Eesti Pank Bank of Estonia

Estonian Economy and Monetary Policy

The Estonian Economy and Monetary Policy is published by Eesti Pank twice a year — in spring and autumn. The overview includes analyses of current economic developments as well as the central bank's forecasts for the coming years.

The Estonian Economy and Monetary Policy is available at http://www.bankofestonia.info and is free of charge to subscribers.

Subscriptions of printed versions:

Fax: +372 668 0954

E-mail: publications@epbe.ee

Mail: Eesti Pank

Publications Division Estonia pst 13 15095 Tallinn Estonia

ISSN 1406-4154
Executive editor Kadri Põdra
Design Vincent OÜ
Layout and cover Urmas Raidma
Printed in Aktaprint

CONTENTS

ECONOMIC FORECAST FOR 2008-2010

Conclusion	4
External environment	5
Demand and commodities prices	5
Monetary policy and money markets	8
Economic growth	9
Domestic demand	11
Private consumption	11
Investment	13
Labour market	14
External demand and balance	16
Inflation	18
Consumer prices	18
Administrative price factors	19
Main goods and services	20
Food	20
Services	20
Industrial goods	21
Energy	22
General government	22
Banking sector	24
Housing loans	25
Consumer credit	25
Corporate loans	25
Risk scenario	26

ECONOMIC FORECAST FOR 2008–2010

CONCLUSION

Estonia's economy has experienced very strong growth in the last three years: during that time economy has expanded by more than a quarter in real terms and almost by two-thirds in nominal terms. This has been achieved at the expense of taking very high risks. Now some of these risks have materialised, bringing the economy into a recession this year. Uncertainties surround also next years' growth expectations.

The main factor behind the recession is the strong downward correction in domestic demand. Moreover, external demand, which has so far supported the strong growth, is weakening too. Growth in domestic demand has been largely relying on active lending, but this trend has changed by now. The decline in domestic demand is facilitated by the uncertainties related to lower economic activity as well as rising energy and food prices in the global market. The autumn forecast expects the economy to return to a growth path at the end of the forecast horizon, although the previous high levels will hardly be reached.

One reason for adjusting the economic outlook is the continuous deterioration of the external environment compared to this spring. According to current market expectations, next year's external growth cycle will be in an even deeper recession than pointed out in the spring forecast. Lack of trust in the financial sector is constantly revealing new victims of the current turmoil and is, along with increased prices of commodities, undermining the global growth outlook. This also explains exceptionally large fluctuations in the prices of different assets. Spring forecasts did not yet consider these events in full. The decrease in commodities prices in recent weeks proves that the price increase at the beginning of the summer was only temporary. Nevertheless, there is a large degree of uncertainty surrounding

the equilibrium price level of commodities. Next year, reduced price pressures of commodities will also affect the inflation rate, giving hope that in future, economic growth will receive more support from interest rates. Currently, the slow-down is apparent in advanced economies and presumably will not fully spread into emerging economies. However, the risk is still there.

In Estonia, the slowing of inflation has so far been delayed by an increase in global food and energy prices, but the cooling of global economy is already easing the price pressures of food and energy. The autumn forecast expects the current double-digit inflation rate to drop to the long-term average level or even below it at the end of the forecast horizon. This will substantially increase the likelihood of Estonia meeting the Maastricht inflation criterion. The growth rate of core inflation will be slowing steadily during the forecast period. Administrative actions constitute a risk factor though, because at the current stage they are hard to forecast for several years in advance. The autumn forecast also takes into account the tax increases that have been planned for balancing next year's budget and that should add some tenths to the inflation.

The employment rate has grown considerably in recent years, but not enough to meet the labour demand fully. This is indicated by both the functioning of the economy at a very low unemployment rate and strong wage pressures. Productivity growth has been slowing at the same time, which is why the large gap between productivity and wage levels persists.

A new upward cycle highly depends on the reallocation of labour to sectors with stronger productivity growth. The current decreasing turnover of jobs¹ and the structure of vacancies do not allow to expect the new growth cycle to start in the near future. Possibly, the new cycle will

¹ Creation and destruction of jobs.

require part of the workforce currently serving domestic demand to be reallocated to export-oriented sectors. Otherwise Estonia's economy might be facing a long period of slow growth. It should also be said that in some cases a new job may entail smaller wages, although households are not really prepared for that.

In the recent robust growth period, several key economic indicators deviated from their long-term trends. In addition to the discrepancies between wage and productivity growth, also indebtedness increased abruptly and the distribution of resources rather created short-term growth potential. This resulted in the current mismatch between supply and demand as well as a resource-costly and highly volatile growth cycle. The robust growth in mark-ups in wholesale trade points to weakening competition. The sooner these factors ease, the sooner the new upward cycle begins.

The extensive inflow of cheap loan capital in recent years caused the overheating of the economy and enlarged external imbalances. By now, this trend has turned and the vulnerability of Estonia's economy is diminishing owing to weaker domestic demand. The external environment will not enhance export revenues though, at least not for the time being. However, in the medium term economic activity is expected to increase in the nearby regions and external demand is likely to recover gradually. Even though Estonia has a cost advantage compared to the majority of EU Member States, there are some signs of weakening as regards Estonia's competitiveness, which can be attributed to the rapid wage growth.

The recent growth period, which relied on the high financial leverage, is now followed by a low in the loan demand and a decrease in the need for foreign capital. According to the base scenario of the autumn forecast, raising external

capital may now be surrounded by higher risks, but as the demand for loans has eased, this will not significantly jeopardize further economic development. Credit availability is necessary for productivity-based economic growth. The loan-servicing capability of the economy largely depends on the changes in interest rates and the unemployment rate but also banks' behaviour. In any case, Estonia will still be needing a substantial amount of external funding in order to ensure further income convergence.

General government expenditure did not smooth the upward economic cycle sufficiently and the so-called automatic stabilisers in the form of income transfers that should appear next year will not completely soften the recession either. General government expenditure will grow faster in 2009 compared to private sector expenditure, which is quite expected at the time of an economic recession. Furthermore, public spending will increase as a ratio to GDP. The budget will run a deficit throughout the forecast period, but government debt will grow only marginally owing to the reserves accumulated in the previous years.

EXTERNAL ENVIRONMENT

Demand and commodities prices

The external environment has become more unfavourable for the Estonian economy over the past six months. The turmoil in global financial markets persists and trust between financial intermediaries is still low. The crisis originating from the US has quickly spread to Europe where major financial institutions have run into difficulties and financial sector problems are passing through to the real economy ever more clearly. External price pressures are expected to decline gradually; however, demand will provide less support to growth because of the cooling global economy. A new growth cycle can be expected only at the end of the forecast horizon.

