ECONOMIC FORECAST 2010–2012

SUMMARY

The forecast is based on information available on 8 April 2010 and will also be published in the central bank's publication Estonian Economy and Monetary Policy No 1/2010.

Global economic growth has recovered and confidence in international financial systems has remarkably improved compared to a year ago. However, confidence continues to be propped by central banks' lenient monetary and extensive fiscal stimuli. These props are, unfortunately, not without cracks, since the fiscal policy of several countries has cast doubt on the sustainability of their public-sector debt burden. It is likely there will be differences across countries exiting the crisis.

Estonia's GDP increased again at end-2009, after seven consecutive quarters of contraction. Confidence indicators have notably improved compared to last autumn, but remain below the historical average. External demand has so far been the main driver of economic stabilisation, with the sectors oriented to domestic demand displaying only limited signs of a rebound. For growth to become sustainable, investment activity must gain momentum. The current GDP expansion is largely based on the increased utilisation of production capacity that was left unused because of the global crisis. However, there are still plenty of unexploited resources in the economy as a whole with some of them having accumulated due to permanent changes in the demand structure.

We assume in the spring forecast that external demand will recover by 20% on the previous year's trough by the end of the forecast horizon. This year's domestic demand will be at a level comparable to that of 2003 because of high unemployment, low consumer confidence and sluggish investment activity. Domestic demand will start to contribute to growth in the next years.

2009 was a year of revising earlier plans for many enterprises and households as well as for the public sector. The global financial crisis resulted in the rapid realisation that the abrupt shrinkage in income is not temporary and therefore permanent expenditure cuts are essential to survive. The reorganisation of manufacturing operations is almost completed in many companies, contributing to the improvement in confidence. Compared to last autumn, the number of companies planning lay-offs in the coming months has notably decreased. The profitability of companies is substantially lower than before, irrespective of extensive expenditure cuts, and this has made servicing their debt burden more difficult.

The deep recession will have several long-lasting consequences. One of them is the high level of unemployment, since labour market adjustments have mostly consisted in lay-offs and, to a lesser extent, in wage cuts. In addition to the manufacturing sector, which was hit hard by the crisis, employment has plummeted also in the construction sector, which used to create many new jobs in the boom time. The current level of unemployment partly reflects the fact that the allocation of labour force in the years of rapid growth was incapable of delivering long-term growth. Although economic activity is on the mend, unemployment is likely to remain high even at the end of the forecast horizon. This means many people will be jobless for a long time and structural unemployment will expand. Unfortunately, long spells of unemployment deteriorate people's working habits, impair their professional skills and reduce their productivity. Rising structural unemployment may in future affect the level of GDP and weaken economic growth potential. High unemployment among the young is a serious longer-term social risk factor, which labour-market institutions need to take into consideration.

Adjustments in companies made many employees feel concerned about losing their job, which had a very strong negative impact on household confidence. However, the situation has improved compared to the trough of 2009. The way in which economy unfolds depends on how permanently the downturn has impacted consumer behaviour. Last year household savings reached the highest level since records began. People are considerably more discouraged to consume and uncertainty is also likely to be stronger in the coming years.

Estonia's relative income level vis-à-vis the EU average deteriorated notably in the course of the economic contraction. At the same time, the relative consumer price level has remained almost unchanged. Wage shrinkage has only meekly passed through to the prices of goods. Had the tax increases made to improve the budgetary position been not made, consumer prices would have fallen more. This year's consumer price inflation has been revised upwards in the spring forecast due to several factors. The main reason lies in additional administrative measures, which could not be foreseen at the time the autumn forecast was being prepared. We have also lifted the expectation regarding external inflation, especially in respect of the price of oil. Inflation will nevertheless remain low in the forecast horizon compared to the boom years, since price pressures will be subdued as a result of weak domestic demand and the vast amount of underutilised production inputs.

The near-term credit market will probably be characterised by a near-standstill with the larger banks operating in Estonia reckoning on better times and on the adoption of the euro. Compared to the period of rapid growth, a large part of the Estonian banking sector has become much more conservative in the provision of credit and has not made any efforts over the past year to issue new loans or to gain market shares. With the volume of overdue loans expanding, banks have mostly focused on dealing with their existing loan portfolios. Taking into account the decline in banks' costs of financing, there is sufficient room for lowering loan interest rates.

The general government will have to continue fiscal consolidation in the years to come. Whereas a moderate general government deficit is tolerated in a deep recession, it is imperative to restore fiscal balance as soon as possible once growth recovers. To this end, it is necessary to take additional measures, and temporary consolidation measures will have to be replaced by permanent ones. If costs grow more slowly than GDP in the coming years, it will be possible to grow out of debt. It is also important to consider the fact that GDP may not be as tax abundant as before.

There are several risks to the accuracy of the spring forecast. The most relevant ones are the slower-than-expected recovery of external demand, a faster rise in the price of commodities, and, as regards domestic economy, even steeper contraction in wages and prices. The spring forecast baseline scenario is supported by two alternative scenarios. The first one analyses what would happen when foreign investors' risk assessment regarding Estonia improved faster than expected, thus increasing their willingness to invest here. The second scenario discusses the negative side effects related to the reduction of the debt burden.

The forecast also includes two boxes of background information. The box on the medium-term sustainability of Estonia's fiscal policy treats the possibilities of achieving fiscal balance. The second box analyses the adjustment of Estonia's economy in both expansionary and contractionary phases of the business cycle, highlighting differences across the size of enterprises.

EXTERNAL ENVIRONMENT

Global economic growth has recovered faster than anticipated in autumn, owing to extensive support measures. All major economies experienced an upturn in the second half of 2009, allowing market participants to revise this year's growth figures slightly upwards. However, the rebound is uneven across countries and adjustment is far from being over. Financial markets are in a much better state than last year, but uncertainty has not yet withdrawn to the pre-crisis level. Due to the need to increase capital buffers and because of imminent loan losses, it will take time before the lending ability of banks recovers.

Although confidence has notably improved in larger economies, there are many countries that will have to deal with the aftermath of the financial crisis for several years to come. This means first and foremost the withdrawal of the unprecedented crisis measures and gradual narrowing of the highly supportive fiscal and monetary policies. However, this requires sustainable private-sector demand growth, which cannot be based merely on restocking. Switching growth engines is complicated by unemployment, which is increasing almost everywhere. Moreover, the private sector is reducing its debt burden in several countries, and this requires additional efforts. Consequently, the spring forecast takes note of the risk that the external environment's support to our economic recovery may be weaker than anticipated in the baseline scenario. Many countries will also have to start diminishing their public-sector debt, which is yet another factor inhibiting economic expansion. In order for the shrinkage in the debt burden to have an invigorating impact, it is necessary to simultaneously improve supply-side flexibility with the help of economic policy measures. Since the economy is still very vulnerable in numerous countries, additional shocks may easily cause short-term disorders, especially in money and capital markets. An environment like this favours the reassessment of risks by economic agents, which may further intensify the effect of the shocks. All in all, it can be said that the global stage for sustained growth is still relatively fragile.

Global GDP contracted by 0.6% in 2009. This is extraordinary in the light of previous decades' growth cycles (see Figure 1). A large part of the decline took place in developed countries, where

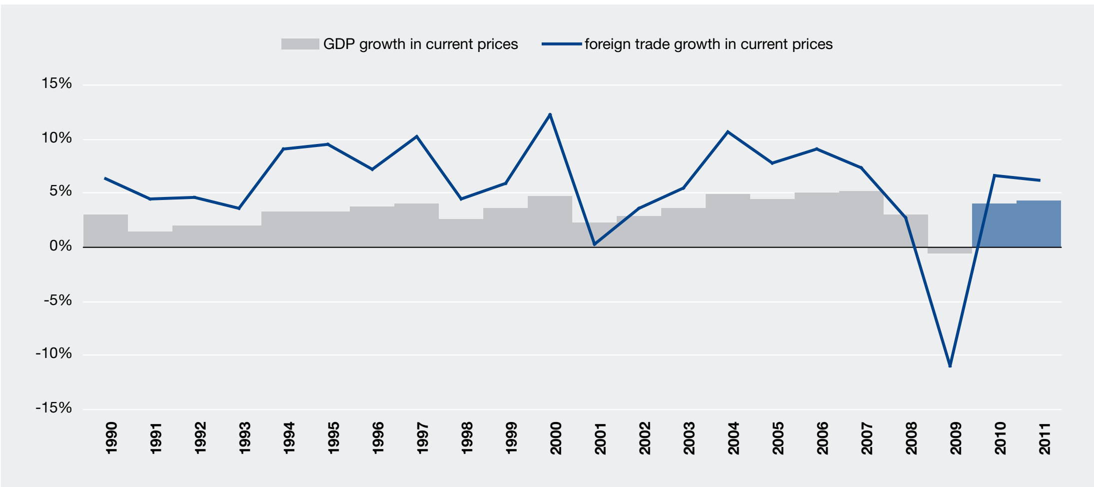


Figure 1. World output and trade

Source: World Economic Outlook

GDP is not expected to bounce back to the pre-crisis level before 2012. Leaving aside Central and Eastern European countries, it can be concluded that emerging markets have been more successful in tackling the crisis. For instance, the total output in emerging Asia is already surpassing pre-crisis levels. The IMF expects this year's global growth to be 4.1%, which is an upward revision of 1 percentage point compared to autumn 2009, and anticipates the next year's expansion to amount to 4.3%.

The rebound of growth at the end of 2009 was also spurred by renewed momentum in global trade. The world trade volume contracted by a total of 11% last year, but a relevant share of the decline that took place at the end of 2008 and start of 2009 was already offset in the second half of last year. Asian countries played an important role here. Thus, the various support measures that countries have taken have not been accompanied by a substantial increase in protectionism. The IMF expects global trade volumes to soar faster than expected in autumn and to grow by an average rate of 6% in the next years.

Developments in the Estonian economy are rather strongly affected by our close ties with other European countries, especially with Nordic countries. The ECB anticipates euro-area economic growth to be 0.4-1.2% this year and 0.5-2.5% in 2011. Euro-area economic contraction was 4% in 2009; the downturn was even deeper in Finland and also in Sweden. At the same time, compared to the autumn assessment, expectations regarding these countries' outlook have risen and their growth rate should in future again exceed the euro-area average. In order for the Estonian economic outlook to improve, demand should increase in the main export markets of the Nordic countries. The prospects of this happening have somewhat increased, especially as regards exports to Asia. Latvia and Lithuania have been experiencing a very severe recession, so taking into account their high unemployment rate and extensive tightening of budgets, it is unlikely our southern neighbours will make any considerable contributions to our external demand growth in the foreseeable future. Nevertheless, the Latvian and Lithuanian export sectors have started to show signs of momentum and their growth forecasts have been gradually revised upwards.

Estonia's external demand reached its trough in the second quarter of 2009, when its volume was some 20% smaller compared to the peak. The upturn, which started in the second half of 2009, will continue throughout the forecast horizon. The economic forecast's assumptions on external demand are based on consensus forecasts[1], which expect that Estonia's main trading partners will have offset some three-quarters of the contraction caused by the crisis by end-2012. This means external demand will grow by about a fifth compared to its lowest point: 8% by end-2010, 13% by end-2011, and 20% by end-2012. The forecast rests on the expectation that 6-month EURIBOR will be 1.1% this year, 2.1% next year and 2.5% in 2012 (see Table 1).

Global inflation did not slow as rapidly in 2009 than could have been expected given the crisis-caused shrinkage in GDP. Prices increased 0.2% in developed countries and 5.2% in developing countries last year. The likelihood of deflation with accompanying threats has considerably decreased by now. In the IMF's assessment, the interdependence between economic growth, inflation and unemployment has weakened, partly as a result of very supportive economic policy measures. The IMF expects this year's inflation to be 1.5% in developed and 5.7% in

[1] Consensus Forecast, Nordic Barometer, Eurozone Barometer.

Table 1. External forecast assumptions

	2006	2007	2008	2009	2010	2011	2012
Household energy (%)	8.8	13.7	25.4	4.1	5.6	6.5	3.8
General government investment (EEK bn)	9.8	12.7	13.4	10.4	10.7	10.9	11.1
Oil price (period average, USD per barrel)	65.0	72.5	97.2	61.6	80.5	83.1	84.1
Average USD/EEK rate of the period	12.5	11.4	10.7	11.3	11.3	11.3	11.3
6-month Euribor (%)	3.2	4.3	4.7	1.4	1.1	2.1	2.5
Consumer confidence indicator	9.1	2.0	-19.8	-25.5	-10.9	-5.4	-1.4

Sources: Eesti Pank, Reuters, other

developing countries. Next year inflation will pick up. The ECB forecasts euro-area inflation to be 0.8–1.6% in 2010 and 0.9–2.1% in 2011.

The price decrease of commodities bottomed out in February last year. The price rise that followed has been quicker than after previous economic crises. This has been caused by the faster-than-expected resumption of demand, especially in Asia, and smaller volume of excessive stocks. The price of crude oil increased nearly 90% in dollars and 80% in euro last year. In short term, energy prices depend on changes in supply in the oligopolistic market and on exchange rate fluctuations. In addition to oil, the price of metals also soared at end-2009. This was brought about by a surge in consumption in China. Food prices, on the other hand, have not moved much from the bottom reached last year.

