EESTI PANK

ESTONIAN ECONOMY AND MONETARY POLICY

1
2018

The Estonian Economy and Monetary Policy is an Eesti Pank review released four times a year that summarises the main recent events in the global and Estonian economies. Twice a year, in June and December, the review also contains the forecast for the Estonian economy for the current year and the next two calendar years.

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INTRODUCTION

The year 2017 was a successful one for the Estonian economy. The GDP growth of almost 5% was the fastest of the past six years, and leaving aside 2011 when growth was boosted by the exit from the low point of the crisis, the Estonian economy is in its best position since the crisis 10 years ago. The good performance of companies has been helped by rapid growth in the incomes of residents, though increasing domestic demand has been accompanied by a greater improvement in export opportunities than in previous years, as demand for goods and services rose together with price levels in the main foreign markets last year, allowing companies to increase their turnover and profits. Data on industrial output and from corporate surveys in recent months have shown the rapid growth in the economy continuing at the start of this year too.

A more certain external environment and labour shortages have led investment activity to increase. Investment stopped declining last year and gross fixed capital formation increased for companies and for the general government. The increase in general government investment was largely down to the more efficient use of structural funds, while for companies it was due to the much improved state of foreign markets and the efforts to increase output to claim part of the growth in demand. The better performance of exports is important not only because it is an important source of revenues for a small economy like Estonia's, but also because earlier experience has shown that successful exporting leads to increased investment in research and development, which can help to improve competitiveness and increase the value added of output.

Despite its rise, the current level of investment is not enough to ensure that rapid growth continues in the economy. The persistent current account surplus over the years indicates that people in Estonia save more than they spend and money is flowing out of Estonia rather than being invested more in economic growth in the future. Although corporate investment increased last year, the ratio to value added is at one of its lowest ever levels and is even below the average for countries in the euro area, which is not enough for Estonia to reach the income levels of richer countries given the competition.

Given the strong improvement in foreign markets, problems in the competitiveness of exports may not stand out. Labour costs for companies have increased strongly, but there is no sign in the competitiveness indicators that the ability to export has deteriorated. The market share of exported goods and services increased slightly last year and exporters managed to raise prices more than competitors did, which is one reason why the trade surplus increased last year. Surveys of exporters do not point to any decline in competitiveness either. Given the small share that Estonian exports have in foreign markets, it is still possible that the success in exporting has mainly been due to the favourable foreign environment, and any change in that could deal a blow to foreign trade.

The labour market has proven more flexible than was previously expected. Although the number of unemployed has fallen to a very low level and companies are complaining about the lack of workers, the share of society in employment is at its highest ever and the number in employment grew further last year. At the same time there was a rise in the number of unfilled positions and it is particularly notable that there was a sharp increase in demand for more highly qualified workers. The number of positions available fell last year for many jobs with low qualifications, which may indicate that the economy is gradually becoming more knowledge-based. The share of value added created in the services sector has been increasing for a long time and employment has also moved towards a services economy, in which several branches have higher productivity and consequently higher wage levels than the average for the whole economy.

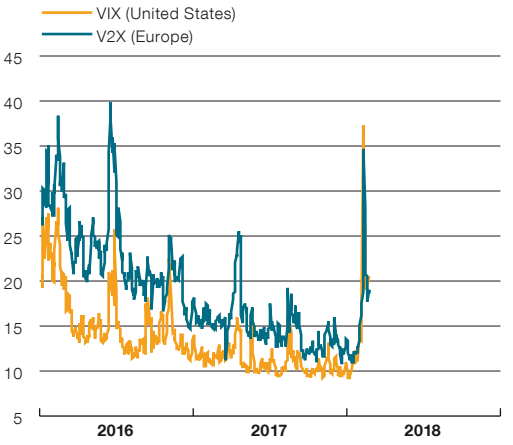
Faster rises in consumer prices have restricted the growth in the real incomes of residents. Wage growth has averaged around 7% for the past two years, but a rise in inflation to around 4% in 2017 slowed the growth in real wages by more than half from 7% to 3%. It should be noted though that this slower growth has been offset by an appreciation in the euro, and by a lesser rise in the prices of imported products in the consumer basket. Despite the rise in inflation, the tendency of households to save has remained as high as during the cautious times after the crisis.

THE EXTERNAL ENVIRONMENT

THE GLOBAL ECONOMY

Growth in the global economy was strong in 2017 at 3.7%, and was more even across different economic areas than before (see Table 1). It was supported by lively trade and more and more by growth in investment towards the end of the year. This indicates that economic growth has been built on firm foundations. Global PMI indexes[1] remain high and give grounds to think that growth will continue in the early part of this year. The monetary policy of the large central banks was mainly accommodative and supportive of growth last year. The worry grew in global financial markets at the start of 2018 that monetary policy would start to be tightened faster than previously as inflation and wage growth have started to pick up in emerging economies. This made global financial markets more volatile and stock markets fell while interest rates on sovereign bonds rose almost everywhere around the globe (see Figure 1). The customs barriers introduced by the government of the USA and pronouncements on this topic have raised the danger of a global trade war and have increased uncertainty.

Figure 1. Stock market volatility indexes in the USA and Europe



Last observation 12.03.2018
Source: Bloomberg

Growth in advanced economies for 2017 as a whole was a little faster than was expected at the start of the year. Particularly surprising was the strong growth in the euro area economy, which came mainly from growth in investments and exports. The continuing strong growth in the USA was largely what was expected though. The Japanese economy also continued to grow thanks to record growth in exports. The economy of the United Kingdom saw its first major setbacks since the Brexit vote however, as inflation rose, largely because of the fall in the pound sterling and because the growth in the economy slowed down. Some rise in inflation has also been evident in some other advanced economies.

Growth in emerging economies remained as fast as expected in 2017 as economic activity was boosted by a global rise in commodities prices and by demand from advanced nations. Growth in the Chinese economy took off again last year as the recovery of global trade encouraged growth in industrial output and exports. Growth was also faster in several other emerging economies like India, Brazil, several African countries and Russia than in 2016 as external demand remained high and commodities prices rose. Equally, financing conditions remained favourable for emerging countries. Inflation moved in different directions in those countries, increasing slightly in China and at the end of the year in Brazil too, while continuing to fall in Russia primarily because food prices fell and because of the base effect.

Table 1. GDP growth in different regions in 2012 - 2018 (change, %)*

	2012	2013	2014	2015	2016	2017	2017 Q3	2017 Q4	2018
World	3.0	2.9	3.2	3.4	3.2	3.7			3.9
Advanced economies	1.1	1.2	1.9	2.1	1.7	2.3			2.3
Emerging markets and developing economies	5.3	5.0	4.8	4.2	4.4	4.7			4.9
Euro area	-0.9	-0.3	1.2	2.1	1.8	2.4	2.7 (0.7)	2.7 (0.6)	2.2
United States	2.2	1.7	2.4	2.6	1.5	2.3	2.3 (0.8)	2.5 (0.6)	2.7
China	7.9	7.8	7.3	6.9	6.7	6.9	6.8 (1.8)	6.8 (1.6)	6.6
Japan	1.5	2.0	0.3	1.2	0.9	1.7	1.9 (0.6)	2.0 (0.4)	1.2
United Kingdom	1.3	1.9	3.1	2.2	1.9	1.7	1.8 (0.5)	1.4 (0.4)	1.5

* GDP at constant prices, in brackets is quarterly growth over last quarter same year, 2018 is WEO forecast.
Source: IMF World Economic Outlook Update (January 2018), OECD, Eurostat, National Statistics.

1 Global PMI, IHS Markit.

Growth in the Chinese economy increased to 6.8% in the fourth quarter of 2017, and to 6.9% for the year overall. This is the first time since 2010 that yearly growth has increased in the Chinese economy. The growth was largely supported by increases in industrial output and exports. It appears that the government has so far managed successfully to restrict the risks to economic growth coming from overheating in the real estate sector and excessive credit growth of companies. An improvement in the private sector is indicated for example by acceleration in the growth in the disposable income of consumers in 2017 and by faster growth in investment by private companies in the fourth quarter of last year. This shows the fundamental basis of the economy is strengthening. The outlook for growth may be threatened a little by the introduction of import tariffs on Chinese goods by the US.

The strong growth in the American economy in 2017 was based mainly on growth in private consumption and industrial output. Yearly growth was 2.5% in the fourth quarter and 2.3% for the year overall. The long-awaited tax cuts arrived in December, the most important of which was a cut in the corporate income tax rate from 35% to 21%, which should encourage investment. This led international institutions to raise their growth outlooks for the US economy for 2018 and 2019. At the same time the hole in revenues will increase the state budget deficit and the debt. Industrial output growth has remained fast at the start of this year too. Despite strong growth in exports, the foreign trade balance remains negative, which explains the protectionist policies of the government to a large extent. Forward looking sentiment indexes[2] show that growth will remain fast in the first quarter of 2018. The tax cuts approved last year will also boost the incomes of consumers, and so consumer surveys[3] show optimism about the outlook for the economy. Wage pressure is visible in the US economy again for the first time in several years. Yearly wage growth was 4.6% in January, though in historical terms that is still not very fast. Unemployment remained low at 4.1%, while consumer price inflation has remained relatively high at 2% in recent months.

Slow growth in industrial output meant that growth in the United Kingdom economy was a little weaker than expected at 1.4% in the fourth quarter of 2017, and for 2017 as a whole it was 1.7%. This was due to lower consumer spending as inflation reduced the purchasing power of consumers. Growth in the economy of the United Kingdom has largely been based on private consumption in recent years. The consumer confidence index[4] fell in January and February, indicating that consumers are worried about the future. Unemployment remains at 4.4% and wage growth is slow at 2.5%. Growth in corporate investment did not pick up in the last quarter of 2017, indicating that companies are reining spending in. Confidence in manufacturing fell in January and February 2018 as higher commodities prices raised the prices of inputs, and so output grew at its slowest rate for 11 months. The United Kingdom economy is currently receiving a lot of support from strong external demand, which is increasing exports. Inflation remained high in January at 3%. The outlook for growth in the economy continues to be threatened by the Brexit negotiations and the delays to any final settlement.

Strong growth continued in the Japanese economy in the fourth quarter of 2017 on the back of foreign demand. Yearly growth was 2% in the fourth quarter and 1.7% for the year overall. The growth was also aided by private consumption, and the Japanese economy has grown for eight consecutive quarters now. Growth may be a little slower in the first quarter of 2018 than in recent quarters, as industrial output and new orders grew more slowly than before, leading the industrial confidence index to weaken slightly in February[5]. The yen has appreciated in the early part of the year, making exporting harder. Consumer confidence also weakened a little in February. The unemployment rate fell further in Japan though, to only 2.4%, which is its lowest level since 1993, and labour shortages are

2 The Institute for Supply Management's Manufacturing PMI.

3 The University Michigan Consumer Sentiment.

4 GfK Consumer Confidence Index.

5 Nikkei Japan Final Manufacturing PMI.

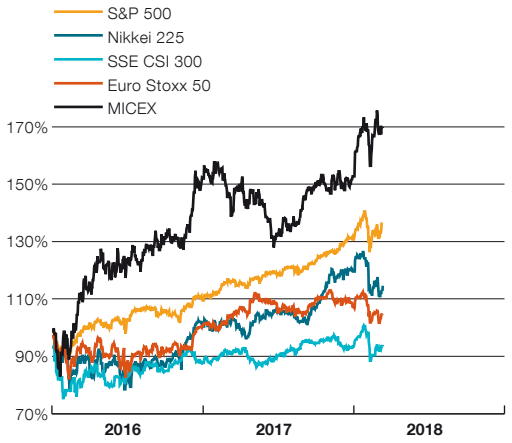
consequently becoming ever more of a problem. Companies have however started to take on more part-time workers than before and to raise their basic wages. The share of foreign workers, which has traditionally been low in Japan, has also started to increase. Wage growth remains quite modest though and it weakened further in December, falling from 0.9% to 0.7%. Higher food prices pushed inflation up in January to 1.4%.

