom					
1. 1860–79	82.7	4.8	9.4	3.1	12.5
2. 1880–99	81.9	5.8	8.4	3.9	12.3
3. 1900–14	78.6	7.4	8.7	5.3	14.0
4. 1921–29	82.0	8.9	6.8	2.3	9.1
5. 1950–58	66.9	16.9 (9.4)	15.5	0.7	16.2
Germany (boundaries of the period)					
6. 1851–70	81.6	4.0	13.7	0.7	14.4
7. 1871–90	73.1	5.9	18.9	2.1	21.0
8. 1891–1913	68.7	7.1	23.0	1.1	24.1
9. 1928	76.1	7.2	18.2	−1.5	16.7
10. 1950–59	58.7	14.4	23.7	3.1	26.8
Italy					
11. 1861–80	87.3	4.2	10.0	−1.5	8.5
12. 1881–1900	84.4	4.8	10.8	0	10.8
13. 1901–10	78.4	4.2	15.9	1.4	17.3
14. 1921–30	78.5	5.6	18.1	−2.2	15.9
15. 1950–59	68.2	12.0	20.8	−1.0	19.8
Denmark					
16. 1870–89	92.0		9.8	−1.8	8.0
17. 1890–1909	88.8		13.5	−2.3	11.2
18. 1921–30	87.8		11.9	0.3	12.2
19. 1950–59	68.6	12.5 (9.6)	18.9	0	18.9
Norway					
20. 1865–74	83.8	3.8	11.3	1.2	12.5
21. 1875–94	84.7	4.8	11.9	−1.4	10.5
22. 1895–1914	83.6	6.6	14.7	−4.9	9.8
23. 1915–24	78.1	8.5	18.9	−5.5	13.4
24. 1925–34	77.5	8.7	14.4	−0.6	13.8
25. 1950–59	60.0	12.5 (8.9)	29.9	−2.4	27.5
Sweden					
26. 1861–80	85.3	4.4	10.8	−0.5	10.3
27. 1881–1900	85.0	5.4	11.2	−1.6	9.6
28. 1901–20	81.6	5.8	13.1	−0.5	12.6
29. 1921–40	75.0	8.6	15.8	0.6	16.4
30. 1941–59	64.8	14.3	21.0	−0.1	20.9
31. 1950–59	61.9	16.8 (11.9)	21.2	0.2	21.4
United States (official concept)					
32. 1869–88	76.7	3.6	20.6	−0.9	19.7
33. 1889–1908	73.6	4.4	21.4	0.5	21.9
34. 1909–28	74.7	4.9	18.4	2.0	20.4
35. 1929–38	77.9	9.4	12.3	0.4	12.7
36. 1946–55	66.4	15.4	17.3	0.9	18.2
37. 1950–59	63.7	17.9 (7.5)	17.9	0.5	18.4

Source: Kutznetz (1965)

Table 3a **Income Distribution. Sweden and the USA**

Household factor income before tax. Percent of total

1935	Sweden	USA
Top 20%	56	52
Bottom 60%	23	27
1954		
Top 20%	43	45
Bottom 60%	34	33

Source: Kuznets (1965)

1972 Percent of factor income before tax/percent of disposable income in Sweden

Top 20%	49/37
Bottom 60%	26/38

Source: Lindbeck (1975)

Table 3b **Maximum equalization percentage for all family units**

	Factor income	Disposable income
1975	36.3	22.9
1980	37.0	21.8
1985	39.2	23.4
1988	39.8	23.7

Source: SCB - Central Bureau of Statistics, Be 21 SM 9001

Table 4

Evaluation of wealth distribution 1920-1985; Share (percent) of total net wealth owned by the richest 1, 2, 5, 10 and 20 percent of households

Year	Richest households (per cent of all househol				
	1	2	5	10	20
1920	50	60	77	91	100
1930	47	58	74	88	98
1935	42	53	70	84	97
1945	38	48	66	82	96
1951	33	43	60	76	92
1961	24	32	48	64	82
1970	23	31	46	62	84
1975	21	28	44	60	80
1975(market value)	17	24	38	54	75
1978	17	24	39	55	76
1985	17	23	37	53	75

Source: From Pålsson (1990, Spånt (1987) and Jansson & Johansson (1988)

Table 5

Public Sector Consumption, decomposed. Share of GNP, %. Current Prices, 1920-85 (from Herlitz)

Sector	1920	1930	1938	1946	1958	1963	1970	1975	1980	1985
Education	2,0	2,4	2,7	2,2	3,2	4,2	5,3	5,2	6,0	5,4
Health/Medical	1,0	1,2	1,4	1,7	2,7	3,2	4,8	5,8	7,3	7,2
Social Care	0,6	0,6	0,8	0,8	1,1	1,4	2,4	2,9	4,7	5,0
General	1,0	1,0	1,0	1,2	1,2	1,3	1,6	2,0	2,4	2,4
Courts/Police	0,5	0,5	0,6	0,5	0,7	1,0	1,2	1,3	1,4	1,2
Military	1,9	1,5	2,2	3,4	4,3	4,2	3,3	3,2	3,1	2,6
Other	1,3	1,7	2,0	2,2	2,9	2,3	2,8	3,6	4,3	4,0
Total Public Consumption	8,3	8,9	10,7	12,2	16,1	17,5	21,4	24,1	29,2	27,8

Table 6

Credit Volume Growth, Sweden, 1871-1911

Year	Growth in Kronor	Credit Volume/(GNP)
1871—75	284	0,53
1876—80	128	0,61
1881—85	279	0,80
1886—90	149	0,83
1891—95	142	0,88
1896—00	707	0,93
1901—05	680	1,09
1906—10	1 024	1,13

Source: Nygren (1985)

Table 7

Internal employment expansion and acquisition in the 10 largest corporations, 1946-1983. Thousands. (From Jagrén 1989)

	Employees 1983	Internal change	Change through acquis.	Total
All				
1946–68	283	109	41	150
1969–75	431	96	52	148
1976–83	423	–81	74	–7
1946–83	423	124	167	290
All except Electrolux				
1946–68	262	102	37	139
1969–75	365	80	22	103
1976–83	334	–73	42	-31
1946–83	334	110	101	211

Figure 1

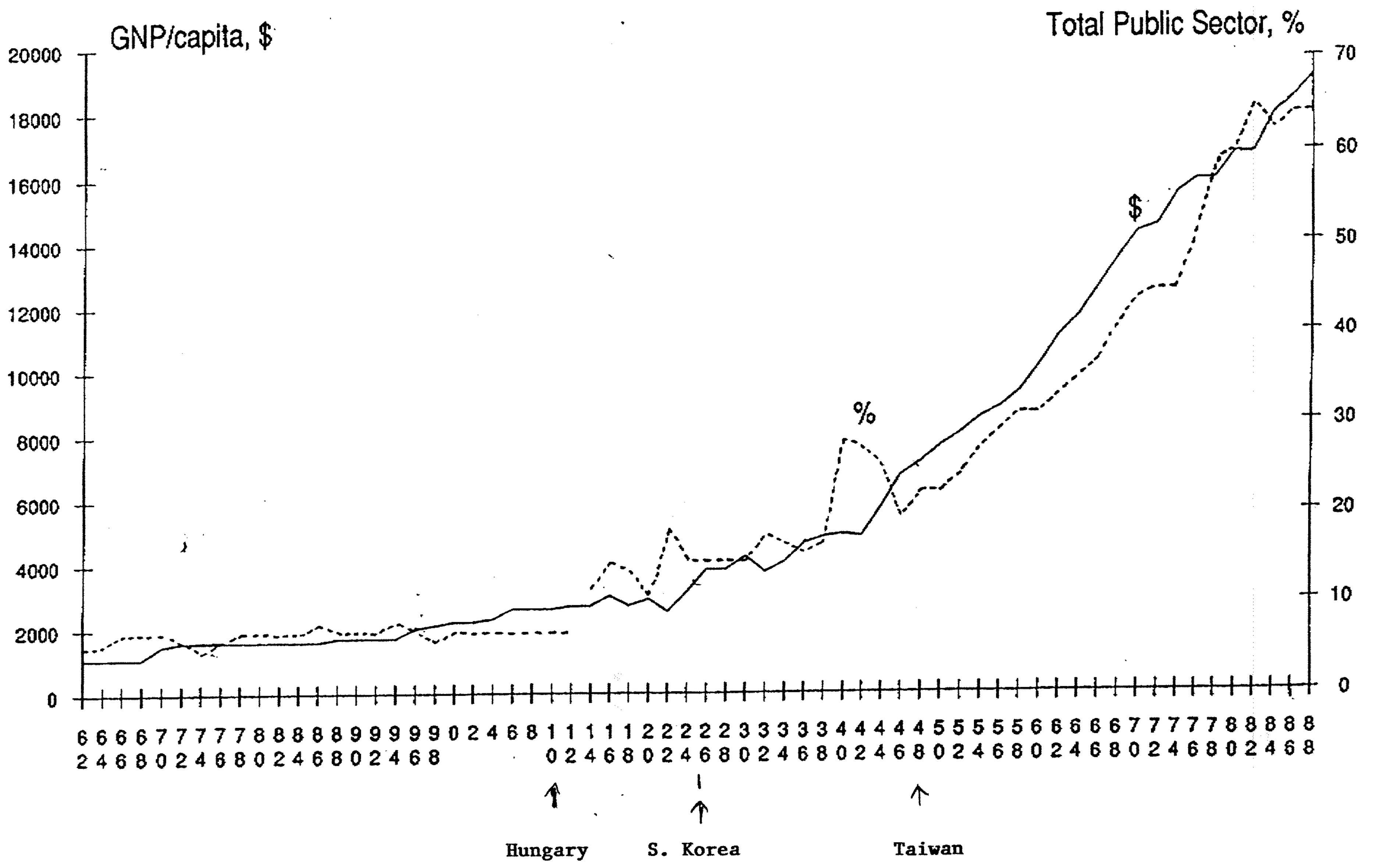
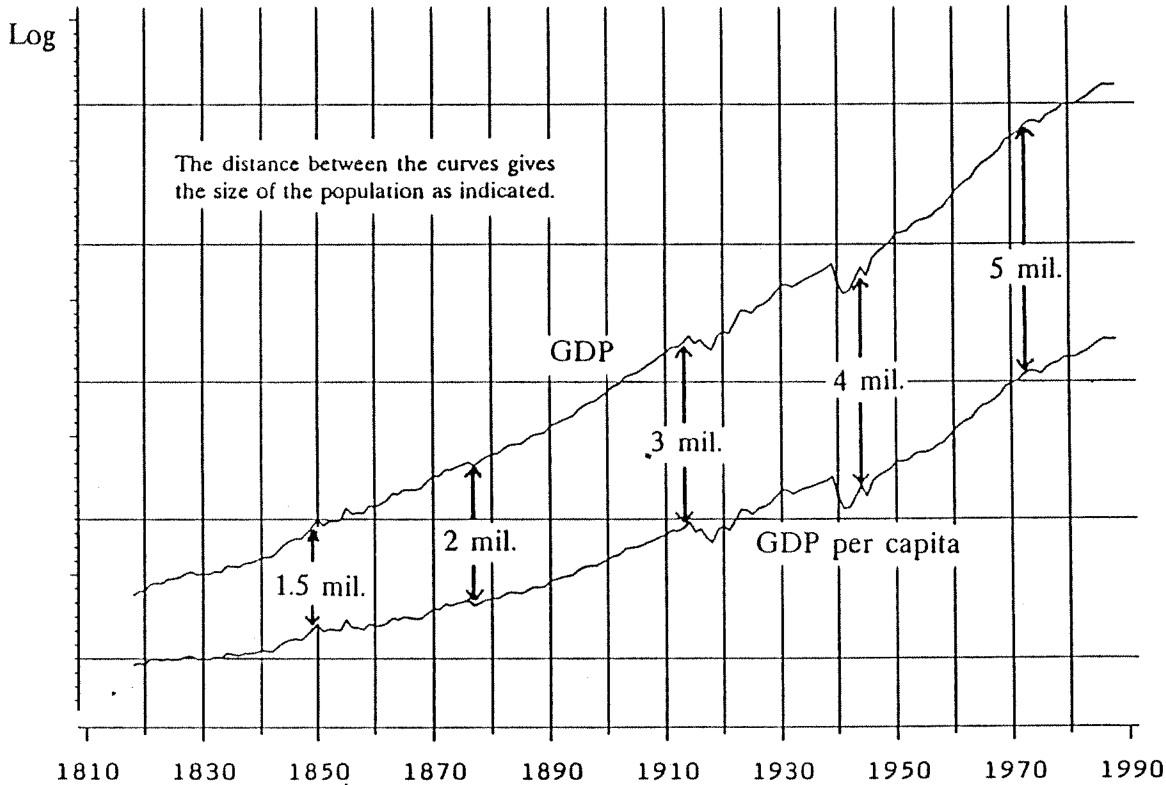

