

ARTICLE – Development of Swedish labour costs in an international perspective

The development of labour costs covaries with domestic economic activity, productivity and price developments. Labour cost development in other countries is also of significance, as it affects how Swedish companies perform in the face of global competition. If Swedish labour costs rise relative to those abroad, our competitiveness will normally be undermined unless productivity also increases more rapidly or the nominal exchange rate depreciates to the same degree. Competitiveness in turn affects the conditions for output and employment. The weak krona means that unit labour costs in the Swedish manufacturing industry are currently unusually low in relation to other countries. According to the Riksbank's forecast, Swedish unit labour costs will increase at approximately the same rate as in competitor countries in the coming years. The expected krona appreciation is thus compatible with a normal competitiveness level for the Swedish manufacturing industry and with continued good economic development. However, there is no uniform measure of competitiveness and the assessment is uncertain as it is based on a number of different forecasts.

Swedish wages are affected by economic developments in Sweden and abroad

Activity in the Swedish economy is currently good, the employment rate has risen to a historically high level and an unusually large number of companies are reporting labour shortages. When employees have a better negotiating position, this usually leads to wages rising at a faster pace. Higher demand is at the same time contributing to higher prices and when prices rise, the demand and scope for wage increases are greater.

In a small, open economy, however, wage formation also needs to consider international competition, which sets the framework for the prices of many of the goods and services produced in Sweden. The manufacturing industry is the sector most exposed to competition from abroad and it has therefore also set the norms for wage formation in Sweden. In time, however, more and more sectors have been affected by global competition. If production costs in Sweden are too high compared with other countries, the conditions for profitable and competitive production will deteriorate. For the public sector and parts of the business sector that are only exposed to international competition to a small extent, the comparison with other countries is less relevant. Developments abroad can, however, be informative as a reference point for these sectors, too.¹⁴

Productivity and the exchange rate are also important for the assessment of competitiveness

As higher output per hour worked gives scope for higher wages, it is important to take into account the relative productivity between the countries. One measure that takes into account both labour costs and productivity is unit labour costs. To obtain a broader view of how cost developments affect competitiveness, one can supplement measures of unit labour costs with, for instance, measures of profitability, which are contingent on not only cost developments but also price developments.

As Sweden has a floating exchange rate, the exchange rate is an important component in the assessment of competitiveness. It is relative prices and costs converted into a common currency that are relevant. Put very simply, a floating exchange rate tends, in the long run, to help even out differences in relative prices and costs converted into a common currency. If unit labour costs in Sweden increase more rapidly than in other countries, Swedish competitiveness can be maintained if the value of the krona falls against other currencies. But the exchange rate is affected by a number of different factors and the process of evening out differences in relative prices and production costs can be protracted. Swedish companies are thus not able to set wages and prices under an assumption that the exchange rate will always even out potential differences in

¹⁴ In this article, the discussion focuses on a comparison of the manufacturing industry, although comments are also made about the economy as a whole. Interpretations of the comparison in terms of competitiveness are mostly based on developments within the manufacturing industry. For further analysis of Sweden's

competitiveness, see for instance the Confederation of Swedish Enterprise's report series "Lönens inverkan på Sveriges internationella konkurrenskraft" (2018) (The impact of wages on Sweden's international competitiveness), in Swedish only.

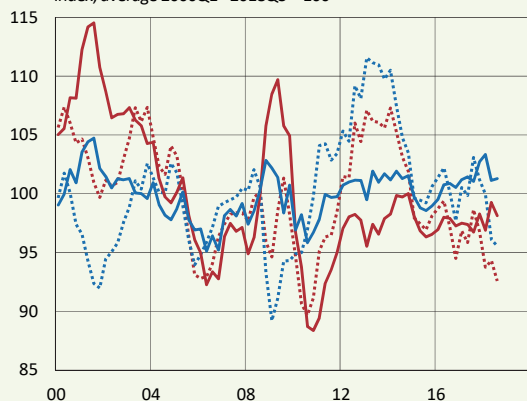
relation to competitor countries. On the other hand, the nominal exchange rate cannot be ignored in an assessment of which cost increases are compatible with a certain trend in competitiveness.

