What are the policy lessons from Sweden?

On the rise, fall and revival of a capitalist welfare state

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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?

The Swedes themselves are not entirely sure what they have done right.

- Paul Krugman¹

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

- Klas Eklund²

The case of Sweden has been discussed intensively among social scientists. 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. As will be shown, Sweden during more or less the same period developed one of the world's most compressed income distributions. Like many other countries, Sweden encountered economic problems in the 1970s and for some 25 years, GDP growth per capita in Sweden was lagging behind comparable countries. After the crisis of the early 1990s, the Swedish economy has made a strong recovery.

The combination of relative success followed by relative decline and then once again catching up, means that Sweden has been used both by right-wing think tanks as frightening example of what big government can do to a thriving economy (Stein, 1991) and by the IMF as an example of how a generous welfare state and big government can be combined with a growing competitive economy (Thakur et al., 2003).³ But what are actually the policy lessons from the case of Sweden? What can other countries learn from the Swedish experience?

Described as 'the social democratic economy' by Belfrage (2008: 278, italics in original), Sweden has been referred to as a typical example of the Nordic model. According to Ryner (2007) the model consists of six parts: 1) a highly 'decommodified' wage relation, 2) public commitment to employment-promoting policies, 3) welfare state universalism, 4) a large social service sector, 5) a

relatively 'women-friendly' welfare state, and 6) class compromise between capital and labour. The exact content of the Nordic or the Swedish model will likely never be agreed upon, but Ryner's description is a standard description, similar to the view in for example Magnusson (2002, 2006) and Schön (2000).

While the standard description captures many important aspects of Sweden, it does not fully explain how Sweden became both prosperous and relatively egalitarian, two of the arguably most striking features about Sweden compared to other countries. Nor does it fully explain the period of lagging behind from the 1970s to the mid-1990s, or the most recent period of relative economic success.

It would be naïve to argue that one single model can explain the full complexity of Sweden's (or any country's) economic development. This paper argues, however, that recent findings in institutional economics and inequality research shed new light on Sweden's economic development. While standard explanations often focus on Swedish exceptionalism in dimensions such as labor movement organization and welfare state universality, the arguments presented here suggests that the origins' of Sweden economic success are less exceptional: Just like most countries, Sweden grew rich because of well-functioning capitalist institutions. Moreover, the compressed Swedish income distribution seems to be much older than many of Sweden's progressive welfare state policies that were implemented in the 1970s.

The paper is structured around 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 research presented to answer these questions tell a story of the rise, fall and revival of a *capitalist welfare state*: a society in which capitalist institutions such as property rights and

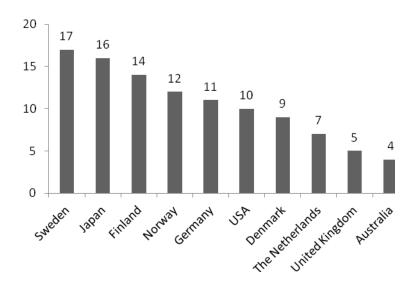
economic openness, together with welfare state policies, create a relatively egalitarian distribution of economic prosperity.

The paper proceeds as follows. Section 2 describes some crucial periods in 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 when and why Swedish income equality increased, while Section 4 describes the problematic period of 1970 to 1995. Section 5 deals with the most recent period of intense reform, and section 6 concludes with a discussion of what other countries can learn from the case of Sweden.

2. Prosperity

The period between 1870 and 1970 in Sweden has been described as particularly successful (Lindbeck, 2001; Blomström and Kokko, 2003). 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).⁴

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



Source: Maddison (1982).

A typical explanation of the golden years 1870 to 1970 is export driven growth of natural resources.⁵ 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 note and to scrutinise these standard explanations. Surprisingly few have followed. Myhrman asks: if British economic development led to growth in Sweden, why was the Swedish economy so weak in its development between 1780 and 1860? And why was there an 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. Since then, research on the importance of institutions for economic development has progressed, suggesting 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 institutions also makes it easier to explain Swedish development after 1970.

