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The Rise, Fall and Revival of the Swedish Welfare State: What are the Policy Lessons from Sweden?

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The rise, fall and revival of a capitalist welfare state: what are the policy lessons from Sweden?*

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Abstract: This paper discusses a number of questions with regard to Sweden's economic and political development:

- How did Sweden become rich?
- What explains Sweden's high level of income equality?
- What were the causes of Sweden's problems from 1970 to 1995?
- How is it possible that Sweden, since the crisis of the early 1990s, is growing faster than most EU countries despite its high taxes and generous welfare state?

These questions are analyzed using recent insights from institutional economics, as well as studies of inequality and economic growth. The main conclusion is that there is little, if any, Swedish exceptionalism: Sweden became rich because of well-functioning capitalist institutions, and inequality was low before the expansion of the welfare state. The recent favorable growth record of Sweden, including the period of financial stress (2008–2010), is a likely outcome of a number of far-reaching structural reforms implemented in the 1980s and 90s.

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1. Why care about Sweden?

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"Is there a certain 'Nordic experience' from which we might learn?"

- Klas Eklund<sup>2</sup>
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For some, Sweden is proof that a generous welfare state and big government is fully compatible with a growing competitive economy. For others, Sweden is a frightening example of what big government can do to a thriving economy. This paper departs from the fact that for about 140 of the 160 years that have elapsed since 1850, Sweden has done well—often remarkably well—in combining high levels of economic growth with increasing equality. From being one of the poorest countries in Europe, the 100-year period from 1870 to 1970 turned Sweden into the fourth richest country in the world. Remarkably, as will be shown below, in more or less the same period Sweden also turned into a country with one of the world's most compressed income distributions.

There are standard explanations of both achievements: Sweden's prosperity is usually attributed to the presence of natural resources (such as forest and iron ore) and to the absence of war. Sweden's high level of income equality is typically assumed to be caused by high and progressive taxes, a regulated labor market and progressive social policies. As will be shown, these standard explanations of Sweden's success are insufficient and sometimes wrong. Just like most countries, Sweden grew rich because of well-functioning capitalist institutions, and its egalitarianism is much older than the policies that today make Sweden stand out in international welfare state comparisons.

These conclusions are reached by applying recent advances in institutional economics and inequality research to Sweden's economic history. More specifically, this paper synthesizes existing research to find compelling answers to the following questions:

- How did Sweden become rich?
- What explains Sweden's high level of income equality?
- Why did Sweden run into problems from 1970 and onwards?
- Why has Sweden, after the crisis of the early 90s, grown faster than most EU countries despite its high taxes and generous welfare state?

Taken together, the answers to these questions tell a story of the rise, fall and revival of a capitalist welfare state. This paper is not the first case study of Sweden from an economic perspective. For example, Lindbeck (1997) argues that Swedish politics in the 1970s and 80s can be understood as a social science experiment with a devastating outcome. For at least two reasons, however, Lindbeck's story needs updating. First, since 1995, the last year covered by Lindbeck, Sweden has done remarkably well in terms of economic growth, and the economic crisis of 2008 has only strengthened this impression. Second, the economic consequences of institutional quality, economic freedom and

¹ Who knew? The Swedish model is working, October 1999. Available at www.pkarchive.org.

² Cited from "The Nordic Way" (Eklund et al., 2011) presented at the World Economic Forum in Davos, 2011.

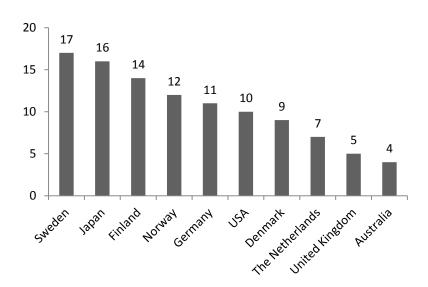
globalization have been a thriving research field, shedding new light on the case of Sweden, from the institutional reforms of the 1800s to the solid economic development today.

The paper proceeds as follows. Section 2 describes the rise of the Swedish economy, from the 1800s to 1970, and discusses how it can be understood from an institutional economics perspective. Section 3 discusses the when and why of Swedish income equality, while Section 4 describes the problematic period of 1970 to 1995. Finally, Section 5 delves into the most recent period of intense reform and high economic growth, and Section 6 concludes.

2. Prosperity

The period between 1870 and 1970 in Sweden has been referred to as the golden years. Figure 1 explains why. Swedish productivity grew to 17 times its size during this period—a figure only to be remotely matched by Japan and Finland. As a result, Sweden went from having a per capita income equivalent to 40–50 percent of the United Kingdom's per capita income during the first half of the 19th century to being the fourth richest country in the world by 1970 (after Switzerland, the US and Luxembourg).³

Figure 1. How much higher was GDP per hour worked in 1970 compared to 1870? (factor)⁴



A typical account explains the growth of the golden years with the export of natural resources. When industrialism gained momentum in the UK, the demand for Swedish timber and ore increased. Another explanation often mentioned is that Sweden benefitted from staying out of the two world wars. Myhrman (1994) was one of the first to scrutinize these standard explanations, and surprisingly few have followed. Myhrman asks: if British economic growth caused growth in Sweden, why was the Swedish economy so weak in its development between 1780 and 1860? And why was there an

³ In earlier versions of the OECD statistics, Sweden actually placed third. However, Luxembourg has now revised its GDP figures.

⁴ Source: Maddison (1982).

increase in Swedish economic growth around the turn of the last century, when the British economy had slowed down?

According to Myhrman, the standard explanations cannot provide sufficient answers to these questions, but the pattern can be explained by institutional factors. In fact, research clearly suggests that Sweden is no different from most other rich countries: prosperity was caused by well-functioning, capitalist institutions. As will be shown, focusing on the importance of stable capitalist institutions also makes it easier to explain why Sweden started trailing behind other countries in the 1970s.

2.1 Explaining growth

The importance of institutions is now more or less mainstream economics, but that was not always the case. Neoclassical growth models predict that growth per person increases when savings and investments increase, but they say nothing about what influences technological development and thereby the long-term growth rate. The more recent, new (or endogenous) growth theory of Lucas (1988) and Romer (1990) takes education and human capital into account as well, but it still lacks an in-depth analysis of what promotes innovation and the creation of knowledge, and the crucial role of institutions in the growth process.

Following works like North (1987; 1990), studies on economic growth (Knack and Keefer, 1995) appeared during the 1990s, which explicitly took into account the role of institutions, for example Knack and Keefer (1995). Institutions rule claim Rodrik et al., (2004), in a famous paper, arguing that certain types of institutional quality, especially property rights, trumps geography and trade as determinants of growth. Abdiweli (2003) has reviewed existing evidence and provided further evidence that judicial efficiency, low levels of corruption, well-organized public bureaucracy, and well-defined private ownership co-varies with high levels of growth. Another important survey by Doucouliagos and Ulubasoglu (2006) carried out a meta-analysis of 52 other studies, which examined the link between institutions characterized by economic freedom (measured in several different ways) and growth. They conclude that economic freedom has a robust positive effect on economic growth regardless of how it is measured.

Research in this area is very much in progress, but many findings support the view that there seems to be a causal link from institutions to growth. This holds, for example, when using instrumental variables to handle the problem of reverse causality from growth or income to institutions. Well-known instruments used include legal origin (Acemoglu and Johnson, 2005), latitude (Easterly and Levine, 2003), and settler mortality (Acemoglu et al., 2001). Furthermore, Granger causality tests by Heckelman (2000) and Dawson (2003) suggest that the level of economic freedom Granger causes economic growth. Finally, for financial markets, King and Levine (1993) and De Gregorio and Guidotti (1995) also support a causal link.

The role of institutions can also explain what is sometimes referred to as the resource curse, namely the fact that many poor countries have valuable natural resources. In the absence of good institutions, however, natural resources cause conflicts, corruption and detrimental behavior that obstruct growth. When institutional quality is higher, there are both laws and social norms that ease conflict resolution and lower transaction costs, fostering economic development (see for example Mehlum et al. (2006)). See also De Soto (2000) on how the absence of effective property rights can explain the lack of economic growth in the world's poorest countries: when houses cannot be mortgaged because they were built without permits, investments fail to materialize.