Global stock indexes fell at the end of January 2018. Although macroeconomic indicators remain strong and corporate financial results have been good, stock markets dropped (see Figure 2). The S&P 500 share index fell by around 10% in the first week of February back to its level at the start of November 2017, having previously climbed by some 5.6% in January 2018. The main cause of the fall appears to have been higher interest rates, which were raised because inflation and wage growth were higher than expected. Unlike US stock markets, European markets have not yet fully recovered from the fall, and the main reason for this is the strong euro. Although there have been large movements in stock markets, there is no fundamental reason for this, and it was more the case that the earlier rise was too rapid and so the correction in markets was expected to some extent (see Box 1).

Interest rates on sovereign bond markets were affected by fears of a rise in inflation and a tightening of monetary policy. The falls in the stock markets boosted demand for risk free sovereign bonds to some extent, which meant that interest rates in bond markets outside the US started to fall from the middle of February. Interest rates continue to rise in the US as wage growth and inflation both exceeded expectations. Euro area interest rates did rise overall in January and February, though from the second half of February the yields on sovereign bonds were moving downwards again.

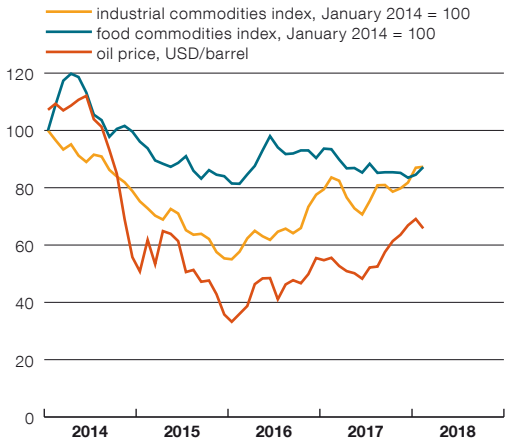
Prices in commodities markets were mostly falling in the first months of this year (see Figure 3). The biggest fall was in the price of oil, which had been rising since the middle of last year, though prices of other energy sources and of metals also fell. These price movements can at least partly explain the sharp increase in volatility in stock markets in February and the desire to diversify risks. The oil price partly fell because of increased production in the US, and the fall was also driven by speculation about the removal or reduction of production quotas by OPEC countries, as the target price level has been reached. The supply of metals is increasing and the winter production limits in China are easing, and so prices fell. Prices for agricultural commodities rose meanwhile, especially for grain.

Figure 2. World stock indexes (01.01.2016 = 100%)



Last observation 12.03.2018
Source: Bloomberg

Figure 3. Commodity price indexes and the oil price, USD

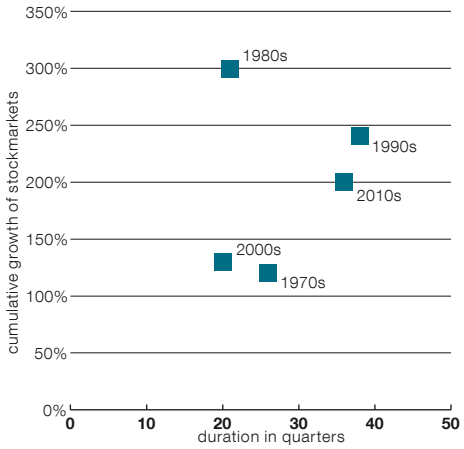


Sources: HWWI, Reuters, Bloomberg

Box 1. Movements in global stock markets

Stock markets in advanced economies had climbed by the start of 2018 to two or three times the level seen at the lowest point in spring 2009 of the trough that followed the global financial crisis. The rise that has now lasted almost nine years is one of the longest lasting since the 1970s, behind only the bull market of the 1990s (see Figure B1.1). In its length and scope the current rise in stock markets is most reminiscent of the 1990s, though the reasons for the rise are different. The main driver of the currently quite stable rise is the stable macro economy that has been induced by the very loose monetary policy environment since the crisis. The financial results of companies have steadily improved, and so share prices have not particularly changed as they depend most on the cash flows from which companies will earn in the future, and on the interest rates used to discount those cash flows. As profits have grown stably and interest rates have remained very low, share prices have risen consistently and strongly. The rise in prices was particularly fast last year as it was given a push by faster growth in the global economy and by inflation remaining low, and so global stock markets rose as much as 20% over the year.

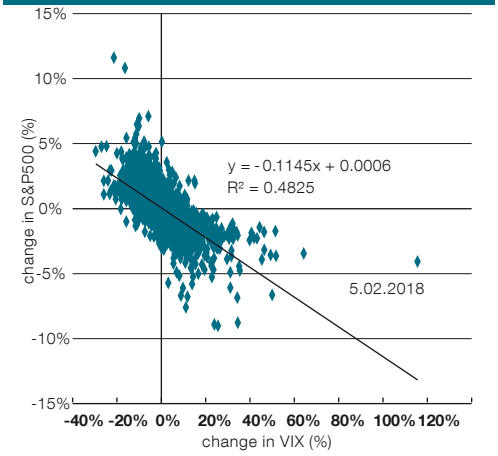
Figure B1.1. MSCI World's cumulative growth and duration by decades



Source: Bloomberg

The long upwards march in stock markets started to fade a little at the start of this year, when a sudden increase in volatility led to an exceptionally steep drop in markets at the end of January and the start of February. The drop of 10% in share prices in 10 days was indeed quite unusual, as it has happened only 19 times in US markets since the Second World War and only eight times outside of a recession[6]. The reasons for the extraordinarily sharp and sudden drop are complex. Stock markets are complex systems and it is always hard to identify single clear reasons for what happens in them, though some more likely factors can be identified. The volatility or fluctuation in prices in stock markets has remained low for a long time with only a few brief rises and last year the VIX volatility index was at the same very low level as in 2007. Movements in the market were very much in one direction, which was shown by the unusual record of the S&P 500 index in the US rising for 588 consecutive days without a single drop of 5%. This gave participants in the market a false sense of security that prices could only rise and may have attracted to the market money that fled rapidly at the first signs of danger. Many funds and strategies that had profited from selling volatility were hit hard by the rising volatility and were forced to cover their positions, which

Figure B1.2. S&P500 and VIX daily change (1990 - March 2018)



Source: Bloomberg

6 US Equity Strategy. Passive aftershocks: what next and what to buy? UBS 12.02.2018.

put pressure on share prices. It could have been assumed from previous experience that the record single day rise of more than 100% in volatility would lead to an even larger fall in share prices than actually happened (see Figure B1.2).

Taking a broader view, one important cause of the fall in share prices may have been the rise in interest rates. The favourable macroeconomic environment that endured last year and this year may somewhat paradoxically have actually slowed the rally in stock markets as higher inflation and inflation expectations pushed interest rates upwards. The nature of stock markets means this moved prices relatively higher, as the value of shares is related to the future cashflows of companies, or their profits, which are discounted to present value using a discount rate, in which the risk-free interest rate is an important component. And so as interest rates rose, share prices fell. The direct impact of higher interest rates is also indicated by the relative movement of different business sectors during the selloff, as the largest losers were the sectors with the most debt, as these are the most sensitive to interest rate changes[7]. The effect should actually be neutral for the long-term investor, as a higher discount rate means lower prices now, but higher returns in the future all else being equal. Corporate financial results and growth in profits remain strong and expectations for growth are still optimistic, and they have tended to be adjusted upwards rather than downwards. Optimistic expectations for growth, seen in the assumption in the S&P 500 index that profits will grow by as much as 26% this year, are not of course certain to be met, and if conditions worsen they could be adjusted downwards, in which case share prices would decline. It could also be argued that the accuracy of forecasts by analysts is not particularly high, especially when it comes to identifying turning points in the economy.

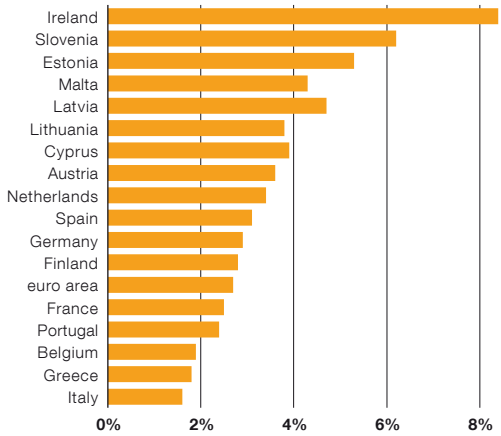
Equity market valuations may currently be considered elevated. Several valuation ratios are above their historical averages, with investors currently ready to pay 20 times the value of one unit of profit for example. The economic environment is still favourable though and if expectations are met the prices may prove reasonable. Shares are also quite reasonably priced when compared to other asset classes, but this does not mean that prices cannot fall suddenly in stock markets or that they will go sharply higher. Predicting an exact turning point in stock markets is very difficult, though at the current advanced phase of the economic cycle it is probable that prices will be more volatile in stock markets than we have been used to seeing in recent years.

7 Ibid.

THE EURO AREA

Economic growth in the euro area remains strong. The economy of the monetary union grew by 0.6% in the fourth quarter of 2017 and the change from the fourth quarter of the previous year was 2.7%, which is the fastest yearly rate seen in 10 years, alongside that of the third quarter (see Figure 4). An improved labour market and favourable lending conditions resulting from the accommodative monetary policy of the European Central Bank have supported growth in consumption and investments. The rapid growth in the global economy has increased external demand for the euro area and despite some appreciation in the exchange rate of the euro,

Figure 4. Real GDP growth year on year, 2017 Q4



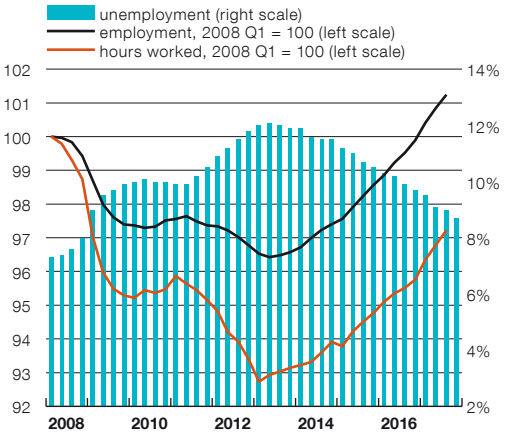
Source: Eurostat

companies have found export opportunities have improved and net exports made a larger contribution to growth in the monetary union. Activity indexes for the first months of the year suggest that growth continued in the first quarter of 2018 at the same rate as, or a little faster than, in the previous quarter. The Purchasing Managers Index (PMI) published by Markit reached its highest level of the past 12 years in January. The index was down a little in February, though it still remains higher than at the start of the fourth quarter of last year. The Economic Sentiment Indicator (ESI) published by the European Commission stayed at close to the highest levels of the past two decades in the first months of the year.

Unemployment has fallen gradually in the euro area and was last at such a low level in 2008 (see Figure 5). The most recent data show that employment in the euro area was 1.7% higher in the third quarter of last year than a year earlier, and the number of people in employment was 1.2% above the previous peak level seen in the first quarter of 2008. Sentiment surveys show growth in employment continuing, as the European Commission's ESI shows employment expectations at their highest level of recent years, and signs of labour shortages have already appeared in some countries in the euro area. Wage growth has picked up a little in the euro area, which is in keeping with a strengthening labour market. It is being held back though by the weak growth in productivity in the euro area and the low rate of inflation of recent years.

