ECONOMIC FORECAST FOR 2011-2013

Eesti Pank's economic forecast is prepared by experts of the Economics and Research Department and Financial Stability Department. The forecast is based on the Macro Model of the Estonian Economy, which has been devised by Eesti Pank and is regularly updated. This forecast is based on information available as at 25 November 2011 and it is also published in the central bank's publication Estonian Economy and Monetary Policy No 2/2011.

SUMMARY

The Estonian economy grew faster than expected in the first three quarters of 2011. The expansion was mostly driven by the favourable market environment and invigorating domestic demand. The post-downturn hike in the Estonian export volume has been impressive. Both households and enterprises in Estonia bought more durable goods, stepped up investment and were more willing to borrow. The more vigorous growth has been accompanied by a faster-than-expected inflation rate, which was boosted by the soaring prices of energy and food commodities in the global market. The economic growth impetus is now abating, and similarly to the rest of Europe, Estonia's outlook depends on how the sovereign bond market crisis in several euro area countries is solved. The crisis puts a strong pressure on both the euro area banking sector and economic activity. As a result, Eesti Pank's autumn forecast expects Estonia's economic growth to slow sharply in 2012, and if external environment tensions intensify, a recession cannot be ruled out, either. Inflation will also decline along with economic activity, converging towards euro area inflation. The autumn forecast expects growth to pick up again in 2013 provided that the external environment improves.

The recent years' global economic growth has been volatile. The slump caused by the financial crisis in the world was in 2010 followed by a dynamic external-trade based recovery, but the growth impetus is now abating again. With advanced economies cooling, the task of upholding global growth is now mostly on the shoulders of developing economies. The euro area sovereign debt crisis deteriorated also the economic situation of Estonia's main trading partners in the second half of 2011. Compared to the spring forecast, the projection for external demand growth has been revised downwards for the subsequent years. This will be partly offset by lower interest rates.

The spreading of the debt crisis and the heightened contagion risk are undermining economic confidence in both Europe and the rest of the world. The current situation has also affected the main stock indices, which have plummeted, compared to spring. At first, the impact of shrinking confidence on euro area manufacturing and trade remained limited, but September showed signs of a reduction in production volumes and new orders. Political tensions in several euro area countries also weaken confidence, since these have brought about market distrust in the proposed economic policy measures and failures in devising rescue packages. It is very important to keep the negative impact of the debt crisis on financial stability from deepening any further, because it may seriously restrain the already weak recovery of the real economy. For growth prospects to improve, it is necessary to win back the trust of financial markets and to restore confidence.

Compared to a couple of years ago, domestic economic imbalances in Estonia have eased, strengthening resistance to the deterioration in the external environment. Owing to the market participants' more modest expectations and the private sector's shrinking debt burden, sensitivity to stricter financing conditions and to outlook changes has diminished. Enterprises have restored profits, and this has added to their financial buffers, reducing vulnerability. The narrowing in the wage-productivity gap has also

boosted economic competitiveness. Although the large number of the unemployed continues to burden the Estonian economy, rapid job creation is alleviating the permanent economic damage stemming from the downturn.

With employment rising and unemployment falling, the labour-market developments have been surprisingly positive this year. Though fostered by seasonal jobs and probably also working abroad, the improvement trend is nevertheless fast. After increasing for several years, long-term unemployment decreased in the third quarter of 2011. Wage costs have also started to pick up along with economic activity and the number of vacancies has been on the rise in several sectors, hinting at a lack of qualified employees. Wage pressures are not yet strong and the slowdown in economic growth is likely to restrain further wage growth, but looking ahead, labour-market related pressures may start posing a serious risk to the development of the Estonian economy. The next year's slump period may make employers want to cut the number of their employees again, but the situation will become aggravated only if there occurs either a longer-term standstill or a recession. Therefore, when production volumes decline it would be reasonable to reduce working time instead of laying off people, at least at the beginning. A hike in unemployment would drive more people abroad in search of a job, posing a risk to Estonia's future growth potential. Estonia's inflation was constantly above 5% in the first three quarters of 2011. This was mostly due to the price growth of food and, to a smaller extent, energy. Food exporters took advantage of the global-market price rises, so prices hiked in Estonia as well. This, in turn, was amplified by increasing mark-ups in the distributing sector, which competition was unable to hold back. Mark-ups reached their historical high in the second quarter. The abolition of the sales tax in Tallinn at the start of 2012 will be a competition litmus test in many fields of activity. However, the global market has not induced any additional price pressures in Estonia since the first half of 2011 and commodity futures even refer to a slight price decline in the forecast horizon. As a result, inflation in Estonia slowed already in the fourth quarter and the trend is expected to persist in 2012. The complete opening of the electricity market at the start of 2013 will step up energy prices for households and smaller companies. The labour market-induced pressure on consumer price inflation is not strong at the start of the forecast period, but it will increase as unemployment decreases.

Banks operating in Estonia have so far remained outside the epicentre of the euro area debt crisis. Although banks are sufficiently capitalised and the funding base has improved, which means better financing conditions for companies and households, the autumn forecast on new loans is more pessimistic due to sluggish external demand and weaker economic activity. While the spring forecast expected loan margins to shrink in the coming years, this forecast, taking into account uncertainties in the external environment, assumes they will stay at the current level. However, if general risk aversion increases, a faster-than-expected rise in financing costs cannot be ruled out. At the same time, it is important that banks continue to be ready to fund projects that are essential to economic growth.

There is considerable uncertainty stemming from the external environment. Therefore, notable uncertainty surrounds the baseline scenario with downside risks overwhelmingly predominant. This is why the baseline scenario is supplemented by an alternative scenario, where the downturn in the external environment is sharper and longer. It is rather likely that in addition to a strong contraction in external demand, Estonia is also facing a hike in loan margins. If this is the case, 2012 will see a recession in Estonia, with inflation declining faster than assumed in the baseline scenario, and recovery postponed into a more distant future.

Fiscal policy is also facing greater challenges due to the high uncertainty in the external environment. It is relatively difficult to estimate the next years' sustainable economic growth, the structure of the economy, and the respective level of tax revenues. According to the 2012 state budget, the next year's government expenditure growth will be some 9%, partly due to one-off factors. Without the latter, the increase would be above 5%. This rate is too rapid for the economy, since it will postpone the government's objective of exiting the consolidated budget deficit and posting a surplus by 2013. According to Eesti Pank's forecast, a surplus will be possible only after 2013. In addition, a 5% rise in government expenditure may lead to inflated expectations. It is also important to take note of the government's plan to cut taxes on labour force over the next two years.

The autumn forecast has two background information boxes. The first one provides an overview of changes in the euro area monetary policy environment and the second one looks at labour market flows and describes the characteristics of the long-term unemployed, highlighting factors that increase the likelihood of becoming a long-term unemployed.

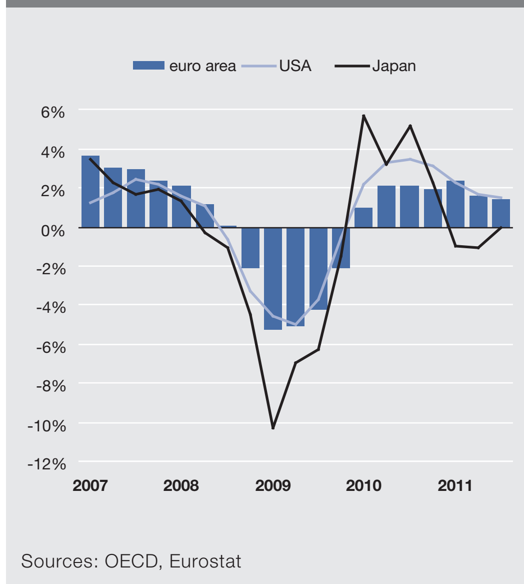
EXTERNAL ENVIRONMENT

The global economy expanded relatively fast in the first half of 2011. Intensified international trade as well as growing export income and emerging economies' strengthening domestic demand played an important role here. The rapid growth boosted price pressures in global commodity and energy markets, pushing inflation in several regions beyond forecasts. The summer, however, saw an aggravation in the international debt crisis. The United States faced for the first time the risk of a rating downgrade and markets started to question the sustainability of several euro area countries' public finances. Indices reflecting the risk perception of financial markets soared and stock markets swiftly lost the gains achieved in the first half of the year. The price of credit default swaps (CDS), which reflect banks' credit risk, hiked again in Europe. As a result, banks' financing conditions tightened in autumn. Thus, risks to the economic outlook have notably increased compared to spring. Confidence indicators have dropped and the slowdown in global economy and international trade has been steeper than expected in the previous forecast. The ongoing financial-market tensions, which deteriorate financing conditions and confidence, pose a risk to the real economy in both the last quarter of 2011 and longer-term. Downside risks are also related to continuously high energy prices, the bond market problems of several euro area countries, and global imbalances. Many countries need to consolidate their budgets, which reduces fiscal stimulus in the years ahead.

