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ESTONIAN ECONOMY AND MONETARY POLICY

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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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Subscriptions of printed versions:
Fax: +372 668 0954
E-mail: publications@eestipank.ee

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INTRODUCTION

The start of this year has been marked by uncertainty, as it is not known how the economic relations between the world's largest economic regions may change. The main cause of this is the new administration in the USA, which has promised various protectionist changes but has not actually introduced them all yet. The result of the Brexit referendum has not yet harmed the economies of the United Kingdom or of other European countries as much as feared, but the final impact of it is still unknown and will depend on the progress of the negotiations ahead. The economy has been growing in the European Union and the labour market has been improving, but upcoming elections in France and Germany could encourage a redesign of the single market, though the probability of this is low. The need to update the role of the European Union as an institution is also seen more broadly. This has been discussed in a recent white paper published by the European Commission, which proposes various scenarios for development of the European Union with different levels of integration. As Estonia is one the countries that has gained most from participation in the single market, the discussions about the future of the European Union and the solutions proposed have an immediate impact on the Estonian economy.

The Estonian economy has been given a lift by the improvement in the economies of its main trading partners. Economic growth in the partners that are most important for Estonia has been boosted by domestic demand, primarily household consumption. The Nordic economies are being given additional impetus by the construction sector. Foreign trade activity increased significantly in most partner countries at the end of last year, improving the opportunities for growth for Estonian exporters. The volume of goods exports increased in the first months of this year at a rate that meant that further market share was gained in external markets, confirming the competitiveness of Estonian production output. However, the market position that has now been taken is no guarantee of success for exports in the years ahead. That will depend on the ability of companies to keep increasing their competitiveness. Restricting growth in labour costs is not so important for increasing competitiveness or for development of the economy as reorganising production in a way that makes it possible to keep raising pay for staff.

Faster growth in the Estonian economy and in competiveness is dependent on the ability of companies to deploy labour more efficiently and on the qualifications of employees. Although growth was slow last year, it picked up noticeably in the last quarter of the year. This was partly a temporary effect that came from the build-up of inventories in advance of a rise in excise duty, but growth was also seen in a wider range of sectors than previously. Confidence indicators for the private sector show greater optimism about the near future and companies' expectations that they will recruit additional staff predict an increase in output volumes. The problem though is the shortage of suitable labour, which has caused the number of vacancies to rise steadily for some time, and the shortage of labour is becoming more of a restraint on growth in the economy. As the number of people in employment is close to the maximum it can reach, further growth in the economy will need to be based on the internal development of companies or the reallocation of labour from companies and sectors with low productivity to more productive ones. This will require workers to be appropriately trained, and will also require more investment by companies than has been the case so far.

Investment remaining at a low level puts doubt over any acceleration in economic growth. Corporate investment has been in decline for four years, making it harder for growth in the economy to increase. To some extent there are objective reasons for the low level of investment activity, such as uncertainty about the recovery in demand in foreign markets and the under-utilisation of existing resources, but investment by companies in Estonia has now fallen below the average for the European Union if taken as a ratio to value added. This is a poor outcome for a country where production capital per employee remains markedly below the levels in more developed countries. Catching up with the income level needs the amount of capital in the economy to be increased notably faster than it has been so far, and investment to be made in the leading technology.

The government should support economic growth by making the business environment as stable as possible. Investment by companies depends on certainty about the future, which is affected by trust in economic policy, including tax policy. Frequent changes in the tax system with short reaction times have increased uncertainty however, and this is confirmed by the steadily deteriorating opinion that companies have of the tax environment. The current situation in the economy, where the labour market is probably overheated and there are no major obstacles to growth for companies focusing on the domestic market, will not benefit from demand being stimulated with a government budget deficit. At a time when labour is becoming more expensive and more scarce, such spending could actually make it harder to maintain and increase competitiveness, contrary to expectations.

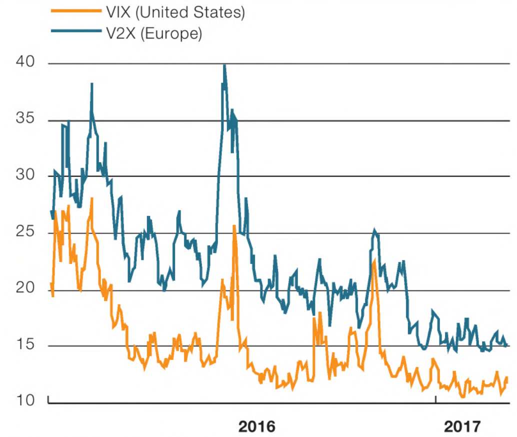
THE EXTERNAL ENVIRONMENT

THE GLOBAL ECONOMY

The global economy grew a little more slowly in 2016 than in previous years. Economic growth slowed from the 3.2% of 2015 to 3.1% (see Table 1). The global economy continued to be affected at the start of 2017 by political instability in the USA, the euro area and elsewhere. Uncertainty is still less than at the end of last year even so, as the new administration in the USA has not been able to make major changes in foreign trade relations and immigration policy as quickly as was initially planned. The result of the Brexit referendum has not yet had the negative economic impact that was feared either. On top of this, global economic indicators improved at the start of this year, and a revival in international trade has been evident, while positive purchasing managers' indexes point to growth in industrial output. The volatility in financial markets has also declined in the early part of the year (see Figure 1). In total, some acceleration in global growth may be expected this year.

The economies of emerging economies have moved in different directions. Growth picked up in China, but it slowed in several emerging economies in Asia and South America. At the same time, the inflow of capital into those countries largely recovered at the start of the year after the uncertainty in financial markets and the significant outflow of capital that followed the presidential elections in the USA. Demand is also returning in advanced economies, which is aiding the exports of emerging economies. Higher prices for fuel and food products raised inflation rates in several emerging economies, but inflation continued to slow in most of the South American countries. Rising commodities prices support the outlook for growth in commodities exporting countries and forward-looking activity indexes for the industrial sector in several large countries, most notably India, have improved in recent months.

Figure 1. Stock market volatility indexes in USA and Europe



Last observation 10.03.2017
Source: Bloomberg

Growth in the Chinese economy reached a yearly 6.8% in the fourth quarter of last year, with growth for 2016 as a whole posting 6.7%. Growth continues to be based mainly on public sector investment, private consumption and credit growth. Looking forward, rapid credit growth could cause problems in China though, while industrial output is growing more slowly than in previous years. Forward looking activity indexes for the industrial sector have strengthened however, and export orders are up, as the USA has not yet introduced the proposed trade restrictions. The exchange rate for the Chinese yuan against the US dollar has remained quite stable, though in recent months there has again been some reduction in foreign reserves, which indicates a continuation of capital outflows.

Table 1. GDP growth in different regions in 2005 - 2016 (change, %)*

	2010	2011	2012	2013	2014	2015	Q2 2016	Q3 2016	2016
World	5.4	4.2	3.5	3.3	3.4	3.2			3.1**
Advanced economies	3.1	1.7	1.2	1.2	1.9	2.1			1.6**
Emerging markets and developing economies	7.5	6.3	5.3	5.0	4.6	4.1			4.1**
Euro area	2.1	1.5	-0.9	-0.3	1.2	2.0	1.8 (0.4)	1.7 (0.4)	1.7
United States	2.5	1.6	2.2	1.7	2.4	2.6	1.6 (0.9)	1.9 (0.5)	1.6
China	10.6	9.5	7.9	7.8	7.3	6.9	6.7 (1.8)	6.8 (1.7)	6.7
Japan	4.2	-0.1	1.5	2.0	0.3	1.2	1,1 (0,3)	1,6 (0,3)	1.0
United Kingdom	1.9	1.5	1.3	1.9	3.1	2.2	2.0 (0.6)	2.0 (0.7)	1.8

* GDP at constant prices, quarterly growth over the previous quarter of the same year is given in brackets; ** 2016 is the WEO estimate
Sources: World Economic Outlook Update, January 2017, Eurostat, national statistics

The economies of advanced countries saw moderate growth in the economy and inflation at the start of the year. The assessments of different institutions in their growth forecasts for advanced economies are a little better than was expected even last year. The outlook for growth in the USA is quite uncertain though, because it is clear that the new government will not be able to introduce the promised fiscal stimulus so quickly. The economies of the euro area and Japan are supported by growth in investment and exports, which has been aided by increased global demand. Higher energy prices are causing inflation to rise above the target of close to 2% set by the central banks of advanced economies, and this could start to restrict the private consumption that has so far supported growth. The monetary policy of the central banks has generally remained accommodative and interest rates have been favourable. There is talk however, primarily in the USA, of a further rise in monetary policy interest rates if inflation starts to rise too fast.

The US economy continued to grow in the fourth quarter of 2016 with support from the optimism of consumers. Yearly growth increased from 1.7% in the previous quarter to 1.9%, and it posted 1.6% for the year as a whole. The main driver of growth was private consumption, and consumer confidence[1] has been above its historical average for the past three months. The industrial sector is doing well, and the ISM activity index for manufacturing[2] has been steadily strengthening as business conditions have improved and demand has grown, which has given support to sales turnover growth. The labour market report for February showed a notable increase in employment, though wage growth has not increased significantly. The unemployment rate remains low at 4.8%. Price pressures have increased though, which can be seen both in producer prices and in the rise in inflation to its highest levels of recent years, as it hit a yearly 2.5% in January, driven primarily by rapid rises in energy prices.

The economy of the United Kingdom is growing despite the referendum vote in favour of Brexit last year. In the fourth quarter of 2016 it was 2% larger over the year, and in 2016 as a whole it grew by 1.8%. Growth continued to be based largely on private consumption, while corporate investment declined. The Markit composite index of purchasing managers[3] declined in February as the confidence of manufacturing companies worsened. The reason for this was slower growth in both new orders and output. However, export orders have been added, as activity indexes have strengthened in the euro area, the USA and China. Export growth has been supported by the continuing depreciation of the pound sterling. Exports hit a record 49 billion pounds in January, and the trade deficit narrowed, while growth in manufacturing output has been at its highest of the past six years. A negative point is the slowdown observed in growth in retail sales. Consumer confidence[4] was lower in February than January, partly in response to higher inflation. Higher fuel prices lifted yearly inflation in the United Kingdom to 1.8% in January. Unemployment remains low at 4.7%, but income growth has slowed.

Economic growth in Japan was faster at the end of 2016 as export opportunities improved. Yearly growth increased from 1.1% in the previous quarter to 1.6% in the fourth, and was 1.0% for the year as a whole. Growth was mainly based on exports, but also partly on higher government spending and private sector investment. Activity indexes indicate an improvement in economic activity as manufacturing has seen growth in new orders and production and in new export orders. Corporate and consumer confidence remains strong and the labour market is considered good, as unemployment remains at its record low for Japan of 3%. Indeed some companies are already facing labour shortages. Corporate profits have continued to increase so far, partly because of the depreciation of the yen, which also supports export growth. There is a lot of uncertainty though about US foreign trade

1 Surveys of Consumers, University of Michigan.

2 The Institute for Supply Management's US Manufacturing PMI.

3 IHS Markit UK Composite PMI.

4 GfK Consumer Confidence Index.

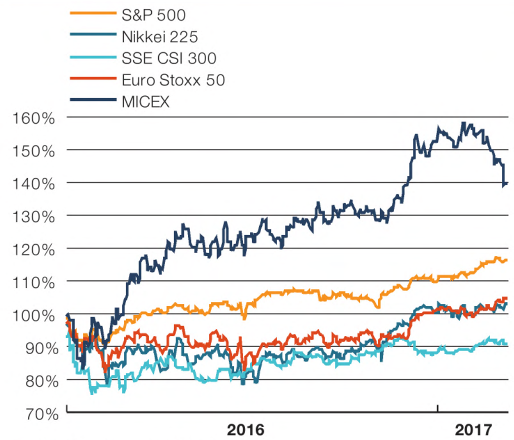
policy, which has a major impact on Japan's exporting sector. Inflation rose to a yearly 0.4% in January, mainly because transport services became more expensive.