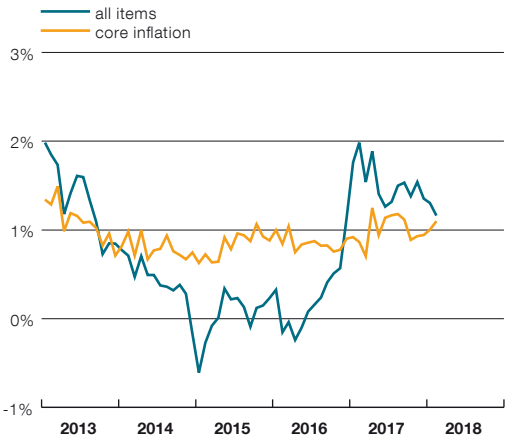
Inflation in the euro area remains below the inflation target of the European Central Bank. Inflation fell to 1.2% in February, primarily because prices of unprocessed food contributed less because of the high reference base. For the same reason, energy prices will rise more modestly in the first half of this year than they did last year. Despite the output gap closing, domestic price pressures have remained modest and core inflation in the euro area remains around 1% (see Figure 6), which is below the long-term average of 1.4-1.6%. Sentiment surveys from January and

Figure 5. Employment and unemployment in the euro area



Source: Eurostat

Figure 6. Euro area inflation



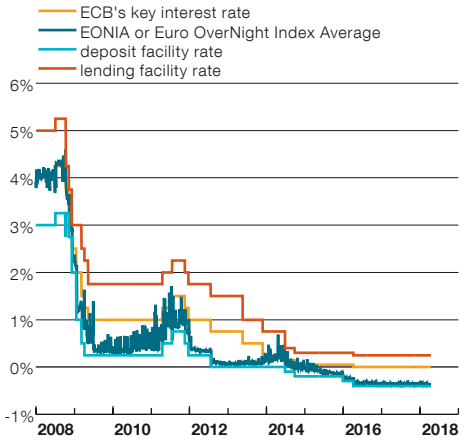
Source: Eurostat

February show that companies in the euro area expect inflation to increase, as strong demand allows them to raise their selling prices. However, lower import price inflation from the appreciation of the euro has put downward price pressure on non-energy industrial goods. Inflation expectations found from financial derivatives remain at around the same level as at the end of last year. The long-term outlook of various institutions for inflation in the euro area still remains at 1.8-1.9%. A rise in inflation over the medium term is supported by the accommodative monetary policy of the euro area (see Box 2).

Box 2: The euro area's monetary policy environment

The objective of the Eurosystem monetary policy is to maintain price stability in the euro area. The forecast from the European Central Bank of March 2018 expects that inflation will climb to 1.7% by 2020[8]. Inflation is being boosted by monetary policy measures and increased economic activity. The Governing Council of the European Central Bank has held monetary policy interest rates at their lowest levels under the economic and monetary union in the first quarter of 2018, with the minimum bid rate on main refinancing operations at 0.00%, the lending facility rate at 0.25%, and the deposit facility rate at -0.40% (see Figure B2.1). The Governing Council assumes that they will remain at their current levels for a long time and for notably longer than the duration of the asset purchase programme.

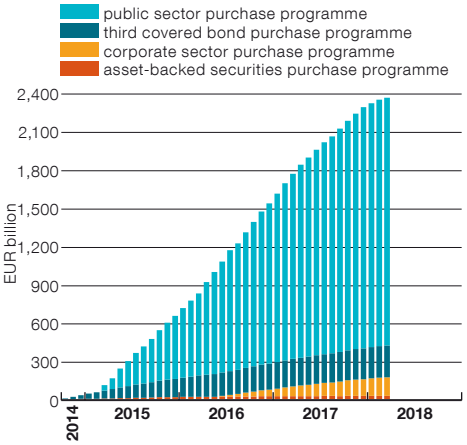
Figure B2.1. Eurosystem key interest rates and EONIA



Last observation 11.03.2018
Source: European Central Bank

The Eurosystem has complemented low interest rates with other monetary policy measures, in order to ease financing conditions and ensure the revitalisation of the supply of credit even more strongly to help in meeting the goal of price stability and in supporting the functioning of the monetary policy transmission channels. The monthly purchases under the asset purchase programme are of 30 billion euros from January 2018 to September. Purchases are intended to continue until at least September or longer if necessary, until a lasting correction in inflation is apparent that is in line with the price stability goal of the Eurosystem. On top of this, principal repaid from securities that were bought earlier and have reached maturity will be reinvested as part of the programme over a long time after net asset purchases have ended. This is very important for the Eurosystem as in this way the programme can provide long-term support to monetary policy and favourable liquidity conditions. The expected effect of the measures on the economy of the euro area and on inflation will be seen in the medium term.

Figure B2.2. Eurosystem holdings under the asset purchase programme



Last observation 09.03.2018
Source: European Central Bank

The support from the monetary policy measures meant that the consolidated balance sheet of the Eurosystem at the beginning of March stood at 4.5 trillion euros, which is 2.2 times what it was in autumn 2014, and is equal to 40% of the GDP of the euro area. As at 9 March total asset purchases stood at 2.3 trillion euros (see Figure B2.2). At 1.9 trillion euros, the largest part of the portfolio consists of public sector bonds, of which Eesti Pank's net purchases accounted for 5.2 billion euros at the end of February 2018.

8 European Central Bank press conference, 8 March 2018.

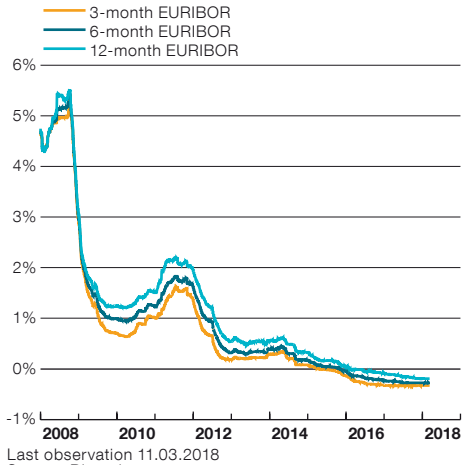
Yearly growth of the money supply in the euro area remains fast with support from the accommodative measures taken by the Eurosystem. The average yearly growth of 5% in the broad money aggregate (M3) and the yearly growth of 9% in the narrower aggregate (M1) in 2017 were similar to the rates of 2016. The growth continued in January. The extremely low interest rates have reduced the return earned by the private sector from term deposits, which has fallen to close to 0.2% in the euro area on average. The stock of corporate deposits grew faster in the first quarter of 2018 than a year earlier, and so buffers are being built up and less external funding is needed to cover spending. Household deposits in contrast have grown more slowly as households are consuming more in the favourable economic climate.

Yearly growth in the stock of loans to the private sector has accelerated since the second half of 2015, and has been above 3% since autumn 2017 for both housing loans and corporate loans. Corporate loans have grown for all maturities, with support coming from the need for investment in fixed assets. Interest rates on loans are at unprecedentedly low levels. The spreads between interest rates for euro area countries facing problems and other member states and those between rates for loans of over 1 million euros and under 0.25 million euros have narrowed significantly in recent years.

Such changes indicate that monetary policy measures have aided a recovery in private sector lending channels. The latest Bank Lending Survey of lending by banks in the euro area shows that the lending conditions for companies and households have improved[9], demand for credit is growing, and credit institutions have optimistic expectations for the near term. Banks report that their financing costs have been brought down with help from the monetary policy measures, and that the credit supply has been encouraged by stronger competition and lower risk assessments. It should be noted though that interest rates remaining low could harm the profitability of banks in the long term, and this in turn could reduce their ability to lend and increase the risks to financial stability.

The accommodative monetary policy in the euro area has helped short-term money market interest rates stay at their lowest ever level. The expectations for short-term interest rates that are revealed by financial instruments remain low, and this also keeps long-term interest rates low. EONIA was between –0.35% and –0.37% from December last year to March of this, holding just above the interest rate on the standing deposit facility. In the middle of March the three-month EURIBOR was at –0.33%, the six-month EURIBOR was at –0.27%, and the 12-month EURIBOR was at –0.19%, which was the same as at the end of November (see Figure B2.3). The money market yield curve as shown by the gap between the one and 12-month EURIBORs was the same as in November last year, which shows that the expectations of the market for a rise in monetary policy interest rates have not changed.

Figure B2.3. Euro area money market interest rates



Last observation 11.03.2018
Source: Bloomberg

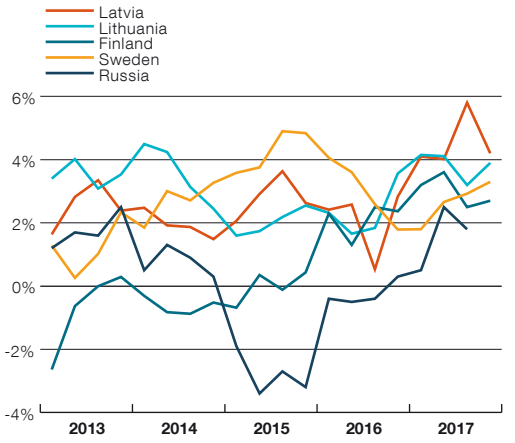
9 Changes in lending conditions are interpreted in the survey by analysing the net difference in the shares of those banks that have noted in the review that they have tightened credit conditions such as margins or collateral demands, and those banks that said they have loosened their conditions. A negative net rate means that a majority of banks have loosened their credit conditions.

ESTONIA'S MAIN TRADING PARTNERS

The economic growth of Latvia and Lithuania was at its best rate of recent years. Yearly growth in the Latvian economy stood at 4.2% in the fourth quarter (see Figure 7) and the economy continued to grow in quarterly terms too. Latvian GDP increased by 4.5% over 2017 as a whole, to reach a higher level than before the crisis. The yearly growth in the Lithuanian economy accelerated to 3.9% in the fourth quarter with very strong quarterly growth of 1.4%. Lithuanian GDP was 3.8% more in 2017 than in 2016. Growth in both of the economies is driven mainly by domestic demand, though a favourable external environment has helped exports grow strongly too (see Figure 8). Rising household incomes in Latvia have increased private consumption, and the industrial and construction sectors are also growing strongly. Investment also increased sharply in Latvia last year. Household consumption in Lithuania is being restrained by high inflation, though investments increased rapidly last year. Exports of goods and services from Lithuania were also up substantially in 2017. The labour market has remained strong with unemployment falling in both countries last year (see Figure 9) and the number of people in employment in Latvia hitting record levels in the third quarter. Despite rapid rises in wages, companies are having difficulties in finding qualified labour. Inflation fell in Latvia in February for the sixth consecutive month, reaching its lowest level of the past year and a half at 1.8% over the year (see Figure 10). Price pressure also backed off in Lithuania in February as yearly consumer price inflation came down to 3.5%, which is the lowest rate of inflation in Lithuania since May 2017.

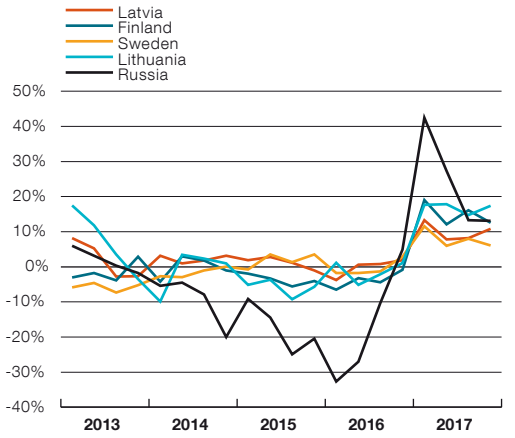
The Nordic economies continued to grow well in the fourth quarter. Yearly growth in GDP in Finland was measured at 2.7% in the last quarter of the year, while in Sweden yearly growth picked up to 3.3%, and the economies of both countries grew strongly relative to what they achieved in the previous quarter. Finnish GDP was 2.7% more in 2017 than in 2016 and Swedish GDP was 2.4% more. The main base for growth in both countries has been investment by the construction sector and household consumption. On top of strong domestic demand there has been a no-

Figure 7. Yearly growth rate of GDP in trading partners



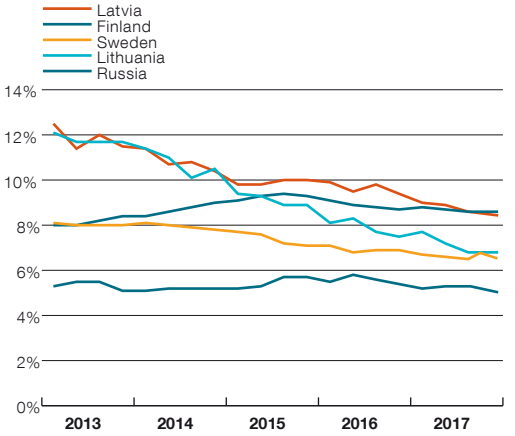
Source: Eurostat

Figure 8. Yearly export growth in trading partners, EUR



Source: Reuters

Figure 9. Unemployment rate in trading partners

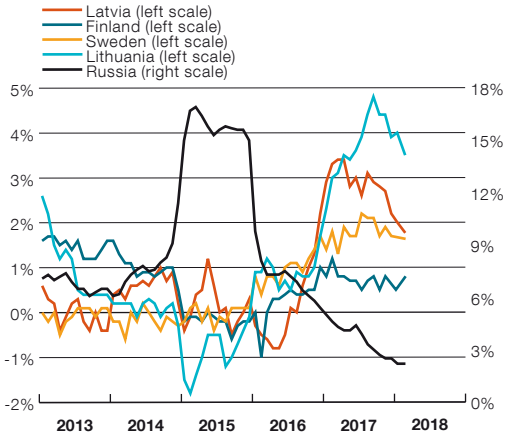


Sources: Eurostat, OECD

table revival in foreign trade in both countries, as goods exports from both countries were larger than a year earlier in both the fourth quarter and in 2017 as a whole. Production of metals, chemicals and wood has helped growth remain high in the Finnish industrial sector, and Swedish manufacturing continued to grow in the fourth quarter with support from production of cars and metals and machinery. The Nordic labour market is improving as unemployment is falling and the number in employment keeps rising. Price pressures are low and inflation fell in Finland to 0.5% in February while in Sweden it was 1.6%, which is the lowest level for ten months. The accommodative monetary policy of the Swedish central bank continues to support investment by households in residential property. The increase in imbalance in the Swedish residential property market could however pose a threat to the economy in Sweden.