⁵ The settler mortality data, however, have severe problems, as noted by Albouy (2008).

To make a potentially long story short, recent research in institutional economics has demonstrated a convincing effect on growth from capitalist institutions such as property rights and rule of law.⁶

2.2 The role of institutions in Sweden

Myhrman (1994) was among the first to note that Sweden's growth during the golden years of 1870-1970 can be explained by institutional reforms implemented mainly during the end of the 19th century. The recent boom in empirical institutional analysis has only made Myhrman's point more convincing. The types of institutional reforms introduced in the mid-1800s are exactly the types of reforms that are often found to be growth promoting by recent cross-country studies.

A natural starting point for describing institutional reforms in Sweden is the late 1700s, when land reforms in the farming sector were beginning to be implemented. These reforms started, and were most radical, in Scania, the southernmost part of Sweden. Here, farmland was rearranged from being a patchwork of plots to organized squares of land set around centrally placed farms. Soon, similar changes took place throughout the country.

Apart from the obvious practical benefits from abandoning the patchwork of plots, land reforms were successful because they changed the incentives for peasants. Using data covering on average 450 farms present each year from 1702 to 1864, Olsson and Svensson (2010) show that property rights play a crucial part in explaining the rising agricultural production: secure property rights among self-owners combined with fixed taxes provided strong incentives for improved productivity compared to those peasants that were tenants under the nobility, where rising rents and the threat of eviction hindered investments. In some cases, the land reforms increased resource equality by allocating land more equally.

In the mid-19th century, private commercial and savings banks were established in Sweden. After some important deregulations of the credit market, these became important sources of credit for the private sector, which facilitated savings for farmers and benefitted private investment. The role of the Swedish Central Bank in granting credit to the private sector rapidly decreased (Larsson and Lindgren, 1989).

Schön (2000) describes how regulations and export duties for a long time prevented timber from becoming an export product in itself, as it had primarily been regarded as something necessary to produce iron. This changed during the 1840s, when there was a reduction of both regulations and duties. Jörnmark (2004) also attributes much importance to liberalization in explaining the breakthrough of the forestry economy, and describes how the structural reform took place, essentially by the privatization of the Swedish forest. It was not the older Swedish individuals in the more inland parts of the country who closed down their smelting houses to open sawmills instead. Rather, it was often immigrated Brits, Norwegians and Germans along the Swedish coast who were responsible for the changes that transpired. Functioning property rights made it possible to buy land from old works and from the State through the sell-off process. From the State's viewpoint, the sell-off process was a means to create taxable units. Stable property rights thus contributed to timber generating profits for both the State and the capitalists.

Schön sums up the effect of liberalization between 1850 and 1870 as Sweden gaining freedom of movement for people, goods and capital, both within and across its borders. Why it happened during

⁶For some critique on the view of institutions as determinants of growth, see Glaeser et al. (2004).

this particular period is open to discussion. On the one hand, the then Minister of Finance Johan August Gripenstedt was an ardent believer in free trade, with rhetoric echoing the teachings of Adam Smith, as described for example by Norberg (1999). On the other hand, Lewin (1992) points out that Sweden was under pressure from the US and a number of European states to liberalize trade.

Shortly after these important liberalizations, Sweden experienced what Rothstein (2008) calls an anti-corruption big bang. Rothstein argues that several important anti-corruption measures were implemented during a fairly short period of time: in 1845, Sweden introduced freedom of the press; the last formal aristocratic prerogative for higher positions in the State was abolished; and equal rights of inheritance for men and women was introduced. In 1846, the first step toward abandoning the guild system was taken. Prior to the system's abolition, it was required that all craftsmen start as apprentices (a possibility reserved for boys born within wedlock only) and finish their training by passing the examination for the master craftsman's diploma. Also around this time, several new public boards and agencies were established for carrying out investments in infrastructure, creating a need for technical skills among civil servants, which in turn paved the way for meritocratic recruitment of civil servants.

Between 1855 and 1860, there were major revisions of the wage system in the civil service, and in 1862 a new criminal code includes a law on misconduct in office. In 1868, direct payments for services to individual civil servants were abolished, implying that fees are State property rather than belonging to the individual civil servant. In 1869, finally, parliament decided that taxes must be paid in money instead of in goods. According to Rothstein, changes like these played an important role in turning Swedish government bureaucracy into one of the least corrupt bureaucracies in the world.

It bears noting that even standard explanations such as export-driven growth depend on the institutional development. Export-driven growth requires goods to export. As a likely outcome of new patent laws—the first passed in 1834 with important improvements added in 1856 and 1884—a number of patents became Swedish export successes. Examples include Frans Wilhelm Lindqvist's patented paraffin stove run on compressed air from 1882 (the so-called Primus stove); Johan Petter Johansson's adjustable spanner patent in 1892; Lars Magnus Ericsson's hand micro telephone, invented in 1884 and patented in 1895; and Sven Wingquists ball bearer, patended in 1907.

Institutional theories go far in explaining the events of the 20th century. The high growth rates in the 1950s and 60s are usually attributed to successful macro-policies; however, Myhrman points out that Sweden during this period was also greatly helped by the fixed exchange rate via the Bretton Woods system, as well as an increase in trade through the GATT agreement. Anton (1969) accounts for another factor likely to have been important: the so-called policy making Swedish style, a term that refers to the spirit of consensus, predictability and rationality that has largely characterized Swedish politics during the 20th century.⁷

This said, standard factors were of course important. Research on economic growth also points to other intuitively plausible factors such as infrastructure investments (for example, public spending on communications) and basic education, see for example Canning and Pedroni (2004) and Barro (1990). These areas were also reformed in Sweden during the 19th century. In the mid-19th century, compulsory elementary school was introduced and railways were heavily expanded. In addition, men and women were given equal rights of inheritance, which furthered women's active participation in the economy.

⁷ Interestingly, Bergh and Erlingsson (2009) show that the same factors—rationality and consensus in the policy process—played an important part in the reform process during the 1980s and 90s, when Sweden was radically transformed in several ways, as described in section 5.

Swedish emigration to the US is also worth taking into consideration. Between 1850 and 1930, 1.2 million Swedes emigrated, whereof at least 20,000 returned. The return of the emigrants and the flow of ideas transmitted via the so-called America letters is a frequently overlooked factor in Sweden's economic development, according to, for instance, Henricson and Lindblad (1995), as well as Johnson (1997). Capital and ideas from the US were often turned into successful business ventures in Sweden.

In all, a full understanding of the Swedish growth requires that standard explanations such as education, infrastructure, natural resources, and the absence of war be complemented by institutional factors. Sweden's period of high and sustained growth started with the introduction of property rights, free trade and non-corrupt meritocratic government bureaucracy. Recent findings in institutional economics strongly suggest that this was no coincidence. Table 1 summarizes some important institutional changes and events in the 1800s.

Table 1. Important institutional reforms and events in Sweden during the 1800s.