In such circumstances, upward price pressures should remain relatively modest in the euro area. This has also been taken into account in the ECB Governing Council's decision to lower the key interest rates. Monetary policy must maintain price stability, thereby ensuring a firm anchoring of inflation expectations in line with the aim of keeping inflation rates below, but close to, 2% over the medium term. At the same time, it has to be kept in mind that all non-standard monetary policy measures adopted during severe financial-market tensions are temporary (see Box 1).

Irrespective of the problems of the debt-ridden countries, the global economy is growing, mostly owing to increasing economic activity in emerging economies. In addition, Japan, which is recovering from the natural catastrophe, and the USA, which is less dependent on export income and has delayed budget consolidation, also contribute to global growth (see Figure 1). Nevertheless, there exist considerable uncertainties regarding forecasts for 2012. Most of them have undergone serious downward revision in recent months.

Figure 1. Economic growth in advanced economies



Sources: OECD, Eurostat

Euro area annual economic growth fell from 1.6% in the second quarter to 1.4% in the third quarter. Germany and France have been contributing to growth, whereas the expansion of the Member States suffering from fiscal problems has been below the average or even negative. Although the euro area economy expanded quarter-on-quarter in the third quarter, the most recent statistics are referring to an ongoing decline in economic activity.

Overall confidence in the euro area is damaged by the inability of the debt-ridden countries to tackle their fiscal problems and to implement reforms to improve their growth potential. So far, international help has been received by smaller countries such as Greece, Ireland and Portugal, but now there is a heightened risk that assistance may also be needed by some larger Member States that have up to now managed to refinance their debt. The spreading of the debt crisis into larger euro area countries has led to speculations that the measures already taken are insufficient to stop the contagion.

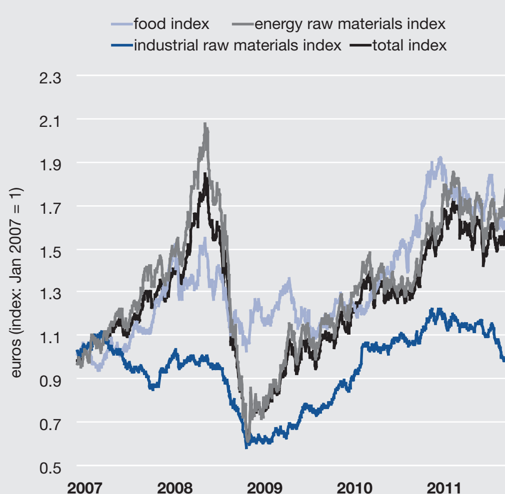
In the first half of 2011, Estonia's external demand was supported by our main trading partners' rapid economic recovery, which is now expected to slow, especially in 2012, due to the notably weaker external environment. The drop in the production of euro area capital goods in September clearly shows that the earlier shrinkage in confidence indicators is now passing through to our trading partners' real indicators. Whereas the economy expanded even too swiftly in the first half of the year and Sveriges Riksbank raised interest rates for three times (the last time in July, by 0.25 pp) to balance the rapid expansion, activity started to subside in autumn and expectations deteriorated. With global uncertainty suppressing consumption and investment, the Swedish central bank revised their next year's growth forecast downwards to 1.5%. Finland has also downgraded the growth assumption, since export demand and private consumption are contracting there as well.

The economic development of our other trading partners has followed a similar trend. The central banks of Latvia and Lithuania have revised this year's growth forecasts upwards, but the next year's projections downwards. So far, their growth has mainly been driven by export demand, but domestic demand has also started to pick up. However, the Latvian and Lithuanian economies will continue to depend on exports and on the behaviour of external markets. Irrespective of the weak results in the first half of 2011, the Russian economy is thriving on the back of commodity exports, which will bolster growth in the coming years as well. High inflation pressures, which have curbed Russia's economic growth in recent years, are also subsiding. Weaker economic activity outlooks have eased global inflation pressures. Although developing economies are growing rapidly, food and commodity prices have stabilised over the past year and even declined slightly (see Figure 2). This means global inflation is dropping to the level of 2010. Food price growth will also be curbed

by better-than-expected crops. The food price index of the United Nations Food and Agriculture Organisation fell by 9% from the peak of February 2011, but it is nevertheless 5% higher than a year ago. The 2012 production volumes will be affected by lower growth forecasts on the one hand and by higher interest rates in developing economies on the other. Though the growth outlook is poor, futures contracts do not refer to a considerable fall in oil prices. Oil demand is still on the rise in developing economies, but it is offset by weaker economic activity in advanced economies. The more pessimistic outlook on next year's global growth shows a smaller chance of raising prices, but it contains the risk that if growth is even slightly higher than forecasted, price pressures will resurface.

In the first half of the year, upward risks prevailed in inflation outlooks and the ECB Governing Council increased the key interest rates in July. When the economic situation deteriorated and inflation pressures eased, the rates were reduced to bolster the economy. The monetary policy environment is discussed in more detail in Box 1.

Figure 2. World commodities price indices



Source: HWWI

Box 1: Monetary policy environment in the euro area (as at 9 December 2011)

Monetary policy environment in the euro area remained accommodative throughout 2011, although early in the year the ECB's Governing Council twice made the decision to raise – after almost a year-long break – the key monetary policy interest rates by 25 basis points: the minimum bid rate on the main refinancing operations was raised from 1% to 1.25% at the meeting in April and from 1.25% to 1.50% at the meeting in July; interest rates on the marginal lending and deposit facilities were lifted accordingly. The rise in interest rates was triggered by the fact that prices in the euro area rose faster than expected. On 3 November and 8 December, the ECB's Governing Council decided to lower the key interest rates by 25 basis points, because uncertainty in financial markets due to the debt crisis had significantly undermined the growth outlook for both the euro area and the global economy. Moreover, the expected slowdown in economic growth may lead to weakening inflation pressures. The euro area minimum bid rate on the main refinancing operations is currently 1.00% – the lowest in the history of the single currency.

The Eurosystem also expanded the number of its non-standard monetary policy measures in order to ensure sufficient liquidity for euro area banks and to enhance the functioning of monetary policy transmission channels. Like in 2010, the Eurosystem has continued to offer unlimited liquidity to banks at a fixed rate[1] in both main refinancing operations[2] and longer-term refinancing operations[3]. In addition, it was decided in autumn to resume longer-term refinancing operations[4] as well as to launch the second Covered Bond Purchase Programme[5]. In addition, the Eurosystem promised unlimited liquidity supply to euro area banks at least until 10 July 2012. Furthermore, the Eurosystem continued to perform purchases under the Securities Markets Programme (SMP), which aims at intervening through purchases in the sovereign bond market, where monetary policy transmission channels have been dysfunctional due to the debt crisis. In order to ensure better access of the banking sector to the ECB's liquidity operations, it was decided to lower the threshold for collaterals eligible in monetary policy operations and to reduce the minimum reserve ratio from 2% to 1%. However, it should be kept in mind that all non-standard monetary policy measures that have been adopted because of financial-market tensions are temporary in nature.

Changes in the key interest rates along with market expectations of future interest rate levels have also translated into money market interest rates – this is well reflected in the development of the 3-month EURIBOR. Following the key interest rate increase in April, the 3-month EURIBOR started to rise as well, increasing from 1.25% in early April to 1.61% in early August, having grown by 33 basis points. Then it started to fall again, mostly due to the deteriorating debt crisis in the euro area caused by Italy, and the decline was supported by the decision to lower the key interest rates in November and December. As a result, the rate declined to 1.44% by mid-December (see Figure a).

Tensions in the euro area money market are also characterised by the spread between the 3-month EURIBOR and 3-month OIS[6] swap rate that measures the credit and liquidity risk in the unsecured money market[7]. The spread between the 3-month EURIBOR and 3-month OIS swap rate has been on the rise since the start of August, when it was 37 basis points. By 8 December, it had reached 101 basis points. However, this spread is still less than half of what it was when the financial crisis peaked in autumn 2008 (see Figure b).

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[1] That is, at the interest rate that is equal to the bid rate on the main refinancing operations.

[2] With a maturity of one week.

[3] With a maturity of three months.

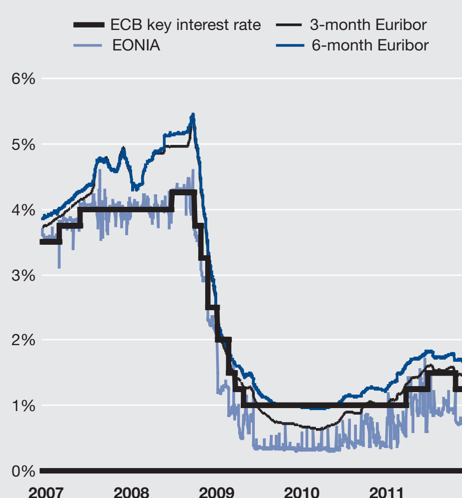
[4] With a maturity of 6, 12, 13 and 36 months.

[5] Covered Bond Purchase Programme 2 (CBPP2). The first Covered Bond Purchase Programme (for a nominal value of 60 billion euros) was implemented from July 2009 to June 2010.

[6] OIS – Overnight Indexed Swap, a fixed rate that is paid in exchange for overnight lending during 3 months; it reflects market expectations regarding the overnight rate for the next 3 months.