Weak krona implies lower Swedish unit labour costs relative to other countries

There is no single measure that provides a complete comparison of cost levels between different countries. It is common to analyse competitiveness on the basis of developments in production costs over time. Differences in productivity growth contributed to volatility in relative cost developments around the years 2009–2010, when developments were coloured by the global financial crisis. Fluctuations in the exchange rate have also contributed to major variations in relative costs in a common currency. The assessment of relative cost levels between countries can therefore be sensitive to the point of reference selected. To limit this problem, we use here an average for the 2000s as the point of reference. However, the comparison will always be affected by the time period studied.

Figure 4:19. Relative unit labour costs

Index, average 2000Q1–2018Q3 = 100



- Economy as a whole, common currency
- Economy as a whole, national currency
- Manufacturing industry, common currency
- Manufacturing industry, national currency

Note. National currency is calculated by dividing each measure in a common currency with a trade-weighted nominal exchange rate. For the manufacturing industry, wage costs are used when calculating unit labour costs. The series for the manufacturing industry are projected from 2018Q1 to 2018Q3 based on unit labour costs in 24 EU countries plus Norway and the United States.

Sources: European Commission, OECD and the Riksbank

A common indicator of competitiveness is a country's unit labour costs in relation to a weighted average of competitor countries expressed in a common currency.¹⁵ According to this measure, unit labour costs in the manufacturing

¹⁵ This article uses one of the European Commission's measure, where the competitiveness weights are based on 37 countries consisting of the EU-28 plus nine other OECD countries (Australia, Canada, the United States, Japan, Norway, New Zealand, Mexico, Switzerland and Turkey).

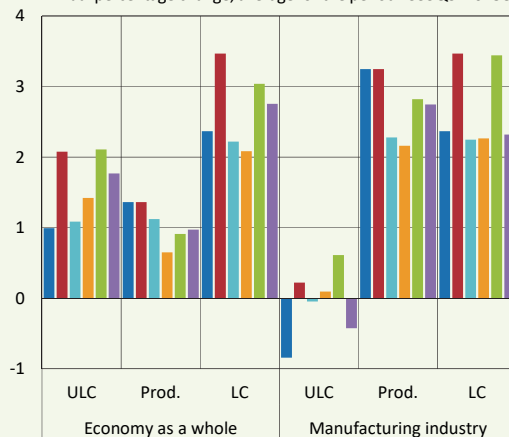
industry in Sweden fell in relation to competitor countries at the beginning of the 2000s and at present the level is low in relation to the average during the 2000s (see Figure 4:19). The recent weakening of the krona is an important explanation for the current unusually low level. The Swedish relative unit labour costs in the economy as a whole are also somewhat lower than the average for the 2000s measured in a common currency.

In Sweden, both labour costs and productivity have increased relatively quickly during the 21st century

Indicators such as unit labour costs in relation to a weighted average of most competitor countries provide an overall picture of a country's relative cost development. But there is also reason to compare development in Sweden with countries in our immediate vicinity. Countries such as Germany, Finland and Denmark are important trading partners and wage developments in these countries comprise a condition for Swedish wage formation. Countries in our vicinity can also be assumed to be natural alternatives if companies with production in Sweden choose to extend or move their operations.

Figure 4:20. Labour costs and productivity

Annual percentage change, average for the period 1999Q3–2018Q3



- Sweden (EUR)
- Euro area
- Sweden (SEK)
- Denmark
- Germany
- Finland

Note. ULC refers to unit labour costs, Prod. refers to production per hour and LC refers to labour costs per hour. The change is expressed in both SEK and EUR for Sweden. For the other countries there is no difference if the change is expressed in national currency or in EUR.

Sources: Eurostat and the Riksbank

Broadly speaking, the comparison with countries in our vicinity provides a similar picture to the comparison above based on competitiveness-weighted countries.¹⁶ Unit labour costs within the manufacturing industry in Sweden and

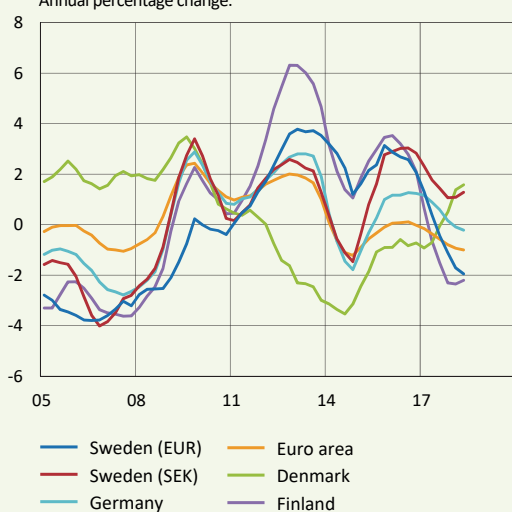
¹⁶ In the measure used for competitiveness-weighted countries, Germany has a weight of around 14 per cent, Finland has around 6 per cent, Denmark approximately 5.5 per cent and the euro area a weight of around 46 per cent.