GNP/capita, $
Total Public Sector, %
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
70
60
50
40
30
20
10
0
$
%
Hungary
S. Korea
Taiwan

Figure 1a. **Real GDP of Denmark 1820 to 1990 - drawn on a Logarithmic Scale.**

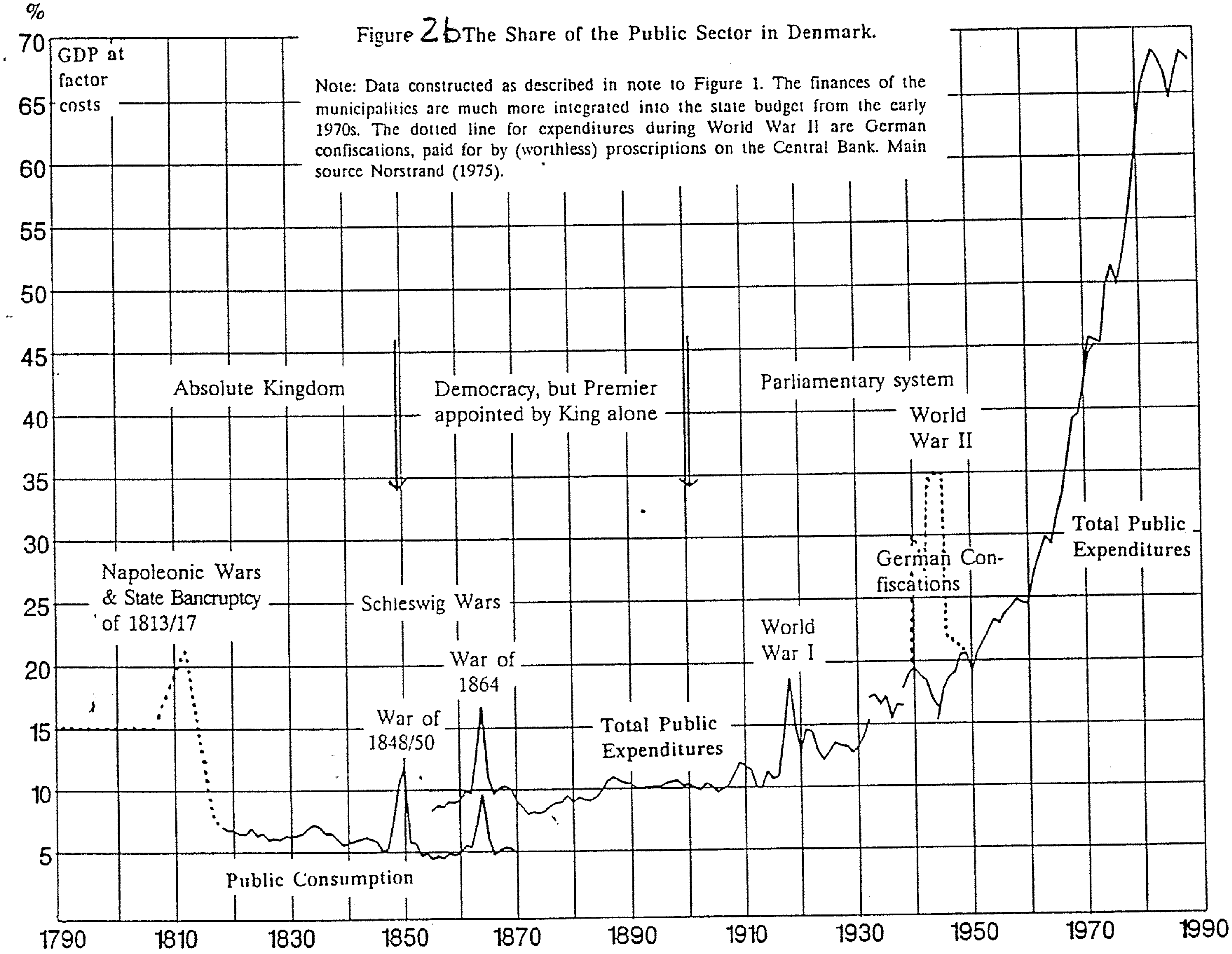


Notes: Constructed by chaining together the long historical series in S.A. Hansen (1972) from 1818 to 1948 (using 1929 weights and chaining over the changes of territory in 1864 and 1920) and ADAMBk (see references) for 1948-1985 (using 1980 weights). The curve rises 85 times, or, as the population has risen 5 times, 17 times per capita. Disregarding all problems comparing over long periods and across countries this corresponds to the difference today between Denmark and Peru or Morocco.

Source: Paldam (1990)

Figure 2b The Share of the Public Sector in Denmark.