Economic activity in Russia is volatile. The monthly GDP data show yearly growth in the economy slowed to 0.7% in the fourth quarter while preliminary data from the statistics office show that Russian GDP in 2017 as a whole grew by only 1.5%, despite the oil price being more than one quarter higher than in 2016. Things looked better at the start of 2018 as yearly GDP growth hit 2% in January with support from growth in industry and an increase of around one third in exports. Although the strong growth in exports is based largely on exports of commodities, exports of machinery and equipment and food products have also increased substantially. The growth in domestic demand has recovered as well, with both private consumption and investment increasing. Although the low purchasing power of consumers means household consumption remains modest, the growth in real wages meant that sales volumes of retail companies were higher in the past half year than a year earlier. Inflation pressures have eased perceptibly, and in February the yearly rate of consumer price inflation remained at a record low of 2.2%. Lower inflation allowed the Russian central bank to cut its base interest rate to 7.5% in February. The recovery in the economy is still uncertain though, as a fall in new orders weakened the manufacturing purchasing managers' index to its lowest level of the past 18 months.

Figure 10. CPI inflation in trading partners



Source: Eurostat

THE ESTONIAN ECONOMIC ENVIRONMENT

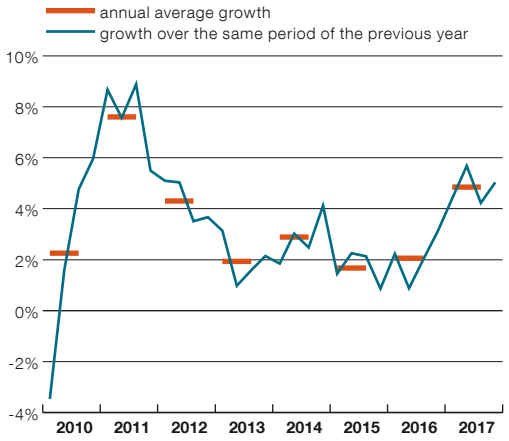
ECONOMIC ACTIVITY

The economy was 5% larger in the fourth quarter of 2017 than a year earlier, and 2.2% larger than in the third quarter adjusted seasonally and for number of working days. For the year as a whole GDP increased by 4.9% (see Figure 11). The growth in the economy was unusually strong in 2017 and exceeded the long term potential of the Estonian economy, meaning the risk of overheating has increased. The growth was broadly based however as both the tradable and non-tradable sectors did well.

The rapid growth was driven by the temporary conjunction of several factors favouring it. Monetary policy remains loose in Europe, which encourages investment and has supported growth in the economies of Estonia's main trading partners. The government also encouraged growth by increasing spending from the budget. Equally, confidence has improved, and all these factors encourage higher consumption and increased investment spirit. This is reflected by the structure of GDP, as a large part of the growth in 2017 came from increased investment (see Figure 12) on the expenditure side, while construction grew rapidly on the production side.

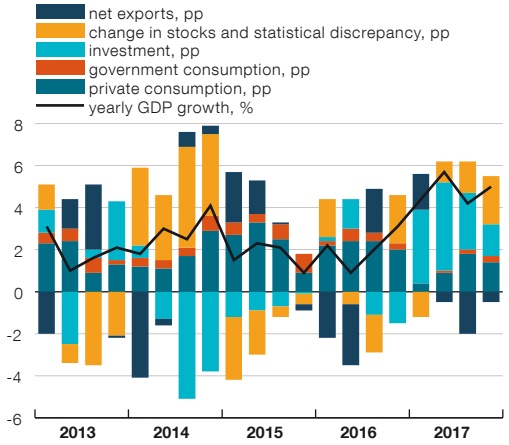
Economic sentiment indexes based on surveys show the expectations of companies and consumers for economic growth were a little weaker at the start of the first quarter, though they remain high (see Figure 13). Industrial output statistics allow a more optimistic attitude about the start of the year, as they suggest that growth has remained rapid. Industrial output in January was almost 2% larger than in December, and 3% larger than the average for the fourth quarter. The growth in it was already fast in the fourth quarter (see Figure 14), as output fell only in some individual branches of industry. Surveys of industrial companies indicate that growth remained strong in industrial output in February. Expectations for the months ahead are a little lower than at the end of 2017, but still high. The Eesti Pank nowcast[10] (see Figure 15), which uses current data as they are received on industrial output, retail, tax receipts, the labour

Figure 11. GDP growth



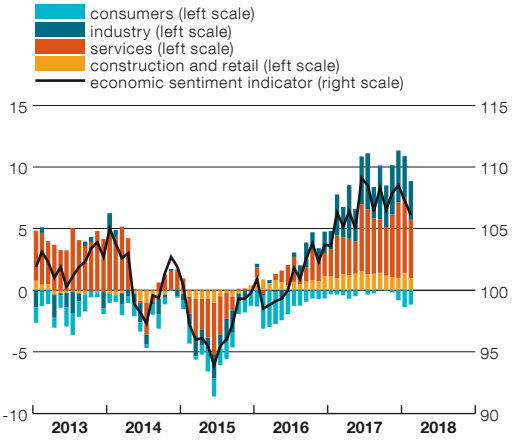
Source: Statistics Estonia

Figure 12. GDP growth



Sources: Statistics Estonia, Eesti Pank

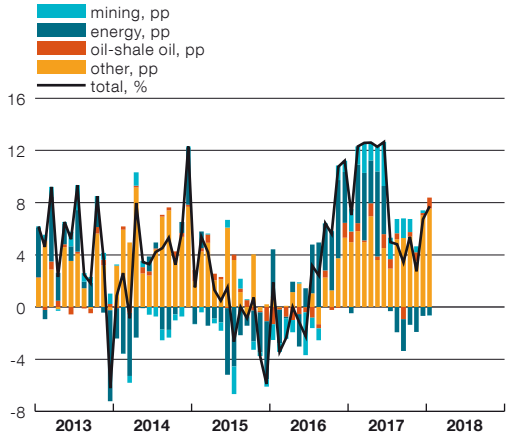
Figure 13. Economic sentiment indicator and economic confidence by sectors



Source: European Commission

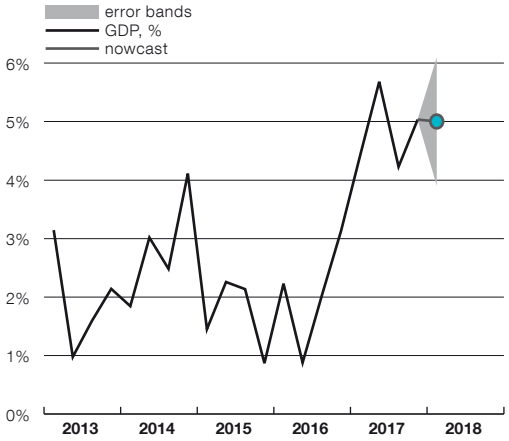
10 The nowcast produced by the Eesti Pank indicator model is a technical regression-based forecast that takes in data as they are received. There are fifteen models in the set and the indicator forecast is the median of the individual forecasts.

Figure 14. Yearly industrial production growth



Sources: Statistics Estonia, Eesti Pank

Figure 15. GDP growth and current quarter nowcast



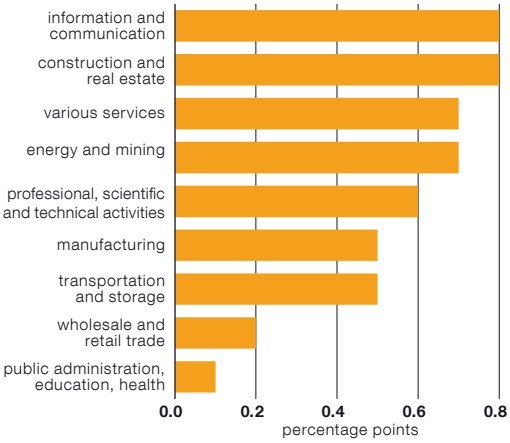
Source: Eesti Pank

market, the financing of the economy and more, also indicates that growth remained strong in the first quarter.

Business services has taken an increased role in the economy. A large part of the growth in 2017 came from information technology and professional, scientific and technical activities (see Figure 16), which cover various business service providers such as law firms and accountants. The share of high value-added services has increased over a long period, and the same can be seen in many other European countries. Business services has a larger share than 10 years ago of both employment and GDP (see Box 3).

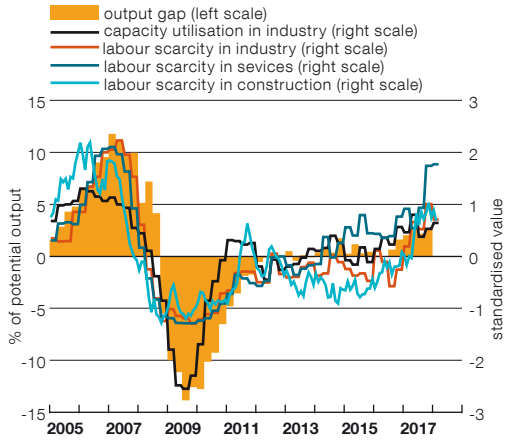
With economic growth fast, signs of overheating have appeared in the Estonian economy (see Figure 17). Companies are finding it ever harder to find employees, unemployment is low and there is less unused capacity than usually. The rapid growth in the construction industry also indicates overheating in the economy. Not all the branches of the non-tradable sector have grown as fast, as growth in value added in retail has been slow. Excise policy and increased cross-border retail trade mean that this indicator has not reflected the performance of the economy so well recently.

Figure 16. Contributions to GDP growth by sectors in 2017 Q4



Source: Statistics Estonia

Figure 17. The business cycle

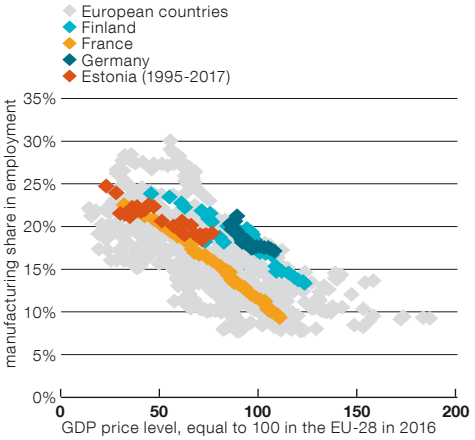


Sources: European Commission, Statistics Estonia, Eesti Pank

Box 3: The value chain and the decline in the share of manufacturing

The structure of the Estonian economy has changed a great deal over the past 30 years. At the end of the 1980s, one fifth of workers were in agriculture and around a quarter in manufacturing. Agriculture now provides only 3-4% of employment and the share of employment in manufacturing is below 20%. Jobs have moved to trade, tourism, business services, banking and similar industries. The share of employment in manufacturing has declined steadily as that of business services has increased. A large part of the growth in the economy in 2017 came from business services and IT, where productivity is relatively high. Value added in manufacturing grew at a slower rate than GDP did in 2017. The IT sector has developed very rapidly in recent years, and the number of jobs in programming and information activities, which is a narrower slice of the IT sector, has doubled in less than 10 years.

