Eesti Pank

ESTONIAN ECONOMY AND MONETARY POLICY

2/2016

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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SUMMARY

There has been a lot of movement in indicators for the global economy in various ways in the the first part of this year, with the tone being set by uncertainty surrounding growth in emerging economies and volatility in the price of oil and other commodities. The economy of the euro area, in contrast, grew faster than expected in the first quarter and the flash indicators point to strong growth continuing. Growth based on domestic demand has been aided by more relaxed credit conditions and deleveraging, while external demand has made only a modest contribution to faster economic growth. The most recent monetary policy decisions of the Governing Council of the European Central Bank, which were the extended asset purchases announced in March and the cut in base interest rates, are aimed at lifting inflation by boosting the credit supply and reviving economic growth.

Total output in Estonia in the first quarter was close to its pre-crisis peak and will surpass it in the middle of this year. There is a significant difference between the state of the economy now and then as rapid credit growth at that time kept total output above its long-term sustainable level, but now the economy is very close to that level. Economic growth will speed up in the years ahead as several factors that have provided obstacles to growth so far fade away. The recovery has been confirmed in Finland, a key destination market for Estonian exports, but the demand environment will also improve in other partner countries, and Russia will exit its recession. A rising but still low oil price means that difficulties will continue for the Estonian oil shale industry, but this will no longer be reflected in the figures for economic growth. The same probably applies to transit flows through Estonia and the transport sector, which will probably not recover significantly from last year's decline.

Growth will reach 3% by 2018 and the main source for the increase will be a rise in labour productivity from its recent low level. At the start of this year labour productivity increased, having fallen last year. This will be the main source of growth in the coming years, as the involvement of the working age population in the labour market is already at its historically highest level, which is also one of the highest in the European Union. Productivity per employee can be raised in the short term by increasing the number of hours worked, as the number of hours actually worked by full-time employees has fallen in recent years. Companies have avoided cutting the number of employees despite temporary declines in orders and production volumes, as the shortage of available labour resources makes it harder than before to find new employees. Over the long term, growth in productivity will be ensured by investment and employee development, which will together make it possible for the structure of the economy to gain greater value added intensity, which will boost the income levels of the country and its residents.

The beginning of the year saw some first signs of recovery in real sector investments, which is in line with the contraction of available production resources and the need to increase fixed assets that have already been observed. Increased investment alone is not necessarily enough to lift the growth capacity of the economy. The volume of investment in the Estonian economy as a ratio to GDP is already among the largest in the European Union. The structure of investment is also important as is the utilisation rate of the new fixed assets. The share of investment going into research and development in Estonia is one of the smallest in the European Union and so support for innovation is not strong. At the same time, the utilisation rate of production resources has been below the European Union average over the years, which means that a relatively large part of the fixed assets acquired and the spending on them has been ineffective. This is not beneficial from the point of view of potential growth and competitiveness.

Growth in wage costs has not calmed down and labour costs increased as a share of GDP in the first quarter too, leading to a further reduction in profits for the business sector. Growth in average wages will slow a little, but will remain close to 5% this year and in the next two. Profits will stop falling in the business sector when productivity starts to rise. The economy will probably grow out from the divergence between labour income and corporate profits as the

Estonian labour market is flexible and relatively well able to adapt. Collective agreements play a small role beyond setting minimum wages and in consequence employers have a lot of control in defining their wage costs. The current situation is not the same as that during the boom ten years ago, when the labour costs of companies similarly rose rapidly, because wage growth is more in line with the fundamental indicators for the economy as it has not been inflated by rapid credit growth. However, part of the growth in wages is due to labour shortages and competition for employees and so wage growth may slow by more than forecast if demand for output grows more slowly than companies expect.

Rising food and energy prices will put an end in the second half of the year to the deflation that has been present for two years, but for the year as a whole consumer prices will be at the same level as they were last year. Inflation will remain between 2% and 3% in the next two years and a large part of the rise in prices will come from tax rises as excise increases on fuel, alcohol and tobacco. Higher inflation will restrain the real rise in household incomes, and that will then hold back growth in consumption over the next two years.

The financial standing of the Estonian general government is good and the budget has remained in surplus in recent years. However, the surplus has not been planned but has resulted from tax revenues being larger than expected or planned investment being postponed. Eesti Pank forecasts the budget position will be close to balance in the years ahead too, but there are major upside and downside risks. The structural balance rule in the State Budget Act ensures the long-term stability of state financing, but in order that companies and households not be faced with uncertainty about the future due to the government needing an unplanned additional source of funds, the government should set the target of keeping the budget in structural surplus or should allow more flexibility in its spending.

In the new budget strategy the government has put smoothing the economic cycle to the forefront and achieving nominal balance has again been postponed. Achieving balance will be harder in future though. The budget was in surplus in recent years even though government wage costs increased rapidly and social benefit payouts increased strongly. This was possible because of a fall in capital expenditure and a tax-rich economic environment. Wage growth will slow in the years to come and the tax burden will decline, while the government is planning to increase investment, and so pressure to limit costs will increase for the budget to stay in balance.

This forecast contains six boxes of background information. They cover the importance of structural reforms in the European Union; the most recent monetary policy decisions of the Governing Council of the European Central Bank; differences in capacity utilisation with the other member states of the European Union; the connections between exports and price-based competition; the effect on the Estonian economic forecast of recent changes in population statistics; and the impact on economic growth of rises in unit labour costs according to data from OECD countries.

THE EXTERNAL ENVIRONMENT

THE GLOBAL ECONOMY

Developments in the global economy were volatile in the first quarter of 2016. The tone was set partly by uncertainty in January surrounding the development of the Chinese economy and partly by the fluctuating oil price. Growth in the global economy slowed last year (see Table 1), but at the end of the first quarter of this year assessments of the state of the global economy turned more positive. Real data for China show the economy stabilising and the outflow of capital slowing, while volatility calmed in the financial markets of the rest of the world (see Figure 1). This helped to stabilise both the exchange rate of the Chinese yuan and the oil price. The monetary policy of central banks has remained accommodative in order to encourage growth. Economic activity was slightly better in advanced economies at the start of this year and the Markit combined index for purchasing managers showed that global economic activity started to improve a little at the end of the first quarter thanks to faster growth in the service sector. The general index of global purchasing managers rose from its low of February to 51.5 points in March. Various political risks have added to the uncertainty around the outlook for the global economy though.

The consolidated indicators for growth in advanced economies in the latest forecast from the IMF are lower for this year than in earlier forecasts, and growth of 4.1% is expected[1]. The deterioration in the outlook for emerging economies, mainly because commodities prices are low. The IMF forecast expects the rate of inflation in emerging economies to slow by 0.3 percentage point this year to 4.4%. Confidence indicators, which illustrate economic activity, mainly deteriorated in the first quarter, as industrial output saw falls in confidence in manufacturing and in the sub-index for new orders. Low commodities prices have had a clear negative impact on growth in commodities exporting countries.

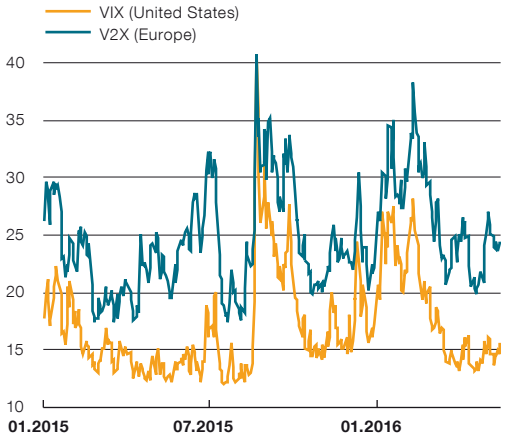
growth in emerging economies was caused to a large extent by the effect passed on from the end of last year of the tightening of financing conditions. Capital outflows from emerging markets were large at the end of last year and in the early months of this year. A large part of the outflow of capital was from China, but Chinese data show that the outflow had largely stopped at the end of the quarter. Inflation pressures remain weak in

Table 1. GDP growth in different regions in 2006–2015 (change, %)*

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
World	5.5	5.7	3.1	0.0	5.4	4.2	3.4	3.3	3.4	3.1
Advanced economies	3.1	2.8	0.2	-3.4	3.1	1.7	1.2	1.1	1.8	1.9
Emerging markets and developing economies	8.2	8.7	5.8	3.1	7.5	6,3	5.2	5.0	4.6	4.0
Euro area	3.2	3.1	0.5	-4.5	2.1	1.6	-0.9	-0.3	0.9	1.6
United States	2.7	1.8	-0.3	-2.8	2.5	1.6	2.2	1.5	2.4	2.4
China	12.7	14.2	9.6	9.2	10.6	9.5	7.8	7.7	7.3	6.9
Japan	1.7	2.2	-1.0	-5.5	4.7	-0.5	1.7	1.4	0.0	0.5
United Kingdom	3.0	2.6	-0.5	-4.2	1.5	2.0	1.2	2.2	2.9	2.3

* GDP at constant prices
Sources: World Economic Outlook, April 2016; national statistics offices

Figure 1. Stock market volatility indexes in USA and Europe

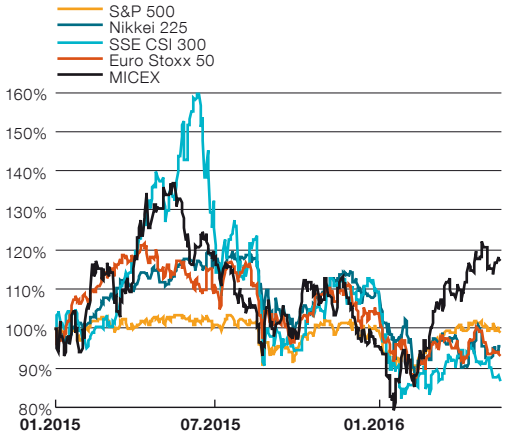


Source: Bloomberg
Last observation 17.05.2016

1 World Economic Outlook, IMF, April 2016.

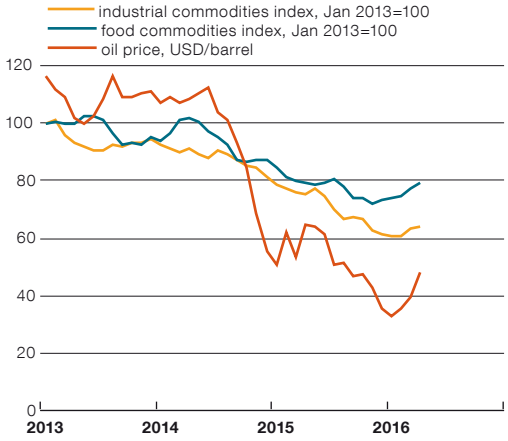
Growth in advanced economies was more in line with what markets expected, or even slightly better. It was a little weaker in the United Kingdom though. The IMF spring forecast states that growth in advanced economies should post 1.9% this year. Inflation meanwhile has moved in the opposite direction in almost all countries and has fallen even more. The IMF forecast expects that inflation in most advanced economies will remain below the 2% targeted by central banks. Growth has mainly relied on domestic demand, which has been supported by improvements in labour markets, but weak external demand has meant export volumes have continued to decline almost everywhere. The economic climate in advanced economies has been affected by the efforts of the central banks. Expectations that the Federal Reserve in the USA would postpone its next interest rate rise led the exchange rate for the US dollar to depreciate significantly, which improved the outlook for the US and Chinese economies. In contrast, the Japanese yen was strengthening at record speed as the Japanese central bank took the slightly unexpected decision not to increase its monetary policy stimulus, while investors moved into the yen as a safe haven currency. A wide easing of monetary policy continued in the euro area in the first quarter, but the exchange rate of the euro still appreciated against the other main currencies.

Figure 2. World stock indexes (03.01.2015 = 100%)



Source: Bloomberg
Last observation 18.05.2016

Figure 3. Commodity price indexes, USD



Sources: IMF, Bloomberg

Global stock markets and sovereign bond markets have started to see more active trading since the anxiety in the first months of the year. Almost all the leading indexes are up a little (see Figure 2). This was helped partly by a recovery in the oil price and the stabilisation of the Chinese economy towards the end of the first quarter, and partly by the approach of the new asset purchase programme of the European Central Bank. Stock markets in emerging economies have also recovered from their lows. The consolidated MSCI index for emerging country stock markets has more than climbed out from its dip at the start of the year, standing some 10% above where it started the year. The stock market in China was also affected significantly by the decision of the Chinese central bank to lower the compulsory minimum reserve rate. At first the European Central Bank's message in March that the floor had been reached for interest rates led to a rapid sell-off of sovereign bonds and a rise in yields. Overall, interest rates combined with the calming of anxiety in financial markets and a general increase in risk appetite in recent months contributed to the slight rise in sovereign bond markets from where they were in January and February.

Prices mostly rose in commodities markets at the end of the first quarter, particularly so for oil and gold. Having fallen at the start of the year, the oil price has been steadily climbing, mostly fluctuating in the range of 35–48 dollars a barrel, even though a meeting of OPEC and other large oil producers failed to reach any agreement on freezing production volumes. Long-term oil futures still do not indicate any major rise in the oil price in the future. The price of natural gas has been very volatile, as a steep fall at the start of the year was followed by a rise in March, but

any rise is limited by the large stocks of gas that were built up during the mild winter. Prices have also risen for metals and agricultural commodities (see Figure 3).

Quarterly growth in the economy of the United States slowed in the first quarter of 2016 to 0.2% according to initial estimates. The economy grew by 0.3% in the fourth quarter of last year. Changes in inventory made a negative contribution to quarterly growth, as did low growth in net exports as a consequence of weak foreign demand. Foreign trade was partly affected negatively by the lagged effect of the low oil price and the more expensive dollar. Industrial output in the first quarter was 2% less than in the first quarter of 2015 because of reduced volumes in mining and in oil and gas processing. Manufacturing volumes increased a little though and the forward-looking ISM index of manufacturing activity has remained strong at above 50 points. Lower growth in private consumption also contributed less to growth than in the previous quarter. Consumer confidence weakened slightly towards the end of the first quarter, but private consumption has still increased moderately in recent months, and this is supported by the continuing strength in the US labour market. Almost 200,000 new jobs have been added each month since the last quarter of last year, and unemployment remains low at around 5%, while strong growth in incomes has increased the disposable income of consumers. Inflation rose a little at the start of the year because of temporary factors, but it fell back again in March to 0.9%, mainly because energy prices were down. Although the Federal Reserve became the first central bank in the largest economic areas to raise its monetary policy interest rates, the forward guidance about monetary policy issued in the first half of this year has been more cautious and base interest rates have been held unchanged. This is mainly because external risks have increased, following recent developments in the global economy and financial markets.

The Japanese economy was 0.4% larger in the first quarter of 2016 than in the previous quarter, mainly because of positive contributions from private consumption, general government spending and net exports. This was a little better than markets expected, as industrial output in the first quarter was 1.1% down on the previous quarter. The Tankan corporate survey by the Japanese central bank for April showed companies to be less confident at the start of the year. Consumer confidence remained weak but consumption indicators improved slightly at the end of the quarter. The Japanese foreign trade balance of 755 billion yen in March was the largest surplus of recent years. Although growth in exports remained modest, there has been a large decline in imports, which could indicate that no major revival of economic activity is to be expected in the near future. The key indicators for the Japanese labour market have mainly remained strong, with unemployment staying close to 3% at the start of the year and the employment rate keeping relatively high, though there has been no notable increase in incomes. Inflation picked up a little in February as food prices rose, but the consumer price index was 0.1% lower in March than a year earlier as prices for energy and utilities were down, meaning March saw the first fall in prices in Japan since 2013. The decision in January to introduce a negative interest rate of -0.1% on excess reserves[2] was a little unexpected for the markets, but the Japanese central bank has not changed its monetary policy in its meetings since then. The volume of the asset purchase programme remains the same as before at 80 trillion yen a year. The yen has appreciated since the start of the year against all the major currencies, partly as a consequence of the dollar depreciating and partly due to investors moving into the yen as a safe haven.

The quarterly rate of growth in the economy of the United Kingdom fell from 0.6% in the final quarter of last year to 0.4% in the first quarter of this year. This confirmed the fear that worries about the possible exit of the United Kingdom from the European Union could have a negative impact on the outlook for the country's economy. Slower growth was mainly a result of lower growth in services, but falls in industrial output and construction volumes also had a negative effect. One cause of the drop in industrial output in the United Kingdom was the problems in the steel industry. A possible further weakening in economic activity would be in line

2 Introduction of "Quantitative and Qualitative Monetary Easing with a Negative Interest Rate", Bank of Japan, 29 January 2016

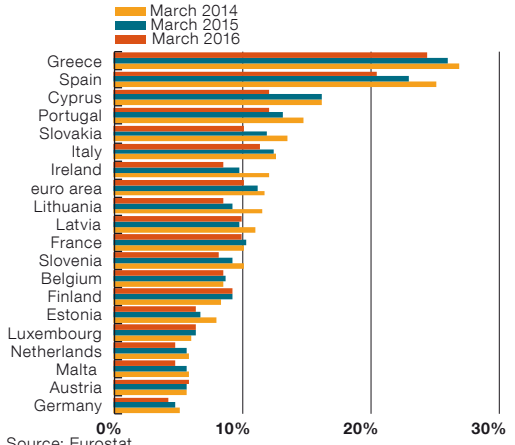
with deteriorating corporate and consumer confidence this year. Growth in the economy in the United Kingdom in the past year has largely been based on private consumption, which has been supported by low inflation and interest rates. Retail sales grew a little less quickly at the end of the first quarter, but still relatively fast at 2.7% in March. An employment rate of 74.1% means the labour market is strong and unemployment has fallen to pre-crisis levels at 5.1%. Inflation has picked up since the start of this year and in March it stood at 0.5% for the year, which is the highest rate of the past 15 months. Prices were mainly rising faster because of increases in services prices and education costs. The exchange rate of the pound sterling, which had been restraining inflation, has been sliding since November and it is likely that the referendum to be held on 23 June on the United Kingdom's membership of the European Union will put further downwards pressure on the pound. The monetary policy of the Bank of England has remained loose and supportive of the economy, and base interest rates have been held unchanged.