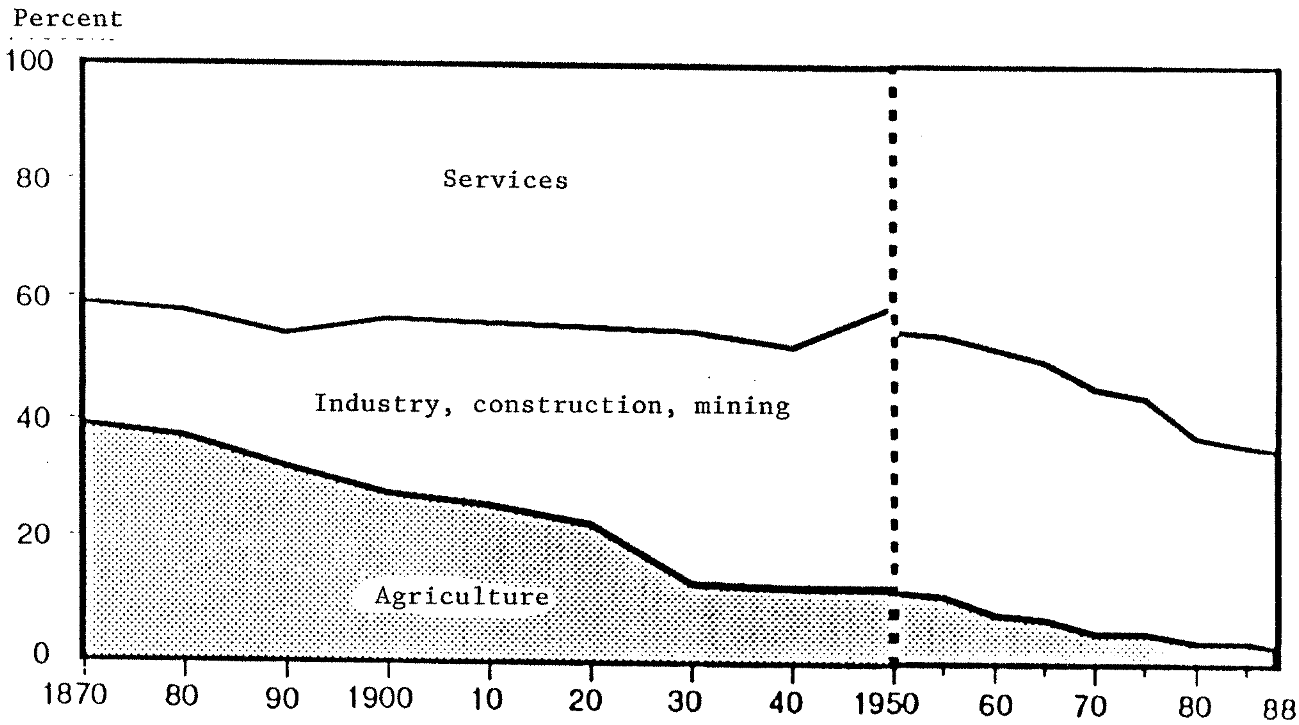
Note: Data constructed as described in note to Figure 1. The finances of the municipalities are much more integrated into the state budget from the early 1970s. The dotted line for expenditures during World War II are German confiscations, paid for by (worthless) proscriptions on the Central Bank. Main source Norstrand (1975).



Source: Paldam (1990)

Figure 3 a **GNP in current prices 1870-1988 divided into sectors. Percentage shares**

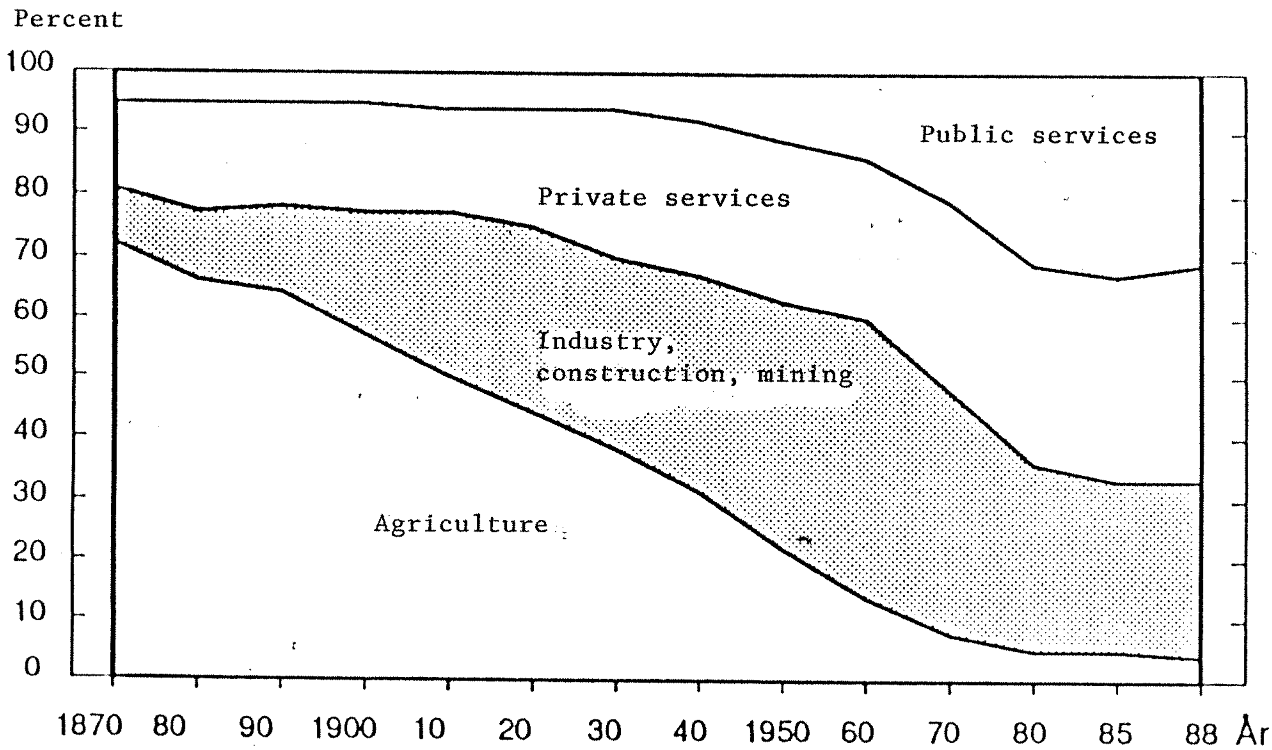
Sweden



Source: SCB, National Accounts

Figure 3 b **Employment divided into sectors 1870-1988. Percentage shares.**

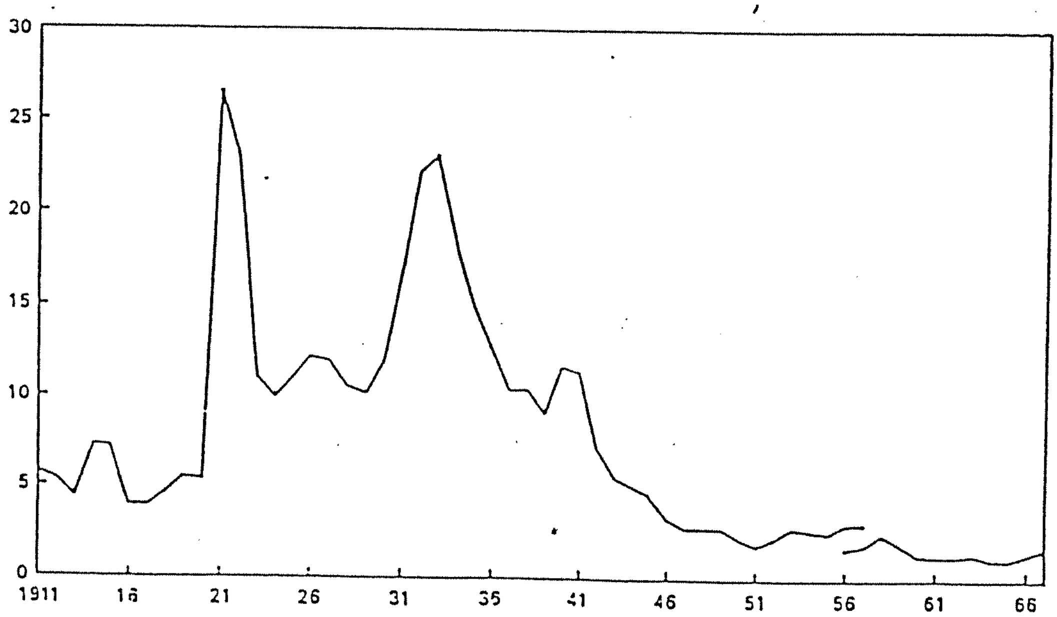
Sweden



Source: SCB, National Accounts

Figure 4

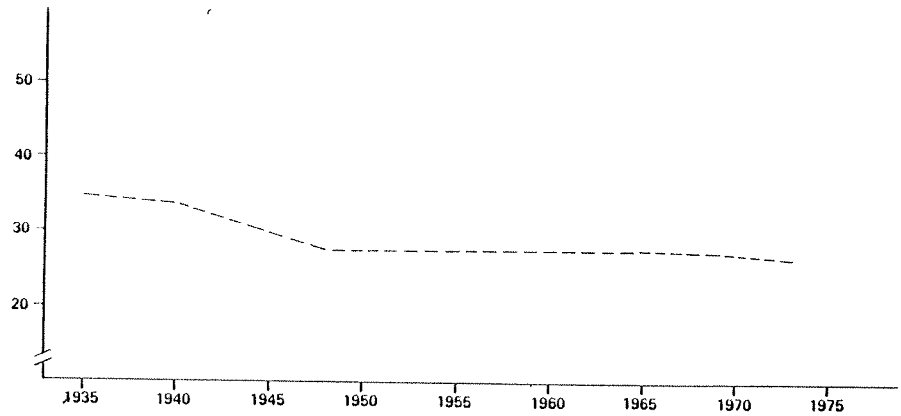
Unemployment in Sweden, 1911-1967 (percent of labor force)



Source: Silenstam (1970, p. 85)

