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The concept, *Highly Industrialised Period*, has been used to characterise Sweden during the fifty years from about 1935 to 1985 (Isacson 2000; Isacson 2002a). In Sweden, the period began after the Great Depression at the beginning of the 1930s, when the economy started to grow and the new Social Democratic government had launched a program of political reforms. It ended after an economically and politically unstable period that continued until the Social Democrats had recaptured political power in the early 1980s. My objective in this article is to discuss the usefulness of the concept in describing the development the other Nordic countries as well as the Baltic countries during the 20th century.

The main characteristics of the highly industrialised period

The Highly Industrialised Period represents the most intensive period of growth in the industrialisation process. In Sweden the stage was reached approximately half a century after the industrial breakthrough. If the leading industrial nations, Great Britain, France, Germany and United States, entered a period of this kind, which I am rather sure they did, it was much later after the Industrial Revolution (Stearns 1998, Schön 2000, Isacson & Morell 2002). During this shorter period of industrialisation, also known in Sweden as the period of the Swedish Welfare State, industrial buildings dominated the skyline in many towns and regions. People moved from the countryside to towns, and the number of gainfully employed increased very rapidly. During the 20th century this kind of transformation was typical of industrialised countries. However, the time span and the extent of the process were slightly different from country to country.

The Swedish government's stability was ensured by the support of the growing number of industrial blue and white-collar workers. The increasing economic surplus, collected though taxes and fees, was used to build a appreciated welfare state. This was a period of rapid economic growth that resulted in a tremendous increase in living standards. From 1930 to 1970 the average annual growth of the Swedish GNP was 3.2 percent, a rate two and a half times higher than during the rest of the 20th century (Schön 2000, p. 13).

One of cornerstones of this new, rational and efficient society was that everything was done on a *large scale*. Development and prosperity were considered dependent on large-scale enterprises. The companies and the factories had to be as large as possible. The architecture of the factories was to be rational, or in other words "functional, constructive, additive, hygienic and anonymous" (Brunnström 1990, p. 215). Many companies applied the principles of scientific management and standardised production, and used assembly lines and mass-produced goods to supply the growing domestic and foreign markets. Small enterprises that were unable to invest in modern technology and pay acceptable wages were driven out of business (Johansson & Magnusson 1998, chapter 2). The same held true for the many small farmers, artisans and shopkeepers. Everyone was to be a wage earner. The numbers of employees grew rapidly, and in 1990, Sweden and the USA had the highest ratio of wage earners in the Western world, over 90 percent (Furåker 1991, p. 51).

However, it was not just the production of industrial goods that had to be organised on a large scale. The customers were to buy their goods in a rational way in supermarkets, using their cars to transport their purchases home. Mass tourism had its breakthrough during the end of the 1950s, and many Swedes flew in big aeroplanes to the warm South where they could walk along the beaches, enjoy the attractively priced food and drink and experience something new and different. Home in Sweden, the schools were designed for mass education. The healthcare systems were designed for the mass treatment of the sick and the elderly. In architecture, form should interplay with and support function. The "practical became the beautiful" (Brunnström 1990, p. 217).

The large scale was also applied by the organisations charged with protecting the interests of different groups, such as the Labour Unions, the Employers' Associations, the Farmers' Union, the Consumers' Association, the Tenants' Association and others. People had great trust in large organisations, big companies and cities, and because this large scale had many obvious advantages, hardly anyone thought of its possible negative effects or questioned what had become "the one and only way" to prosperity and happiness. All the political parties in Sweden, especially the left and the right wing parties, embraced this ideology, and it became a cornerstone in the famous Swedish model.

In Sweden, the period also involved a strict gender division. Men worked in the industry in superior positions, often operating machines, while women worked in subordinated positions, taking care of the housework and the elderly, the young and the sick. Only two areas, family life and travel, did the small scale survive. Moreover, it not only survived, it prospered. The nuclear family and the car became two important "safety valves" in the regulated large-scale society that had been established after the middle of the 1930s. These safety valves were necessary, because the large-scale society created growing internal tensions. For a long time, the effects of the rigid production system and the pollution from industry and traffic on human health were not considered a problem. Or, I would say, they were viewed either as minor technical questions that could be solved with new technology or as something that we had to accept for the sake of greater prosperity. The standardised hospitals, industrial installations, schools and offices were hardly seen as something problematic before the 1970s.

The large-scale ideal placed the state, the big industrial companies and the large organisations together at the frontline in the development of the welfare state and modern society. In Sweden this model began to be questioned at the end of the 1960s and was seriously challenged after the international recession in the middle of the 1970s. Although many large industries were closed down unemployment was rising, there was no immediate threat to the large-scale model's position as the foundation of modern society. Big industry and large-scale solutions remained the ideal up until the mid 1980s, when a new ideal won official support and wide acclaim. The new ideal favoured individualistic behaviour and saw the entrepreneur and the small-scale service sector and the harbingers of a bright future.