Growth continued to slow in the Chinese economy at the start of 2016. Quarterly growth was 1.1% in the first quarter of the year, with support from investment in fixed assets, industrial output and retail sales, but this is notably below the 1.5% recorded in the fourth quarter of last year. The slowdown in China had been generally expected though as the structure of the economy shifted. The Chinese economy is based more than before on private consumption and the service sector. The economy is showing several signs of stabilisation in contrast to the uncertainty at the turn of the year, with retail sales proving strong this year for instance and growing by 11% in March. The money supply and credit growth were at record levels in the first quarter, though the increase in the share of loans overdue poses some risk to the banking sector. Industrial output also grew faster towards the end of the quarter, growing by 6.8% in March, while profits also increased for industrial companies. China's foreign trade surplus remained at record levels however, as imports declined even faster than exports. Inflation rose at the start of this year and stood at 2.3% in March, with higher food prices making a significant contribution. Employment remains at a high level and unemployment has been close to 4% in recent months. The downwards pressure on the yuan against the dollar has largely eased, but the negative news from the economy and the stock market pushed the central bank to intervene in the market again in January with regulatory measures in response to the falling exchange rate. The monetary policy of the central bank is still moving in the direction of easing, but as monetary policy interest rates do not operate in the traditional way yet, the main monetary policy tool that the central bank has is the compulsory reserve rate for the banks. This was cut by 0.5 percentage point in March, falling to 17% for large banks as a result.

THE EURO AREA ECONOMY

Euro area GDP continued to grow stably and the economy reached its pre-crisis size in the first quarter of 2016. In the first quarter of this year, growth in the euro area increased to 0.5% in quarterly terms, which was 0.2 percentage point higher than in the fourth quarter of 2015 and some 0.1-0.2 percentage point above market expectations. Yearly growth increased to 1.5% in the first quarter. Signs of economic recovery are coming first from indicators of domestic demand but the differences between countries in the euro area are still large. The unemployment rate in the euro area in March 2016 had fallen to 10.2%, ranging from 24.4% in Greece to 4.2% in Germany (see Figure 4). Achieving faster economic growth still depends in many countries on the necessary structural reforms being enacted (see Box 1).

Figure 4. Unemployment rate in euro area countries



Source: Eurostat
Last observation for Estonia February 2016 and for Greece January 2016

Inflation of close to zero and increasing growth in employment and wages lifted purchasing power, which gave a boost to private consumption in the first months of this year, but some slowing is apparent. Employment has been growing for more than two years, and the growth rate reached 1.2% over the year in the fourth quarter of 2015, while wage costs grew by 1.3% in the non-financial sector. Retail sales volumes increased by an average of 2.3% over the year in the first three months of 2016, though in March they were 0.5% down on February despite Easter being early. Private consumption has started to be held back in recent months by rising energy prices and lower consumer confidence in response to the increased threat from terrorism.

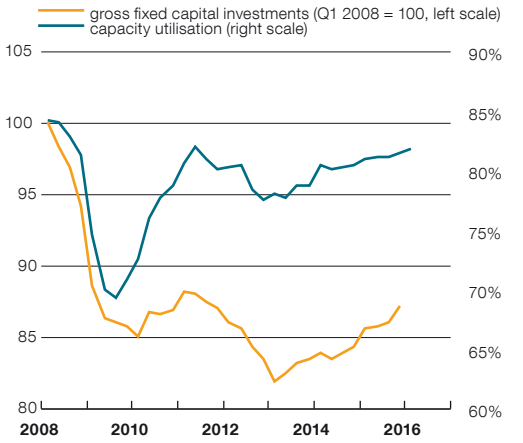
Manufacturing output volumes in the euro area are larger than last year especially because of rapid growth in January and they were some 2.1% larger in the first quarter than a year earlier, driven primarily by quarterly growth in volume of around 0.9%. Production of capital goods grew somewhat faster at 3.2% over the year, while energy production was down by 3.4% over the year. Growth in production volumes in the first quarter was largely due to the rapid growth in January as output in most branches of manufacturing was lower in February and March than in January.

Exports from the euro area are still limited by the weak external environment, which has restrained growth in goods exports. This growth was around 3% in 2015, but in the first two months of this year goods exports were up only 1.4% on the previous year. The external trade balance of the euro area has improved in recent months. Despite strong growth in domestic demand, the cost of goods imports in January and February was only 0.2% higher than a year earlier. Growth in imports was limited by a fall in prices for energy.

Investment has started to offer quite strong support to domestic demand. In the fourth quarter of 2015, investment in fixed assets in the euro area was up 1.3% on the previous quarter, and up 3.2% over the year. Increased investment is supported by the utilisation of production capacity being close to its historical average and by favourable interest rates (see Figure 5). Favourable financing conditions also aid the construction sector, which has been in recession for a long time but has now seen yearly growth for two quarters, posting 1.6% in the first quarter of this year.

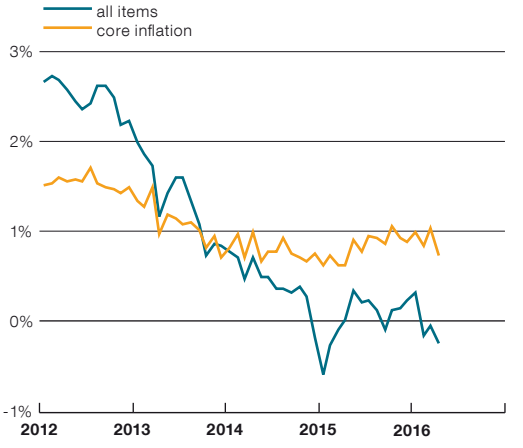
Credit volumes continue to shrink in some euro area countries, but in the euro area as a whole growth in credit volumes has been accelerating very slightly for half a year. The stock of loans to non-financial companies in the euro area grew 0.8% more in March than a year before, which is the fastest growth for four years. The Bank Lending Survey for the euro area shows that credit conditions for businesses were eased

Figure 5. Investments in the euro area



Sources: Eurostat, European Commission

Figure 6. Euro area inflation



Source: Eurostat

even further in the first quarter of 2016. This is aided by the low risk assessments of the banks, low refinancing costs, general liquidity and tighter competition between banks with increased use of bond markets. The credit supply is boosted by the growth in the liabilities of banks given negative interest rates in the money market. The average EONIA overnight interest rate has been negative for more than a year and in May it ranged between –30 and –35 basis points. The asset purchase programme of the European Central Bank has kept the growth in deposits fast and growth in the M3 money supply has remained close to 5% in recent months (see Box 2 for more details on the monetary policy environment in the euro area).

Consumer price inflation has remained close to zero because of lower energy prices and modest core inflation. The harmonised index of consumer prices was down 0.2% in April over the year, and this was primarily because of the fall in energy prices (see Figure 6). Without energy prices, consumer price inflation has ranged between 0.7% and 1.0% in the past half year. Consumer surveys show that 12-month inflation expectations for the euro area have been slightly positive in the first months of this year, while deflation was expected a year ago. Professional forecasters expect inflation in the euro area to be 0.3% this year, which is 0.4 percentage point less than was expected in the first quarter. Long-term inflation expectations with a reference year of 2020 remain unchanged at 1.8%. Producer prices in the euro area are still falling relatively fast and were 3% down over the year in January. Producer prices have now been falling for about two years in response to tighter competition at a time when demand has remained moderate.

Box 1: The economy needs structural reforms for it to grow faster

Weak economic growth has led to public dissatisfaction in many advanced economies. It can be observed that growth is noticeably weaker than it was before the crisis in Estonia and most other countries of the European Union, and also in countries like the USA and Japan. The wide range of fiscal policy measures taken by governments and the loose monetary policies of central banks have been necessary, but not enough to boost demand significantly and so lift global growth. Weak growth has broader social effects, with high unemployment in several countries, incomes growing slowly, and increased general uncertainty in the European Union leading to greater support for radical and Eurosceptic parties. Political debates in the USA and in Europe have seen a large amount of support for populist, protectionist and nationalist politicians.

What could boost growth in the economy? The capacity for growth is being held back in advanced economies by the ageing of the population, the lack of corporate investment activity, and weak growth in total productivity. This means there are various supply-side factors creating a bottle-neck for growth, and these factors can only be eased through effective structural reforms. The IMF analysed the reforms introduced in Germany, the Netherlands and Australia in the 1990s and the early 2000s and found that various product and labour market reforms boosted GDP in those countries by an average of 5% over five years[3]. How was this possible?

Structural reforms can help in reorganising an economy such that the restrictions holding back growth are reduced and so the competitiveness of companies is increased. The labour market reforms in Germany saw among other things a significant cut in the benefits paid to the long-term unemployed, the introduction of a new form of short-term employment contract, and strengthened active labour market measures. The result of this was a notable increase in economic growth in the country and in the rate at which new jobs were created. Inspired by the positive impact of the reforms, the G20 countries agreed at a summit in Brisbane, Australia, in 2014 on

3 Box 3.4. Can Reform Waves Turn the Tide? Some Case Studies Using Synthetic Control Method. World Economic Outlook (WEO), IMF, April 2016.

a strategy for growth that would define the structural reforms needed to lift global potential GDP by 2% over five years. While work on the reforms is ongoing, their implementation has been slower than expected.

It is harder to introduce reforms in an economy that has been in a slump for a long time. Firstly this is because countries with a weak fiscal position are often limited by the implementation costs of introducing structural reforms. Secondly their unpopularity may reduce public support for the government. Governing parties in several European countries have lost support to parties with extremist opinions and fear that reforms may exacerbate this trend further. Rises in political extremism have in fact been typical in Europe in earlier economic cycles. A lot of research into political trends in the 20th century[4] has noted that radical parties typically gain support in the first five years after an economic crisis, but they then start to lose that support when the economy grows again.

An economic crisis can also encourage the introduction of reforms. The IMF researched structural reforms in 26 advanced economies to find which factors most affected the introduction of reforms[5]. Surprisingly the IMF research found that in an economic crisis, political differences can be overcome, and unpopular but necessary reforms can be passed. Reforms are also encouraged by peer pressure as main trading partners make reorganisations that aid economic growth. Equally, the opinions of the government on economic policy have not historically been decisive in the introduction of reforms, as the IMF research found that governments of the left and of the right have passed the reforms needed to get economies free from constrictions.

Although Estonia has an innovative information and communications technology sector, good conditions for starting a business, and state finances in good order, the gap to countries with higher incomes is shrinking only slowly. The main reason for that is low productivity in the economy, as it stands at only 65% of the European Union average and there is nearly 40% less machinery and equipment in Estonian companies per employee than in Germany or Finland. Though Estonia remains behind the richer countries, it is still moving in the right direction, but more slowly than before the crisis. In order to strengthen long term economic growth the productivity of the Estonian economy needs to be increased significantly by implementing structural reforms.

What structural reforms are needed in Estonia? The Estonian economy has developed fast in the past 25 years. The fundamentals that provided the base for growth are still present, but increasing competitiveness and productivity will require an improvement of the business environment and innovation and investment from companies. Economic growth will rise when companies invent new products and invest in bringing those innovative ideas to reality. This requires the state to pass the reforms that are needed to boost competitiveness so as to create a climate that encourages business. Assessments by the OECD[6] and the IMF[7] find that to raise productivity sustainably over the long-term Estonia, given its small population, should make the most of its human capital. This means reducing the shortage of qualified labour by bringing the skills of workers into line with the demands of the labour market. Raising economic growth will also need promotion of investments in high value added activities and more effective cooperation between companies and research institutions that would support the development and export of high-technology products.

4 Funke, M., Schularick, M., Trebesch, C. (2015). The political aftermath of financial crises: Going to extremes; Mian, A.R., Sufi, A., Trebbi, F. (2012). Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises. NBER Working Paper no 17831.

5 Box 3.1. Breaking the Deadlock: Identifying the Political Drivers of Structural Reforms. World Economic Outlook, IMF, April 2016.

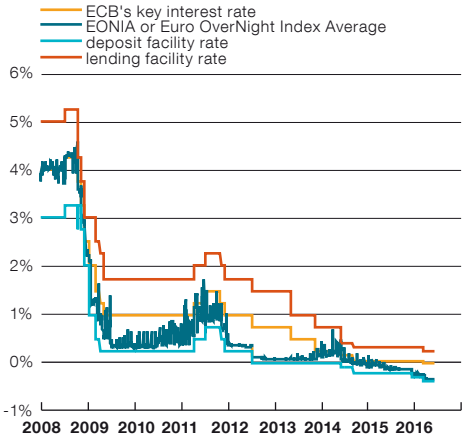
6 OECD economic review of Estonia 2015.

7 Republic of Estonia. Selected Issues. IMF Country Report no 15/337, 30 November 2015.

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. The June forecast by experts from the Eurosystem finds that inflation will remain low in the euro area for some time yet, but will rise to 1.6% in 2018[8]. Higher inflation is supported by monetary policy measures and by an expected recovery in economic activity.

Figure B2.1. Eurosystem key interest rates and EONIA



Source: European Central Bank
Last observation 31.05.2016

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 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 half of 2016, 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).

At its meeting in April, the Governing Council clarified the details of the new part of the expanded asset purchase programme[9], the corporate bond purchase programme. Purchases under the programme will start this June. The Eurosystem can purchase bonds denominated in euros with maturities of six months to 30 years of all euro area companies except banks that have ratings of at least BBB- or equivalent and meet the Eurosystem collateral requirements. Purchases can be made on the primary or the secondary market, except for purchases of bonds of publicly owned companies, which can only be bought on the secondary market because of the ban on monetary financing of government. The Eurosystem can buy up to 70% of a new issue, or 33% for public sector companies, like under the purchase programme for public sector bonds.

The total effect of the asset purchase programmes and the targeted longer-term refinancing operations[10] was that the consolidated balance sheet of the Eurosystem in the middle of May stood at 3.0 trillion euros, which is 50% more than in autumn 2014. The portfolio of covered bonds bought under the third covered bond purchase programme (CBPP3) started in autumn 2014 stood at 177 billion euros on 27 May, and that of the asset-backed securities purchase programme (ABSPP) stood at 19 billion. The portfolio bought under the public sector asset-purchase programme (PSPP) started in March 2015 stood at 800 billion euros on 27 May (see

8 European Central Bank press conference, 2 June 2016.

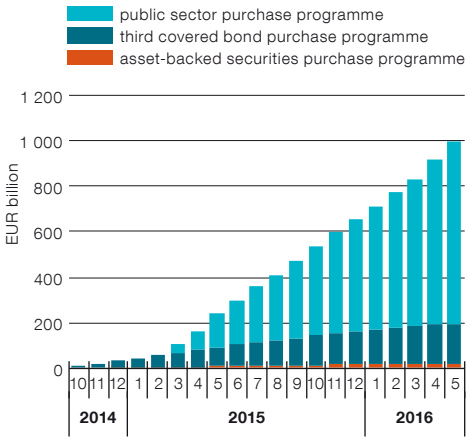
9 The expanded asset purchase programme (APP) has four parts: covered bonds (CBPP3), asset backed securities (ABSPP), public sector securities (PSPP), and the corporate bond (CSPP) portfolio.

10 Targeted longer-term refinancing operations (TLTRO) are loans to credit institutions intended for onward lending to the real sector, though not for housing loans. In the first phase, from September 2014 to June 2016, the Eurosystem is making loans once a quarter at the applicable ECB base interest rate. The second round of lending operations from June 2016 until March 2017 will see four-year loans issued once a quarter. If the lending portfolio of a bank to the non-financial sector increases between February 2016 and January 2018, the loans granted under TLTRO II will have a favourable interest rate that will not exceed the difference between the current base interest rate of the ECB and the standing deposit facility rate at the time of the transaction, currently -0.40%. For more see ECB bulletin 3/2016.

Figure B2.2), of which at the end of April 1.8 billion was purchases by Eesti Pank, including the 64 million euros of bonds of AS Elering. In the seven targeted long-term refinancing operations so far, the Eurosystem has issued 425 billion euros of loans.

The expected effect of the non-standard measures on the economy of the euro area and on inflation will be seen in the medium term because monetary policy passes through into the economy with a lag. However, the European Central Bank has emphasised its readiness to take additional measures to maintain an appropriate degree of monetary accommodation.