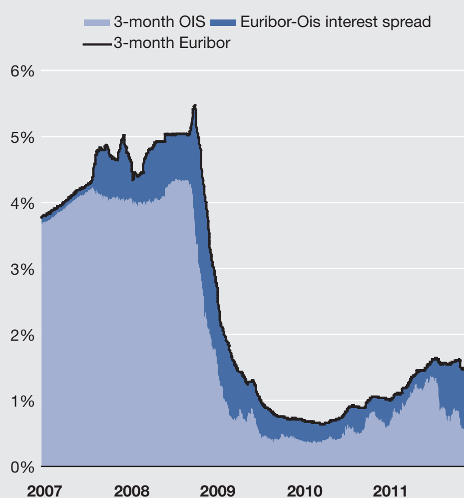
[7] Unsecured money market – money market, where the reference rate is either EONIA or EURIBOR with a maturity of up to 1 year.

Figure a. Euro area monetary policy interest rates



Sources: ECB, Reuters

Figure b. Euro area money market rates



Source: Reuters

The exchange rate of the euro vis-à-vis the dollar is expected to remain relatively unchanged in the next years. This forecast is based on the ECB's external assumptions expressed on 25 November (see Table 1). The expected level of money market interest rates has been markedly downgraded compared to spring. In 2012, the annual average 3-month EURIBOR will be 1.2% (2.3% in the spring forecast). The spring forecast also assumed that the 3-month EURIBOR will be 2.8% in 2013, whereas now it is expected to reach just 1.4%.

Table 1. External assumptions of the forecast

						Difference from previous forecast		
	2009	2010	2011	2012	2013	2011*	2012*	2013*
External demand growth (%)	-17.1	10.6	8.2	4.9	6.4	0.6	-2.1	-0.3
Oil price (USD/barrel)	61.9	79.6	111.5	109.4	104.0	0.4	1.4	0.3
USD/EUR exchange rate	1.4	1.3	1.4	1.4	1.4	0.0	0.0	0.0
Interest rate (3-month Euribor, %)	1.2	0.8	1.4	1.2	1.4	-0.2	-1.1	-1.4

* 2011 spring forecast

Sources: Reuters, Eesti Pank

BASELINE FORECAST SCENARIO

Economic activity

GDP soared in the first half of 2011, by an average of 9.0%, year-on-year, but according to the flash estimate of Statistics Estonia, growth slowed to 7.9% in the third quarter. On the one hand, the exhaustion of the temporary growth impetus refers to growth slowing down to a level that is sustainable in long term. On the other hand, the deterioration in the external environment outlook and the general lack of confidence may impede growth more sharply and extensively than assumed.

The main growth driver has been export-oriented manufacturing, where value-added growth peaked at 46.9% in the first quarter of 2011, year-on-year, accounting for 5.8 pp of GDP growth. Manufacturing surged owing to higher external demand and the reutilisation of production capacity that was idle during the crisis. According to the Estonian Institute of Economic Research, capacity utilisation plummeted to below 60% in 2009. In early 2011, seasonally adjusted capacity utilisation hiked to 73.5% and it has not changed much since.

Recovery from the crisis and improving growth outlooks bolstered domestic demand in 2011. Stronger confidence and employment growth contributed to the increase in the consumption of durable goods and expanding production volumes awakened investment activity. Stocks also grew along with production volumes.

The rapid growth of 2011 has been more balanced and supportive of sustainable development than the previous robust expansion period. Private consumption has increased, while households have repaid loans and increased savings, so the increase in private consumption has not come at the price of detoriating financial position of households. Compared to before, relatively more investments have been made in machinery and equipment necessary for producing higher value added, and less have been invested in buildings. The current account, which lapsed into a wide deficit in the boom years, is now in surplus. The wage-productivity gap, which developed before the crisis, has also narrowed significantly.

Though the recent years' rapid export growth has made Estonia more vulnerable to external-environment risks, it has eased domestic imbalances. In past crises, domestic imbalances aggravated external-environment shocks, but since the economy is more balanced now, it should have more strength to smoothen shocks arising from the external environment. When external demand shrinks, domestic demand will provide support to economic activity.

Although the 2011 economic expansion has been more robust than expected in spring, the growth projection for 2012 and 2013 is more pessimistic than in the previous forecast. This is because of the higher reference base, a decline in external-environment growth expectations, and growing uncertainty. Slowing external demand diminishes export growth expectations, and global uncertainty makes Estonia's enterprises postpone their investment plans.

The poor global outlook and growing uncertainty due to the sovereign debt crisis in some euro area countries is exerting the strongest impact on exporters. Investment projects are postponed around the world, and this reduces demand for capital goods. Since the hike in capital goods exports has been one of the main growth drivers in Estonia, the current sharp slowdown will have a harsher effect here than in other countries. This tendency is related to a swift drop in industrial production in September 2011, when it declined by 11% within a month. This was also the first sign of the pass-through of global uncertainties to Estonia's real indicators.

Tabel 2. Economic forecast by key indicators*

	2009	2010	2011	2012	2013	Difference from previous forecast 2011	2012	2013
Nominal GDP (EUR billion)	13.8	14.3	16.0	16.7	17.8	0.1	-0.4	-0.6
GDP, chain-linked volume change (%)	-14.3	2.3	7.9	1.9	3.6	1.6	-2.3	-0.6
HICP inflation (%)	0.2	2.7	5.1	2.8	2.9	0.4	0.3	0.0
GDP deflator, change (%)	-1.0	1.1	3.9	2.2	2.8	1.1	-1.0	-0.7
Current account (% of GDP)	3.7	3.6	2.7	2.0	0.9	1.0	1.0	1.1
Private consumption expenditures, chain-linked volume change (%)	-15.6	-1.7	3.7	2.3	3.4			
Government consumption expenditures, chain-linked volume change (%)	-1.6	-1.1	1.9	3.4	2.0	-0.2	2.8	1.0
Fixed capital formation, chain-linked volume change (%)	-37.9	-9.1	16.9	6.7	5.7	-8.4	-6.5	-4.0
Exports, chain-linked volume change (%)	-18.6	22.5	23.5	1.6	6.4	1.0	-3.1	0.0
Imports, chain-linked volume change (%)	-32.4	20.6	23.9	2.7	7.2	1.3	-3.6	-1.4
Unemployment rate (%)	13.8	16.9	12.1	10.4	9.8	-0.9	-1.1	-0.3
Domestic employment, change (%)	-9.9	-4.8	7.1	1.2	0.5	2.0	-0.2	-0.4
Productivity per person employed, change (%)	-4.8	7.4	0.7	0.7	3.1			
Real compensation per employee, change (%)	-2.6	-0.8	-3.7	1.0	2.0			
Compensation per employee, change (%)	-3.5	1.4	1.7	3.7	5.0			
Private sector debt, outstanding amount change (%)	-6.3	-6.5	-3.7	-1.4	2.2	-0.5	-5.4	-5.3
General government budget balance (% of GDP)	-2.0	0.3	0.7	-2.0	-0.7	0.7	-0.4	-1.1

* Private consumption includes final consumption by non-profit institutions serving households. The calculation of labour and productivity indicators draws on annual employment figures, which are the annual average of seasonally adjusted quarterly data. The private sector loan stock consists of the stock of loans and leases of households and non-financial institutions.

Sources: Statistics Estonia, Eesti Pank

Though Estonia's economy is currently less vulnerable than in 2008, external-environment developments affect also domestic market-oriented enterprises. Estonia's companies are postponing investments and larger purchases due to falling confidence and shrinking export income. In addition, the pass-through of the debt crisis to the financial sector may impact credit conditions in Estonia and thus inhibit domestic demand growth.

Further export and economic developments are leaning on our trading partners' demand, which, in turn, depends on how fast problems in the debt-ridden countries are solved and confidence is restored.

Domestic demand

Private consumption

Private consumption started to pick up in late 2010, when recuperating income and employment allowed stepping up consumption. Positive labour-market developments, that is, decreasing unemployment and growing wages, have supported the increase in households' disposable income also in 2011. On the other hand, inflation stemming from the global increase in food and energy prices is curbing purchasing power.

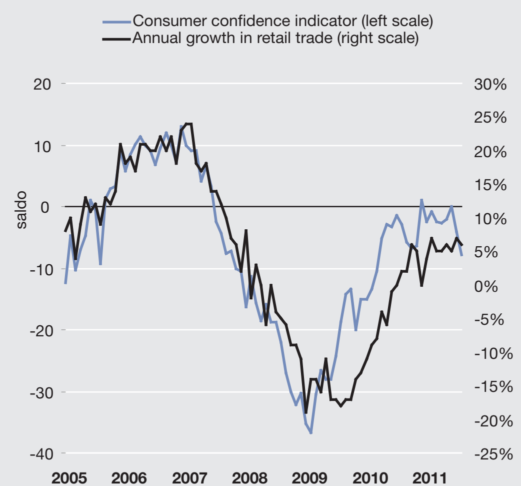
In the first half-year, consumer confidence in Estonia remained at a historically high level (see Figure 3). After a long period of economising, the year-on-year consumption of durable goods escalated more than 30%. The majority thereof

could be attributed to the purchase of cars and to expenditure on furnishing and renovations. At the same time, the share of durable goods in the consumer basket is still smaller than in the pre-boom period. The confidence indicator started to decline in the third quarter. This was not yet reflected in the September retail sales, when its volume expanded 6%, year-on-year. According to the forecast, declining confidence will pass through to consumption in the next quarters and private consumption growth will slow in 2012. In addition to households' concerns over their financial situation, the dynamics of consumption expenditure is affected by the contracting contribution of durable goods to private consumption over the forecast period, since the majority of expenditures postponed during the recession were made in 2011.