Global stock markets have been in a positive mood at the start of this year. The main equity indexes in the USA have risen to record levels. The rises have been due to the good financial results of companies and continuing optimism about president Trump's expansionary fiscal policy. The S&P 500 has climbed by around 10.5% since the presidential election in early November (see Figure 2). Positive economic data and cautious central banks have given significant support to rises in equity prices elsewhere. Indexes in Europe have risen by a little less than stock markets in the USA because relations with the United Kingdom remain tense and political risk is increasing as elections approach in several European Union member states.

Bond prices have been raised in many parts of the world by increased uncertainty. Upcoming elections have also had a negative impact on the bonds of several euro area countries. Prices of French sovereign bonds have been particularly volatile, and the interest rate spread between French and German bonds has widened the most since 2012. The interest rate spreads of Italian and Spanish sovereign bonds over German bonds have also increased because of political problems and problems in the banking sector. Although the interest rates rose slightly on German sovereign bonds at the start of this year, they then fell back again and the rate on two-year government bonds fell in February to its lowest ever level of -0.96%.

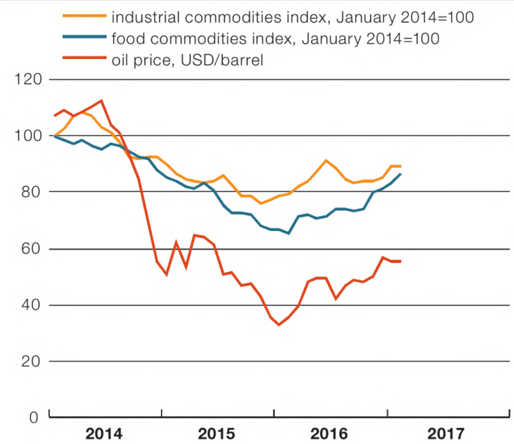
There were no major changes in commodities markets in the first months of the year (see Figure 3). The prices of energy sources ended February more or less where they had started the month with the exception of natural gas, which continued the slide in price that had started at the turn of the year and lost 15% over the month, making around 30% since the start of the year. This was mainly because the winter in the USA was milder than expected and because new gas pipelines came on stream. Brent crude oil remained at 55 dollars a barrel in January and

Figure 2. World stock indexes (03.01.2016 = 100%)



Last observation 12.03.2017
Source: Bloomberg

Figure 3. Commodity price indexes and oil price, USD



Sources: IMF, Bloomberg

February and even the announcement by OPEC members of a sharper cut than expected in output did not affect the price. Prices of precious metals were 3-5% higher in February than in January, while prices of industrial metals moved in various directions. The prices of the main food commodities rose slightly in January and in February.

THE EURO AREA

The economy in the euro area continued to grow at a moderate rate in the second half of 2016. Growth in the final quarter of the year was similar to that in the preceding quarter at 0.4%. Yearly growth was 1.7% in the quarter, the same as the figure for the whole year. However, the economy continues to perform differently in different countries in the euro area (see

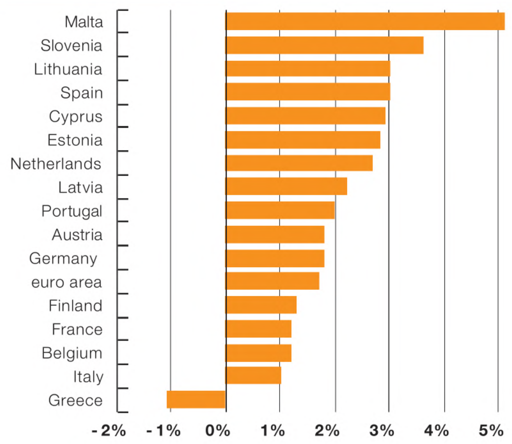
Figure 4), posing challenges for the economic management framework of the European Union (see Box 1 on the importance of upcoming elections for cooperation and integration between countries in the European Union).

Growth was based on domestic demand, and primarily on private consumption. Investment, which was down in the third quarter, picked up again at the end of the year and contributed to quarterly growth, but it still remained at some 10% below its pre-crisis peak in the final quarter of last year. Exports from the euro area grew faster in the fourth quarter, but this was not enough to offset imports. This meant that net exports had a negative effect on quarterly growth. The data received for this year so far, principally survey data, point to a strengthening of growth in the euro area in the first quarter. The Purchasing Managers Index (PMI) published by Markit was at its highest level of the past six years for the euro area in February. The economic sentiment indexes of the European Commission were also higher in January and February than at the end of last year.

The labour market in the euro area has improved steadily. Employment has risen in each quarter since the second half of 2013. During this time the number in employment in the euro area has risen by more than 3%, or about 4.5 million people. Unemployment fell in the final month of last year to 9.6%, and remained there in January this year (see Figure 5). Despite this, unemployment is still above its average from before the crisis, meaning that wage pressures have remained restrained. Yearly growth in compensation per employee increased in the fourth quarter to 1.4%, but this is still below the historic average.

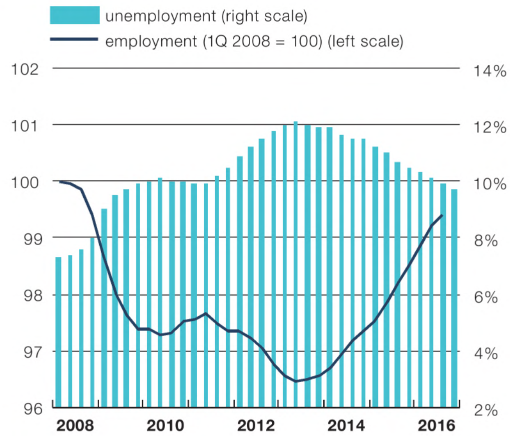
The rising oil price has helped inflation to climb strongly in the euro area in the first months of this year. Inflation reached 2% in February, which is the highest rate since January 2013 (see Figure 6). Alongside the oil price, higher food price inflation helped lift the headline inflation index, aided partly by the low comparison base for food commodities from the start of last year. Core inflation, which excludes energy and food prices, has remained stably at 0.9% in recent months, leaving it below its long-term

Figure 4. Real GDP growth year on year, Q4 2016



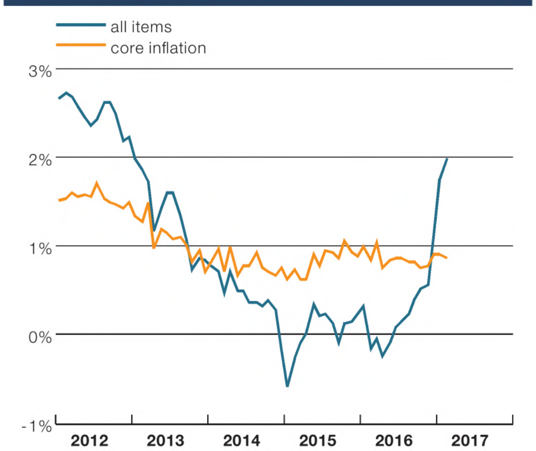
Source: Eurostat

Figure 5. Employment and unemployment in the euro area



Source: Eurostat

Figure 6. Euro area inflation



Source: Eurostat

average of 1.4%–1.6%. Companies, households and financial institutions expect that future inflation will be higher in the euro area with continuing support from accommodative monetary policy (see Box 2 on the monetary policy environment in the euro area). Expectations of higher inflation are reflected by sentiment surveys and financial derivatives, and they are higher in the first months of this year than they were last year. The long-term outlook of various institutions for inflation in the euro area still remains at 1.8% however.

Box 1: The future development of the European Union depends on the elections in France and Germany

On 25 March the heads of state and government of the European Union met as the European council in Italy to mark the 60th anniversary of the Treaty of Rome[5]. They discussed the development of the European Union at a point where the United Kingdom is starting its exit negotiations, eurosceptic opinions are gaining ground in the European Union, and transatlantic relations are clouded in uncertainty. To encourage European Union member states to discuss the future and find real solutions, the European Commission presented five possible scenarios for the future of the European Union at the summit in Rome in a white paper[6]. The development scenarios depend on how tightly the European Union member states decide to integrate: i) carrying on as now; ii) focusing on nothing but the single market; iii) letting those who want more do more in a multi-speed European Union; iv) focusing only on selected policy areas, while doing less elsewhere; or v) doing much more together across all policy areas. A serious discussion on models for cooperation is expected after the French presidential elections on 23 April and 7 May, and the German parliamentary elections on 24 September.

The basis of European Union integration is the Franco-German axis. Cooperation between the two big countries is important because they are the biggest economies in Europe, accounting between them for 36% of the GDP of the European Union, and they are home to about one third of European Union residents. France and Germany are also important centres of power. Although the two countries had historically competed for political influence in Europe, German Chancellor Konrad Adenauer and French President Charles de Gaulle signed the Élysée Treaty in 1963, which laid the foundation for closer and more successful cooperation between the two countries. The personal relations between the leaders of the two countries have played an important role in driving the Franco-German axis. The friendship between Helmut Kohl and François Mitterrand was a key factor in the decision by France and Germany to abandon their national currencies and create the monetary union, while the close relationship between the conservatives Angela Merkel and Nicolas Sarkozy helped the European Union to cope better with the global financial crisis. However, in recent years under Angela Merkel and François Hollande, some differences have emerged between the two countries on fiscal policy, the handling of the migration crisis, and the response of the European Union to Russian aggression in Ukraine. The differences between the positions of Germany and France have also put a brake on closer integration of the European Economic and Monetary Union (EMU). The readiness of the two countries to compromise, and indirectly the political development of the European Union, depend on whether the elections in Germany and France give power again to politicians who are politically likeminded. The key question in the development of the EMU is whether after the elections Germany will be able to calm fears that closer pan-European cooperation will limit Germany's ability to grow, and competitiveness more widely in the European Union, and secondly, whether France is ready to tighten its national fiscal policy to allay those fears and to introduce the structural reforms it needs.

5 The signing of the Treaty of Rome on 25 March 1957 by Belgium, France, Italy, Luxembourg, the Netherlands and West Germany started the creation of the European Economic Community, which was the forerunner of the European Union.

6 http://europa.eu/rapid/press-release_IP-17-385_en.htm

The traditional opposition between candidates of the left and right has been replaced in the French presidential elections by an opposition between pro-European and nationalist candidates. The current favourites are National Front leader Marine Le Pen, independent Emmanuel Macron, and the centre-right François Fillon. As candidate of the nationalists Marine Le Pen has promised to bring back the franc and hold a referendum on membership of the European Union. The National Front would need a majority in parliament to be able to carry out such promises, which would mean increasing its number of seats at the parliamentary elections of 11-18 June from the current two to more than half of the 577. The European Central Bank finds that leaving the euro area would increase the debt servicing costs of French companies and households, together with inflation, unemployment and other risks in France. The Governor of the French central bank, François Villeroy de Galhau, says that following such a departure, the government's interest payments would rise by about the same amount as the entire defence budget of 30 billion euros a year[7]. Unlike Le Pen, who has spent her campaign opposing Chancellor Angela Merkel of Germany, Emmanuel Macron and François Fillon have visited Berlin during their campaigns and professed their belief in the cooperation between Germany and France. Both candidates have promised to restrict the French budget deficit and introduce structural reforms.

The main parties in the German parliamentary elections are the Christian Democrats and the Social Democrats. Martin Schulz, the new leader of the Social Democrats and former President of the European Parliament, has made social policy the central theme of the election campaign, proposing to increase social support and extend the length of time that benefits are paid for. The proposals of the Social Democrats to increase government spending are opposed by Angela Merkel, who is standing for her fourth term of office and who stresses economic conservatism at both the national and European Union levels.

Stronger cooperation between Germany and France is important for the Estonian economy. A report on the effect of the European Union's single market[8] puts Estonia in sixth place in the list of countries that have benefited from the single market. Membership of the single market has boosted GDP in Estonia, created new jobs and increased consumption. The development of the European Union is politically very important for Estonia at a time when geopolitical divisions are changing and the economic environment is uncertain. Membership of the European Union confers the right to speak on global topics and makes it possible to participate in the development of the global economy. Turning away from the European Union in contrast would increase uncertainty for investors, reduce the political cooperation that has been the basis for economic development, and affect trade, meaning that a small country like Estonia would have a lot to lose.