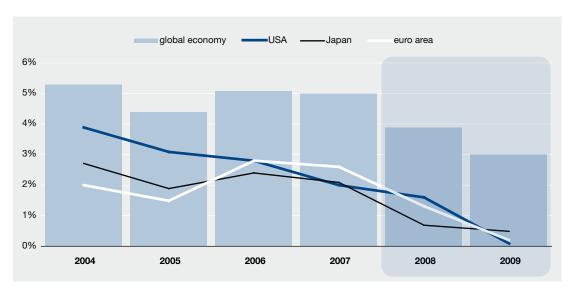


Figure 1. Global growth forecast

Source: IMF (October 2008)

Advanced economies are currently experiencing slowing growth, stemming from volatile raw material prices and problems in the financial markets. There are fewer signs of slowdown in emerging economies. In industrialised countries, the impact of shocks is still to reach the real economy and, consequently, the uncertainty is only increasing. Further developments of the economic cycle are related to several factors, including restoring trust between banks while also restraining inflationary pressures.

Compared to this spring, the global economic outlook has become even more negative and the economy will most probably cool next year too (see Figure 1). In advanced economies, consumer confidence indicators have decreased significantly because of the negative signals from the labour market. The risk of an economic decline has increased also in manufacturing and the services sector. Thus, the recovery from economic recession is still ahead.

The US economic growth has declined further under the influence of negative news. However, the forecasting of long-term developments is hindered by strong financial recession on the one hand, and the implementation of measures temporarily stimulating the growth on the other. The recession of the US real estate market continues and the labour market is weakening, reflecting growing tensions. Next year, the US and the euro area are expected to experience economic stagnation, especially the latter, as the euro area growth outlook has been revised down significantly compared to the spring forecast. Real estate markets have entered a downward phase in several European countries and the weak external environment does not provide any support either. So the European economy is only at the start of a cyclical recession and the related risk is clearly on the upside.

Compared to this spring, all our close neighbours, who account for more than a half of Estonia's export volume, have also considerably curbed their growth expectations. The same risks that surround Estonia's economic development are high on the agenda also in other Baltic States. Moreover, Finnish and Swedish economic growth will also be two times slower compared to recent years.

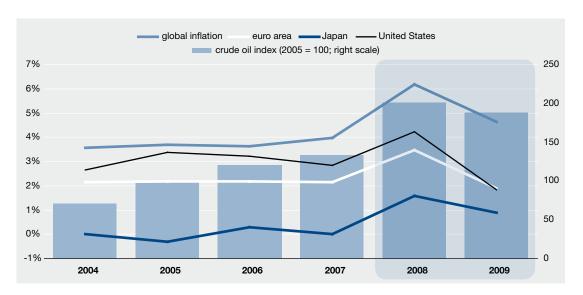


Figure 2. Global inflation and crude oil price index

Source: IMF (October 2008)

One of the major risks pointed out in various global economic forecasts is the possible passover of economic recession from advanced countries to emerging economies. So far, there are only a few signs of that and market participants are still relatively optimistic in that respect. In the light of past experience, however, the situation may change because problems have often passed on to countries with lower income levels. The rapid integration of capital and goods markets over the last decade has entailed strong dependence between countries and rapid transmission of economic shocks.

The price hike of commodities at the beginning of summer and the subsequent correction have, at least partly, pointed to the speculative nature of these price fluctuations, which still might not have completely disappeared from the market. Supported by the price hike of energy and food, euro area inflation achieved a record high of 16 years in July, reaching 4.1%, which is twice as high as the 2% target set by the European Central Bank. Lately, inflation has subdued as a result of a fall in fuel prices, reaching 3.6% in September (see Figure 2).

The high volatility of oil prices has not yet receded, which significantly affects the inflation volatility also in the near term. At the time of preparing the current forecast, the futures market expected the price of oil to exceed 85 US dollars per barrel, but the volatility of markets complicates making any assumptions in relation to the external environment. In the spring forecast, the oil price was 90–100 dollars per barrel. In summer, however, it peaked at 150 dollars and in October fell below 70 dollars.

As regards unprocessed food, we expected the price pressures to ease in the middle of this year and fall slightly next year. At the current juncture, this assumption still holds.

Based on the past experience, we may say that major global economic crises and recessions have occurred in waves. Therefore, the risks related to global economy are hardly over and there is still room for further downward revisions.

MONETARY POLICY AND MONEY MARKETS

The tightening of the monetary policy environment, which started last year, continued until autumn 2008.

In order to curb inflation, in July 2008 the European Central Bank changed the monetary policy interest rates, which had so far been stable for more than a year. The minimum bid rate for main refinancing operations was raised by 25 basis points to 4.25%; interest rates on marginal lending and deposit facilities rose as well. This was caused by the increased risk of the second-round effects that might jeopardize the price stability goal in the medium term.

The global financial turmoil, which has lasted for over a year, deepened in the middle of September 2008 and led to a loss of liquidity and reliability in international money and securities markets. The average interest rate of the European interbank money market, the Euribor, reached the record

highs of this decade across the entire maturity spectrum, mostly because of the growing lack of trust between banks. Therefore, at the beginning of October, the European Central Bank decided – in cooperation with other major central banks – to cut the minimum bid rate for main refinancing operations by 50 basis points to 3.75%. The marginal lending rate was cut as well, whereas the deposit facility rate remained unchanged. Consequently, the current upward trend of the Euribor will also probably reverse, thus reducing loan-servicing costs for companies and households. The first signs of that are already visible.

The difference in interest quotations that form the basis of future Estonian kroon and euro transactions (forward premiums) have been volatile since autumn 2007 and it is difficult to denote any clear trends at the moment (see Figure 3). Thus, it is too early to draw any far-reaching conclusions. However, we can claim that although interbank money and securities markets have been recently hit by a serious crisis, the position of the kroon remains strong.

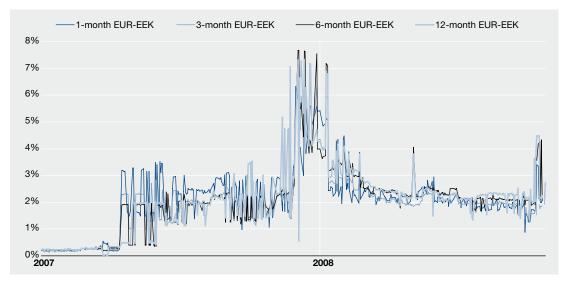


Figure 3. Forward premia of the euro and the Estonian kroon (percentage points)

Source: Reuters, Eesti Pank's calculations

ECONOMIC GROWTH

Estonia's economy has been declining over the past year and a half. Year-on-year GDP decreased 1.1% in the second quarter of 2008. In the first half of 2008, real GDP growth was supported by agriculture, fishery as well as hotels and restaurants, whereas the earlier solid contributions from construction, financial intermediation, manufacturing and trade decreased. In the coming years, we expect better use of various EU funds and further general government investment in order to ease the recession and support long-term economic convergence.