BASELINE FORECAST SCENARIO

Economic activity

The rapid decline in economic activity in Estonia has been replaced by stabilisation. After a downswing that lasted nearly two years, the economy picked up in the fourth quarter of 2009, growing by 2.5% on the previous quarter, but remaining in a deep, 9.4% fall relative to the same period a year earlier[2]. The upturn was spurred by a temporary increase in inventories, which was caused by a rise in excise duties. As a result of the front-loading, this year's first-quarter growth will be smaller. Estonia's economy contracted by 14.1% last year and nearly 20% compared to the boom-time peak, plummeting to the level of 2005.

Recession was very broad-based in 2009, affecting both domestic-demand-focused and export-oriented sectors. The strongest setbacks to total production took place in construction (–30%), financial intermediation (–27%), manufacturing (–26%), and hotels and restaurants (–23%). These branches of activity underwent the largest job cuts as well. Total production increased only in forestry (17%), fishery (6%) and public administration, national defence and statutory social insurance (1%).

Signs of an economic upswing are subdued in sectors oriented to the domestic market. Although manufacturing exports shrank the most in 2009, resumption is taking place faster as well. External demand for durable goods, which underwent the steepest slump, has bounced back the most rapidly. A large part of production capacity is still underutilised, with weak demand being the main factor inhibiting output growth. Compared to autumn, the forward-looking components of confidence indicators have improved in several sectors and reached levels comparable to the historical average in manufacturing and services. The construction sector with its very low level of confidence is an exception.

Compared to last autumn, the share of companies planning lay-offs in the coming months

[2] Seasonally and working-day adjusted.

has notably decreased. This confirms that the restructuring of manufacturing operations in the business sector is nearing its end and that output volume is stabilising. At the same time, the share of firms looking for new staff in the coming months has not increased much, which shows the period of sluggish activity persists.

However, supported by external demand, the economy will continue to grow gradually (see Table 2). Owing to the available excess capacity, it is easy to expand output in the near term without a significant rise in costs. But in order to achieve sustainable growth, it is imperative that investment activity gathers momentum. Last year the share of corporate investment in GDP shrank to 13–14%, which is several percentage points lower even compared to the crisis ten years ago. The indicator made up as much as 22–23% of GDP in the boom years. The near-term outlook for a pickup in investment activity is not very favourable though, because the economy is lacking funds to enter a new growth phase as a result of the deep recession. The adoption of the euro would support the inflow of foreign investment, which has been rather subdued recently. Improvement in expectations is another way the introduction of the euro would contribute to the upsurge of economic activity. However, looking a couple of years ahead, the economic growth profile will mostly depend on the ability of earning profits in export markets. To this end, the production inputs discharged from servicing domestic demand in the course of the recession need to be channelled into the exporting sector. Estonia's medium-term economic expansion will be markedly less brisk than prior to the downturn, but still exceeding the growth of our main Nordic trading partners by 1–2 percentage points.

Table 2. Economic forecast by key indicators

								Difference from previous forecast		
	2006	2007	2008	2009	2010	2011	2012	2009	2010	2011
GDP (EEK bn)	207.0	244.5	251.5	214.8	213.6	223.0	233.4	0.9	1.8	-1.3
GDP, chain-linked volume change (%)	10.0	7.2	-3.6	-14.1	1.0	4.0	3.3	0.1	-0.4	-0.6
HICP (%)	4.4	6.7	10.6	0.2	1.3	1.1	1.3	0.2	1.7	-0.6
GDP deflator (%)	7.6	10.2	6.7	-0.6	-1.6	0.3	1.3	0.3	0.8	-0.8
Current account (% of GDP)	-16.9	-17.8	-9.4	4.6	3.4	1.5	-1.2	-1.7	3.0	6.7
Current account plus capital account balance (% of GDP)	-14.7	-16.8	-8.4	7.4	6.5	5.0	2.3	-1.0	3.2	7.3
Private consumption expenditures, chain-linked volume change (%)	13.0	9.1	-4.8	-18.9	-5.6	1.6	3.8	-0.7	-5.7	-4.5
Government consumption expenditures, chain-linked volume change (%)	3.5	3.7	4.1	-0.5	-1.0	-1.2	1.4	4.6	0.2	-0.1
Fixed capital formation, chain-linked volume change (%)	18.5	9.0	-12.1	-34.5	1.9	10.6	9.6	1.1	3.0	-1.2
Export, chain-linked volume change (%)	14.0	0.0	-0.7	-11.2	7.7	8.1	6.8	0.8	2.5	-2.2
Import, chain-linked volume change (%)	22.9	4.7	-8.7	-26.8	6.1	9.0	10.8	1.3	-2.2	-8.8
Unemployment rate (ILO) (%)	5.9	4.7	5.5	13.8	16.0	14.5	13.2	-0.7	-0.6	0.2
Employment growth (%)	6.4	1.4	0.2	-9.2	-2.7	1.4	1.1	0.9	0.6	-0.9
GDP growth per person employed (%)	3.3	5.7	-3.7	-5.3	3.8	2.6	2.2	–	–	–
Real wage growth (%)	10.4	12.0	4.3	-3.8	-4.2	0.1	1.9	0.5	-0.2	-0.4
Average gross wage growth (%)	16.2	20.4	13.8	-4.6	-3.8	1.2	3.2	0.0	0.6	-0.8
Nominal money supply growth (%)	27.7	14.0	5.6	1.0	0.3	2.6	4.0	1.9	-1.6	0.1
Nominal credit growth (%)	51.6	30.2	7.3	-6.4	-2.4	2.3	3.8	-0.1	-2.3	-0.8
Gross external debt (% of GDP)	96.8	109.8	118.5	126.8	124.6	109.4	109.7	-0.4	-4.6	0.6
General budget balance (% of GDP)	2.3	2.6	-2.8	-1.7	-2.2	-2.3	-1.8	1.3	0.6	-0.8

Sources: Statistics Estonia, Eurostat, Eesti Pank

Domestic demand

2009 was a year of reviewing earlier plans for many enterprises and households, as well as for the public sector. The global economic crisis resulted in the realisation that the rapid contraction in income is not temporary, thus permanent expenditure cuts are essential to survive. However, due to very high uncertainty about even the near-future outlook, some economic agents curtailed costs just as a precautionary measure. As a consequence, domestic demand plunged to new lows in the course of the past year. The pace of the decline was about 26% year-on-year in the first three quarters. The contraction slowed to 17% in the fourth quarter, but mostly due to the low reference base. Quarter-on-quarter, the shrinkage in domestic demand started to show signs of easing towards the end of the year (see Figure 2).

This year's domestic demand volume will be comparable to that of 2003 due to extensive downward adjustments. Compared to the recovery of export income, a pickup in domestic demand will take place with a lag over the forecast horizon. To this end it is necessary for general confidence to strengthen and for the banking sector's support to the economy to increase. The recuperation of domestic demand will not be very fast, since the high level of unemployment will suppress growth in consumption expenditure for several years to come. Looking at the number of the employed, this year is comparable to 2001.

Private consumption

Private consumption contracted more than GDP during the crisis. The previous years' robust growth in consumption expenditure rested on both wage growth and vigorous lending. However, as the economy contracted, the previous years' increase in consumption expenditure was withdrawn in full extent – household consumption soared by 23% in 2006–2007, but declined by the same amount in 2008–2009. The majority of the decrease, i.e., around 20%, took place during 2009.

Estonia's households have never before made so extensive adjustments to their behaviour as in 2009. Above all, they refrained from costlier

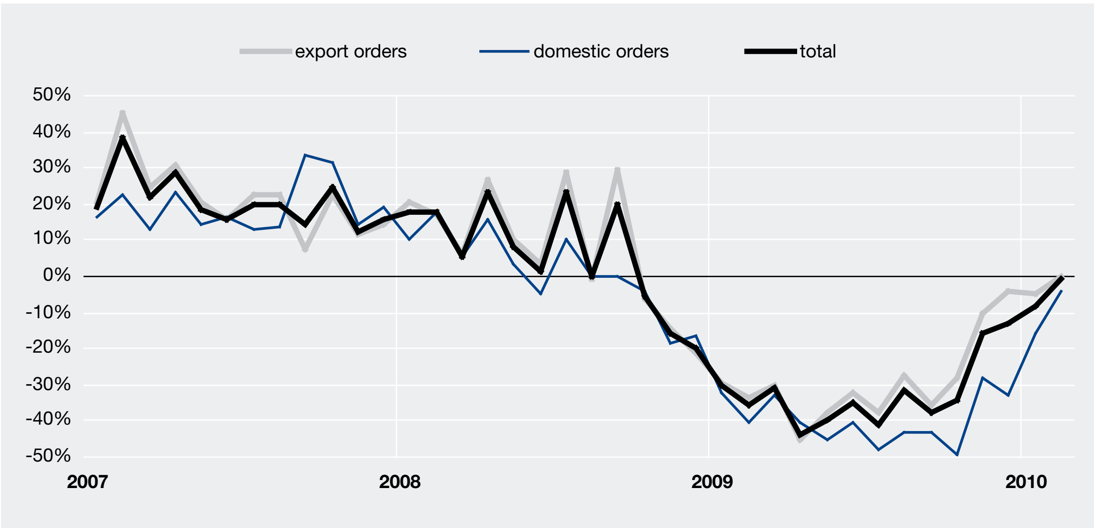


Figure 2. Annual growth in manufacturing export orders

Source: Statistics Estonia

purchases, such as cars, clothing, audio-video and telephone equipment. At the same time they also cut down on expenditure on basic commodities and even on food. The latter dropped in nominal terms by so much as 14.1% year-on year at the end of 2009. This shows that the budget has become very tight for some households.

In 2010, the volume of private consumption will be roughly at the same level as in 2004, making a negative contribution to GDP growth. However, private consumption is expected to pick up in the years to come with the help of new jobs and the improvement of the general economic situation. The completion of adjustments in enterprises in the near future will help boost the confidence of people who have not lost their job. This will bring along a more courageous usage of credit.

The impact that the downturn has exerted on the confidence and saving habits of households will be a very significant factor affecting the growth profile in the coming years. In 2009, the decline in consumption expenditure outstripped the drop in income and saving surged to make up an estimated 11% of disposable income. The saving of households was close to zero a couple of years ago. Last year savings grew as a result of high uncertainty, but the total effect of this factor is difficult to assess (see Figure 3). The amendments to the Employment Contracts Act, which entered into force in mid-2009, may have weakened the confidence of employees as regards keeping their job and thus made them save more.

Investment

Compared to earlier periods, investment activity in Estonia was at a very low level in 2009, constituting only 21.8% of GDP, which is nearly a third less on the peak of 2006–2008. The low will persist in 2010. Investment is expected to pick up in longer term, along with increasing export income. The adoption of the euro would also contribute to the recovery. Since there are scanty internal financial resources in the economy, the upturn will mostly be supported by foreign companies. The share of general government investment remained unchanged in the course of the crisis and it is expected to stay at the level of 5% of GDP also in the years to come.

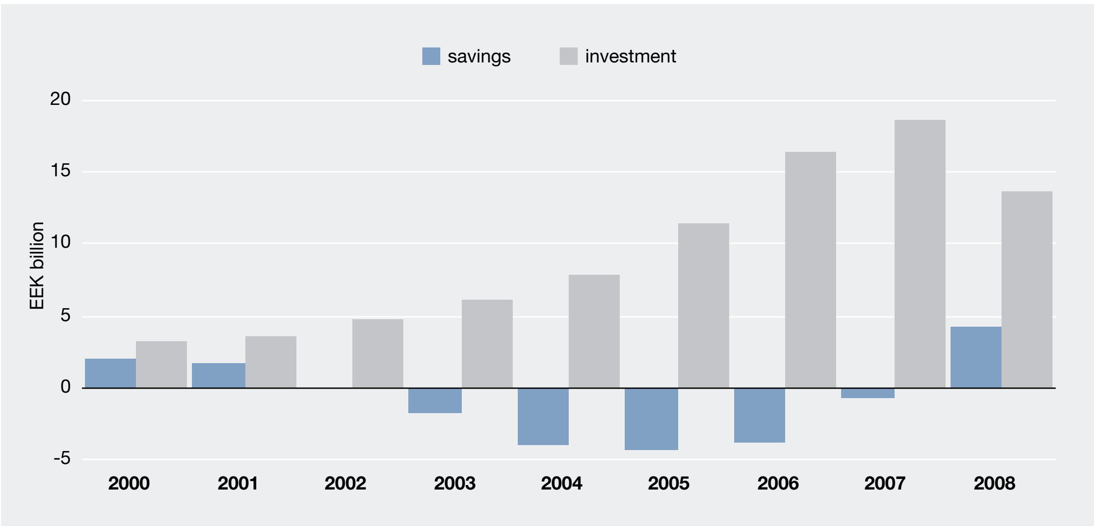


Figure 3. Household savings and investment

Source: Statistics Estonia

The rapid economic contraction resulted in a sudden slump in demand and in the underutilisation of production resources, which means there is currently no pressing need for additional capital investment. According to a survey of the Estonian Institute of Economic Research, 60% of production resources were being utilised at the start of 2010, which points to a slight recovery from last year's trough. Numerous enterprises have no need to boost their production capacity with new investment to exit the crisis, since their resources are on the shelf waiting to be put into use when demand recovers. Considerable investment was made in buildings, facilities and dwellings in the years of rapid growth. In 2009, the same articles accounted for nearly half of the shrinkage in investment.