The revision of the national accounts' time series by Statistics Estonia revealed that recent years' private consumption had been stronger than previously estimated and as a result, less savings were accumulated. Consequently, the scope of private consumption growth on account of reduced saving has decreased compared to the spring forecast. The propensity to consume is also hampered by a decline in confidence. It has been allowing private consumption to grow temporarily faster than income since early 2010. Consumption is primarily related to income in the forecast period and the share of financing by loans is not expected to increase over the coming years.

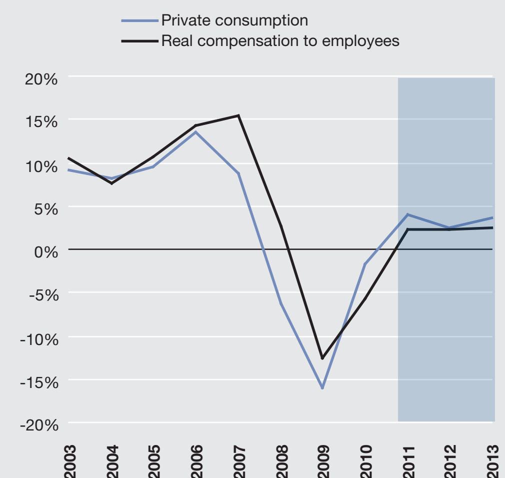
This forecast expects growth in private consumption expenditure to slow from the beginning of 2012, when the effect of weaker external demand reaches the labour market and consumers will become cautious again about making larger purchases. Consumption growth will pick up in 2013, along with a recovery in general economic activity (see Figure 4).

Figure 3. Consumer confidence indicator



Sources: Statistics Estonia, Estonian Institute of Economic Research

Figure 4. Real private consumption growth



Sources: Statistics Estonia, Eesti Pank

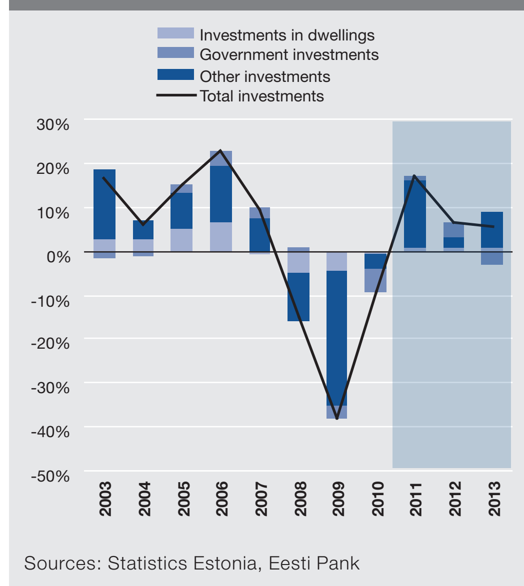
Investment

Fixed capital formation started to grow in the last quarter of 2010, when exporters were able to increase their production volumes. Consequently, they expanded the stock of equipment necessary for production. This concerned especially manufacturing, as well as storage and transportation activities. The second quarter witnessed a slightly broader-based investment growth, since retail and wholesale as well as real estate and agricultural companies increased their fixed assets. However, the major contributor was the energy sector, where historically large investments were supplemented by a windpark project. The annual corporate investment growth was almost 30% in the first half-year, driven by the positive and still improving economic climate as well as a low reference base. While the second-quarter business data indicated that investment growth had accelerated compared to the start of year, the large-scale sale of fixed assets led to a smaller growth in net investment. The volume of corporate investment is currently at about the level of 2002.

Similarly to households, corporations also increased investment in transport equipment in late 2010 and early 2011. However, in the second quarter, the share of machinery and equipment in investments increased. Data on capital goods imports imply that growth continued in the third quarter as well. In the second quarter, the level of construction investment was comparable to that of 2001, but it is expected to increase henceforth. Construction volumes in Estonia have been on the rise since 2010 and the building permits statistics show that growth continued in the third quarter as well.

In the next periods, corporate investment will be most affected by the general economic environment and companies' perception of the duration of the financial and debt crisis. Problems in the international financial environment will pass through to the Estonian enterprises mostly in the form of shrinking external demand. In addition, there is a risk of higher supply-side constraints regarding the financing of investments (though the ECB has lowered the key interest rate, banks are still inclined to raise loan margins due to heightened risks). Contrary to the pre-crisis period, companies tend to resort more to their own funds when investing. Thus, they are mostly prudent and delay investments until the situation calms (see Figure 5).

Figure 5. Gross fixed capital formation growth



Sources: Statistics Estonia, Eesti Pank

In the first half-year, the household investment growth rate was significantly slower than expected in the spring forecast. This is largely attributable to the revision of data by Statistics Estonia, which changed the dynamics of the 2010 time series. Investment in dwellings experienced a modest growth of 2.5% in the second quarter, year-on-year. Households' debt burden continued to decline in recent quarters, but its ratio to disposable income was nevertheless several times higher than in the pre-boom period. The turnover of new housing loans was small and their stock is decreasing, so loan capital growth

does not contribute much to housing investment. According to the forecast, investment growth will slow starting from the last quarter of 2011. In the next few years, investment in Estonia will be affected by several major infrastructure and general government sector projects. In 2011 and 2012, the general government sector will make a significant contribution to investment growth by investing the revenues from selling unused emission quotas. This will be a one-off event to take place mostly in 2012, so the general government sector investment will decrease in 2013. Due to prudency, corporate investment will grow rather modestly (3.4%) in 2012, but it is expected to pick up somewhat in 2013. Housing investment will continue to increase over the forecast period, by 4.6% in 2012 and by 3.9% in 2013.

Inventories

At the beginning of 2011, corporate inventories grew rapidly due to the expansion of the exporting sector. Computer, electronic and optical equipment production companies contributed the most to the increase. Further developments in inventories will be affected by a higher reference base. Besides, companies may start to optimise their stocks (that is, they may implement just-in-time principles) due to prevailing insecurity. Consequently, we forecast that the change in inventories will contribute negatively to GDP growth in 2012 and the share of inventories as a ratio to GDP will contract in the forecast period as GDP increases.

External balance and competitiveness

Rapid export growth was the result of several positive concurrent factors. Global economic recovery led to a general enlivening in international trade. The Estonian trading partners' demand growth, including demand for products exported by Estonia, was above the average. When the production capacity that had been left unutilised during the crisis was flexibly put into use, exporters had the potential to reap additional benefits from the favourable economic situation and to increase their market shares.

An essential role in the post-crisis recovery was played by companies with an international dimension – they were able to expand their market shares thanks to business connections and knowledge of foreign markets. These developments are also reflected in the higher income account deficit caused by increased profits, as an international ownership structure is not rare for companies that have become part of cross-border production chains. Further developments in the income account deficit will depend on the increase in profits. If global economic growth temporarily declines, companies are more likely to lower their profits rather than to cut labour costs, which may lead to a passing decrease in the income account deficit.

Export growth played an essential role in the economic recovery, but it will slow in the forecast period. Goods export growth, which exceeded 50% in the first half-year on the back of the export of capital goods, decelerated to 29.5% in September. The export markets' development outlook is somewhat more pessimistic due to shrinking confidence. This affects the Estonian export outlook as well. Uncertainty makes companies in advanced economies postpone their investment decisions. This hampers future growth in capital goods demand, which has so far supported the development of Estonia's exports.

The adverse impact of inhibiting export growth on the current account is alleviated by slowing import growth. Import dynamics reflects the economic activity: domestic production needs external inputs that have to be imported. The post-recession import recovery was mostly driven by the development of the exporting sector, since domestic demand has been somewhat slower to recover. In 2012, imports will be affected by slowing export growth and the ongoing recuperation

of private-sector investment, which will be further supported by the government sector's investment of revenues from the sale of emission quotas. Consequently, we forecast a modest deterioration in the external balance (see Figure 6). In 2012-2013, the use of structural funds will play an important role in the development of the current account surplus, since it will influence current transfers.