Figure B3.1. Price level and share of manufacturing in employment 1975-2017*



* maximum sample, actual sample shorter for most countries
Sources: Eurostat, Eesti Pank

The industrial sector has always played an important role in the development of the country as it produces goods that can be traded on global markets. Exports are needed as they can earn the foreign income that allows goods that are not produced locally to be bought from abroad. This means that productivity in industry is largely responsible for how much residents of the country are able to consume goods from abroad and companies are able to get technology from other countries. A lot of services can also be exported though, such as IT services.

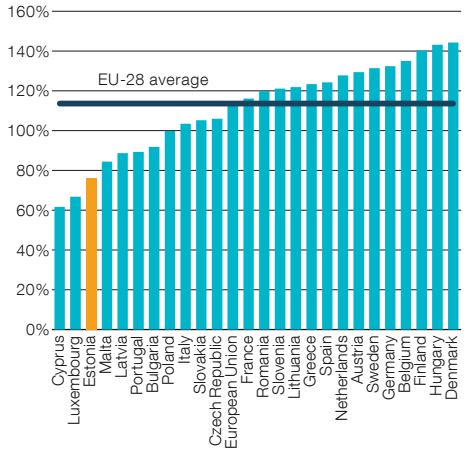
The shift from industry to services has not just happened in the past few years but is part of a long-term trend. Such changes have happened in many advanced economies (see Figure B3.1) and there are various reasons behind this. Among these are that as people become wealthier they consume more services, and as productivity rises in the industrial sector it requires less labour, while manufacturing jobs move to countries where labour is cheaper.

The share of employment taken by industry has shrunk as the cost of production has risen. Last year a little below 20% of all employees worked in manufacturing. In 1987, when the price level in Finland was similar to what it was in Estonia last year, a little over 20% of all employees there were in manufacturing, but in 2016 the share of employees in Finland in manufacturing was down to a little over 13%. A decline in the share of Estonian employment in manufacturing will probably continue to accompany the general development of the economy.

There is no single fundamental and unconditional link between the decline in the share of manufacturing and the rise in the cost of production. A higher cost of production encourages companies to move production to other countries, but as moving is expensive in itself it does not necessarily happen instantly when labour costs start to rise. Equally, the share of manufacturing in the economy can be affected by technological development in some areas. If one company becomes more capital intensive and replaces people with machines, the productivity of those people who remain at the company will rise and so will their wages. This in turn will affect

the overall level of wages. In this case production within the country becomes more expensive and manufacturing shrinks as a share of the economy, but various processes can affect this.

Figure B3.2. Productivity in manufacturing compared to other industries in 2016

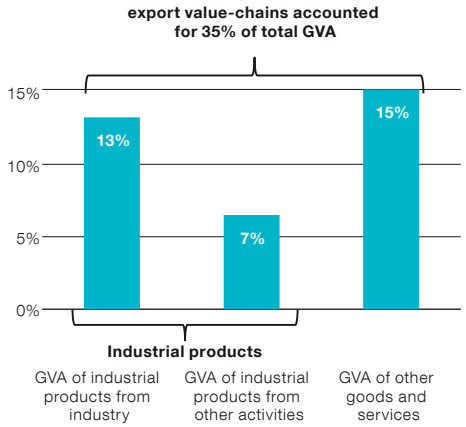


Sources: Eurostat, Eesti Pank

The productivity of the industrial sector in Estonia is low. Value added per employee is well below the European average, though it is notable that productivity in industry is lower than in other branches of the Estonian economy (see Figure B3.2). This begs the question whether it is possible to increase welfare in Estonia by, for example, raising the minimum wage faster so that branches of the economy with low productivity would be made to close, easing the problem of labour shortages. However, the manufacturing sector and the service sector are interlinked in value chains and closing branches of industry with low productivity could have an indirect impact on the high-productivity service economy.

Some of the branches of industry that have remained in Estonia may have an advantage in that production is linked to locally based services, allowing profit to be earned whether or not production would be cheaper in some other region. Local production may even count as a selling point. A large part of the value of manufactured goods produced in Estonia for export comes from branches of the economy other than manufacturing (see Figure B3.3)[11]. Goods and services from several other branches of the economy are used in producing manufactured goods and these supply a significant part of the final price of the exported goods.

Figure B3.3. Exported value-added as a share of total gross value added (GVA) in 2014



Sources: Eurostat, Statistics Estonia, Eesti Pank

For low productivity branches of industry remaining in Estonia, it becomes ever more important how well services can be integrated in value chains of manufactured products as that would allow profit to be earned while the cost advantage decreases. It is unavoidable though that higher cost of production means that some jobs will leave Estonia and there will be fewer jobs in the industrial sector. This should not necessarily be seen as a bad thing though, but as a part of the development of the economy.

11 The value chain of the exporting sector is analysed using use and supply tables from 2014, which are used to calculate the input-output tables for domestic production. Productivity is analysed using the Estonian labour force survey and annual corporate financial statistics based on the corporate annual reporting dataset EKOMAR.

DOMESTIC DEMAND

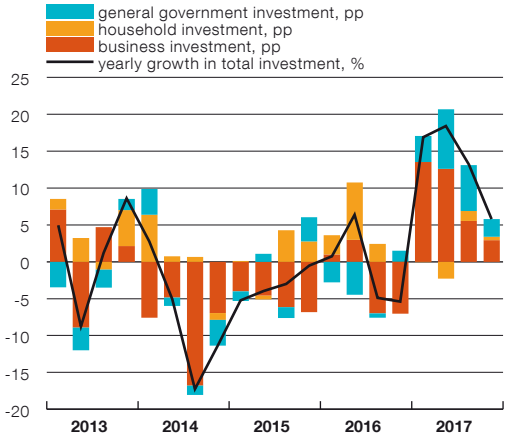
Domestic demand in Estonia grew in 2017 thanks largely to an increase in investment (see Figure 12). Gross fixed capital formation was up 13% on 2016 and corporate and general government investment contributed roughly equally to the growth (see Figure 18). In the fourth quarter of 2017, the growth in investment slowed to 5.8%. The yearly growth of 4.5% in domestic demand was supported equally by private consumption, investment and increases in inventories.

Having shrunk for three years, corporate investment increased by 15% in 2017. The growth in corporate investment was boosted in the first half of the year by one-off investments in transport vehicles, and in the second half of the year the growth slowed. Investment by the non-financial sector was 5.5% larger in the fourth quarter than in the fourth quarter of 2016. The options for financing investment are good. Investment was largely financed from own funds in 2017. External capital was used mainly in the form of domestic bank loans, to which access is good. Corporate profits increased in 2017 having fallen for a couple of years, which also helps in funding investment from own funds.

The yearly growth in corporate investment was slower in the fourth quarter than at the start of the year as investment in wholesale and retail trade and transportation and storage were notably smaller than in the fourth quarter of 2016. Investment in transportation and storage was smaller in the fourth quarter of the year because of the high reference base in the fourth quarter of 2016 when the purchase of a new ferry to go between the mainland and the islands meant investment was substantially higher than usual. The wholesale and retail sector invested less in construction as less new trading space was built in the fourth quarter than a year earlier, which is to be expected given the earlier large amounts of construction. Capacity utilisation in manufacturing remained at a high level and investment continued to increase rapidly.

Gross fixed capital formation by the general government increased by a quarter in 2017 at constant prices. A large part of the capital formation in the early part of the year came from investment in construction, but in the second half investment was primarily in machinery and equipment (see the section on General government financing).

Figure 18. Gross fixed capital formation



Sources: Statistics Estonia, Eesti Pank

Data from the Land Board show increased activity in the market for residential property, especially in the fourth quarter. The number of transactions with apartments was 8% higher than in the fourth quarter of 2016. A remarkably large number of transactions were made with apartments being sold for the first time (see Figure 19). Data from Statistics Estonia show the dwelling price index increased by 4.9% in the fourth quarter over the fourth quarter of 2016. Preliminary data show that the increase in transactions and prices continued in January and February, though at a slightly lower rate than in the fourth quarter. Growth in incomes and low interest rates mean that the accessibility of real estate remains good and demand for residential property remains strong, and this has increased the amount of new residential property development. The general increase in transactions and the number of apartments sold for the first time is not in keeping with the data from Statistics Estonia on residential property investments by households however, as these show a rise of 1.2% in the fourth quarter at constant prices but a fall for the year as a whole of 3.2%. As household investment in

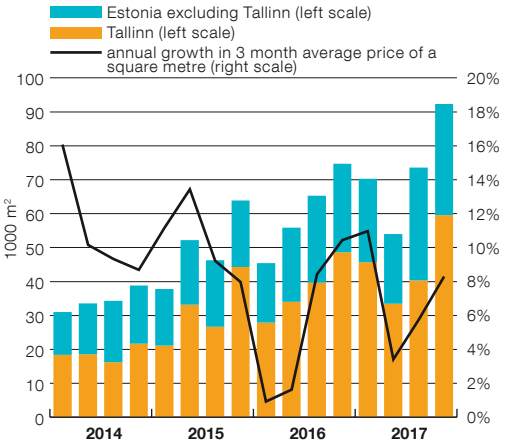
transport vehicles[12] and equipment was one fifth larger than in the previous year, total household investment in 2017 was at the same level as a year earlier.

Growth in private consumption at constant prices was lower in 2017 than in several previous years. Although household spending on consumption increased faster than a year earlier at current prices, the growth in private consumption at constant prices was slowed to 2% in 2017 by higher inflation. Spending on consumption grew faster in the second half of the year than at the start of the year and in the fourth quarter private consumption grew by 2.6% at constant prices (see Figure 20). These dynamics for the growth in private consumption were similar to those for the growth in declared wages paid out. Data from the Tax and Customs Board show that declared wages paid out grew faster in 2017 than a year earlier, though price changes mean that the real yearly growth in the payroll was slower in 2017 than previously. The growth in declared wages paid out accelerated in the second half of the year as did the growth in private consumption.

The growth in spending on consumption was held back in 2017 by lower spending than a year earlier on expendables, primarily alcoholic drinks but also various services. Consumption of catering and accommodation services grew most as a share in the consumer basket in the year as a whole, but the main boost to growth in private consumption in the fourth quarter of 2017 came from larger purchases of clothing and footwear than a year previously. Sales revenues adjusted for price changes of retail companies were 1% lower in January 2018 than a year earlier. The fall was because of much smaller sales of motor fuels than a year earlier, which is partly a consequence of the rise in excise on motor fuels on 1 January, which led to stocking up of fuel in December.

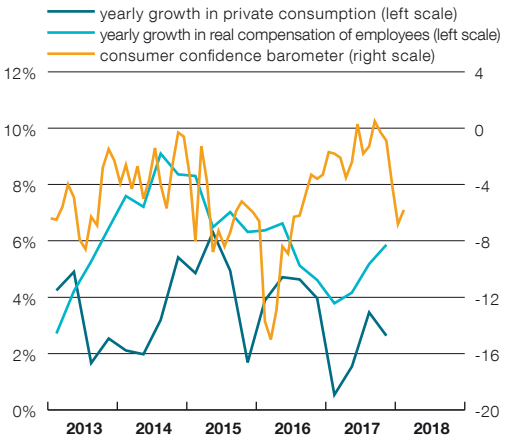
Data from the Tax and Customs Board show that wages paid out increased faster than consumption over the year as a whole, meaning household savings also increased. This

Figure 19. Annual growth in the average price of a square metre of transactions with apartments and total area of apartments sold for the first time



Source: Estonian Land Board

Figure 20. Private consumption



Sources: Statistics Estonia, Tax and Customs Board, European Commission

is reflected in the annual growth in bank deposits, which climbed to 10% by the end of 2017. Households have managed to increase their savings for several years and the household saving rate, which shows the ratio of savings to disposable income, has risen to close to the average level for the European Union (see Box 4).