Falling demand has brought along changes in preferences and some goods are needed much less than before. That is why it is necessary to reorganise part of earlier investments to make them productive again. This, along with the flow of newly available resources into servicing foreign demand, requires additional loan resources and the inclusion of new know-how. The reallocation of resources and a smooth transition to a growth cycle calls for flexibility from creditors, since many enterprises have to reduce their debt burden at the same time.

In 2009, corporate profits fell by 56%, which means there are scanty internal financial resources to launch a new investment cycle. Although enterprises substantially curtailed costs, the share of profits in sales remained still markedly below the long-term average even at the end of 2009 (see Figure 4).

Stocks

The level of stocks accumulated in the boom years started to decrease in 2008. The contraction, which was to a great extent caused by shrinking demand and growing alternative costs related to stock-keeping, has considerably precipitated the economic downturn.

The decrease in stocks is expected to slow in 2010 and to turn into an increase in the second half of the year. The level of stocks is vastly affected by expectations regarding the recovery profile.

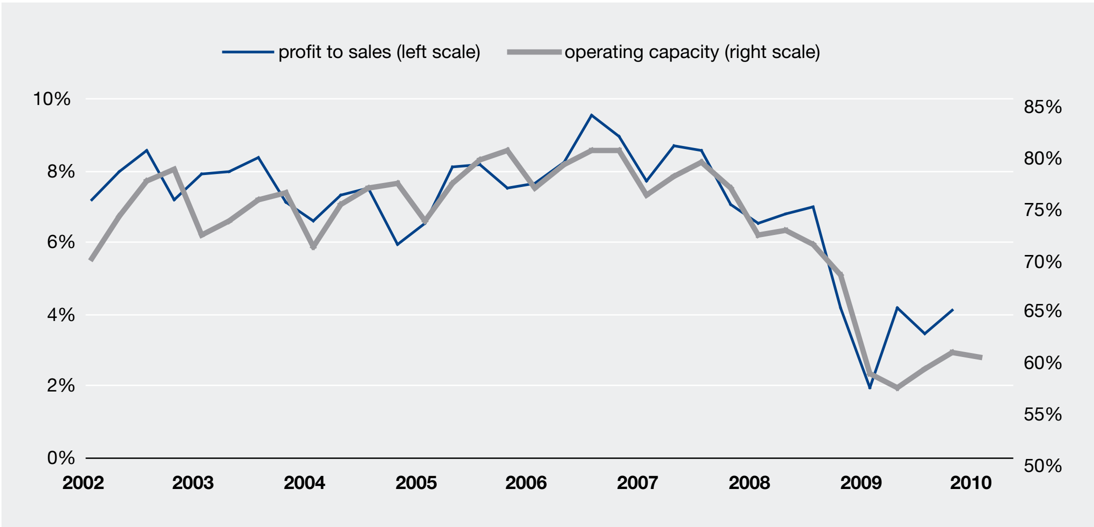


Figure 4. Profitability and utilisation of production capacities in the manufacturing sector

Sources: Statistics Estonia, Estonian Institute of Economic Research

External balance and competitiveness

Ongoing external debt growth along with the extensive inclusion of foreign savings were for more than a decade the factors reflecting Estonia's economic vulnerability. Estonia's dependence on external financing started to decrease last year. External debt, which amounted to 298 billion kroons at end-2008, had declined to 272 billion by end-2009. In addition, the current account, which had been in a deficit for a considerable stretch of time, posted a surplus of 4.6% in 2009. Estonia turned from a net borrower to a net lender vis-à-vis the rest of the world, although what actually happened was that we started to save more and repay our debts to other countries.

The current account turned into a surplus owing to narrower trade balance, which shrank from 11.7% recorded in 2008 to 3.9% in 2009. The services account surplus has even expanded despite the global crisis, soaring from 7.5% to 9.2%. This is a better result than expected a year ago. The current account surplus will persist in the first half of the forecast horizon and debt burden will continue to contract. However, the likelihood of a current account deficit will increase as time goes by, since domestic demand will recover along with the resumption of growth. In the boom years, domestic demand was financed by foreign capital inflow through banks. The importance of this funding channel will decrease in the forecast horizon and direct foreign investment and portfolio investment will become relevant instead. Extensive financing via the EU structural funds will continue as well, with the annual resources received making up some 3–4% of GDP.

The external balance is to a great extent dependent on Estonia's export ability, which determines the income earned in foreign markets. Export volumes picked up in the second half of 2009, referring to improving foreign trade. Year-on-year, goods exports measured at current prices contracted by almost 25%, mostly in industrial sectors related to capital goods. Services exports turned out to be less sensitive to the global crisis, shrinking a mere 11%. The contraction was primarily caused by a fall in transport services due to smaller goods carriage volumes. Computer services exporters, for example, have done better than the average – they managed to increase their export volumes by 10%. Preliminary estimates show that services exporters managed to increase their market share in the EU internal market in 2009. The goods export outlook has continued to improve in the first months of 2010, with year-on-year growth exceeding 10%.

Declining wages (especially the reservation wage) and high unemployment are boosting labour-costs-based competitiveness, because it has become simpler and cheaper to find new employees. This contributes markedly to the recovery of output in industries that are more labour-intensive and less skill-intensive. In the years to come, Estonia's enterprises will be successful in taking over market share in sectors characterised by low knowledge intensity and high labour intensity. The development of capital-intensive sectors will take longer, since it requires larger investment in both production equipment and human capital. Looking at the long-term competitiveness of the economy, it is important to consistently contribute to boosting productivity.

Labour market

The labour market has undergone robust adjustments. A considerable share of employees has been laid off from companies that did not invest in long-term growth potential in the years of rapid expansion. The slowdown in the economic contraction in Estonia has reduced the pessimistic sentiment of both enterprises and households. The collapse in the number of jobs also inhibited at the start of 2010. Although the creation of new jobs has picked up, it is still weak considering the very high unemployment level. Unemployment will decrease over the forecast horizon, but it will still remain very high with a serious threat of an increase in structural unemployment.

Employment and productivity

In 2009, the number of the employed amounted to an average of 596,000, which is 61,000 (9.2%) less than a year earlier. In the course of the recession the number of jobs shrank most in the sectors that had lived beyond their means in the boom years, e.g., construction (–28%), but also in several branches of activity in manufacturing (an average of –15.7%).

Cutting down on working hours was an important means of curtailing labour costs during the recession. Last year the number of working hours per employee declined by 6.9% on 2008, when the drop amounted to 1.6%. As a result of the reduction in working hours and employment, productivity per working hour grew by 0.8% in the second quarter of 2009 and soared to 8% in the fourth quarter. Prior to that, productivity per working hour had been on the decline for four consecutive quarters. Underemployment, on the other hand, escalated in 2009: 13,000 people wished to work more than enabled by employers. Recovering economic activity does not necessarily bring along an immediate increase in vacancies, since enterprises first start adding on working hours.

The self-employed have proved to be one of the most flexible groups of employees in the course of the recession. They quickly responded both to the downturn by cutting jobs and to the slowdown in the contraction by creating new jobs. Thus, the share of entrepreneurs in total employment is likely to increase in the near term. There will be no large-scale creation of new jobs in the non-tradable sector in the forecast horizon, but as exports recover, employment in the manufacturing and transport sectors may start to increase. Estonian residents have been interested in working abroad since the country's accession to the EU. The motivation to do so gained notable momentum in 2009: more than 19,000 people were working abroad as of the last quarter of 2009[3]. This tendency is very likely to continue.

Unemployment

The annual average number of the unemployed[4] surged to 95,000 in 2009, with the unemployment rate reaching 13.8% – the highest figure seen during the time of reindependence. Unemployment soared to as high as 15.5% in the last quarter of the year (see Figure 5). The unemployment rate is the largest among the young, men, immigrants and unskilled workers. This trend is characteristic of both Estonia and the EU. With the unemployment rate expanding, the share of the long-term unemployed has hiked. Returning to the labour market is usually more difficult for them, which is why many give up looking for a job and become economically inactive. Nevertheless, economic activity has remained relatively high so far. This is partly explained by the fact that being registered as unemployed enables access to several benefits (health insurance, unemployment benefit, possibilities of receiving additional training).

Long-term unemployment accompanying the crisis plays a significant role in the development of structural unemployment via the labour market hysteresis mechanism. Looking at past data it can be said that although the unemployment rate will peak in the first half of 2010, long-term unemployment will continue to increase both this and the next year, accounting for more than 7% of active labour force at the end of the forecast

[3] This does not include people who live and work abroad permanently.
[4] ILO methodology.

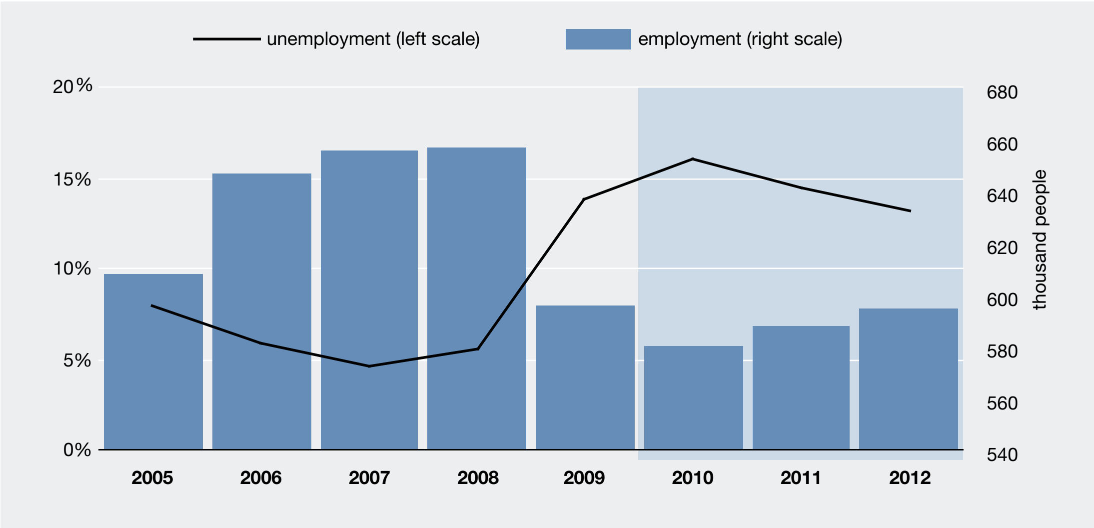


Figure 5. Employment and unemployment

Sources: Statistics Estonia, Eesti Pank

period. A high level of structural unemployment may have a strong impact on Estonia's future GDP, because long spells of unemployment affect people's working habits, reduce their professional skills and thus make them less productive. The institutional setup of the labour market has a key role to play in alleviating structural unemployment.

Looking further ahead, the current high level of unemployment among the young is a serious long-term social risk factor. This may cause the given age group to be rejected in the labour market for many years, making it difficult for them to find work even when economic circumstances improve. Thus, it is imperative to conduct active labour market policies as regards young people. If they are unable to gain any work experience, it might be a good idea to improve their professional skills with the help of additional training programmes.

The increase in the number of the unemployed should come to an end in the first half of 2010. Since production factors are strongly underutilised, enterprises have no plans of creating numerous new jobs next year. Although employment will increase over the next couple of years, it will fail to strongly alleviate the very high unemployment level. Increasingly more people will move to work abroad, retire or give up looking for a job. According to demographic projections, the number of 16-64-year-olds will contract by a couple of thousand people each year during the entire forecast horizon.

Wages and labour costs

As a result of the economic downturn, enterprises have substantially curtailed labour costs. This has been achieved by both cutting the number of employees and reducing their wages. The average nominal wages shrank by 4.6% last year, whereas the slump was even deeper at the end of the year, falling to 6.5% (see Figure 6). Public-sector wages decreased even more compared to the private sector – by 10.9% and 4.8%, respectively. Wage contraction has been the steepest in the construction and manufacturing sectors, as well as in retail and wholesale trade. Labour costs were reduced by a total of 13% compared to the same period a year earlier.

Figure 6. Wage growth

Sources: Statistics Estonia, Eesti Pank

Firms have employed various measures to keep wage costs in check. These range from cutting bonuses, premia and other benefits to lowering basic wages. Wages will continue to shrink year-on-year in the first quarter of 2010, after which stabilisation will follow. Further changes in the average wage level depend on several factors. While increasing the number of working hours and the restoration of bonuses will raise the average wages, experience from end-2009 show that new employees' reservation wage is below the average. The larger will be the share of long-term and structural unemployment, the smaller will be the impact of unemployment on suppressing the average wages. It is possible that some sectors will experience upward wage pressures irrespective of the high level of unemployment.