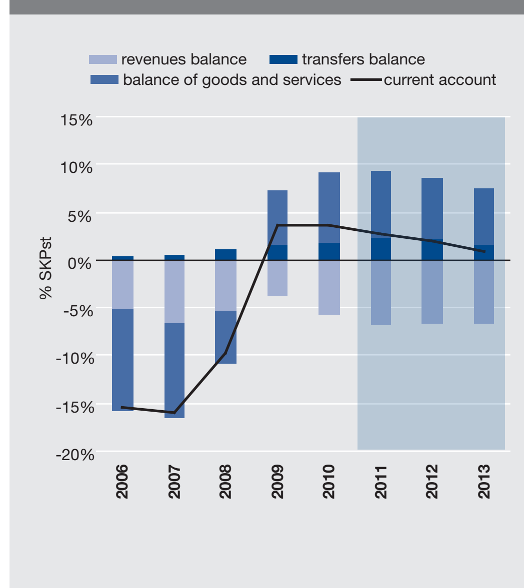
Labour market

In spring 2011, we expected economic growth and labour market indicators to converge to the long-term growth path after the post-crisis acceleration. However, employment recovered and unemployment shrank in the second and third quarter of 2011 at a much faster pace than expected in our spring forecast. Employment growth peaked in the first quarter of 2011 at 3.1%, quarter-on-quarter, whereas the second and third quarter growth rates were also very strong, both historically and in comparison with the post-crisis recovery in other European countries.

Nevertheless, weaker external demand growth prospects and increased insecurity have led to a more pessimistic labour market forecast for the coming years. The forecast relies on the assumption that the growth slowdown is deemed to be relatively short-lived. Due to the cost of recruitment, training and layoff of employees, there is a lag of almost 6 months before employment responds to changes in GDP, and the employment dynamics is always more steady than GDP. If employers expect a recovery in demand, they will adapt to short-term setbacks by reduced working hours and temporary leaves rather than by layoffs.

Compared to our spring forecast, the adjustment in real unit labour costs is expected to last longer, partly due to the revised GDP time series and partly because of better-than-expected developments in early 2011. However, lower-than-expected demand will lead to an increase

Figure 6. External balance



in unit labour costs and a fall in profit margins in the near future, since it is difficult to make short-term changes in agreed labour costs.

Employment and productivity

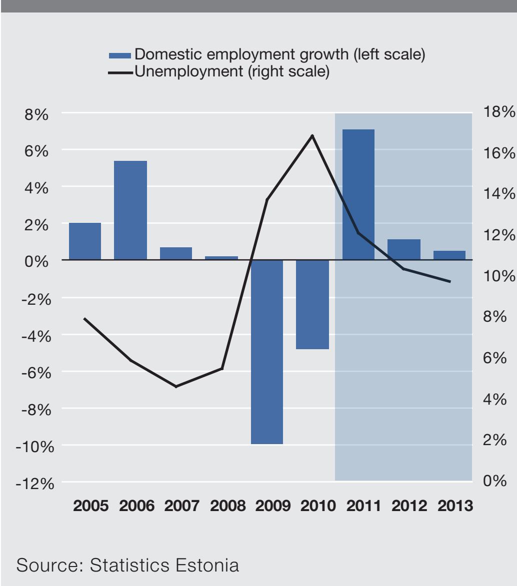
During the first three quarters of 2011, domestic employment[8] increased by 7.7%, year-on-year. In the first quarter, employers recruited due to positive future expectations and production volumes that increased already in the second half of 2010. This is true primarily in manufacturing and construction, where labour force was cut the most after the crisis. Employment growth became significantly more broad-based already in the third quarter. Our analysis of labour-market flows shows that the rate of hiring was the highest seen over the past decade in the first half of 2011.

While the annual employment growth has accelerated in recent quarters, seasonally adjusted quarterly growth peaked at 3.1% in the first quar-

[8] Domestic concept for employed persons involves resident and non-resident employees and self-employed persons employed by the resident producer units.

ter and slowed to 0.9% and 1.5%, respectively, in the second and third quarter. The decrease in the growth rate towards a balanced growth path was expected, and it is forecasted to decline even further in the subsequent quarters due to the subdued external demand growth and increasing insecurity. Year-on-year, domestic employment growth will decrease from 7.1% in 2011 to 1.1% in 2012 and to 0.6% in 2013 (see Figure 7). On a quarterly basis, we also predict a marginal fall in employment in the first half of 2012. The difference between total employment and employment by domestic concept mostly consists in the Estonian residents working abroad (pendulum migration). The number of such people increased significantly in 2009 and 2010, making a non-negligible contribution to total employment growth in some quarters. We expect pendulum migration to remain relatively unchanged over the forecast horizon.

Figure 7. Employment and unemployment



Source: Statistics Estonia

Productivity growth decreased in the first half of 2011 and the forecast expects a short-term shrinkage in productivity in 2012. This can be expected in the context of slowing economic growth, because hiring is based on the number of orders received in the previous period as well as on expectations, and the adaptation to smaller-than-expected demand will take some time. Productivity growth will recover at the end of the forecast period, approaching the long-run rate.

Unemployment

In the first three quarters of 2011, the labour participation rate surpassed the level predicted in our spring forecast. The rate was 68.5% in the first quarter, being the highest since 1992. This can be partly explained by the change in the age structure of the working-age population – the large birth cohort of the Singing Revolution reaching the best working age where the activity rate is the highest. The gradual raising of women's retirement age has increased the participation rate of older women. Improving active labour market measures, the extension of health insurance to all registered unemployed persons, and also the strong recovery in employment, have made the unemployed more hopeful of finding a job and motivated them to continue searching. We expect the labour participation rate to stay at the third-quarter level during the entire forecast period.

Unemployment is expected to decline at a slower pace compared to our previous forecast because of weaker growth in the coming years. Due to faster-than-predicted employment growth in the second and third quarter of 2011, it will drop to the level of 9% by the end of 2013, which coincides with the previous forecast. The share of long-term unemployment will increase, and to some extent, the number of the discouraged as well, that is, those who have given up hope of finding a job. With working-age population shrinking and in the context of structural unemployment, a more efficient use of labour resources will become increasingly important. Labour market policy measures that are focused on long-term unemployment should also be enhanced (see Box 2).

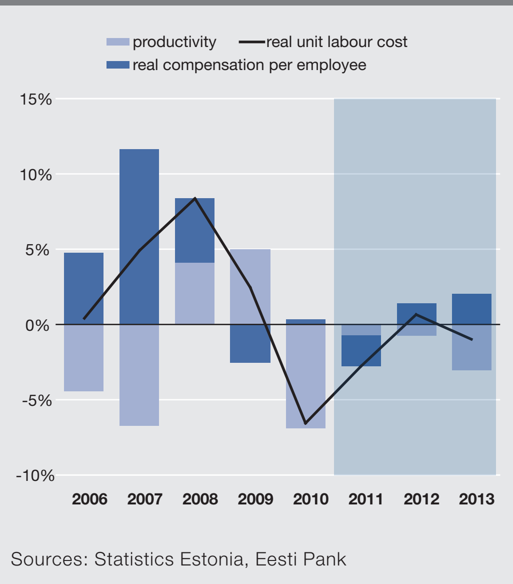
Wages and labour costs

The first half of 2011 witnessed acceleration in labour costs and growth in average monthly gross wages. Preliminary data indicate that this continued in the third quarter as well. For the next year we forecast that the increase in average monthly gross wages will slow to 3.7%, to the level that is in line with weaker labour demand. When economic growth recovers, wage growth will pick up again, to 5.1% in 2013.

The quick drop in the unemployment level suggests that the shortage of qualified labour will become more pronounced in the coming years and supply-side constraints may add some pressure on wages. Wage pressures can be expected, for example, in the construction sector, where labour demand has strongly recovered in recent quarters and companies have to compete more and more with the Scandinavian wage level.

In the first half of 2011, the real unit labour costs[9] were still on the fall, which means that the wage and productivity gap was still narrowing (see Figure 8). Economic growth slowdown is expected to lead to a temporary increase in unit labour costs, and the level and duration of this increase will be determined by the flexibility of the labour market (that is, its ability to adapt to the changed environment).

Figure 8. Real unit labour cost growth



Sources: Statistics Estonia, Eesti Pank

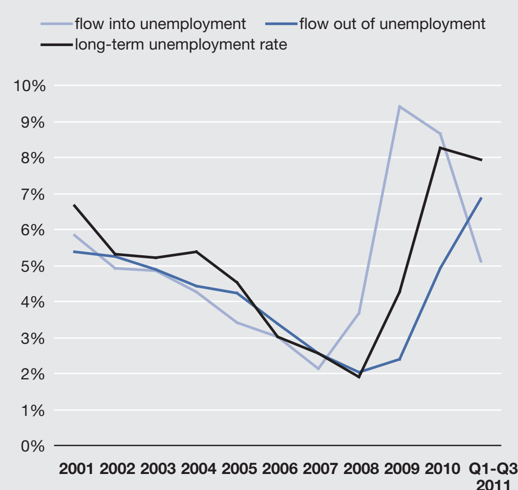
[9] Real unit labour costs show labour costs per a GDP unit. Growth in unit labour costs is increased by wage growth, but decreased by productivity growth.

Box 2. : Labour market flows and long-term unemployment in Estonia before and after the recession

Unemployment became a major problem in the Estonian economy during the economic recession in 2008-2009. Although the level of unemployment has significantly decreased compared to its peak, it is still over 10%. The large number of long-term unemployed has become one of the most acute issues. This box analyses the Estonian labour market mobility and identifies the factors that contribute to long-term unemployment.