As most of the risks outlined in Eesti Pank's spring forecast have materialised, we can now say that Estonia's economic development has rather followed the risk scenario than the base scenario of the spring forecast. According to the autumn forecast, Estonia's economy will decline

both this and next year, and growth is expected to recover only in 2010 (see Table 1 and Figures 4-5).

From 2005 to 2007, growth was driven by strong demand based on active lending, with resources mostly servicing domestic demand. The current economic slowdown has also been largely shaped by domestic demand: quite expectedly, real estate investment has decreased, but also private consumption has experienced much stronger than expected correction. Most probably, these components will not stimulate growth in 2009 either.

The current natural cyclical down-phase is facilitated by the global financial crisis and the economic cooling of Estonia's major trading partners. The unfavourable developments of both the domestic and external factors have increased the overall uncertainty and there are

Table 1. Economic forecast by key indicators

	2005	2006	2007	2008	2009	2010		ence fron	
GDP (EEK bn)	173.5	205.0	238.9	255.9	265.5	282.0	-15.4	-26.1	-33.9
Real GDP growth (%)	9.3	10.4	6.3	-1.8	-2.1	3.0	-3.7	-5.1	-2.0
HICP (%)	4.1	4.5	6.8	10.7	4.8	2.8	0.9	0.3	-0.2
GDP deflator (%)	5.2	7.0	9.6	9.0	6.0	3.2	-0.5	1.6	-0.1
Current account (% of GDP)	-10.0	-16.7	-18.1	-11.1	-6.5	-7.1	-0.9	1.0	-0.5
Current account plus capital account balance (% of GDP)	-9.2	-14.6	-16.9	-9.1	-4.8	-4.0	-0.8	1.3	-0.2
Real private consumption growth (%)	9.7	12.8	7.8	-1.5	-1.7	3.9	-4.2	-5.5	-0.6
Real government consumption growth (%)	1.9	1.8	3.9	2.6	-2.0	0.8	-2.0	-1.7	-0.8
Real investment growth (%)	9.4	19.5	4.8	-5.6	-10.4	6.4	4.1	-8.2	1.3
Real export growth (%)	20.9	11.6	0.0	-0.9	0.5	4.8	-3.1	-4.2	-1.7
Real import growth (%)	17.5	20.4	4.2	-5.9	-3.3	5.3	-4.1	-4.1	0.3
Unemployment rate (%)	7.9	5.9	4.7	4.8	7.0	8.3	-1.6	0.5	2.4
Employment growth (%)	2.0	6.4	1.4	-0.7	-2.5	-1.2	1.7	-2.3	-2.0
Value added growth per full-time employee (%)	7.3	4.5	5.9	0.2	-0.6	4.1	-2.9	-3.8	-0.5
Real wage growth (%)	7.7	11.6	11.6	3.8	0.0	1.8	-1.9	-2.7	-1.7
Average gross wage growth (%)	11.4	16.2	20.4	14.6	5.0	4.9	-0.3	-2.0	-2.1
Nominal money supply growth (%)	42.0	28.2	13.4	3.9	2.2	2.8	-7.7	-6.3	-6.0
Nominal credit growth (%)	50.4	51.6	30.2	10.2	4.1	6.4	0.9	-4.4	-1.8
External debt (% of GDP)	86.1	97.7	112.4	114.4	115.2	116.3	4.3	4.9	6.3
Budget balance (% of GDP)	1.3	3.3	2.7	-1.4	-2.5	-1.3	-0.1	-2.5	-1.3

Sources: Statistics Estonia, Eurostat, Eesti Pank

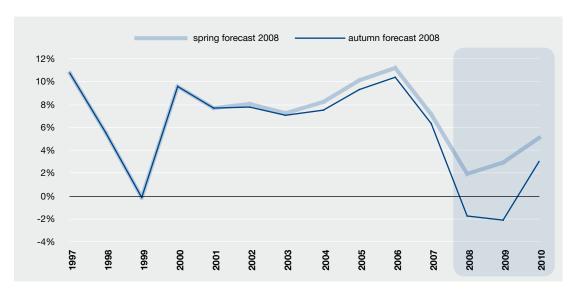


Figure 4. GDP growth forecast

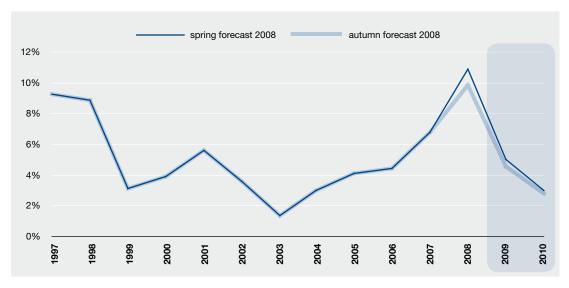


Figure 5. Inflation forecast

Sources: Statistics Estonia, Eesti Pank

no clear signs of a possible upward cycle in the near future. Even if 2009 sees a gradual recovery in our main export markets and the turmoil in financial markets eases, the growth rate will still be unexceptionally low.

Economic forecasts do not expect the recovery to be as rapid as at the time of the previous

decline; that is, at the end of 1990s. Supply-side indicators show a decrease in employment in construction, trade, services and manufacturing, pointing to a further downward trend rather than a reverse of the trend. Demand indicators do not promise a rapid recovery either – on the contrary, companies expect a decrease in orders as well as demand.

On the other hand, sometimes the slowdown in economic activity offers good opportunities for implementing major structural changes and allocating resources more efficiently. Continuous rapid growth without economic restructuring and a rise in productivity is impossible. The structure of demand has somewhat changed by now, but supply has not yet had time to fully react to these changes. Consequently, no major changes have taken place neither in the employment structure nor in the structure of capital investment. In order to prepare the economy for a new growth cycle, part of the workforce should move to sectors providing higher productivity.

The economy has to cope with the cyclical adjustment largely on its own. The role of the general government is to keep long-term growth factors in place. Institutional capacities, competitive education system, transparent economic policy and simple taxation, effective infrastructure and sustainable debt burden are the factors that convince (foreign) investors of Estonia's economic potential.

DOMESTIC DEMAND

Strong domestic demand pressures have significantly contributed to economic overheating in recent years. Domestic demand grew considerably, driven by active lending provoked by the optimism of economic agents. This, in turn, brought the growth period forward in time.

