

## Microeconomic Reforms and Business Transformation: Some Lessons from Sweden

*In the aftermath of the Covid 19 crisis, the business sectors in Sweden and Europe will need considerable restructuring and reorganization. These required changes add to the need to keep pace with the evolving digital technologies. Sweden underwent a similar transformation in the early 1990s, when wide-ranging policy reforms were undertaken. What lessons can we draw from them?*

By Fredrik Heyman, Pehr-Johan Norbäck and Lars Persson



*Fredrik Heyman, Pehr-Johan Norbäck and Lars Persson photographed by Karl Gabor.*

In response to a financial crisis in the early 1990s, Sweden implemented a major structural reform package. The major objectives were to restore macroeconomic stability and promote growth. This was done not only through macroeconomic policies, but also through microeconomic reforms intended to improve the functioning of markets. It was these latter policies in particular that ignited a successful industrial reorganization process. In the 1980s, discussions regarding reform of the

Swedish welfare state became increasingly intense. Professor Assar Lindbeck was one of the most prominent advocates for efficiency-enhancing reforms, the need for which became acute in the early 1990s when Sweden faced its most severe economic crisis in the post-war period. The government turned to Professor Lindbeck to chair a task force on how to turn the economy around.

In 1993, the Lindbeck Commission presented a large number of proposals to improve the efficiency and functioning of markets in Sweden, many of which were implemented (Lindbeck et al., 1994). Among them were several macroeconomic policy reforms, including the establishment of an independent central bank with an inflation target, and a floating exchange rate.

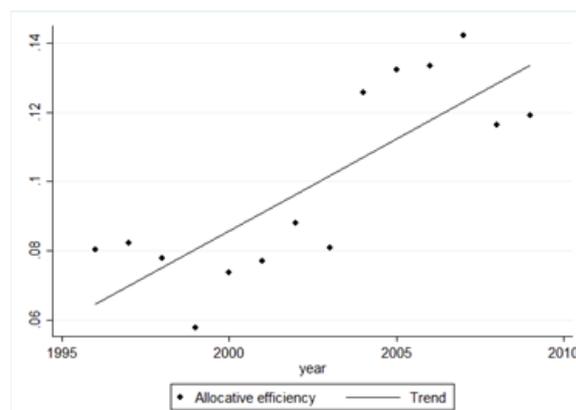
While it is clear that these macroeconomic reforms contributed to the ensuing recovery, it is less appreciated that a substantial part of the Swedish reform package was aimed at improving the microeconomic functioning of the economy, and that this led to a successful reorganization process in the business sector. Notable reforms included greater openness to inward FDI, stronger competition policy, the deregulation of product markets, tax reforms, the decentralization of the wage negotiation system, and the liberalization of temporary work contracts. Importantly, these reforms have not been reversed by subsequent governments. These microeconomic policy reforms led to increased private sector productivity during the following two decades. It could also be noted that although income inequality in Sweden has increased since the early 1990s, it is still low compared to most other industrialized countries.

### The impact of microeconomic reforms

An important objective in many of the reforms was to improve resource allocation and the microeconomic functioning of markets. Figure 1, taken from Heyman, Norbäck and Persson (2019), shows how allocative efficiency in the Swedish business sector – measured as the extent to which market share is allocated to high-productivity firms – increased during the period.

This finding is corroborated by Andrews and Cingano (2014), who used firm-level data for OECD countries in 2005 to show that Sweden had the highest allocative efficiency. Their research also suggested that regulations related to employment protection, product market competition and FDI were negatively related to productivity.