7 https://www.ft.com/content/614f4a73-fd99-3c84-b690-51aefcfd5deb

8 http://www.amchameu.eu/sites/default/files/amcham_eu_single_market_web.pdf

Box 2: The monetary policy environment of the euro area

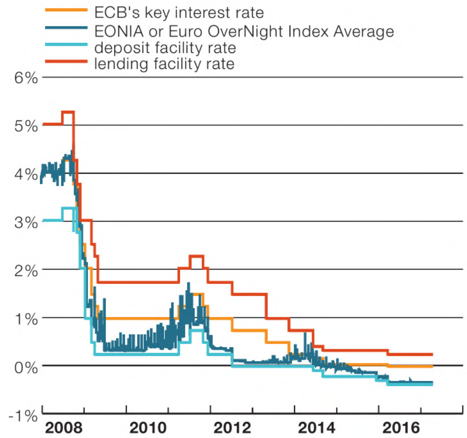
The objective of the Eurosystem monetary policy is to maintain price stability in the euro area. Price stability is defined by the Governing Council of the European Central Bank as inflation in the euro area of below, but close to, 2% over the medium term. In 2016 prices rose in the euro area by an average of only 0.2% over the year. The forecast from the European Central Bank of March 2017 expects that inflation will climb to 1.7% in 2019[9]. Higher inflation is supported by

9 European Central Bank press conference, 9 March 2017.

monetary policy measures and by an expected recovery in economic activity.

The Governing Council of the European Central Bank held monetary policy interest rates at their lowest levels under the economic and monetary union in the first quarter of 2017, 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).

Figure B2.1. Eurosystem key interest rates and EONIA

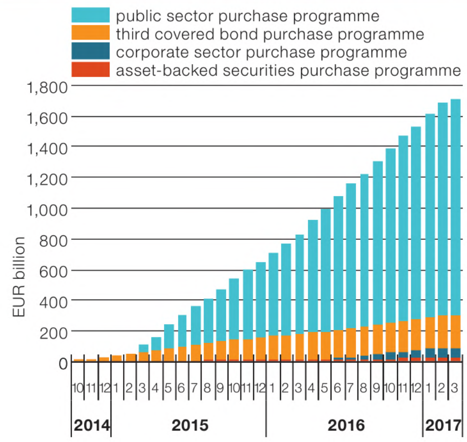


Last observation 19.03.2017
Source: European Central Bank

The package of monetary policy measures from the Eurosystem is large and varied. It is intended to help in meeting the goal of price stability at a time of low interest rates and in supporting the functioning of the monetary policy transmission channels, by easing financing conditions and revitalising the supply of credit. The volume of monthly purchases under the expanded asset purchase programme[10] was 80 billion euros up to March 2017, and 60 billion euros from April to December. Purchases are intended to continue until at least the end of 2017, or longer if necessary, until the Governing Council of the European Central Bank sees a lasting correction in inflation that is in line with the price stability goal of the Eurosystem. The Governing Council of the European Central Bank has emphasised its readiness to increase the volumes of asset purchases and/or extend the programme to maintain a supportive monetary policy stance and to cope with the risks to the sustainability of economic growth and inflation. The expected effect of the measures on the economy of the euro area and on inflation will be seen in the medium term.

The total effect of the asset purchase programmes and the targeted longer-term refinancing operations[11] was that the consolidated balance sheet of the Eurosystem in mid-March stood at 3.8 trillion euros, which is 88% more than in autumn 2014. The total volume of asset purchases stood at 1.7 trillion euros on 10 March (see Figure B2.2). At 1.4 trillion euros, the largest part of the portfolio consists of public sector securities, of which Eesti Pank's purchases accounted for 3.6 billion euros at the end of February 2017. The second stage of the longer-term targeted lending has seen the Eurosystem supply the credit institutions of the euro area with total loans of 507 billion euros. Not all financial institutions have considered the extremely favourable lending measure necessary, as they had sufficient alternative sources of funding. The final operation currently planned within this took place in March with an additional 233 billion euros lent out.

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



Last observation 10.03.2017
Source: European Central Bank

10 The expanded asset purchase programme (APP) has four parts: covered bonds (CBPP3), asset backed securities (ABSPP), public sector securities (PSPP), and the corporate bond (CSPP) portfolio.

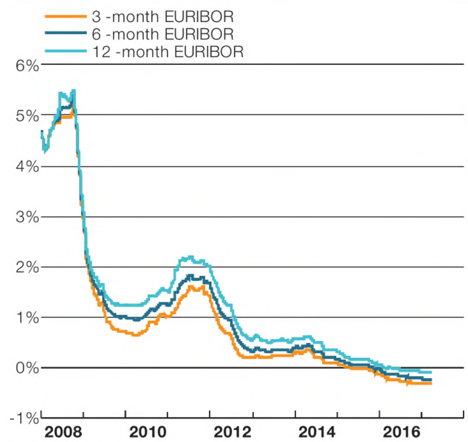
11 Targeted longer-term refinancing operation (TLTRO) loans to credit institutions are four-year loans with very favourable interest rates and intended for onward lending to businesses and households, though not for housing loans.

Yearly growth of the money supply in the euro area remains strong and a major contribution to this was made by the package of accommodative measures taken by the Eurosystem. The average yearly growth in the broad money aggregate (M3) was 5% in 2016 and yearly growth in the narrower aggregate (M1) was 9%. In January 2017 these figures were 4.9% and 8.4%. The extremely low monetary policy and money market interest rates have affected the return earned by the private sector from term deposits, which has fallen to close to 0.3% in the euro area on average. The stock of deposits still managed yearly growth of 7% on average for companies and 5% for households, up from 4% and 3% in 2015. The January statistics confirm the continuation of the same trend, which could to some extent indicate that consumption and investment are being postponed.

Yearly growth in the stock of loans to the private sector has accelerated strongly since the second half of 2015. The stock of housing loans and corporate loans has seen growth remain at close to 2% in the past half year though. Interest rates on loans are staying at record low levels. The spreads between interest rates for euro area countries facing problems and other member states and those between rates for large and small loans have narrowed significantly in the past year and a half. Such changes indicate that monetary policy measures have had a positive effect on private sector lending channels[12]. The latest Bank Lending Survey of lending by banks in the euro area shows that the lending conditions for companies and households have improved[13], demand for credit is growing, and credit institutions have positive 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 however be noted that interest rates remaining low could lead to additional risks to financial stability and could hurt the profitability of the banks.

The accommodative monetary policy in the euro area has helped short-term money market interest rates to fall to their lowest ever levels. The expectations for short-term interest rates that are revealed by financial instruments remain low, and this also affects long-term interest rates. EONIA[14] was quite stable from December to mid-March at between –0.33% and –0.36%, holding just above the interest rate on the standing deposit facility. In the middle of March the three-month EURIBOR[15] was at –0.33%, the six-month EURIBOR was at –0.24%, and the 12-month EURIBOR was at –0.11%, and they were all at the same level as at the end of December (see Figure B2.3). The money market yield curve as shown by the gap in the 1 and 12-month EURIBORs was the same as in December at 30 basis points.

Figure B2.3. Euro area money market interest rates



Last observation 19.03.2017
Source: Bloomberg

12 See the ECB Economic Bulletin 1/2017, MFI lending rates: pass-through in the time of non-standard monetary policy, pp 40–63.

13 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.

14 Euro OverNight Index Average for overnight lending between banks in the euro area.

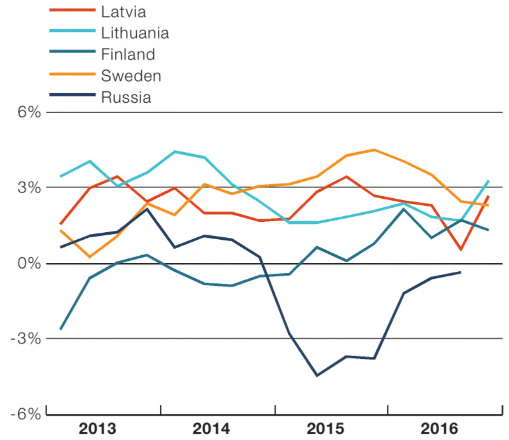
15 The Euro Interbank Offered Rate for lending between banks across Europe.

ESTONIA'S MAIN TRADING PARTNERS

The Latvian and Lithuanian economies improved at the end of last year. Yearly and quarterly growth accelerated significantly in both countries in the fourth quarter (see Figure 7). In 2016 as a whole, the economy grew by 2.0% in Latvia and by 2.3% in Lithuania. Growth has largely been driven by rising household incomes and private consumption. Equally, the industrial sector is growing strongly and yearly growth in exports of goods and services recovered in the fourth quarter (see Figure 8). Manufacturing continued to grow strongly in January. However, the low level of use of European Union funds has led to a significant reduction in investment in the public sector. The construction sector was in decline in both countries in 2016, though it perked up a little in the fourth quarter. Developments in the labour market have been positive as employment increased and unemployment fell in the fourth quarter and in the year as a whole (see Figure 9). Inflation has picked up in recent months as steadily rising prices for services have been accompanied by higher goods prices brought on by higher prices for commodities and rising prices for food. Consumer prices continued to rise faster in February (see Figure 10).

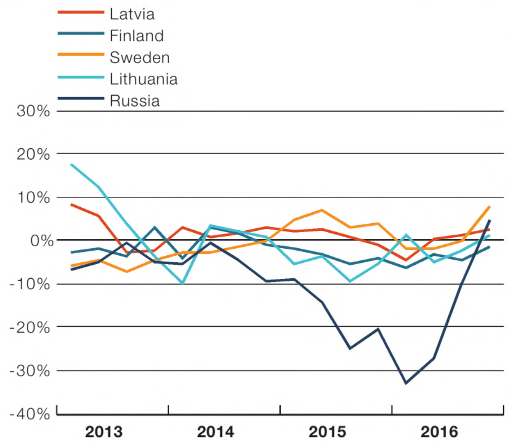
Growth in the Nordic economies is based mainly in domestic demand. It was slower in the fourth quarter over the year in Finland, but the Finnish economy still grew by 1.4% over the whole year. Yearly GDP growth in Sweden also slowed a little in the fourth quarter, but that was mainly because of the high comparison base from last year. In quarterly terms growth was up notably in the last quarter of the year and in 2016 as a whole the Swedish economy grew by 3.3%. Growth is mainly being driven in both countries by investment in the construction sector and by household consumption. This is particularly evident in Sweden, where the favourable financing conditions supported by the loose monetary policy of the central bank have significantly increased investment by households in residential property. Production of metals, chemicals and electronics has helped the Finnish industrial sector improve its performance substantially, and Swedish manufacturing started to grow again in January with support from production of cars

Figure 7. Trading partners' GDP, yearly growth rate



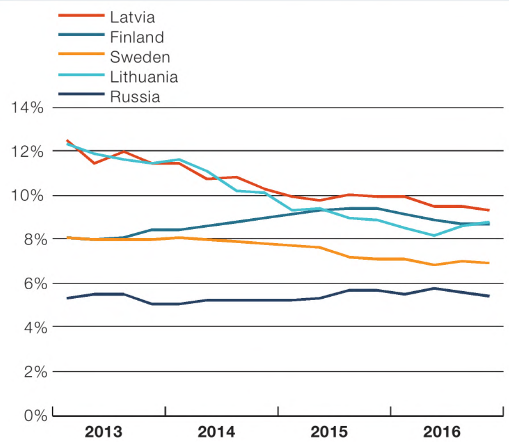
Source: Eurostat

Figure 8. Trading partners' yearly export growth in euros



Source: Reuters

Figure 9. Trading partners' unemployment rate

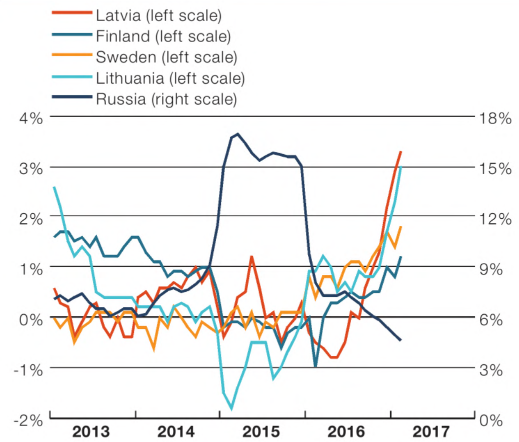


Sources: Eurostat, OECD

and electronics. The trends in foreign trade were different as the value of Finnish goods exports declined steadily last year while exports from Sweden started to grow in the fourth quarter and goods exports were up by a notable amount over the year in January. The labour market is improving in those countries as unemployment fell in the fourth quarter while employment rose. Although consumer prices have mainly risen in recent months, price pressures remain low.