In 2008 and the coming years, the role of lending will be much smaller. From 2005 to 2007, credit growth amounted to nearly 20–30% as a ratio to domestic demand. Such a large share of loan accumulation is not sustainable in the long run, which is why we expect that ratio to decline to about 4–5% in the years to come. The high credit dependence of earlier years implies that any setback in the availability of credit involves

the risk of a marked downward correction in domestic demand. Loan demand should support economy, so that it would create real growth but would not cause inflationary pressures. High interest rates as well as sharply increased risk aversion of financial institutions help to curb the loan demand. Apart from the above, domestic demand also depends on the flexibility of the labour market in times of an economic slowdown.

After the credit boom, the recession usually lasts longer in the sectors oriented to the domestic market. The reason is that access to loan resources in these sectors improves during the boom and rapid growth in indebtedness will bring along long-term restructuring. Domestic demand is likely to pick up again only if there are clear signs of increased activity in external market oriented sectors that will bring new revenues to the economy. At the current moment, this is quite unlikely in the case of Estonia, considering the outlook for external environment and the related risks. Thus, domestic demand growth will recover at a slow pace.

Although the base scenario of the spring forecast expected a modest contribution to growth from domestic demand, we have cut this estimate even further in the autumn forecast. Namely, compared to spring we have substantially reduced the contribution of private consumption as well as investment expectations (see Figure 6).

Private consumption

Private consumption has responded to the slow-down in growth more vigorously than expected in the spring forecast, although incomes have increased in line with the forecast. The rise in food and energy prices, which has been slightly more robust than expected, has reduced the purchasing power.

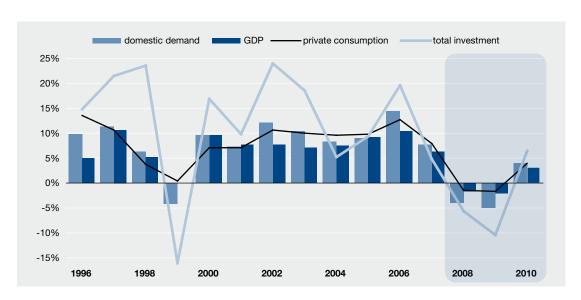


Figure 6. Real growth of domestic demand

The prices of basic necessities (food and housing), which are less price sensitive because changing consumption habits is more difficult and takes more time, have increased the most. For instance, the increase in food prices reached 17% in August but in terms of volume sale decreased 3%. This is why people have sharply reduced spending on durable goods. In recent months, the retail trade of household necessities

and appliances, general hardware and construction materials as well as clothing and footwear has decreased over 10%. Lower consumption of durable goods is also the reason why growth in consumer credit has decelerated the most over the last year.

At the end of the year, household expenditure on thermal energy will grow markedly; moreover,

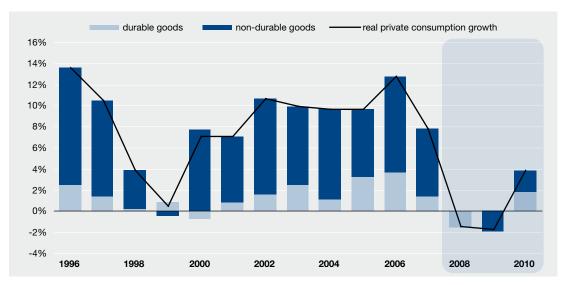


Figure 7. Private consumption growth structure

Sources: Statistics Estonia, Eesti Pank

loan servicing costs have increased as well. This will tighten household budgets even more, which, in turn, likely puts even more pressure on the sellers of durable goods (see Figure 7).

Compared to this spring, there are several factors, which have made it necessary to reduce the expected figures for private consumption for the following years. Compared to the spring forecast, a larger than expected decline in the domestic economy and lower export prospects primarily denote a smaller wage increase and higher unemployment. Consequently, consumption expenditure is also smaller than expected in spring. In the second quarter, wage growth exceeded 15% and the price rise remained at 11%, whereas starting from the end of this year average income growth might even fall behind inflation, at least for a while.

Loan servicing costs have also increased somewhat faster because interest rates have risen more rapidly than expected. However, uncertainties surrounding the global economy have generated different opinions as to what will happen to the interest rates in the coming years. Disposable income will decrease, compared to the spring forecast, partly because the reduction of the income tax rate has been postponed. Therefore, the estimated growth of private consumption will be by additional 0.7% lower in the following years.

Such a strong reaction of private consumption arises from households' increased uncertainty regarding their future economic situation, which has boosted precautionary savings. In August, the volume of household savings deposits increased more than 40% year-on-year. The rise in deposit interest rates has also had its effect. The consumer confidence indicator has fallen to the level last seen eight years ago and does not yet show any signs of stabilisation. Due to the increased uncertainty, people have taken

considerably less consumer loans this year. This is one reason why the spring forecast for private consumption was overestimated. Since last year private consumption increased substantially owing to consumer credit, this year's growth rates will be lower.

Investment

Although the share of investment in GDP was extremely high, it was not effective enough to ensure further economic growth. The share of investment in GDP (including changes in inventories) stood at nearly 40% at its peak in 2006-2007, being almost twice as high as the EU average.

In the first half of 2008, household investment decreased by a fifth. The activity of real estate transactions does not point to any changes in the current trend. Corporate investment remained nearly at the previous year's level in the first half-year but different indicators refer to a more extensive correction at the end of the year and in 2009. The decline in investment is also indicated by lower capacity utilisation owing to previous large business investment and the current decrease in demand.

According to the surveys of the Estonian Institute of Economic Research, in the middle of 2008, industrial capacity utilisation stood at 71%, being nearly 6 percentage points lower than a year ago. According to Statistics Estonia, the stocks of real estate companies have grown as a result of stronger supply and weaker demand, totalling 10 billion kroons. This is twice as much as the increase in the stock of household investment loans expected for 2009. In the coming years, general government investment will be supported by infrastructure projects financed with the help of EU funds; however, growth in general government investment is not able to offset the corrections expected for investment in other sectors.

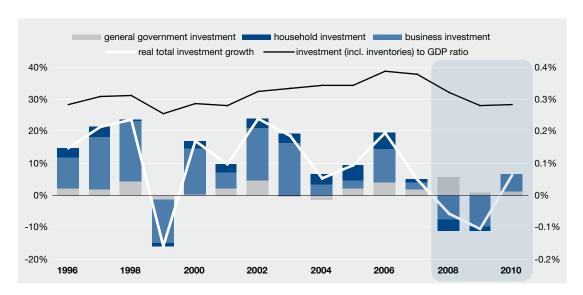


Figure 8. Investment growth structure

The correction largely stems from the recession in the real estate market but is also affected by the poor outlook for external demand and stricter financing conditions. The new growth cycle of investment can only be expected when the demand for export has recovered. Nevertheless, replacement investment² is still made, and efficiency and productivity also need to be enhanced.