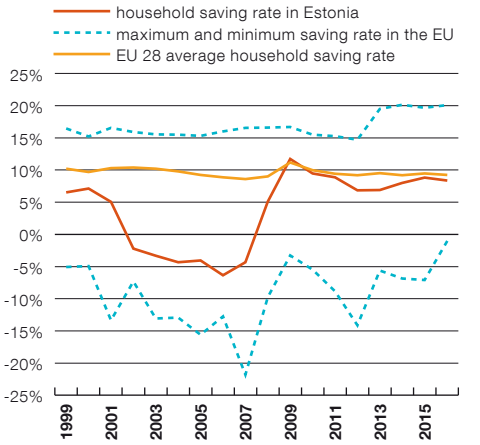
The increase in inventories contributed less to the growth in domestic demand in 2017 than it did a year previously. The growth in inventories was restrained by slower growth in stocks of goods bought for sale in retail than in 2016. Inventories grew faster than in 2016 in manufacturing as more raw materials and input materials were stocked up.

12 The rapid increase in investment in means of transport and in car leases taken by households may have been affected in recent months by the change to the taxation of company cars that came into force at the start of 2018, which has led to company cars being re-registered to private individuals.

Box 4. The household saving rate

The saving rate of Estonian households has held up very high in recent years by the standards of the past couple of decades and has caught up to the average for the European Union. The saving behaviour of households is important for the short and long-term development of the economy. In the short term the choices households make between savings and consumption affect current economic growth through domestic demand, but at the same time households lend their savings out to companies, which use them to fund their investments, and corporate investment and the amount of fixed assets can drive economic growth in the future.

Figure B4.1. Household saving rate



Source: Eurostat

Without the changes to net value from amounts set aside for pension funds, Estonian households have in recent years saved a little over one tenth of their disposable income each year. The household saving rate[13], which shows the amount of income left over after consumption spending as a share of disposable income, was 8.4% in 2016 (see Figure B4.1). The average saving rate in the European Union was similar at 9.3%, and the average figure in the European Union has fluctuated little in the past couple of decades, remaining between 9% and 11%. The saving rate of households in Estonia has been much more dynamic though and has ranged from -6.4% in 2006 to 11.7% in 2009.

Households give different reasons for saving such as saving for old age, rainy day saving just in case, or saving for planned large financial expenditure, and these reasons, and indeed all saving behaviour, are affected by a wide range of macroeconomic factors. The literature on the subject most frequently links household saving behaviour to figures measuring the income of the country and of households, as saving increases as the national income level rises and household disposable income grows faster; to macroeconomic uncertainty, as higher inflation and higher unemployment increase saving; to the demographic structure of residents, as a higher share of retired people reduces saving; to the return on savings, as higher real interest rates are likely to increase saving; and to saving by the general government and the business sector, as a rise in the saving rate in those sectors reduces household saving.

To establish whether the higher rate of household saving in Estonia than previously is affected by the same factors that set the saving rate in other European Union countries, panel data from 26 European Union countries[14] was assessed using the following panel regression model with the fixed effects:

$$saving\ rate_{it} = \boldsymbol{X'}_{it}\boldsymbol{\beta} + \alpha_i + \varepsilon_{it},$$

where α_i is the set of fixed effects for each country *i*, and the explanatory variable $\boldsymbol{X}$ covers income per resident adjusted for the price level, the general government budget balance in the previous period, the growth in real disposable income of households, change in the unemployment rate, the real three-month interest rate, corporate savings as a share of GDP, household debt as a ratio to disposable income, the income tax rate for households as a ratio to disposable income, and a dummy variable for the year 2007. $\boldsymbol{\beta}$ is the vector of the coefficients of the explanatory variables and ε_{it} is the residual, or the saving rate for country *i* in year *t* that is not explained by the economic indicators or the fixed effects for the country.

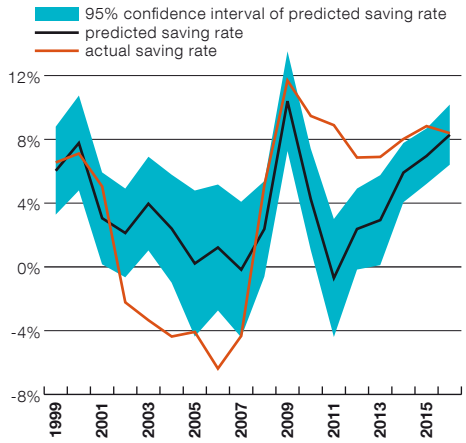
13 Household savings are not adjusted here or further on for changes in net value from amounts put aside in domestic pension funds.

14 Of the 28 member states of the European Union, Croatia and Malta were not included because of incomplete data.

It emerges that the household saving rate in European Union countries has a statistically significant and positive relation with income per resident, growth in real household disposable income, change in the unemployment rate, and the real interest rate. The general government budget balance of the previous period, corporate savings as a share of GDP, household debt as a ratio to disposable income, and the income tax rate for households as a ratio to disposable income have a statistically significant and negative effect on the household saving rate in those countries.

Using the results of the estimation of this equation for those factors and the effect of the state itself on the saving rate, an expected saving rate can be found for each country, if the reaction of the saving rate in that country to those factors were the same as the European Union average. Unlike in other countries there are times in Estonia when the expected saving rate does not very well match the actual dynamics of the household saving rate (see Figure B4.2). This indicates that Estonian households may have reacted to some factors in a markedly different way to households in other countries in the European Union, or that Estonian household saving behaviour is set by another factor that is not included in the model.

Figure B4.2. Household saving rate in Estonia



Sources: Eurostat, Eesti Pank

When the economy was growing strongly in 2002-2007, the saving rate in Estonia was sharply negative, though it should have been higher given the macroeconomic factors noted earlier. Then in the years following the global financial crisis, the household saving rate was higher than would have been expected from the various factors. The sharp drop in real interest rates, fall in unemployment and increase in corporate sector saving in 2010 and 2011 sharply reduced the expected saving rate of households. Households may have concluded from the time of economic difficulties that too little had been built up in savings in the good times, and this may have held the saving rate in 2010-2014 higher than expected.

The forecast saving rate for households estimated for Estonia has risen strongly since 2011 and in 2016 the actual saving rate and estimated saving rate were at the same level. The saving behaviour of Estonian households has probably been affected more than earlier by other factors not included in the model, though assuming that the saving behaviour of Estonian households changes in a similar way to that of other European Union countries, the high saving rate of households in the past couple of years is to be anticipated given the various macroeconomic factors.

EXTERNAL BALANCE AND COMPETITIVENESS

The competitiveness of the Estonian exporting sector did not change substantially in 2017. The turnover of exports grew by around 8% in Estonia, while the growth in the European Union as a whole was 1-2 percentage points lower. The growth in exports at constant prices remained clearly below the growth in foreign demand, though the reason for this was largely the decline in export turnover in the electronics sector, which had little impact on overall competitiveness (see Figure 21).

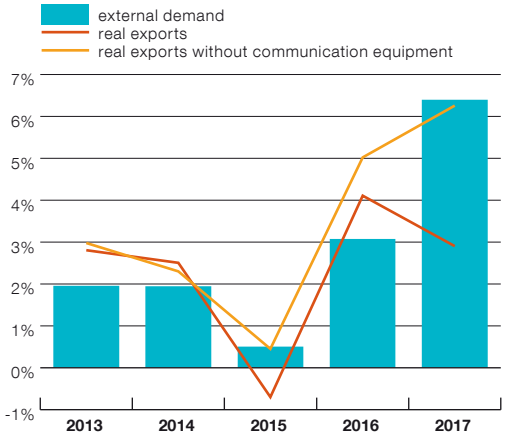
Exports of both goods and services increased last year in most sectors. The contribution of mineral products to the growth in exports decreased in the second half of the year as the low reference base effect from 2016 disappeared. The growth in exports in the fourth quarter still accelerated mainly thanks to exports of metal products. Core exports were up 9% over the year as a whole, driven by exports of wood, metal and foodstuffs. Exports of transport services, which make up around a quarter of exports of services, grew strongly throughout the year and were up 12% in the fourth quarter with a large part of the growth coming from air transport of passengers. Exports of other major services also increased. The flash estimate for the balance of payments shows exports of goods and services growing by 10% in January, with services exports increasing by as much as 17%.

Imports of goods and services grew at a slightly slower rate than exports did, both in the fourth quarter and in the year as a whole. The growth in goods imports was based mainly on larger imports of intermediate goods. The growth in imports of capital goods caused by increased investment also made a significant contribution. The fastest growth was in imports of transportation and storage services and ICT services. Imports of goods and services were 10% larger in January than a year earlier, like exports.

At the end of the year competitiveness indicators were tending to be pessimistic. The nominal effective exchange rate was some 2% higher than at the start of the year, mainly because of the depreciation of the Swedish krona. The real effective exchange rate based on unit labour costs was some 5% higher in the third quarter than a year earlier (see Figure 22). The rise in this exchange rate makes Estonian exports relatively more expensive in foreign markets and harms competitiveness. Assessments by companies of changes in their own competitiveness abroad have been less positive than they were in the middle of last year, though they still point to competitiveness improving. Changes in the competitiveness of Estonian exports in recent years are analysed in more detail in Box 5.

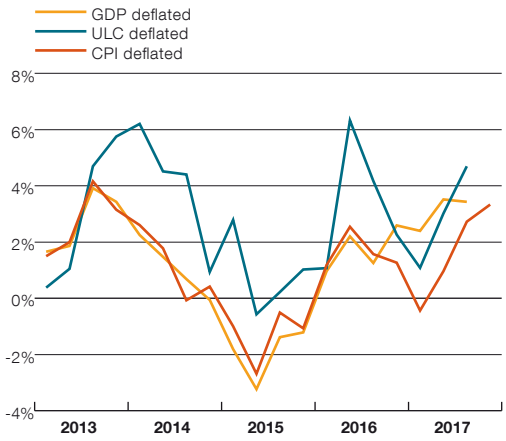
Strong foreign demand drove the current account to a surplus of 3.2% of GDP in 2017, or around twice as much as in the previous year (see Figure 23). The surplus on the goods

Figure 21. Growth in exports and external demand



Sources: ECB, Statistics Estonia, Eesti Pank calculations

Figure 22. Yearly REER dynamics

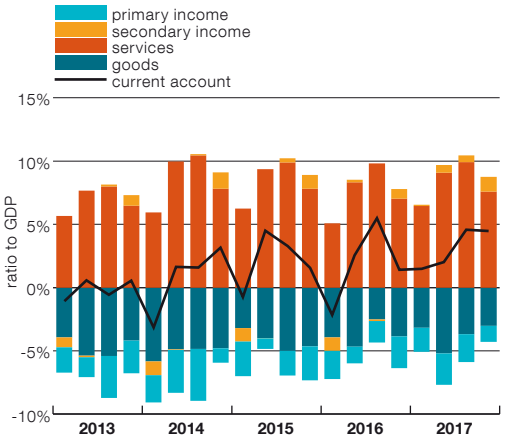


Source: European Central Bank

and services account was 28% larger than in the previous year and was the largest ever. The surplus was increased further by fines received from abroad in the energy sector and by large-scale use of structural funds. As the large revenues from exports were used to finance investment, investment increased as a share of GDP by 1.4 percentage points during 2017. The large surplus on the current account meant the Estonian economy continued to be a net lender to the rest of the world and the net international investment position has moved steadily towards balance.

The inflow of direct investment was the same as a year earlier driven by individual transactions in the finance sector and the trade sector. Larger direct investment in manufacturing went into manufacture of wood products and food production. Direct investment continued to be made mainly from reinvested income.

Figure 23. Current account



Sources: Statistics Estonia, Eesti Pank

Box 5: Has the competitiveness of the Estonian exporting sector worsened in recent years?

The rapid rise in labour costs in recent years has justifiably pushed the competitiveness of Estonian exports and a possible decline in it to the forefront of discussion. It is evident that price based competitiveness is directly related to labour costs, but non-price competitiveness also needs to be considered. Estimates by the World Bank and the European Commission of the competitiveness of exports are based on observation of growth in exports of one country compared against the growth in exports of a comparison group such as the EU-28 or the whole world[15]. If the exports of one country have grown faster than those of the comparison group in a given period, that country has increased its market share and competitiveness has increased in consequence. In the opposite case both market share and competitiveness have declined. Alongside comparison of growth in exports in different places, the growth in exports from the country under observation can be compared with the growth in imports in destination countries, which shows directly the performance in that market against other competitors.