2.1 Explaining long-run growth

The importance of institutions for economic development is now mainstream economics, but this was not always the case. Neoclassical growth models stemming from Solow (1956) predict that growth per person increases when savings and investments increase, but 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 do not identify the crucial role of institutions in the growth process.

North (1990: 110) defined institutions as the rules of the game that shape human interaction and argued that 'third world countries are poor because the institutional constraints define a set of payoffs to political/economic activity that does not encourage productive activity'. The focus on institutions as rules of the game spurred research that tried to explicitly account for the role of institutions in research on economic growth. For example, Mauro (1995) showed that different measures of corruption, red tape and inefficiency of the legal system had a negative impact on investment and growth. Another example is Knack and Keefer (1995: 223) who added different indicators of the security of property rights to standard growth regressions and conclude:

[...] institutions that protect property rights are crucial to economic growth and to investment. Some of the regressions [...] point to effects that rival even those of education. Moreover, the effect of institutions on growth persists even after controlling for investment. This suggests that the security of property rights affects not only the magnitude of investment, but also the efficiency with which inputs are allocated.

The studies mentioned above focus on specific institutions such as corruption and property rights.

Another strand of the literature has taken the approach of bundling under the label *economic freedom* institutions and policies that are expected to make markets work well. Economic freedom refers not only to private property rights but also to rule of law in general, freedom to trade, absence of government interventionism and a stable monetary system. After surveying 52 studies of the

relationship between various measures of economic freedom and growth, Doucouliagos and Ulubasoglu (2006) concluded that economic freedom has a robust positive effect on economic growth regardless of how it is measured.⁷

One critical question must be raised regarding the relationship between institutions and growth: Can it be verified that the relation is causal, in the sense that institutions cause growth rather than the other way round?

Empirically, the lack of exogenous variation in institutional arrangements makes it difficult to compare the causal effects of different institutions. Researchers have met this challenge using a variety of approaches. One strand of the literature uses pure theory and formal analysis to show that profit seeking individuals invest less if others can seize the fruits of their investments (Demsetz 1967). Another strand rely on cross-country regressions where so-called instrumental variables are used to create a quasi-natural experiment. Some well-known examples of attempts to identify the causal effects of institutions using instruments are (Acemoglu, Johnson, and Robinson 2001) using variation stemming from differences in malaria mortality among European settlers, Mauro (1995) using ethnolinguistic fractionalization and Easterly and Levine (2003) using latitude.

The third approach uses natural experiments where circumstances create a natural control group against which the effect of certain institutions can be evaluated. An example is the situation when some but not all squatters in Buenos Aires where given formal property rights to their land in 1984, which led to significant and sizeable effects on housing investment and child education in the 2000s, as reported by Galiani and Schargrodsky (2010). Similar evidence exists for the beneficial causal effect of successfully fighting corruption, identified using a newspaper anti-corruption campaign in Uganda by Svensson and Reinikka (2005).

Identifying what institutions matter the most is not easy, both because different types of institutional arrangements are typically correlated, and also because of institutional complementarities: The effect of property rights is likely to depend on, for example, the freedom to trade internationally. Abdiweli (2003) reviews existing evidence and provides further evidence that judicial efficiency, low levels of

corruption, well-organised public bureaucracy, and well-defined private ownership co-varies with high levels of growth. Using the economic freedom index, Berggren and Jordahl (2005) conclude that the second dimension, quantifying property rights and the integrity of the legal system, is the one most robustly related to growth.

To make a potentially long story short, recent research in institutional economics clearly indicates that institutions such as property rights and the rule of law promote economic development.

2.2 The role of institutions in Sweden

As mentioned above, Myhrman (1994) was among the first to note that Sweden's growth during the golden years of 1870-1970 can largely be explained by institutional reforms implemented mainly during the end of the 19th century. The recent boom in empirical institutional analysis has made Myhrman's point even more convincing. The types of institutional reforms introduced in the mid-1800s are exactly the types of reforms that the research described in the previous section has found beneficial for economic development.