Figure 5

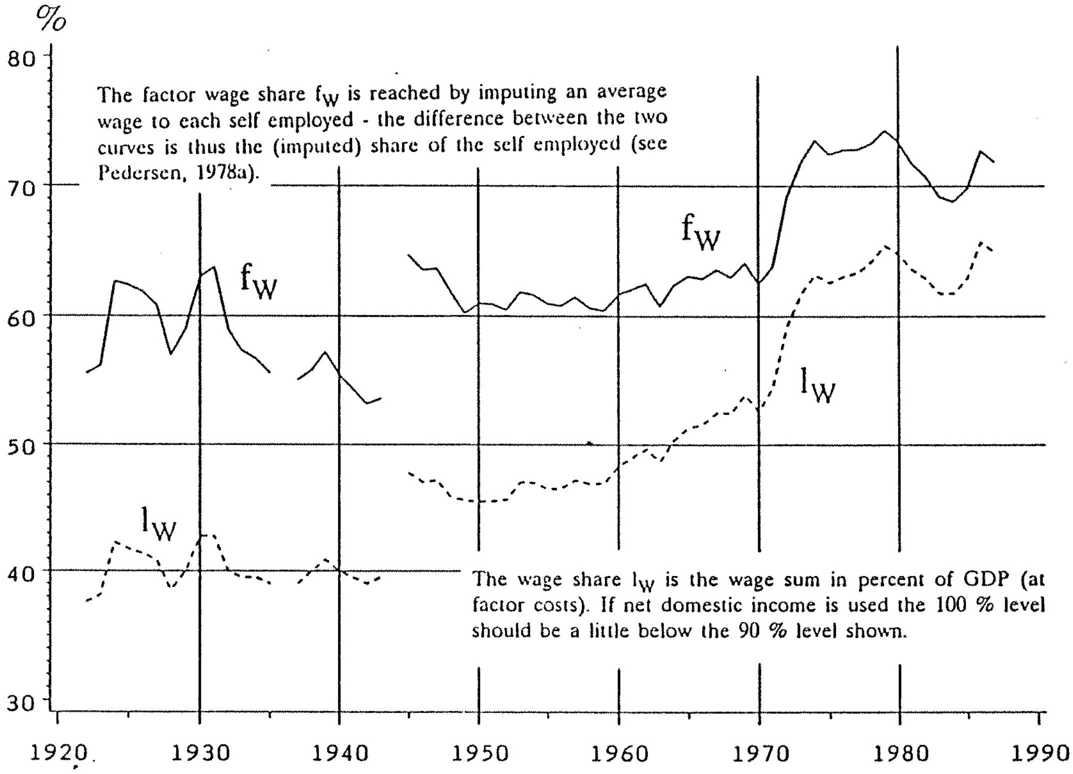
Income inequality among households. Tax-assessed income. Measure of inequality: maximum equalization percentage



Source: Spånt (1980)

Figure 6

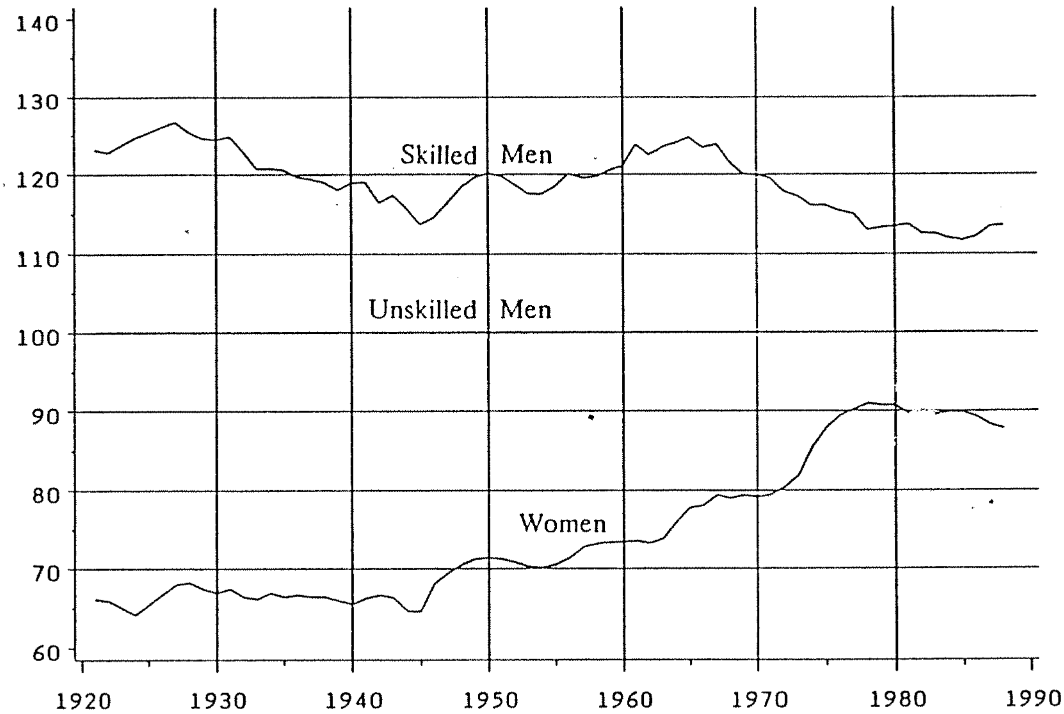
Denmark. The Wage Share, 1922-1987



Source: Paldam (1990)

Figure 7

Denmark. The Wage Distribution between Major Groups of Workers 1921-1987



Note: The distribution is calculated by setting the average wage for unskilled men equal to 100, see Pedersen (1978b). The series is updated by the author. The results for the three main groups are representative. Most skilled women are salaried, so most women in the data shown are unskilled.

Source: Paldam (1990)

Fig. 8 Import Duties as Per Cent of Merchandise Imports

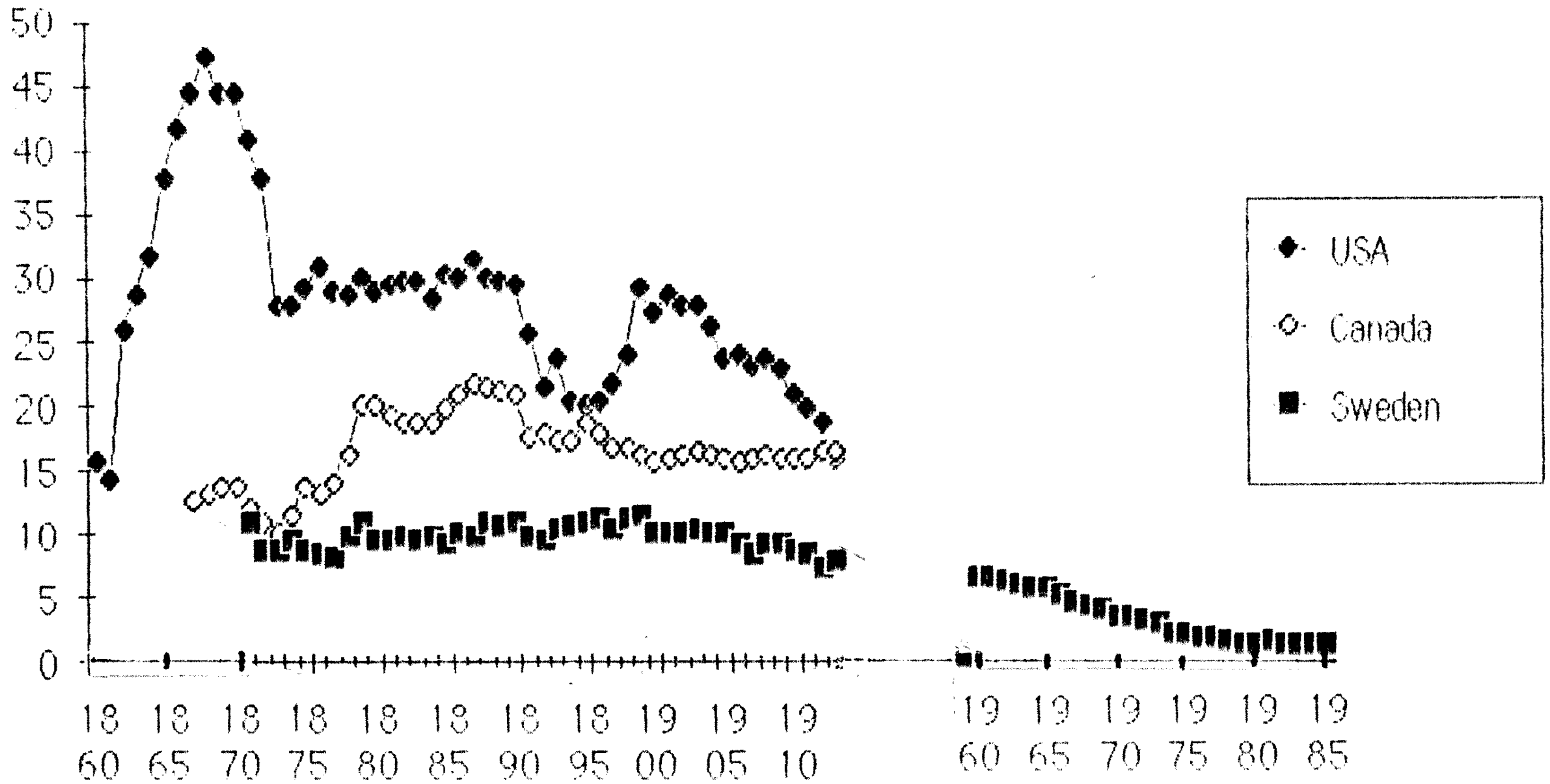


Figure 9

Funding of trade education (from Höök, 19)