The destination markets for Estonia can be considered as a set of main partner countries, or more broadly the whole of Europe or the world. Total global exports and imports should be equal and so there is no difference in global comparison whether import data or export data are used. However, global measures and a global comparison base may be a little too general for a small country like Estonia, as Estonia has only a marginal market share in global export markets. Exports and imports in the EU-28 have grown at a fairly similar rate since 1996, and so the results of comparisons for the EU-28 are quite similar whichever method is used. It may also be interesting to compare Estonia to other countries in central and eastern Europe (CEE)[16], where the dynamics of export growth and import growth have been a little different, though these countries have never been main destination markets for Estonian exporters and so the import demand there has no great significance for the Estonian exporting sector. The methodology of the European Commission and the World Bank can be used for comparison with the EU-28 or with

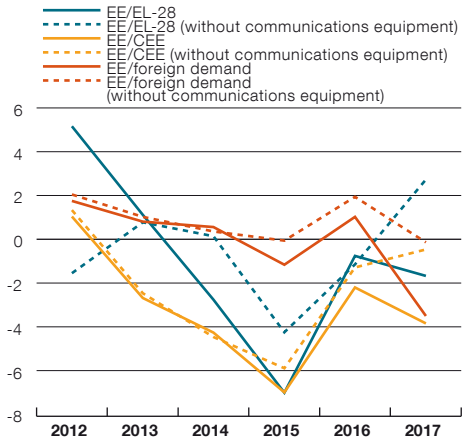
15 https://mec.worldbank.org/; http://ec.europa.eu/eurostat/cache/metadata/en/tipsex10_esms.htm

16 https://stats.oecd.org/glossary/detail.asp?ID=303

the CEE countries, and changes in the competitiveness of exports can be evaluated using only comparison of growth in exports.

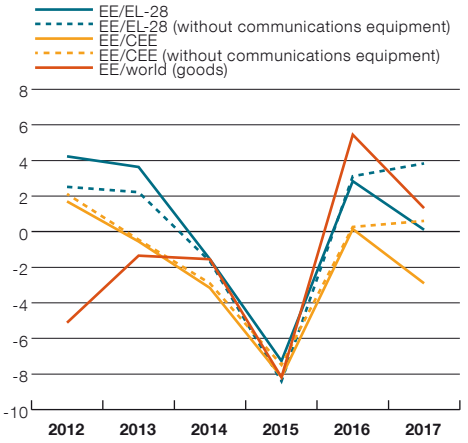
Different indicators can give quite different assessments of the development of competitiveness in the Estonian exporting sector (see Figure B5.1). Comparison with the EU-28 countries and the CEE countries shows Estonian exports growing more slowly in recent years. Excluding communications equipment from the data improves matters a little[17], though even then the rate of growth has rather been slower. Individual shocks that have affected the behaviour of Estonian exports stand out clearly, such as the sanctions imposed by Russia and the difficulties of the oil shale sector in 2015, or the fall in exports of communications equipment in 2015 and 2017. Comparing Estonian exporters with the import demand in Estonia's actual trading partners shows however that market share has at least been maintained or has been increased a little each year for exports not including communications equipment.

Figure B5.1. Export market share dynamics, real pp



Sources: Statistics Estonia, Eurostat, Eesti Pank calculations

Figure B5.2. Export market share dynamics, nominal pp



Sources: Statistics Estonia, Eurostat, Eesti Pank calculations

Given the impact of prices, Estonian exports have been doing a little better with only 2015 clearly different from the other years, and that for the reasons already noted (see Figure B5.2). This means that even if exports from Estonia have grown more slowly than those of the EU-28 or the CEE countries, the prices of exported goods and the turnover of exports have still grown more quickly. This is partly a sign of increased non-price competitiveness, which probably indicates improved quality of products and services or that products with higher value added have been exported in the same product class. However this rise in prices could also partly be due to a rise in input prices, such as higher labour costs, and this is clearly a sign of danger for the future in terms of competitiveness.

Overall it is difficult to come to a single conclusion about the competitiveness of Estonian exports. The only thing that stands out clearly from all the indicators is that apart from exports of mobile communications equipment the Estonian exporting sector has managed to advance its competitiveness better in recent years. The situation looks worse when seen in comparison to other CEE countries as export growth lags the furthest behind, but the target markets for exporters from those countries are quite different from those of Estonia. Estonian exporters do best in markets that are already established, where there has certainly been no diminution of market share or loss of competitiveness.

17 Exports of communications equipment accounted for 7-8% of total Estonian exports during the period under observation, though only a few companies deal with such exports and mainly as subcontractors for parent companies. This means that the internal decisions of one group of companies can change Estonia's export turnover substantially, but those changes do not reflect the vitality and competitiveness of the whole exporting sector.

THE LABOUR MARKET

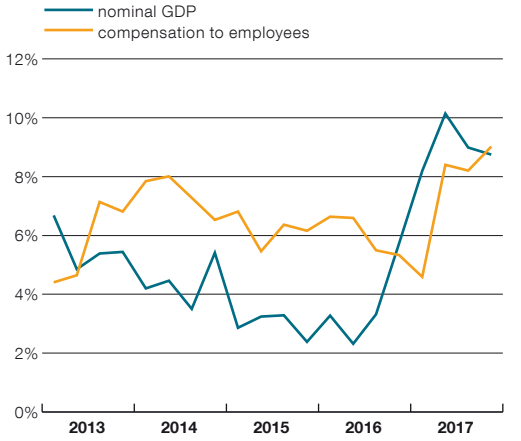
At the end of 2017 labour costs were again growing faster than productivity at current prices (see Figure 24). The rapid growth in labour productivity in the first half of the year proved temporary and in the fourth quarter productivity was lower than in the fourth quarter of 2016. Companies needed extra labour to serve the increased demand and they managed to increase the number of employees despite labour shortages. The low level of slack in the labour market meant the growth in the average wage accelerated from 6.2% in the first half of the year to 7.5% in the second half. As a result unit labour costs rose faster than they did in the first half of the year. The higher inflation environment still allowed companies to pass higher labour costs on into product prices in foreign and domestic markets better than in earlier years. Although unit labour costs rose a little in the fourth quarter, corporate profits also rose.

The faster rate of growth in the average wage than in the last quarter of the previous year was mainly due to the public sector (see Figure 25). Temporary factors such as the administrative reform and the end of the presidency of the Council of the European Union probably played a significant role in this. Data from the Tax and Customs Board also indicate that although wage growth increased notably in the general government in December, the rate of growth was already lower in January.

Sectors where wages have risen faster in the past year are energy and construction. The notable recovery in the construction market has led to increased demand for labour at a time when there is little labour available on the market. Sentiment surveys show that companies find that labour shortages have increased in manufacturing too, though wage growth there has been below the average level for the economy.

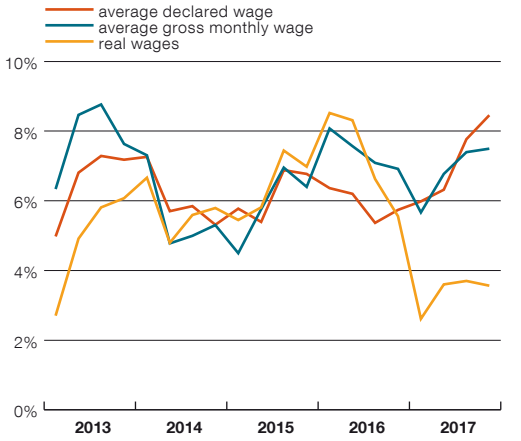
Employment grew faster in 2017. The labour force survey by Statistics Estonia and the wage survey show the number of waged employees rose at companies and institutions resident in Estonia by around 5% in the last quarter of the year. Data from the Tax and Customs Board

Figure 24. Yearly change in nominal GDP and compensation to employees



Source: Statistics Estonia

Figure 25. Yearly change in average wages



Sources: Statistics Estonia, Tax and Customs Board

show much slower growth of 1.3%. The regions that contributed most to the growth in employment were Harjumaa and Ida-Virumaa. The biggest growth in employment was in the industrial sector, notably manufacturing and construction (see Figure 26).

Companies were more optimistic about developments in employment looking forward than they were earlier. The confidence survey by the Estonian Institute of Economic Research shows that the employment expectations of companies in industry, construction, services and trade rose at the start of 2017 and remained throughout the year at about the same level as in 2011, when the labour market recovered from the crisis. The same survey found that the share of companies that consider labour shortages to be a factor re-

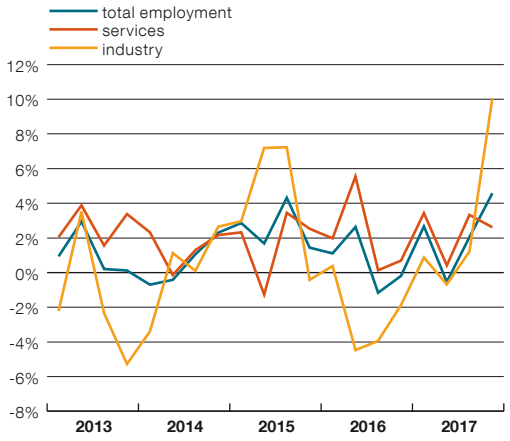
stricting production has never been as high as it is now since before the economic crisis. There was a particular spike in the assessments of labour shortages by companies in the construction sector in the middle of 2017 (see Figure 27).

The number of vacancies reached 10,587 at the end of the fourth quarter of 2017, which is around 17% more than a year earlier. Taking seasonal factors into account, the number of vacancies grew faster than in the third quarter as well. The sector of the economy that saw the fastest rise in the vacancy rate in 2017 was the industrial sector. The vacancy rate in services in the private sector had already risen a year earlier and remained unchanged throughout 2017 at its highest rate of recent years (see Figure 27).

The large increase in employment has pushed unemployment down to a level which it has only been lower than in 2007. The unemployment rate was 5.3% in the fourth quarter and the region with the largest fall in unemployment was Ida-Virumaa (see Figure 28). Around one third of the total number of unemployed had been looking for work for more than one year in the final quarter of the year. Data from Töötukassa show the number of registered unemployed increasing. This can be fully explained however by a rise in the number registered as unemployed with reduced capacity for work, without whom registered unemployment would have been lower than a year earlier. The number of unemployed people with and without disabilities rose in the fourth quarter of 2017 in monthly terms.

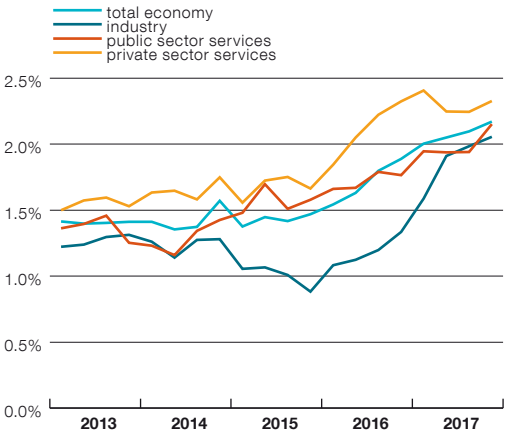
As finding work is not difficult and the wage level has climbed in recent years, the labour force participation rate was high in 2017. It reached 72.2% in the final quarter of 2017 which was 2.6 percentage points more than in the fourth quarter of 2016. Participation increased particularly among women and the amount of labour in the economy increased because of the active participation in the labour market even though the number of people of working age fell.

