NOVEMBER 2018

Economic summary

IKEM INDEX OF SALES ON THE DOMESTIC AND EXPORT MARKETS Q3 2016–Q3 2018. AN INDEX VALUE OVER 100 INDICATES GROWTH, MEASURED AT ANNUAL RATE.

Source: IKEM

A slowdown is just around the corner...

The IKEM companies – the one-fifth of Swedish industry that consists of production in areas including chemicals, pharmaceuticals, refineries and plastics & rubber – achieved volume growth on both the domestic market and the vital export market in Q3 (export index of 113). There was a slight slowdown compared with the preceding quarter, but significantly greater momentum compared with the first quarter of the year (100). The IKEM companies expect sales to continue to rise over the next six months, albeit at a slightly more cautious rate, expressed in the index figure of 111.

The economic performance of Swedish chemical-related industrial production has been strong for several years, as can be seen in, among other things, a capacity utilisation that is high for the industry. In Q3, it was around 89 per cent according

IKEM
Innovations- och kemiindustrierna i Sverige

to the IKEM survey, which is the same level as in Q2 and not far from the average of 91 per cent reported by Statistics Sweden for the Swedish manufacturing industry as a whole.

As a general rule, high capacity utilisation means less potential for productivity improvements, as the existing production resources are already close to their maximum utilisation. Nevertheless, a large proportion of the companies are managing to achieve a positive productivity trend during the current period. Over 42 per cent reported an increase in productivity, of which 26 percentage points reported a **large** increase.

The number of people employed at the companies continued to grow for the fourth quarter in a row, which is clear evidence that the IKEM companies are bucking the trend (Figure 3).

RAW MATERIAL COSTS SOAR

The costs of raw materials/input goods continued to rise in Q3. A large proportion of the IKEM companies' purchasing costs are directly or indirectly influenced by the price trend for oil and oil-based products. It was not until October that the price trend for crude oil started to decline. If this is a sustained price correction, it will mean reduced purchasing costs for the companies in the future.

Since IKEM began measuring the change in the companies' purchasing costs in Q1 2017, there has been a clear trend of rising costs, but Q3 recorded the single fastest increase to date (index of 129, Figure 2). For the average IKEM company, purchasing costs for raw materials/input goods correspond to around 40 per cent of turnover.

FIGURE 2. **IKEM INDEX (RIGHT AXIS) OF THE COMPANIES' RAW MATERIAL/INPUT COSTS WHERE AN INDEX OF 100 CORRESPONDS TO AN UNCHANGED COST TREND, MEASURED AT ANNUAL RATE.**
HWWI INDEX OF ENERGY RAW MATERIALS, CONVERTED INTO A QUARTERLY TREND, PER CENT AT ANNUAL RATE (LEFT AXIS).
Source: IKEM and HWWI

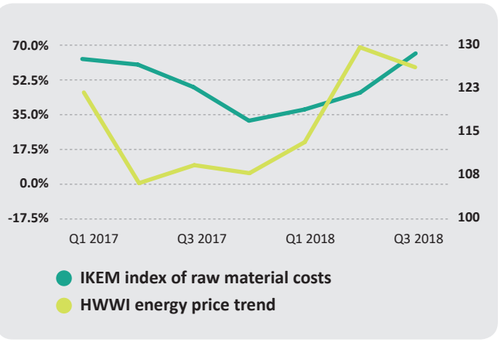


FIGURE 3. **IKEM INDEX OF EMPLOYEES, PROFITABILITY AND INVESTMENT Q3 2016–Q3 2018. AN INDEX VALUE OVER 100 INDICATES GROWTH, MEASURED AT ANNUAL RATE.**
Source: IKEM

FIGURE 4. **PRICE TREND FOR NORTH SEA OIL 2 JAN 2017–15 OCTOBER 2018, USD.**
Source: Macrobond

There is a great deal of variation between the different IKEM industries in relation to the average, however. At the one extreme, pharmaceutical manufacturing, the value-added rate is by far the highest among all of Swedish industrial production. The share of raw material costs here is 10 per cent or lower. At the other extreme are companies operating within oil and refinery production, where in some cases raw material costs amount to more than 80 per cent of turnover.