Here we consider flows between different labour market statuses (unemployment, employment and inactivity). Similar unemployment rates may result from labour market flows[10] of various magnitude. Flows in the labour market affect the duration of both employment and unemployment. For example, unemployment may decrease due to growth in the rate of exiting unemployment or due to a fall in the rate of entering unemployment. The average duration of unemployment decreases in the first case, but increases in the second case.

Figure c. Worker flows into and out of unemployment (% of labour force) and long-term unemployment rate, 2001 – 2011Q3



Sources: Statistics Estonia, Eesti Pank

While the rate of entering unemployment escalated due to the global financial crisis that started in 2008, the decade-long downward trend in the rate of leaving unemployment continued (see Figure c). This situation reverted in 2010 with the economic recovery, and the share of people leaving unemployment started to grow, primarily on account of those leaving unemployment for employment (see Table a). While less than 2% of workers left unemployment for employment in 2008-2009, this figure increased to 6.1% – the highest level in the last decade – in the first three quarters of 2011.

Long-term unemployment increased, since leaving unemployment for employment was more moderate than the post-crisis escalation in the rate of entering unemployment. Furthermore, 2011 witnessed also a drop in the share of people becoming unemployed, and thus growth in the number of short-term unemployed decreased. While the share of people who were unemployed both in the previous year and in the reference period was 2-3% of workforce during the years of rapid economic expansion, this increased to 8% in 2010-2011 (see Figure c and Table a).

[10] Flows in the labour market are defined in this analysis as the number of people who have changed their labour market status in the current quarter as compared to the same time last year. These flows have been divided by the workforce (unemployed and employed) in the same period the year before, in order to obtain rates of movement from one status to another.

Table a. Worker flows into and out of unemployment and long-term unemployment, 2001–2011Q3 (% of last period's workforce)

	Out of employment into unemployment	Out of inactivity into unemployment	Total flows into unemployment	Out of unemployment into employment	Out of unemployment into inactivity	Total flows out of unemployment	Long-term unemployment rate
2001	3.8	2.0	5.8	3.7	1.7	5.4	6.6
2002	3.0	1.9	4.9	3.4	1.8	5.3	5.3
2003	3.1	1.7	4.9	3.6	1.3	4.9	5.2
2004	2.4	1.9	4.3	3.4	1.1	4.4	5.4
2005	2.0	1.4	3.4	3.2	1.0	4.2	4.5
2006	1.6	1.4	3.0	2.8	0.6	3.4	3.0
2007	1.3	0.8	2.1	2.2	0.3	2.6	2.6
2008	2.6	1.1	3.7	1.7	0.3	2.0	1.9
2009	7.8	1.6	9.4	2.0	0.4	2.4	4.3
2010	6.8	1.8	8.7	4.2	0.7	4.9	8.3
Q1–Q3 2011	3.5	1.6	5.1	6.1	0.8	6.8	7.9

Sources: Estonian Labour Force Survey, Eesti Pank

Table b. Cox proportional hazards model. The covariate is the hazard rate of moving out of unemployment into employment, 2001–2011Q3 (%)

	2001–2004	2005–2008	2009–III kv 2011
Age (years)	–0.7**	–1.5***	–2.1***
Sex (1 = male, 0 = female) (d)	34.1***	9.1	–7.4
Married (1 = married/living together, 0 = other) (d)	9.5	16.5*	37.5***
Estonian language (4 = home language, 3 = oral and writing skills, 2 = oral, 1 = comprehension, 0 = other)	6.3*	10.6***	22.8***
Secondary education (baseline: primary education)	23.8**	36.3***	34.0***
Higher education (baseline: primary education)	41.6**	51.2***	61.7***
Harju County (baseline: South Estonia)	36.2***	27.7**	34.9***
Central Estonia (baseline: South Estonia)	5.1	51.2***	64.4***
Ida-Viru County (baseline: South Estonia)	–36.4**	13.5	27.3
Lääne County (baseline: South Estonia)	10.5	22.0*	54.4***
Model attributes			
No of observations	1828	1609	1918
Logarithmic likelihood function value	–5170.5	–5333.1	–4123.4

Note: * refers to the significance likelihood of $p < 0.1$, ** to the significance likelihood of $p < 0.05$ and *** to the significance likelihood of $p < 0.01$.

The table presents the effect of explanatory variables on conditional probability of the unemployed becoming employed, i.e. instead of hazard ratios hazard ratio minus one is presented. The Cox proportional hazard model assumes that the hazard of a group is always proportional to the hazard of its reference group, without defining the baseline hazard function. In case of binary variables, noted by (d), the presented estimate indicates the difference in conditional probability between presented and reference category. For example, if the probability of a female becoming employed at a certain elapsed time of unemployment in 2001–2004 had been 2%, then the probability of a male becoming employed, ceteris paribus, would have been 34,1% higher, 2.682%. In case of ordered or continuous variables, such as Estonian language skills and age, the presented estimate shows how much the conditional probability of becoming employed is higher, if this variable increases by one unit. Unemployment duration is measured with monthly frequency.

Source: Estonian Labour Force Survey

The probability of leaving unemployment for employment and thus also the expected duration of unemployment depend on people's individual characteristics. The identification of such characteristics is essential for designing labour market policy and defining its target groups. Therefore, this box also examines the characteristics that add to the likelihood of leaving unemployment, by applying the Cox's proportional hazard duration model. This analysis does not cover people who leave unemployment for inactivity. The dependent variable is the probability of leaving unemployment for employment at a certain moment, conditional that the individual has not left the unemployment before. It is assumed that the effect of explanatory variables on the baseline probability is proportionally constant over time[11]. Results for periods 2001-2004, 2005-2008 and 2009-2011 third quarter are presented in Table b. A more specific overview of the used methodology and data is provided in Eesti Pank's Working Paper 1/2011 (Meriküll 2011).Tabel b.

Among human capital variables, education and command of the Estonian language are significant factors explaining the duration of unemployment; the place of residence matters as well. Each additional year of age, ceteris paribus, decreased the conditional probability of leaving unemployment for employment by 2.1% during the period of economic slowdown and in the subsequent period. The probability of remaining unemployed for a longer period of time is higher for people with a lower education level and for those who are single. Higher proficiency of the Estonian language increases the potential of leaving unemployment for employment. The risk of long-term unemployment is higher for unemployed persons who live outside the Harju County, Middle-Estonia and Lääne-Viru County. Since 2004 gender has not had a statistically significant effect on exiting unemployment; before 2004 it was easier for unemployed men to find a job. The importance of age, marital status, Estonian language proficiency, education and place of residence in explaining the exit from unemployment to employment has increased during the period of economic recession, because employers have a bigger pool of potential workers to select from in the environment of high unemployment. Consequently, the risk group with the highest probability of long-term unemployment includes mainly older individuals with basic education and those who have no or low competence in the Estonian language. Active labour market measures, which aim is to enhance the job finding opportunities for most vulnerable labour market segments, should therefore mainly focus on this target group.

Reference:

Meriküll, J. (2011) Labour market mobility during a recession: the case of Estonia. Working Papers of Eesti Pank, 1-2011.

[11] The assumption of proportionality is in this case only met for the sample 2001-2004; in other cases this assumption is not met for some characteristics.

Prices

Inflation[12] continued at a rapid pace throughout the first three quarters of 2011. The price hike was mostly caused by food and energy. The price of the latter started increasing already in early 2009. In autumn 2010, the price level was primarily influenced by the price of food, which started showing signs of a slowdown only in the second half of 2011. The impact of these factors raised inflation to 5.4% in the third quarter, so it exceeded the spring forecast projections. However, core inflation remained below 2.5%.

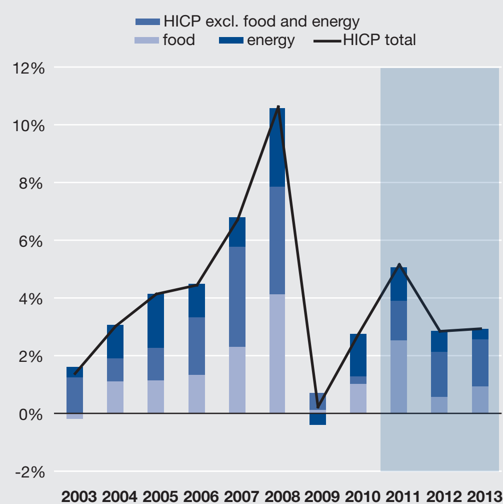
Inflation in Estonia will decline in the last quarter of 2011, partly due to the previous year's higher reference base. The projection sees inflation to slow also in 2012-2013, to 2.8% and 2.9%, respectively (see Figure 9). With the economic activity on the wane, both Estonia's and our main trading partners' price pressures are weakening. Corporate and household confidence is shrinking, and this is affecting their consumption decisions.

Although economic activity is relatively weak in advanced economies, markets expect global commodity prices to remain high. The baseline scenario expects the price of an oil barrel to be 109 dollars in 2012 and 104 dollars in 2013. The global-market price level of several other industrial commodities, especially metals and textile, has decreased compared to the peak at the start of the year. This has a downward effect on inflation. The food price dynamics in the global market depends on weather conditions (among other things) in shorter term, and on demand growth in developing economies in longer term.