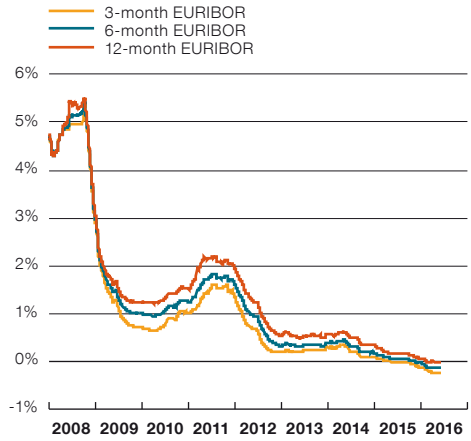
Figure B2.2. Eurosystem holdings under the expanded asset purchase programme



Source: European Central Bank
Last observation 27.05.2016

Annual growth of the money supply in the euro area remained stable in the first quarter of 2016 and was supported primarily by the comprehensive package of accommodative measures taken by the Eurosystem. The average annual growth in the broad monetary aggregate (M3) was 5.0% in the first quarter and 4.6% in April, and annual growth in the narrower aggregate (M1) was 10.2% in the first quarter and 9.7% in April. The annual growth in the stock of household and corporate deposits also picked up by around one percentage point from the fourth quarter of 2015. With interest rates in general low, the rate on the term deposits of the non-financial sector is also low at around 0.4%, and it fell a little further during the first months of the year. Annual growth in the stock of loans to the non-financial sector has accelerated since the second half of 2015, with growth in the stock of housing loans holding at 2% in the past half year, while growth in the stock of loans to companies has started to increase gradually for the first time since early 2012 and reached 1.2% in April. Interest rates on loans are also staying at historically record lows, and interest rates for corporate loans have particularly fallen in recent quarters. Such changes indicate that monetary policy measures have had a positive effect on private sector lending channels. The latest Bank Lending Survey for the euro area shows that the lending conditions to the non-financial sector have loosened[11] and demand for credit has started to grow. Although the situation varies between countries, euro area credit institutions generally expect that these trends will continue in the coming quarters. They find that the credit market for companies in particular will improve further. This has also been facilitated by the reduction in the costs of funding for banks due to the monetary policy measures that have been taken.

Figure B2.3. Euro-area money market interest rates



Source: Bloomberg
Last observation 31.05.2016

11 See https://www.ecb.europa.eu/stats/money/surveys/lend/html/index.en.html. 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.

The accommodative monetary policy in the euro area has helped short-term money market interest rates to fall to their lowest ever levels, and they are now negative. The expectations for short-term interest rates that are revealed by financial instruments remain low, and this also affects long-term interest rates. EONIA[12] fell when the news of the additional measures was released at the March meeting of the Governing Council of the European Central Bank and from the middle of March to the end of May it was between -0.30.% and -0.35%, holding just above the interest rate on the standing deposit facility. At the end of May the three-month EURIBOR[13] was at –0.26%, the six-month EURIBOR was at -0.15%, and the 12-month EURIBOR was at -0.02%, which was not significantly changed from the end of March (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 March at 33 basis points.

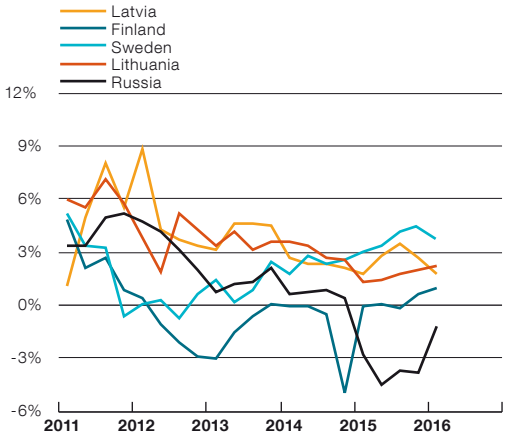
12 Euro OverNight Index Average for overnight lending between banks in the euro area.

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

ESTONIA'S MAIN TRADING PARTNERS

The economies in Estonia's trading partners mainly improved in the past half year. Growth in trading partners important for Estonia is largely driven by household consumption, which is supported by the stability in the labour market and weak price pressures. Like in Estonia, domestic demand has helped the economies in Latvia and Lithuania remain stable, though there is some concern around the low level of activity in foreign trade. The Swedish economy is strong thanks to the accommodative monetary policy of the central bank and the weaker exchange rate of the krona, while growth in Finland is also positive. The recession in Russia eased at the start of the year. Economic activity in Russia is still relatively weak and that has a direct effect on Estonia and on the foreign trade and industrial output of our main trading partners. Global economic circumstances remain fairly unfavourable and there are worries about the waning growth in China and the ongoing political and economic crisis in Brazil. Geopolitical tensions remain high.

Figure 7. GDP of trading partners, yearly growth rate



Source: Eurostat

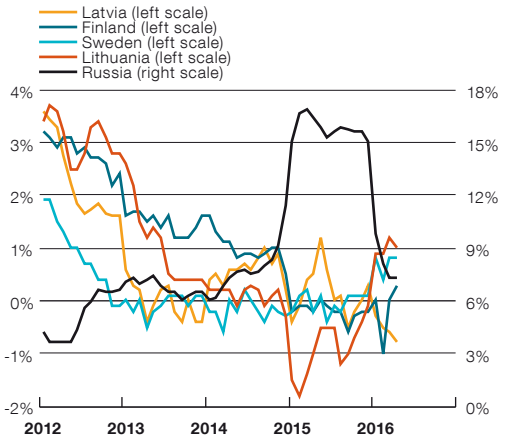
Year on year growth in the Latvian economy has been slowing since the third quarter of last year, and this trend continued in the first quarter of this year in the flash estimate of the statistics office (see Figure 7). Seasonally adjusted GDP was lower in the first quarter than in the previous quarter. The main driver of economic growth was consumption rooted in the good purchasing power of households, while manufacturing output was also higher in the first quarter than a year earlier and than in the previous quarter. The production of the construction sector was down over 20% in the first quarter in contrast, partly because of the slowdown in the use of European Union funds. In the first three months of the year, exports were down in yearly terms mainly because of a sharp drop in exports of machinery and mechanical appliances and electronic equipment. Developments in the labour market also diverged as employment continued to grow in the first quarter of the year while unemployment was also up in both yearly and quarterly comparison. Low commodities prices are still keeping price pressures in check in Latvia, and in April the consumer basket was 0.8% cheaper than a year earlier (see Figure 8).

Growth in the Lithuanian economy continued to increase in the first quarter and the flash estimate from the statistical office put it at 2.2% in yearly comparison. Seasonally adjusted GDP was also higher in the first quarter than in the previous one. Growth has largely been driven by rising household incomes in recent quarters and by private consumption. On top of that, exports stopped falling in the first quarter of the year, particularly as exports of grain and machinery and equipment increased. Manufacture of wood and wood products and furniture helped manufacturing output increase strongly in the first quarter as well. The labour market continued to improve as unemployment fell further at the start of this year and employment increased throughout last year. Although prices for services have risen steadily, price pressures have been weak in Lithuania because of low commodities prices. Inflation was 1.0% in April in Lithuania, mainly because of a steep fall in prices last April.

Economic growth in Finland remained positive. Growth recovered in the second half of last year and the preliminary monthly data from the statistical office show the total output of the economy was higher than a year before in the first quarter of this year too. The economy also grew in the first quarter in quarterly terms. The main basis for growth has been the balanced growth in household consumption as real wages rise slowly. The decline in exports deepened in the first quarter however. There has been a notable drop in trade with Russia, mainly because of a sharp contraction of almost half in mineral exports in the past two years. The industrial sector also remains weak and industrial output was down in the first quarter. Low commodities prices brought consumer prices down in Finland last year and the consumer basket has not risen in price this year.

Economic activity in Sweden has remained strong. Preliminary data from the statistical office put yearly growth in the first quarter at 4.2%, and seasonally adjusted GDP was higher in the first quarter of the year than in the previous quarter. The economy has been boosted by strong domestic consumption combined with foreign trade benefiting from a weaker Swedish krona. Passenger car production led a large rise in manufacturing output volumes in the first quarter. Economic activity has also been backed by the accommodative monetary policy of the Swedish central bank, which has encouraged household consumption and investment. The yearly growth in consumer prices was 0.8% in April, mainly because of low commodities prices. Low inflation led the Swedish central bank to leave the repo rate at -0.50% in April and to warn that low interest rates and high levels of household indebtedness make it necessary to find a balance between demand and supply for housing loans that would lead to lower demand for credit. If the risks stemming from the Swedish real estate market overheating were to be realised, it would reduce the income of Estonian exporters and would weaken their ability to repay their loans, putting pressure on the Estonian banking sector.

Figure 8. CPI inflation of trading partners



Source: Eurostat

The decline in the Russian economy slowed at the beginning of the year. The flash estimate from the Russian Statistics Service showed the contraction of the economy in the first quarter to have slowed to 1.2% over the year. The first quarter of the year was the fifth in a row where the Russian economy shrank. Although imports fell at a slower year on year rate in the first quarter of the year, goods exports were down around one third, with oil products seeing a sharp decline. At the same time, the production and export of crude oil increased slightly in the first quarter. Investment, industrial output and household consumption all continued to decline in the

quarter, with private consumption restricted by the fall in real incomes. The economic pressure from sanctions was added to the pressure from the low oil price and the consequent volatility in the rouble exchange rate, though the rise in the oil price has led the rouble to strengthen in recent months. Inflation pressures have not really eased, and although the yearly rise in consumer prices was 7.3% in April, this was mainly because of high inflation last year. The Russian central bank finds that the balance between high inflation and low levels of economic activity has not changed, and it kept its monetary policy rate at 11% in April.

THE ESTONIAN ECONOMIC ENVIRONMENT

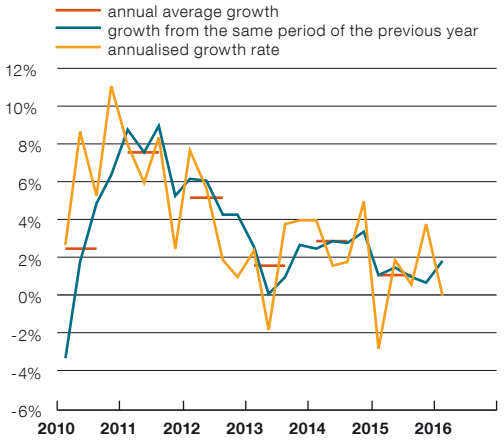
ECONOMIC ACTIVITY

The flash estimate from Statistics Estonia put growth in the first quarter of 2016 at 1.7% over the year and put GDP unchanged from the fourth quarter of last year (see Figure 9). Growth was notably faster than in the fourth quarter, a large part of that being due to the stocking up of goods subject to excise in anticipation of rises in excise. Furthermore, indicators of economic activity other than GDP showed the economy strengthening in the first quarter. **Current data show that quarterly growth in the first quarter was more balanced than in 2015.** A primary indicator of this is that corporate investment data from VAT declarations and exports were stronger than in the previous quarter, counterbalancing the slower growth in the retail trade.

Industrial output in the first quarter of the year was a seasonally adjusted 1.2% higher than in the fourth quarter of last year despite the problems in the oil shale sector, with manufacturing output up 1.4%. This was strong growth, given the problems in the oil shale sector and the weaker than average external environment. Growth in the industrial sector as a whole was less than that in manufacturing as the output from mining fell, probably because stocks were increased in oil shale mining in 2015. In yearly terms, manufacturing output was down in the first quarter (see Figure 10), mostly because of mining and oil production, but production still increased in most sectors. Industrial output increased particularly quickly in April, gaining around 6% from the previous month. This was largely because production was increased in the mineral resource industry, which was affected by oil shale mining and growth in the production of sand, gravel and crushed stone for the construction sector.

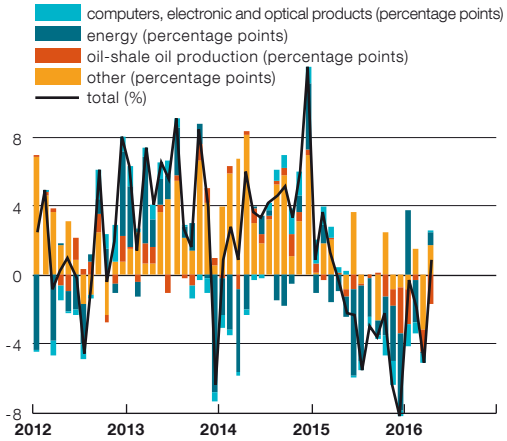
Economic growth has been negatively affected in recent years by transportation and storage, where increased competition among Baltic Sea harbours has hindered transit flows. The transport of goods through ports and by rail continued to decline in the first quarter of this year, which indicates that negative developments in transportation and storage have not yet ended (see

Figure 9. GDP growth



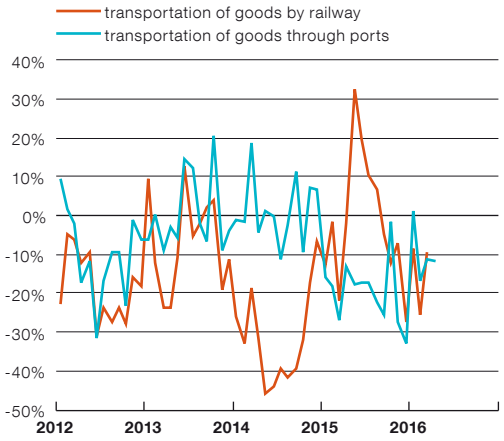
Source: Statistics Estonia

Figure 10. Yearly industrial production growth



Sources: Statistics Estonia, Eesti Pank

Figure 11. Yearly growth in transportation of goods



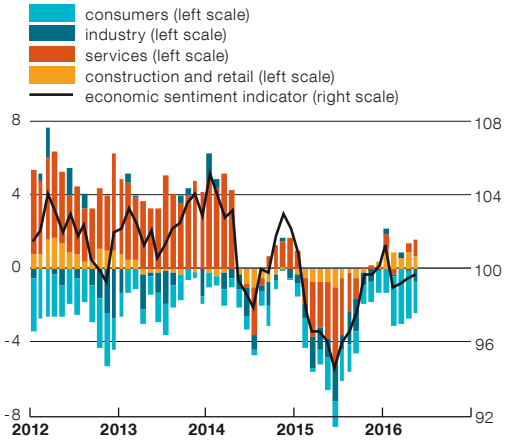
Source: Statistics Estonia

Figure 11). Reduced transit and intermediation activity also restrains the wholesale business, but the continuing rapid growth in private consumption and increasing retail sales mean the trade sector as a whole is doing well. Changes in retail volumes in the first months of 2016 indicate that growth is slowing slightly though. Retail goods subject to excise were stocked up increasingly by consumers in January, and the leap year effect had a favourable impact in February. Growth in the sales revenues of retailers slowed to 3% in March, which seems a better indicator of the sector than the developments in the preceding months. However, the turnover volume index for retailers increased by 6% in April.

Private sector expectations were more optimistic at the start of 2016 than in 2015. Confidence survey figures for industry, services and construction were better in the first five months of this year than they were last year, indicating that businesses have a more optimistic view of the development of the economy (see Figure 12). Confidence has particularly improved in the construction sector from previous years, with support from increased development of both commercial and residential property, and also from steadily increasing general government investment, which is being pushed by the cycle of the European Union's Structural Funds. In contrast to the optimism of businesses, pessimism was increasing among households at the start of the year, though confidence strengthened again in April and May. The temporary deterioration may have been caused by the background of negative news as large-scale redundancies were announced.

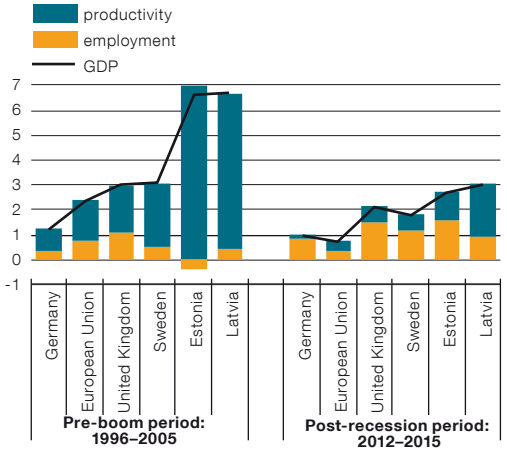
The Estonian economy was probably quite close to its potential in 2015. Although growth in recent years has been below long-term expectations, the output gap, which shows the difference between actual GDP and potential GDP, is probably not big, because growth has been restrained by factors with a long-term negative impact. One of these factors is the decline in value added in transportation and storage, which has been caused by changes in the state of competition and will not turn around during the forecast horizon. Equally, the energy sector is affected by how the situation was changed

Figure 12. Economic sentiment indicator and economic confidence by sectors



Source: European Commission

Figure 13. Decomposition of GDP growth in selected economies



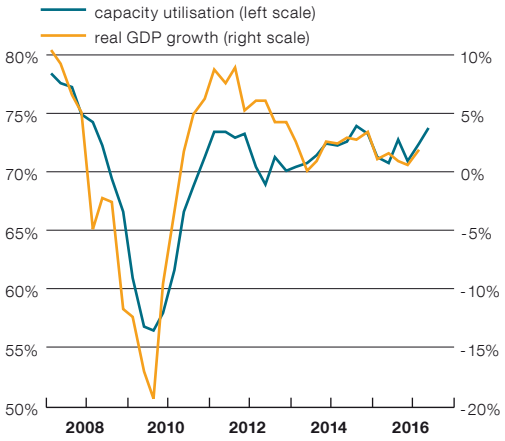
Source: Eurostat

in competition in the Baltic states by the electrification of an additional undersea cable. Weak potential GDP growth is reflected by low productivity growth, as GDP growth has been mainly built on rising employment since the crash that started in 2008. A similar development can be found in other advanced economies (see Figure 13), where productivity growth has lagged a long way behind its earlier rate. Rising employment is largely a cyclical phenomenon though, and it is losing its capacity to support economic growth.

Industrial companies have the space to increase their production without needing to make major investments, though this would need production capacity to be used more

efficiently. Capacity in Estonia is on average used less than in similar industries in the rest of Europe (see Box 3), but capacity use is now close to its long-term average (see Figure 14). Further improvement in this indicator will need production to be made more efficient than in the years before the crisis. The reasons why capacity is underused vary between companies, but overall the outcome is the same; machines are standing idle for longer than those of competitors are. The inefficient use of production capacity may be one reason why investment is larger as a share of GDP in Estonia than in other countries with similar economic growth.