For this reason, it is natural for the export value of refined products, for example, to move almost as strongly as the price trend for crude oil. In July and August, for instance, Statistics Sweden reported a growth in the value of refined export products of 68 and 63 per cent respectively, measured at annual rate. In terms of volume, this naturally represents significantly lower growth. For pharmaceuticals, on the other hand, the covariation between increases in raw material prices and the export value of pharmaceutical production is negligible.

TOUGHER MARKET OUTLOOK

The global economy is standing at a crossroads. This has been noticeable in particular in the very nervous and negative developments on the world's stock exchanges in recent months. The underlying conditions for global growth remain relatively good, according to the most influential forecasting institutions such as the IMF, the OECD and the World Bank. Their growth expectations for the next few years have been reduced recently, however. Even compared with the more cautious forecasts, increasing risk looms large, while the potential for pleasant surprises is receding. Some of the main risks to the growth forecasts on the table at the moment are the ratcheted-up trade conflict measures triggered by President Trump's USA, Italy's lack of budgetary discipline and a "hard" Brexit. The market has already begun to price in a sharper economic turnaround than the leading forecasting institutions are currently predicting.

TABLE 1. **GDP GROWTH, OUTCOME AND FORECAST ACCORDING TO THE IMF AND THE WORLD BANK.**
Source: Macrobond

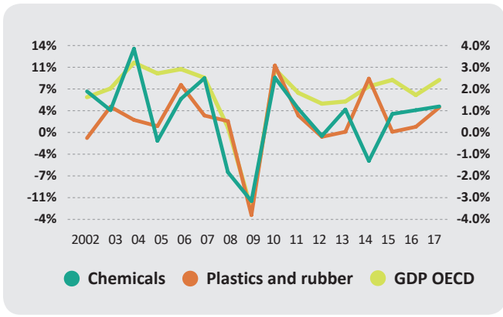
	2015	2016	2017	2018	2019	2020
OECD countries, World Bank	2.4	1.7	2.4	2.4	2.1	2.0
Eurozone, IMF	2.1	1.9	2.4	2.0	1.9	1.7

For large parts of the Swedish IKEM industries, which have an average share of exports of 85 per cent, this is something that will affect growth opportunities over the years to come. For the vast majority of chemicals and plastics & rubber companies, there is a strong link between global growth and their own ability to grow on the export market. Exports are made mainly to other developed economies. The correlation between export volumes and GDP growth in the OECD countries is significant, with a correlation coefficient of 0.8 (1 means maximum correlation and-1 maximum negative correlation) (see Figure 5).

Pharmaceuticals exports, on the other hand, have a completely neutral relationship to the growth performance of the OECD area, with a correlation coefficient of 0.

Exports of refined products, such as various oils and petroleum, have a stronger correlation with external economic phases, but not to such an extent as the chemicals and rubber & plastics industries (correlation coefficient of 0.35). The lower growth forecasts for the OECD area in 2019 and 2020 will therefore be noticeable in the form of lower export growth, primarily for chemicals and plastics & rubber companies, but also for refineries. Pharmaceuticals exports remain governed by other external parameters.

FIGURE 5. **THE CORRELATION BETWEEN THE VOLUME TREND OF THE CHEMICALS AND PLASTICS & RUBBER COMPANIES (LEFT AXIS) AND GDP GROWTH WITHIN THE OECD AREA (RIGHT AXIS).**
Source: Statistics Sweden and the World Bank



TOPIC

The future electricity supply is absolutely vital for long-term growth

The economic survey clearly indicates how important it is for the vast majority of IKEM's member companies to be able to rely on a stable electricity supply (Table 2). It is under these conditions that their businesses have been built up and there is an expectation that the electricity supply must continue to meet the needs of industry. Both competitiveness and processes are directly affected by the ability of the electricity grid to provide an uninterrupted supply. The issue of a stable electricity supply can be considered a basic requirement if Sweden is to be regarded as an attractive country in which to invest.