As real estate prices are falling, household investment is slowing as well (see Figure 8). Household confidence has decreased and purchases are postponed. The activity of real estate transactions has reached the level of 2002–2003 and shows no sign of improvement. This means that the realisation of current assets will take more time. Price correction may also be more extensive. In the case of larger price decline, second round effects – asking for collateral securities, additional contributions, etc. – cannot be completely ruled out. Since unemployment has not increased considerably yet, it has not had time to put much pressure on real estate prices.

Yet there is a risk that when unemployment increases, it will also affect real estate prices.

LABOUR MARKET

The number of employees has grown substantially over the last years, but the overall labour demand has not been fully met. This is indicated by both the functioning of the economy at a very low unemployment rate and strong wage pressures. At the end of the growth period, the economy reached the stage of full employment and thus slower growth was inevitable. Since a large part of the resources were employed, the labour market started to hinder growth and strong wage pressures emerged. The opportunities of working abroad caused additional pressures.

So far, the unemployment and employment rates have not considerably responded to the deceleration of economic growth. Instead, in the second quarter of 2008, the unemployment rate achieved the lowest level of the recent years (4.0%) and

² Investment for replacing the existing buildings, machinery or parts of them.

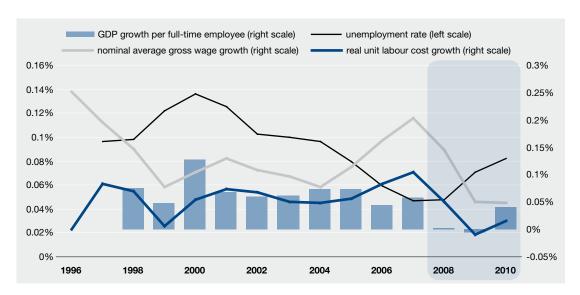


Figure 9. Employment and wage growth

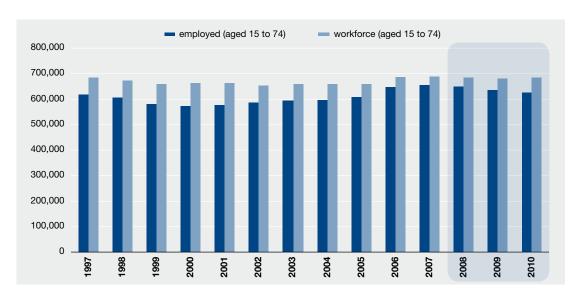


Figure 10. The employed and total workforce

Sources: Statistics Estonia, Eesti Pank

the number of employees was only 0.3% lower than a year before. But now, these trends are reversing (see Figures 9-10). In the years of rapid growth in labour demand, the employment rate grew mainly on account of those residents who would have had more difficulties in getting a job if the demand for labour were lower (e.g.

the retired). In 2008, the the share of the retired among the economically inactive started to grow again.

Robust wage growth, which exceeded considerably productivity growth in the last two years, raises serious concerns about the flexibility of

the cost of labour. However, as the economic cycle reversed, wage growth started to decelerate slightly. Owing to the high inertia of wage growth, it should take 6–8 quarters to get it in line with productivity growth. In Estonia, the balance between those indicators was hindered by public sector wage growth at the beginning of 2008, which, given the current phase of the economic cycle, was not the most appropriate time, but would not affect the overall situation in the longer term. In the second quarter, average wage growth decelerated, falling to 12.2% in June.

The rapid economic growth of previous years has temporarily boosted several indicators and this impact is now reluctant to recede. Productivity growth has been slowing much faster than real wage growth, which is why the large gap between these two indicators persists. Nevertheless, in the first half of 2008, real wage growth decelerated from 15.0% in the previous year to 3.4%. As wage growth exceeded that of economic growth, it also brought along a relatively faster rise in labour costs and a decline in the share of profits in the value added. In order to reduce economic imbalances in Estonia, the abovementioned gap should decrease. So far, the employment and unemployment rates have not responded flexibly to the slowing economic activity, but we expect a bigger correction in wage growth. Most probably, companies will not cut down on jobs, as they remember how difficult it was to find employees in the last couple of years. Instead, they rather cut down on wage costs. Given the relatively flexible wage formation in Estonia, including the large share of additional remuneration, cuts in wages cannot be excluded either at the time of an economic decline.

In the upcoming years, cross-border labour mobility might start increasing again, as part of the people who have lost their job will seek work opportunities abroad. Yet, due to the economic low of the external environment, finding a job abroad may not be as easy as in the previous years. The increase in the number of people working abroad entails a proportionately slower rise in the unemployment rate but also less flexible wage formation.

From the perspective of further economic developments, labour resources should be reallocated to sectors with stronger productivity growth. In order to support the new growth cycle a part of the workforce serving domestic demand should probably move to export-oriented sectors. Furthermore, domestic demand oriented sectors might have to reorient themselves to earning export revenue. However, the relocation of labour may cause a decrease in nominal wages.

Global price hikes and cyclical economic changes are inevitable. However, Estonia's economic potential should improve in order to respond flexibly to these changes. The most crucial aspect is the flexibility of the labour market so that labour resources would be employed more effectively. In the long run, this should stimulate economic activity and income growth.

EXTERNAL DEMAND AND BALANCE

The extensive inflow of cheap loan credit in recent years and low interest rates caused the overheating of the Estonian economy and increased considerably external imbalances. The decelerating economic growth has also put an end to the growth in the current account deficit. At the end of the second quarter, the deficit reached as much as 10% as a ratio to GDP, which is almost 6 percentage points less than two quarters before. The current account deficit was primarily caused by the income account, or in other words, by the high profitability of foreign-owned companies. The balance of goods and services reached only -3.4% in the second quarter. Compared to this spring,

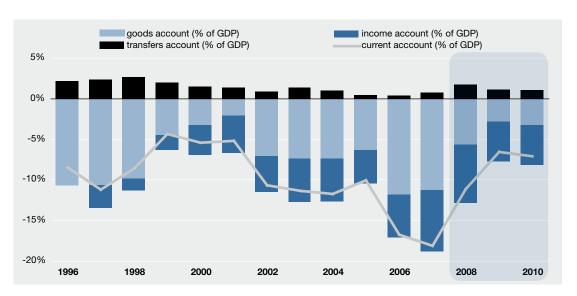


Figure 11. Current account structure

credit-based consumption and investment has decreased. If this trend continues, the current account deficit might decline even faster.