Whereas the baseline scenario expects imported inflation to weaken, the contribution of domestic factors will increase next year as well. The growth of nominal unit labour costs will accelerate to 2.9% in 2012 as a result of wage growth

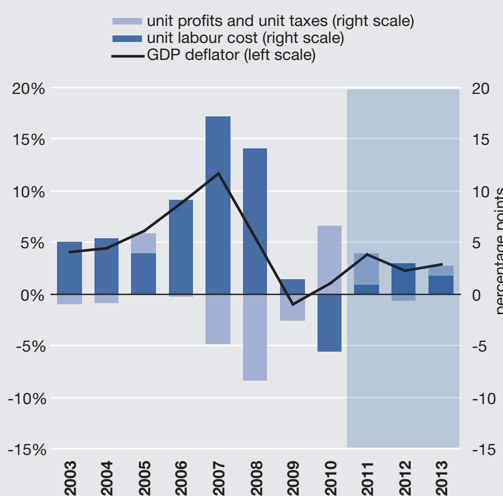
[12] The text always refers to HICP.

Figure 9. Inflation



Sources: Statistics Estonia, Eesti Pank

Figure 10. Contributions to GDP deflator growth



Sources: Statistics Estonia, Eesti Pank

(see Figure 10). However, since final consumption will increase moderately, it will become less easy for companies to transfer rising costs to prices, compared to the two previous years. The mark-ups will thus fall by about 0.7% in 2012. The next year's forecast for the GDP deflator (which is affected by labour costs, as well as alcohol and tobacco excise rises) is 2.2%.

Food

The hike in food prices in the first half of 2011 was a relevant source of forecast errors. However, in line with the higher reference base of 2010, the rapid food price growth slowed notably in the second half of the year. Speaking of the price of processed food, its year-on-year growth slowed from 10.2% in September to 6.5% in October. Estonia's weather conditions and crops have been better than in several previous years. As a result, vegetables, for instance, cheapened by 15% in the third quarter – more than the usual seasonality. The inflation of unprocessed food slowed from 8.8% to 3.1% over the first nine months of the year. Meat is the only exception in foodstuffs – its price continues to go up. Looking at futures, food prices will stabilise at a high level in the global market.

Energy

Global energy price dynamics has been volatile in recent months, partly due to exchange rate fluctuations. In Estonia, both motor fuel and thermal energy prices increased at a fast pace in the first half-year. The changes in oil prices are transmitted to thermal energy prices with a lag. Thus the price increase of natural gas and thermal energy will be reflected in the CPI of this year's last and next year's first quarter. The price level of solid fuels is influenced by the increased use of wood chips in electricity production, among other factors. According to current market expectations, electricity price will hike for households in 2013, when the electricity market will be opened. The current forecast assumes the rise to be 20%.

Core inflation

Core inflation[13] was relatively moderate in the first ten months of 2011. However, due to the year-on-year services price growth of 3%, it accelerated to 2.3% in the third quarter. Rental prices inflation was accelerated by the recovery in the rental market, displaying a 30% rise, year-on-year, in October. Another factor was tourism revival and changes in the tourism market structure. The number of tourists to Estonia posted a record in the first half of the year. This has in turn contributed to the inflation of accommodation services. Services inflation has so far been held back by the price drop of communication services, which cheapened by 8.3% in the third quarter.

Further core inflation dynamics will be mainly determined by consumers' income growth. Year-on-year, core inflation will continue to accelerate in the first quarter of 2012, reaching 2.8% in the course of the year. This will be caused by, among other factors, the lagged effects of this year's wage growth. In the previous crisis, Estonia's core inflation turned out to be relatively rigid to developments in the real economy.

Indirect taxes

Compared to the spring forecast, there is more information available on administrative measures. In September 2011, the government decided to raise the excise duty on alcohol by 5% as from January 2012. This will step up inflation by up to 0.2 pp. The tobacco excise duty will also increase from January, but since companies have accumulated stocks, the pass-through will probably manifest itself in the consumer price index from March to May of 2012. In conclusion, based on the available information, indirect taxes will contribute to inflation by 0.4% in 2012 and by 0.2% in 2013.

[13] Core inflation includes only the inflation of services and manufactured goods, both of which accounted for 50% of core inflation in 2011.

General government

General-government revenue

Whereas last year's mostly export-driven economic expansion did not result in an increase in tax revenues, the latter have shown robust growth this year. General-government tax revenues were some 8% larger in the first three quarters of this year compared to 2010. EU structural funds and income from the sale of emission quotas have augmented also non-tax income.

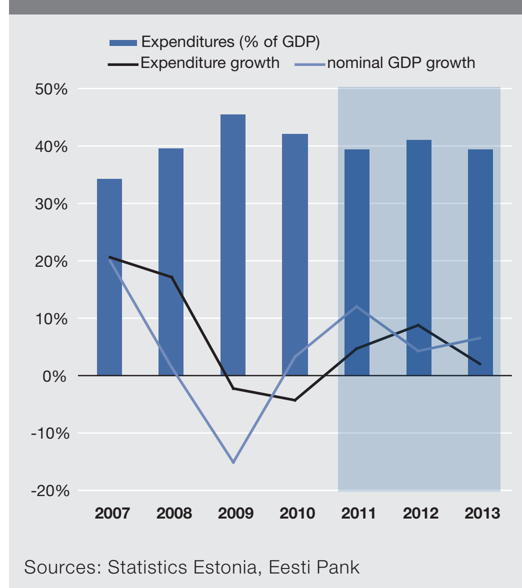
Looking at economic developments, tax revenue growth is expected to slow over the forecast horizon. Non-tax income growth will abate as well, since the usage of EU structural funds is likely to remain close to the 2011 level and revenues from asset sale and dividend withdrawal, both of which were increased temporarily during the recession, will decline. The forecast takes into account the 10% tobacco excise duty rise in 2012 and 2013 and the 5% alcohol excise duty rise in 2012. It also considers the abolition of reduced tax rates on fuels in some sectors during 2012-2013.

With the tax abundance of GDP on the fall, the ratio of tax revenues to GDP will drop by about 1 pp this year, to 32.5%. In 2012, the government will restore their transfers to the second pension pillar, which technically translates into a shrinkage in the tax burden. However, the latter is set to enter a slow growth path in the coming years, since domestic demand will outstrip exports and excise duties will be raised. Nevertheless, the tax burden will make up some 33% of GDP in the forecast period.

General-government expenditure

According to the State Budget Strategy, the government's objective is to restore a fiscal surplus by 2013. To this end, the increasing tax revenues should first and foremost be used to improve the fiscal position. Whereas two previous years saw general-government expenditure shrinking as a result of extensive austerity measures, costs have started to grow slightly this year. According to the next year's state budget, expenditure growth will accelerate further in 2012. Along with expenditure made on account of the sale of extra emission quotas, expenditure growth will amount to about 9%. Without one-off factors, general-government expenditure will increase by 5%. This is likely to remain below Estonia's medium-term growth potential and the increase in tax revenues, but it may still prove to be difficult to meet the State Budget Strategy's aim to eliminate the budget deficit by 2013 (see Figure 11).

Figure 11. General government expenditure



Sources: Statistics Estonia, Eesti Pank

Fiscal balance and debt

This forecast projects the general government's 2011 budget surplus to be larger than expected in the spring forecast. The general-government investment has been below expectations, whereas tax revenues and income from the sale of emission quotas have been higher. The coming years' fiscal balance forecast has been revised downwards, since the macroeconomic outlook has deteriorated.

The nominal budget balance is over the forecast horizon significantly affected by the revenue from the sale of emission quotas and by the expenditure financed by such income.[14] The structural budget balance, that is, the fiscal position indicator excluding business cycle effects and extraordinary expenditure and revenue, will be in surplus over the entire forecast horizon, though the surplus will decrease slightly in the coming years. Thus, based on the assessment of the structural fiscal balance, it may be concluded the government is going to ease fiscal policy (see Figure 12).

The general-government debt was about 6% of the annual GDP in the middle of 2011, with the general government continuing to be a net lender. The forecast expects the general government to finance next years' deficit on account of reserves, with no additional borrowing. However, the gross debt level will deteriorate due to the participation in the European Financial Stability Facility. Nevertheless, the general-government debt increase will be relatively modest and the debt level will not be more than 7% of GDP over the forecast horizon.