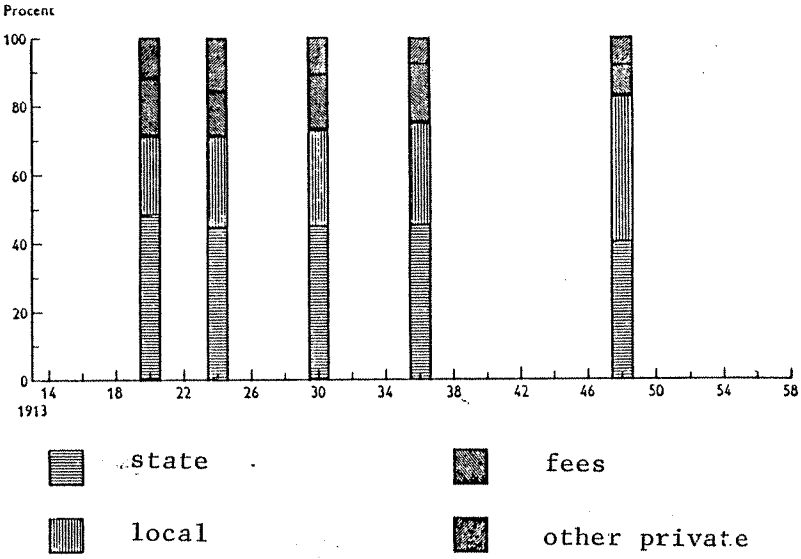


Figure 10

Public consumption of education in secondary schools and high school

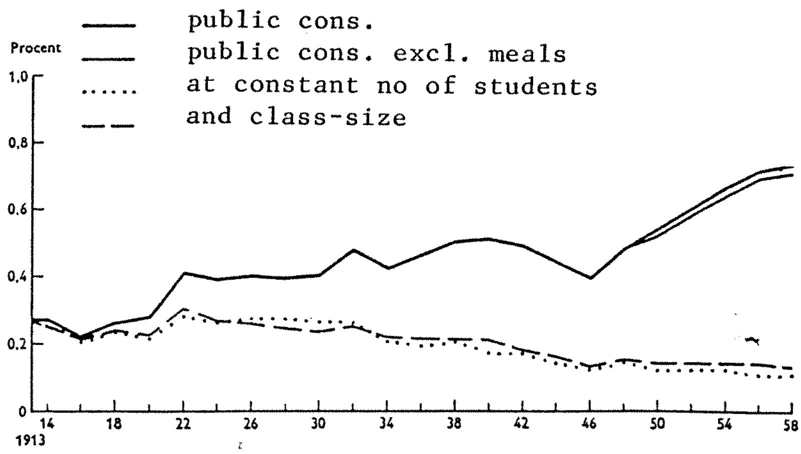


Figure 11

Number of students in trade education (from Höök)

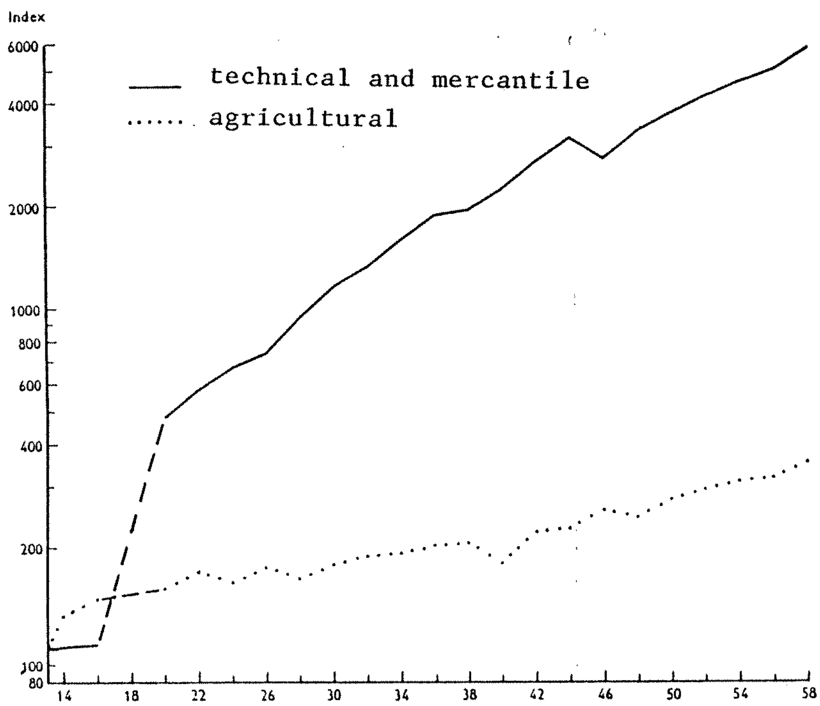
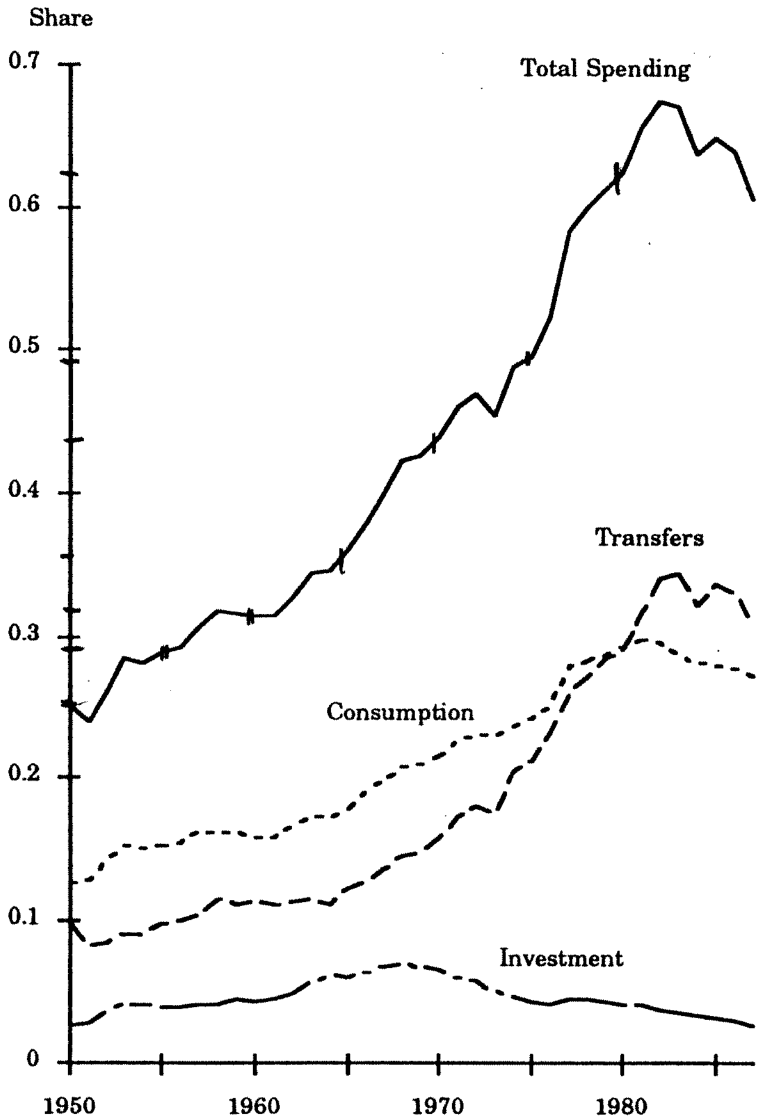


Figure 12

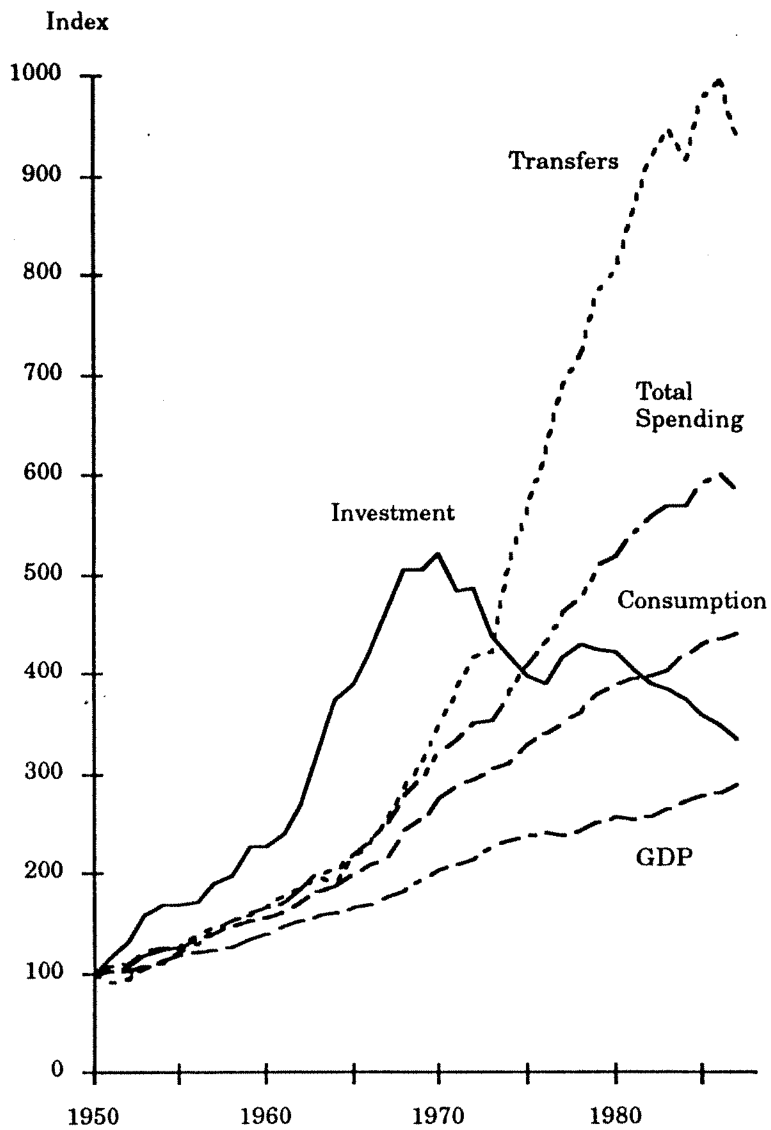
Different Measures of the Public Sector as a Share of GDP in Current Prices, 1950-87, Sweden



Source: Henreksen (1990)