In the near term, the external balance will improve largely owing to domestic factors. While export volumes have somewhat decreased, export revenues have so far posted satisfactory results owing to a rise in global prices. The external environment does not favour export revenue growth, at least for the time being, but in the medium term economic activity is expected to increase in the nearby regions and external demand will gradually recover. All in all, the deficit will decrease across all major components. It is primarily the trade balance deficit that will decrease, but so will the income account deficit (see Figure 11).

The easing import demand of Estonia's main trading partners since the end of 2007 continued at the beginning of 2008 and thus also export volumes decreased. The first signs of that appeared already at the end of the last year. Therefore, the exports of goods and services remained at a very low level in the first half of 2008. Export prices have hiked owing to both

the domestic and external factors. At present, however, the growth in export prices is slowing.

Goods exports started to decline in the third quarter of 2007. Partly, this arose from the overall increase in prices, which affected also export prices. At the beginning of this year, exports decreased further. Mineral fuels imported to Estonia for processing and then re-exported have recorded the biggest decline, but their contribution to the value added is marginal. The exports of metal products as well as machinery and equipment have continued to grow. Rapid export growth in April and July can partly be attributed to the calendar effect.

Growth in services exports has also decreased along with slowing economic growth. Growth has been most stimulated by travel services, especially private travel. The volume of exports will probably not change much next year either and growth is expected to re-accelerate only in 2010.

General indicators point to a much stronger growth in services exports compared to goods

exports. Goods exports decreased for the first time in the second quarter of 2007, whereas services exports began to decline a year later. Surely, part of that can be attributed to the rise in service prices and the moderation in the overall economic activity in the nearby region. The outlook of global economic growth and turmoil in the financial markets is also raising concerns, especially in the United States.

According to the Estonian Institute of Economic Research, industrial businesses sensed their weakening competitiveness in the EU market already in 2006. By now, the indicator of competitiveness has fallen to a historical low. Companies consider their competitiveness to be lower also in the domestic market, as they have to compete with foreign service providers there as well. Competitiveness is likely to be affected by the pressures stemming from the robust growth in domestic production inputs prices and wages in recent years.

By the middle of 2008, the income account deficit had increased to 8.2% of GDP, but it will gradually decrease in the future. Estonia's economic cycle is moving in correlation with the economic cycles of those countries where our investors have mainly invested their money. Therefore, the productivity of both the foreign investment in Estonia and Estonia's investment abroad will decrease simultaneously. The income account will improve also in terms of labour income. As Estonia is currently facing an economic downturn, more Estonian residents will be seeking job opportunities abroad. The balance of the current transfers account stood at 1.5% of GDP in the second quarter. The funds available from the previous financial perspective will be used further, which will somewhat increase the transfers account. As soon as the funds of the new financial perspective become available, the transfers balance will increase to a couple of percents of GDP.

External debt growth has also slowed along with the easing economic growth and will decelerate further in the forecast period, approximately at the same pace with nominal GDP growth. This reflects primarily the declining activity of the real estate sector. Consequently, the loan demand of the private sector has weakened, which is why banks' need for external funds has also decreased.

INFLATION

Consumer prices

In the first nine months of this year, consumer prices increased by an average of 11.1%, year-on-year (see Figure 12). The double-digit inflation rate largely arises from an increase in global energy and food prices. By now, commodity prices have dropped from the high levels, but external markets are still sending hectic signals. As demand has eased and wage growth has slowed, Estonia's inflation has been decelerating also in the second half-year (see Figure 13). Administrative factors have been one of the main driving forces of inflation.

In the autumn forecast of Eesti Pank we revise this year's inflation forecast up by less than a percentage point to 10.7%, since the earlier high price levels of energy and food are still affecting the comparison basis (see Figure 14). At the beginning of 2009, inflation will decelerate at a faster rate. By that time, both the domestic and external price pressures will ease. We expect consumer price inflation to be 4.8% in 2009. As various surveys indicate, households and companies expect inflation to decelerate over the next twelve months. According to the base scenario of the autumn forecast, consumer price inflation will slow to 2.8% in 2010, and thus the likelihood of Estonia meeting the Maastricht inflation criterion will increase.

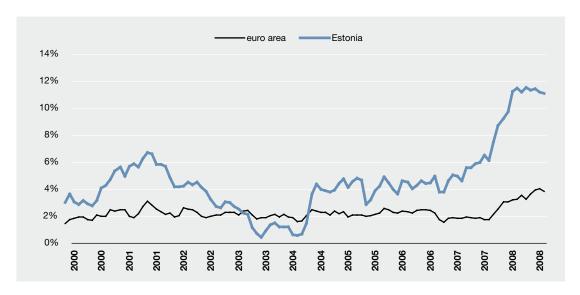


Figure 12. Annual consumer price growth in Estonia and the euro area

Source: Eurostat

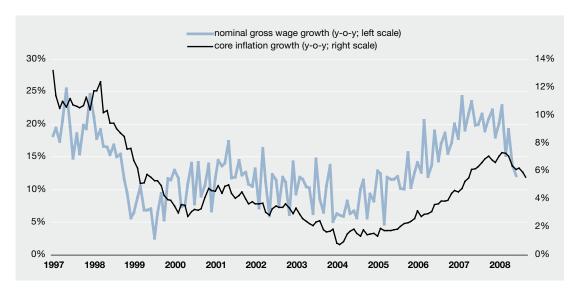


Figure 13. Core inflation and gross wage growth

Sources: Statistics Estonia, Eesti Pank

Administrative price factors

In the middle of 2008, the harmonisation of excise duty rates pursuant to the Treaty of Accession to the European Union came to an end. The excise duties were increased two times (in January and July), which is why the prices of tobacco

products and alcohol rose by 51.0% and 10.8%, respectively, in nine months. The contribution of administered prices to inflation increased to 5.3 percentage points by September. The rise in excise duties affected inflation sooner than expected.

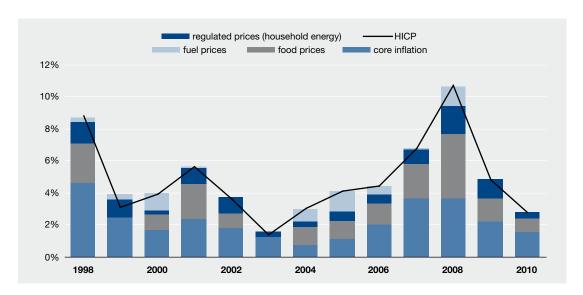


Figure 14. Composition and forecast of inflation

As regards other major price hikes, the price rise of thermal energy is to take place in the final months of 2008. Currently, there is no information available regarding possible administered price rises in 2010. Due to indexation, the upward price pressures on electricity will persist throughout the forecast period.