Figure 14. Capacity utilisation and economic growth



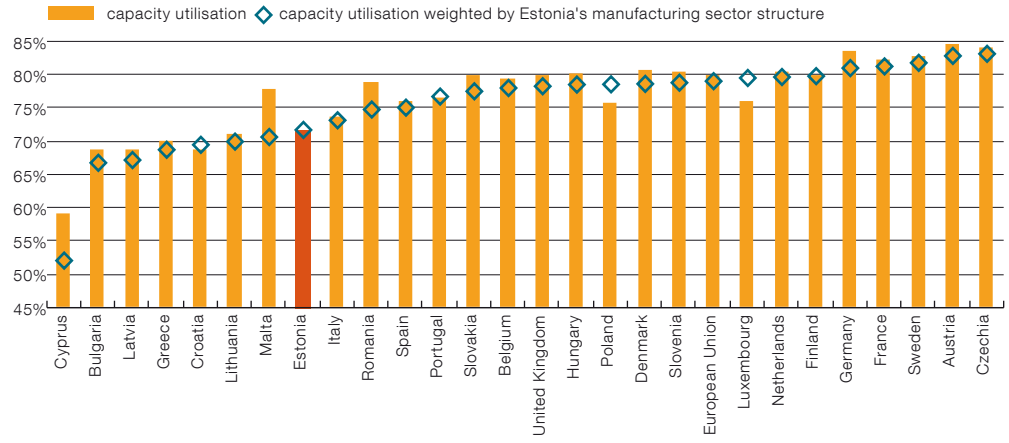
Sources: European Commission, Statistics Estonia

Box 3: The capacity utilisation rate in Estonia and the rest of the European Union

The capacity utilisation rate is an indicator used in analysis of the economic cycle as it reacts quickly to negative shocks that hit an economy and helps explain the volatility in the production cycle that is not related to technological development or capital deepening. Long-lasting differences in different countries between the capacity utilisation rates of apparently similar companies point to differences in efficiency and consequently in productivity. There is a strong correlation between productivity levels and capacity utilisation in the countries of the European Union, as 1% higher capacity utilisation in a country corresponded to 2.7% higher productivity in the years 2000 to 2014.

There is probably a correlation between factors that affect efficiency, and the direct impact on productivity of the utilisation of equipment is actually smaller. The capacity utilisation rate of industrial companies in Estonia is among the lowest in Europe (see Figure B3.1). From the start of 2005 to the second quarter of 2016, the capacity utilisation rate in the European Union averaged 80%, while in Estonia it was 72%. The difference was partly due to the difference

Figure B3.1. Capacity utilisation in selected countries 2005 to Q2 2016 average



Sources: Statistics Estonia, European Commission, Eesti Pank

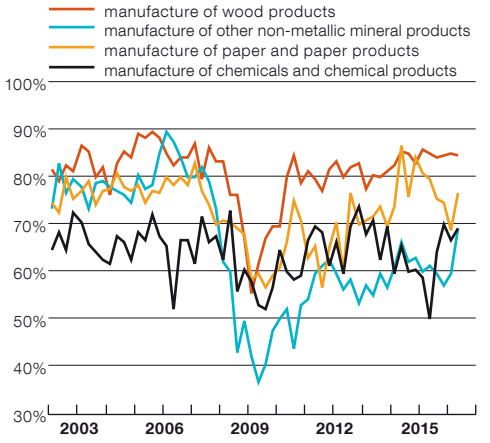
in the structure of the industrial sector, though this only explains one percentage point of the difference. If Estonian industrial companies were to use their capacity at the same intensity as the European Union average for similar industries, unit elasticity suggests the value added of manufacturing in Estonia would be around 10% more than it is now.

Estimates of the level of capacity utilisation are based on industry surveys, so there may be some subjectivity in the figures. The method of collecting the data is similar in all countries though, and so the data are comparable. As this is a business's own view of its capacity utilisation, it should not be seen as a reflection of efficiency only but rather of the potential the business managers identify as unused.

One reason why production capacity is used less than in other European Union producers could be the focus on small one-off orders, which need production capacity to be kept available so that orders can be completed quickly when they come in. This is noted quite often in the rhetoric about Estonia's competitive advantage lying in its great flexibility. The data do not bear out this view though. Surveys covering the level of capacity utilisation also have a question on the length of current orders. The length of the period covered by orders does not explain the difference between levels of capacity utilisation in different countries, but it does show changes in them over time.

Changes in the level of capacity utilisation can be sharp and are asymmetric with respect to the business cycle, as the divergence of the utilisation level from its usual absolute value is larger at the low point of the economic cycle than when an economy is heating up. After a recession there may be long periods where capacity utilisation is below its historical average, as an economic crisis may have changed the structure of demand. This is seen in the capacity utilisation levels of industrial companies in Eastern Europe in the 1990s, which were lower than in the next decade because the collapse of the Soviet Union changed the structure of demand substantially. Levels of capacity utilisation in some branches of industry, such as construction materials, have remained lower than before since the economic crisis of 2008–2009 (see Figure B3.2). The utilisation has returned to pre-crisis levels in most branches of industry though.

Figure B3.2. Capacity utilisation in selected industries

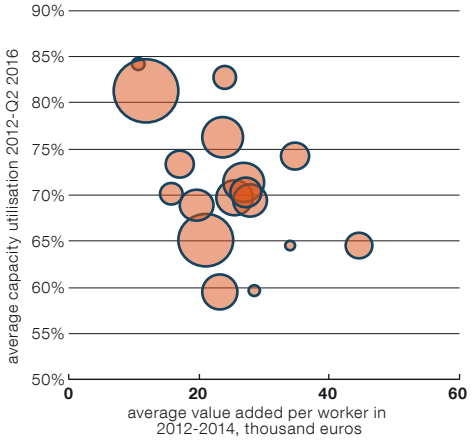


Source: European Commission

The level of capacity utilisation can be affected by the stage of development. Industries with low productivity and lower competitiveness than competitors in countries with cheap labour may have old equipment that it is no longer worth using. Alternatively, the loss of competitiveness can reduce investment and so industries with low productivity do not create excessive capacity and have to use the resources they have more intensively. This appears to be the case in Estonia as industries with low productivity have utilisation levels above the average. The average levels in the European Union for such industries are still higher than in Estonia, but below the overall average. Industries with high productivity have capacity utilisation levels below the average (see Figure B3.3).

More efficient use of equipment is one possible source of economic growth on the supply-side. Better organisation of work and sales work may be able to raise production significantly in the industrial sector without massive investments being needed. Keeping more production capacity idle than competitors do means making relatively large investments and this may be one reason why Estonia has a high ratio of investment to GDP in international comparison. As the capacity utilisation level in most industries is approaching its pre-crisis average or has already passed it, further increases in the intensity of use of production capacity will need to come from improving working processes.

Figure B3.3. Capacity utilisation in selected industries



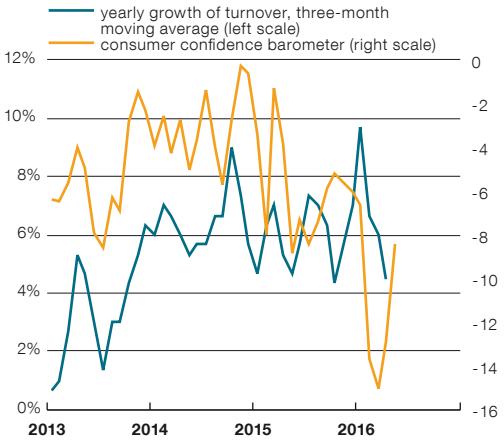
Sources: Statistics Estonia, European Commission, Bubble size corresponds to value added in the industry

DOMESTIC DEMAND

Having dropped sharply at the start of this year, consumer confidence bounced back in May, though households remain more pessimistic than they were last year. Worries have particularly increased around the general performance of the economy and future levels of unemployment, though in March and April the opinion of respondents about their own family's financial circumstances was also less positive. As households had already limited their consumption growth and increased their savings last year, the loss of confidence is unlikely to have led to a sharp correction in consumption habits.

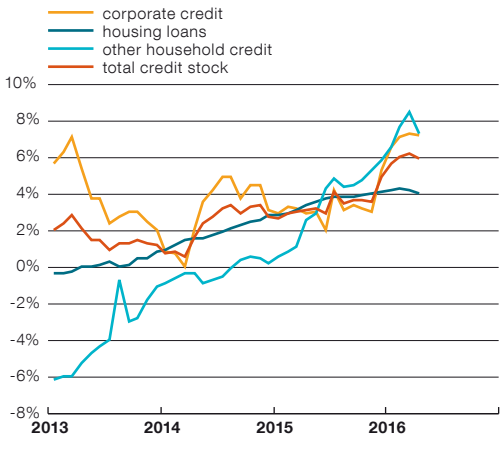
Yearly growth in turnover volume at trade enterprises, which covers a large part of private consumption, is still fast (see Figure 15). Growth climbed back to an average of 6.7% in the first four months of the year, having slowed temporarily at the end of last year. This was affected by higher sales of fuel in January ahead of a rise in excise, without which growth would have remained at a similar level to that of the four quarters of 2015. Growth continuing at this rate is in line with the development of disposable household income in the first quarter, as yearly wage growth increased but the impact of higher social benefits and a lower tax burden on labour was smaller than last year. The stock of household consumption loans was 7% larger in April this year than it was a year

Figure 15. Turnover volume for retail companies



Sources: Statistics Estonia, European Commission

Figure 16. Annual credit stock growth



Source: Eesti Pank

previously, primarily because of growth in car leases (see Figure 16). At the same time, household deposits continued to grow fast, at a rate of 7% in the first quarter.

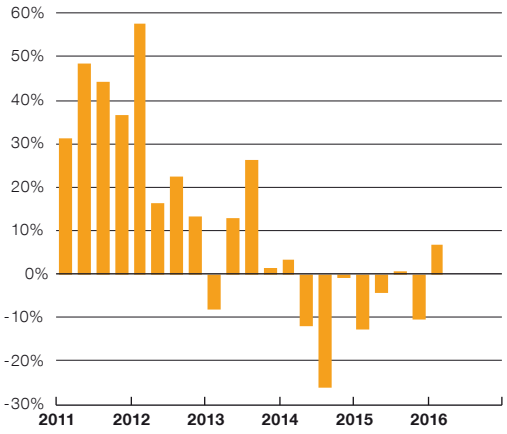
Data from the Tax and Customs Board show investment by VAT-registered companies was 7% larger in the first quarter than a year before (see Figure 17). This means that after two years, investment in the business sector might have stopped falling at the start of this year. Increased imports of machinery and equipment indicate a recovery, as does the improved assessment by construction companies of their portfolio of orders, as seen in the figures from the Estonian Institute of Economic Research. Together with investment activity, corporate borrowing also increased at the start of this year, and yearly growth in the stock of loans taken from the banks operating in Estonia picked up to about 7% by the end of April.

Growth in transaction volumes in the residential property market has slowed. In the first quarter of 2016 the yearly growth in the number of transactions for apartment ownership slowed to 4%, from 11% in the fourth quarter (see Figure 18). Conditions are still favourable for buying residential property as loan interest rates are low (see Figure 19), and falling inflation and relatively fast wage growth have meant that the affordability of real estate has not worsened. Real estate also offers a way to invest savings, and for this reason the share of transactions with apartments that do not involve a loan has increased.

EXTERNAL BALANCE AND COMPETITIVENESS

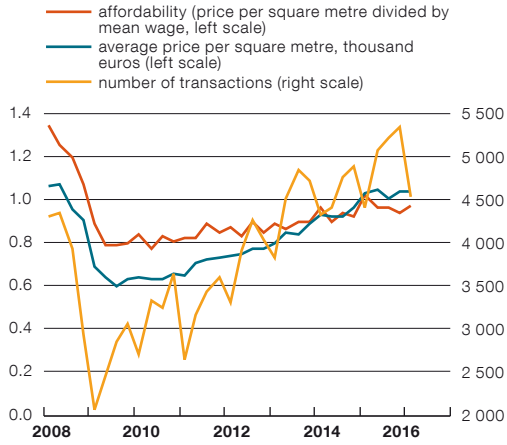
Exports of goods and services were down 1% at current prices over the year according to the flash estimate of the balance of payments for the first quarter, and down some 9% on the previous quarter. The main reason was the fall of 2% in exports of goods from the same period of the previous year. Problems in the oil industry were not resolved and the turnover of exports of mineral products was around 30% lower than in the first quarter of last year. Exports of food products, metal products and machinery and equipment also contributed to the decline in exports to a smaller extent.

Figure 17. Yearly growth in fixed capital investments of VAT payers



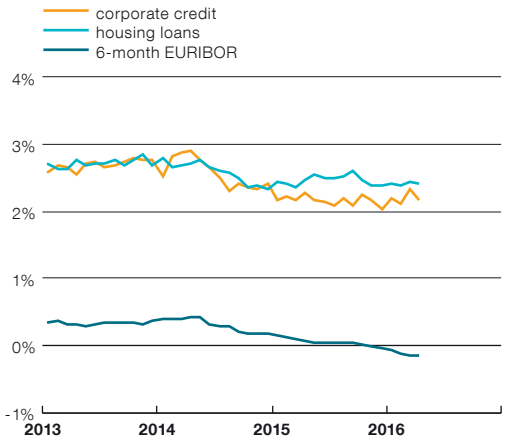
Source: Tax and Customs Board

Figure 18. Transactions with apartments



Sources: Land Board, Statistics Estonia

Figure 19. Bank lending rates



Sources: Eesti Pank, European Central Bank

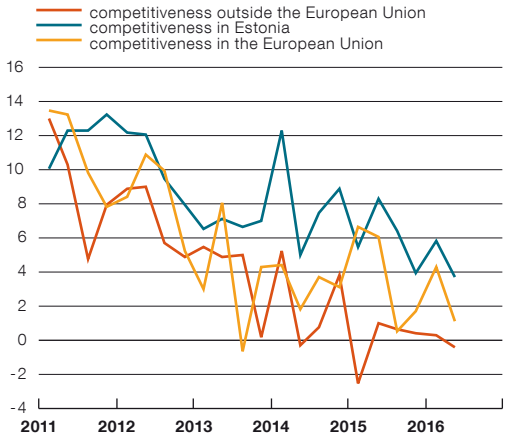
Exports of services were up 1.5% in the first quarter. The same trends as at the end of last year have continued in the service sector. Exports of transport services have fallen further, and the volume of exports of travel services was also somewhat smaller. The problems in both sectors are indirectly linked with Russia, as transport services have particularly lost out in transit flows through Estonian ports, which has reduced orders for several service providers in the sector. Smaller trade volumes also mean that the general volume of goods transport services in the balance of payments was less. The reduced purchasing power of Russian tourists can be observed in exports of travel services. The number of Russian tourists visiting Estonia fell by 25% last year, and was down a further 10% over the year in the first quarter of this year.

Estimates of improvement in competitiveness have weakened. Sentiment surveys show Estonian companies saw the improvement of their own competitiveness in the second quarter less optimistically than a year or a quarter previously. The worst assessments were of competitiveness in markets outside the European Union, where the combined figure worsened slightly (see Figure 20). However, estimates looking three months ahead for export orders, output volumes, sales prices and employee numbers were generally good in the second quarter, in the context of the past two years.

Estonia's nominal effective exchange rate (NEER) strengthened in the first quarter by around 1.5% on the previous quarter and the previous year. The main cause was the depreciation of the Russian rouble against the euro (see Figure 21). The real effective exchange rate deflated by unit labour costs was 2% stronger in the fourth quarter than at the same time a year earlier. Growth in unit labour costs was driven in the second half of 2015 by manufacturing, where it was around 10%, and construction, where it reached some 13%.

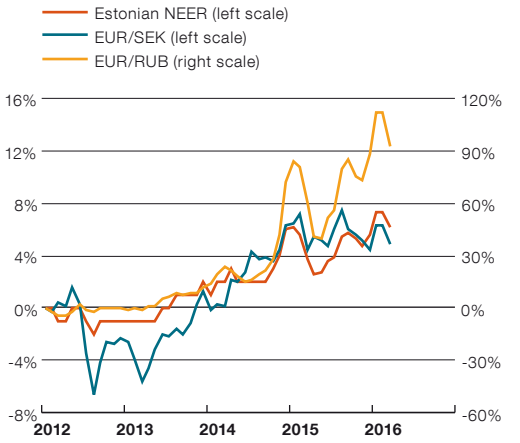
The flash estimate for the first quarter shows the deficit on the current account of the balance of payments was 119 million euros, or 2.2% of the GDP of the period, which is about twice what it was in the same quarter last year (see Figure 22). The deficit was due to

Figure 20. Assessment of competitiveness, industry survey (seasonally adjusted)



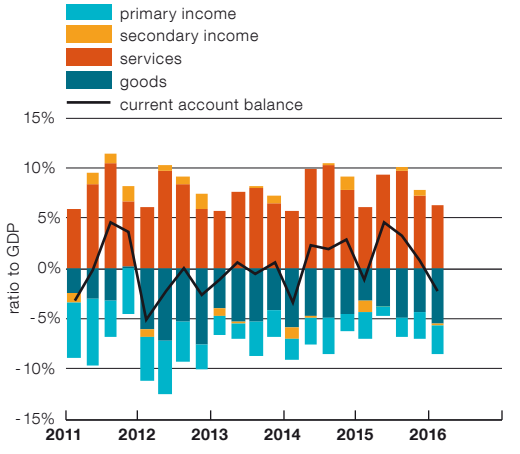
Source: European Comission

Figure 21. Change in the euro exchange rate and NEER (January 2012 = 0)



Sources: Reuters, Eesti Pank

Figure 22. Current account



Sources: Statistics Estonia, Eesti Pank

the combined impact of a deficit on the goods account and increased outflows of investment income. Investment activity has shown signs of gradual increase, as imports of capital goods were up 18% in the last two quarters on the same period a year earlier, and data from tax declarations to the Tax and Customs Board also reflect some growth in investment.