Prices

Estonia's 2006–2008 inflation was considerably higher than could have been assumed looking at the pace of long-term price level convergence with Europe. Considering the price level in Estonia, sustained inflation should be 1–2 percentage points higher than the EU average. The country's price level accounted for nearly 70% of the EU average in 2008, whereas the purchasing power of residents made up just 67%. The gap between prices and income widened last year, since income dropped dramatically due to the global crisis. The relatively high cost of many services and manufactured goods compared to other Central and Eastern European countries refers to the need for price adjustment. This would also offset exchange rate appreciations vis-à-vis the currencies of our trading partners. In 2009, the Estonian kroon's real effective exchange rate calculated on the basis of consumer prices was about 1.5–2% higher year-on-year. The majority of the increase derived from the higher nominal exchange rate of the kroon.

The level of consumer prices in Estonia continued its downward trend in the second half of last year, having dropped by 2.2% from the peak recorded in October 2008. The decline in the price level was inhibited by several tax amendments, without which the level of prices would have lowered by more than 3%. The key contributors to last year's price decrease were food and household energy, which are both dependent on trends in the external environment. The share of goods affected mostly by domestic factors was smaller than expected. For example, the price of services has not shown sufficient downward flexibility compared to the rather high upward flexibility it displayed in the boom years. Thus the price adjustment of such goods may still be ahead. In March 2010, the price level rose by 1.3%, with year-on-year inflation amounting to 1.7%. The price increase was faster than expected and took place in about the same magnitude in several euro-area countries as well. The month-on-month hike was driven by three factors: the price rise of oil due to the cheapening of the nominal exchange rate of the kroon vis-à-vis the dollar, the considerably higher price of fresh vegetables (because of adverse weather conditions), and the unexpected surge of nearly 10% in the cost of communication services.

The spring forecast expects consumer prices to grow by 1.3% in 2010 (see Figure 7). Inflationary pressures will pick up for many reasons. Administrative measures alone will account for more than 1.5 percentage points of this year's inflation, since part of their impact has passed through from 2009. In addition, the price of real estate is below the long-term average and may thus resume growth. The risk of inflation originating from the external environment has also increased, primarily due to the rising cost of energy. Corporate profits have for a long time been at a very low level, so it cannot be ruled out that some companies may raise prices to recover their profit. However, in light of the sharp fall in incomes, such a move would not turn out to be successful in the economy as a whole, because an upswing in spending on some goods will lead to curtailing expenditure on other goods and services. As a consequence, such price rises place a drag on the resumption of growth.

In the first half of 2010, inflation will be influenced by the reference base effect, because imported energy was cheap in the global market at the start of 2009. The year-on-year growth in inflation will inhibit in July. This will be caused by the withdrawal of the impact of VAT increases from the reference base and by the price decline of services. Inflation is likely to stabilise at around 1% in the second half of the year. The GDP

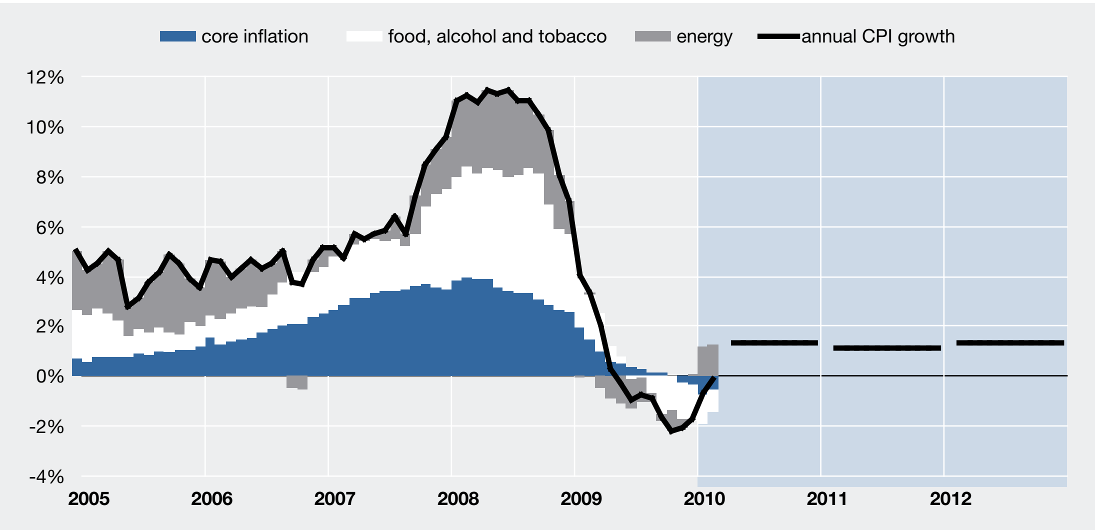


Figure 7. Inflation components and forecast

Sources: Statistics Estonia, Eesti Pank

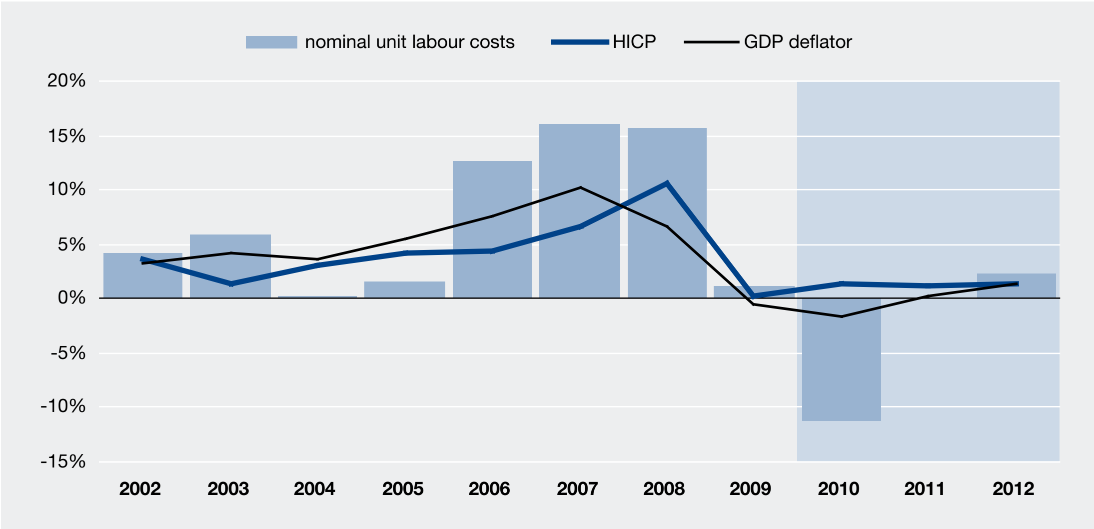


Figure 8. GDP deflator and CPI growth

Sources: Statistics Estonia, Eesti Pank

deflator is a measure of the change in the price of value added produced within a country. The deflator will contract this year due to wage contraction and weak demand (see Figure 8). The producer price index measures output prices, which include both domestic and imported production inputs, and it is more affected by the price increase of imported commodities and energy.

Administered prices[5]

In 2009 the government announced several additional administered price increases. The VAT rate went up by two percentage points in July, but firms' profits absorbed some of the rise. Several taxes were also raised at the start of this year to improve the budgetary position. Excises on tobacco and alcohol were increased as from January, but the resulting price growth will pass through to consumer prices with a half-year lag, because companies have accumulated extensive stocks. Motor fuel and energy excises went up as well. Another additional administrative measure is the 1% sales tax in Tallinn enforced as from June 2010. The opening of the energy market constitutes a risk factor, since it is difficult to forecast how it will affect consumer prices. The share of regulated prices in inflation will probably be up to 1.9 percentage points in 2010.

Food, alcohol, and tobacco

Global food prices increased in the second half of 2009, but this was mostly a rebound from the low reference base at the start of the year. The cost of primary food commodities (above all cereal) remained lower than average by historical standards. Sugar and tea were an exception – their price hiked as a result of adverse weather conditions in several geographic regions.

Food prices in Estonia declined by 2.6% in the second half of 2009. This was mainly because of the 5.1% cheapening of unprocessed food due to seasonality. The price of meat products dropped as well in the second half of last year. As regards processed food, the cost of crude milk started rising from October, thus affecting

[5] Administered prices are either prices that are directly or indirectly regulated by the state or goods the price of which includes a large share of excise duties (a total of 30% of the consumer basket). Among other things, the definition covers thermal energy, electricity, alcohol, tobacco and motor fuel.

consumer prices. Compared to mid-2009, the farm-gate price of milk was some 20% higher at the end of the year. The price level of food is expected to remain stable over the forecast horizon. If the food industry manages to boost their export volumes in 2010, it is possible prices will increase in the domestic market as well. However, since demand in the domestic market is weak, there prevails stiff competition.

Motor fuel

The hike in the price of oil in the global market caused strong inflationary pressures in the second half of last year. Some of the price surge was offset by the depreciation of the dollar, but the tendency reversed at the end of the year. Estonia experienced a large price jump in January 2010, when the cost of motor fuel grew by 50 cents due to the rise in excise duties. According to crude oil futures, markets expect the price of oil to rise to 90 dollar per barrel by the end of 2010. The indirect impact of the oil price increase is more notably reflected in the inflation of some goods. The spread between the retail price and global-market price of motor fuel has been wider than the averages of previous years as from summer 2009.

Household energy

Thermal energy cheapened at a rapid pace in the first half of 2009, but the trend turned in July, and the price hiked by 9.6% in the course of the next month. However, the cost of thermal energy was still lower at the start of 2010 than in the same period a year ago. The effects of the soaring oil price will pass through to the cost of thermal energy with a 6-month lag, which means Estonia will have to start importing substantially more expensive natural gas in spring 2010. Several thermal energy producers have announced a price hike in March or April, and it is possible that the price of thermal energy will surge by about 10% in 2010.

The price of electricity in the forecast horizon depends on numerous supply and demand side factors, including the opening of markets, an increase in environmental taxes and price indexation. The spring forecast expects the cost of electricity to grow by 7% for residential customers in 2010, but the majority of the price increase has already taken place in January.

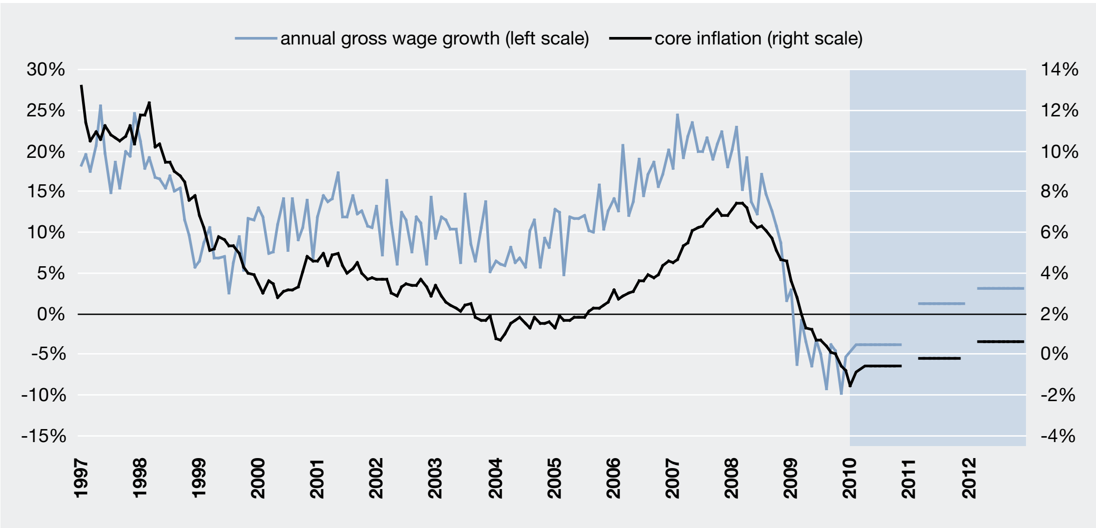


Figure 9. Core inflation and annual gross wage growth

Sources: Statistics Estonia, Eesti Pank

Core inflation

In the domestic economy, on the other hand, prevailing risks are related to price declines, which may manifest themselves mostly in the services sector. Corrections in the prices of services have so far been smaller than expected, referring to price rigidities. Adjustment to weaker demand mostly took place through a contraction in employment. The service that has cheapened the most is apartment rent, which had decreased by 33.5% year-on-year by December 2009. In addition, price fall in the accommodation sector accelerated to 16% in December due to stiffening competition after the end of the tourist season. Though some domestic-market-oriented branches of activity have not yet experienced a contraction in prices, the pass-thorough of wage cuts to prices may take place over a longer time horizon (see Figure 9).

Looking at sales turnovers, it can be seen the services sector has suffered as heavy a shock as manufacturing. The services sector should probably review prices more often to determine the optimum price level. As to manufactured goods, there is room for the cost of clothing and footwear to decline, since their price level is very high compared to other EU countries.

General government

As a result of the simultaneous effect of contracting domestic demand and the eruption of the global financial crisis, the past two years' recession in Estonia was more severe compared to the assumptions prevailing at the time the budget was being prepared. When the volume of the economy contracted, tax revenue started to shrink rapidly as well. This forced the government to repeatedly implement measures to improve the budgetary position as from the second half of 2008.

The expenditure cuts, tax increases and several one-off measures adopted in the course of the past year and a half have helped prevent a sharp widening of the budget deficit. This, along with the perspective of the adoption of the euro, considerably improved confidence in Estonia. Keeping the deficit within reasonable limits removed the need to take a large-scale and probably also rather expensive loan in the difficult financing conditions.