The standard explanation – export driven growth as a result of natural resources – is no longer considered an explanation at all. In fact, many poor countries have an abundance of valuable natural resources. The phenomenon is sometimes referred to as the resource curse, describing the tendency that in the absence of good institutions, 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. For example, Mehlum et al. (2006) and De Soto (2000) describe how the absence of effective property rights can explain the lack of growth in the world's poorest countries: when houses cannot be mortgaged because they were built without permits, investments fail to materialise.

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 organised 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: Compared to those peasants that were tenants under the nobility, where rising rents and the threat of eviction hindered investments, the secure property rights among self-owners combined with fixed taxes provided strong stronger incentives to improve agricultural productivity (for example by using crop variation, trenching and the removal of stones). 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). The importance of more sophisticated financial markets for economic development in Sweden in the period 1890-1939 is stressed also by Hansson and Jonung (1997).

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 citizens 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 (in Sweden known as *avvittringsprocessen*). From the State's viewpoint, the sell-off process was a means to create taxable units. Jörnmark's main point is that the combination of stable property rights and the freedom to trade contributed to timber generating profits for both the State and for the capitalists.

Schön (2000) 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. Shortly after these important liberalizations, Sweden experienced what Rothstein (2011) 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 and the last formal aristocratic prerogative for higher positions in the State was abolished. 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. Before the introduction of the new system, civil servants were often hired without sufficient funds to pay them. This led to a system where civil servants often held several positions and accepted side payments from peasants. When the wage system was in place, and when meritocratic recruitment introduced, it was less accepted to use public positions for the purpose of extracting rents. 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. The reforms mentioned by Rothstein (2011) are largely the same as those mentioned by Myhrman (1994), and the same as those mentioned in textbooks such as Schön (2000).

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 explanations thus provide an understanding of why Sweden's economic development accelerated around 1870. Myhrman (1994) stresses, however, that institutional theory goes far in explaining also a much more recent development. The high growth rates in the 1950s and 60s are usually attributed to successful macro-policies, but Myhrman points out that Sweden during this period was 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 characterised Swedish politics during the 20th century. Table 1 summarises some important institutional changes and events in the 1800s that likely contributed to economic development.

The focus on institutions should not be taken to mean that the standard explanations were not important. In addition to the factors included in the Swedish model, noted in the introduction, empirical research on economic growth points to public spending on communications and basic education.¹¹ 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.

It is also worth noting that there were benefits associated with the emigration from Sweden to the US. 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 (Henricson and Lindblad, 1995; 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, the class compromise between capital and labour 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. Important institutional reforms and events in Sweden during the 1800 s. 12

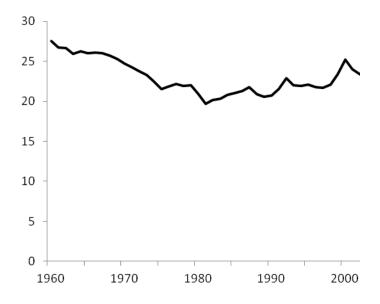
Late 1700s	Land reforms improved agricultural productivity.
1826	An institute of technology is established in Stockholm (which in 1876 was converted into the Royal Institute of Technology).
1842	Compulsory elementary school is introduced.
1845	Equal rights of inheritance for men and women are introduced, 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 – 60	Lowered tariffs. Standard rate postage within Sweden is introduced. This played an important role in developing newspaper distribution and literacy.
1856 – 66	The infrastructure is improved through the expansion of state-owned railways, which also prompts a shift to standardised time in Sweden in 1879.
1864	Freedom of trade is established.
1866	The four-estate system is abolished, establishing a modern bicameral Parliament.
1840 – 62	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 modernised 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 – 75	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.

3. Equality

After the years of high growth from 1870 to 1970, Swedish inequality was low almost regardless of measurement method. As will be shown, the timing of the changes in the Swedish income distribution suggest that the fundamental causes of the low inequality are to be found in institutional reforms rather than in the far-reaching welfare state policies of the 1970s.

Using data from the Standardised World Income Inequality Database (Solt 2008), figure 2 shows that the most commonly used inequality measure, the Gini coefficient for disposable income, decreased rapidly until 1976, with an increasing trend starting in 1982.

Figure 2. Gini for disposable household income in Sweden 1960-2008.