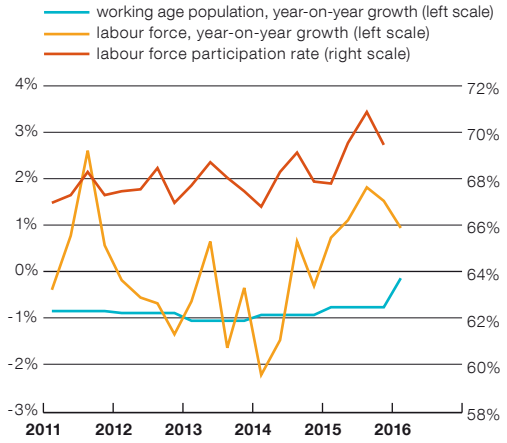
Imports of goods were up 2.9% over the year in the first quarter, and the balance of the goods and services account fell to close to balance. Imports of machinery and equipment increased by 4% over three quarters, and imports of transport vehicles increased by a total of 17%. The biggest outflow of investment income in the first quarter mainly reflects a faster outflow of direct investment income. The volume of equity invested in Estonia from abroad fell in net terms for the second quarter in a row. The deficit on the current account in the first quarter is in line with the Eesti Pank December forecast, and is quite a normal phenomenon when seen in a longer perspective. The Estonian economy was a net borrower again after two years.

THE LABOUR MARKET

The population increased in 2015 for the first time since independence was regained[14]. Around half of the growth of 0.2% was due to a one-off upwards correction, but positive net migration was double the natural population decline. The number of people of working age declined by 0.16% in 2015, which is a notably smaller fall than in previous years (see Figure 23). On top of the one-off upwards correction, migration flows have considered unregistered migration too since 2015, meaning the latest observation of the migration balance is not fully comparable with those of previous years.

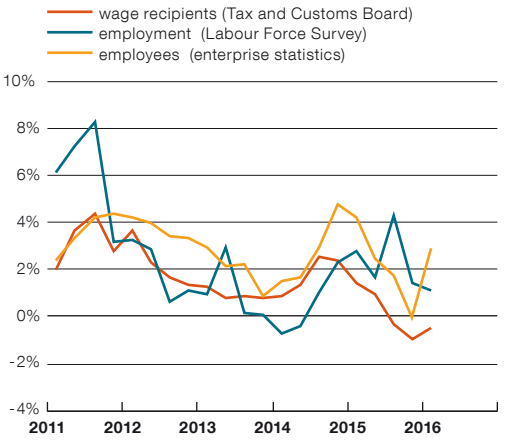
The labour force participation rate was 68.6% of people of working age in the first quarter of 2016, which is 0.8 percentage point more than in the same quarter of 2015. As a result the labour force in the economy continued to grow even though the working age population shrank (see Figure 23). The labour force participation rate was unchanged from the previous quarter in seasonally adjusted terms. This is probably partly a reflection of more moderate growth replacing the rapid growth in the year and a half following the impact of the launch of the register of employees. As in the past year, the number of labour force participants increased over the year because of higher participation among the over-50s.

Figure 23. Labour supply



Source: Statistics Estonia

Figure 24. Employment year-on-year growth



Sources: Statistics Estonia, Tax and Customs Board

Data from the labour force survey show employment grew in the first quarter of 2016 by 1.1% over the year and was slightly up on the previous quarter too (see Figure 24). Data from the Tax and Customs Board show 0.3% fewer people receiving wages paid out at the start of the year than a year previously, though

14 There is a one-off jump in the statistics in 2000 because the data for 2000–2010 were corrected upwards following the results of the census of 2011.

the seasonally adjusted number was higher than in the previous quarter.

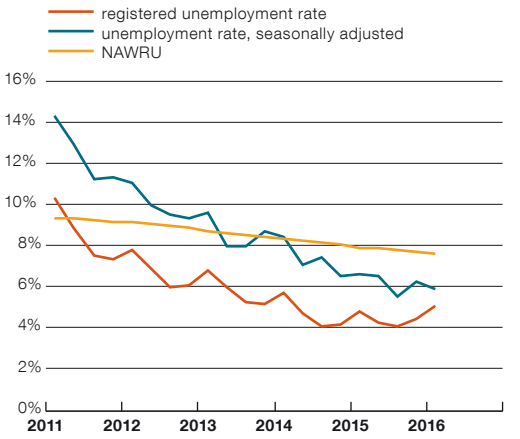
The unemployment rate reached 6.5% in the first quarter of 2016, which is about as high as a year before (see Figure 25). Seasonally adjusted unemployment was slightly lower than in the fourth quarter of 2015, and the share who were long-term unemployed fell from 38% last year to 24%. The number of long-term unemployed fell quickly, by 42%, at the same time that the number of short-term unemployed continued to rise. Having increased for about half a year in 2015, registered unemployment fell at the start of 2016 in quarterly terms

The match between jobs and labour has improved in recent years. This is indicated by the decline in available labour, which has not been accompanied by a build-up of vacancies. The relation between vacancies and the unemployment rate is shown by the Beveridge curve (see Figure 26), which has shifted closer to the origin of the axis. The fall in unemployment at the start of 2016 means that the reversal in the curve seen at the end of last year was only temporary.

The natural unemployment rate was estimated by Eesti Pank to be higher at the start of 2016 than the actual rate. This is indicated by continuing growth in unit labour costs, which was slower than in 2015, but still positive. The position of employees in wage negotiations is strong, which is illustrated by the average wage rising even as company profits shrink.

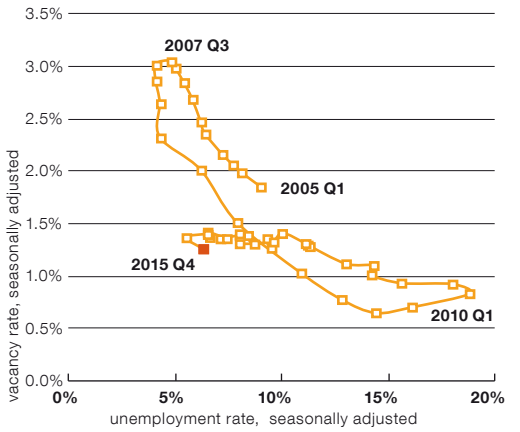
The yearly rise in the average gross monthly wage reached 6.4% in the final quarter of 2015, and increased further to 8.1% in the first quarter of 2016. The acceleration was driven by three main factors, which were bonuses; structural changes, as the share of workers in jobs paying less than the average wage decreased and the share of high-wage jobs increased; and to a smaller extent the higher number of days worked than in the previous year because of the leap year. As labour taxes did not change significantly in 2016, net wage growth slowed and was about the same as gross wage growth (see Figure 27). Upwards pressure on wages comes from the stress in the labour market that

Figure 25. Unemployment



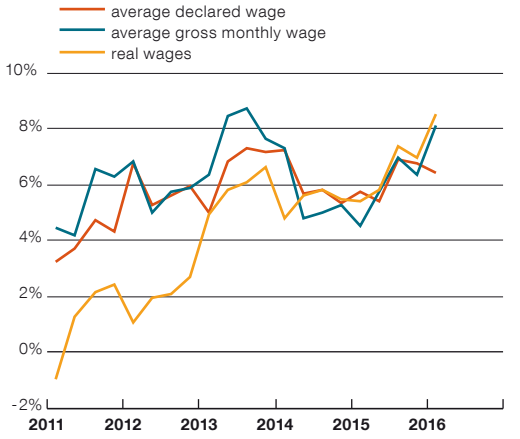
Sources: Statistics Estonia, Töötukassa, Eesti Pank

Figure 26. The Beveridge curve



Sources: Statistics Estonia, Eesti Pank

Figure 27. Yearly change in average wages

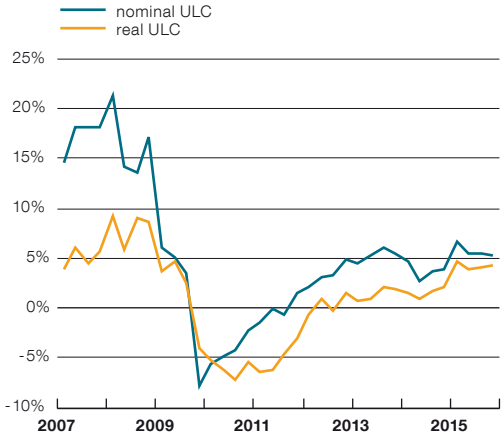


Sources: Statistics Estonia, Tax and Customs Board

is caused by the shortage of available labour and the small number of young people entering the labour market. Wage growth has equally been boosted by the minimum wage rising faster than the average wage. The rise in the minimum wage affects not only those who earn the minimum wage itself, but also those who earn a wage a little above it, as companies try to preserve the wage structure within their organisation.

Having fallen in 2015, labour productivity increased at the start of 2016. Wages still grew faster than productivity, so the unit labour cost rose (see Figure 28), but the rise in the unit labour cost was smaller than it was last year.

Figure 28. Unit labour cost growth

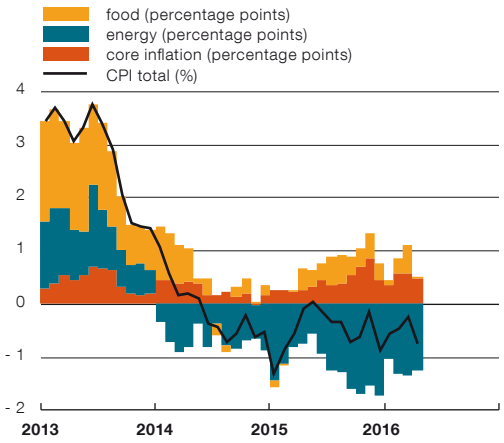


Source: Statistics Estonia

PRICES

The fall in consumer prices in Estonia is into its third year, and is due to external factors. Consumer price deflation deepened in the first quarter of 2016 to 0.4% principally because prices for oil and food were down on world markets (see Figure 29). Commodities prices have been falling globally for longer than was previously forecast as economic growth in emerging economies is currently supported more strongly by domestic demand but global growth has not yet pulled out of its trough at the rate hoped for.

Figure 29. CPI growth



Sources: Statistics Estonia, Eesti Pank

The fall in energy prices was broadly based in the first quarter, and was a consequence of oil being cheaper. Motor fuels were down 10% over the year in the first quarter, while natural gas was down 19% and heat was down 11%, the cost of both of these also being largely dependent on the oil price. Household consumers were able to increase their consumption of other goods because the oil price was lower. The real purchasing power of households was lifted by 1.2% during the year by the fall in energy prices. At the same time the lower oil price put Estonian oil processing companies into difficulty. This has an indirect effect on consumer prices and is passed into price statistics with a long lag by reduced economic activity and higher unemployment.

The price level of food has risen throughout the year despite food commodities being cheaper on world markets, because excise rates were raised. Food commodities continued their broad-based fall in price on world markets, and prices have now dropped to the lowest level they reached during the economic crisis in 2009. Food prices within the European Union have been helped downwards by liberalisation of the single market rules and Russian sanctions on imports, which have pushed producer prices for food down even further. The farm-gate prices for dairy and meat products in Estonia have fallen more during the current downturn of the cycle than the average in the European Union, as has been the case previously too. This has caused difficulties for farmers and food producers. The biggest falls in prices in the consumer food basket were of 7% in dairy products and 1.7% in meat products, which between them are one third of the basket.

Alcohol prices rose at the same time in the food basket following a rise of 15% in excise from February. Prices of fruit and vegetables have been as volatile as usual this year rising fast in the first months of the year and then falling in April.

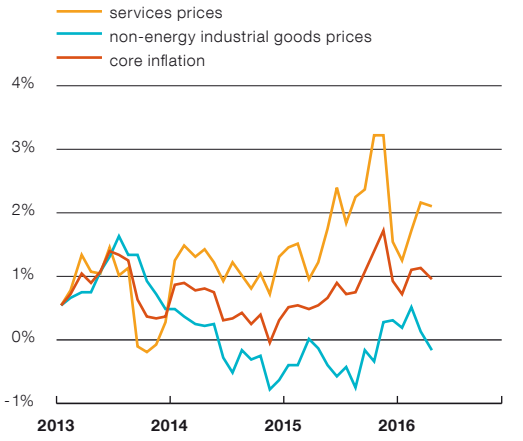
Conditions in the domestic economy, primarily rising wages and falling unemployment, have lifted core inflation in recent years. Core inflation has mainly been boosted by rises in prices for services (see Figure 30). Wage growth has remained relatively strong even while economic activity has been weak, and the unemployment rate has fallen below the estimated natural rate of unemployment, making it harder and harder for companies to find qualified workers, which is causing wage and inflation pressures in the economy.

Services inflation has been in line with higher labour costs, while the impact of lower prices for imported inputs is only noticeable in a few individual prices. Lower prices for transport services is one example, as they are probably partly due to cheaper oil prices. The depreciation of the rouble last year reduced the purchasing power of Russian tourists and pulled down prices for accommodation services. Some services being cheaper is generally the exception though, as service price inflation has largely been led by higher rents and higher prices for leisure services.

The price level of consumption goods has not significantly changed in the past two years in Estonia, though retail sales volumes increased 18% and wages 13%, while unemployment fell to 6.7%. The link between inflation and unemployment has weakened in many European Union countries, or in other words, the short-term Phillips curve has become flatter. Presumably the increased trade and competition have made prices of goods less susceptible to domestic price pressures, and companies have borne part of the increase in costs themselves. Furthermore, the price level for consumer goods in Estonia is already quite high at 88% of the European Union average, while income stands only at about 71% of the European union average.

The short-term inflation expectations of companies have fallen to historically low levels. Surveys in recent years have shown the share of companies saying they are able to raise prices declining steadily. However, there was a modest rise in the first quarter in consumer expectations of inflation for a year ahead.

Figure 30. Core inflation and its components



Source: Statistics Estonia

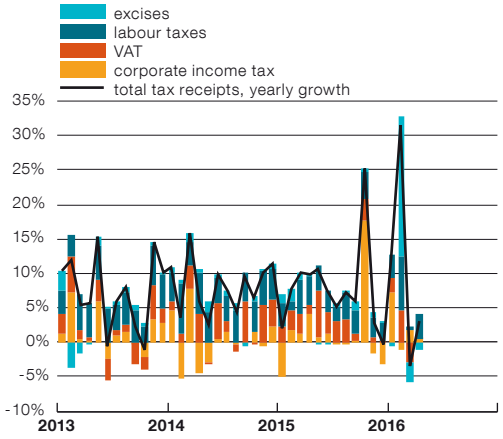
GENERAL GOVERNMENT FINANCING

State budget tax receipts grew 12% in the first quarter of this year as goods were stockpiled in anticipation of the rise in excise rates (see Figure 31). Before excise rates were raised in February, almost three months worth of motor fuel and strong alcohol were bought, which caused a lot of volatility in monthly tax receipts. As consumption of both these excise goods has been generally declining in Estonia in recent years, it is probable that the entire windfall effect in government revenues will disappear during the first half of the year at the latest. Growth in revenues from labour taxes has been quite fast and is in line with developments in wages and employment. Revenues from income tax on legal entities have been affected by higher dividends paid out by companies, as dividends have been increasing faster and faster in recent years despite the drop in profits.

Social benefits continued to grow quite quickly at the start of the year, with a notable contribution coming from unemployment insurance payments. The social benefits paid out in the first quarter of 2016 from the budget of the Ministry of Social Affairs were 6.6% more

than a year earlier, with the largest part of the rise being accounted for by pensions, because of their large share of the total. Pensions paid out from social tax received increased by 6.5% over the year, though growth will slow in the second quarter as the pension index will drop from 1062 last year to 1057. Growth in family benefits was affected primarily by increased child support. The amount paid out in unemployment insurance by Töötukassa has been larger than before, and was 42% more in the first quarter than a year previously. The growth in social transfers will still remain much slower this year than it was last year.

Figure 31. Tax receipts in the state budget



Source: Tax and Customs Board

ECONOMIC FORECAST 2016-2018

The Eesti Pank economic forecast is produced jointly by experts from the central bank's Economics and Research Department and Financial Stability Department. The Eesti Pank forecast is a part of the joint forecast for the euro area produced by the euro area central banks and the European Central Bank, which uses shared assumptions about the external environment. The assumptions about the external environment cover the interest rates in the euro area money markets, the exchange rate of the euro and commodity prices. The economic forecasts produced at the same time by the other central banks of the euro area are used for the assumptions for demand and prices in Estonia's trading partners. The forecast external assumptions and the Estonian economic indicators are based on information available as at 17 May 2016. The Eesti Pank forecasts are compiled using EMMA, the macro-model of the Estonian economy developed and regularly updated by Eesti Pank.

THE INTERNATIONAL ECONOMIC ENVIRONMENT

The outlook for growth in the global economy is weaker than in the December forecast. Although the global economy will continue to grow in the longer term, the rate of growth in the main economic areas is slower this year, and the recovery is uneven across regions. The outlook for global growth continues to be hampered by geopolitical tensions, and so forecasts are affected by substantial risks. The advanced economies that have so far stood out for their moderately fast growth, the USA and the United Kingdom, have now seen the slowing of economic growth, and it is expected that growth in those countries will be in the range of 1.8–2.3%[15] in 2016. It is expected to speed up from 2017. The outlook for the Japanese economy is clearly more pessimistic than was forecast earlier. Inflation in advanced economies will remain firmly below 2% this year, though it should rise later on. Inflation in the euro area should be supported in the future by the continuing accommodative monetary policy of the European Central Bank and by its wide-ranging asset purchase programmes.