Late 1700s	Land reforms improved agricultural productivity.
1826	An institute of technology is established in Stockholm (which in 1876 was converted into the Royal Institute of Technology).
1842	Compulsory elementary school is introduced.
1845	Equal rights of inheritance for men and women are introduced, free press is established, and the last formal aristocratic prerogative for higher positions in the state is abolished.
1846	Compulsory guild training is abolished.
1848	Introduction of the joint-stock company law.
1862	Municipalities replaced parishes, and regulated municipal autonomy is introduced. New general criminal code includes a new law on misconduct in office.
1850-1860	Lowered tariffs. Standard rate postage within Sweden is introduced. This played an important role in developing newspaper distribution and literacy.
1856 – 1866	The infrastructure is improved through the expansion of state-owned railways, which also prompts a shift to standardized time in Sweden in 1879.
1864	Freedom of trade is established.
1866	The four-estate system is abolished, establishing a modern bicameral Parliament.
1840-1862	Several new public boards and agencies are established for infrastructure investments, creating a need for meritocratic recruitment of civil servants.
1860s	Interest rate control is removed and banks set up as limited companies are allowed.
1873	The Swedish currency Krona is introduced. Being tied to the gold standard, this provided a stability that made overseas trading easier.
1895	The Companies Act modernized legislation, and responsibility is transferred to the newly established Patent and Registration Office.
1868	Direct payments for services to individual civil servants is abolished. From now on, the fee/money should no longer belong to the individual civil servant but be state property.
1869	Parliament decides that taxes must be paid in money instead of in goods.
1855 – 1875	Weberian-style bureaucracy is introduced through a series of reforms that transformed being a civil servant into a fixed wage, and full-time jobs are available only through open meritocratic competition.

⁸ Compilation based on Myhrman (1994), Rothstein (2008) and Schön (2000).

3. Equality

After the golden years of high growth from 1870 to 1970, Swedish inequality was low almost regardless of measurement method. Data from the Standardized World Income Inequality Database (Solt, 2008) show a rapidly decreasing trend until 1976, and an increasing trend starting in 1982 (see figure 2).

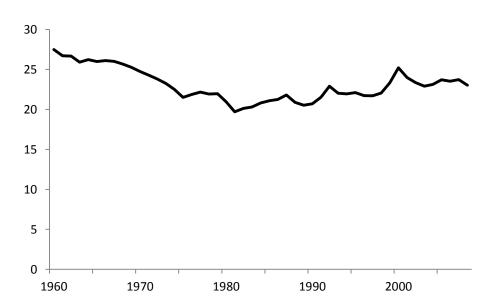


Figure 2. Gini for disposable household income in Sweden 1960-2008.9

Reliable sources on inequality before the 1960s are rare, those that exist confirm the conclusion that Swedish equality appears to be a fairly old phenomenon. For example, Lee (1989) calculates Gini coefficients for the value of rural land in Sweden from 1805 to 1921, and notes a continuous decrease from 0.70 to 0.58. Turning to the 19th century, Roine and Waldenstrom (2008) study income tax return forms from the top ten and top one percent of the highest income earners from 1903 to 2004. They conclude:

Starting from higher levels of inequality than in other Western countries, the income share of the Swedish top decile drops sharply over the first eighty years of the century. ... Most of the decrease takes place before the expansion of the welfare state, in fact, by 1950 Swedish top income shares were already lower than in other countries. (p. 1)

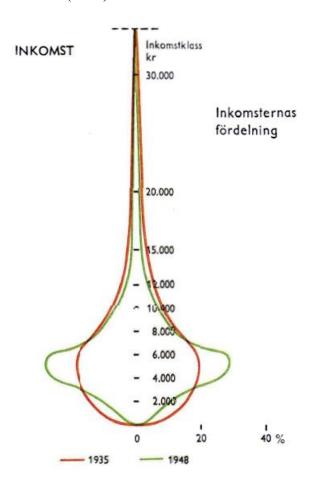
A similar outcome for the lower end of the income scale is found by Rauhut (2002), who studies the allocation of social security payments during the period 1918–1997. After an increase in social security payments during the crisis in the 1930s, the number of people living off welfare continuously decreased until 1965, despite the fact that the real level of the benefit norm increased significantly during the same period.

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⁹Source: SWIID 3.0, Solt (2008).

For the period 1930 to 1948, Bentzel (1952) analyzes the income distribution and documents a substantial compression. Figure 3 reproduces Bentzel's illustration of the distribution of disposable income in the years 1935 and 1948, which clearly shows how the share of incomes accruing to the middle class increased, while at the same time the income shares for both high and low-income earners decreased.

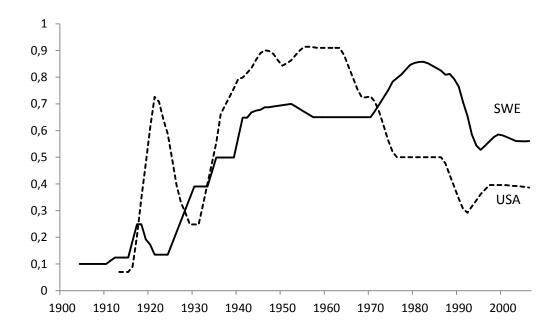
Figure 3. The distribution of disposable income in Sweden 1935 and 1948 according to Bentzel (1952).



Hence, several sources together suggest that there was substantial income compression going on in Sweden from around 1800 until the 1970s. Since around 1980, data clearly indicate that inequality has increased. For example, Gottschalk (1997) shows that income inequality in Sweden since 1979 has increased at the same rate as in the US.

Because having an even distribution of income became one of Sweden's defining characteristics long before the 1970s, the politics of the 1970s and onwards cannot hold the key to explaining Swedish equality. This observation is worth noting because it excludes several popular candidates for explaining equality: features such as high marginal taxes and extensive labor market regulations became typical for Sweden in the 1970s, and by then equality was already very low by international standards. In fact, as shown in Figure 3, most of the time between 1910 and 1970, the top marginal tax rate was higher in the US than in Sweden. Total taxes as a share of GDP were also similar in Sweden and the US until around 1960, as noted by Rodriguez (1981).

Figure 3. Top marginal income tax rate in Sweden (cont.) and the US (dashed) 1900-2005. 10



Having excluded high and progressive taxes, as well as extensive labor market regulations (including strict employment protection laws) as main causes of income equality in Sweden, we must ask what factors are more likely explanations. There is no complete agreement, but review of case studies of Sweden, as well as cross-country studies aiming to explain cross-country variation in poverty and inequality, suggest a number of equality promoting factors that likely apply to Sweden: land reforms, trade unions and centralized wage bargaining, primary school reforms, the introduction of social insurance schemes and increased female labor participation.

3.1 Land reforms

Many authors have noted that land reforms in Sweden made it possible for poor farmers to escape poverty by virtue of increasing agricultural productivity (Jörberg, 1976; Lee, 1989; Olsson and Svensson, 2008). A government report (Finanskomitten, 1863) also stressed that an increase in the number of savings banks was important for equality by aiding the private savings in poor households. This explanation is supported by Lee (1989) who notes that the group with positive savings in the rural sector increased steadily after 1840. He concludes that both the destitute and the rich decreased in significance in the 19th century.

3.2 The Trade unions

Bradley et al. (2003) find that countries with more powerful trade union movements (measured in membership) have greater equality in gross earnings. Moller et al. (2003) use the same data and find a correlation between strong trade union movements and low levels of relative poverty. The emergence of Swedish trade unions at the end of the 19th century and the mutual recognition between SAF (the Swedish Employers' Confederation) and LO (the Swedish Trade Union Confederation) in 1906 thus crops up as a plausible contributing factor to the increase in equality. Furthermore, the decrease in

¹⁰Data from Roine et al. (2009).

inequality during the 20th century also coincided with a trend in growing trade union membership. The number of blue-collar workers belonging to a trade union rose heavily during the first 50 years of the 20th century to reach approximately 80 percent (Lundh, 2002). With a slight delay, the number of white-collar workers belonging to a trade union followed the same trend, but reached 80 percent first in the 1970s. The rom 1958 to 1982 wage compression was also a likely consequence of coordinated central bargaining.

3.3 School reform

Meghir and Palme (2005) find strong evidence that primary schooling can increase income equality by studying the Swedish school reform of the 1940s, which introduced a uniform, compulsory nine-year primary school with national standardized tests. The reform lends itself well to being evaluated, as a number of municipalities ran both the old and the new school system simultaneously for several batches of students. The results are clear: the introduction of a uniform, compulsory school made students more inclined to continue to upper secondary school. The increase was greater among students with fathers who had a low level of education. Meghir and Palme have also studied the effect on future incomes, and have shown that the school reform again clearly benefited those children with fathers who had a low level of education. On the other hand, for children with well-educated fathers, the reform actually had a negative impact on their future earnings. Finally, using IQ data, the authors have established that the reform was particularly beneficial for gifted children whose fathers had a low level of education.