Examining and distinguishing the Highly Industrialised Period

The concept Highly Industrialised Period has principally been used to stress the importance of big industry and large scale in economic and social development during the 20th century. Alfred J Chandler is even more explicit about the importance of the large industrial companies in his famous book *Scale and Scope* from 1990. He focuses, however, on the organisation of the industrial companies and their importance to economic development in the Western world. What I have tried to point out is that, besides production, Chandler's model can be applied to other areas of Swedish society as well – consumption, health care, education and housing – as they wee organised using the same principles. For a period of fifty years, the rational, organised large industrial companies were the symbol of a bright future. At the some time, I am aware of the "historical alternatives to mass production" discussed by social scientists, mainly based on a small-scale industrial business sector with a different system of production (Sabel & Zietlin 1985; Isacson 2002b). However, when analysing the situation in Sweden between the 1930s and the 1980s, I think is fruitful to use the concept of `Highly Industrialised Period´. The next and crucial question is weather this concept can be useful in describing 20th-century developments in the other Nordic countries and the Baltic countries.

The answer depends on how we define the concept and delimit this phase in modern society. One way of examining the question is to use quantitative methods. That is partly what I have done in my analysis of Sweden. From the middle of the 1930s to the 1970s, the industrial sector was the most important economic sector if we consider the number of people employed and its share of the gross national product (GNP). Until the 1930s agriculture has been the leading sector, and from the 1970s onwards it was services (Schön 2000, 14; Isacson 2000, pp. 56–57). However, the majority of industrial companies were quite small, and there were only a few very large companies, mostly in the iron- and steel, pulp and paper industries and in shipbuilding. Despite their small number, the large companies (Volvo, SAAB, Atlas Copco, Sandvik, Ericsson, SKF, Algots, Facit, Stora Kopparberg and others) had a lot of power and became the ideal (see also Houltz 2003).

Another method would be to monitor the average size (based on the number of people or the volume of the buildings) of hospitals, mental hospitals, schools and other public service institutions over time. This, however, is too difficult a task. The degree of urbanisation in Sweden is a more accessible variable. At the beginning of 20th century, no more than 21 per cent of the Swedish population lived in towns and other population centres. In 1935 the figure was 34 percent. Thirty years later the figure had reached 55 percent and continued to increase. At the end of the 20th century, 85 percent of the population lived in densely populated areas. After the Second World War the number of farms also diminished from 290 000 to 77 000. At the end of the century only one third of farms were used mainly for agriculture production and constituted the owners´ or tenants´ principal means of livelihood. Thee average size of the farms grew rapidly from the 1950s on (Flygare & Isacson 2003, pp. 166–172).

However, I cannot use only quantitative measures since the Highly Industrialised Period was first of all a qualitative concept, an ideology, so to speak. Consequently, it should be defined using qualitative criteria, namely by undertaking a discursive analysis of the ways of referring to, valuating and stratifying phenomena in society. In order to do this, one must read many texts from different periods, sort out what is important, and find the plausible relations between strategic words in the official rhetoric. The relevant terms might include `small industry´ and `big industry´, `industrial workers´ and `entrepreneurs´, `industry´ and `agriculture´, `mass production´ and `handicrafts´, `men´ and `women´, `countryside´ and `towns´, as well as names of particular companies, persons, organisations and phenomena (see for instance the terms in the influential Swedish book *Acceptera* from 1931. Asplund 1931). Reading contemporary literature or reports written by historians can be of great help in the process. An in-depth investigation, however, requires a close reading of journals, newspapers, official reports, parliamentary records, dairies etc. This is something I have not done as thoroughly as I would like to. For this reason my analysis in this article is tentative rather than definitive.

The Highly Industrialised Period in the Nordic-Baltic region

How useful is thus the concept in analysing the Nordic and Baltic countries during the 20th Century? If we look strictly at employment rates, company size and urbanisation, I am not completely convinced that all the other six countries have gone through this kind of period. However, if we turn to the central values and the official rhetoric of these societies, we see that they all, at least to some extent, gone through a distinct period that we can designate as `highly industrialised´. The conclusion is the same when we look at their economies. In the other six Nordic and Baltic countries, just as in Sweden, large industry was also the driving force in society and had an influence on the living conditions, the architecture, the landscape, and people's conceptions of the past, present and future. However, there are differences between the countries in industrial development over time, and in the importance awarded to big industry.