Germany have remained more or less unchanged since 2000, while they have increased slightly in Denmark and fallen slightly in Finland (see Figure 4:20). Relatively high increases in Swedish labour costs compared with the other countries have corresponded with a relatively high growth in productivity. When expressed in euros, unit labour costs in the manufacturing industry have been lowest in Sweden.

Swedish unit labour costs in the economy as a whole have increased roughly as in Denmark and more than in the other countries, regarded over the entire 2000s. Although productivity has increased more in Sweden than in the other countries, Swedish labour costs have increased even more in relative terms. When expressed in euros, the increase in Sweden has thus been roughly as in Germany and lower than in the other countries.

The accumulated development since the turn of the century conceals variations during different periods. Figure 4:21 shows a five-year moving average of the growth in unit labour costs within the manufacturing industry.

Figure 4:21. Unit labour costs in the manufacturing industry
Annual percentage change.



Note. Five-year moving average.

Sources: Eurostat and the Riksbank

There is a high degree of covariation in the development of unit labour costs between the countries, with the exception of Denmark. In Sweden, Germany and Finland, unit labour costs fell during the period prior to the financial crisis and since then they have increased. Various trends in productivity and labour costs are hidden behind this covariation, however. One example is the relative development in Sweden and Germany. In national currencies, developments in Sweden were in line with Germany up to 2015. At the beginning of the period, however, both labour costs and productivity

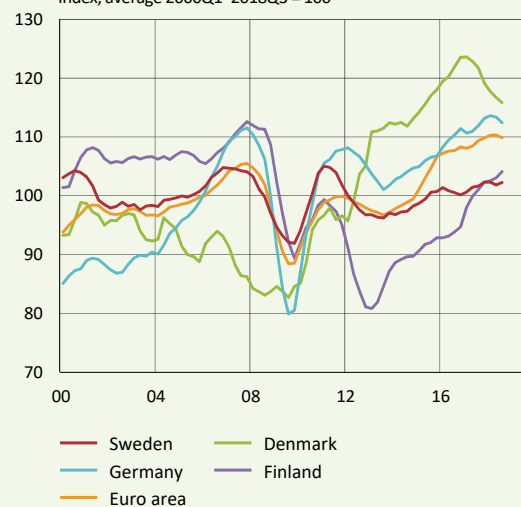
¹⁷. Profit share differs significantly between different sectors, partly dependent on how labour-intensive the production is. A sector that is labour-intensive has by definition a lower profit share than a sector that is capital-intensive. A comparison of the profit share levels between countries therefore needs to take into account the

increased much faster in Sweden than in Germany. During the past five-year period Swedish unit labour costs in national currency have increased somewhat faster than in Germany. During this period labour costs have increased at roughly the same pace while productivity growth in Sweden has been lower. At the same time, the weaker krona means that unit labour costs in the Swedish manufacturing industry have increased relatively slowly in a common currency during the past five-year period.

Minor variations in profit share within Swedish manufacturing industry in the 2000s

As far as companies are concerned, it is profitability, rather than labour costs, that affect the conditions for production and employment. A measure of profitability is what is known as profit share, i.e. that share of value added that does not go to labour costs. Profit share thus does not measure actual profits, but is a rough measure that includes costs for capital used in production.¹⁷ Developments in the profit share consist of developments in unit labour costs in relation to prices of what is produced.

Figure 4:22. Profit share manufacturing industry
Index, average 2000Q1–2018Q3 = 100



Note. Four-quarter moving average.

