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Extended right to vote kick-started the economic development in Sweden

By Björn Tyrefors Hinnerich



How important are political rules for economic growth? Recent work at the Research Institute of Industrial Economics supports theories that changes in political institutions can be key determinants of economic institutions and growth. Björn Tyrefors Hinnerich, Erik Lindgren and Per Pettersson-Lidbom examined the impact of Sweden's 1862 suffrage reform, which extended the voting rights of industrialists. Using a unique data set they found that the reform was a key factor in Sweden's growth miracle because it gave industrialists more political clout, kick-starting the process.

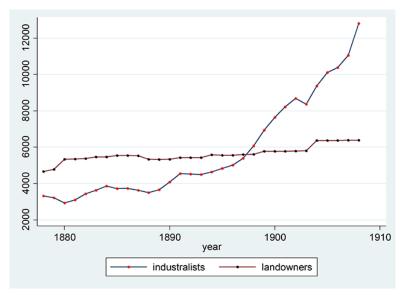
This study reveals that where industrialists gained political power there was more investment in railways, followed by structural change and economic development. They also found evidence of less coercive labor practices. However, they also established that population growth was higher in areas where landowners had more political power – a surprising result given the conventional wisdom that population growth and urbanization are positively correlated with economic development.

From a very poor country to one of the richest

In the middle of the 19th century Sweden was a predominantly rural agricultural society. Only 10 percent of the population lived in cities, which were small. Public health was poor, with low life expectancy and an infant mortality rate of 15 percent. Sweden was thus an economically and socially backward country, among the poorest in Europe. Sweden's industrialization process started relatively late and began largely in rural areas rather than the cities. For example, by 1901, nearly two-thirds of employment in the manufacturing sector was still based in rural areas. There was thus a close interaction between manufacturing and agricultural labor markets, with industry competing for labor. There was also a large demand for unskilled labor, including women and children (Heckscher, 1954).

The construction of railways was a major factor in the industrialization process. In 1853, parliament decided that only the main lines – about a third of the total railway network in 1910 – should be built and operated

Figure 1. Average number of votes per local government for landowners and industrialists



Source: Statistics Sweden, BISOS R

by the State, while all other local railways should be privately operated. The local railways were typically limited liability companies, often controlled by local governments. Consequently, these railways became much more important than the state-owned railways for the transportation of both people and goods. In 1910, for example, 38 million people travelled on the local lines but only 20 million travelled on the state lines, while private railways transported twice as much cargo compared to state-owned routes. When the industrialization process finally started, Sweden was rapidly transformed. By 1950 it was one of the world's richest, healthiest and most industrialized countries.

The suffrage reform

Sweden has a long history of local self-government in rural areas. In the 19th century the main rural decision-making body was the town meeting, but in practice only landowners had voting rights. In 1862, parliament (the Diet), comprised of nobility, clergy, burghers and landowning farmers, extended suffrage rights at the local level to include industrialists. The decision reflected the "private property principle", the notion that all local taxpayers, including firms, should have voting rights in the local government. A year later, parliament additionally decided that all local taxpayers should have votes in proportion to their tax payments. As Sweden entered late into the industrialization phase and was very poor in the 1860s, the reform did not have any large immediate impact on the relative political power of landowners and

industrialists at an aggregate level. For example, in 1860 there were only 154 firms with limited liability outside Stockholm, while by 1917 the number of firms had increased to 8,700. However, some local governments saw a larger increase in the relative power of the industrialists than others. Over time, investment in railways and increased economic activity also affected profits, and hence taxes paid and the number of votes (Figure 1).

Sweden's agricultural system gave landowners a high degree of control over the workforce, allowing corporal punishment if peasants did not show up for compulsory labor, tenant farmers' obligation to perform unpaid work for landowners, and severe restrictions on labor mobility with a rigid system of internal passport control until 1860. In wage equivalents the agricultural salary was less than half the wages in the manufacturing sector. The Swedish agricultural economy was characterized by a large

2 www.ifn.se



supply of unfree and cheap labor, so landowners clearly had much to lose from allowing farm workers to find employment outside agriculture. Also, as only a small fraction of their produce was marketed, and typically sold locally, the benefits to them of local railways were limited.