Hence, there is strong evidence to suggest that the school reform led to an increase in income equality in Sweden: owing to the reform, the distribution of human capital is more equal than it would have been if students, to a greater extent, had been dependent on family and market for basic schooling.

There is no data available to do a similar assessment of the 1842 elementary school statute, which required every parish to have an elementary school. It is, however, likely that the effects were akin to those of the 1940s school reform. Many children were put through school prior to the introduction of the elementary school statute. Thus, the reform was of particular importance to those children who otherwise, and usually with great difficulty, would have had to obtain similar knowledge elsewhere. Sandberg (1979), describing Sweden around 1850 as an "impoverished sophisticate", argues that the Swedish peasantry had a strong taste preference for literacy and elementary education. Another study pointing to the importance of education for Swedish equality is by Bjorklund et al. (2009), who studied brother correlations in income for men born between 1932 and 1968, suggesting that primary school reforms are likely explanations of decreases in the importance of family background for income.

3.4 Early social insurance

As demonstrated by Brady (2005), for example, social security transfers (i.e., state-sponsored cash transfers for sickness, old age pensions, family allowances, and unemployment and workers' compensation) are an important determinant of relative poverty and thus for income equality. Edebalk (2000) shows that the foundations for the Swedish social insurance model are old: in 1891, government grants for health insurance funds were established; in 1913, Sweden introduced the world's first universal public pension insurance system; and in 1916, a compulsory insurance to cover work-related accidents according to the Bismarckian loss of income-principle (rather than a fixed amount) was initiated. Economic problems between the First and the Second World War delayed the sickness insurance system until 1955.

¹¹ Since 1980, membership rates have dropped slightly, a trend that have since then accelerated.

Social insurance schemes promote equality in several ways. Systems with flat-rate benefits mitigate poverty. Bismarckian schemes (i.e., positively income-related benefits according to the loss of income principle) can promote equality by forcing high-risk groups and low-risk groups to be part of the same insurance scheme, where the insurance premium is set based on the average risk. This means that, for instance, the sickness benefit insurance redistributes money from those who are rarely sick to those who are often sick. In real life, high-income earners are typically less sick than others. With occupational injury insurance, money is redistributed in a similar way, from those who do not get injured to those who do suffer work-related injuries. A nation-wide, compulsory insurance is therefore particularly beneficial to those individuals who work in more injury-prone work places. Importantly, these inequality promoting effects are essentially by-products caused by the universal benefit of insurance protection, as discussed by Bergh (2005).

3.5 Female labor participation

As described by Johansson (2006) income compression in Sweden during the 1950s and 1960s was driven entirely by income compression among women as female labor participation increased. Interestingly, most scholars now seem to agree that this development was not driven by an ideological desire for gender equality, but rather a consequence of economic growth and a shortage of labor – as described for example by Berntsson (2002). This led to an expansion of public child care facilities, a policy supported by both the employers' association and the unions. As a side effect these policies help create gender equality, but the main motivation was the need to increase labor supply.

3.6 A large middle class with capitalistic dynasties?

As expected, the relatively compressed income distribution in Sweden coexists with high social mobility, as measured by intergenerational income elasticities. In other words, the correlation between the income of a father and his son is comparatively low in Sweden, as recently confirmed, for example, by the OECD (2008). However, Björklund et al. (2008) find that the relatively high level of mobility in Sweden is dramatically lower within the top percentile of the population, leading to the conclusion that equality of opportunity in Sweden, for a large majority of wage earners, coexists with what they call "capitalistic dynasties". 12

One might speculate that these capitalistic dynasties play an important part in explaining Sweden's combination of market oriented growth and high levels of income equality for a very broad middle class. 13 Defining middle class as households having an income between 67 and 150 percent of the median income, Wolff (1992) notes Sweden's middle class consists of 79 percent of the population, compared to 73 percent in Norway, 63 in the Netherlands, and 54 in the US.

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¹² See further Henrekson and Jakobsson (2001) on how policies favored concentration of firms and concentration

4. Interventionism and lagging behind

The problems in Sweden from 1970 and onwards have been meticulously studied many times. As demonstrated by for example Henrekson (1996), real GDP per capita in Sweden grew more slowly than in comparable countries demonstrates convincingly that for a period of almost 25 years, starting around 1970. The lagging behind of Sweden can be illustrated by the fact that at the beginning of the 1970s, a German Deutsch Mark could be bought for just slightly more than one Swedish Krona. By the time the D-Mark was replaced by the Euro, the price had approximately multiplied by four. 14

Sweden's failure to keep up is not wholly surprising. It is difficult for a country to sustain strong economic growth when it already is one of the richest countries in the world. Poorer countries can imitate wealthier countries' technology, learn from others' mistakes and skip certain technological phases. But this catching-up effect cannot explain why Sweden has fallen behind in economic wealth compared to, for instance, the US.

The period of lagging behind has been documented in detail by Lindbeck (1997) under the suggestive title "The Swedish Experiment". There is now a consensus among most economists and policy-makers on the main reasons for Sweden's lagging behind – but their relative importance is still debated. In particular, it is hard to know the extent to which the welfare state can be blamed or if the main problems were merely ill-advised macro-economic policies.

4.1 Policy mistakes

The following points is an attempt to summarize the consensus among most economists on some of the most important causes of Sweden's economic problems from 1970 and onwards.

- After the Second World War and up until the mid-1970s, Keynesian management of household demand aimed at leveling economic fluctuations. Such policies require good timing to succeed. For example, contractions during boom periods may come too late and cause damage at the beginning of a recession. Such policies depend on unreliable forecasts, which provide estimates as to whether a downturn in the economy is temporary or the beginning of a longer recession. In addition to these problems, active demand management becomes less efficient when the economy becomes internationalized.
- From the mid-1970s onwards, Sweden began to subsidize problem-stricken industrial sectors
 and devalue the Swedish currency to maintain industry competitiveness. These measures
 alleviated the situation in the short term, but the fundamental productivity and structural
 problems remained unsolved. Too many actors in the Swedish economy essentially did the
 wrong things in the wrong way.
- A number of labor market regulations were introduced in the 1970s, contributing to increased labor costs: extended period of notice (1971); rules with regard to construction workers needing to be employed via instruction from the public employment office (1973); a responsibility to permit time off for language training and to pay for immigrants' Swedish language tuition (1973); protection against being fired on grounds of pregnancy (1974); law on safety ombudsmen and safety committees (1974); limitations on temporary employment (1974); law on permitting time off for trade union activity (1974); law on permitting time off for education and training (1975); obligation to inform the employment office of job openings

¹⁴ Depending on time perspective and the counterfactual used, it can actually be argued that the lagging behind of Sweden started already in the 1950s – see Krantz (2000).

¹⁵ See also Henrekson (1996).

- (1975); law on right of co-determination in work life (1977); and restrictions on possibility of taking out overtime, as well as extended holiday (1978).
- During the 1970s, real labor costs increased much more than labor productivity increases allowed. Costs increased mainly due to taxes (the payroll tax increased from 12.5 percent of a salary in 1970 to 36.7 percent in 1979, and during the same period, progressivity increased), labor market regulations (as listed above), and high nominal wage increases.
- High marginal taxes caused high levels of inefficiencies and tax avoidance. In fact, the social democrat and economist Gunnar Myrdal (1978) famously asked whether the Swedes had turned into a people of swindlers.
- High marginal taxes combined with unlimited tax deductions for interest rate payments meant that loan-financed consumption became attractive for households. With marginal taxes above 80 percent, the value of tax deductions was very big. In addition, high inflation further lowered the real cost of debt financing.
- The aggressive devaluation in 1982, combined with the economic boom of the 1980s, made many economic indicators appear healthy for unsustainable reasons. The seemingly healthy economic development made it politically difficult to pursue a sufficiently restrictive financial policy.