Source: SWIID 3.0, Solt (2008).

Since around 1980, inequality has increased in most countries, including Sweden. Importantly, Sweden remains a country where inequality is comparatively low: Table 2 displays Gini coefficients for the 5 most equal countries in the OECD, with the OECD average and USA included for comparison. To explain why inequality in Sweden is lower than in other countries, we must clearly look for data on the income distribution before the 1970s.

Table 2. The five OCED countries with lowest inequality compared to the OECD average and USA.

Mid-80s		Mid-90s		Mid-00s	
Sweden	0,198	Sweden	0,211	Denmark	0,232
Finland	0,209	Denmark	0,215	Sweden	0,234
Denmark	0,221	Finland	0,218	Finland	0,254
Norway	0,222	Austria	0,238	Luxembourg	0,258
Austria	0,236	Norway	0,243	Austria	0,265
OECD avg.	0,296		0,312		0,315
USA	0,337		0,361		0,38

Source: OECD (Gini, disposable income, 18-65 years of age, extracted september 08, 2012 from $\underline{\text{http://stats.oecd.org/}}$).

Reliable sources on inequality before the 1960s are rare, but those that exist suggest that Swedish equality increased a long time ago. 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, a comparative perspective is provided by Roine and Waldenstrom (2008: 1) who 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.

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. Further support for an income compression before the 1960s is provided by Bentzel (1952), documenting a substantial compression of the distribution of disposable income between 1935 and 1948. Hence, several sources together suggest that there was substantial income compression going on in Sweden from around 1800 until the 1970s.

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. High marginal taxes and extensive labor market regulations became typical for Sweden in the mid-1970s, and by then equality was already very low by international standards. 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 very close to the OECD average until around 1960, as noted by Steinmo (2003) who also stresses that the Swedish corporatist decision

making model did not necessarily imply a very large welfare state—nor high taxes necessary to finance it.

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



Source: Roine et al. (2009).

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. A review of case studies of Sweden, as well as cross-country studies explaining variation in poverty and inequality, suggest a number of equality promoting factors that apply to Sweden: Land reforms, trade unions and centralised wage bargaining, primary school reforms, the introduction of social insurance schemes and increased female labor participation.

3.1 Land reforms, agricultural productivity and private savings

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 2010). A government report (Finanskomittén 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 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. From 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 increased income equality by studying the Swedish school reform of the 1940s, which introduced a uniform, compulsory nine-year primary school with national standardised 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 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 data on cognitive abilities, 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 education 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 are 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.

In the 1930s, an important strategic choice was made: the universalistic welfare state strategy, supported by Prime Minister Per Albin Hansson's minister of social affairs Gustav Möller, won over the selective view supported by especially Gunnar and Alva Myrdal. Economic problems between the First and the Second World War delayed the sickness insurance system until 1955.

The universalistic strategy is important for redistribution for somewhat counterintuitive reasons. While the selective welfare state may be more targeted towards helping the poorest in society, universal welfare states tend to be bigger. As noted by Åberg (1989), the redistributive outcome depends both on redistributive profile and on the size of the redistributive sector.

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?

Another way of describing the income distribution in Sweden is by computing the size of the middle class. Defining middle class as households having an income between 75 percent and 125 percent of median household income, Pressman (2007) calculates that 47 percent of Swedish households belong to the middleclass, compared to 29 percent in the United States (and an average at 37 percent). As expected, such a compressed income distribution results in high social mobility. For example, fatherson income correlations are comparatively low in Sweden (OECD 2008).