In Denmark, Copenhagen became an important industrial city at the end of the 19th century with an important consumption industry. Starting at the end of the 19th century, Finland developed into a large exporter of building timber produced by many sawmills in the countryside. Norway industrialisation was propelled by hydroelectric power and the electro-technical industry (Krantz 2001; Jörberg 1976).

Of the Nordic countries, Finland was the second, after Sweden, to become a Highly Industrialised Nation, In Finland the period lasted from right after the Second World War, until the demise of the Soviet Union about 1990 (Hjerppe 1989). Denmark had many large industrial companies and embraced the large-scale rhetoric, but it also had a large agriculture sector throughout the entire 20th century, as well as many small-scale enterprises. I would say that Denmark never went through a phase that wholly fits the description of a highly industrialised period. Norway's situation was even more complicated. There were very large companies within the pulp and paper industry, and electro-metallurgic industries. The power stations were also large in volume. At the same time, Norway had a policy which made it possible to survive on small farms and in villages along the coast as well far up in the mountains and in the northernmost parts of the country. Thus, the highly industrialised ideal was never fully implemented, certainly not to the same extent as in Sweden from the 1930s and Finland from the 1950s onwards. The same applies to Denmark (Kryger Larsen 2001; Isacson 1997).

What about the Baltic States (see Henriksson 1983; Misiunas & Taagepera 1993; Meskauskas 1994; Kirby 1995; Pihlamägi 1999)? The industrialisation of the Baltic countries started at the end of the 19th century. The big seaports of Estonia and Latvia, Riga, Tallinn, Narva, Liepaja and Klaipeda, became industrial centres in their provinces, each having vast hinterlands. In Lithuanian there was no comparable big industrial city at that time, but industrialisation had started on a small-scale basis. Estonia was characterised by large-scale industry, and entirely dependent on the Russian market. The Narva Cotton Mill was larger than the largest factory in the Nordic countries. In Latvia, Riga developed rapidly as an industrial city. At the beginning of the 20th century, the engineering and textile industries, the sawmills, and a number of small food processing plants, mostly owned by Germans, employed more than 80 000 people. Riga was then the largest industrial city in the Russian Empire, as well as in the entire Nordic-Baltic area.

After the First World War, the Baltic States became independent and were faced with serious economic problems. The agricultural sector still dominated the economy. The industrial sector was small, especially in Lithuania, and employed only a fraction of the labour force. Industrial companies lost their working capital and were cut off from their markets. Many industrial plants, especially in Riga, had been destroyed or relocated into the Russian interior. As a consequence the rural population and the agrarian sector grew relatively. However, there were some new industrial undertakings during the 1920s. A considerable electronics industry developed in Latvia. In the second half of the 1930s, Latvia and Estonia went through a new phase of rapid industrialisation.

In 1939, Latvia, with 2 million inhabitants, had 114 000 industrial workers. Estonia, with a smaller population of 1.13 million, had 73 000. At that time the oil-shale industry in the region of Kohtla-Järve was very important. It had been growing rapidly since the beginning of the 1920s. Lithuania, the largest of the Baltic States, with its population of 2.6 million in 1939, had only 57 000 employees in the industrial sector. Lithuania was the most agrarian of the three Baltic States, but did also experience industrial growth from the 1920s onwards. Light industry and food processing dominated industrial sector (Misiunas & Taagepera 1993, Appendix B).

The three Baltic countries came out of the Second World War as Soviet republics, with many towns and factory buildings in ruins. Reconstruction soon began, and the countries industry was once again adapted to the requirements of the USSR. From the mid forties, the influx of labour from Russia and other parts of the Soviet Union was considerable, especially to Latvia and Estonia. Lithuania received far fewer immigrants because the industry was scattered in different parts of the country instead of being concentrated in a few cities as in Latvia and Estonia. Lithuanians, who moved from the countryside into cities to a large extent, also satisfied the demand for factory workers. In 1980 about 80 percent of the population were of Lithuanian nationality, compared to 65 percent in Estonia and 53 percent in Latvia.

All three countries were strongly subordinated to the interests of the Soviet Union. "It was an industry based on Russian investment and Russian labour, managed by Russians according to goals set by Russians, importing a large part of the raw materials from Russia and exporting most of its products" (Misiunas & Taagepera 1993, p. 111).

The five (or seven) year plans regulated production and a rapid economic transformation began, but the centralised system suffered from inefficiencies and miscalculations. A reorganisation was necessary, and in 1958, regional economic councils (*sovnarkhozy*) were established. Each republic became a unit of economic administration. The interference from the Soviet ministries decreased. This reorganisation was especially beneficial to Lithuania, which unlike Latvia and Estonia, had not been subjected to rapid, centrally directed industrialisation after the World War II (Dremaite 2003). However, in 1964 the new leaders in Moscow abolished the *sovnarkhoz*. They replaced the territorial units with production branches (Misiunas & Taagepera 1993, pp. 187 and 227).