Figure 26. Yearly growth in employment from the Labour Force Survey



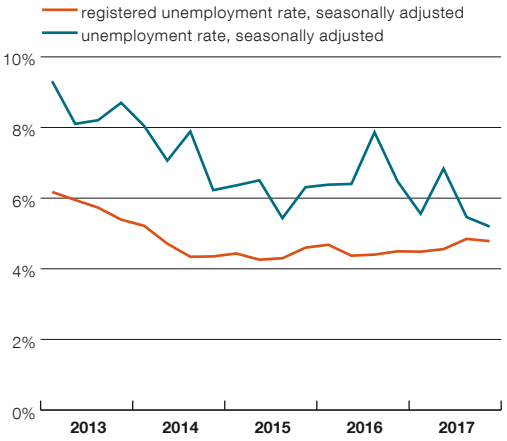
Source: Statistics Estonia

Figure 27. Vacancy rate seasonally adjusted



Sources: Statistics Estonia, Eesti Pank

Figure 28. Unemployment



Sources: Statistics Estonia, Töötukassa, Eesti Pank

PRICES

The yearly growth in consumer prices increased to 3.8% in the fourth quarter of 2017, though it slowed again at the start of this year. The main reason inflation was high was the rise in prices of food and energy on global markets, though higher excise rates also had a substantial effect. Without the impact of the rise in excise the inflation rate in January would have been 2.6%. Inflation has had quite different impacts on households with different levels of income (see Box 6).

Inflation was pushed up last year largely by price changes in the external environment. Prices rose particularly for food commodities and oil during the year. Prices for dairy products and butter rose particularly on global markets as production volumes fell, while prices of fruit and vegetables also started to rise faster recently. The rise in producer prices of food slowed at the end of the year in Europe. As prices of food commodities have been quite volatile, it cannot be ruled out that a sharp rise in prices may be followed some time later by a fall in prices.

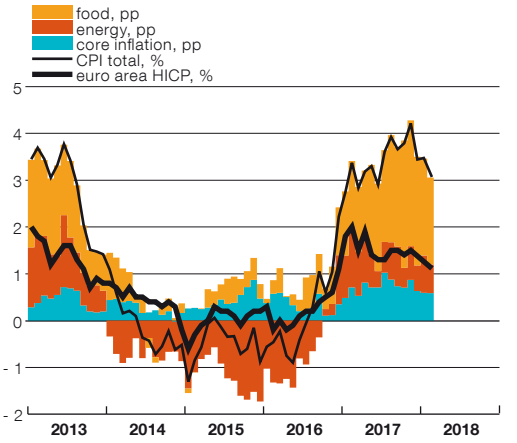
Inflation for energy goods started accelerating in the middle of 2017 as the price of oil increased. The oil price was 26% higher in US dollars at the start of 2018 than at the start of the previous year. The higher oil price is passed through into consumer prices mainly through motor fuels, and inflation of such fuels was pushed up by the rise in excise on petrol to 12% in January. The prices of other energy components, especially heating energy, have so far only risen a little (see Figure 29).

Inflation has been restrained by a strengthening of the exchange rate for the euro. The stronger euro makes imports of food commodities and consumer goods cheaper. Some 80% of fuels, 19% of machinery and equipment and 17% of clothes are imported in US dollars. The weighted currency basket has risen by 1.5% over the year, as more than half of Estonia's trade in goods is with countries in the euro area. The exchange rate impacts prices of imported energy commodities directly, but changes in prices of manufactured goods depend to a large extent on the markups of local companies.

Rises in excise have affected inflation significantly in recent years. The biggest impact came from excise on beer, which came into force in July 2017. The impact of rises in excise on inflation will decline in the second half of this year as the reference base will be higher. Rises in excise on alcohol, tobacco and petrol have raised inflation this year by around 0.6-0.7 percentage point.

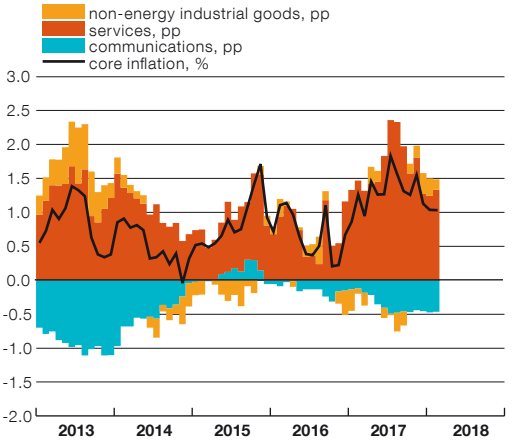
Inflation was also lifted by increased economic activity in Estonia in 2017. The rise in labour costs last year for companies in Estonia was one of the fastest in the euro area, but the unemployment rate was one of lowest ever seen in Estonia. Increased demand allowed companies to raise prices more than before, which was also indicated by increased corporate profits. Core inflation, which is the rise in prices of services and

Figure 29. CPI growth



Sources: Statistics Estonia, Eesti Pank

Figure 30. Core inflation



Sources: Statistics Estonia, Eesti Pank

manufactured goods, has been more modest and was 1.3% in the fourth quarter (see Figure 30). Inflation has probably been restrained from going even higher by the low price level of imported manufactured goods.

The consumer sentiment survey by the Estonian Institute of Economic Research shows that consumer perceptions of inflation and their price expectations have continued to rise quickly in recent months. The rise in price expectations can be explained by the higher prices for primary consumption goods, which are perceived more readily, and by the rises in excise. The short-term price expectations of companies have also risen gradually, and service sector companies have indicated that price rises in the months ahead will be markedly higher.

BOX 6: How higher consumer prices relate to household incomes

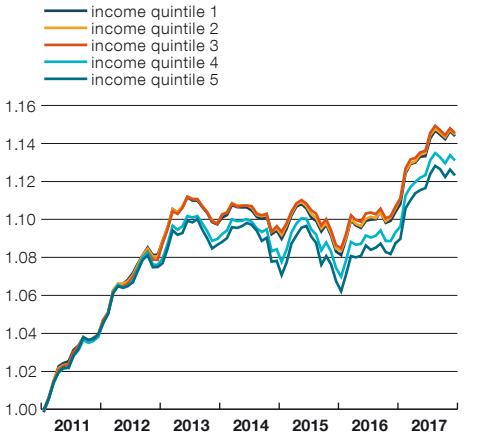
The consumer price index is calculated from the cost of the consumer shopping basket, which contains the average spending of consumers on goods and services. The price of the consumer basket may increase both because of rising prices and because of changes in the structure of consumption.

On average households spend around half of their income on primary consumption goods, with 28% going on food and 24% on housing. The incomes of households, and their consequent ability to consume, vary however. Poorer people spend a relatively larger share of their income on primary consumption goods and they have less money left over for buying other consumer goods and services. Food makes up 36% of the consumer basket of the households in the first income quintile, who are the poorest, with 9% going on alcohol and tobacco products. In the richest households, 24% of spending goes on food and 18% on housing.

As incomes rise so the share of spending on essentials declines and the share of spending on various services, including leisure services, increases. The share of services and consumption goods in the consumer basket has risen from 51% in 2001 to 56% now, while the share of spending on food has fallen from 35% to 28% in the same period. This fall is likely to continue in future as food products including alcohol and tobacco make up an even smaller share of consumer spending in the richest countries in the euro area at 17% than they do in Estonia. The structure of consumer spending can be affected over time by other factors, such as tastes and technological development.

Consumer prices have risen faster for poorer households than for richer ones in recent years. The rise in prices of goods and services affects different income quintiles quite differently, as the structure of consumption by households differs. Figure B6.1 shows the consumer price index by income quintiles. In 2011-2017 consumer prices rose by 15% for the first quintile, which is the poorest, while for the richest income quintile prices rose by 12%. The biggest disparity came in 2013 when inflation was 0.8 percentage point higher for the poorest households because food prices and housing costs increased simultaneously. The difference in inflation for different income quintiles was wid-

Figure B6.1. CPI of income quintiles (January 2011 = 1)



Sources: Statistics Estonia, Eesti Pank

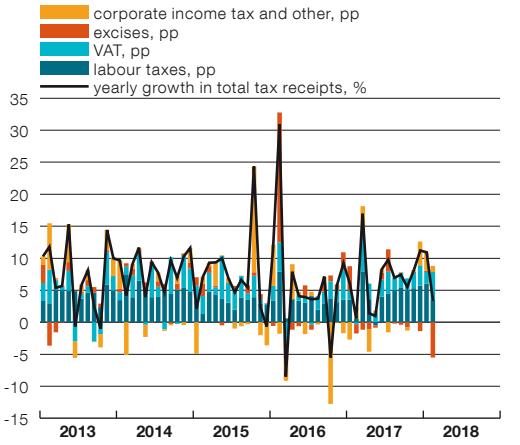
ened by 0.2 percentage point by the rise in food prices in the second half of 2017. The larger impact of the sharp rise in food prices on poorer households was offset last year by moderate inflation in housing costs. At the same time, the real consumption of wealthier households was restrained last year relatively more by the higher cost of leisure time services and of eating out. In contrast, at times when the prices of goods and services mainly move together inflation affects all households in a similar way.

The calculation of inflation by income quintile uses data from the Estonian household survey for 2010-2012 and 2015-2016 on the structure of consumption. The weightings found from this survey are adjusted using the weights of the consumer price index to take account of possible over or underreporting of the consumption of goods. For example, people generally report lower consumption of alcohol than is shown by alternative sources of data. The data for the structure of consumption are imputed for the intermediate years not covered by the survey, using data for consumption in neighbouring years and changes in the consumer price index weights.

GENERAL GOVERNMENT FINANCING

The sharp increase in economic growth in 2017 did not notably improve the fiscal position. Initial estimates show that general government spending exceeded revenues and the fiscal deficit reached 0.3% of GDP. The rapid growth in the economy helps general government revenues to increase as faster growth in wage costs and private consumption gave a strong push to revenues from labour taxes and VAT. Despite this the budget balance was no better than in 2016 as excise revenues fell at the same time and growth in spending accelerated. It can be concluded from this that the structural fiscal position worsened in 2017.

Figure 31. Tax receipts in the state budget



Source: Tax and Customs Board

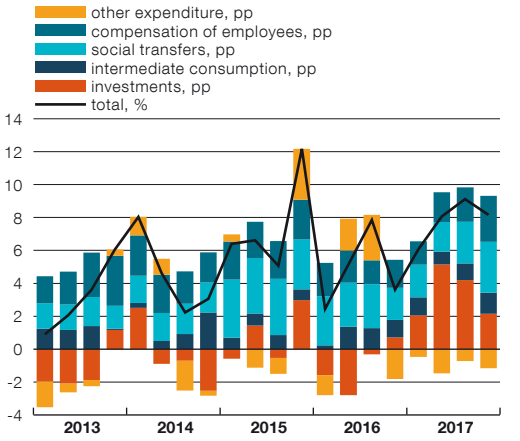
The most problematic last year were the revenues from alcohol excise. In the years before the financial crisis, rises in alcohol excise had only a minor effect on consumption, but the unexpectedly sharp rise in prices in 2017 drew more of a reaction. The amount of spirits declared to the Tax Board in Estonia was some 16% less than a year earlier[18]. Revenues from excise were again down at the start of 2018 (see Figure 31), though this was due to excise on fuel as excise on petrol rose in January, which was a month earlier than in the previous year, and so companies and households were already stocking up on fuel in December.

The growth in general government spending increased to 8.6% in the second half of 2017 as the government raised social benefits and temporarily had higher labour costs (see Figure 32). The yearly growth in social benefits increased in the fourth quarter to 10% as a new benefit for pensioners living alone started to be paid. This came on top of a rise in July in benefits for large families. The growth in labour costs for government institutions increased to 10.1% at the end of the year, though this includes bonuses and additional costs from the presidency and the reform of administration, and so the growth already slowed slightly at the beginning of 2018.

18 The comparison is made of the period October 2016 to September 2017 with October 2015 to September 2016 to take account of the increase in inventories prior to the rise in tax rates.

The yearly rise in general government investment slowed in the fourth quarter but was still faster than economic growth. General government spending on fixed assets increased over the whole year by 28%, or 23 % with investment grants. There were several reasons why investment increased. External support for funding general government investment increased by around 50% last year, which indicates that projects financed from structural funds have finally got going. Several large infrastructure projects were planned for the presidency of the European Union and to mark the 100th anniversary of the Republic of Estonia. Local governments may have been more interested in investment because of the elections that were held in October.

Figure 32. General government expenditure growth



Source: Statistics Estonia