Björklund et al. (2008) find however that mobility in Sweden is much lower within the top percentile of the population, leading to the conclusion that relative equality in Sweden coexists with what they call 'capitalistic dynasties'. In many ways, policies favored concentration of firms and concentration of private ownership until about 1980, according to Henrekson and Jakobsson (2001). One might speculate that the success of Swedish capitalism lies partly in the combination of these capitalistic dynasties with high levels of income equality for a large middle class.¹⁴

3.7 Conclusion: Equality of opportunity?

What are the lessons from the decreasing income inequality in Sweden from around 1800 until the late 1970s? It bears noting that reforms such as land reform, primary school reform, Bismarckian social insurance, and increased female labor participation do not directly equalise economic outcomes, but rather contribute to making the sets of choices available to different individuals more similar – what Roemer (1998) calls equality of opportunity. It is also worth emphasizing that the reforms that increased equality likely had no costs in terms of lower economic growth. On the contrary, agricultural reforms that increased productivity, the primary school reforms and the female labor participation probably contributed to both economic development and a more egalitarian income distribution. In all, the Swedish experience illustrates that the equity-efficiency trade-off often referred to (Okun 1975) is not a necessity. Promoting equality and promoting economic development need not be conflicting goals.

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 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.¹⁶

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'.¹⁷ There is now a consensus among many mainstream 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 summarise the consensus among mainstream economists on some of the most important causes of Sweden's economic problems from 1970 and onwards.¹⁸

• 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 internationalised.
- From the mid-1970s onwards, Sweden began to subsidise 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 (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 summarised above, political institutions 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 characterised 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.

There are, of course, different versions of what explains Sweden's economic problems that started in the 1970s. For example, Korpi (1996) denies that Sweden was lagging behind other countries – though the reasons for this claim have been questioned, and the rough pattern of GDP per capita in Sweden compared to the US and the core EU countries is visible in figure 5.¹⁹

An interesting description is provided by Mjøset's (1987) account of nordic economic policies in the 1970s and 1980s. Though not entirely incompatible with the mainstream explanations given above, Mjöset puts the blame for the problems differently. For example, while the mainstream explanation blames decreasing competitiveness largely on large nominal wages increases, Mjøset emphasises the pricing behavior of Swedish exporting firms, noting in comparison that Finnish large firms showed a much greater price flexibility. Mjøset also notes some degree of unfortunate circumstances: As booming prices in raw materials and staple goods in the early 1970s created a stimulus and caused profits to increase from 1972 to 1974, the Rehn-Meidner wage setting model used at the time was indeed supposed to generate increasing wages in all sectors. Unfortunately, the lagged wage increases were substantial and coincided with the international downturn (Mjøset 1987: 438-9)

While some attempts to dampen the public expansion were made around 1980, the number of people employed in the public sector increased until 1985 (excluding state owned corporations) or 1990 (including state owned corporations), and tax revenue as a share of GDP peaked in 1990. The Rehn-Meidner wage setting model was supposed to curb inflation and foster high productivity (Erixon 2002, 2008), but there was a difference between the model in theory and how it was actually implemented.

In particular, Björklund (1982) argues that the inability of politicians to keep fiscal policy sufficiently tight resulted in variable and unpredictable inflation.

Mjøset actually characterises Swedish economic policy during the 1980s as austerity measures, but after the crisis that hit Sweden in 1991, the analysis that fiscal policy was not tight enough is more common among Swedish economist (Jonung 1991), and also supported by (some) social democrats (Feldt 1991).

4.2 Was policy worse in Sweden than in other countries?

For sure, Sweden was not the only country with economic problems in the 1970s. Is it possible to examine if 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, but not many go sufficiently far back. The Economic freedom index (EFI) (Gwartney et al., 2010) is one of the most used measures, starts in 1970 and 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 index has frequently been used as a descriptive tool for quantifying how market friendly policies are in different areas.

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 Forum, the *International Country Risk Guide* from the PRS Group and the World Bank's *Doing Business* data. 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).²¹

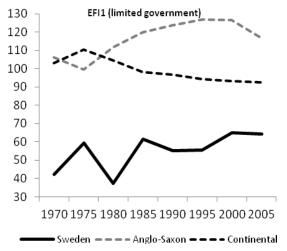
Using the Economic freedom index, Bergh and Erlingsson (2008) show that Sweden increased its level of economic freedom more than most other welfare states between 1970 and 2000, both because

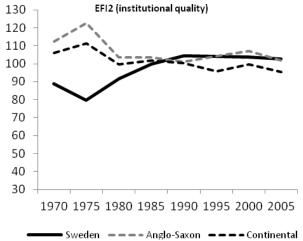
Sweden was clearly below the OECD average in the 1970s, and because Sweden in 2000 had above average levels of economic freedom. In Figure 4a-c, Sweden is compared to the average values for continental European welfare states (Belgium, Netherlands, Germany, France, Italy, Switzerland), and Anglo-Saxon welfare states (Australia, Canada, United Kingdom, United States).²² 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 in the economy 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 was also worse in Sweden, and the same goes for policies, though here the difference was smaller. Seemingly, this suggests that size of government is 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 position in the first dimension changes only moderately. 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.