Figure 1. Allocation efficiency in Sweden 1996-2009

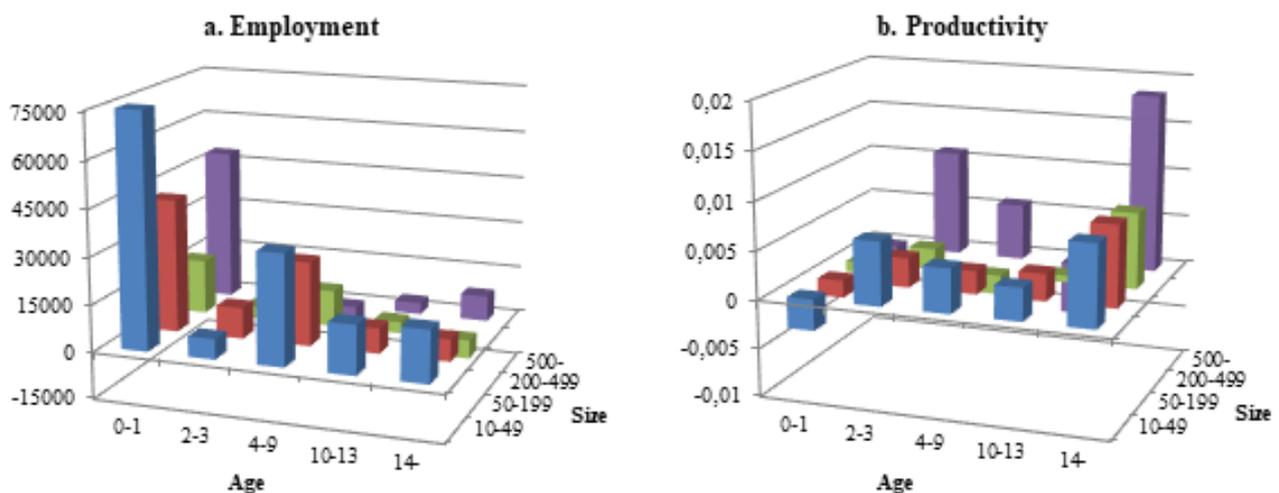


Note: The figure shows how allocative efficiency has changed over time in Sweden. A productivity decomposition method proposed by Olley and Pakes (1996) is used to calculate allocative efficiency. The method divides aggregate productivity into different terms, where one term has a natural efficiency interpretation term. This part (the allocative efficiency term) can be interpreted as the extent to which market share is allocated to high-productivity firms. See Heyman, Norbäck and Persson (2019) for details.

Another way to illustrate the impact of the reforms is to examine the roles played by different types of firms in the restructuring process. Figure 2 depicts net job creation and value-added creation for combinations of firm size and firm age during the period 2000–2013. It shows that net employment increased in small firms, while most of the productivity gains were created in large incumbent firms, suggesting that the reforms enhanced the division of labor between large incumbents and small growing firms.

In the figures, young, small firms are found in the bottom left, medium size and medium age firms in the middle, and large, old firms in the top right. The two figures point to an important distinction between employment and value added creation: Figure 2(a) suggests that hardly any net employment was created in the oldest firms, but Figure 2(b) shows that, at the same time, most of the value added was created in these firms, with the greatest increase for the largest firms, the large Swedish multinationals. Hence, start-ups and young businesses created the large bulk of new jobs. But old and large firms were behind most of the increase in productivity during the period.

Figure 2. Productivity in the Swedish business sector by firm age and sector, 2000–2013



Note: Employment = net job creation; productivity = net value added creation. Productivity is expressed in millions of SEK per employee. See Heyman, Norbäck and Persson (2018) for details.

### Macroeconomic reforms and digitalization

Another area that the Lindbeck commission addressed was competition policy. The commission found that urgent reforms were needed in order to have a more efficiency-enhancing competition policy in Sweden. After Sweden entered the EU in 1995, it adopted a much more stringent competition law.

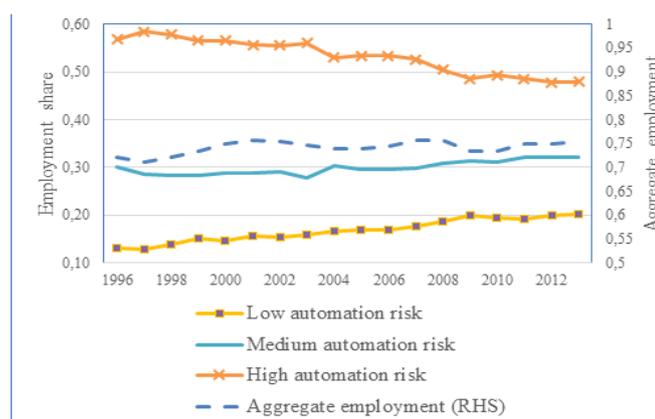
Our recent research has demonstrated that Sweden is in the midst of a digitalization-driven transformation of the business sector and labor market (Heyman, Norbäck and Persson, 2016 & 2020; Gardberg, Heyman, Norbäck and Persson, 2020). This new digitalized economy will require new reforms to strengthen competition policy.

For instance, in the digitalized economy a larger proportion of interactions occurs in markets with network effects between actors. These network effects generate gains in terms of e.g. increased user values, but they can also cause market failures. Leading firms in network industries often achieve a dominant market position as consumers are attracted to the largest networks. This can be costly to society if this leads to less entry, as the entry of new, more productive firms typically leads to increased employment and higher

wages, in addition to increased competition and lower consumer prices. The availability of Big Data also changes business models and strategies, as firms turn to data analysis when engaging in marketing and market research.