Figure 13

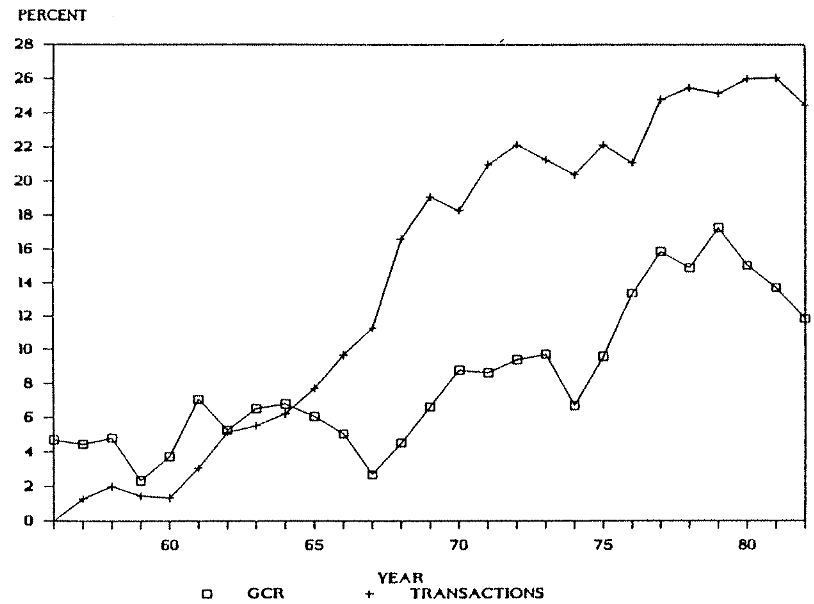
Real Growth of Government Expenditure and Its Main Components, 1950-87 (Index 1950 = 100) Sweden



Source: Henreksen (1990)

Figure 14 **Percent of total income unrecorded.**

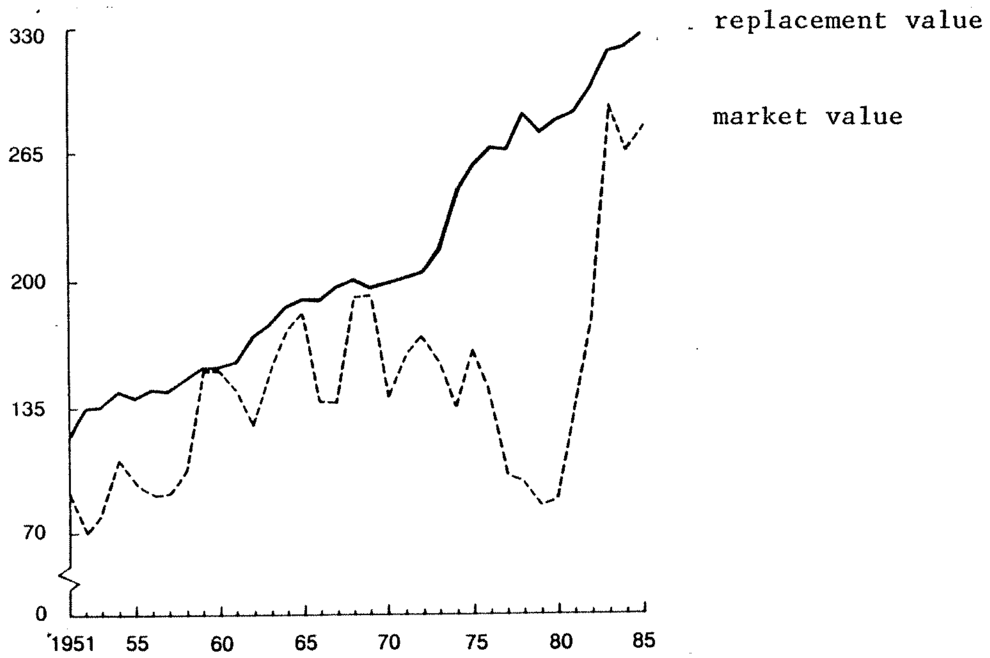
Alternate methods



Source: Rivlin et al

Figure 15

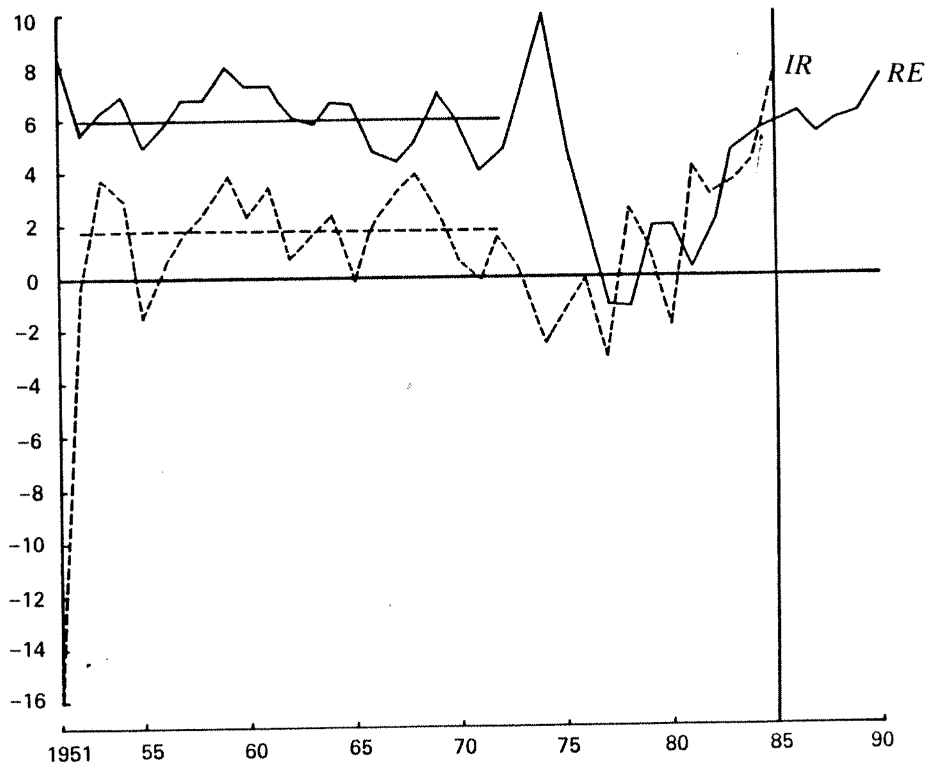
Market value and replacement value of capital in Swedish industry, 1951-85
Billions of SEK, 1980 prices



Source: Eliasson (1988)

Figure 16

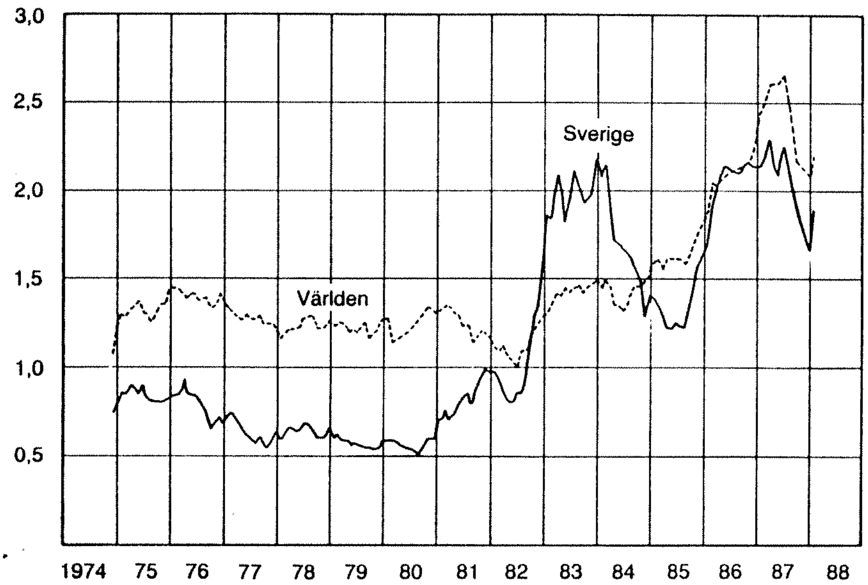
Real rate of return in industry (RE) and the real interest rate (IR) 1951-90



Note: The horizontal lines are averages for the period 1952–72.