Soviet post-war economic policy transformed all three Baltic States from rural societies into urbanised and industrialised countries. In 1980, between 62 percent (Lithuania) and 70 percent

(Estonia) of the population in the Baltic States were living in cities and towns, compared to 24 to 35 percent in 1940 (Misiunen & Taagepera 1993, p. 364).

During the first post-war decades, economic growth was high and the standard of living increased. Men and women earned theirs living as labourers in collectively owned large industries, farms, hospitals and state agencies. The number of industrial employees increased during the 1960s and 1970s, especially in Lithuania. When the Soviet regime collapsed, the Baltic States were the most urbanised republics of the USSR, with many big industries, although with a large agricultural sector (Misiunen &Taagepera 1993, pp. 230–233, and 288–291).

The main motto during these decades of Soviet rule was the “bigger the better”. Thus, it is no surprise that the world’s biggest nuclear power station was build in the mid 1980s in Ignalina, Lithuania, close to the border of Belarus and Latvia. The port establishments in Klaipeda, Liepaja, Ventspils and Tallinn were expanded. The new port of Tallinn was the largest and deepest port on the Soviet Baltic coast and a “dinosaur of a harbour” (Misiunen &Taagepera 1993, 289–290). A rational and competitive socialist society needed large and effective industries, harbours, farms, housing districts, hospitals, schools etc. However, there were some important differences between the three Baltic States in the extent to which the large-scale model was implemented. Its effects were considerable in Estonia and especially in Latvia, but less so in Lithuania.

Comparisons and conclusions

In conclusion, I will emphasize that although the concept `Highly Industrialised Period´ can be useful “when analysing the Nordic-Baltic countries during the 20th century”, we should be aware of important differences between the seven countries. The period does not begin and end at the same time in all of the countries. Denmark, Sweden, Latvia and Estonia entered the Highly Industrialised Period early on, while in Finland, Estonia, Norway and Lithuania the changes occur later and where not as distinguished as in the other countries. Sweden, Latvia, Finland and Estonia came closest to the ideal, while Denmark, Norway and Lithuania were less affected.

In all countries people left the countryside and moved to rapidly growing urban centres. Industrial companies and plants grew bigger and bigger, as did apartment blocks, schools, hospitals, shopping centres, and other public buildings which were also organised according to a rational, “industrial” model. Old worn-down buildings were demolished and replaced with modern ones. After the Second World War, mass-production on assembly lines became common, and the relative number of wage earners increased rapidly. Rational large-scale industry was held up as a model for the rest of the society, with the full employment of the labour force as one of the main objectives. The large-scale pollution of air, water and ground was not considered a problem before the mid sixties. This was particularly true in the Baltic States. However, there were also many small industries, towns and villages that survived, especially in Norway, Denmark and Lithuania. The gender division of labour was also very pronounced throughout the Nordic-Baltic Region, although more research is required before an accurate assessment of the situation can be made, especially in the Baltic States.

In the Nordic countries, the economic growth came to an end in the mid 1970s. In Sweden, shipbuilding, and the textile, and iron and steel industries were very severely affected by the recession. Factories were closed down and tens of thousands of blue and white-collar workers lost their jobs. The situation was equally bleak in Denmark, and the country decided to join the European Common Market. Norway was helped through the recession by the newly discovered big oil and gas deposits in the North Sea. The Finish economy also survived, due to the country's close trade relations with the Soviet Union. On the other hand Finland, experienced severe economic and social problems after the collapse of the USSR at the beginning of the 1990s. The Baltic States entered a difficult period of economic and political reforms in 1991, when they re-established their independence and abandoned the centrally planned system.

Finely, I will conclude with a brief overview of the present situation in the Nordic-Baltic region, now in transition toward the post-industrial era. All countries, except Norway, are members of the European Union. Especially for the Baltic States this has given great opportunities, and the countries are now going though a rapid development. Large industrial companies are still very powerful in the Nordic-Baltic Region, but their production methods have changed. It is much more important for the investors and the managers to own well-known trademarks than large industrial plants. Production and trade is organised in a flexible global network. This affects the living conditions in and the outlook for the Nordic and Baltic states, as companies are selling off lines of business and concentrating on a few profitable activities. The service sector has grown and has been more important than the industrial sector in terms of employment its share of GNP for a long time. Of particular importance are business services and health care services, performed in small-scale enterprises to an increasing degree. Big is still beautiful in the Nordic and Baltic countries, but not as attractive as before (Castells 1996). ■

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