Higher commodities prices are helping the Russian economy exit its recession after two years. Monthly GDP data show a minimal recession at the end of the year and the flash estimate shows that economic output was down over the whole year by only 0.2%. The improvement in economic activity has been backed by the industrial sector, where food, chemical and forestry production increased last year. There was also a recovery in yearly growth in goods exports in the fourth quarter, but this was mainly due to higher commodities prices. Investment remains in decline and private consumption is weak because of the poor purchasing power of households. However, real wages have risen in recent months, and in January there was growth again in the real disposable income of households. The yearly rate of rise in consumer prices slowed to 4.6% in February, but in monthly comparison prices have risen steadily. Despite the slight easing of inflation pressures, the Russian central bank left its repo rate at 10% in February, though it indicated that base rates may be lowered in the near future.

Figure 10. Trading partners' CPI inflation



Source: Eurostat

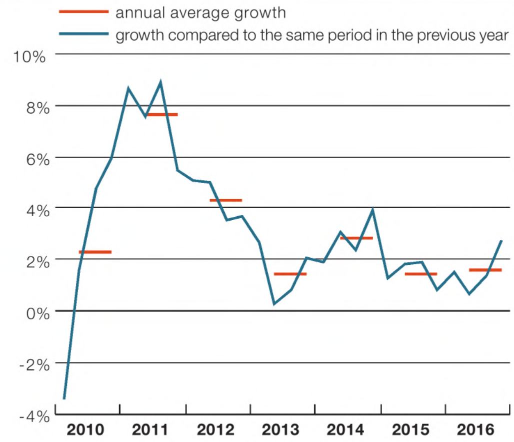
THE ESTONIAN ECONOMIC ENVIRONMENT

ECONOMIC ACTIVITY

Economic indicators have been showing a broad-based strengthening of economic activity since last summer. If the extraordinary drop in the value added of the agricultural sector in the third quarter is excluded, growth strengthened in both yearly and quarterly terms throughout the second half of the year. Yearly GDP growth was 2.7% in the fourth quarter, while quarterly growth was very rapid at 1.9%. The rapid growth in the fourth quarter meant that economic growth for the whole year was faster than forecast at 1.6% (see Figure 11).

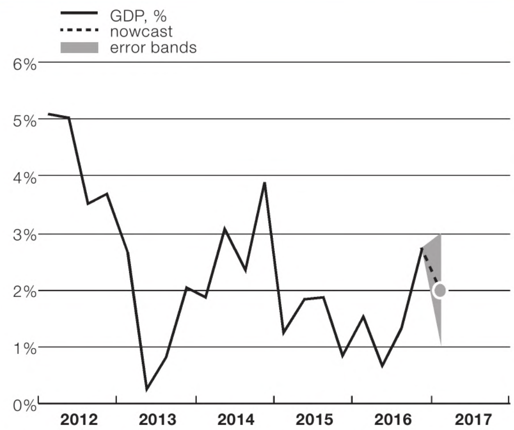
The nowcast[16], which makes use of the latest information on economic indicators, including tax receipts, industrial output, foreign trade, banking and so forth, predicts that economic growth will have slowed a little in the first quarter (see Figure 12).

Figure 11. GDP growth



Source: Statistics Estonia

Figure 12. GDP growth and current quarter nowcast



The uncertainty related to the nowcast is indicated by the mean of the historical absolute nowcast errors
Sources: Statistics Estonia, Eesti Pank

Most sectors contributed to economic growth in the fourth quarter of 2016 (see Figure 13). Only agriculture among the largest sectors saw a decline, which was a consequence of the reduced grain harvest. Having been in difficulties in the first half of the year, the oil shale sector saw faster growth in the second half. The retail and wholesale sector continued to grow strongly, and the construction sector started to grow in the fourth quarter, having earlier been held back by weak investment. The information and communications sector made a major contribution to growth with IT businesses growing the most. Value added declined in other parts of information and communications, such as telecommunications.

The major contribution to growth from net taxes on products in the fourth quarter could mean slower GDP growth in the first quarter. The large role played by net taxes on products indicates that stocks of goods were being built up in anticipation of the rise in excise in January and February 2017. Excise was raised on tobacco products in January and on alcohol and fuel from February, but stocks of those goods had already started to be built up at the end of last year. Such stocking up usually occurs in the month immediately preceding the rise in excise, but in this case it may have happened in the fourth quarter because of the late postponement of the excise rise in December, as excise rates were initially supposed to rise in January. The stocking up of excise goods in the fourth quarter will have affected growth in the first quarter negatively, as

16 The nowcast produced by the Eesti Pank indicator model is a technical regression-based nowcast that takes in data as they are received. There are currently fifteen models in the set and the nowcast is the median of the individual forecasts. In Figure 12 there is a small shaded area of +/– one average absolute nowcast error either side of the Q1 nowcast. This average is taken of absolute nowcast errors over the past five years, where the nowcast errors for each quarter are the difference between the nowcast and the first estimate of that quarter's GDP growth. These nowcasts have been made on an equivalent amount of information: the last observations available to the nowcaster are the initial estimate of GDP growth for the previous quarter; industry and trade growth for the first month of the current quarter; two months of confidence indicators for the current quarter; and similar. The resulting gap reflects both uncertainty about developments in the upcoming months and inaccuracies in the parameter estimates of the models.

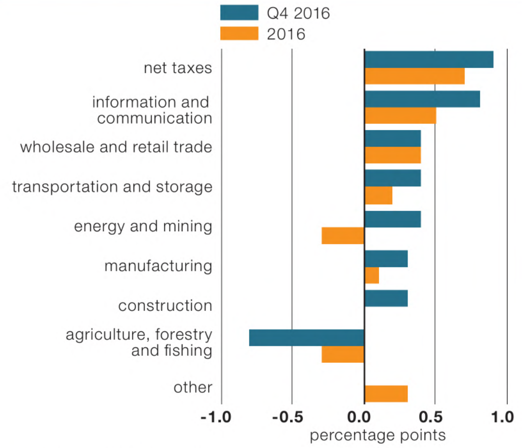
a year earlier the same effect was felt mainly in the first quarter.

Growth in industrial output has been broadly based. Growth in industrial output was boosted substantially in the second half of 2016 by oil shale production, which includes mining, energy and oil production, though growth also picked up in other branches of industry (see Figure 14). Faster growth in the oil shale sector was due to the higher oil price and a change in the system of fees for the use of natural resources. Other branches of industry that made a large contribution to growth were production of machinery and equipment, and wood processing. The industrial output statistics for January show growth slowing a little at the start of the year.

Sentiment surveys showing expectations in the private sector remain very strong even though the nowcast and industrial output indicate some slowing of growth in the first quarter (see Figure 15). Confidence in both industry and construction was at its highest levels of the past five years in February 2017, and the sentiment indexes for all sectors were above their averages of the past decade. Expectations for the output of the industrial sector rose sharply in February to a similar level to that of the first half of 2011 when the economy was temporarily growing rapidly following the crisis.

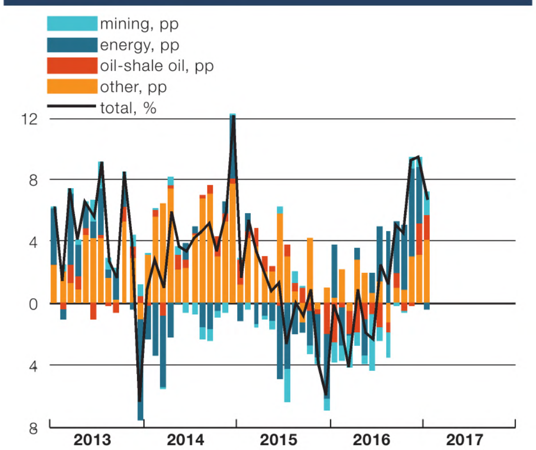
Further growth in the industrial sector may start to be restricted by shortages of investment and of labour. The utilisation level of production capacity in manufacturing was 74% in the first quarter, which is low in international comparison, but quite high given the structure of the Estonian industrial sector and earlier figures. One reason that investment has been low is that profitability has fallen as wages have risen. An ever increasing share of industrial companies say that the main factor limiting their production is the shortage of labour (see Figure 16). Although economic development was strong in the fourth quarter, the problems of labour shortages and weak investment remain unsolved. Box 3 discusses the impact on GDP growth of the decline in investment.

Figure 13. Contributions of sectors to GDP growth



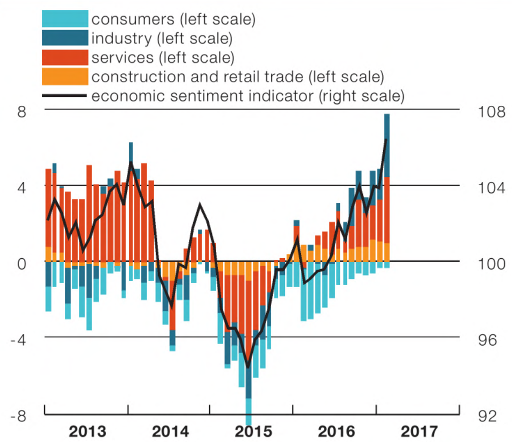
Source: Statistics Estonia

Figure 14. Yearly growth in industrial production



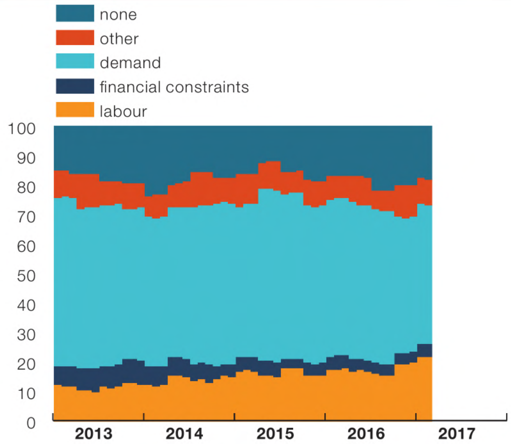
Sources: Statistics Estonia, Eesti Pank

Figure 15. Economic sentiment indicator and economic confidence by sectors



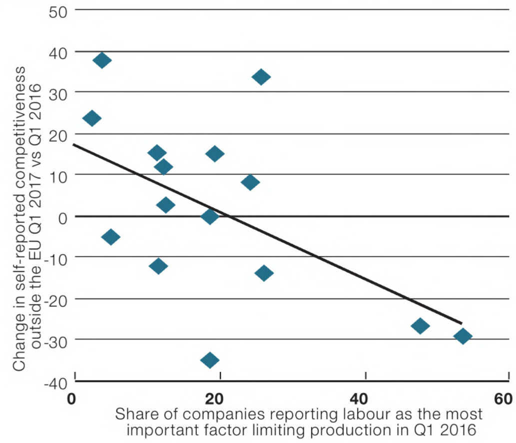
Source: European Commission

Figure 16. Factors limiting production



Sources: European Commission, Statistics Estonia

Figure 17. Shortage of labour and changes in competitiveness in manufacturing



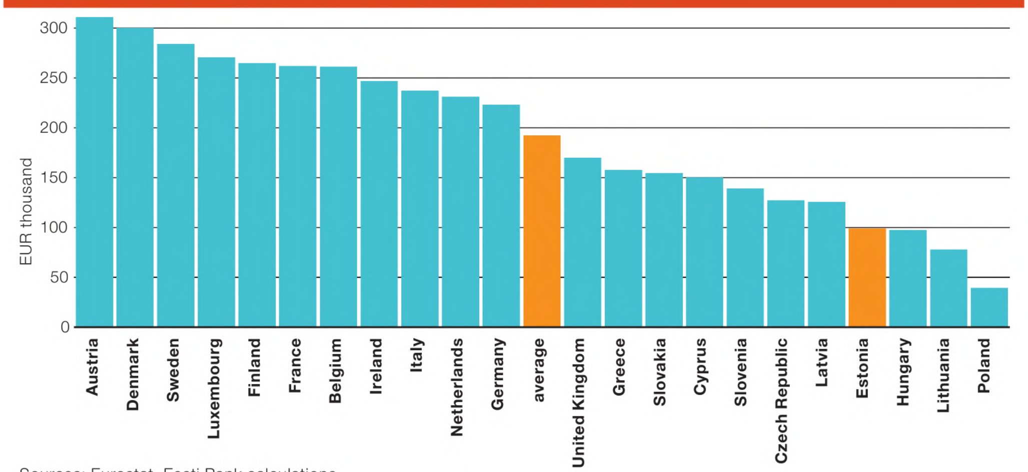
Sources: European Commission, Statistics Estonia

Labour shortages threaten the competitiveness of companies and through that, growth in the future (see Figure 17). Labour shortages have so far been most serious in branches of the economy with low productivity, where low wages make it harder to find employees. Increasing output has started to raise the significance of labour shortages across the economy. Although industrial companies have a better opinion on average of their competitiveness in the first quarter of 2017 than they did a year earlier, the assessment of competitiveness has deteriorated in economic sectors that were affected most by labour shortages a year ago.