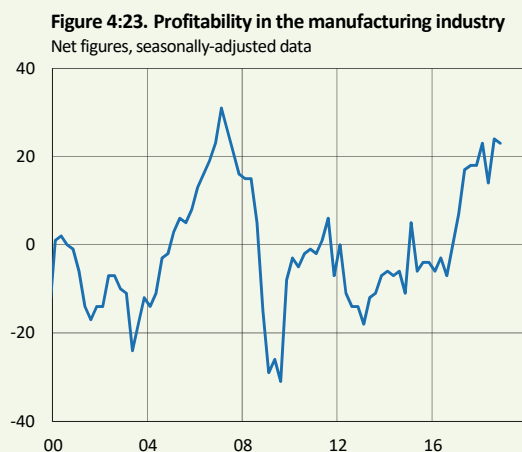
Sources: Eurostat and the Riksbank

The profit share for the Swedish manufacturing industry has been stable since 2000 and is currently slightly higher than the average since the turn of the century (see Figure 4:22). In Sweden and Finland value added prices in the manufacturing industry fell at roughly the same pace as unit labour costs during the period 2000–2008 and the profit share therefore remained more or less unchanged. In Germany, value added prices remained roughly the same

composition in the manufacturing sector. Changes in the composition of industrial output can also affect the development of profit shares.

during the same period and the profit share increased. The fact that the Swedish profit share has not risen in line with developments in Germany and Finland in recent years is connected with the higher increase in unit labour costs in Sweden. In Denmark, low increases in unit labour costs during the five-year period following the financial crisis, combined with rapidly rising prices in recent years, have contributed to the profit share rising.

The profit share is calculated on both prices and costs in national currency. Nevertheless, the exchange rate may still be significant when interpreting the profit share level, as prices in national currencies can be affected by the exchange rate. During the last ten-year period, for example, the manufacturing industry's value-added prices have basically been a mirror image of the krona exchange rate. This has to do with the prices for exported Swedish goods and services being set in euro or US dollars and a weakening of the krona thus pushes up the price in krona. The weak krona can thus currently contribute to raising the profit share level in the Swedish manufacturing industry.



Note. Profitability, current assessment.

Source: National Institute of Economic Research

Indicators point to high profitability within the Swedish manufacturing industry

In addition to the profit share, there are also indicators showing how manufacturing companies themselves view their profitability and competitiveness. For example, the European Commission publishes an indicator of how companies view their competitiveness situation within the EU.¹⁸ This indicator points to the competitiveness situation for Swedish companies in the EU being somewhat better now than the average since 2000 and unusually good compared with Germany and Finland. There is a clear covariation between the countries, which probably reflects that the

perceived level of competition is linked to the business cycle. But the exchange rate also appears to affect the perceived level of competition. When the krona is weak in relation to the euro, Swedish manufacturing companies tend to have a more positive view of their competitiveness in relation to German and Finnish companies.

The National Institute of Economic Research publishes an indicator of Swedish companies' own assessments of profitability. Companies in the manufacturing industry report that their profitability is high in a historical perspective (see Figure 4:23).

Swedish labour costs increasing in line with other countries

Developments in unit labour costs and profit shares in Sweden in the 2000s do not deviate substantially from developments in comparable countries. During the period as a whole, a relatively rapid rise in Swedish labour costs has corresponded to a relatively high growth in productivity in the manufacturing industry and the profit share level has been stable.

Both in Sweden and abroad the economic situation is expected to contribute to a gradually faster increase in labour costs going forward. The European Commission assesses that unit labour costs will increase by around 2 per cent in 2020 in Germany and around 1.5 per cent in the euro area as a whole. The OECD's forecast for the aggregate of all OECD countries entails an increase of around 2.5 per cent in the same year. The Riksbank's forecast for labour costs and productivity in Sweden implies unit labour costs in the national currency increasing by 2.0 per cent in 2020 and 2.1 per cent in 2021.

The krona exchange rate (KIX) is expected to appreciate by around 5 per cent in the coming three years. This will contribute to relative Swedish unit labour costs in a common currency increasing faster than in our competitor countries. At the same time, the level for relative unit labour costs in the Swedish manufacturing industry is currently lower than the average since 2000 and profitability is unusually high according to the companies' own assessments. All in all, this means that the competitive situation in Sweden will, according to these measures, be in line with the level that has been normal during the 2000s when the krona appreciates. This in turn is expected to be compatible with continued good economic development. However, the assessment of future relative cost developments in a common currency is based on a number of different forecasts and conditions that can quickly change.

¹⁸ Industrial Confidence Indicator, Total Sector, Quarterly, Competitive Position Inside EU, Balance, SA.