Banking sector and financing of the economy

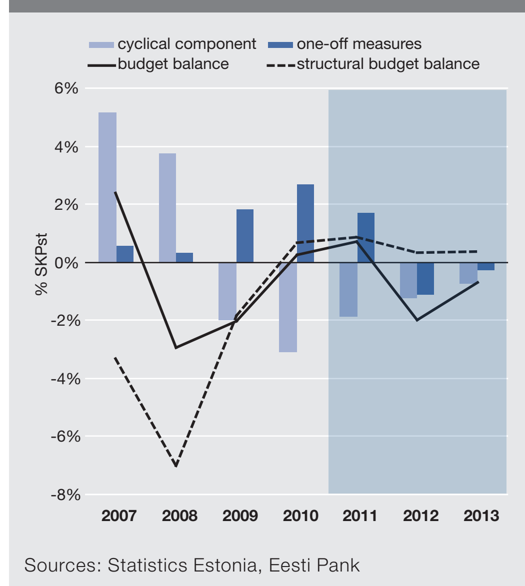
Credit supply

The high capitalisation of the Estonian banking sector and the improved funding base create a good basis for financing companies and households. Domestic cash flows from loan repayments and the real sector's growing deposits are sufficient for supporting new lending volumes that are significantly higher than the present level.[15]

[14] Income from selling emission quotas has improved the fiscal balance of 2010 and 2011 by 1 pp to GDP in both years, but the expenditure financed by the income step up the next years' deficit, by 1.1 pp in 2012 and by 0.4 pp in 2013.

[15] See Lending Review No 2/2011.

Figure 12. Fiscal stance



Sources: Statistics Estonia, Eesti Pank

Interest margins on new loans to the real sector have declined somewhat faster than expected in spring; mostly due to competition. Average interest margins[16] have declined by 50 basis points since to the start of 2011, reaching the euro area average level. The margins will not decline further, but the EURIBOR (generally used as the base rate in loan agreements) is expected to decrease in 2012 by some 50 basis points. Loan interest rates will return to the end-2011 level by the end of 2013 (see Figure 13). Nevertheless, the increasingly unstable external environment and higher risk aversion may bring about the pressure to increase the interest margins on new loans.

Nordic parent banks have so far remained outside the epicentre of the euro area debt crisis and there have been no major funding disruptions. However, parent banks are still vulnerable to adverse developments in financial markets, due to their high share of wholesale funding.

[16] The interest margin has been calculated over the 6-month EURIBOR

The Estonian banking sector is less dependent on additional funds from their parent banks, as domestic funding base has increased. Nevertheless, they are not fully isolated from developments that affect their parent banks, and the effects of adverse developments in financial markets may translate into an increase in funding costs as maturing liabilities to parent banks are rolled over at higher interest rates.

Credit demand

Since economic activity in Estonia has recuperated faster than expected, the credit market has also recovered somewhat more robustly than forecasted in spring. New lending volumes to the non-financial companies increased by 30% in the second and third quarter, primarily on account of short-term loans for financing surging business activities. Growth in new long-term loans, which are granted for financing investment, has been more moderate, a total of 17% in the second and third quarter. There were two reasons: first, as predicted in spring, non-financial companies have not stepped up borrowing in order to finance real estate, and second, investments were increasingly financed from internal funds and foreign loans.[17] Growth in new loans peaked probably in the third quarter of 2011. Lending growth is expected to decline in future due to the higher reference base and decelerating export growth. As to financing investment, the current trend of using more internal and foreign funds will continue and companies will remain cautious in taking new long-term bank loans due to higher uncertainty. With sales and investment on the rise, new lending volumes to non-financial companies will still grow in 2012 and 2013. The forecast expects the corporate and household new loans to grow by 11% in 2012 and by 10% in 2013, but new lending volumes will not reach the pre-crisis levels because of smaller uptake of loans for purchasing real estate.

[17] The ratio of long-term loans to corporate investment was 80% in 2011 compared to almost 100% during the boom period.

Figure 13. Lending rates

The recovery in household credit demand has been somewhat different than predicted in spring. New housing loans started to grow slightly earlier and faster than expected – 17% and 27%, in the second and third quarter, respectively, although the number of loans granted has not significantly increased[18]. A very modest growth in new consumer loans, below 5% in the second and third quarter, implies that households' behaviour has remained prudent. In the coming years, credit demand will be supported by an increase in household income and the affordability of residential real estate despite risen prices. It can be assumed that households will remain conservative in taking on new loan commitments and make informed decisions. This, in turn, will subdue growth in credit turnover. Housing loans will be mostly taken for purchasing new dwellings. Private consumption will increase, but not on account of new loans. Continuous prudent financial behaviour means the deposits of the real sector will expand.

[18] Households purchased real estate of higher quality and price and therefore took larger housing loans.

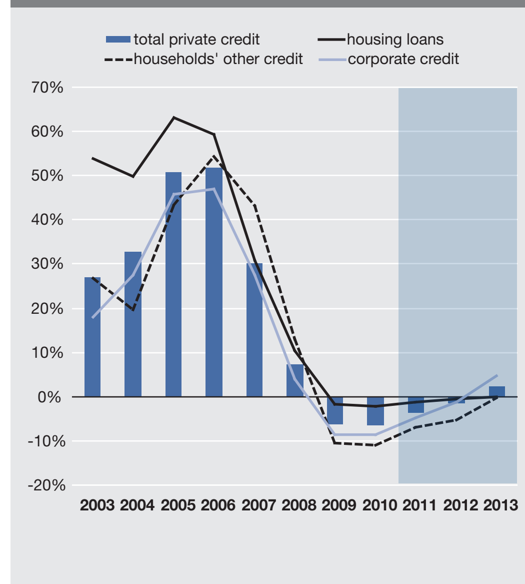
Credit stock has continued to shrink this year, though credit turnover went up (see Figure 14). Nevertheless, the decline in credit stock was smaller than predicted in spring. This can be explained by the higher-than-expected level of new housing loans and slower-than-expected write-off of non-performing loans. Loan amortization was slightly higher than assumed. The real sector will continue to scale down the leverage accumulated during the boom time. As a result, the debt burden of the real sector vis-à-vis GDP will decline in the forecast period. The write-off of bad loans will also reduce the credit stock in the coming years. The loan portfolio will continue to shrink in both 2011 and 2012, and we can expect a modest – about 2% – increase in the credit stock only in 2013.

ALTERNATIVE FORECAST SCENARIO

The baseline forecast scenario assumes that it is possible to curb the debt and financial crisis in Europe. The euro area downturn is short-lived and economic activity enters a slow recovery. But the spill-over from the debt crisis to the real economy may be more pronounced if there occurs a disorderly restructuring of some country's debt or if the sovereign debt crisis escalates. The forecast depends on the steps taken to resolve the crisis. If the process is delayed or obscure, a more prolonged and steeper recession cannot be ruled out. Therefore, notable uncertainty surrounds the baseline scenario with downside risk overwhelmingly predominant.

Compared to spring, the autumn baseline scenario already includes a slowdown in external demand growth, which results from our trading partners' increasing uncertainty, less favourable financing conditions and weaker fiscal support. The alternative scenario, on the other hand, describes a situation, where the crisis will not be solved in the near term and its impact on the real economy will increase.

Figure 14. Private sector credit growth



Given the likely global nature of the crisis, with the financial sector suffering the most, the downside scenario has been modelled similarly to the 2008-2009 recession. The crisis spills over to our main trading partners through several channels and its primary direct impact on Estonia lies in weaker external demand. Low confidence reduces first and foremost the demand for capital goods and contracting demand will have an amplified effect on Estonia's export-oriented manufacturing sector. Different from the previous crisis, the current downturn has not been preceded by a boom and Estonian exporting sector is stronger, so external demand will decline less than in 2009.

The risk to credit market developments results from the increase in general uncertainty in Europe caused by the possible spreading of the debt crisis. Nordic banks, which are relevant to Estonia's economy, have so far avoided getting into the epicentre of the crisis, because their capitalisation is high and direct exposure to the

problem countries' sovereign debt is small. If the debt crisis escalates, tensions are bound to appear in the local banking sector as well. The credit market will face extensive supply-side constraints, which means higher lending margins will be forced onto the real sector. Therefore, the alternative scenario expects margins on new loans to the private sector to increase. Expectations regarding the 3-month EURIBOR, however, are the same as in the baseline scenario.

Different from 2008-2009, major economies have much more limited possibilities to stimulate the economy. On the contrary, countries in fiscal difficulty are forced to curb expenditure to consolidate their budgets in order to restore or maintain investor confidence. As a result, external demand will not bounce back the way it did in 2010, helping the Estonian economy swiftly back to its feet. In case of a new recession, Estonia's growth outlook would be markedly below the expectations of the baseline scenario in the coming years.

According to the alternative scenario, Estonia's GDP will contract by 3.9% in 2012 and grow just 0.2% in 2013. Thus, the economy would come to a halt in the second half of the forecast horizon and signs of improvement would appear as late as end-2013. The labour market will respond to the situation with a lag and private consumption will decline along with disposable income in 2012. Unemployment, however, would not hike to the level of a couple of years ago, because the structure of the economy is more balanced. Investment will be held back by low productivity and higher loan interest rates.

The alternative scenario does not include the inflation risk, since inhibited economic activity would rather cause deflationary pressures, through both domestic factors and foreign trading partners. Oil prices would also respond to the recession and decrease, like in the previous crisis, thus reducing inflation in Estonia even more.

If medium-term economic growth is slower than expected, the government will have to be ready to revise their current expenditure plans. Otherwise the general government deficit may increase sharply. It should also be kept in mind that financing a fiscal deficit may prove to be rather costly in such circumstances.