Source: Eliasson (1988)

Figure 17 **q-values in Sweden (Sverige) and the world (Världen) 1974-1987**



Source: Morgan Stanley Capital INternational Perspectives

Figure 18

Percent of labor force employed by AMS (the Labor Market Board)
(from Lindbeck, 1975)

A: General Relief Work
B: A + protected workshops
C: B + reeducation programs

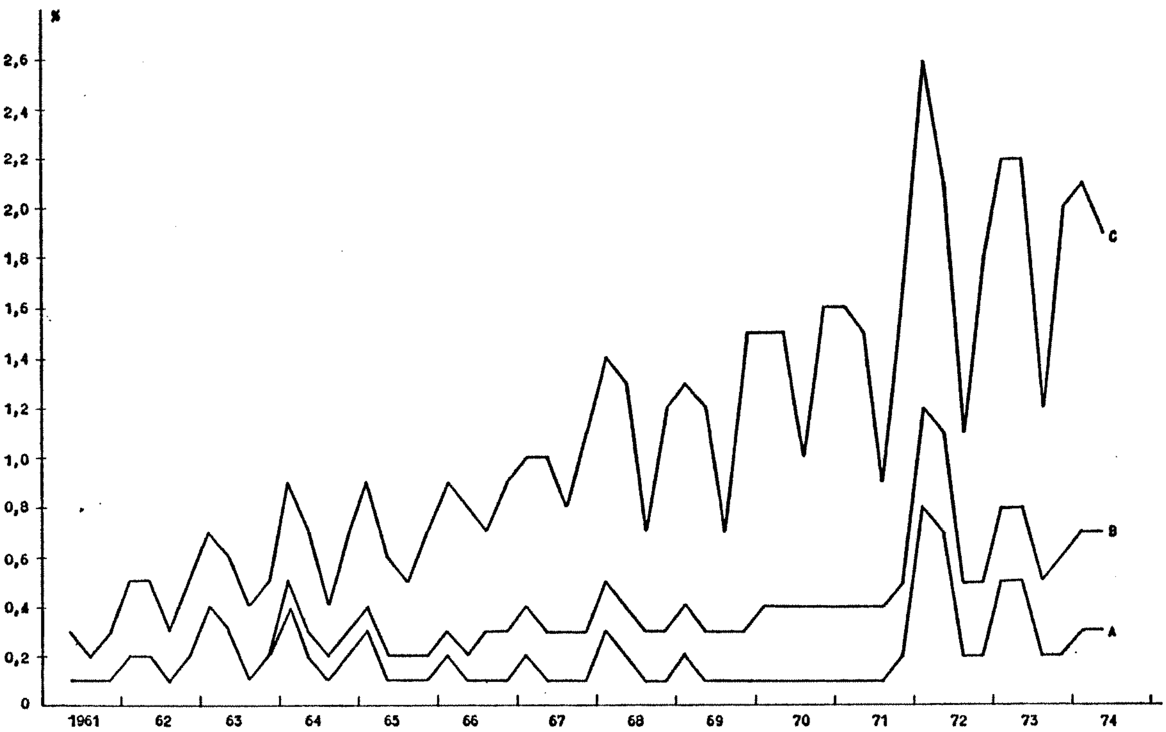
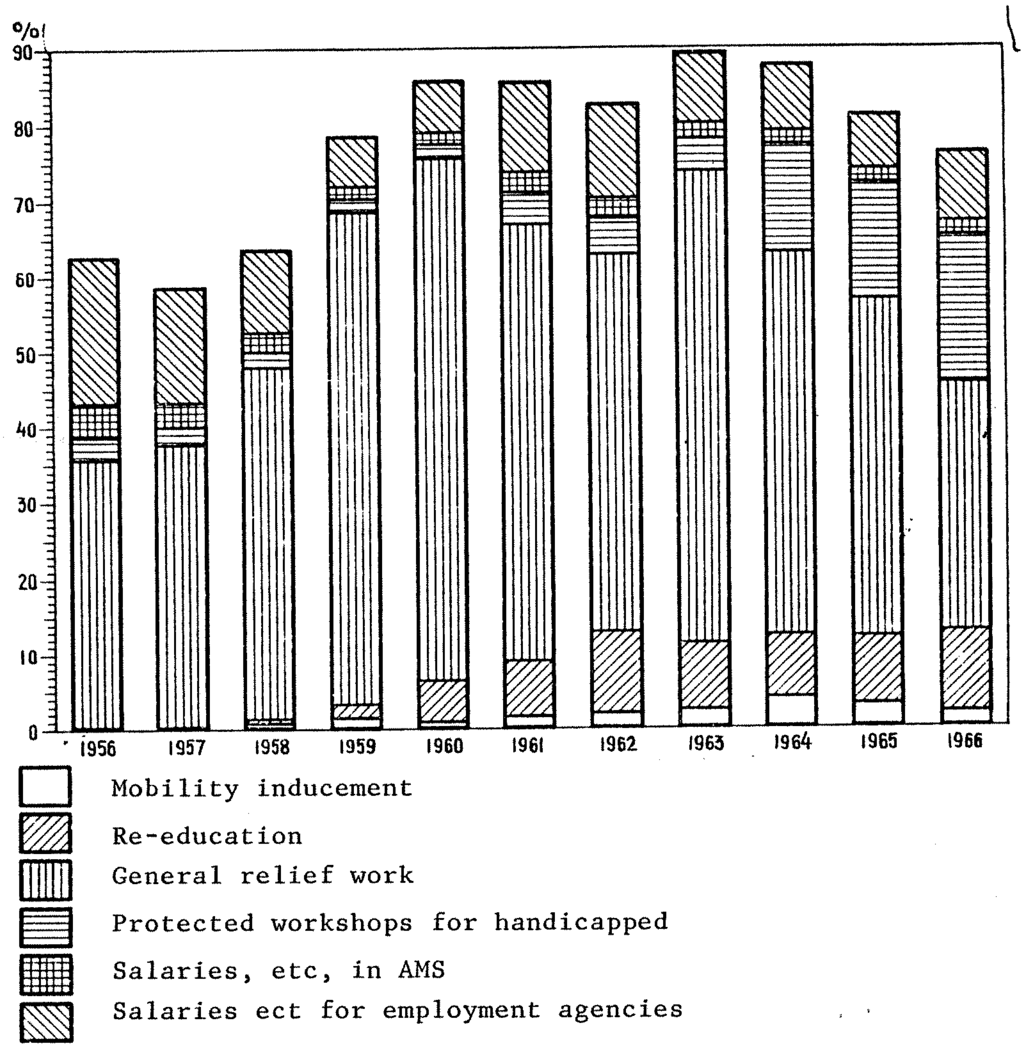


Figure 19

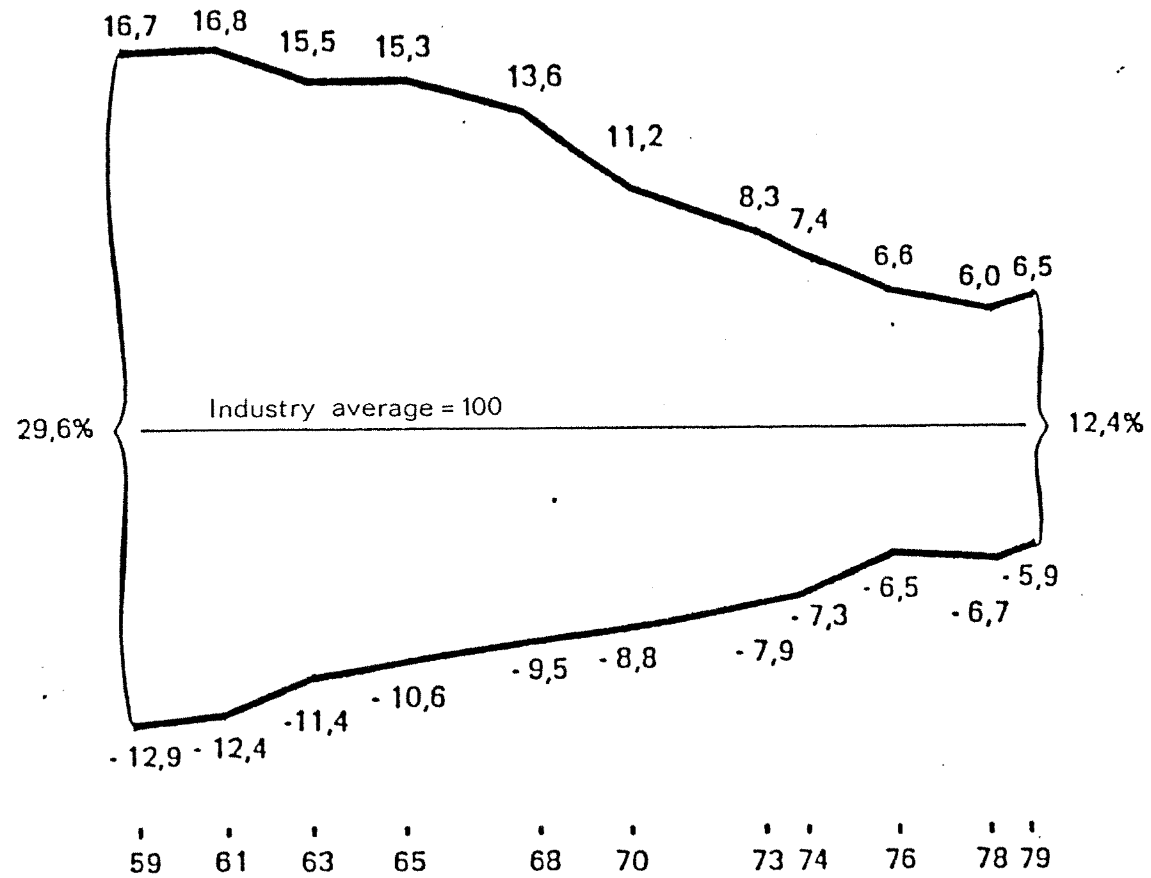
Distribution of AMS' (the Labor Market Board's) expenses, 1956-1966



Source: Öhman

Figure 20

Wage dispersion in Sweden, 1959-79



Source: SOU 1981:44, p. 133

Figure 21

Number of individuals in early retirement as percent of total population by age group, 1967-1974
(from Östlind, 1977)