The economic outlook for emerging countries is worse than in the December forecast. The growth forecast for some emerging economies, such as China has been raised slightly from the autumn because the volatility in financial markets has calmed in recent months and the economic policy measures taken by the government are supporting growth. The continuing reorientation of the Chinese economy towards consumption-based growth rather than investment-based growth will mean though that in the future it should be taken into account that growth in the Chinese economy will be slower than in previous years and will be around 6% rather than the 7% seen until now. Inflation pressures are moving in different directions, as they are generally rising in the commodities-exporting countries but easing in others. At the same time the lower commodities prices will restrict opportunities for faster growth in commodity exporters. In the current IMF forecast the consolidated indicator for growth in emerging economies is 0.4 percentage point lower for this year than in the October forecast, and 0.2 percentage point lower than in the January forecast, and growth of 4.1% is expected[16].

Economic expansion will continue in the euro area in the coming years with increased support from investment backing up private consumption. Base interest rates will remain favourable throughout the forecast horizon and will pass with a lag into improving the financing costs of the non-financial sector. The asset purchase programme of the euro area should culminate in March next year, reducing the cost of funding for companies and helping asset prices to rise. Growth in external demand and exports of the euro area will remain quite moderate this year even as domestic demand grows rapidly. Exports will grow more slowly than imports, meaning that the smaller contribution from net exports will have a restraining effect on economic growth. Export growth will accelerate in future as external demand increases and that

15 European Commission spring forecast 2016.

16 World Economic Outlook (WEO), IMF, April 2016.

Table 2. External assumptions in the forecast

					December 2015 projection		
	2015	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**
Foreign demand growth (%)*	-0.2	2.4	3.8	3.9	-1.5	2.6	3.8
Oil price (USD/barrel)	52.4	43.4	49.1	51.3	53.8	52.2	57.5
Interest rate (3-month EURIBOR, %)	-0.02	-0.25	-0.3	-0.25	-0.02	-0.19	-0.12
USD/EUR exchange rate	1.11	1.3	1.14	1.14	1.11	1.09	1.09

*Foreign demand growth is the weighted growth of imports of trading partners
Source: European Central Bank

will start to lift GDP growth in the euro area from next year on. The positive effect of the structural reforms introduced earlier and the improvement in competitiveness will aid a sustainable increase in growth. Competitiveness will be improved by product and labour market reforms, and by price and wage growth having been lower in the euro area in recent years than in trading partners. Price competitiveness is also aided by the increasing difference between the monetary policy directions of the euro area and its main trading partners.

Inflation in the euro area will approach a level in the coming years that is in line with the mandate of the Eurosystem. The fading out of the negative base effect of energy prices, favourable interest rates, increasing domestic demand, and faster wage growth in response to recovering employment will be passed on into both producer prices and consumer prices. It is assumed that the 3-month EURIBOR will remain negative in the years ahead, and will be 10-20 basis points lower than was forecast in December (see Table 2). The euro area will exit its deflation this year, and inflation will reach 1.6% at the end of 2018.

Despite the continuing uncertainty in the external environment, the outlook for growth in Estonia's main trading partners is relatively good. Strong domestic demand and increased government spending let the Swedish central bank raise its 2016 growth forecast to 3.7% in April. Growth will slow a little in Sweden next year, but it will still maintain a good tempo. The Finnish economy exited its recession last year. Growth is recovering only slowly in Finland, as it is still held back by consolidation of the government budget and the weak purchasing power of households. In the near future, the recovery in growth in exports and in the industrial sector will also be modest. The outlook for growth in the Latvian and Lithuanian economies is supported by strong domestic demand, but the weakness of the Russian economy means the low level of activity in foreign trade is a worry. The negative effect from this should dissipate, and the European Commission expects growth in Latvia and Lithuania to be supported by domestic demand and recovering exports in 2017 and to reach 3.1%. Like in Estonia, wages growing faster than productivity is a concern in Latvia and Lithuania, as it harms competitiveness and is not sustainable over the long term. The Russian central bank finds that sluggish economic activity and the impact of sanctions will keep the economy in recession this year by 1.4%. The central bank expects growth to remain close to zero in 2017, assuming an oil price of 30 dollars a barrel. Geopolitical tensions will be joined in putting pressure on the Russian economy by the low oil price, falling investment, and a reduction in household real incomes.

Commodities prices will remain low moving forwards. The oil price will remain lower in the current forecast horizon than was forecast in December, averaging 51.3 dollars per barrel in 2018. The oversupply in the oil market of recent months has disappeared to some extent, and emerging economies in Asia have supported an increase in demand. The result is that the oil price has risen by some 70% from its lowest point in January. However, oil producers have not managed to agree on any freeze in oil production volumes. The main opponent is Iran, which has returned to the oil market and wants to get its production volumes up to where they were before sanctions were introduced. The International Energy Agency finds that the low oil price of the past two years has reduced investment in the oil sector by 40%, primarily in North and South America and in Russia. As a result an increase in dependence on Middle-Eastern

oil can be expected in the years to come. Food prices have been falling since 2012, but last year the strongest El Niño on record caused severe droughts and floods, which will raise food prices this year. However, the impact of bad weather on food prices will be short-lived, and prices for food commodities will remain subdued in the near future.

REAL GDP GROWTH

Eesti Pank forecasts that the Estonian economy will grow by 1.8% in 2016, 2.9% in 2017, and 3% in 2018. The role of exports and investment in economic growth will increase. Growth in private consumption will slow a little, but it will remain at a similar rate to GDP growth in future. The outlook for growth is a little more pessimistic than in the forecast published last December because the external environment is weaker. The forecast for growth for 2016 to 2018 is presented in Table 3 together with the forecasts for the other important macro indicators for the Estonian economy.

The potential growth of the economy for the next few years is around 3%. Long-term growth will slow because the gap to the complexity of production in the stronger European countries has narrowed over time. This makes it harder and harder to introduce new technological solutions, and means the difference between income growth and the European average is smaller. Low productivity growth has been a problem in several advanced economies, where the rate of growth has been below its earlier average for the past five years, like it has been in Estonia. Productivity may pick up generally in advanced economies as the scars from the recession heal, and that

Table 3.Economic forecast by key indicators*

					Difference from December forecast		
	2015	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**
Nominal GDP (EUR billion)	20.46	21.29	22.42	23.67	0.00	-0.16	-0.24
GDP volume**	1.1	1.8	2.9	3.0	-0.1	-0.4	-0.2
Private consumption expenditures***	5.0	2.6	2.7	3.2	-0.2	-0.9	-0.1
Government consumption expenditures	2.1	0.4	0.7	0.7	1.3	-1.2	-0.8
Gross fixed capital formation	-4.4	3.0	3.7	4.9	1.4	1.7	-1.1
Exports	-1.1	2.3	3.8	4.1	1.4	1.3	-1.1
Imports	-1.8	3.5	3.4	4.3	1.0	0.7	-1.4
Output gap (% of potential GDP)	-0.1	-0.7	-0.3	-0.1	1.0	1.0	1.0
CPI	-0.5	0.0	2.7	2.2	-0.1	-1.2	-0.2
Core inflation	0.9	1.0	1.2	1.3	0.1	-0.1	-0.2
Services	2.0	1.6	2.1	2.4	0.0	-0.4	-0.5
Non-energy industrial goods	-0.2	0.4	0.4	0.2	0.1	0.2	0.1
Energy	-7.0	-3.7	5.0	1.6	-0.3	-3.0	1.1
Food, including alcohol and tobacco	1.1	1.0	4.9	4.8	0.1	-1.4	0.1
HICP	0.1	0.6	2.9	2.6	0.0	-0.9	-0.2
GDP deflator	1.4	2.0	2.3	2.6	0.1	-0.5	-0.1
Unemployment rate (% of the labour force)	6.2	5.9	7.5	9.4	0.3	0.1	0.4
Employment****	2.9	-0.5	-0.2	-0.4	-0.4	-0.7	0.6
Average gross wage	5.9	4.9	5.0	5.0	0.8	0.1	-0.6
ULC	5.8	3.4	1.4	1.2	1.2	2.0	0.2
GDP per employee	-1.8	2.4	3.1	3.3	0.3	0.4	-0.8
Private sector debt, outstanding amount	4.9	5.4	5.1	5.4	0.4	1.1	0.2
Private sector debt, outstanding amount (% of GDP)	78.3	79.4	79.2	79.1	0.2	1.8	2.1
Current account (% of GDP)	1.9	1.4	1.0	1.2	0.1	2.0	0.8
Budget balance (% of GDP)	0.4	0.0	-0.1	-0.2	0.3	-0.1	-0.1
Cyclical component (% of GDP)	0.6	0.7	0.3	0.1	0.1	0.3	0.1
Temporary measures (% of GDP)	-0.5	-0.3	-0.4	-0.1	0.0	0.0	-0.1
Structural budget balance (% of GDP)	0.3	-0.3	0.0	-0.2	0.1	-0.4	-0.2

* Numbers reported are annual rates of change in per cent, if not noted otherwise;
** GDP and its components are chain-linked;
*** including NPISH;
**** employment by domestic production units
Sources: Statistics Estonia, Eesti Pank

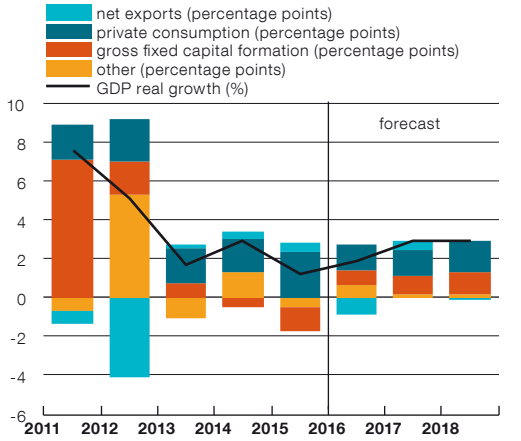
will have a positive impact on the outlook for the Estonian economy too. There is a lot of uncertainty involved in assessing the potential growth of the Estonian economy because it is small and open. In recent years the economy has been at the mercy of long-lasting negative shocks. Given how close Estonia is to the high-income Nordic countries though, and given its low wage level, positive developments are equally possible. Because the economy is small, one single company can have a big impact on its growth.

The long-term capacity for growth might start to be restricted though by the reduction in profitability that has been caused by labour income taking a larger share of the economy. This has reduced the attractiveness for investment and may lower the potential for growth. Equally, the slow real convergence of recent years has meant there is little empirical evidence on whether convergence with the average income of the European Union, particularly through technological development, continued at the same rate as before the crisis. Moreover, the majority of GDP growth in Estonia in recent years has come from the labour component, which is becoming exhausted as a source of growth.

Estonian GDP is close to its potential output. Capacity utilisation has reached close to a long-run average level given the structure of the economy. Labour market indicators are not so much in balance however, as the continuing rise in unit labour costs points to unemployment being below the natural rate. If developments turn out worse than expected, companies are not rushing to save on labour costs first of all, and so a positive gap has appeared in the labour market. This has so far been counterbalanced by the under-utilisation of technology. One way of restoring balance is for the imbalances in the labour market to be eased through a correction in wages, which would encourage increased investment. A second way would be to grow out of the imbalances with faster productivity growth than has been seen so far.

Growth in private consumption will slow over the forecast horizon together with the slowing of growth in real wages and social benefits. Rising incomes mean that consumption will still be an important component in growth (see Figure 32), but this growth will be held back by slower growth in disposable income and by the return of inflation. Fiscal policy will have a positive effect throughout the forecast horizon, as the tax burden on labour will shrink and social transfers will increase, though their effect will be smaller than in 2015. Buffers built up earlier will allow households to smooth their consumption, so saving will decline slightly during the forecast horizon. Growth in private consumption will slow this year to 2.5%, and will remain at around the same rate as overall GDP growth in the years ahead. A slowing rise in disposable income and a decline in the savings rate will lead growth in household deposits to slow in the years to come.

Figure 32. GDP growth by expenditure approach



Sources: Statistics Estonia, Eesti Pank

The impact of the factors that have caused corporate investment to decline has probably receded, and conditions favour an increase in investment during the forecast horizon. Growth in investment is supported by good financing conditions, recovering external demand and growing profits, a reduction in spare capacity in the industrial sector, and the start of a new budget period in the European Union. The reduction in investment in energy and in transport and storage will last over the medium term, but its impact on overall growth in investment has by now probably largely faded out. Data from the Tax and Customs Board show that corporate investment grew quite fast at the start of 2016. For the year as a whole corporate investment will increase by 2.9%, and growth will pick up over

time through revitalised foreign demand and more numerous orders. A faster recovery will be held back by uncertainty around the strengthening of demand, and the low capital intensity of growing industries.

Competition between banks in the corporate loan market will remain strong, but it will not get any sharper and interest margins will probably not fall any further. The stock of loans taken from banks operating in Estonia will increase during the forecast horizon a little faster than nominal GDP, like it did last year. Domestic lending will gradually replace lending from abroad however, as access to domestic loans has improved, investment by large energy companies that borrow abroad has been reduced, foreign investment has declined, and Estonian residents have bought companies back. Overall corporate indebtedness, or the ratio of debt liabilities to GDP, will not change significantly throughout the forecast horizon.

Rising wages and low unemployment together with favourable loan interest rates will encourage household loan liabilities to increase, though slower growth in real incomes and real estate prices will limit any further acceleration in growth in loan liabilities. Growth will increase only a little in the stock of residential property loans in the second half of the forecast horizon as disposable income increases, and it will remain below 5%. Lending conditions for households will not change significantly, and banks will maintain their conservative stance.

Rapid rises in real estate prices and in numbers of transactions in the past few years have now calmed down, and the risk of overheating in the real estate market has abated. The faster growth in investment in residential property came at the end of last year, when demand increased as incomes rose and confidence was high, and a large amount of new property came onto the market for sale. No significant reduction in demand is to be expected though, as the affordability of real estate will not deteriorate, interest rates will remain low, and high-quality new apartments will be added to the market constantly. As a result, investment by households will grow faster than the economy overall during the forecast horizon. Increased supply and slower growth in incomes will mean that prices for residential property will rise more slowly during the forecast horizon than they have in the past couple of years.

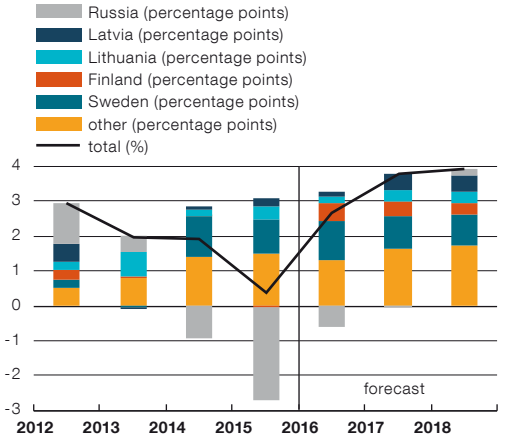
The contribution of general government investment to GDP growth will start to recover from 2017. General government investment growth will be 3.5 percentage points lower this year at 1.6% than it was in 2015 as the projects under the previous European Union budget period had to be completed by the end of last year, and it will take some time to be able to start using the funds for the new budget period to a large extent. Projects under the new budget period of the European Union will start on a larger scale from 2017, and they will be accompanied by increased investment funded by the state budget.

Exports will stop declining and growth will start to recover with support from stronger external demand. The sectors leading growth in goods exports in the near term will be furniture, including prefabricated houses, and timber. The problems in oil production will not be resolved even during the forecast horizon, as the oil price will remain low on global markets. For services, a continuation of the reduction in transport services is foreseen for 2016 and the flash estimate of the balance of payments for the first quarter of 2016 also shows a decline in travel services. There is no reason to assume any change to the previous trend of growth for the remaining sectors of services. Real growth in exports of goods and services is forecast at 2.3% for this year and a faster 3.8% for 2017. Faster growth in exports assumes a recovery in foreign demand, and the forecast for this is not significantly different from the December forecast. Faster growth in foreign demand will be led by Sweden, Finland and Latvia (see Figure 33). In this context, volumes of exports of both services and goods to Finland, which takes around 20% of total Estonian exports, managed to increase by more than the imports in the same groups did. A continuation of this trend would give a positive impetus to Estonian exports within the forecast horizon too.

The surplus on the current account will decline during the forecast horizon. The surplus will become smaller because of increased investment activity and by 2017 it should fall to around 1% of GDP. Reduced savings in the general government and private sectors will contribute to this. As the surplus on the current account shrinks, it is probable that the international net investment position will not improve in the near future at the same rate as in recent years. In the short term it is possible that liabilities will start to increase again.

The price competitiveness of companies will improve throughout the forecast horizon. Real unit labour costs will stop rising in 2016 and will start to fall in 2017. This will bring down the real effective exchange rate, allowing companies to use their price advantage to increase export volumes. Export prices will rise in the forecast horizon by around one percentage point more than import prices, which will improve the terms of trade for companies. It should be remembered however that no single indicator of price-based competitiveness, whether unit labour costs, the effective exchange rate, or any other, is able to explain fully the export behaviour of companies. Non-price competitiveness may be of even more importance (see Box 4).