Whereas a moderate general government deficit is tolerated against the backdrop of a deep recession and underutilised production capacity, it is imperative to restore fiscal balance as soon as possible when growth recovers and capacity is put to use. Thus, fiscal consolidation must continue in the years to come, even more so because the GDP structure may not be so rich in tax revenue in the future compared to the years of rapid growth. This means that domestic demand and wage fund, the main sources of tax revenue, will in future account for a smaller share of the volume of the economy. Since some of the currently employed measures are of one-off nature, these will have to be replaced by sources providing steady income.

General government expenditure

In the past two years, the share of general government expenditure in GDP increased to 45% from 35%, which is an unprecedented hike in historical comparison. The sharp ascent will come to a halt this year and the role of the general government in the economy will start declining next year, reaching about 42% by 2012. Whereas costs will this year decrease also in nominal value, there is hope of growing out of the deficit as from 2011. This means the economy will grow faster than expenditures. Eesti Pank's spring forecast on 2010 rests on the endorsed budgets. Projections about the next years proceed from the assumption that costs on unemployment and social transfers will decrease, when growth and employment recover. In addition it has been assumed that the general government's final consumption expenditure will remain unchanged in 2011 and will grow slower than the pace of economic expansion in 2012. Owing to the more extensive usage of the EU structural funds, the volume of general government investment will not decline over the entire forecast horizon and remain roughly at this year's level.

General government income

Because several tax rates were raised for the purpose of fiscal consolidation, the tax burden of 2010 will hike to almost 36% of GDP from 32% recorded in 2008. Although tax burden will shrink somewhat in the next years, this will not be due to a decline in tax rates, but because of a contraction in tax abundance.

The spring forecast expects the current tax rates to persist over the entire forecast horizon, except for the tobacco excise scheduled to be raised at the start of 2011. In addition, payments into the second pension pillar, where 1% of income is allotted by individuals, with the government adding 2% to it, will be restored in 2011 (see Figure 10).

Fiscal balance and debt

According to Eesti Pank's spring forecast, fiscal deficit will form 2.2% of GDP in 2010. The indicator should decline to 1.8% by 2012. Additional measures need to be taken in order to achieve the government's objective of resuming fiscal balance in the coming years (see Figure 11).

The general government's debt burden grew to 7.2% of GDP by end-2009. But since the sale of assets increased simultaneously, the Estonian government was still a net lender at the end of the year. Although public-sector indebtedness will continue to expand over the next years due to the deficit, Estonia will still be in a fairly favourable position in international comparison at the end of the forecast horizon.

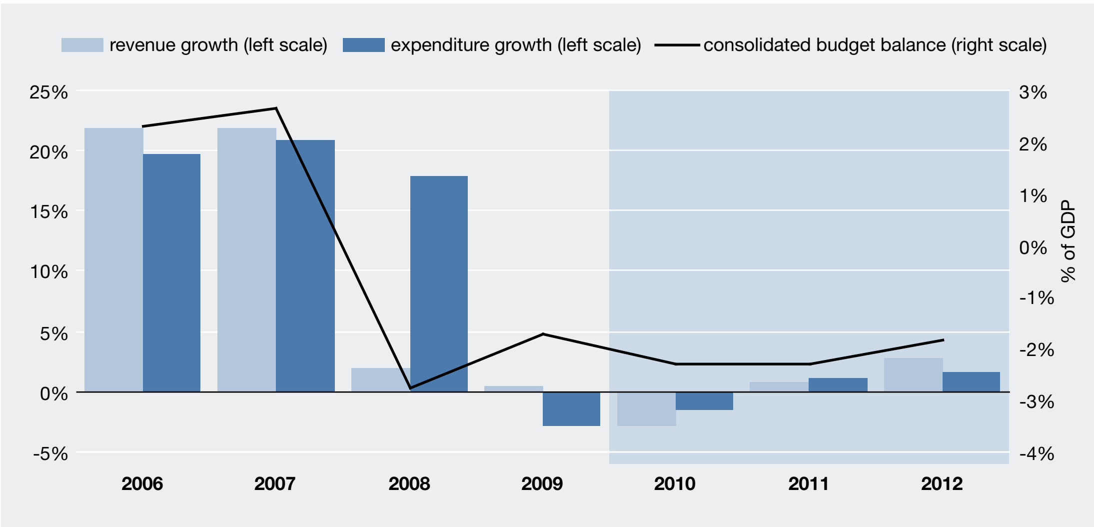


Figure 10. Budget balance

Sources: Statistics Estonia, Eesti Pank

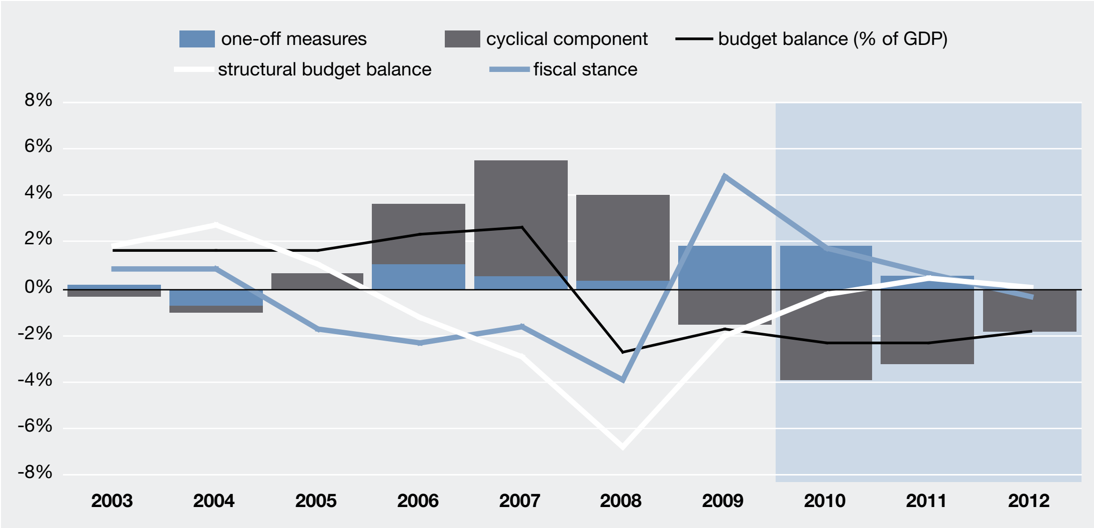


Figure 11. Fiscal stance

Sources: Statistics Estonia, Eesti Pank

Banking sector

International credit market

Both the international liquidity environment and inter-bank confidence suffered damage in the course of the international financial crisis. Greatly owing to excessive state intervention, the slump had been passed by mid-2009 and European larger banking groups have been enjoying considerably better market-based financing opportunities over the past half-year. Nevertheless, it is still early to speak about a full recovery of financial-sector confidence. Financial intermediation does not yet function efficiently enough and the global liquidity environment continues to be propped by central banks' lenient monetary policy. Although the LIBOR-OIS spread has notably decreased compared to the peak level, it was still 10-20 basis points above the pre-crisis level at the start of April 2010 (see Figure 12).

Euro-area banks have reported better access to market financing and improvement in liquidity position, which are easing tensions in the credit environment[6]. However, it still continued to tighten in the fourth quarter of 2009, because of an increase in costs related to reinforcing banks' capital position and to high uncertainty about economic and financial-sector outlooks.

Lending behaviour and factors affecting it have been relatively similar in Nordic countries and euro area. The housing market activity has been supported by low interest rates in both Sweden and Finland, where the annual growth rate of housing loans stepped up to 9% and 6%, respectively, by end-2009. Corporate credit market, on the other hand, has been following a downward trend due to adverse economic circumstances[7].

Estonian credit market

Compared to the boom years, the Estonian banking sector has also become considerably more conservative in offering credit and banks have not been focusing on issuing new loans or gaining market shares over the past year.

[6] Source: The Euro Area Bank Lending Survey, January 2010.
[7] Sources: Suomen Pankki, Riksbank.

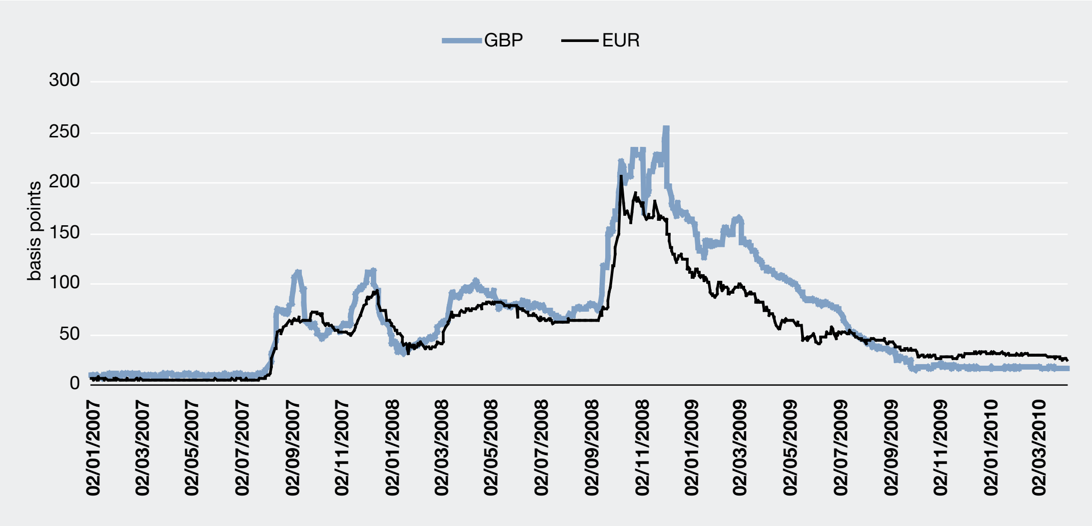


Figure 12. Spread between three-month deposit and overnight index swap rate

Source: Bloomberg

With overdue loans mounting, they have instead focused on dealing with the existing loan portfolios.

On the other hand, shrinking sales revenues of companies have brought along weaker demand for credit and the need to reduce their debt burden – a tendency likely to continue in the next years as well. Firms have been forced to make extensive expenditure cuts, adding additional impetus to the recession. Pressure by banks to curb companies' financial leverage may exert a drag on enterprises' investment activity and thus also on their short-term and long-term growth potential. This forms the basis of the risk scenario where the volume of the economy will be smaller due to a more rapid contraction in the debt burden.

Both companies and households cut down on expenditure financed by loan capital in 2009 – the turnover of real-sector loans was down 54% on the previous year and the financing portfolio volume shrank by 8.4%. Loan volume dec-reased to varying degrees across sectors (see Figure 13). Whereas loan volume dropped by 16% in manufacturing, the highly indebted commercial property sector and the hotel and restaurant sector posted an increase of 4% and 21% in the portfolio, respectively. However, these extraordinary loan growths were caused by earlier decisions to borrow and new large-scale investment in highly indebted sectors was considered risky by both lenders and companies. Due to the specific nature of contracts on financing real-estate development[8], loan volumes are not expected to shrink rapidly and the debt burden of the economy will remain high over the forecast horizon.

The inactivity of banks in issuing loans and designing new loan products and scanty interest in expanding the amount of borrowers are signs that competition has substantially loosened. Banks' risk appetite has also withdrawn – lending decisions are now much more thoroughly considered and only the most promising projects will be approved. All this mostly refers to the credit

[8] Some of the credit issued to the real-estate sector is bullet loans.