In addition to the economic factors summarized above, some political institutions probably also contributed. The three-year terms of office, introduced with the election in 1970, contributed to short-termism in politics, as each government was hampered either by being newly appointed, or by an impending election. The joint election day for the general, county council and local government elections led the latter two to being overshadowed by the general election. This reduced incentives for local politicians to do well in local politics. Another miscalculation concerning the reform of 1970 was the allocation of 350 seats to parliament. Remarkably, in the 1973 election, the two opposing blocs won 175 seats each, leading to a number of decisions being made by lot. While Swedish political decision-making generally had been characterized by predictability and rationality, this was not the case for the lottery-style parliament in place from the election in 1973 until 1976.

Simply put, the macroeconomic strategy in the 1970s was to postpone dealing with the fundamental problems by way of devaluation. The strategy did not change until the effects of the aggressive devaluation of 1982 tapered off at the end of the 1980s. At that point, the underlying problems with regard to productivity, wage increases, household debt, and a rigid labor market contributed to making the crisis of the early 1990s much worse in Sweden than in most other countries.

Taken as a whole, the policies pursued in the 1970s definitely did not result in stable rules. Legislation and tax rates were changed every year. Thus, in addition to policies now preventing or delaying necessary changes in Sweden, government behavior had become less predictable. The aim throughout the lottery-style parliament of 1973 – 1976 was to not let politics be determined by lot. However, a few of the cross-political agreements that were negotiated instead were associated with other problems. In the first so-called Haga agreement, the social democrats and the liberal party reached a decision on lowering retirement age and income tax, which was financed by an increase in pay-roll taxes. The propensity to raise those taxes not directly visible to employees has since been assiduously demonstrated in Sweden.

The numerous devaluations created further disruptions. A fixed exchange rate that is regularly changed leads to speculation, uncertainty and an inability to plan rationally. Additionally, the macroeconomic policies of the 1970s were unfortunate in that companies got into the habit of turning

to government authorities for support and subsidies instead of being guided by comparative advantage and market demand.

4.2 Was policy worse in Sweden than in other countries?

Identifying problematic policies in Sweden is not sufficient to establish the reasons for Sweden lagging behind. At the least, we need to know in what ways policies and institutions were worse in Sweden than in comparable countries. There are a number of ways to quantitatively compare policies and institutions across countries. One of the most used methods is to rely on an index such as the Economic freedom index (EFI) (Gwartney et al., 2010). The index consists of five dimensions: Size of government (EFI1), legal structure and security of property rights (EFI2), access to sound money (EFI3), freedom to exchange with foreigners (EFI4), and regulation of credit, labor, and business (EFI5). Using several indicators in each dimension, the five dimensions are weighed together in a composite index, where 0 indicates the lowest and 10 the highest degree of economic freedom.

The first dimension is a summary measure of government involvement in the economy, using data such as total government consumption, top marginal taxes and government enterprises and investment. The second dimension is a measure of the quality of legal institutions, combining data from the Global Competitiveness Report produced by World Economic Forum¹⁶, the International Country Risk Guide from the PRS Group¹⁷ and the World Bank's *Doing Business* data. ¹⁸ Dimensions three to five capture various aspects of monetary policy (using e.g. levels and volatility of inflation), trade policies (using e.g. tariff rates) and regulations in the economy (such as minimum wages and price controls).¹⁹

In Figure 4a-c, Sweden is compared to the average values for continental European welfare states (Belgium, Netherlands, Germany, France, Italy, Switzerland), and Anglo-Saxon welfare states (Australia, Canada, United Kingdom, United States).²⁰ All comparisons are made relative to the average for all OECD countries at each point in time. The first dimension is interpreted as a measure of limited government, the second dimension as a measure of institutional quality and the average of dimensions three to five as a summary measure of policy quality.

The graphs show clearly that Sweden was indeed worse than comparable countries (and worse than the OECD-average) during the 1970s and the first half of the 1980s. Most strikingly, government involvement was much higher in Sweden (and thus the score for Sweden in the EFI dimension government size was about half of the OECD-average.) The quality of institutions and policies was also worse in Sweden, but only slightly so. This suggests that size of government may be at least partly responsible for Sweden lagging behind.

Note however that while dimensions two to five reach and in some cases exceed the OECD average, Sweden's relative positive in the first dimension only changes moderately. As will be shown below, from 1995 and onwards, economic growth in Sweden has increased without drastic reductions in the size of the welfare state, suggesting that the causes of Sweden's lagging behind are more complex than the question of whether the welfare state should be blamed or not. We return to the question after discussing the development in Sweden after the crisis of the early 1990s.

¹⁶ Available at http://www.weforum.org/en/initiatives/gcp/index.htm .

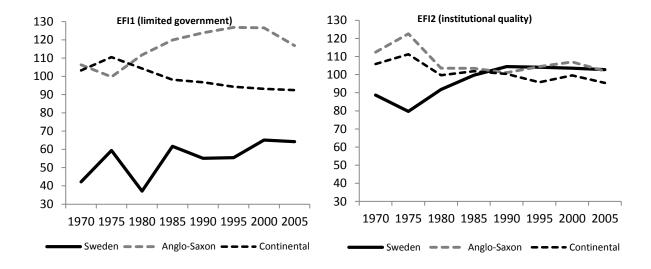
¹⁷ Available at http://www.prsgroup.com/ICRG.aspx.

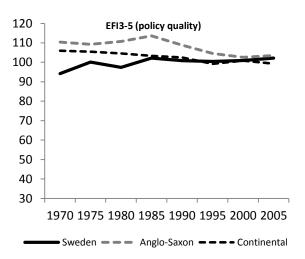
¹⁸ Available at http://www.doingbusiness.org .

19 For further information on the components of the index, see the appendix "Explanatory Notes and Data" Sources" in the 2010 report, available at www.freetheworld.com. See also Berggren (2003).

²⁰This welfare state categorization follows Bradley et al. (2003), who stay close to the three categories described by Esping-Andersen (1990). Using other types of classifications (cf. Abrahamson, 1999) leads to the same conclusions regarding in what way Sweden differs.

Figure 4a-c. Policies and institutions in Sweden compared to Anglo-Saxon and Continental welfare states (1970-2005). Index with OECD average = 100.

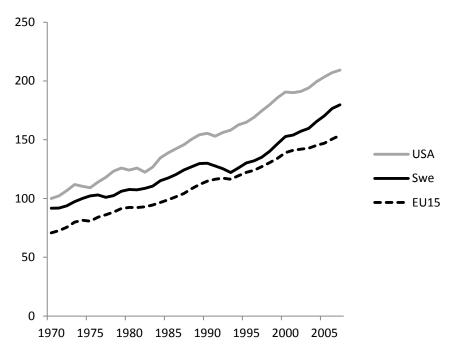




5. Revival of the capitalist welfare state

As shown in Figure 4, the period of Sweden lagging behind came to an end after the crisis of the early 1990s. Instead, Sweden has been growing faster than both the EU-15 and the US.

Figure 4. Real GDP per capita in the US, Sweden and the EU-15. Index 100 = USA $1970.^{21}$



The relatively good growth performance of Sweden after 1993 has been surprising to some. Commentators such as former prime minister Göran Persson, as well as the International Monetary Fund, have compared Sweden and its welfare state to a bumblebee:

Think of a bumblebee. With its overly heavy body and little wings, supposedly it should not be able to fly—but it does. (Göran Persson, cited in Thakur et al., 2003)

It is worth discussing in-depth the fact that Sweden since the mid-1990s has combined high economic growth with high taxes and a generous welfare state. Bergh and Henrekson (2011) show that several studies have found that total government size correlates negatively with growth in rich countries. Recent examples include Afonso and Furceri (2010), Bergh and Karlsson (2010), and Romero-Avila and Strauch (2008). Coefficients vary, but very approximately these studies indicate that a 10 percentage points increase in tax revenue as a share of GDP is associated with between 0.5 and 1 percentage point lower annual growth. This effect clearly has economic significance, and it makes Sweden's recent growth even more remarkable. Yet, there are potential explanations.