Box 3: The marginal product of capital and the decline in investment

Investment by the Estonian business sector has declined constantly for four years. As gross fixed capital formation provides about a quarter of Estonian domestic demand, the reduction in investment has directly hindered economic growth in recent years. The constant decline in corporate investment could also reduce potential growth in the future, though this depends on the return on investment and how effectively that investment is used, and on whether investment is reduced in more or less productive areas.

Figure B3.1. Net capital stock per person employed in 2014

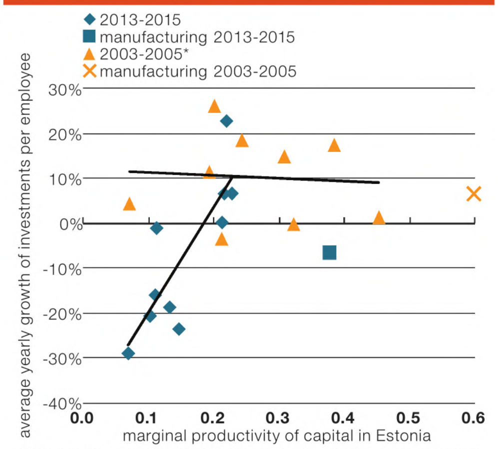


Sources: Eurostat, Eesti Pank calculations

Value added per employee has so far been lower in Estonia than the average for the European Union, which can partly be explained by the smaller amount of capital per employee. It is estimated that in 2015 there was half as much capital per employee in the Estonian economy as in the countries of the European Union on average (see Figure B3.1). An increase in capital volumes is necessary for productivity and income levels to be raised.

Economic growth does not depend only on the amount of capital per worker, but also on the benefit from new investment, or the marginal product of capital. The marginal product of capital shows how much the value added per worker increases for each additional unit of capital, all else remaining equal. The marginal product of capital in Estonia[17] is largest in manufacturing[18], followed by that in information and communications, financial and insurance activities and mining. It is also higher in manufacturing in the European Union on average, as that is a capital-intensive sector where capital plays a major role in the creation of value added.

Figure B3.2. Marginal productivity of capital in Estonia and yearly growth of investments



* Professional, scientific and technical activities are excluded from the data for 2003-2005
Sources: Eurostat, Eesti Pank calculations

The marginal product of capital has mainly fallen in Estonia in the past decade, and it has become more equal across sectors (see Figure B3.2). The benefit from new investment has declined most from its level of 2003–2005 in construction and in professional, scientific and technical activities. These two sectors are the ones where the marginal product of capital in 2013-2015 was below the average for the other countries in the European Union (see Figure B3.3). The marginal product of capital has only increased in the past decade in Estonia in financial and insurance activities, which is the sector where the marginal product of capital exceeds the European Union average by the most. In general Estonia's advantage over other European Union countries in benefiting from new investment has declined in the past decade. In 2003–2005 the marginal product of capital in Estonia exceeded the European Union average in eight of the eleven sectors, but now the Estonian figure is above average in only five sectors. What is more, the gaps to the European Union averages have mainly narrowed.

The fall in the marginal product of capital is probably one reason why economic growth in Estonia has been close to the European Union average in recent years even though corporate investment as a ratio to value added has remained above the average. Among other things, faster growth needs the benefit from new investment to be brought back to the European Union

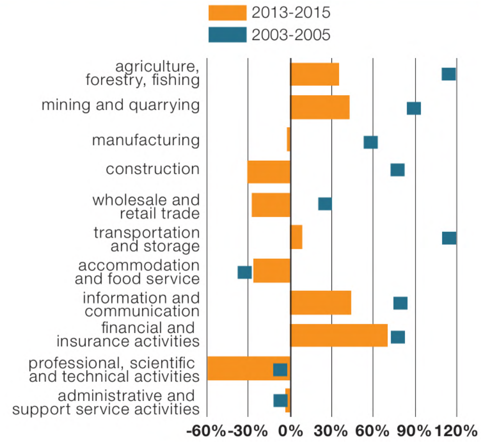
17 Using data from Eurostat for net fixed assets, value added and number of people employed in 2000-2015 from 19 European Union member states (Cyprus, Latvia and Ireland are excluded from the list of countries shown in Figure B3.1 as there are not sufficient data), the fixed effects method is used to estimate the following equation for each sector: $\ln y = \alpha + \beta \ln k + u$, where y is value added per employee, k is net fixed assets per employee, and y and k are the matrixes (i x t) or (*countries x years*). β is different for each sector and is the 19-country average elasticity of value added to capital. The estimation of the elasticity of value added to capital does not take in the differences between countries in the structure of capital, and it is assumed that the relation between capital and value added in each sector is the same in all 19 countries and does not change over time. The estimated elasticity can be used to calculate the marginal product of capital for each sector in each country, which depends on the elasticity and on changes in the relation between value added and capital.

18 Eleven sectors are observed: agriculture, forestry and fishing; mining; manufacturing; construction; wholesale and retail; transport and storage; accommodation and food service activities; information and communications; financial and insurance activities; professional, scientific and technical activities; and administrative and support activities.

average in those sectors where it has remained behind other countries. This would need both additional and current capital to be used more efficiently, as the level of capacity utilisation in manufacturing remains below the European Union average for example.

A trend is discernible in Estonia that was not present in 2003-2005, where investment is increasing primarily in sectors where the marginal product of capital is higher[19] (see Figure B3.2). The benefit from new investment is also higher in those sectors than in other European Union countries, which means that companies are investing more in areas where Estonia has an advantage over other countries in its return on capital. Investment has mainly declined in sectors with low marginal product of capital, and this has softened the negative impact of reduced investment on economic growth in the future.

Figure B3.3. Differences in marginal productivity of capital from the EU average



Sources: Eurostat, Eesti Pank calculations

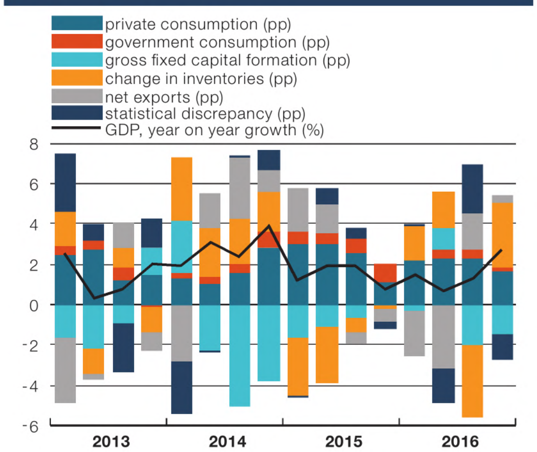
19 An exception is manufacturing, where the low investment activity of recent years can be explained by several years of uncertainty about the recovery of demand in export markets.

DOMESTIC DEMAND

Strong yearly growth of 3.7% in domestic demand in Estonia in the fourth quarter of 2016 was backed mainly by increased inventories and growth in private consumption (see Figure 18). Inventories increased above all because stocks for sale of food products, drinks and tobacco products were built up by wholesalers, partly in anticipation of the rise in excise at the start of 2017.

The growth in domestic demand was held back in the fourth quarter and in 2016 as a whole by the continuing decline in investment volumes. Gross fixed capital formation declined by 5.5% in the fourth quarter and by 2.8% in the whole of 2016 (see Figure 19). Investment fell for the whole economy primarily because of the low level of corporate investment activity. The decline in general government investment halted over the year and in the fourth quarter it was replaced by growth of 1.7% as investment in construction increased, but corporate investment was down in the fourth quarter by 12.6%.

Figure 18. GDP growth



Sources: Statistics Estonia, Eesti Pank

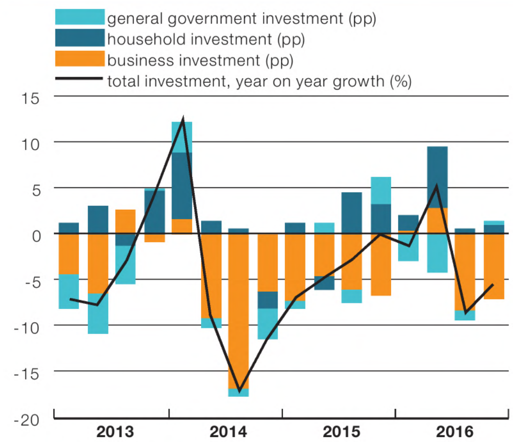
The drop in corporate investment continued to be driven in the fourth quarter mainly by companies in energy, which invested half as much as a year earlier. Gross fixed capital formation was also down in manufacturing despite the high level of capacity utilisation and the significant improvement in confidence indicators in the past six months. Corporate profits have shrunk in recent years, and this has also affected investment plans. However, access to bank loans and other sources of finance for increased investment remains good.

The residential property market was active at the end of last year and in the first months of this. Household investment in new living space was up 4.7% over the year in the fourth quarter in constant prices. As demand has increased, so has the supply of new living space, which is reflected in the number of transactions with new apartments and the increase in total area. Although the growth in the supply of new residential space slowed a little, the share of all sales transactions that involved new apartments increased[20] (see Figure 20). Real estate prices continued to rise fast, and the average sales price of an apartment was up by an average of 10% over the year in the fourth quarter of 2016 and the first months of 2017. The rapid growth was partly due to an increase in the share of transactions that involved new and more expensive apartments, and without that the growth would have been 6%.

Although real wages have been rising more slowly in the past six months, their rate of rise remains fast in historical terms and together with a high employment rate and high confidence levels among consumers this has supported growth in private consumption in the end of 2016 and the start of 2017 (see Figure 21). Excluding sales of fuel, retail sales volumes increased faster in January than they did a year earlier. There was a major drop in sales of fuel as the rise in excise on fuel this year was not preceded by such a big build-up of inventories as the rise in 2016 was. Households expect the economy to remain favourable and so consumer confidence climbed at the start of 2017 to the highest level, seasonally adjusted, seen for a couple of years.