Figure 33. Demand growth in trading partners

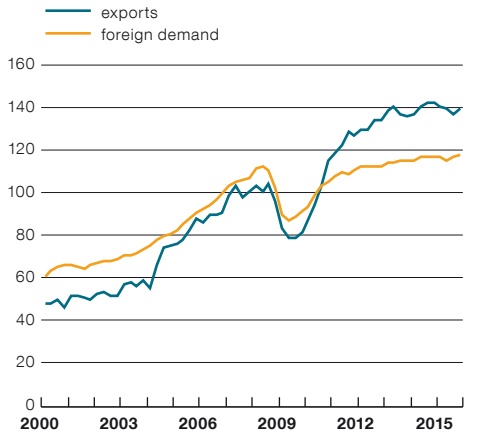


Sources: Eurostat, European Central Bank, Eesti Pank

Box 4: Export performance and competitiveness

Exports of goods and services are a key source of demand so the developments of exports are of great consequence for economic growth in a country. Economic growth has slowed recently in Estonia as exports to key markets have stagnated. It is important to forecast the performance of exports with some precision and doing so requires an understanding of the factors driving exports. It has proven extraordinarily challenging to pinpoint these factors; recent research at Eesti Pank and in other parts of the Eurosystem has looked more deeply into these issues.

Figure B4.1. Estonian exports at constant prices and foreign demand (indexes, 2010=100)



Sources: Statistics Estonia, European Central Bank, Eesti Pank

The export performance of a country is traditionally modelled or explained by two key variables, one that captures the demand for the country's exports from its trading partners, and one that captures the price or cost competitiveness of the country. This approach is also used for the forecasts for exports produced in Eesti Pank. The demand for a country's exports is typically computed by weighting the imports of its trading partners. Econometric analyses typically show that there is a close connection between foreign demand and the development of exports. Figure B4.1 shows the indices of the real value of Estonian exports and the demand from Estonia's trading partners.

There are many different measures of price or cost competitiveness. Price competitiveness is typically modelled as the real effective exchange rate, which is the foreign price level relative to the domestic price level, both measured in the same currency. Cost competitiveness is often proxied by relative unit labour costs, which are foreign labour costs per unit produced relative to domestic costs, both measured in the same currency. In both cases an increase in the index implies improved competitiveness.

Improved cost or price competitiveness makes it possible to lower export prices and this would be expected to lead to larger export volumes. This intuitive idea has received very mixed support in empirical studies. The relationship between competitiveness and export performance seems to differ across countries and over time and is often difficult to estimate precisely. In a recent study the coefficient of the competitiveness variable had what appeared to be the wrong sign for many countries, and it implied that improved competitiveness was associated with lower exports[17]. There seems to be substantial heterogeneity across countries and indexes of price or cost competitiveness[18].

A recent line of research has tried to identify any systematic component that appears to be of importance for exports but that cannot be explained by foreign demand or measures of price competitiveness. Using an unobserved components model it is indeed possible to find such systematic variation[19]. This makes it sensible to search for novel factors that might help to explain the performance of exports.

A large number of increasingly refined measures of price or cost competitiveness have been devised. One idea is that having better quality exports will allow a country to increase its exports even if measures of price or cost competitiveness worsen. This possibility has led researchers to devise and compute indexes of quality-adjusted or non-price competitiveness[20]. These indexes appear to help explain export performance, especially for emerging-market economies such as those in Central and Eastern Europe, which are exporting increasingly advanced products.

Another recent idea is that domestic demand and exporting might be substitutes, so that the extent of demand from domestic consumption and investment will affect export performance. Domestic producers might for instance look more actively for export markets if they cannot find buyers at home. Recent studies using data from Portugal and a panel of 11 euro area countries suggest that there might indeed be such an effect in the short-term[21],[22]. The effect is most pronounced when domestic demand declines, and it is arguably not very large in quantitative terms.

17 Christodoulopoulou, S. & Tkačevs O.: *Measuring the effectiveness of cost and price competitiveness in external rebalancing of euro area countries: what do alternative HCIS tell us?*, forthcoming in Empirica.

18 The same heterogeneity appears in a recent study seeking to assess the effect of different competitiveness measures on the current account balance; see Staehr, K. & Vermeulen R. (2016): *Competitiveness shocks and macroeconomic performance across euro area countries*, forthcoming in the ECB Working Paper series.

19 Algieri, B. (2015): *Price and non-price competitiveness in export demand: empirical evidence from Italy*, Empirica, vol. 42, no. 1, pp. 131-156.

20 Benkovskis, K. & Wörz J.: *Non-price competitiveness of exports from emerging countries*, forthcoming in Empirical Economics.

21 Esteves, P. S. & Rua A. (2015): *Is there a role for domestic demand pressure on export performance?*, Empirical Economics, vol. 49, no. 4, pp. 1173-1189.

22 Bobeica, E., Esteves P. S., Rua A. & Staehr K. (2016): *Exports and domestic demand pressure: a dynamic panel data model for the euro area countries*, Review of World Economics, vol. 152, no. 1, pp. 107-125.

This notion has been taken a step further in a recent working paper from the ECB[23]. The suggestion is that changes in domestic demand might affect export performance differently depending on the business cycle stance of the economy. Rising domestic demand may lead to a reduction in exports during booms but have little impact on exports during a downturn when there is lots of free capacity in the economy. This interdependence appears to be of importance in some of the countries examined but not in others.

It is clearly challenging to explain and forecast exports. The explanatory power of the real effective exchange rate or relative unit labour costs is modest and varies substantially across countries. There seems indeed to be a missing factor in the modelling of exports, and so a number of new ideas for explaining exports have been proposed recently, such as the effect of quality improvements, domestic demand dynamics and the capacity stance. None of these explanations are likely, however, to account fully for the missing factor. There is still a need for a deeper understanding of the interaction between exports, export markets and the domestic economy. It is safe to conclude that the export performance of many countries, including Estonia, will remain a source of surprises in times ahead.

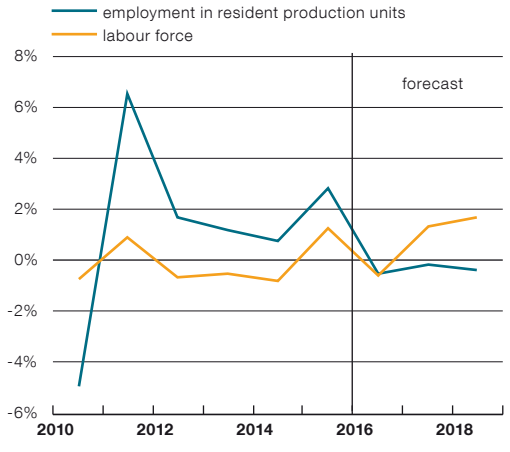
23 Belke, A., Oeking A. & Setzer R. (2014): *Exports and capacity constraints. A smooth transition regression model for six euro area countries*, ECB Working Paper, no. 1740.

In contrast to the developments of previous years and the assumptions in the long-term population forecasts, the net migration balance in 2015 was positive. This was driven by the young in particular. The forecast assumes that net migration will remain positive in the years ahead, but will fall. Box 5 gives more details on the population forecasts used. Alongside the fall in net migration, the effect of natural demographic processes will slow the rate the working age population shrinks at, as the larger cohorts born after the year 2000 reach working age and the small cohorts born during the second world war exit it. Overall the number of people of working age will fall more slowly during the forecast horizon than was expected in the previous forecast, declining at an average of 0.4% per year.

The labour force participation rate will increase during the forecast horizon, and this will offset the decline in the working age population. A rising retirement age and improved health will increase the labour force participation of older workers smoothly and slowly, but the working capacity reform will increase the participation rate noticeably in 2017–2018 by more than one percentage point a year. The participation rate may be brought down by the effect of the administration reform in rural areas and by redundancies in the oil shale sector. In both cases those who lose their jobs will generally be older workers who will find it hard to find work locally, and so there is a danger than they will exit the labour market.

Employment in Estonian companies and institutions will be slightly lower in 2016 than it was in the previous year, and during the forecast horizon it will decline gradually together with the working age population (see Figure 34). Rapid employment growth in 2015 was boosted by the reduction in the shadow economy following the introduction of the register of workers, and the effect of that should disappear

Figure 34. Annual growth in employment



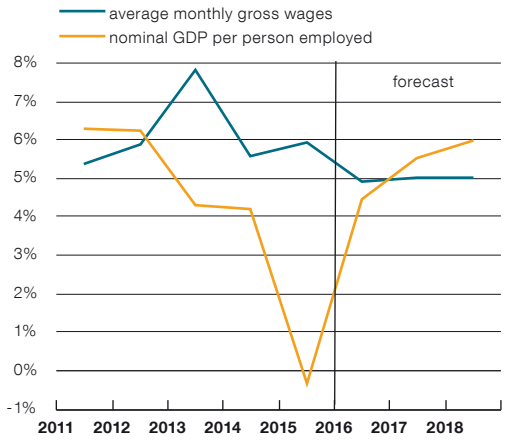
Sources: Statistics Estonia, Eesti Pank

during the forecast horizon. Demand for labour will not increase as external demand for production recovers. Companies have the capacity to increase production with the employees they already have, as they did not reduce the number of employees when demand was low, fearing difficulties in hiring when demand recovers.

The unemployment rate will be 5.9% in 2016, which is about the same as in the previous year. After that it will rise because of the working capacity reform, and it will reach 9.4% in 2018. The reform will start to affect the unemployment rate gradually from the middle of 2016. People returning to the labour market in order to receive incapacity benefits will probably spend more time than the average looking for work, and at first structural unemployment will rise.

Wages will rise more slowly during the forecast horizon, because the increased share of labour costs in added value will push companies to limit growth in labour costs and will reduce demand for labour (see Figure 35). Slower wage growth is suggested by household confidence, and the steady rise in recent years in the share of those who expect unemployment to increase, which should lower wage expectations too. However, wage pressures will still come from several sources, such as the decline in the working age population, the low rate of increase in the numbers of highly qualified specialists, the rise in the minimum wage, the collective wage agreements in healthcare, and the rise in wages for teachers.

Figure 35. Wage and productivity growth



Sources: Statistics Estonia, Eesti Pank

Real unit labour costs will grow more slowly, and at the end of the forecast horizon unit labour costs will fall as labour costs stop rising and productivity growth recovers. Companies are under heavy pressure to regain profitability, and to that end they will invest to raise efficiency. In 2015 labour costs increased as a share of GDP for the fourth year in a row, which is a relatively rare phenomenon according to data for other countries from 1970-2015. Box 6 analyses episodes of growth in unit labour costs in other countries and how they have ended. The adjustment in labour costs in Estonia has been delayed by low interest rates, which make projects that are not very profitable more attractive; by low inflation, which makes it harder to pass higher labour costs on into product prices; and by recent negative shocks in certain sectors that companies have not yet managed to adapt to.

Box 5: Population projections

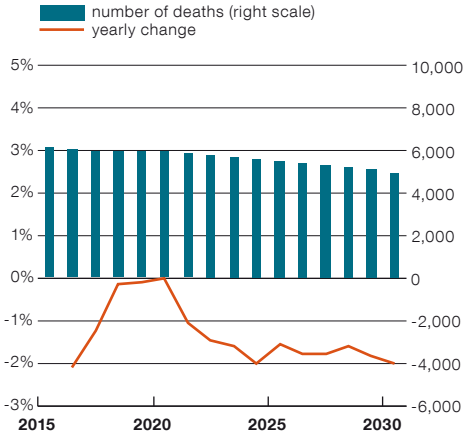
The forecast for the number of people of working age largely defines the labour supply over the long term, and so it plays an important role in the macroeconomic forecast. The Eesti Pank economic forecast has before now used the long-term population forecast of Statistics Estonia, which relies on the assumption that the Estonian migration balance will improve, but will remain negative for a long time in the future. The actual migration balance has improved faster than expected in recent years however, and in 2015 it was positive for the first time since independence was regained, according to the Statistics Estonia estimate. The rapid improvement in the migration balance led Eesti Pank to review its population forecast too.

Forecasting the working age population needs assumptions to be made about the mortality rate as well as about migration. Mortality at working age is higher in Estonia than

in the member states that joined the European Union earlier, but in the past two decades it has fallen steadily as living standards have risen. This forecast presumes that mortality will fall further, and it uses the dynamics of the mortality coefficients for age and sex from the higher life expectancy variant of the Eurostat population forecast. This population forecast from Eurostat extends life expectancy a little from the Statistics Estonia forecast, but the difference is not large. Statistics Estonia assumes that life expectancy at birth will rise by 2040 to 83.7 years for women and 78.2 for men, while Eurostat puts the figures at 86.8 for women and 79.2 for men. Figure B5.1 illustrates that the number of deaths among those aged 15–74 will fall significantly in the years ahead. This is mainly because of changes in the population structure.

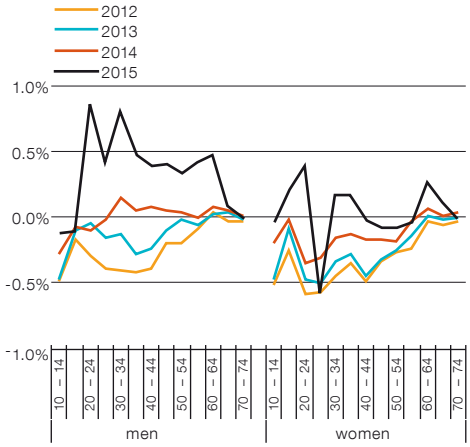
The assumption about migration is more positive than that used in the previous forecast. Figure B5.2 shows the net migration rates[24], which have improved over time across the whole age range and also for both sexes. The figures for 2015 cannot strictly speaking be compared with those for earlier years because there was an important methodological change in how it was calculated, as unregistered migration was taken into account as well as registered migration[25]. It is still probable that the net migration rate will remain positive in the next few years. The main reason for this is that the Estonian labour market is improving rapidly compared to that in Finland, the main destination for migration. This will reduce the push for emigration, and will encourage those who have already left to return to their native land. There has also been a rise in the number of foreign students, who are also classed as residents, while the economic difficulties in Russia and Ukraine have encouraged migration to Estonia. Equally, there is a serious shortage of labour in some sectors, and the wage level has risen to be competitive in recruiting from abroad too.

Figure B5.1. Deaths in working age (15-74) and yearly change, forecast for 2015-2030



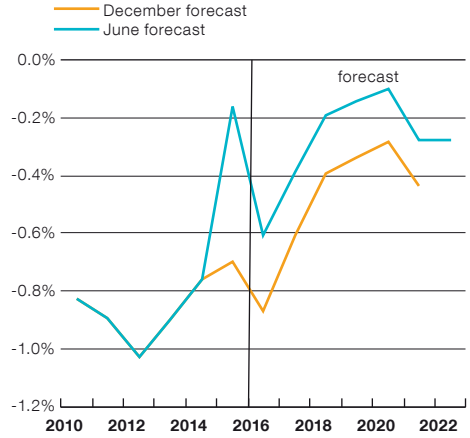
Sources: Eurostat, Eesti Pank

Figure B5.2. Net migration rates



Source: Statistics Estonia

Figure B5.3. Change in the working age population



Sources: Statistics Estonia, Eesti Pank

24 The net migration rate is the migration balance by age and sex in relation to the number of residents of Estonia in the given group.

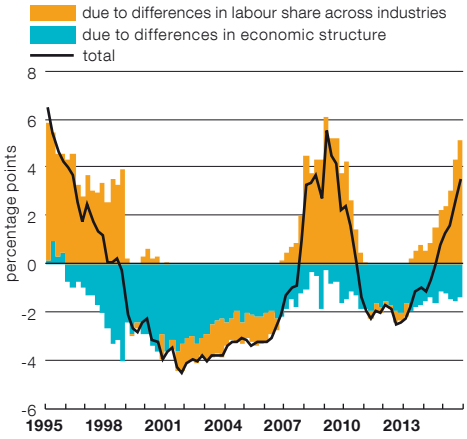
25 For more see the press release from Statistics Estonia http://www.stat.ee/277564.

Overall the working age population under this forecast will fall by around 0.2 percentage point less each year than was assumed in the December 2015 forecast (see Figure B5.3). This will reduce the impact of the shrinking population on the potential for growth in the economy. It will equally affect the labour force participation rate to some degree as migration previously reduced the number of young people who would stay in the labour market in Estonia.

Box 6: Growth in unit labour costs in Estonia

The change in the ratio of wage income to capital income has appeared as a major imbalance in the Estonian economy in recent years. The share of labour income in value added, the labour share, in Estonia has previously been below the European Union average partly because the Estonian economy has relatively more capital-intensive sectors than the European average. The rapid rise in labour income in recent years though has started to lift its share in value added above the European average. This is not due to a change in the structure of the economy however, at least not at the sectoral level, but to a change in the ratio of labour income to capital income within sectors (see Figure B6.1).

Figure B6.1. Estonia's labour income share in value-added, difference from EU28



Sources: Eurostat, Eesti Pank

A change in the ratio of labour income to capital income does not always necessarily imply imbalance. An increase in the share of labour income could be caused by technological development for example, or a fall in the cost of capital as the risks around Estonia decline. Technological development is a long-term process, and the sharp rise in the share of labour income in the economy in recent years cannot be entirely attributed to it. Reduced risks around Estonia should be expressed more through increased investment, but this has been weak in recent years.

The change in the share of labour income could be just a cyclical phenomenon arising because it is not worth employers reducing their labour force if the economy is hit by a negative shock but a later improvement is expected. This is precisely what the enterprise statistics indicate, as the share of labour income has increased more in those sectors where turnover has fallen.