TABLE 2. **THE COMPANIES' VIEWS ON THE IMPORTANCE OF A STABLE AND COMPETITIVE ELECTRICITY SUPPLY.**
Source: IKEM

How important is a stable electricity supply in terms of your company's willingness to invest in Sweden?
Not important at all: 2% *Significant:* 19%
Absolutely vital: 79%

How important is a competitive overall electricity cost in terms of your company's willingness to invest in Sweden?
Not important at all: 3% *Significant:* 43%
Absolutely vital: 54%

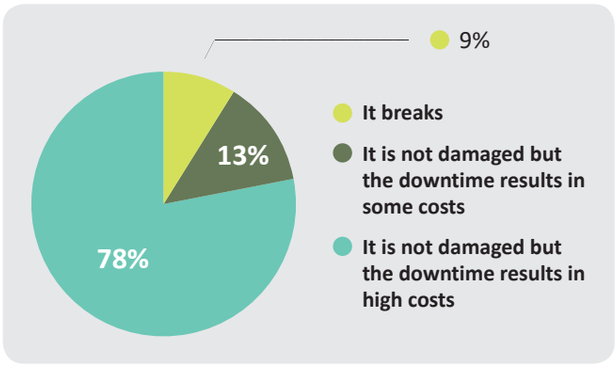
IKEM ECONOMIC SUMMARY, NOVEMBER 2018
Innovations- och kemiindustrierna i Sverige

UNPLANNED POWER FAILURES DAMAGE EQUIPMENT AND THE ENVIRONMENT

Asked how their production equipment is affected by an irregular and unreliable electricity supply, almost 4 out of 5 member companies respond that it means high costs for them. One in ten member companies surveyed said that power failures resulted in damage to production equipment.

Industrial production is built on high capacity utilisation. The survey shows that unscheduled production disruptions lead to negative consequences in several different areas. Valuable raw materials that have begun processing can be destroyed by a disruption, while the lead times for repairs, restoration and spare parts result in a loss of production. The environmental burden can also increase because of shutdown and startup. Generally speaking, an interruption to the manufacturing process makes it difficult for the companies to fulfil deliveries to their customers as promised. If this occurs frequently, it can be a very serious issue for the companies.

FIGURE 6. **HOW IS YOUR COMPANY'S PRODUCTION EQUIPMENT AFFECTED BY AN IRREGULAR AND UNRELIABLE ELECTRICITY SUPPLY?**



Source: IKEM

HIGH ELECTRICITY COSTS A THREAT TO INVESTMENT

For more than half of the companies in the chemicals industry, a competitive overall cost of electricity supply is vital in terms of encouraging investment in Sweden (Table 2). The economic survey shows that the vast majority of the member companies see the cost of electricity as a priority and an important issue. Unlike the reliability of the electricity supply, electricity costs are something that the companies can influence to varying degrees in their own operations. Profitability is a prerequisite and driving force within industry. The efficient use of electricity is therefore an issue that the companies work with on a daily basis.

COMPETITIVE ELECTRICITY PRICES BENEFIT CLIMATE-FRIENDLY INDUSTRY

When companies develop their business and invest in new technology, this increases the vitality of industry and opens up opportunities for greater sustainability in the value chains of which they form a part. A stable electricity supply is therefore a basic requirement, not only for industry but also for the sustainable development of society as a whole. In our survey, almost all companies responded that they will have the same or increased electricity consumption over the next few years. Major research and development activity is underway to introduce climate-friendly new technologies in industry, which will involve a transition from fossil fuels and raw materials to electrified processes. The successful introduction of new technologies would lead to a significant reduction in carbon dioxide emissions, but this also requires a significant increase in the availability of climate-friendly electricity. In this context, competitive electricity prices are an important prerequisite for the implementation of climate-friendly new technologies in industry.

IKEM's member companies operate across a broad range in the production of plastics, rubber, chemicals and pharmaceuticals. The total value added by the industry represents almost one-fifth of total industrial production in Sweden. The value of exports was SEK 270 billion in 2017. Unless otherwise indicated, all the responses reported from the economic survey are weighted according to the company's turnover. The economic summary is reported every quarter.

If you have any questions, please contact:
Carl Eckerdal, Chief Economist
070-497 11 98
carl.eckerdal@ikem.se

Mikael Möller, Director Public Affairs
070-683 81 44
mikael.moller@ikem.se

IKEM

Innovation and Chemical Industries in Sweden
Innovations- och kemiindustrierna i Sverige
Box 55915 | SE 102 16 Stockholm | Sweden
www.ikem.se