The study by Bergh and Karlsson (2010) analyzes several variables that might influence growth using Baysian Averageing over Classical Estimates (BACE, introduced by Sala-i-Martin et al., 2004). It turns out that for many variables that explain growth variations among rich countries, Sweden has

²¹Source: OECD. The figure uses GDP per head in PPP dollars.

improved its position substantially, starting already in the 1980s. In particular, this holds for economic openness and inflation control. For example, from 1980 to 2000, Sweden increased exports as a share of GDP from 28 to 42 percent, and lowered annual inflation from 10 to 1 percent. Together, these two changes added roughly two percentage points to annual growth, according to the estimates in Bergh and Karlsson (2010). On the other hand, during the same time higher taxes, higher unemployment and slower labor force growth impeded annual growth by roughly one percentage point.

Naturally, such interpretations of regression coefficients are only illustrative, but still suggest that lower inflation and higher economic openness may well be part of the puzzle of explaining Sweden's combination of relatively high growth and high taxes.

The suggestion that Sweden benefitted from increased economic openness contrasts against the standard view where economic openness and free trade are stereotyped as a threat against the welfare state. ²² Nevertheless, there are several reasons why economic openness may in fact be especially important for countries with big governments. Iversen (2005) argues as follows:

Labor-intensive, low-productivity jobs do not thrive in the context of high social protection and intensive labor-market regulation, and without international trade countries cannot specialize in high value-added services. Lack of international trade and competition, therefore, not the growth of these, is the cause of current employment problems in high-protection countries. (p. 74)

Inflation control and economic openness are not the only policy changes in Sweden implemented during the 1980s and the 1990s. Bergh (2009) describes how a number of reforms have increased both the economic and political sustainability of the Swedish welfare state. In short these reforms include the following:

- Restructuring the tax system
- Tying benefits closer to taxation
- Increasing work incentives
- Increasing reliance on private topping up of public consumption and social insurance
- Increasing freedom of choice through voucher systems
- Increasing efficiency through competition enhancing reforms

A number of the most important reforms are listed in Appendix A. Together, these reforms explain why economic freedom as measured by the index shown in figure 4a-c after 1990 is actually above the OECD average for all dimensions except the first dimension (which is related to government size). Even among the Nordic countries, Sweden further sets itself apart by having even higher taxes than the others and lower levels of economic freedom in the 1970s. Given the policy advice of mainstream economists during the 1980s and 90s, and the high number of reforms toward economic freedom that took place in Sweden during the same period, absence of economic growth would be more puzzling than the relatively high levels of growth actually experienced in Sweden and the other Nordic countries.

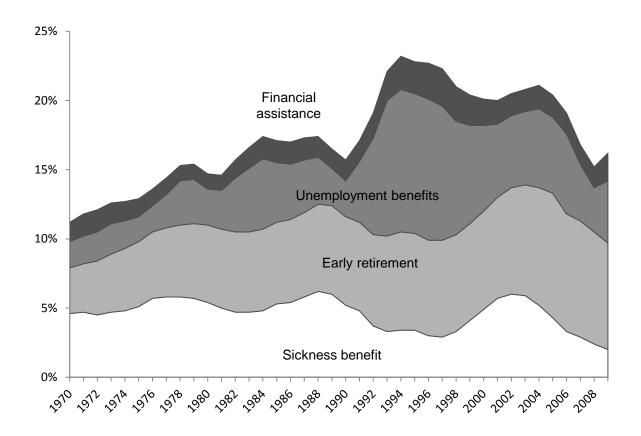
²² For example, Martin and Schumann (1997), Strange (1996) and Sinn (2003).

6. Conclusions: what are the policy lessons from the case of Sweden?

In many aspects, Sweden is not very different from other countries. The accelerating economic growth in Sweden around 1870 was most likely largely a result of liberalizations and well-functioning capitalist institutions. In this respect, there is no Swedish exceptionalism.

When it comes to equality, the most important conclusion is that most of the decrease in income inequality in Sweden occurred before the expansion of the welfare state. A number of seemingly unrelated reforms, such as land reforms, school reforms and the occurrence of unions and centralized wage bargaining, are likely explanations. Interestingly, at least parts of gender equality in Sweden seem to be an unintended consequence of the need to increase labor supply by using women in the workforce.

Figure 5. The share of the population aged 20-64 supported by various welfare benefits, 1970-2009 (fulltime equivalents).



Thus, when it comes to the roots of prosperity and equality, the lessons from Sweden are not very different compared to the lessons from mainstream institutional economics: Well-functioning capitalist institutions, especially property rights and a non-corrupt state sector, promotes prosperity. Primary schooling, risk sharing social insurance schemes and labor unions contribute to a more equal distribution of income.

The lessons from the Swedish experience after 1970, however, are more interesting and less trivial. As already mentioned it is hard to know if Sweden's lagging behind other countries in terms of growth between 1970 and 1995 was mainly a failure of the welfare state or mainly a failure of the

macroeconomic policies applied at the time. A careful conclusion is that the combination of unsuccessful macro-economic policies and a very generous welfare state caused big problems for Sweden. As an illustration, figure 5 shows the share of the adult population supported by various welfare benefits from 1970 to 2009. For a universal welfare state like Sweden, it is crucial to achieve a balance between people who work and pay taxes, and people who do not. Clearly, the trend in Sweden from 1970 to 1995 was not sustainable: The share of adults not working more than doubled, from about 10 percent to above 20 percent after the crisis of the 1990s.

A possible interpretation of the evidence is that in countries with high taxes and generous welfare systems, macroeconomic mistakes will be more costly. During the period of lagging behind, excessive state interventionism hampered structural adjustment and economic development in general. The economy was much less capitalist, rules were unstable, policy unpredictable, and work incentives were weakened by the design of taxes and benefits. This leads to the conclusion that to successfully combine a large welfare state with economic growth, macroeconomic factors are crucial and a high degree of economic openness may actually foster policies that promote competitiveness. Analyzing the fact that Sweden was ranked the second most competitive country in the world according to the Global Competitiveness Index 2010–2011 (just slightly behind Switzerland). Eklund et al. (2011) emphasize the role of market deregulations, inflation control and stricter budget rules – but also some lowering of taxes and benefit levels.

The upshot is that the policy implications from the case of Sweden are hard to classify along a simple right-left scale: the welfare state seems to survive because it coexists with high levels of economic freedom and well-functioning capitalist institutions.

Appendix

Reforms towards increased economic freedom in Sweden, 1980-2000.

1980

Consumers gain the right to use answering machines and fax machines from suppliers other than Swedish Telecom.

A committee on credit policies is set-up. In an interim report from an ongoing inquiry into the currency regulation, several experts conclude that currency control has not been effective.

1981

The Centre Party, the Liberal Party and the Social Democrats agree on a tax reform that brings an end to increasing progressivity in the income tax.

1982

The report on credit policies concludes that regulations are efficient in the short run, but do not produce the desired effects in the long run.

1984

After six years of work, a public inquiry on pensions declares the old pension system (ATP) fraught with such substantial problems that a reform is necessary.

1985

Interest rate control is completely abolished after having been solely a recommendation since 1983. On November 21, 1985, the Swedish Central Bank revokes the ceiling on bank lending.

1988

New telecommunications policies: Swedish Telecom is stripped of its duties as an authority, and a new authority, the Swedish Board of Telecommunications, takes over the issuing of directives and managing of equipment.

A decision concerning transport policy prepares for railway competition: the National Rail Administration is setup to take over infrastructure, and the railway network is divided into core rail networks and county railways in order to facilitate the competitive purchasing of the latter.

1989

The parliament abolishes the Exchange Control Act from 1939, according to which only the Central Bank is permitted to trade in foreign currencies.

1990

The deregulation of domestic aviation is initiated.

BK Trains is granted permission to operate on certain routes in Småland.