Just as labor market reforms were central to the Lindbeck Commission's reform package, the new digital economy will also require labor market adaptation. In our research on digitalization, we apply Frey and Osborne's (2017) occupation-based automation measure, which seeks to measure the probability that an occupation will disappear within a few decades due to digitalization and automation. If occupations classified as high-risk de facto have declined or disappeared over time, we take this to be caused by industrial reorganization driven by digitalization. Indeed, Figure 3 shows that over the past two decades the share of employment in high-risk occupations has decreased by approximately 9 percentage points, while employment has increased by around 7 percentage points in the low-risk occupation group.

**Figure 3. Employment dynamics for automation risk groups**



Note: The dotted line shows the employment-to-population ratio for ages 16–64. See Gardberg Heyman, Norbäck and Persson (2020) for details.

## Conclusions

The digitalization drive in Sweden’s business sector is leading to a drastic restructuring of the demand for different types of occupations. While digitalization seems not to have led to a decline in total employment, as shown by the dashed line in Figure 3, the trend towards declining employment in high-risk occupations is likely to continue. This suggests that a well-functioning system for re-education and further training will be of crucial importance to help disadvantaged groups.

The Swedish experience from the 1990s shows that efficiency oriented microeconomic reforms in the business sector have the potential to increase welfare by solving political and market failures that hamper efficiency. Efficiency oriented microeconomic reforms in today’s business sector need to handle the specific competitive issue of a digital economy, and to balance incentives and insurance to achieve inclusive growth that can be shared by all types of firms, workers, and consumers.

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## Assar Lindbeck, 1930–2020

Academic research in economics must take as its point of departure issues relevant to policy and decision-making. It must be conducted according to the highest scientific standards, and its results should inform both economic policy and public debate.

Assar Lindbeck formulated these principles in his autobiography (2012). With the qualification that research should also have relevance for the business sector, the ideals of economic research at IFN could be similarly formulated. So it is entirely natural that Lindbeck and IFN had a close relationship over the years, first in the 1960s and again from 1995 until his death in August 2020.

In the 1960s, Lindbeck wrote two books while at IFN. Then in his thirties, he was already well established academically. The first was a critical analysis of rent regulation in Sweden, concluding that it should be abolished. Coauthored with Ragnar Bentzel, then president of the Institute, and the young Ingemar Ståhl, who later became professor at Lund University, the book played a very important role in subsequent political debate. Rent regulation remains in place to this day, but Assar continued to contribute to this debate throughout his life.

The other book, coauthored with Odd Gulbrandsen, was a critical analysis of the complicated regulations governing Sweden's agricultural sector. Lindbeck's recommendation here was also to deregulate, which in this case actually took place. However, a couple of years later there came a new set of controls, this time in the shape of the EU's Common Agricultural Policy (CAP). The impact of these writings by the then young professor I believe can be explained by his integrity and his unique ability to apply economic principles in a way that was understandable to a broad audience.

In 1995, in my role as IFN's president I recruited Lindbeck to help me further strengthen the Institute's academic standing. Since then he shared his time between IFN and the Institute for International Economic Studies at Stockholm University.

At IFN he contributed in several ways. His insistence on raising the bar and publishing in leading international journals became an important inducement for the organization. Crucially, he was a role model for the other researchers, many of them half his age.



Assar Lindbeck photographed by Fredrik Eriksson

His energy and productivity were impressive. His bibliography for the years 1995–2020 includes 42 scientific papers, many of them published in top scientific journals. Two weeks before his death, his final article – coauthored with Jörgen Weibull – was accepted for publication in the *European Economic Review*. At 88, he had an article published in the *Journal of Political Economy*, coauthored with Mats Persson.

Lindbeck's scientific focus did not bar him from taking part in public debate. During his 25 years at the Institute he published 38 op-ed articles, 31 of them in *Dagens Nyheter*, Sweden's leading daily newspaper.

While Lindbeck had many talents, small talk was not one of them. Yet he was a very stimulating discussion partner. He was knowledgeable, had strong views, and was often humorous. His interests and knowledge stretched far beyond economics and policy – he had expert knowledge in the visual arts, music, architecture, film, and not least painting. He was a painter himself and his work was exhibited on several occasions at Stockholm galleries.

Assar was a great economist and a great human being. He will be deeply missed by family, friends and colleagues, including staff and alumni at IFN.

**Ulf Jakobsson, president of IFN 1994–2005**

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