Main goods and services

Food

In the second half of 2008, growth in global food prices abated. This partly reflects optimistic estimates of this year's yield, although the recovery of the usual stocks of cereals might take several years. The moderate price growth arose from a decrease in oil demand, which is why in July the raw materials for bio-fuels cheapened in the external markets.

Slower growth in global food prices manifests itself also in Estonia, although there are differences across product groups (see Figure 15). In the first nine months, the prices of dairy products declined the most (-2.4%). The prices of vegetables and fruits have undergone a regular

seasonal drop. However, the price growth of bread and meat products has been stronger than the average: 9.1% and 4.8%, respectively. This year's weather conditions in Estonia were unfavourable for agriculture and high precipitation hindered timely crop harvests. However, this is not the primary reason for the rise in meat and bread prices. The inflation of food prices depends, above all, on global price trends.

According to the autumn forecast, food prices will grow at a slow pace over the next twelve months. Year-on-year, this entails an abrupt slowdown in the growth of food prices starting from September. By the beginning of next year, price growth will slow below 10%. The volume of retail food sales will decrease as a result of weak domestic demand and competition in the food market will strengthen compared to the situation at the end of 2007.

Services

In the first nine months of this year, service prices increased by an average of 10.3%, year-on-year. Transport services³ made the greatest contribution to price growth. The record high

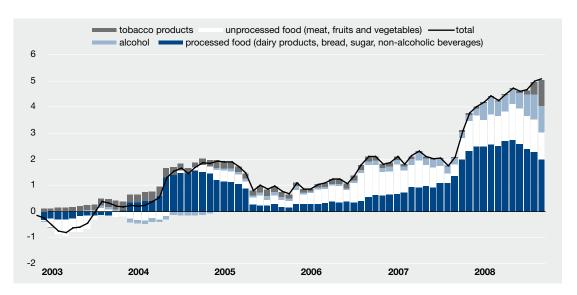


Figure 15. Food price rise in Estonia (contribution to annual CPI growth in percentage points)

price level of motor fuel in the summer months affected also service prices. In July, for example, bus ticket prices increased 9.6%; in August, the prices of refuse collection and airline tickets grew 8.9% and 18.6%, respectively. Oil price affected the inflation of service prices also through other components.

Considering the entire forecast horizon, the inflation of service prices will decelerate the faster, the lower the wage growth will be. Labour market data confirm the deceleration of wage growth, although there are differences across fields of activity. In 2009, labour costs and productivity growth will be more in line and price pressures will weaken. However, it is not clear how much inflation will be affected by the persisting gap between real wage growth and productivity growth.

Industrial goods

Changes in the prices of industrial goods have been favourable for consumers this year. Price

changes for clothes and footwear followed the customary seasonal pattern and July's discounts were bigger than in several previous years. The strong euro lowered the prices of electronics imported from non-EU countries. In the first nine months of 2008, the prices of home electronics decreased 14.7% on average. The cooling of the economy and the greater cautiousness of consumers will also inhibit growth in the prices of domestic industrial goods (e.g. construction materials). During the real estate boom, a large part of the loans was spent on renovating and furnishing the newly acquired housing.

Since the US dollar is again appreciating against the Estonian kroon, the prices of imported industrial goods are likely to show moderate growth rates in the forecast period. For instance, from July to September, the dollar appreciated 12%. However, exchange rate changes take effect in consumer prices only after a relatively long time lag.

³ Services are divided into five main groups: recreational services (31%), transport services (18%), housing related services (17%), communication services (18%) and other services (16%).

Energy

In the first nine months of 2008, the prices of motor fuel rose by 27%. The oil price reached its record high in July, climbing to nearly 150 dollars per barrel, which was followed by a rapid downward trend. In August, the oil price fell 12% and in September – by an additional 10% (see Figure 16). Owing to the appreciation of the US dollar, the price decline has been smaller in euros. In the autumn forecast, we expect the oil price to stabilise at the level of 85 dollars; this assumption is based on the market expectations at the beginning of October.

Oil price changes directly affect the prices of motor fuels, but also the cost of household energy (with some delay). The price of imported natural gas depends on the global price fluctuations of fuel oil in the previous six months. The price rise of natural gas, in turn, affects consumer prices. Thermal energy prices will increase 25–30% on average in the fourth quarter, which will boost inflation by approximately 0.6 percentage points. Based on the maximum price ceilings approved by the Estonian Competition Authority, the price of heat

energy will increase the most in Tallinn and its neighbourhood. Given the current oil price level, thermal energy is expected to decline slightly at the beginning of 2009. As regards solid fuels, there is an oversupply of timber, which is why the prices of firewood have increased much less in 2008 compared to 2007.

GENERAL GOVERNMENT

The compilation of the budget for 2008 relied on the scenario of soft landing of the economy and the fiscal policy targeting a revenue surplus was supposed to help improve the macroeconomic balance (see Figure 17). At the beginning of this year it became evident that in the context of stricter monetary policy and slowing external demand, the revenues will be lower than the planned expenditures. In order to ensure budget balance, the government drafted a supplementary budget to cut down on expenditure.

Unfortunately, the economic growth rates for 2008 will be lower than expected in spring. In terms of volume, the expenditure cuts are comparable to the lower than expected receipt of tax

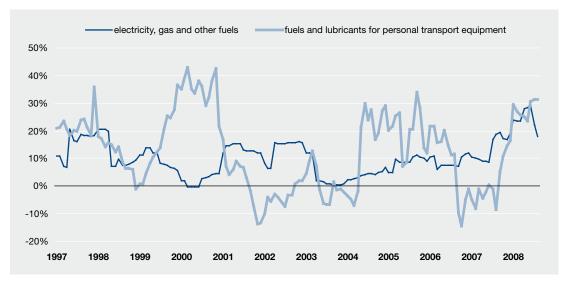


Figure 16. Energy price rise in Estonia

Source: Eurostat

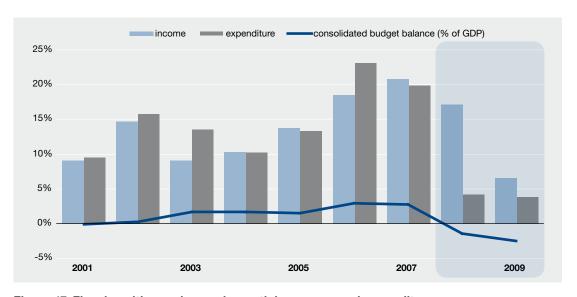


Figure 17. Fiscal position and annual growth in revenue and expenditure

revenues resulting from the economic contraction. Thus, the fiscal position of the general government will be similar to the one outlined in the spring forecast. The deficit will reach about 1.4% of GDP.