A comprehensive tax reform is implemented: tax bases are widened and tax rates heavily reduced for both individual taxpayers and companies.

Sweden applies for EC membership.

The taxi industry is deregulated.

1991

The public utility company Water Power Board (Statens vattenfallsverk) becomes Vattenfall AB.

The business CityMail is established—there is no legislation that expressly prohibits competition in the postal delivery sector.

Farming is deregulated and previously negotiated prices are gradually to be replaced by market prices. Fourteen billion is set aside for adjustment subsidies to facilitate the adjustment to the deregulated market. Swedish EU membership, however, will later roll back the deregulation.

The parliament decides that headhunting businesses and recruitment companies should be allowed to operate after obtaining special permission from the National Labor Market Board (AMS).

After the 1991 election, Sweden withdraws from the ILO Convention, which prohibits recruitment activities for the purpose of profit making.

The parliament gives the government the right to privatize a total of 35 state-owned enterprises or public utility companies.

Government intervention in company investments, which commenced with the introduction of the investment funds in 1955, is brought to an end.

1992

The employee investment funds are phased out.

Commercial radio and TV is permitted.

Domestic aviation is deregulated by ending the monopoly of SAS and Linjeflyg.

New legislation concerning local government allows the local authorities more room to independently shape their organization.

School vouchers are introduced: local governments are instructed to pay independent schools at least 85 percent of the municipal schools' average cost per student. The independent schools, however, are not allowed to charge any fees and they have to be recognized by the National Agency for Education.

The running of county railways is opened to competition for the first time.

The State sells shares in Svenskt Stål AB (Swedish Steel–SSAB), Nordiska Satellitaktiebolaget (the Nordic Satellite Corporation), the plant breeding company Svalöf AB, and Svensk Avfallskonvertering AB (Swedish Waste Processing Corporation).

1993

AssiDomän AB is created from the former Swedish National Forest Enterprise (Domänverket) and National Forest Industries (Skogsindustrierna).

The level of compensation from the unemployment benefit fund is lowered from 90 to 80 percent.

New telecom legislation allows for competition in the telecom market. Televerket (Swedish Telecom) becomes Telia AB.

Private employment agencies are permitted.

The Swedish Central Bank starts working toward the objective of limiting the annual increase of the consumer price index to two percent, with a margin of one percent up or down.

The State reduces its ownership in the weapons industry company Celsius AB from 100 to 25 percent state-owned. Furthermore, the venture capital company Företagskapital AB is sold, several subsidiaries of Sveriges Geologiska AB (the Swedish Geological Company) are liquidated, as is the parent company. The main part of SKD-företagen AB (computer management and consultancy company) is sold.

The government subsidies allocated to the municipalities change from being earmarked subsidies to general subsidies.

The parliament decides on a new pensions system.

The EEA Treaty comes into effect, and consequently the EFTA countries are granted access to the EC internal market and free movement of goods, services, capital, and persons.

The Swedish constitution is altered so that the government term of office is extended from three to four years.

The General Post Office (Postverket) becomes Posten AB.

The State sells off just under half of its holdings in AssiDomän AB.

Procordia is divided up between the State and Volvo.

1995

A spending ceiling on the national budget is introduced. The spending ceiling is nominal and is set for three years at a time according to a rolling schedule. It also includes a budgeting marginal allowing for fluctuations in the market.

Nordbanken, which was nationalized during the banking crisis, is re-floated on the stock exchange through the State selling 34.5 percent of the shares to the public.

Sweden becomes a member of the EU.

The State sells yet another part of Pharmacia.

1996

A new energy policy is introduced, opening the selling and production of electricity to competition.

1997

The new budget process with 27 expenditure areas is implemented for the first time. When the expenditure framework has been set, any increase in expenditure in any area (except the national debt interest) must be financed within the framework.

Stadshypotek AB (the National Building Society) is sold.

1999

The so-called damage assessment for long-haul bus traffic is abolished. Previously, the bus companies were required to demonstrate that State Railways' (SJ) business would not be damaged by any given bus route. This regulation had gradually been relaxed during the 1990s.

The Securities Register Centre (VPC) is sold.

2000

Telia AB goes public.

The proposal to establish a National Audit Office is unanimously approved in parliament, providing Sweden with an independent national audit under the parliament.

References

- Abrahamson, P. (1999). The Welfare Modelling Business. Social Policy and Administration, 33, 394-416.
- Acemoglu, D., and Johnson, S. (2005). Unbundling Institutions. Journal of Political Economy, 113, 949-995.
- Acemoglu, D., Johnson, S., and Robinson, J. (2001). The colonial origins of comparative development. *American Economic Review*, *91*, 1369-1401.
- af Kleen, B. (2009). Jorden de ärvde: Weyler förlag.
- Afonso, A., and Furceri, D. (2010). Government size, composition, volatility and economic growth. *European Journal of Political Economy*, 26, 517-532.
- Albouy, D.Y. (2008). The colonial origins of comparative development: An investigation of the settler mortality dat. *NBER Working Paper 14130, available at http://www.nber.org/papers/w14130.*
- Anton, T.J. (1969). Policy-Making and Political Culture in Sweden. Scandinavian Political Studies, 4, 88-102.
- Barro, R.J. (1990). Government Spending in a Simple Model of Endogeneous Growth. *Journal of Political Economy*, 98, S103-S125.
- Berggren, N. (2003). The Benefits of Economic Freedom: A Survey. The Independent Review, 8, 193-211.
- Bergh, A. (2005). On the counterfactual problem of welfare state research: How can we measure redistribution? *European Sociological Review*, 21, 345-357.
- Bergh, A. (2008). A race to the bottom for the big welfare state? In A. Bergh, and R. Höijer (Eds.), Institutional Competition. Cheltenham/Northampton: Edward Elgar.
- Bergh, A., and Erlingsson, G.Ó. (2009). Liberalization without Retrenchment: Understanding the Consensus on Swedish Welfare State Reforms. *Scandinavian Political Studies*, *32*, 71-94.
- Bergh, A., and Henrekson, M. (2011). Government Size and Growth: A Survey and Interpretation of the Evidence. *Forthcoming in Journal of Economic Surveys*.
- Bergh, A., and Karlsson, M. (2010). Government size and growth: Accounting for economic freedom and globalization. *Public Choice*, *142*, 195-213.
- Berntsson, P. (2002). Den kvinnliga reservarbetskraften förlegad retorik eller aktuell politik? Exemplet den offentliga barnomsorgen. *Statsvetenskaplig Tidskrift*, 105, 238-249.
- Bjorklund, A., Jantti, M., and Lindquist, M.J. (2009). Family background and income during the rise of the welfare state: Brother correlations in income for Swedish men born 1932-1968. *Journal of Public Economics*, *93*, 671-680.
- Björklund, A., Roine, J., and Waldenstrom, D. (2008). Intergenerational Top Income Mobility in Sweden A Combination of Equal Opportunity and Capitalistic Dynasties. *IFN Working Paper No.* 775.
- Bradley, D., Huber, E., Moller, S., Nielsen, F., and Stephens, J.D. (2003). Distribution and Redistribution in Postindustrial Democracies. *World Politics*, *55*, 193-228.
- Brady, D. (2005). The Welfare State and Relative Poverty in Rich Western Democracies, 1967-1997. *Social Forces*, 83, 1329-1364.
- Canning, D., and Pedroni, P. (2004). The Effect of Infrastructure on Long Run Economic Growth. *Mimeo, November 2004*.