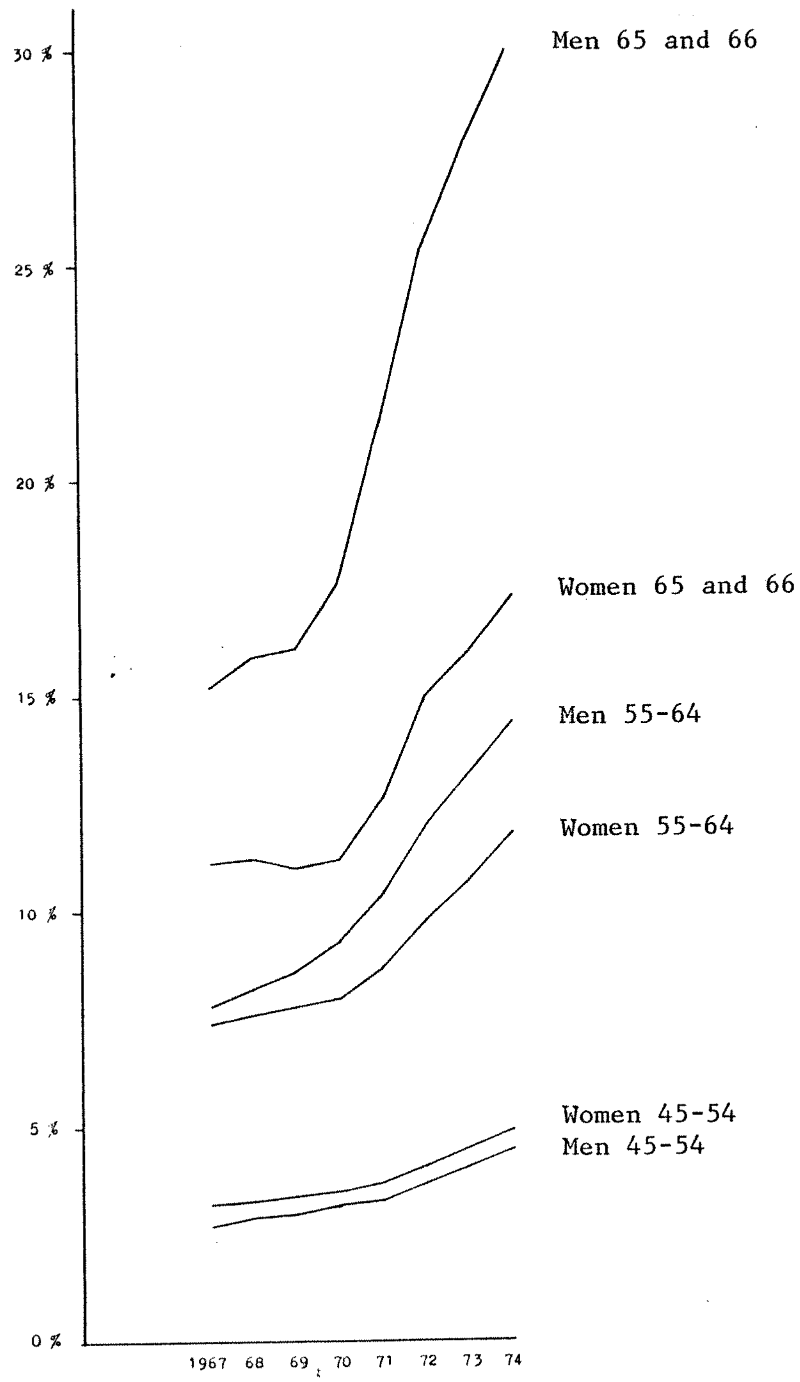


Figure 22

Some firms' shares of Swedish industrial production, 1685-1980 (from Jagrén 1989)

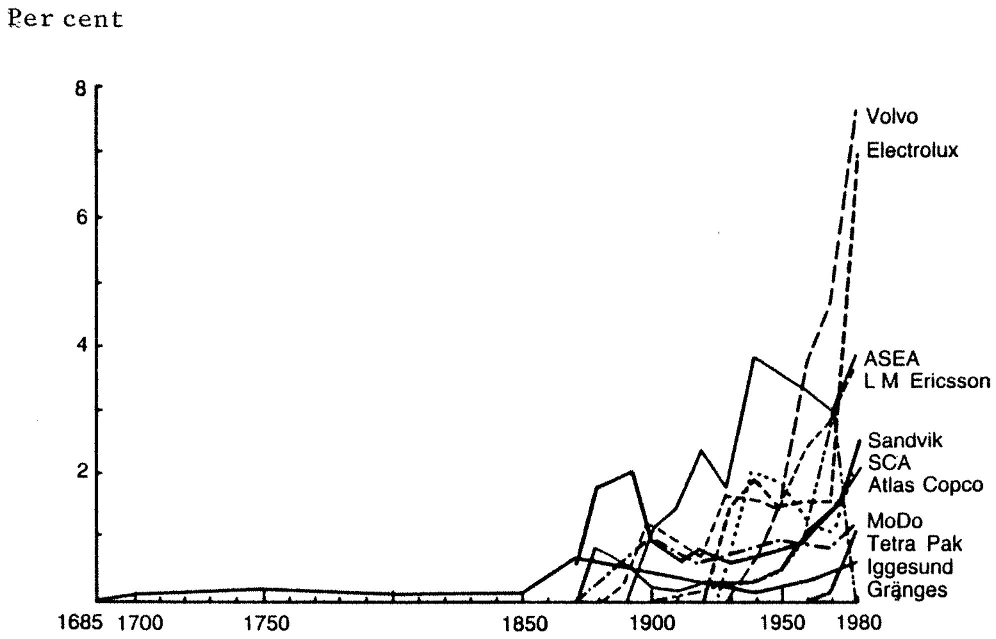


Figure 23

10 companies' share of total Swedish manufacturing employment 1880-1983 (from Jagrén, 1988). Companies listed in Table 8

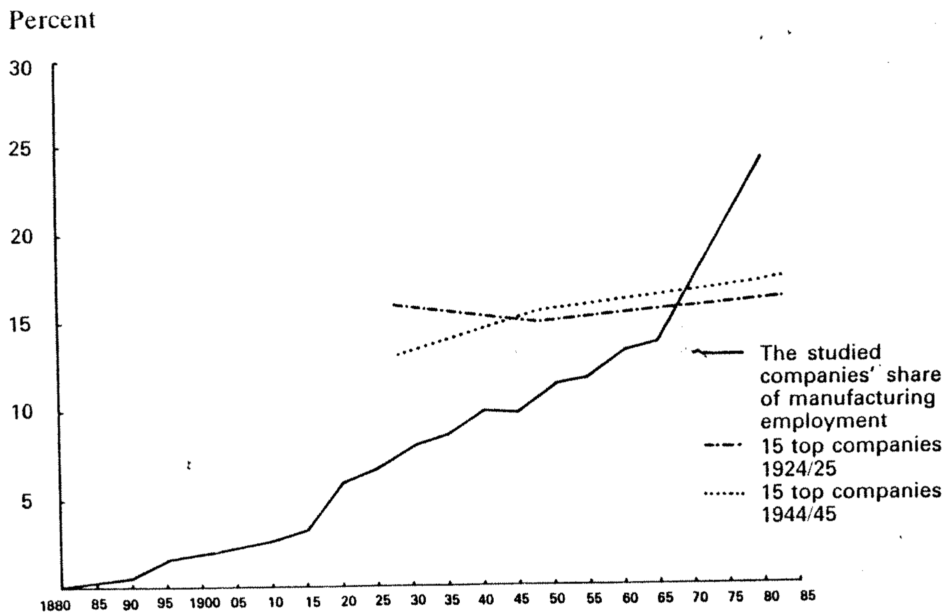
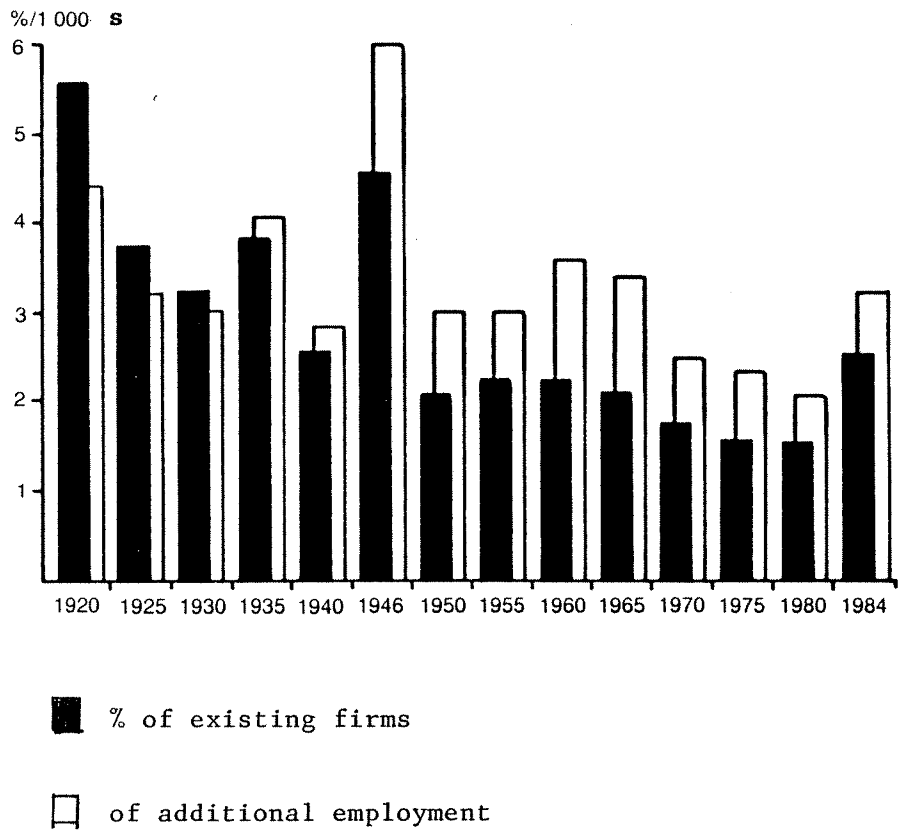


Figure 24

Number of new firms, % of existing and additional employment
(from Jagrén, 1989)



Source: De Rietz (1985)