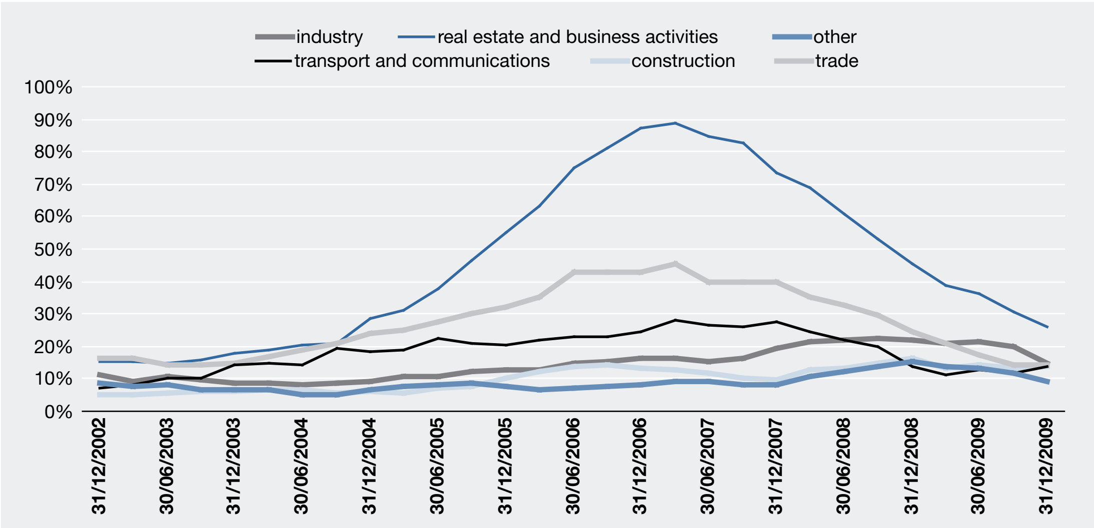


Figure 13. Credit turnover as a ratio of value added

Sources: Statistics Estonia, Eesti Pank

market organising itself against the backdrop of a rapidly deteriorating economic environment, but if applied to the extreme, it may lead to a credit crunch. In the autumn forecast we expected loan margins to decline already from the start of 2010, since there is room for a decrease as a result of the contraction in banks' financing costs and reduction in the risk assessments of both domestic and external economy compared to the start of last year. But banks have decided to keep loan risk margins at the level they reached at start-2009, which is comparable to the level prior to the EU accession (see Figure 14). Although loan interests have reached very low levels owing to the key interest rate, lowering the interest margin would send an impor-

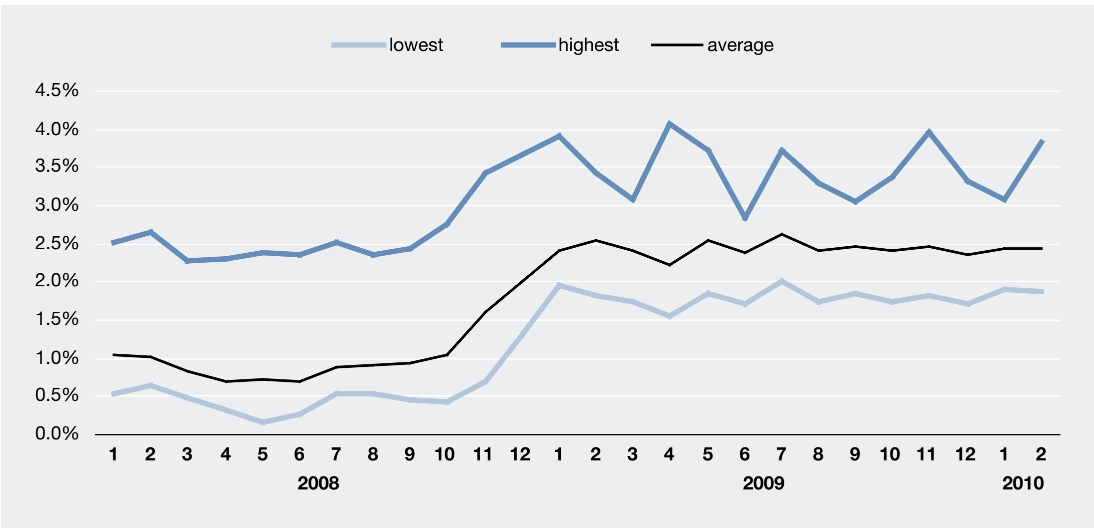


Figure 14. Spread between interest rates on new housing loans and 6-month Euribor

Source: Eesti Pank

tant signal to potential borrowers. If it is reduced, it may help boost credit demand. Large discrepancies between interest margins imposed by banks are an additional sign that competition could become stiffer. However, if this does not happen, margins will not decline before EURIBOR starts rising again.

The near-term credit market will evidently be characterised by a near-standstill with the larger banks operating in Estonia reckoning on better times and on the adoption of the euro. The latter may bring along a welcome improvement in the international market sentiment. If credit demand rebounds, banks will have a reason to become more active in the market and offer competitive conditions. At the same time it is possible that the share of domestic loans in the corporate financing structure will continue to shrink.

Household sentiment may change quickly upon the appearance of first positive signs (e.g., labour market deterioration stops, credit conditions ease, etc) and this could give an impetus to the real estate market. The resumption would be supported by the very low real estate cost, which is expected to have bottomed out and has thus become very attractive to people with average income. Considering the amount and structure of dwellings, there exists need for new real estate developments and it is likely that the financing of new housing projects will pick up (although in a comparatively modest volume) even before household demand gains impetus. The recent crisis experience allows to expect that the development of the housing market will be more balanced and the likelihood of a real estate bubble in the forecast horizon is marginal.

ALTERNATIVE FORECAST SCENARIOS

The economic situation in Estonia has continued to improve compared to autumn 2009, but the recession will have consequences affecting economic developments here for several years to come. Reorganisations in manufacturing and revisions in business plans have alleviated economic stress, and the confidence of both companies and households has risen. This has helped reduce economic imbalances that originated in the boom years, supporting a faster rebound in growth. The imbalances lie in the discrepancy between wages and productivity, which has declined as a result of shrinking wages and cutting the number of employees, and in the high private-sector debt burden, which contracted by a total of 13 billion kroons in the course of the past year. This year's baseline forecast scenario is supplemented by two alternative scenarios, although there are more potential risk sources in the economy. If additional threats materialise, there might follow a set of economic policy measures not anticipated in the spring forecast.

A considerable risk associated with the external environment is weaker-than-expected resumption in external demand. In addition to the general demand environment, the course of recovery of our neighbouring economies is especially important for Estonia. Possible setbacks in these markets would put a drag on our recovery as well. The second potential threat is a faster-than-anticipated increase in energy and food prices in the global market, since this would bring along a higher level of inflation in Estonia and extra pressures on the already tight budgets of companies and households. On the positive side there is the possibility that foreign investors' risk aversion towards Estonia will reduce faster, and their willingness to invest here will increase. The latter is treated in the first alternative scenario. The adoption of the euro would support Estonia's competitive position, since it would boost the credibility of the economic environment.

There are also several risks proceeding from processes within the Estonian economy. As a result, the economy may unfold in a different way than forecast. The first risk is shrinkage in the debt burden, which received an additional and very buoyant push from the deep contraction in income in the course of the recession. This risk is analysed in the second alternative scenario. In addition, risks arising from the domestic economy are characterised by deeper nominal adjustments than assumed. These include a steeper decline in wages and prices – the larger is the excess in underutilised production resources in the economy, the more the price of these resources will decline. Wage cuts have taken place through channels that work more intensively in the short run, whereas the impact of high unemployment may exert a protracted impact on wages. The shrinkage in wages has so far passed through to the prices of goods to a relatively small extent in several sectors, which may be because the process is more time-consuming. Thus, profounder nominal corrections may bring along an additional need for adjustments in manufacturing even in the medium term.

First alternative scenario: higher inflow of foreign investment

Several money market indicators have declined close to their pre-crisis levels, which is a sign that confidence in Estonia's economic developments and economic policy is resuming in the external environment. With risk aversion diminishing, investors' willingness to invest in Estonia is on the mend. It has become considerably cheaper to find and hire workforce, because of high employment and contraction in reservation wages. The prices of several other production inputs, such as land, buildings and facilities, are also more favourable than a couple of years ago. Decreasing risk aversion may also boost money flows received through the banking sector, should the pressure exerted on the parent banks by international markets ease.

Larger investment inflow contributes to the creation of new jobs and reinforces economic growth potential. It is likely new investment will not be domestic-market-oriented, but increase the dependence of the Estonian economy on its trading partners. As a result, GDP growth will be somewhat faster over the entire forecast horizon and external trade will pick up as well (see Figure 15). Due to the vast amount of underutilised resources in the economy, this will not have a very strong effect on prices and wages.

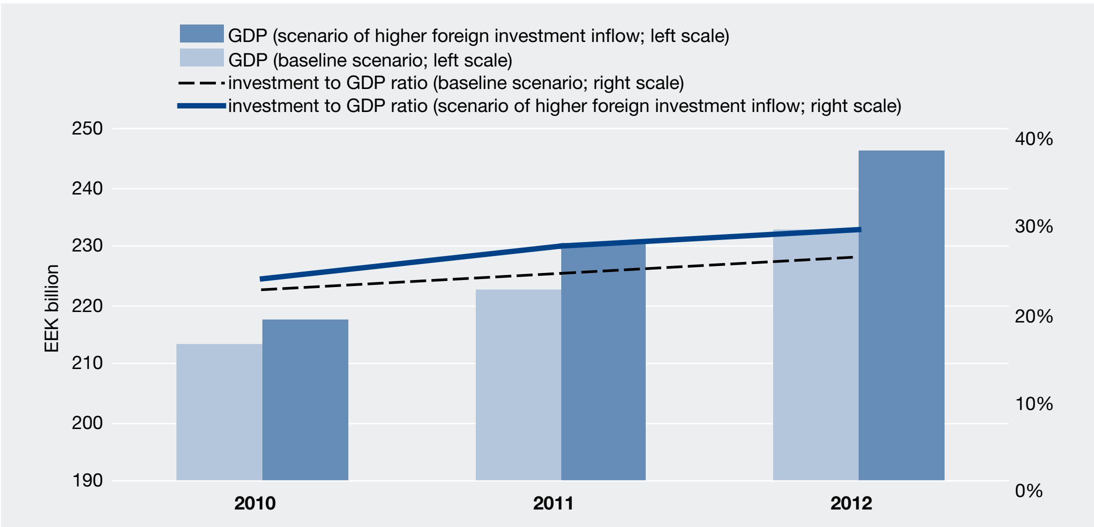


Figure 15. Scenario of higher foreign investment inflow

Source: Eesti Pank

Second alternative scenario: larger contraction in debt burden

A survey conducted within the framework of Eesti Pank's research project on wage flexibility showed that in 2009, nearly 40% of companies considered difficulties in funding their economic activity through traditional financing channels to be big or even very big. The figure is much higher than in other EU countries studied[9]. It is likely that some enterprises tried to use alternative means of financing because of the difficulties. Indeed, banks were more concerned with their existing loan portfolios, because of the increasing volume of problem loans. Highly indebted sectors were preferred in allocating loan resources, but this may not be the best way of heating up economy and restoring growth potential, especially if this is done on account of financing new projects. This does not support economic restructuring, which is necessary to ensure medium-term sustainable growth. A possible negative side effect of shrinking imbalances is strong supply-side restrictions in the banking sector. Therefore, state-owned companies should consider borrowing from the foreign market instead of the local one. The sources of the restrictions may also originate outside Estonia, should the situation in global financial markets tighten again (see Figure 16).

Contraction in income and in sales turnovers meant that many companies had trouble with servicing their debt and they were forced to negotiate with banks to change repayment schedules. Since no statistical data are available, it is difficult to assess the scope and possible effects of this development. There are many ways of reducing the corporate debt burden, and the choices made will have an important impact on future GDP growth. One possibility is to launch new projects that help decrease the debt obligations of earlier unprofitable projects. In this case there will be a short-time increase in debt burden. The other way is to tighten the belt. This means older projects will have to undergo

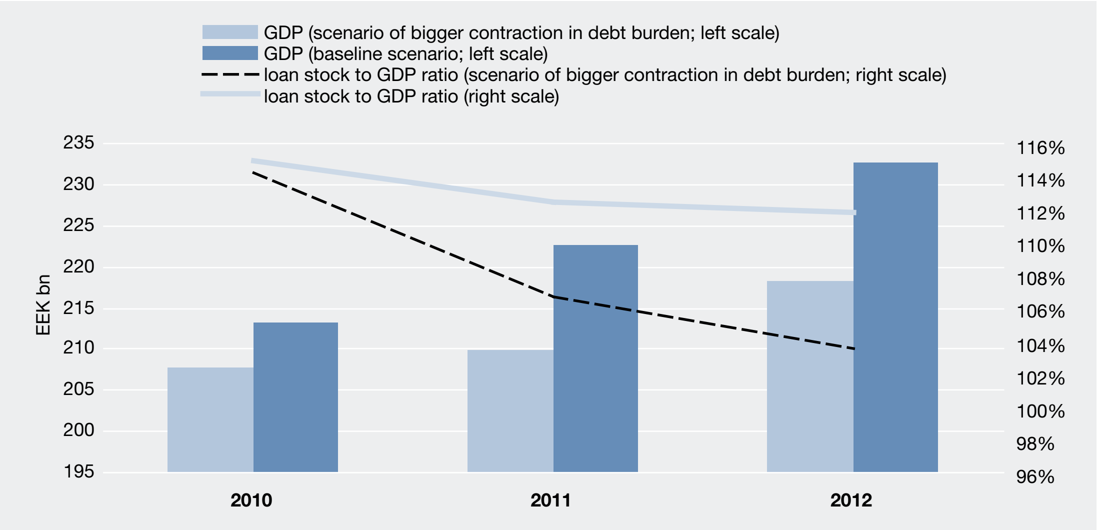


Figure 16. Scenario of bigger contraction in debt burden

Source: Eesti Pank

[9] 10 EU Member States.

extensive cost curtailments in order to cover their loan obligations. Current signs refer to the materialisation of the second option. This means recession may continue in 2010 with 2011 experiencing a near-standstill. A major threat is that fiscal deficit will exceed 3%. This will lead to inevitable additional expenditure cuts (see Figure 17).