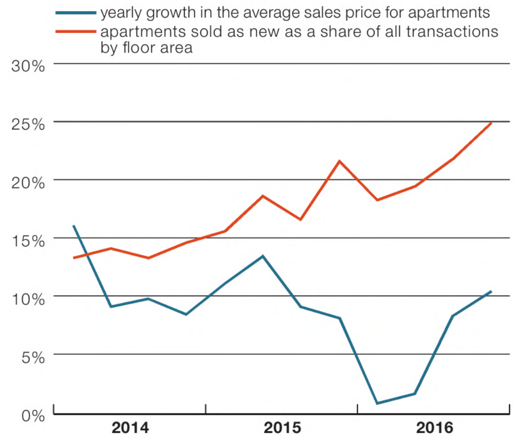
The favourable labour market allows consumers to increase their spending on goods and services to improve their quality of life. Growth in private consumption slowed to 3.3% in the fourth quarter, but spending on leisure was up by more than 10% over the year. The biggest

Figure 19. Gross fixed capital formation



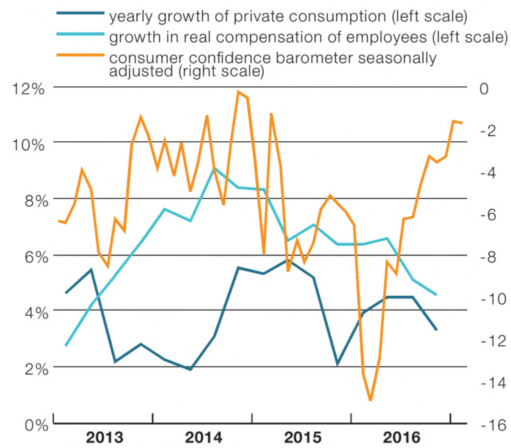
Sources: Statistics Estonia, Eesti Pank

Figure 20. Prices of apartments and sales of new apartments



Source: Land Board

Figure 21. Private consumption



Sources: European Commission, Tax and Customs Board, Estonian Institute of Economic Research

20 Around 25% of sales transactions for apartments were for new apartments in the fourth quarter of 2016, up from 22% in the fourth quarter of 2015 and 17% in 2014.

growth in the shares in the consumer basket in 2016 was in accommodation and catering services and in leisure goods and services. Non-discretionary spending, which covers purchases of food and non-alcoholic beverages, and housing, water and energy costs, increased more slowly than total private consumption in the fourth quarter and in the year as a whole, and such spending declined slightly as a share of the consumer basket. This is to be expected as non-discretionary spending generally shrinks as a share when household wealth increases, and so far it has been a larger share in Estonian household consumption than the average for the European Union.

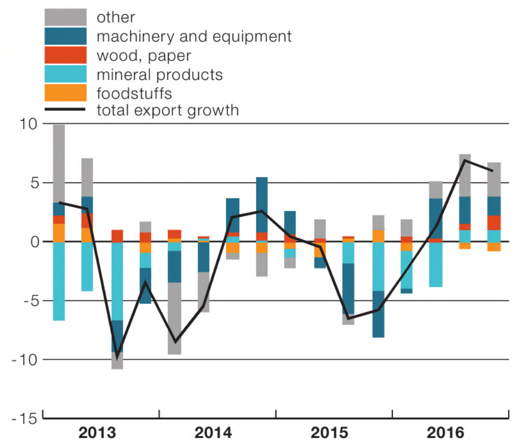
EXTERNAL BALANCE AND COMPETITIVENESS

Estonian exporters managed to increase their market share in Europe in 2016. Exports of goods and services from Estonia increased by 4% at current prices, which is the highest figure of the past four years. Trade remained at the same level as in the previous year for the countries of the European Union overall.

The spurt of growth that goods exports saw in the second half of 2016 continued until the end of the year. Goods exports increased by 6% in the fourth quarter and by 3% over the whole year. Foreign trade data show no major changes in the structure of exports in the fourth quarter, with growth led by machinery and equipment and wood products (see Figure 22). There was quite strong growth in the export of mineral products in the latter two quarters of 2016, but this was not enough to offset the steep fall in exports at the start of the year. Growth in goods imports was also close to 3% in 2016.

Foreign trade data confirm that growth in goods exports remained fast at 14% in January and was broadly based. Core exports of goods that have the highest value added for the Estonian economy increased by 10%. The major contribution to core exports came from exports of wood, furniture and metal products. Imports of goods were up by a total of 40% in January, though three quarters of that was a one-off transaction for sea transport vehicles. Otherwise goods imports grew at around the trend rate of 10%.

Figure 22. Decomposition of goods exports year on year, %



Sources: Statistics Estonia, Eesti Pank

Growth in services exports was broadly based last year and stood at 6%. Exports increased in travel, construction, telecommunications, and other business services. Exports of transport services were down in the fourth quarter by 7% at current prices and for the year overall by 8%. There was a decline in the export of sea, rail and road transport services, with exports of rail transport services down by a quarter over the whole year. Exports of other important groups of services grew strongly in the fourth quarter. The flash estimate of the balance of payments found growth in exports of services accelerating to 12% in January.

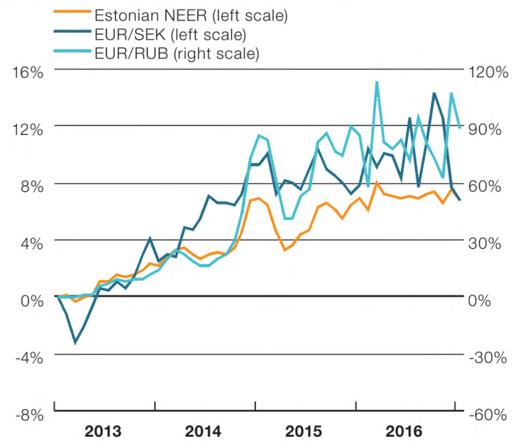
Competitiveness indicators show an improvement in the competitiveness of Estonian companies. The assessments by industrial companies of their own competitiveness within the European Union and outside it were significantly higher than a year earlier both at the end of 2016 and at the start of this year. Industrial companies find that export orders have not yet returned to their usual levels, but they are more optimistic about the future than at the start of 2016. Box 4 analyses the competitiveness of Estonian exports in more detail.

Estonia's nominal effective exchange rate remained at the same level throughout 2016 and there was no change in January this year either (see Figure 23). Although the exchange rate against the Swedish krona and the Russian rouble was quite volatile last year, the changes were mostly in opposite directions and balanced each other out. The unit labour cost and the GDP deflator based real effective exchange rates calculated by the European Central Bank continued to rise in the third quarter of 2016, though at a somewhat slower rate than previously. The most recent observation of the real effective exchange rate based on consumer prices, which is the only exchange rate indicator calculated monthly, showed it down 2.7% in February.

The current account was in surplus by 2.7% of GDP in 2016, which shows that saving is still being preferred to investment (see Figure 24). A large current account surplus partly shows that exporters have managed to remain competitive in international markets and to increase exports. It also shows that the inflows of income from exports have been directed to saving rather than investment. This is to be expected, given the uncertainty in the economic climate in recent years, but the investments that are not made now will reduce the ability of the economy to grow in future. Data from the flash estimate of the balance of payments put the current account in deficit in January, though this was due to one-off import transactions that do not reflect the general state of the economy.

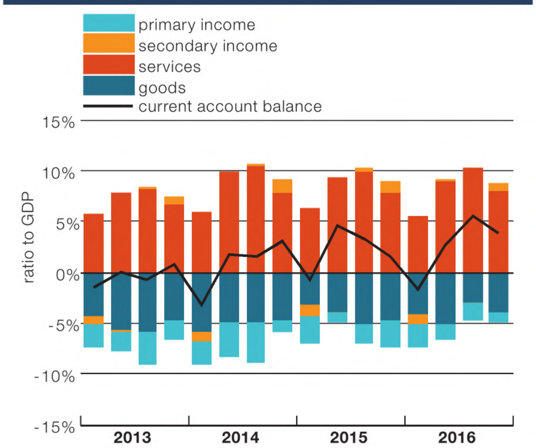
The inflow of direct investment recovered after its exceptional year in 2015. Liabilities to foreign direct investors increased by 640 million euros in 2016 and the main form of investment was reinvested earnings. No new money was added to the equity and share capital of companies overall.

Figure 23. Change in the euro exchange rate and NEER (January 2013 = 0)



Source: Eesti Pank

Figure 24. Current account



Sources: Statistics Estonia, Eesti Pank

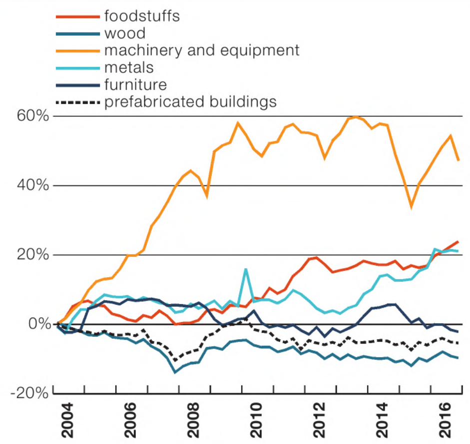
Box 4: The competitiveness of Estonian goods exports and changes in market share since 2014

The market share of Estonian goods exports has increased for several groups of products since Estonia joined the European Union. This is evidence of improved competitiveness. A difference should be drawn however between changes in market share due to price-based competitiveness and those due to non-price competitiveness. Non-price competitiveness is preferred as improvement in it allows export products to be sold for a higher price, and so it helps the economy to grow and the incomes of residents to rise.

It is hard to measure the impact of non-price factors as they include the quality of the product, the reputation of the brand, flexibility in signing contracts, and many other characteristics that cannot be measured directly. Non-price competitiveness is mostly measured from the part of the success of exports that cannot be explained by changes in price relative to competitors in target markets. This analysis observes the competitiveness of the six most important groups of goods for Estonia[21] in the five most important target markets[22]. The contributions of price-based and non-price competitiveness are distinguished using regression models on panel data to identify the strength of the relations between changes in the market share of exports of groups of goods and changes in relative prices, which are the Estonian export prices divided by the import prices in the target markets for each group of goods. The results of the analysis cover around 40% of all goods exports.

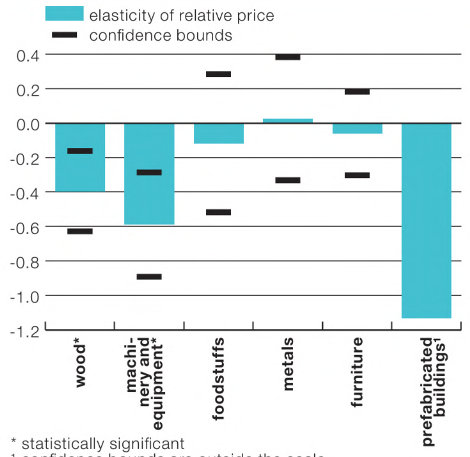
Relative prices have seen very different changes in the different groups of goods in the period under observation (see Figure B4.1). Relative prices for machinery and equipment, one of the most important groups of goods for Estonia, have risen by around 60% over 13 years. The biggest rise came immediately after accession to the European Union, when the prices rose in a sector that was developing rapidly for Estonia while the same products were becoming gradually cheaper in the markets of Estonia's main trading partners. After the economic crisis the prices of machinery and equipment stopped rising and since then they have been quite volatile. At the same time the relative prices of the timber and prefabricated buildings produced by the wood sector have fallen since 2004, meaning that the output of Estonian companies has become relatively cheaper on foreign markets.

Figure B4.1. Relative price change in 2004-2016, 2004=0



Sources: National statistics offices, Eesti Pank calculations

Figure B4.2. Effect of relative price changes on exports



* statistically significant
¹ confidence bounds are outside the scale
Source: Eesti Pank calculations

Analysis of competitiveness cannot draw definitive conclusions from observation of the dynamics of relative prices alone, as there may be different reasons for the changes in prices. A rise in prices caused by higher labour costs for example may have a negative effect on competitiveness. Equally, prices may rise because the quality of the products has improved or the producer has managed to export goods with higher value added and so a higher price, which could indicate that the exporter has become more competitive. As Estonian companies are generally price-takers in foreign markets rather than price-setters, all else being equal it may be assumed that a rise in relative prices should have a restrictive effect on exports and therefore the elasticity of relative prices to growth in exports should be negative.