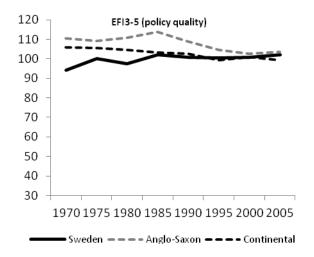
Figure 4a-c. Policies and institutions in Sweden compared to Anglo-Saxon and Continental welfare states (1970-2005). Index with OECD average = 100.

a b





c

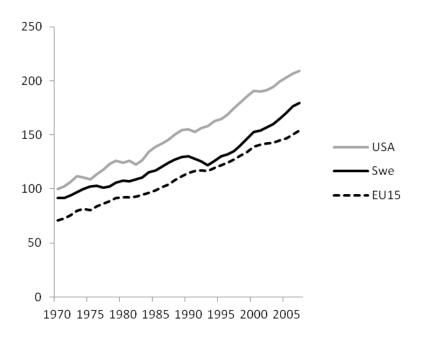


Source: Own calculations based on Gwartney et al., (2010).

5. Revival of the capitalist welfare state

Figure 5 illustrates that 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 5. Real GDP per capita in the US, Sweden and the EU-15. Index 100 = USA 1970.



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

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. 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.

First of all, recent evidence suggest that institutional quality and government size interact in how they affect growth. Oto-Peralías and Romero-Ávila (2013) confirm that government size is negativly linked to growth for low and medium levels of institutional quality – but not so when institutional quality is high. This means that the increase in institutional quality and the decrease in government size in Sweden has seen may have a non-trivial impact on economic growth.

Second, 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 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.

Inflation control and economic openness are by far not the only policy changes Sweden implemented during the 1980s and the 1990s. In fact, a large number of reforms have likely contributed to increasing both the economic and political sustainability of the Swedish welfare state (Bergh, 2009). 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 within the public sector through voucher systems
- Increasing efficiency through competition enhancing reforms

A number of the most important reforms are listed in Appendix A. These reforms are the reason why economic freedom in Sweden as measured by the index shown in figure 4a-c after 1990 increased to a level above the OECD average for all dimensions except the first dimension (government size). Given the evidence reviewed in section 2.1, they are also likely candidates for explaining why economic growth has increased.

5.1 The role of globalization

Economic openness and free trade are often described as potential threats against the welfare state, and there have been worries that increased mobility of capital and labor will lead to a race to the bottom in terms of tax revenue and welfare state generosity.²³ Both case studies and cross country comparisons tend rather to find that countries with large public sectors are often highly integrated into the world economy (Rodrik 1997, Steinmo 2003, 2010, Lindert 2004). To explain this pattern, the so-called compensation hypothesis suggests that open economies develop large welfare states and corporatist institutions as a response to the volatility caused by economic openness and international markets (Katzenstein 1985, Cameron 1978). Against this hypothesis, Kim (2007) notes that the relationship between economic openness and volatility is 'not only theoretically ambiguous but empirically moot' (p. 210), and concludes that more open economies are not necessarily more volatile externally or internally. Along the same lines, Down (2007) presents empirical evidence that trade openness in developed countries is actually negatively related to both GDP volatility and price volatility.

The findings of Kim (2007) and Down (2007) suggest that countries with large welfare states actually benefit from economic openness. Similarly, Iversen (2005) note that economic openness may be especially important for countries with generous welfare states:

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)

According to this view, economic openness is instrumentally important for welfare states with high taxes, generous transfers and extensive labor-market regulation, because international trade allows welfare states to specialise in high value-added services. Iversen is proven right by empirical evidence in Epifani and Gino (2009) who show that countries with high taxes benefit from globalization via a terms of trade mechanism: Higher production costs are passed on to consumers globally because exporters in high tax countries have market power and can increase prices to levels well above marginal costs.