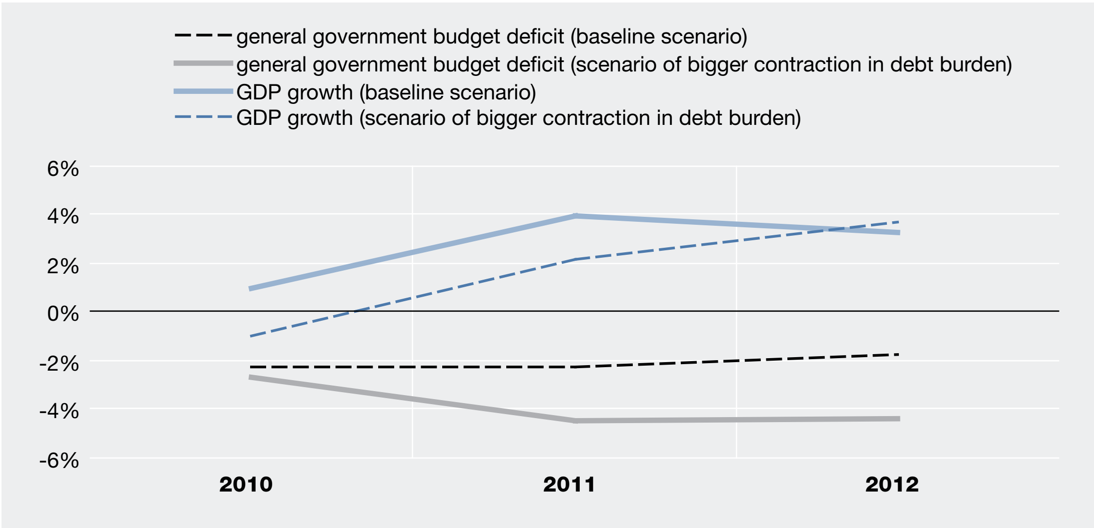


Figure 17. Budget deficit and GDP growth in case of bigger contraction in debt burden

Source: Eesti Pank

BOX 1

Medium-term outlook and sustainability of fiscal policy in Estonia

In the widest sense, the sustainability of public finances consists in the ability of the state to meet its obligations. The essence of the latter is, at the same time, rather vague, since they involve both clearly specified obligations (e.g., general government debt) and contingent liabilities, depending also on the ambitiousness of the objectives set.

For EU Member States, rules in the field of public finances are laid down in the Stability and Growth Pact. The rules can be interpreted as minimum objectives. For instance, government debt is very small in Estonia and, compared to other countries, cost pressures related to ageing population are relatively moderate here, not requiring extra efforts from the point of view of fiscal policy sustainability. Therefore the pact simply stipulates the 3% annual threshold must not be breached and policy settings must in the medium-term lead the consolidated budget deficit to at least below 1% of GDP. This applies to all euro-area countries and ERM2 participants and does not rule out the application of more ambitious national strategic plans.

This is what the Estonian government did in 2007 by setting the medium-term objective of keeping the general government budget in surplus to ensure sustainable fiscal policy. The general government budget turned into a surprise deficit (2.6% of GDP) as a result of the global financial and economic crisis that erupted in 2008. According to this year's updated convergence programme, the government's target is to start running surpluses again by 2013. The path to this goal will be specified in further strategic documents.

Social security benefits

Various social security benefits make up a considerable share of expenditure in the general government budget. The amount paid out in social security benefits has hiked to some 15% in 2010 from the pre-crisis level of about 10% of GDP. This is not a reflection of automatic stabilisers at work, i.e., of an increase in costs as a consequence of the recession. Pensions, which are paid from social security contributions, account for a large part of social security benefits.

The indexation of old-age pensions, which entered into force in 2008, does not allow for any downward flexibility. 20% of the index depends on the previous year's inflation and 80% on growth in the previous year's social security contributions. In other words, the index cannot be smaller than 1. To keep the PAYG-system deficit in check, it was necessary to amend law in 2009 and the pension rise scheduled for April 2009 was just 5% instead of the 14% initially planned. In addition, the principles of the indexation of old-age pensions were made more specific. It was decided that if the expected GDP growth in the given calendar year is negative or if the anticipated deficit of the national pension insurance is larger than 1% of GDP, the index used will be lower than the formula index. At the same time, the law prescribes that differences due to using a lower index have to be offset within five years. Thus, a cumulative index for determining the size of old-age pensions was applied. Pensions increased in 2009 and will remain at the same level in 2010, which means that in light of rapidly shrinking social security contributions, the state pension insurance will post a deficit of about 2.5% of GDP in 2010. In 2010–2011 the deficit will be narrowed by the temporary usage of second-pillar pension contributions to cover the current expenditure of pension insurance. The first-pension-pillar deficit will start to contract as from 2011, but there are factors to be considered: ageing population, reduction in the rate of the working-aged to the pension-aged, the need to ensure sufficient income for pensioners, and the government's promise to compensate for the pension contributions not paid into the second pillar as soon as in 2014–2017. As a result, the first-pillar deficit will account for 1.0–1.5% of GDP in the medium term.

The income of the unemployment insurance system established in 2001 used to be consistently larger than the expenditure up to the start of the economic crisis. The situation changed in 2009, when the Unemployment Insurance Fund posted a deficit of 0.3% of GDP. To improve the balance, the unemployment insurance premium was raised to 1.4% of wages for employers and to 2.8% for employees in the summer of 2009. Since the volume of unemployment insurance benefits has declined and the tax rate has increased, the budget of the Unemployment Insurance Fund will reach a surplus again this year. As from 2013, the right to receive unemployment insurance benefit will extend also to such unemployed people whose contract of employment has been terminated at the initiative of the employee or by agreement of the parties. Looking at the current tax rates, the surplus of the Unemployment Insurance Fund will be more than 0.5% of GDP by that time.

The expenditure of the Health Insurance Fund, which, along with the Unemployment Insurance Fund, form the social security funds sector, was around 7% higher in 2009 compared to the income. Taking into account that demand for health services will not decline much over time, the budget position is not expected to improve very fast. A recent survey jointly prepared by the World Health Organisation, Ministry of Social Affairs and PRAXIS Centre for Policy Studies sees even higher risks. Proceeding from the assumption that the progress of medical technology and increasing demand for health services will step up expenditure growth, it is forecast that the deficit of the Health Insurance Fund will continue to widen over the next years[10]. The survey also points out ways to save: reformation of the hospital network, coordination of the acquisition of expensive medical equipment, reducing the share of patent medicines, and more efficient management of money flows. These possibilities are also considered in the updated convergence programme, which has set the goal of regaining the Health Insurance Fund's budget balance in 2012[11].

Based on the above, it can be said the budget of the social security sector (including also the first pension pillar) will not return to a balance in the medium term, and the government will have to ensure a surplus of up to 1% of GDP on account of consumption expenditure in order to meet its surplus goal.

The expenditure of local governments is likely to remain larger than their income

The consolidated local government budget has posted deficits in most years after Estonia regained independence. The indebtedness of local governments accounted for about 45% of their budgets at the end of last year. In order to achieve local-government fiscal discipline, there are legal restrictions on the total debt burden – 60% of the net revenue of the fiscal year. Considering GDP growth and the limits on the debt burden, the forecast medium-term deficit of local governments will be an average of 0.5% of GDP.

Arising from what has been said above and from the objective of the consolidated general-government budget running a surplus in the medium term, the central government should achieve an annual surplus of up to 1.5% of GDP (without the first pension pillar). The task is rather difficult, because the recent one-off measures (temporary cessation in contributing to the second pension pillar, property sale, larger-than-usual profit distributions and accumulation of stocks prior to excise increases) will have to be replaced by permanent ones. Another factor exerting pressures on general-government expenditure is an increase in interest payments, which will accom-

[10] See also http://www.haigekassa.ee/uploads/userfiles/E93445(1).pdf.
[11] See also http://www.fin.ee/economic-policy.

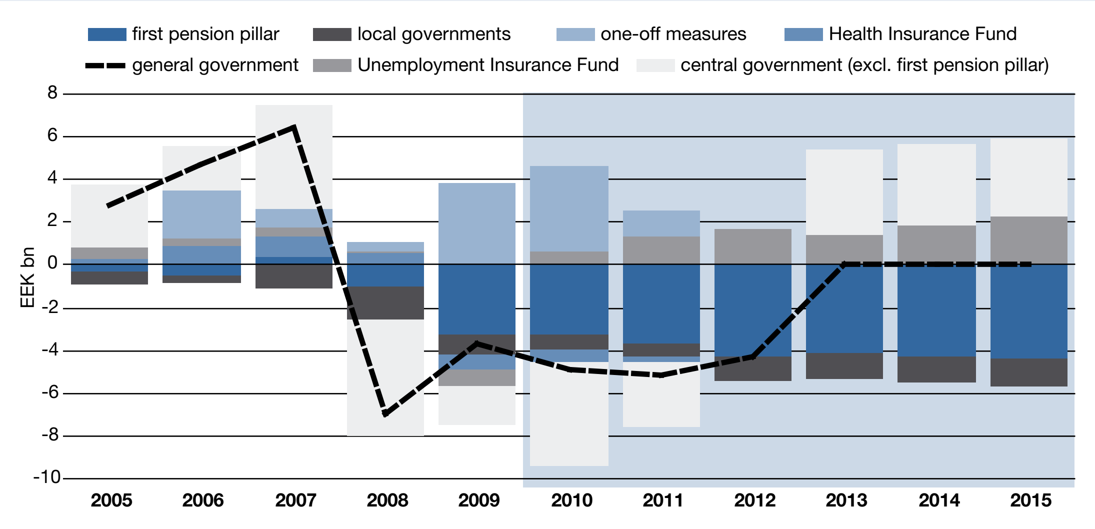


Figure 18. Fiscal balance by sectors

Sources: Statistics Estonia, Eesti Pank, Unemployment Insurance Fund

pany the growing debt burden and balloon up to 0.5% of GDP. This means that, *ceteris paribus*, there will be less resources left for covering other expenses.

The situation described is illustrated by Figure 18, which shows the development of general-government balance across sectors. The one-off measures to improve the balance are presented separately, since these will have to be replaced by permanent ones. The light grey columns reflect general-government balance without the first pension pillar and one-off measures.

If the current social security system persists, the central government will have to improve its budgetary position by 8 billion kroons compared to 2010 in order to meet the convergence programme's objective of achieving at least a balanced general-government budget by 2013. Since the central government's revenue will grow largely in the same magnitude according to the current forecasts, it is clear the central government will not be able to expand their expenditure in the next ears.

Naturally, it is possible to improve the fiscal position by increasing revenue, but because tax rates were raised both this and last year, further increases in the tax burden are not welcome, since they would put brakes on growth. Instead, ways should be found to decrease the labour-force tax burden (e.g., cutting the unemployment insurance premium), which hiked last year and represents the strongest drag on growth.

Thus, from the point of view of economic expansion, it would be more sensible to revise expenditure. Reducing productive investment would definitely not be the best solution as regards growth and it would not ensure longer-term saving. As a result, the options the government has to choose from lie in either reforming the system of social security benefits or curtailing the final consumption expenditure of the government sector. Government consumption, which accounted for 16–18% of GDP before the crisis, soared to 22% in 2009. The general-government budget balance is very likely to recover, when consumption expenditure reaches its previous level.

BOX 2

The adjustment of different-sized companies in expansionary and contractionary phases of the business cycle

It is generally believed that large ships are more difficult to turn than small ones. Does the same principle apply to economy – is it true the adjustment ability of large and small companies differs? This box aims to compare the behaviour of different-sized enterprises in upswing and downswing phases of the economy. The size of enterprises is determined by the number of employees.

According to short-term financial statistics of enterprises, institutions with more than 100 employees account for the most significant share in the economy. There were around 650 such companies in Estonia at the start of 2009, but the number decreased by more than 30 in the course of the year. These organisations employ more than a third of the total workforce and create about 40% of the corporate net value added. The success of large companies is more dependent on external demand developments.

Companies with 1–9 employees account for the largest share, i.e., some 80% of the total number of enterprises in Estonia. In 2009, such enterprises engaged approximately 25% of the total number of the employed and created 21% of the corporate net value added. These companies rely mostly on the domestic market. It should be noted that, as an exception, the gross profit of companies with 1–9 employees outstripped that of enterprises employing more than 100 workers in 2009 – 37% compared to 34% of the aggregate profits in the economy. The share of companies with 10–19 employees is about 8% in Estonia, enterprises with 20–49 employees make up 5% and those engaging 50–99 employees form about 2% of all enterprises (see Tables 3 and 4)[12].

Table 3. Number of companies by size in 2009

	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Change Q1–Q4 2009
1–9 employees	40,272	41,573	40,556	39,062	-1,210
10–19 employees	4,049	4,016	3,875	3,826	-223
20–49 employees	2,515	2,514	2,410	2,378	-137
50–99 employees	830	825	818	802	-28
100 and more employees	674	664	654	641	-33
Total	**48,340**	**49,592**	**48,313**	**46,709**	**-1,631**

Source: Statistics Estonia

Table 4. Breakdown of companies of different size by economic indicators (%)

	2009					2005				
	1–9	10–19	20–49	50–99	100–...	1–9	10–19	20–49	50–99	100–...
Breakdown of companies	83.7	8.2	5.1	1.7	1.4					
Average number of employees	25.0	10.9	15.4	11.9	36.7	21.9	11.9	16.3	12.2	37.6
Sales revenue	23.5	11.4	15.0	12.4	37.7	22.5	10.7	17.2	13.2	36.4
Total profit (loss)	37.4	6.6	10.3	11.3	34.4	27.6	10.6	14.4	11.1	36.2
Net value added	21.2	9.8	15.3	13.4	40.3	20.5	11.0	16.1	13.0	39.5
Total stocks	23.0	12.4	17.3	14.6	32.7	21.2	11.7	17.5	14.6	35.0
Completed stocks	12.1	4.8	14.4	20.5	48.1	9.8	10.6	12.6	15.2	51.8
Fixed investment	28.7	6.7	11.8	10.1	42.6	25.5	9.4	14.4	10.3	40.4
Financial lease	27.4	14.0	14.3	34.3	10.0	28.3	19.7	21.6	9.9	20.5

Source: Statistics Estonia

[12] The analysis does not consider companies that move from one size group to another in the course of expansionary and contractionary phases of the business cycle.