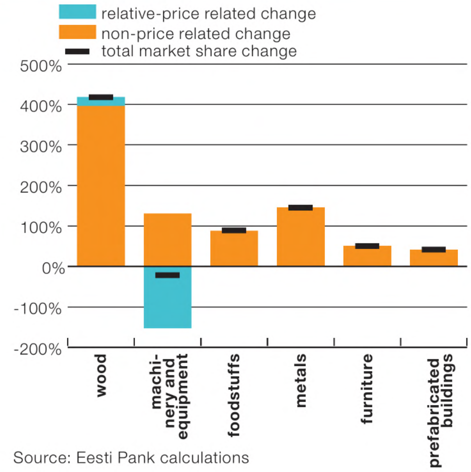
The negative relation between relative prices and exports is confirmed by the results of the regression analysis (see Figure B4.2). It is equally clear that it is only the groups of goods of

21 Food products, timber and timber products, metal and metal products, machinery and equipment, and furniture and prefabricated buildings. Exports of mineral products and chemical products are excluded from the observation.

22 Sweden, Finland, Latvia, Lithuania and Germany.

wood production and machinery and equipment where relative prices have a statistically significant effect on gains and losses of market share for exports. The effect of price-based factors was generally in the right direction for the other four groups of goods, but the wide confidence bounds mean that no statistically significant relation can be claimed. This means that assessments based on this method show that non-price factors played a more important role in the changes in market share of foods, metal products, furniture and prefabricated buildings.

Figure B4.3. Change in market share 2004-2016



Source: Eesti Pank calculations

Wood products have quintupled their market share in major target markets, meaning growth has been 400%, since Estonia joined the European Union, and by far the greater part of this growth has come from the improvement in non-price competitiveness (see Figure B4.3). Exports of machinery and equipment are different as the market share of exports in target markets shrank in the period observed. The results for this group may be distorted to some extent, as the entry into the structure of price dynamics and business processes of one large multinational in the sector can directly affect the value of goods exported from Estonia. It can be seen from the figure that non-price factors in the period observed have been favourable for this group of goods too, but they have not been able to offset the negative effect caused by the large rise in relative prices.

As market share for exports has increased in key target markets for almost all groups of goods, it can be said that Estonian competitiveness has certainly improved in the past 13 years. Market share has mostly been increased through improved non-price competitiveness[23]. This indicates that the key to success for Estonian companies in foreign markets does not lie in cheap production as other factors have proven to be more important. The growth of market share for Estonian exports on global markets has probably been smaller, as global trade has generally grown faster than demand in Estonia's main trading partners.

23 The development of price-based and non-price competitiveness is analysed in the Estonian Competitiveness Report http://www.eestipank.ee/en/publication/estonian-competitiveness-report/2016/estonian-competitiveness-report-2016.

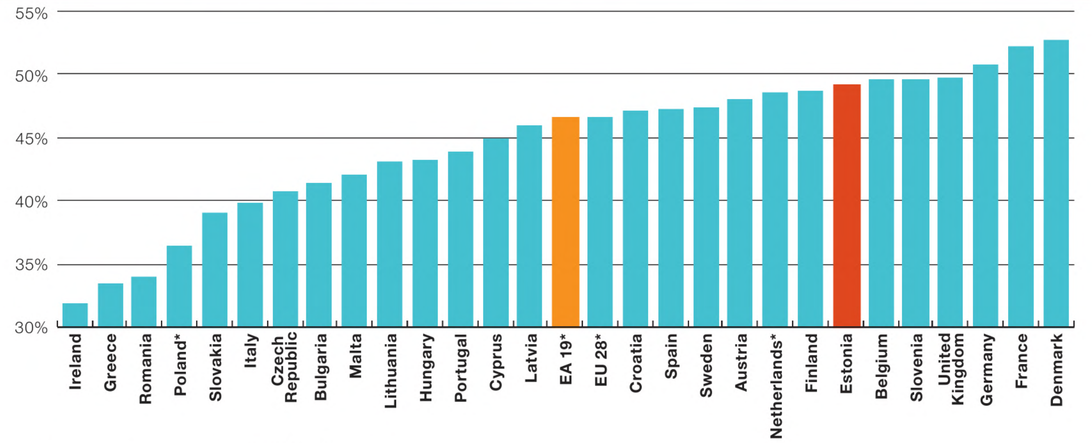
THE LABOUR MARKET

Productivity growth increased in the final quarter of 2016 and real wage growth slowed. This increases the probability that corporate profitability will recover and the economy will grow smoothly out of the problem of labour costs having climbed high. The consequence of rapidly rising wages in recent years has been that wage costs have reached a share of 49% of GDP, which is above the European Union average and is approaching the level seen before the economic crisis (see Figure 25).

The growth in unit labour costs slowed in the second half of 2016 in most sectors. Unit labour costs fell in manufacturing as value added grew rapidly while the payroll grew more slowly. The same was noted in total in trade, transport and storage, and accommodation and catering. The growth in unit labour costs was also restrained for the economy as a whole by the recovery in growth in the oil shale sector in the second half of 2016.

Growth in the average wage slowed throughout 2016 and most other indicators for pay showed similar trends in their development.

Figure 25. Compensation to employees, % of GDP, 2016



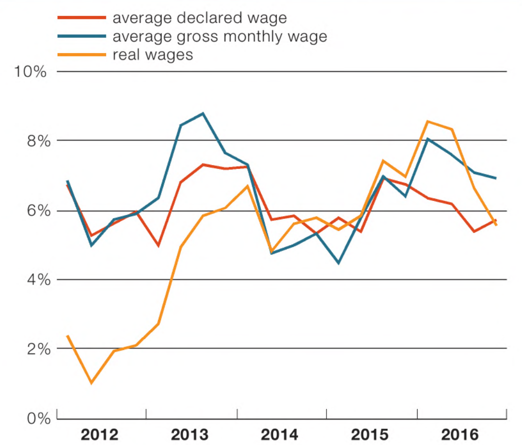
* compensation to employees 2016 Q1-Q3 average
Source: Eurostat

The fastest rising wage indicator was the full-time equivalent gross monthly wage, which rose by 7.6% in the first three quarters and then by 6.9% in the fourth. Slower growth was also seen in the average gross hourly wage and the corporate payroll shown in the enterprise statistics. Data from the Tax and Customs Board show that growth in the average wage declared increased from 5.4% in the third quarter to 5.7% in the fourth, but in the second half of the year as a whole the rise was slower than in the first half. Rising inflation slowed the growth in real wages, which is the rise in the average wage adjusted for prices (see Figure 26).

The pressures from the demand for labour eased a little in the second half of 2016. Employment in companies and institutions in Estonia was down 0.6% in the fourth quarter. The fall came primarily in construction and oil shale, which was affected by the low energy price and a fall in foreign trade with Russia. Employment did not fall in the service sector, but growth in it slowed markedly (see Figure 27). Not all indicators show employment falling though, as growth in the number of recipients of wages declared in the data of the Tax and Customs Board increased a little at the end of 2016.

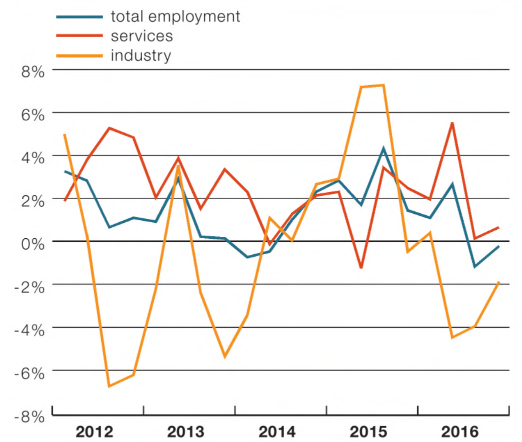
The vacancy rate rose in the fourth quarter of last year to a seasonally adjusted 1.8%, which is the highest level since the crisis. Together with the vacancy rate the unemployment rate has risen, which indicates that the match between jobs and the unemployed

Figure 26. Yearly change in average wages



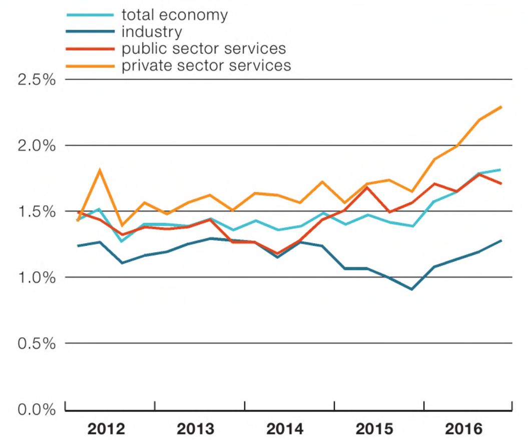
Sources: Statistics Estonia, Tax and Customs Board

Figure 27. Employment year on year growth from the Labour Force Survey



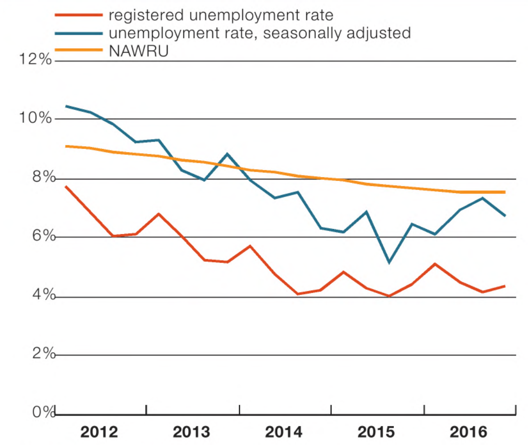
Source: Statistics Estonia

Figure 28. Vacancy rate, seasonally adjusted



Source: Statistics Estonia

Figure 29. Unemployment



Sources: Statistics Estonia, Töötukassa, Eesti Pank

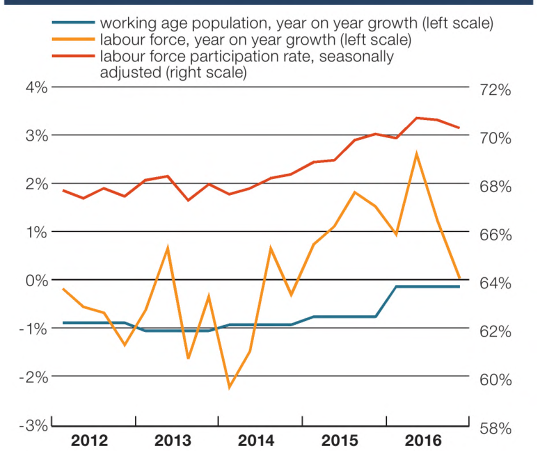
has deteriorated. There were over one third more positions vacant than a year previously, at a total of over 9000. Like the figure for employment, the vacancy rate rose fastest in the service sector (see Figure 28). The vacancy rate rose in most counties, and the highest rate was of 2.3% in Tallinn. Vacancies are most apparent in Harjumaa and Tallinn, while the amount of available labour increased in Ida-Virumaa.

The unemployment rate reached 6.6% in the fourth quarter, and has been affected by the development of the labour market in Ida-Virumaa in recent quarters (see Figure 29). The unemployment rate[24] rose there in the third quarter primarily because of economic difficulties in the oil shale sector, and it remained high in the fourth quarter of the year. Registered unemployment in the data from Töötukassa was around one fifth higher in Ida-Virumaa in the first quarter of 2016 than a year earlier, but the situation has improved in the past ten months.

There were a little over 7000 people registered as unemployed with reduced capacity for working in February 2017, and their number has more than doubled since 2014. In January 2017 there were 3365 people directly classed under the new system for assessing working ability as having reduced capacity for work, and 1561 of them did not have a job.

The decline in the number of people of working age in Estonia has slowed markedly

Figure 30. Labour supply



Source: Statistics Estonia

more than earlier population forecasts expected as the migration balance has improved. Preliminary data show the migration balance continued to improve in 2016 as 3220 more people came to live in Estonia than left.

The labour force participation rate was the same in the final quarter of 2016 as a year earlier, and it was lower than in the first half of the year. As people did not move from inactivity to the labour market and the number of people of working age fell at the same time, the two-year long period of growth in the labour supply came to an end (see Figure 30). The rise in the retirement age and especially the working ability reform should see the activity rate rise further in future.

24 The unemployment rate is found from the Estonian Labour Force Survey and covers people who meet three conditions: they are not in work, they are looking for work, and they are ready to start work.