In all, recent research suggests that countries with large welfare states and high taxes benefit from economic openness. Increasing economic globalization thus emerges as another partial explanation of Sweden's economic performance.

5.2 The political consensus

As shown by Bergh and Erlingsson (2008), the degree of political consensus on the reforms described above has de facto been high, contributing to commonly held expectations that the reforms will not be reversed. One might ask why social democrats in Sweden during the 1980s seemingly retreated from its more radical position in the 1970s. According to Ryner (2002), social democrats actually came to play a leadership role in the neo-liberal restructuring of the Swedish economy. This is puzzling, argues

Ryner, because 'increased social consumption, industrial democracy and collective capital formation' would have been more appropriate responses to the challenges Sweden was facing at the time (p. 3)

When Sweden is understood as a capitalist welfare state, the behavior of social democrats in the 1980s and the 1990s is less puzzling. The key to Sweden's success before 1970 was the combination of universal welfare state policies and a well-functioning capitalist economy. The welfare state and the market economy played different roles and worked well together, creating both prosperity and relative equality. During the 1970s, markets worked less well because policies created the wrong incentives: Firms could hope for subsidies and devaluations rather than taking measures to increase productivity. Against this background, the fact that social democrats modify policies and institutions in a market friendly (or neo-liberal) direction in the 1980s and the 1990s is more logical. It can actually be described as returning to the recipe that worked well during the golden years 1870 - 1970.

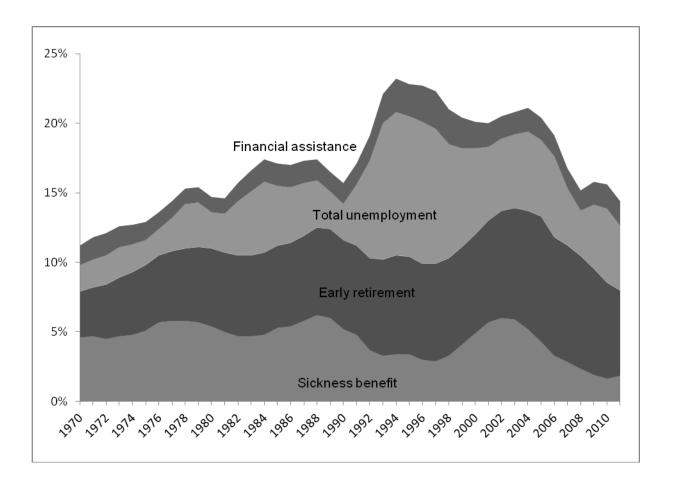
Moreover, while it is indeed correct to describe the changes and a fundamental restructuring of the Swedish economy, it was not a neo-liberal dismantling of the welfare state. Bergh and Erlingsson describe the changes as liberalization without retrenchment, and several scholars have arrived at the conclusion that Sweden after the turbulent 1990s remained a 'social democratic' or 'universal' welfare state (Rothstein and Lindbom 2004; Bergh 2004; Bergqvist & Lindbom 2003; Lindbom 2007, 2001; Kvist 1999). The changes made can thus be understood as measures taken to preserve and adapt the welfare state to new circumstances (cf. Klitgaard 2007, Bergh 2008). It is also worth noting that the market friendly reforms did not erode the public support for the welfare state. In fact, Svallfors (2011) shows that the public support for welfare state policies remains high or even increasing across all income groups.

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

The narrative presented describes Sweden as a *capitalist welfare state*. It sheds light not only on the origin of Swedish prosperity, but also on the much debated political and economic development in Sweden after 1980. 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 spreading social insurance schemes and labor unions contribute to a more equal distribution of income.

The lessons from the Swedish experience after 1970 are 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 6 shows the share of the adult population supported by various welfare benefits from 1970 to 2009. We see clearly that the system is working: the various social security systems serve as cushions during the economic downturns. But we also see a problematic trend upwards. 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.