As the share of labour income in the Estonian economy has been increasing for several years by now, it may be asked how long this can continue. In 1970–2014 there were 51 such cases in the OECD countries of the share of labour income increasing over a short time of at least four years, which is how long the current episode has lasted in Estonia. How the indicator for the share of labour income will move in one year cannot be accurately predicted from its development the previous year, but after four consecutive years of growth in the share of labour income, the probability increases that the share will start to shrink. In the fifth year after four consecutive years of growth, the share shrank in 60% of the cases observed and continued growing in just 40%.

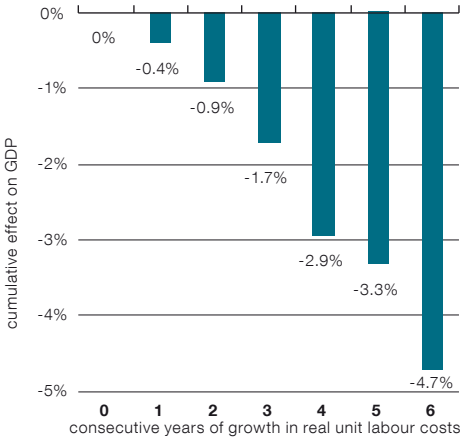
Cyclical growth periods of the share of labour income can be resolved in two ways. One way is for the economy to grow out of the growth cycle, which means that accelerating economic

growth does not drive growth in labour income beyond its previous rate, and that allows companies to increase their profit margins and competitiveness again. The other way is that the falling profit margin pushes some companies to exit the market, leading at first to slower growth in value added, but also to an even larger fall in labour income and to higher unemployment. An increased supply of available labour will reduce wage pressures and so the profit margins of the more productive companies that have survived can improve.

During or immediately after two thirds of the cases of growth lasting more than four years there was a recession. This was mostly not a response to the growth in unit labour costs, but more to various economic crises. In 40% of the cases the start of the adjustment in unit labour costs was preceded by a recession, after which GDP growth increased faster than labour income growth did. In total, GDP growth was faster than growth in unit labour costs in 58% of the cases. The negative correction scenario, where labour costs fall faster than GDP, occurred in 15% of cases. Looked at the other way, growth in unit labour costs increased the probability of a recession within a year from 10% to 13.5% across the sample. Episodes of growth in the share of labour costs in the following two years depend on how far the share fell after the previous rise, but in most cases there was no recovery to the earlier level.

In the observed data the growth in unit labour costs was accompanied by a slowdown in GDP growth. This cannot be seen as fully causal, as a deterioration in the economic circumstances can cause unit labour costs to grow, as companies cannot reduce their labour costs if sales revenues fall over the short term. However, rising unit labour costs can hurt competitiveness, which in turn can cause growth in the economy to slow. The results of modelling show that growth in unit labour costs accompanies a slowdown in GDP growth, with GDP growth slowing down more during long sustained episodes of growth in unit labour costs. The data observed show a relative reduction in the level of GDP when labour costs rise compared to the case where unit labour costs do not increase, and the loss was the greater the longer unit labour costs had been rising (see Figure B6.2). The modelling takes account of country and time fixed effects and income level convergence. The use of time fixed effects helps to control for the impact of international economic shocks, such as the international financial crisis. Earlier episodes of growth in unit labour costs have had many causes, so the averages calculated from them cannot necessarily predict the future developments in the Estonian situation, though in general rising unit labour costs are accompanied by slower economic growth, with the turning point in growth in unit labour costs preceded by an economic downturn in many cases.

Figure B6.2. Negative growth of GDP related to growth in real unit labour costs



Sources: OECD, Eesti Pank

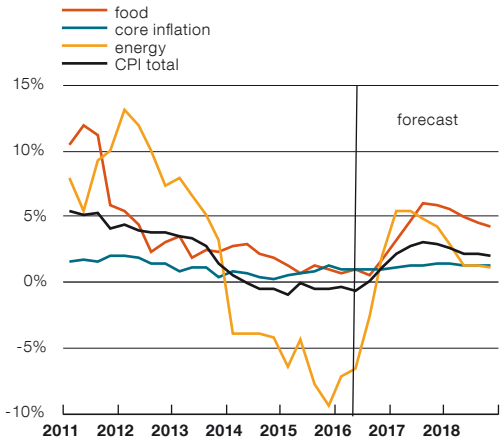
PRICES

External factors, primarily higher global market prices for imported oil and food, will provide the base for a rise in consumer price inflation. The prolonged period of deflation that has lasted several years is forecast to end in the second half of this year but the average price level will not change in 2016. Inflation will pick up in 2017 to 2.7%, with higher excise rates giving strong support to the rising prices for imported energy and food. The rise in commodities prices on global markets will ease in 2018, but the impact of domestic factors on prices will increase. Average inflation in 2018 will reach 2.2% (see Figure 36).

The inflation forecast is founded on the assumption that the fall in commodities price levels on global markets has ended by now. The crude oil price will rise at a slow rate in the next two years, and in 2018 it will reach 51 dollars a barrel. Historically, the oil price has recovered relatively quickly on the global market when prices have fallen because of low demand. When commodities prices have fallen because of over-supply, deflation has lasted for a longer time because a supply side adjustment through lower investment is needed. A rising global oil price causes motor fuels in Estonia to become more expensive, though a majority of the rise in those prices in the years ahead will still come from rises in excise. As the oil price rises, so does the price of imported natural gas, and the price of heat generated from it. In total the price level of energy goods will increase by 5% in 2017, but by a lower 1.6% in 2018.

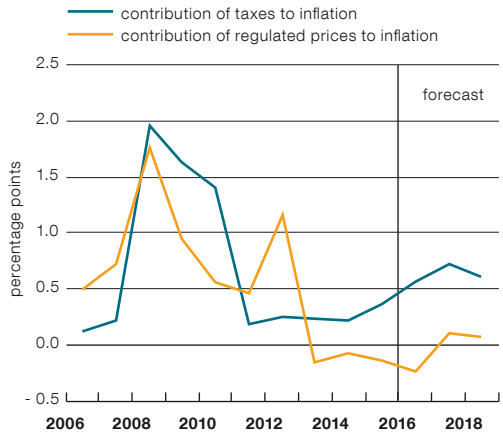
Food commodities are less tradeable internationally than oil, and food prices depend more on production circumstances in various regions of the world. For several years in a row favourable weather conditions have fostered the fall of food commodities prices. According to the Food and Agriculture Organization of the United Nations, the price level of food commodities on the world market has stabilised in recent months, though the fall of farm-gate prices of dairy and meat products has continued in the European Union. The downward trend of those food commodities prices is predicted to reverse

Figure 36. CPI inflation and its components



Sources: Statistics Estonia, Eesti Pank

Figure 37. Tax changes and regulated prices



Sources: Statistics Estonia, Eesti Pank

throughout the forecast horizon. The consumer price inflation of food will reach 1% in 2016, then rise to almost 5% in 2017–2018. Like energy prices, food consumer prices will be driven upwards in the coming years by the substantial impact of higher excise tax rates, which will contribute almost half of the rise in food prices. The total impact of excise taxes on inflation will rise in 2017 from 0.6% to 0.8% (see Figure 37).

Core inflation will reach almost 1% in the forecast horizon, and will be kept up by service price inflation, as prices will continue to rise slowly for consumer goods. Services inflation will continue to be supported by the relatively fast wage growth. At the same time, service price inflation will be boosted by the waning of the impact of one-off factors such as the introduction

of free higher education, and because prices for communications services will not fall as fast in the forecast horizon as they did in several earlier years. The downside risk is that the deceleration of real estate price growth could slow rises in rent prices among services.

Inflation for consumption goods will be low throughout the forecast horizon, restrained by market competition. Companies producing consumption goods compete amongst themselves and also with imported goods. Imported consumption goods have become more expensive as the euro has depreciated, though the effect from that will soon cease. Faster economic growth based on exports will lead unit labour costs to grow more slowly and cost pressures to diminish. As GDP growth will remain below its potential, the final demand will not cause price pressures in the economy.

The long-term price expectations for Estonia based on the Consensus Forecast have remained close to 2%. Long-lasting deflation could be damaging for Estonian companies, increasing their real debt burden and reducing their profits, and causing the state budget balance to deteriorate. To avoid deflationary spirals, central banks around the world have taken unprecedentedly strong monetary policy measures, so as to strengthen economic growth and achieve the goal of stable inflation.

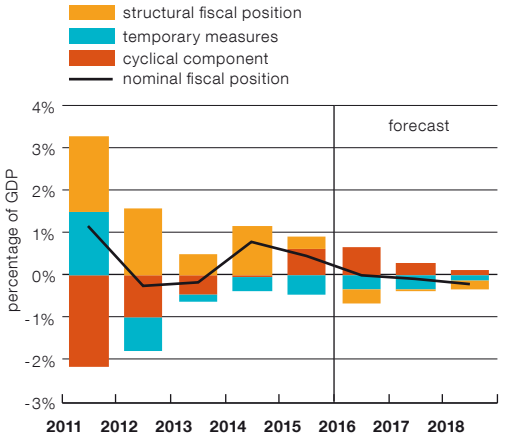
GENERAL GOVERNMENT FINANCING

The nominal fiscal position of the general government will deteriorate over the forecast horizon, but it will remain close to balance. To alleviate the problems caused in the energy sector by the low oil price, the government waived its dividend income from the sector and reduced resource extraction fees, leaving the fiscal position for this year worse than the position for 2015, but still in balance. The combined effect of these decisions was a reduction in non-tax income in 2016 of around 0.5% of GDP, and the negative effect will last in the coming years. The payroll will grow more slowly in 2017 and the tax intensity of GDP will decrease[26]. As the government plans call for investment growth to recover, the budget will fall into a small deficit of 0.1% of GDP in 2017 and 0.2% in 2018.

A reduction in non-tax income does not depend directly on the economic cycle, and it is hard to assess whether it will be temporary, meaning the deterioration of the fiscal position appears structural. The methodology used by Eesti Pank shows the structural fiscal position of the government will remain in deficit until the end of the forecast horizon[27]. This is so even if the costs of administration reform are classed as a temporary measure that does not affect the structural position, as the Ministry of Finance classes them (see Figure 38).

At the same time, the direct impact of tax policy measures on budget revenue is positive. The tax burden on labour will be reduced by a cut in social tax, a rise in the tax-free threshold, and rebates to the low-waged. At the same time, excises and VAT on hotels are being raised, and their direct impact on budget revenues is more than enough to offset the reduction in labour taxes. The ending of additional payments from the state to second pillar pension funds in 2018 will add to the tax burden in accounting terms. The effect of tax policy measures together

Figure 38. General government fiscal position



Sources: Statistics Estonia, Eesti Pank

26 As economic transactions are taxed differently, an increase in the share of private consumption or of wage costs in GDP can lead to higher tax revenues than an increase in, say, export-based GDP growth.

27 The method used takes account of changes in the structure of GDP, as the impact of the economic cycle is calculated for each income and cost component according to how the particular economic indicator affecting income or expenditure stands in relation to its trend value. The result is that despite the cyclical effect on the budget from years of rapid consumption and wage growth, the output gap is negative.

with the termination of this temporary measure will be positive throughout the forecast horizon, reaching around 0.5% of GDP. The government has planned tax measures in its budget strategy that will increase tax revenues, but there is not yet sufficient information about them for them to be taken into account in the forecast.

The tax burden will still fall during the forecast horizon, because the tax base will shrink as a share of GDP. The main tax base, which is private consumption and labour costs, will grow more slowly in the forecast horizon, and in consequence the positive effect of the economic cycle on budget revenues will be reduced and the tax burden will fall over the three years as a whole by 0.1 percentage point to 33.5% of GDP. On top of this it should be remembered that the tax base for excise, which is the quantity of alcohol, fuel and tobacco, will almost always increase more slowly than nominal GDP. This means that the tax burden will shrink moving forwards, when the cut in labour taxes is offset by the rise in excise, even if tax changes are planned to be fiscally neutral in the initial year.

General government expenditure will grow more slowly in the forecast horizon, as growth in pension costs and labour costs slows, but investment growth will recover. The rise in pension costs will be affected above all by the gradual rise in the retirement age in 2017 and 2018, and the fall in the pension index linked to wage growth, which will lead social benefits to decline as a share of GDP. Furthermore, the government plans to limit quite tightly the growth in public sector labour costs, cutting the number employed in the general government, and the effect of the cut in social tax will be added to this. Investment growth is likely to remain modest this year, as the cycle for the funding period of the European Union is at a low point since the previous budget period has ended and the new one is only starting. Faster recovery in growth is expected from 2017, when several projects funded from the state budget are planned on top of the use of foreign funds. In the three years as a whole, expenditure is forecast to increase at the same rate as the economy as a whole.

The budget strategy revealed in spring 2016 confirms the government's medium-term fiscal goal of keeping the structural fiscal position at least in balance. At the same time, achieving nominal balance has again been postponed, this time to 2020. The spring forecast of the European Union finds that the government's structural budget position will be in a small deficit, which can be considered close to the medium-term objective. The European Union also praises Estonia's efforts to introduce working capacity reform and the plan to reduce the tax burden on the low paid through tax rebates. On this, the Commission points to the risk of high marginal tax rates, which could increase the shadow economy or hinder the labour supply. Concern is again being caused by the gender wage gap, access to public services, and promotion of research and development, and it is recommended that these issues be acted on more effectively.

RISKS TO THE FORECAST

The sources of risk to growth in the Estonian economy have not changed significantly in the past six months. The factor most likely to restrain growth is again the acceleration in economic growth in partner countries remaining below expectations. The share of exports going to Russia has fallen very low, and so there are limits to the additional negative risks to the Estonian economy stemming from there. However, the transport sector may suffer if the transit flows from Russia continue to decline. Finland, which plays an important role in Estonian foreign trade, has exited its recession of a few years, but there is a lot of uncertainty around the future outlook, as it is hard to recover the lost competitiveness. The economy in Sweden, Estonia's biggest trading partner, is growing fast, and the forecast is also optimistic, but a possible bursting of a real estate bubble would harm the sustainability of growth in Estonia through several channels. Firstly it would reduce Estonia's exporting options, as the correction in real estate prices would be accompanied by a fall in the disposable income of Swedish residents and in demand for imports. Secondly, local banks would probably restrict the loan supply in this scenario, and this would restrain economic growth through a reduction in corporate investment and investment in residential property.

How the rapid wage growth that has been seen until now resolves remains a source of risk. The forecast is that economic activity and increased productivity will see the business sector move smoothly away from the divergence between labour cost growth and economic growth, and that wages will rise a little more slowly as a result. It is still not impossible that the rise in labour costs that there has been will be followed by a more forceful correction than forecast, especially if exporting opportunities do not improve at the expected rate. It is vital that export-based economic growth speed up, because the small domestic market puts limits on how much growth is possible.

Although there is an excess of risk that could see growth slower than forecast, there are also factors that could push growth up faster. One source of such positive risk is the stronger bounce-back than was expected in the average number of hours worked, which had fallen in recent years, partly reflecting the expectations of companies of an increase in demand and output in the near future. If Estonia's trading partners do better than expected and demand for Estonian exports revives, it will be possible for companies to increase production volumes rapidly by increasing working hours. The second source of positive risk is that investment may grow more strongly than forecast, aided by very low interest rates and the quite significant levels of own funds held by companies despite the fall in profits.

The risks to the inflation forecast are in balance. Consumer prices may rise faster than forecast if the effect of the earlier depreciation of the euro eventually passes into retail prices with a noticeably longer lag than has happened on previous occasions. Inflation may also be pushed up if the oil price rises faster than expected, as it has changed rapidly in the first half of this year. Inflation might however be slower if growth in the global economy, including growth in advanced economies, is more sluggish than forecast, as this would reduce price pressures through lower wage rises and weaker demand for commodities.

The Eesti Pank forecast for growth is a little lower in each of the three years than the average of the forecasts of other institutions, though it is close to it. The inflation forecast for this year is lower than those of other institutions, but it expects the same rate for next year that a majority of those institutions do. The lower inflation forecast for 2018 reflects commodities prices, which are expected to see growth peak in 2017 (see Table 4).

Table 4. Estonian economic forecasts by other institutions

	GDP real growth, %				CPI inflation, %			
	2015	**2016**	**2017**	**2018**	**2015**	**2016**	**2017**	**2018**
Eesti Pank	1.1	1.8	2.9	3.0	-0.5 (0.1*)	0.0 (0.6*)	2.7 (2.9*)	2.2 (2.6*)
Ministry of Finance	1.1	2.0	3.0	3.3	-0.5 (0.1*)	0.3 (0.9*)	2.7 (2.9*)	2.9 (3.0*)
European Commission	1.1	1.9	2.4		0.1*	0.8*	2.9*	
IMF	1.1	2.2	2.8	3.2	0.1*	2.0*	2.9*	2.8*
OECD	1,2	1,8	3,0		0,1*	0,4*	1,8*	
Consensus Forecast	1.1	2.1	2.6		-0.5	0.7	2.1	
SEB	1.3	2.4	3.0		0.1*	1.3*	2.7*	
Swedbank	1.2	2.0	2.5		-0.5	0.5	2.6	
Nordea	1.1	2.0	2.7		-0.5	0.2	2.6	

* HICP
Source: Eesti Pank, June forecast 08.06.2016; Ministry of Finance, Spring 2016 forecast 05.04.2016; European Commission, Economic Forecast, Spring 2016, 03.05.2016; IMF, WEO, April 2016, 12.04.2016; OECD, Economic Outlook, June 2016, 01.06.2016; Eastern Europe Consensus Forecasts, May 2016; SEB, Eastern European Outlook, March 2016, 09.02.2016; Swedbank Economic Outlook 14.04.2016; Nordea Economic Outlook, 16.03.2016