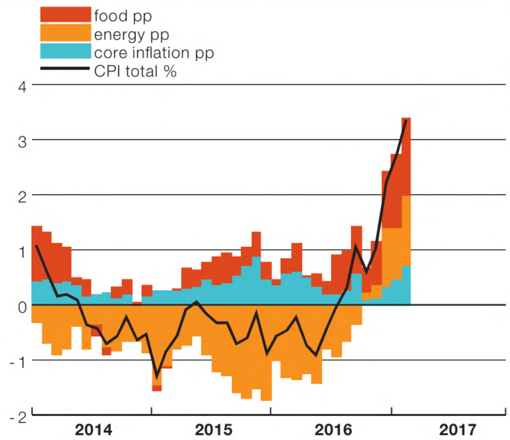
INFLATION

The second half of 2016 saw an end to the decline in consumer prices that had started three years ago. The price level was up by 1.3% over the year in the fourth quarter of 2016, and price growth accelerated further in the first months of this year. Inflation in Estonia reached 3.4% in February, which was the highest in the euro area (see Figure 31). The two main factors driving inflation were the end of the decline in global commodities prices, and higher excise rates, though it could also be an indication of increased economic activity.

The main factor behind inflation in Estonia and in the euro area as a whole has been the rise in global markets of the prices for oil and food commodities (see Figure 32). The rise in the oil price steepened in November when OPEC members decided to cut production volumes for crude oil. As the world oil price had fallen at the start of 2016, the reference base was low and the base effect was also supplemented by the introduction of higher excise rates. These factors together left motor fuels 23% more expensive in February than a year earlier and accounted for around one third of total inflation. Heat energy and natural gas have continued to fall in price this year, as the price of such forms of energy reflects changes in the oil price with a lag.

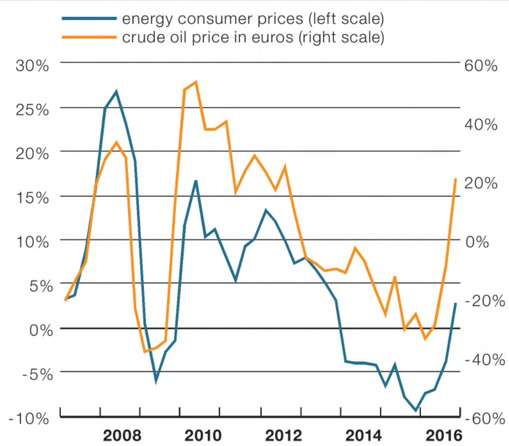
The rise in food commodities prices accelerated on world markets throughout 2016 and the rise became broadly based at the end of the year. The oversupply on the European Union market, which had been deepened by the disappearance of the Russian market in 2014, decreased. Bad weather also had an impact. In Estonia, consumer prices rose most for dairy products, cooking oils and fish products. The rise in excise on tobacco and alcohol at the start of 2017 also had a substantial impact of 0.6 percentage point on the rise in the consumer price index. The inflation of meat product prices remained subdued, probably partly because prices for cereals were low. Box 5 discusses the impact on consumer prices of higher prices for food commodities.

Figure 31. CPI growth



Sources: Statistics Estonia, Eesti Pank

Figure 32. Energy price growth



Sources: Statistics Estonia, Bloomberg, Eesti Pank

Core inflation, which covers prices for consumer goods and services and accounts for some 60% of the cost of the consumer basket, has remained low for several years. There are several reasons for this, including slow growth in the economy, cheap prices for imports and stronger competition in the domestic market. These factors have offset the pressure on consumer prices coming from rising wages. State-regulated prices have also risen at moderate rates in recent years.

Core inflation picked up at the start of this year, mainly because prices rose for services. Core inflation reached 1.3% in February in Estonia, as services were up 2.7% in price, and manufactured goods were down 0.2%. The largest price increase for services was for transport services, which may have been a consequence of the rise in fuel prices. Prices for transport have been very volatile as the price of air tickets has risen and fallen steeply from month to month.

Prices for manufactured goods fell a little at the start of this year. Seasonal price discounts started in December 2016 and continued to a large extent in January. The increasing growth in producer prices indicates a gradual increase in the prices of imports in advanced countries though. Prices for imports are being pushed up by the increase in prices of metals and other industrial commodities on world markets in recent months, and also by the low exchange rate of the euro.

Box 5: The effect of changes in prices for food commodities on consumer prices for food products in Estonia

The price level of food commodities has risen and fallen cyclically on global markets in the past two decades. As food products make up one third of the consumer basket for Estonian residents, food prices have a significant impact on the consumer price index.

The retail price of food in Estonia is affected by changes in the price of food commodities on the internal European Union market and on the world market. Trade makes price dependence with external markets bilateral. More dairy produce and cereals are produced in Estonia than is consumed by residents, and such products can be exported. The supply of home-grown vegetables and of fruit and berries is lower than for other products, so import prices have a more immediate effect on consumer prices. Fruit and vegetables come mainly from countries in southern Europe, but also from North Africa. Around half of the poultry consumed is imported because consumption is higher than production in Estonia. The prices of coffee and sugar are almost entirely dependent on the trends in world prices.

Retail prices of food in Estonia are strongly linked to the prices of agricultural produce. Changes in the price of food commodities on the European Union's internal market are transmitted to Estonia over three quarters[25] with the peak of transmission occurring in the third and fourth months and the impact fading after that. A rise or fall of one per cent in the price of food commodities in the European Union causes the retail price of food in Estonia to rise or fall by around 0.7 per cent (see Table B5.1) during the first year, meaning the effect of commodities prices on retail prices is stronger in Estonia than it is on average in the euro area.

Table B5.1. Pass-through of a commodity price shock to CPI food prices (%)*

	EU food commodities prices (EC)	World market food commodities prices (FAO)	Estonian farm-gate prices (ESA)
Quarter 1	0.079	0.055	0.134
Quarter 2	0.428	0.199	0.310
Quarter 3	0.602	0.258	0.407
Quarter 4	0.681	0.281	0.442
Quarter 5	0.717	0.290	0.454
Quarter 6	0.734	0.294	0.458

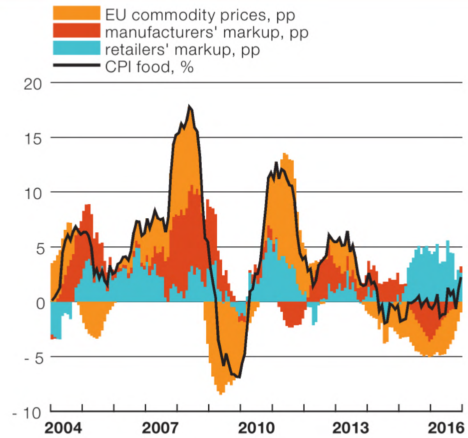
* cumulated impulse responses over time to a 1% shock in commodity prices, calcualted from a VAR model
Sources: European Commission (EC), Food and Agriculture Organization (FAO), Statistics Estonia (ESA)

The effect of the price of food commodities traded on global markets on consumer prices in Estonia is lower than the impact of prices in the European Union's single market. The price on the single market is affected by agricultural policy, which sets intervention prices, subsidies,

25 The number of periods when the price impulse of food commodities is statistically significant within 95% confidence bounds.

import tariffs and quotas. This means that the volatility of food commodity prices is less in the European Union than on the global market. Although there are no very great differences in the price dynamics of agricultural produce in Estonia and in the European Union, consumer prices for food have been more volatile in Estonia than they are in larger European Union countries. One cause of this may be the differences in the market structure, as contracts are shorter, but it may also be because of the greater market power of wholesalers and intermediaries.

Figure B5.1. Decomposition of CPI food inflation



Sources: Statistics Estonia, ECB, Eesti Pank

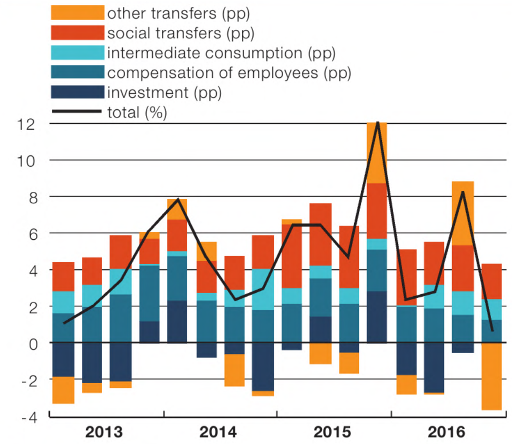
The transmission of changes in food commodity prices into producer prices and then into consumer prices can be analysed by intermediate stages. This is a generalisation, because both the data and the econometric methods impose limits that must be considered in interpreting the results. The first steeper rise in food prices occurred in 2004 when Estonia joined the European Union. The opening of the European Union market allowed food products to be exported at higher prices than before. However, the rules of the single market meant that imported sugar and fruit became more expensive. The next years of rapidly rising prices were 2007 and 2010, when the main driver pushing consumer prices higher was rising food commodity prices in the European Union. Since 2013 food commodity prices have fallen on the European Union's internal market, though the fall in consumer prices has been quite modest in Estonia, indicating an increase in markups (see Figure B5.2). As profits have declined for retail companies at the same time, higher markups have probably counterbalanced higher costs, including rising wage costs.

GENERAL GOVERNMENT FINANCING

The general government budget was in deficit for 2016 as a whole even though the economic climate supported a rise in tax revenues. Rapid wage growth boosted the inflow of labour taxes, and rises in excise and faster growth in private consumption lifted revenues from indirect taxes. The tax burden increased by 1 percentage point to 35% of GDP. The fiscal position was worsened though by the government's decision to cut resource extraction fees and waive the dividend payment from Eesti Energia, which reduced non-tax income. The rise in excise duties in 2017 was postponed by a month, and so the stocking up of inventories of excise goods partly shifted to the new calendar year. Using the estimates for the cyclical component of the budget given in the Eesti Pank December forecast shows the general government budget to have fallen into a small structural deficit last year.

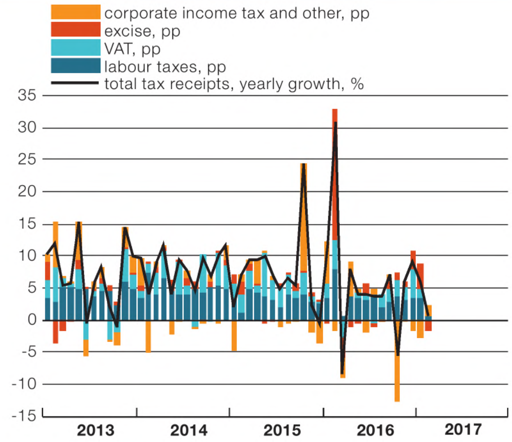
On the expenditure side of the budget, the share of current spending increased in 2016 and the share of capital expenditures declined. This has happened for several years in a row now, reflecting the government policy of raising the salaries of employees in selected sectors and increasing the redistribution of income within the economy. The increase in social transfers in 2016 was largely cyclical, stemming from a rise in the pension index and wage-related benefits, but the rate of child support and subsistence benefit was raised as well. The annual growth in wage costs in government institutions has been slowed gradually since the end of 2015 by the reduction in the number of employees, though it has remained quite high given the general slow growth in the economy. Government investment was down by 9% over the whole year, but as most of the reduction came in the first half of the year, it is to be hoped that investment activity is recovering in

Figure 33. General government expenditure



Source: Statistics Estonia

Figure 34. Tax receipts in the state budget



Source: Tax and Customs Board

government institutions. This, and the increase in other current transfers, meant that the growth in general government spending in the second half of the year increased somewhat, but remained low at 3.5% for the whole year (see Figure 33).

Tax receipts were modest at the start of 2017 as the increase in VAT revenues slowed and the amount of excise goods stocked up in February were smaller than a year previously. The build-up of inventories before a tax rise and the longer-term effect on consumption of a tax rise are related to the scale of the rise. For this reason it was to be expected that the effect on consumption of the rise in excise on alcohol and fuel in 2017 would be smaller than that in 2016, when the tax hike was sharper. Although declared wage income continued to increase quickly, the take of labour taxes slowed in February as the Tax and Customs Board paid back more in rebates on private income tax in that month than it did in 2016. In January and February, 3.4% more came into the state budget as tax income than in the same months of the previous year (see Figure 34).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