- Dawson, J.W. (2003). Causality in the Freedom-Growth Relationship *European Journal of Political Economy*, 19, 479-495.
- De Gregorio, J., and Guidotti, P.E. (1995). Financial Development and Economic Growth. *World Development*, 23, 433-448.
- De Soto, H. (2000). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Easterly, W., and Levine, R. (2003). Tropics, germs, and crops: how endowments influence economic development. *Journal of Monetary Economics*, 50, 3-39.
- Edebalk, P.G. (2000). Emergence of a Welfare State-Social Insurance in Sweden in the 1910s. *Journal of Social Policy*, 29, 537-552.
- Eklund, K., Berggren, H., and Trägårdh, L. (2011). The Nordic Way. *Report presented at World Economic Forum, Dayos*, 2011.
- Esping-Andersen, G. (1990). The Three Worlds of Welfare Capitalism. Princeton: Princeton University Press.
- Finanskomitten. (1863). Underdånigt betänkande angående Sveriges ekonomiska och finansiella utveckling, under åren 1834-1860. *Stockholm*.
- Glaeser, E.L., La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (2004). Do Institutions Cause Growth? *Journal of Economic Growth*, *9*, 271-303.
- Gottschalk, P. (1997). Income Distribution in Sweden & the U.S. Presented at the conference "Labor Market Policy and Job Creation Swedish and U.S Experiences" arranged by the US Embassy in Stockholm, May 20 1997.
- Gwartney, J.D., Hall, J.C., and Lawson, R. (2010). 2010 Economic Freedom Dataset from the Economic Freedom of the World: 2010 Annual Report: Fraser Institute.
- Heckelman, J.C. (2000). Economic Freedom and Economic Growth: A Short-Run Causal Investigation. *Journal of Applied Economics*, *3*, 71-91.
- Henrekson, M. (1996). Sweden's relative economic performance: Lagging behind or staying on top? *The Economic Journal*, 106, 1747-1759.
- Henrekson, M., and Jakobsson, U. (2001). Where Schumpeter was nearly right the Swedish model and Capitalism, Socialism and Democracy. *Journal of Evolutionary Economics*, 11, 331-358.
- Henricson, I., and Lindblad, H. (1995). Tur och retur Amerika: utvandrare som förändrade Sverige: Fischer
- Iversen, T. (2005). Capitalism, Democracy and Welfare. USA: Cambridge University Press.
- Johansson, M. (2006). Inkomst och ojämlikhet i Sverige 1951-2002., Institutet för Framtidsstudier; 2006:3.
- Johnson, A. (1997). Inte bara valloner: Invandrare i svenskt näringsliv under 1000 år. Stockholm: Timbro.
- Jörberg, L. (1976). The industrial revolution in the Nordic countries. In C.M. Cipolla (Ed.), *The emergence of industrial societies*. 375-485. New York.
- Jörnmark, J. (2004). Skogen, staten och kapitalisterna. Lund: Studentlitteratur.
- King, R., and Levine, R. (1993). Finance, Entrepreneurship and Growth. *Journal of Monetary Economics*, 32, 513-542.

- Knack, S., and Keefer, P. (1995). Institutions and economic performance: cross-country tests using alternative institutional measures. Vol. 7. 207-227.
- Krantz, O., (2000). Svensk ekonomisk tillväxt under 1900-talet en problematisk historia. *Ekonomisk Debatt*, 28, 7-1.
- Larsson, M., and Lindgren, H. (1989). RISKTAGANDETS GRÄNSER Utvecklingen av det svenska bankväsendet 1850-1980. *UPPSALA PAPERS IN ECONOMIC HISTORY Basic Reading No 6*.
- Lee, S. (1989). The Rich and the Destitute in Sweden, 1805-1855: A Test of Tocquevilles Inequality Hypotheses. *Economic History Review*, 42, 43-63.
- Lewin, L. (1992). *Ideologi och strategi*. Lund: Norstedts juridik.
- Lindbeck, A. (1997). The Swedish Experiment. Journal of Economic Literature, 35, 1273-1319.
- Lindbeck, A. (1975). Inequality and Redistribution Policy Issues (Principles and Swedish Experience), *Education, Inequality and Life Chances*, Vol 2. 229-385. Paris: OECD.
- Lucas, R.E. (1988). On the Mechanics of Economic Development. Journal of Monetary Economics, 22, 3-42.
- Lundh, C. (2002). Spelets regler. Institutioner och lönebildning på den svenska arbetsmarknaden 1850-2000. Stockholm: SNS Förlag.
- Maddison, A. (1982). Phases of Capitalist Development. Oxford: Oxford University Press.
- Martin, H.-P., and Schumann, H. (1997). *The global trap: Globalization and the assault on prosperity and democracy*. London, New York: Zed Books.
- Meghir, C., and Palme, M. (2005). Educational Reform, Ability, and Family Background. *American Economic Review*, 95, 414-425.
- Mehlum, H., Moene, K., and Torvik, R. (2006). Cursed by Resources or Institutions? *World Economy*, 29, 1117-1131.
- Moller, S., Huber, E., Stephens, J.D., Bradley, D., and Nielsen, F. (2003). Determinants of relative poverty in advanced capitalist democracies. *American Sociological Review*, 68, 22-51.
- Myhrman, J. (1994). Hur Sverige blev rikt. Stockholm: SNS förlag.
- Myrdal. (1978). Dags för ett bättre skattesystem! Ekonomisk Debatt, 6, 493-506.
- Norberg, J. (1999). Den svenska liberalismens historia. Stockholm: Timbro.
- North, D.C. (1987). Institutions, Transaction Costs and Economic Growth. Economic Inquiry, 25, 419-429.
- North, D.C. (1990). *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.
- OECD. (2008). Growing Unequal? Income Distribution and Poverty in OECD Countries. SourceOECD.
- Olsson, M., and Svensson, P. (2008). Explaining agricultural growth. The case of Sweden 1700-1850. *Paper presented at the Social Science History Association conference, Miami23–26 October 2008*.
- Olsson, M., and Svensson, P. (2010). Agricultural growth and institutions, Sweden 1700-1860. *European Review of Economic History*, *14*, 275-304.

- Rauhut, D. (2002). Fattigvård, socialbidrag och synen på fattigdom i Sverige 1918-1997. *Lund Studies in Economic History 18*.
- Rodriguez, E. (1981). Den svenska skattehistorien. Lund: Liber Läromedel.
- Roine, J., and Waldenstrom, D. (2008). The evolution of top incomes in an egalitarian society: Sweden, 1903-2004. *Journal of Public Economics*, 92, 366-387.
- Roine, J., Vlachos, J., and Waldenström, D. (2009). The long-run determinants of inequality: What can we learn from top income data? *Journal of Public Economics*, *93*, 974-988.
- Romer, P.M. (1990). Endogenous Technological Change. Journal of Political Economy, 98, 71-102.
- Romero-Avila, D., and Strauch, R. (2008). Public finances and long-term growth in Europe: Evidence from a panel data analysis. *European Journal of Political Economy*, 24, 172-191.
- Rothstein, B. (2008). Anti-Corruption A Big Bang Theory. *Paper presented at the Nordic Political Science Association meeting in Tromsö, august 2008*.
- Sala-i-Martin, X., Doppelhofer, G., and Miller, R.I. (2004). Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach. *American Economic Review*, *94*, 813-35.
- Sandberg, L.G. (1979). The Case of the Impoverished Sophisticate: Human Capital and Swedish Economic Growth before World War I. *The Journal of Economic History*, 39, 225-241.
- Schön, L. (2000). En modern svensk ekonomisk historia. Tillväxt och omvandling under två sekel. Stockholm: SNS förlag.
- Sinn, H.-W. (2003). *The New Systems Competition: A Construction Principle for Europe*. UK: Blackwell Publishers.
- Solt, F. (2008). Standardizing the World Income Inequality Database. Social Science Quarterly, 90, 231-242.
- Strange, S. (1996). *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press.
- Thakur, S., Keen, M., Horváth, B., and Cerra, V. (2003). *Sweden's Welfare State: Can the Bumblebee Keep Flying?* Washington: International Monetary Fund.
- Timonen, V. (2001). Earning Welfare Citizenship: Welfare State Reform in Finland and Sweden. In P. Taylor-Gooby (Ed.), Welfare States Under Pressure. London: Sage Publications.
- Wolff, M. (1992). Where we stand Can America Make it in the Global Race for Wealth, Health and Happiness? USA: Bantam Books.