The years of rapid economic expansion followed by a steep downturn are reflected in the economic indicators of many companies. Whereas enterprises of all sizes were rather equally able to enjoy the benefits of the boom years, the slump in economic activity did not take place at the same time for them all. In 2008, growth contracted rapidly in enterprises with 1–9 and 10–19 employees. Apparently hoping that the downswing would be short-term, the companies did not immediately start curtailing labour costs. This differs from the behaviour of organisations with 100 and more employees in 2009, when labour costs were axed as a rapid response to shrinkage in sales revenues.

Enterprises in the period of rapid growth

Corporate sales revenue soared by some 20% annually in the boom years of 2005–2007. As a result, corporate profits were initially growing notably faster (increasing by more than a third in both 2005 and 2006) and distributed fairly equally across various-sized companies. Unfortunately, it is very difficult to manage such rapid expansion. This is reflected in the hike in labour costs (17%, 22% and 27%, respectively, in 2005–2007), which markedly exceeded expenditure on other production inputs. Profit growth declined sharply to 12% in 2007, and this took place irrespective of the size of companies.

In 2004, when Estonia joined the EU, the number of jobs increased only in enterprises employing 100 and more people. Organisations with 1–9 workers created the most of new jobs in 2005 and 2007. Enterprises faced an increasing need for labour force, since demand for their products started to grow. As a result, wages per working hour started to surge. However, the increase in the hourly wage was for many years slower in companies with more than 100 employees. This was apparently owing to their more systematic remuneration policies, which helped contain wage costs in the rapid expansion period. An interesting aspect is a decline in working hours per employee, which has been taking place over a longer period of time and continued also in 2005–2007. The trend is present in companies of all sizes but is the most apparent in those employing 1–9 people. This could be a reflection of people's desire to supply less labour in the light of rapidly improving general welfare. The contraction in the number of working hours could be explained by an increase in the proportion of part-time workers, but this is not backed up by labour market statistics.

When assessing the efficiency of companies by looking at the share of gross profits in their sales revenues, enterprises with 1–9 employees stand out from all the rest – they have consistently managed to earn more profit on their sales revenue than other enterprises. In 2005–2007, profit accounted for 10% of the sales revenue in companies with 1–9 employees, whereas the indicator was 7.9% for enterprises with 100 and more workers and just 6.8% for those with 20–49 employees. Thus, the behaviour of enterprises with 1–9 employees was very dynamic in the boom years. On the one hand, they rapidly created new jobs and, in so doing, took on more risks, but on the other hand, they also earned higher profits.

Enterprises in the period of recession

2008 and 2009 were the years of a downturn, when the volume of the economy contracted by about 18%. The slump originated from small enterprises servicing domestic demand and was escalated by a global financial crisis.

Small companies started experiencing shrinkage in sales revenues a year earlier than the rest of the economy. Whereas the sales revenue of firms with 1–9 and 10–19 employees was about 10% smaller in 2008 on 2007, the rest of the economy was still enjoying growing income on sales. Although small enterprises curtailed other expenditure, they did not revise labour costs. The number of working hours was somewhat reduced and the hourly wage even increased a little, but the number of employees remained unchanged. As a result, productivity indicators deteriorated notably.

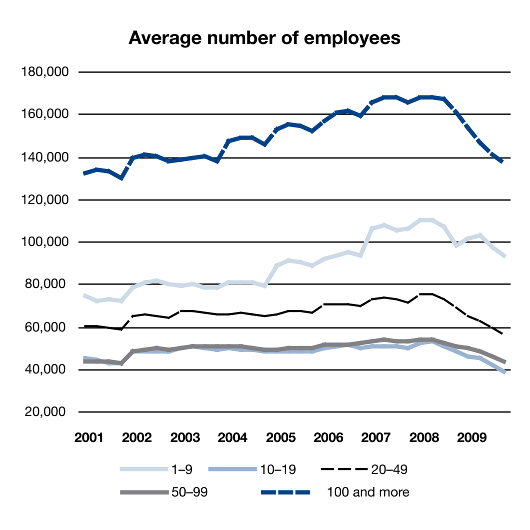
At end-2008 and in 2009 there occurred extensive changes arising from the global crisis, and this led to a plunge in sales revenues in the entire economy. The drop accounted for 21% in enterprises with 100 and more employees and for as much as 30% in companies with 20–49 employees. The latter group has been forced to make the most extensive adjustments over the downswing period. Sales revenues fell further also in small enterprises in 2009, but the contraction was not as sharp as in larger companies.

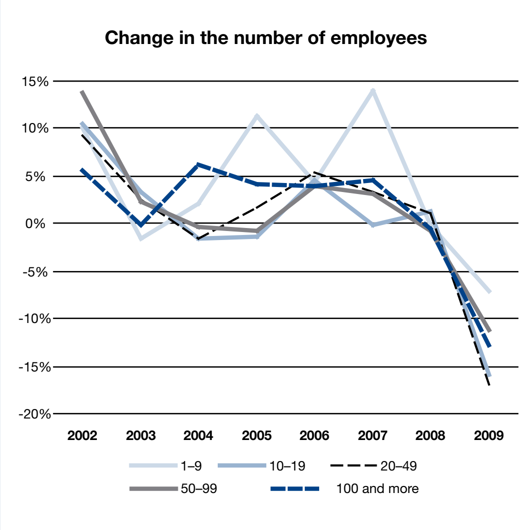
The decrease in sales revenues was followed by large-scale expenditure curtailments, which reduced the volume of the economy even more. Costs were cut the most by companies with 20–49 employees (nearly 30%) and the least by firms with 1–9 employees (about 19%). The ways and scope of lowering labour expenditure differ across enterprises. All companies, irrespective of size, decreased both the number of employees and working hours per employee. The harshest personnel cuts were made by companies with 20–49 employees. Since such firms did not create many new jobs in the boom time, the number of the employed there fell close to the level of 2001. Companies with 10–19 employees cut down on labour costs the most, by nearly 25%, and the hourly wage there declined by 9%. The hourly wage was reduced by small and medium-sized enterprises, whereas companies with 100 and more employees did not apply this measure. This confirms the hypothesis that their more contained wage growth in the rapid growth years paid off in the course of the downswing. The main adjustment strategy of large enterprises was axing jobs.

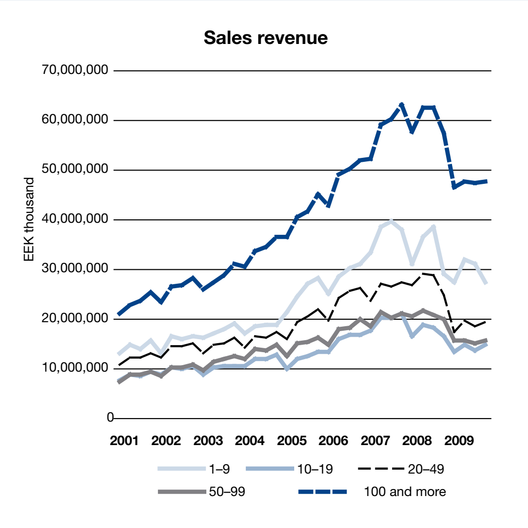
The share of gross profits in the sales revenue of companies contracted notably in 2008–2009: to 6.1% and to 3.4%, respectively. The indicator remained higher in companies with 1–9 employees – 9.2% and 5.5%, respectively. Since profitability was higher in the second half of 2009 compared to the first half, it can be said the curtailment of costs had been a step in the right direction.

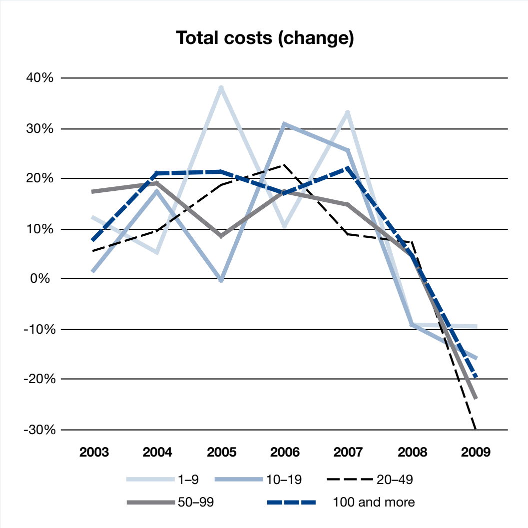
One difference between large and small enterprises in a downward cycle is the accumulation of stocks. In small enterprises, it took off already in 2007, when a considerable amount of resources measured as a ratio to sales revenue was locked in stocks in companies with 1–9 workers. In 2008, the same happened in enterprises with 10–19 employees. The accumulation of stocks was not so considerable in enterprises with 100 and more employees. The discrepancy can be explained by differences in the organisation of production and sales strategies. The stocking and destocking cycle accounts for a large share in changes in the volume of the economy. Therefore, more efficient management of stocks plays an important role in smoothing expansionary and contractionary phases of the business cycle.

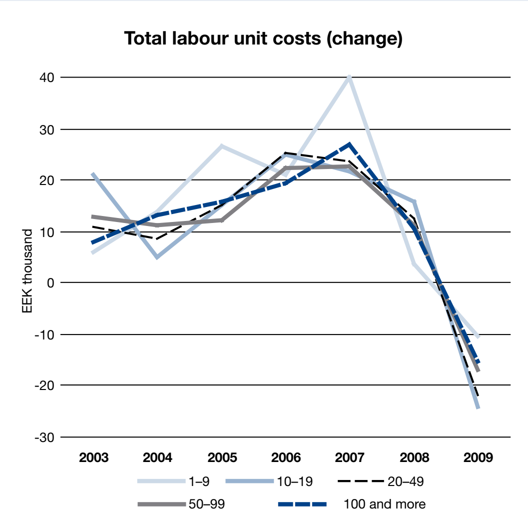
Annex. Selected economic indicators for different-sized companies

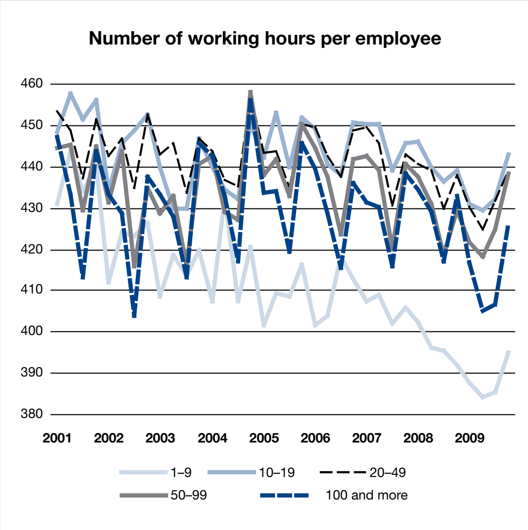


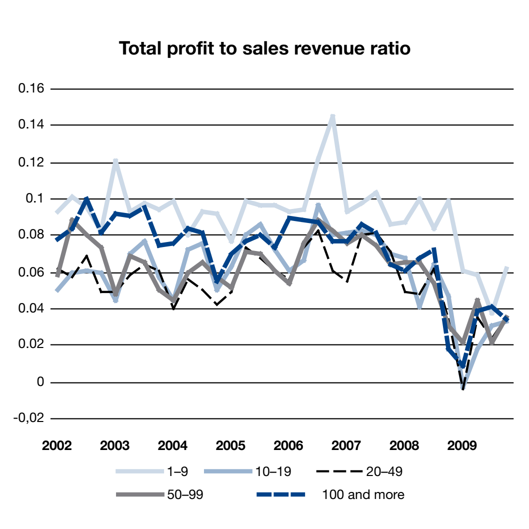


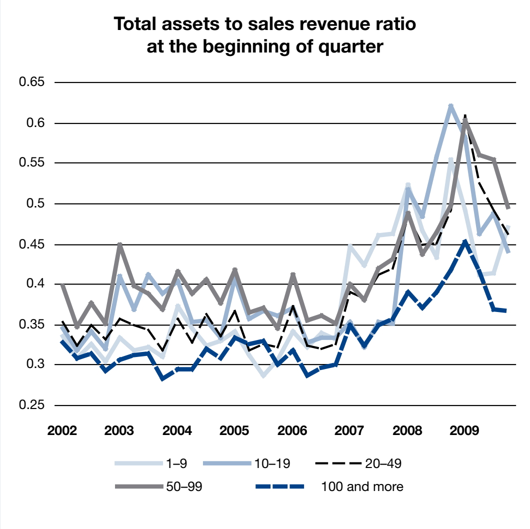












Sources: Statistics Estonia, Eesti Pank