In contrast, industrialists had much to gain, and also from any easing of restrictions on labor. They could use the railways to transport their products outside their immediate communities, while trains would bring workers to the factories. Also, with increasing profits from expanding businesses, industrialists would pay more taxes, giving them more voting power. Landowners' resistance to local railways has already been pointed out by historians. For example, Mellquist (1974) has analyzed in detail the decisions about railway investments at town meetings, finding that landowning farmers opposed railway investment in all the cases he analyzed. In sum, the construction of railways was desired by industrialists, but opposed by landowners.

Effects of the suffrage reforms

The IFN researchers used archives to create a data set of local government during the 19th century. The data include a very large number of political, economic and demographic variables for about 2,300 rural local governments, often on an annual basis both before and after the suffrage reform. For example, there are data regarding the political power of landowners, railway investments, spending on primary education and welfare,

church and total spending, employment shares and labor coercion measures. They also collected measures of labor and land productivity, real wages, labor-saving technologies, and working time and labor demand in both the agricultural and the industrial sectors. Furthermore, they gathered demographic variables, such as the total mortality rate, infant mortality rate, the fertility rate, population size, and inward and outward migration.

The first finding is that in local governments where landowners retained political power, there was much less investment in railways compared to those areas were industrialists gained political power due to the suffrage reform. The estimated effect is large: a 10 percentage point increase in the vote share of industrialists increases the probability of having a local railway by 15–17 percentage points.

But industrialization came at a price. Railway construction was funded partly by loans that had to be amortized, and which therefore adversely affected local budgets. The data suggest that spending on education and poor relief decreased significantly where industrialists gained more political power. However, church spending and total spending was little affected. Thus, it seems that railway spending crowded out the funding of primary education and poor relief, and that human capital formation in the form of primary education was not important for Sweden's industrialization and economic development in the late 19th century. Moreover, population growth was higher in areas where landowners had more political power. This is perhaps surprising given the conventional wisdom that population growth (or urbanization) is

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positively correlated with economic development (e.g., Acemoglu et al (2005). This result is explained by higher mortality rates in early industrialized localities.

In a second step, the IFN researchers established that industrialists' increasing political power led to structural changes in the agricultural and manufacturing sectors. They found that the share of people working in agriculture decreased in municipalities were industrialists acquired power. Again, the estimated effect was substantial: a 10 percentage point increase in the vote share for industrialists led to a 10 percent decrease in agricultural employment. Moreover, in municipalities where the industrialists became more powerful, agricultural labor markets began to provided better conditions for their workers, with fewer coercive labor contracts, higher real wages and shorter working hours. Correspondingly, the manufacturing sector flourished, relatively, workers received higher wages and labor productivity increased.

Conclusions

This research provides a novel explanation of Sweden's economic development take off, based on a political economic framework. Sweden was extraordinarily poor in the beginning of the 19th century, with landowners controlling all political power. But a centrally decided constitutional reform changed the basis for voting rights from land ownership to tax payments. As a result, in some municipalities industrialists gained the necessary political power to construct railways, and this led to more widespread economic development. In municipal-

ities where landowners retained political control after the suffrage reform, landowners blocked technological change and economic development. Thus, extending voting rights to industrialists on the behalf of landowners seem to have been favorable to the start of the industrialization process in Sweden.

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Childbirth prevents female executives from reaching the top

At the age of 40, women are less likely than men to be CEOs of larger firms. Differences in qualifications can't explain this, as female managers are generally more qualified than men. Instead, the differences are explained by the fact that women are lagging behind in their career following the birth of a first child. This is what new research by Joacim Tåg, IFN, Matti Keloharju, Alto University, and Samuli Knupfer, BI Norwegian Business School, shows.



Exceptionally rich data from Sweden makes it possible to study the gender gap in executives' career progression and to investigate its causes. In their forties, female executives are about one-half as likely to be large-company CEOs and about one-third less likely to be high earners than male executives.

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