Figure 6. The share of the population aged 20-64 supported by various welfare benefits, 1970-2011 (fulltime equivalents).



Source: Statistics Sweden.

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. This is not a unique conclusion. Analyzing the fact that Sweden was ranked as the second most competitive country

in the world according to the Global Competitiveness Index 2010–2011 (just slightly behind Switzerland), Eklund et al. (2011) emphasise the role of market deregulations, inflation control and stricter budget rules, but also some lowering of taxes and benefit levels.

In summary, 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 co-exists 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 privatise 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 recognised 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.

1994

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 nationalised 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.

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¹ Krugman (1999).

² Eklund et al., (2011).

³ After the 2008 financial crisis, Sweden was portrayed as a 'rock star of recovery' in the Washington Post (June 24, 2011). The Economist used the words 'North star', noting that "unlike much of the rest of Europe, Sweden is roaring ahead" (Jun 9, 2011). Two years later, Sweden is described as 'The next supermodel' (Feb 2, 2013).

⁴ In earlier versions of the OECD statistics, Sweden actually placed third. However, Luxembourg later revised its GDP figures.

⁵ As noted by Myhrman (1994), Sweden's prosperity has often been attributed to the presence of natural resources (such as forest and iron ore) and to the absence of war.

⁶ Mauro did in fact use instrumental variable analysis (based on ethnolinguistic fractionalization) to argue that his findings represented a causal effect from institutions to growth, though this issue is discussed further below. ⁷For some critique on the view of institutions as determinants of growth, see Glaeser et al. (2004).

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⁸ For a survey of the method of using instrumental variables to identify causal relationships, see Angrist and Krueger (2001). When institutions are bundled under the economic freedom label, Heckelman (2000) and Dawson (2003) analyze the timing of changes using so-called Granger causality tests, and concluding that economic freedom comes before economic growth, and not the opposite.

⁹ For research on financial development in general, see King and Levine (1993) and De Gregorio and Guidotti (1995) whose findings also support a causal link from financial development to economic growth.

¹⁰ 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.

¹¹ See for example Canning and Pedroni (2004) and Barro (1990). Note however that even such traditional explanations are related to institutions. For example, a country's education level can be seen as a proxy for the quality of the underlying institutions associated with education.

¹² Compilation based on Myhrman (1994), Rothstein (2011) and Schön (2000).

¹³ Since 1980, membership rates have dropped slightly, a trend that have since then accelerated.

¹⁴ For some anecdotal evidence on the role of capitalistic dynasties in Sweden still today, see af Kleen (2009).

¹⁵ See Roemer (2003) for an attempt to evaluate the extent to which fiscal regimes in 11 welfare states equalise opportunities for income among citizens. Results suggest that the systems in Sweden and Denmark in the early 1990s were highly redistributive, possibly aiming for equality of outcome rather than equality of opportunity.

¹⁶ 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).

¹⁷ See also Henrekson (1996).

¹⁸ Rosen, S. (1996). Public Employment and the Welfare State in Sweden. Journal of Economic Literature, XXXIV 729–740., Freeman, R. B., R. Topel, and B. Swedenborg, eds. 1997. The welfare state in transition: Reforming the Swedish model. Chicago: University of Chicago Press, Lindbeck, A., P. Molander, T. Persson, A. Sandmo, B. Swedenborg, and N. Thygesen. 1994. Turning Sweden around. Cambridge, MA: MIT Press, Agell, J. (1996). Why Sweden's welfare state needed reform. The Economic Journal, 106, 1760-1771.

¹⁹ Korpi, W. (1996). Eurosclerosis and the sclerosis of objectivity: On the role of values among economic policy experts. The Economic Journal, 106, 1727-1746.

²⁰ Davidsson, P och M Henrekson (2002), "Determinants of the Prevalence of Start-ups and High-Growth Firms", Small Business Economics, vol 19, s 81-104.

²¹ 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).

²²This 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.

 $^{^{23}}$ For example, Martin and Schumann (1997), Strange (1996) and Sinn (2003).