The fiscal policy planned for 2009 must also take into account the possibility of a more robust economic decline. In 2009, public sector expenditure will grow faster than private sector expenditure, which is quite expected at the time of economic recession, and general government expenditure will increase to 40-41% of GDP. Owing to the restraints on jobs and wage costs, the final consumption expenditure of the general government (at constant prices) will remain at the previous year's level or even decrease slightly. Moderate investment growth will continue. However, income transfers to households will increase much faster than average. The planned increase in pensions and family allowances accidentally coincided with the period of economic decline, which is why these transfers will act as automatic stabilisers.

In order to increase budget revenues, the government decided to halt the gradual reduc-

tion of the personal and corporate income tax rates for one year. Thus, in 2009, the general tax burden will not change much. The consolidated budget deficit will increase up to 2.5% of GDP, but as the previous years witnessed considerable growth in expenditure, fiscal policy provides relatively modest support to domestic demand. However, should the deficit exceed 3% of GDP, the government must be prepared for additional expenditure cuts.

Assuming that the economy will recover some time soon, the government plans to continue with the reduction of the income tax rate in 2010. This also denotes a slowdown in central government expenditure growth; however, this will probably not offset the deficit of other budget segments. Thus, there will be a moderate consolidated budget deficit also in 2010.

Debt growth is expected to be limited in the coming years owing to the reserves accumulated in the previous years, and general government debt will not exceed 5% of GDP, not even at the end of the forecast period.

BANKING SECTOR

The recent growth period, which relied on the high financial leverage, is now followed by a low in the loan demand and a decrease in the need for foreign capital. Currently, loan growth still exceeds nominal economic growth, although the gap is gradually decreasing (see Figures 18-19). Moreover, the gap might well reverse.

The current risk behaviour of banks should not change much in the forecast period. The last three years should be regarded as an exception, as the situation is currently normalising and risks are assessed more adequately.

The general market competitiveness remains tight, which does not necessarily mean that if one bank takes a stricter stance on lending, then

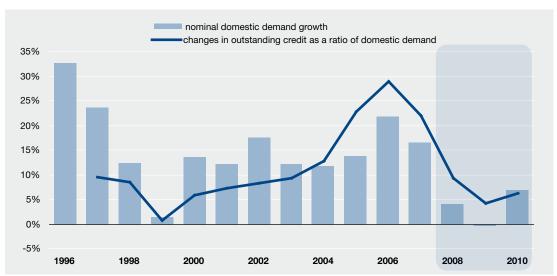


Figure 18. Contribution of outstanding credit to domestic demand

Sources: Statistics Estonia, Eesti Pank

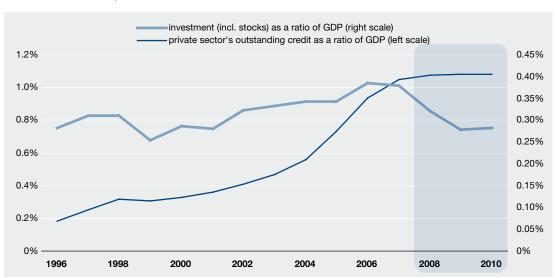


Figure 19. Outstanding credit and investment

Sources: Statistics Estonia, Eesti Pank

other banks will do the same. Yet, compared to previous years, the cost of credit will probably remain high for banks. But as the declining loan demand also reduces the need for external funds, the impact of high funding costs on the non-financial sector might be lower than expected.

Parent banks might be facing greater difficulties in raising external funds if the tensions in global financial markets persist. This also entails bigger supply-side constraints or, in other words, less loan money for the Estonian market.

Housing loans

In the autumn forecast, we expect the activity of the housing market to be largely similar to the current levels also in the forecast period. The activity is unlikely to increase as households have become more cautious given the worsening economic environment. At the same time, better opportunities to buy real estate are believed to be ahead. Borrowing has become more unfavourable with a year: higher interest rates have increased debt servicing costs for households and banks have replaced "customer-friendly" credit conditions with more conservative ones (including bigger down payments and higher level of minimum monthly income).

In the near future, transaction activity will be similar to the period preceding the real estate boom: transactions will be made by those who need housing and whose income level enables them to accept the offered price/quality ratio. Those who made transactions for speculative purposes prefer to rent the property out. In the Tallinn housing market the price correction has presumably already taken place, but if the market activity remains low prices might drop further. However, one cannot rule out even a faster price fall.

Consumer credit

Since the overall optimism in the economy is decreasing, consumer credit decisions have become more considered. Many households postpone spending on furnishing the housing or the purchase of a new car until the outlook improves. The slowing consumer credit growth is accompanied by moderate growth in car leasing. Consumer credit growth will presumably stay in line with nominal economic growth.

Corporate loans

Tight competition in the banking market in recent years increased the availability of loans for the business sector. At the current juncture, banks have the opportunity to choose their clients more carefully. However, the funding of credit-worthy projects will presumably continue.

In the previous years, the corporate loan portfolio mostly increased on account of loans issued to real estate companies, which is why in the following periods, this loan segment will probably also show most modest growth figures. Banks are likely to provide funds to the existing real estate projects, but it will be more difficult to find funding for new developments.

Lower loan growth rates can also be expected in the field of hotels and restaurants, which have, similarly to real estate companies, considerably increased their loan portfolios in recent years. Stronger-than-average growth in outstanding credit is to be expected in the industrial sector, as this segment of the economy should start a new upward cycle earlier than others. Furthermore, export-oriented sectors may seem more attractive to banks than sectors providing to the domestic market who have made substantial compromises in terms of profitability.

RISK SCENARIO

There is a large degree of uncertainty surrounding both the Estonian and global economy, and not only in the medium term, but even in respect of near-future developments. Global financial and commodity markets are currently very volatile and as this situation is quite unprecedented in the recent past, it is difficult to assess the impact and extent of that volatility. Recent events prove that the uncertainty originating from the financial and commodity markets will strongly affect also non-financial sector developments in the coming years. Owing to this uncertainty, our growth expectations have become much more pessimistic in the last six months (see also Figure 20).

In the years of credit boom, the Estonian economy departed from the balanced growth path as several indicators diverged from their long-term trends. Some of these indicators are now returning to their previous levels and there is high uncertainty regarding the extent and rate of the correction. Presumably, the correction will cause some of the indicators to fall even below their previous level. Deviations from normal trends might also change the shape of future trends. For Estonia, it is unfavourable that negative domestic developments coincide with the low of the external environment.

According to the base scenario of the autumn forecast, domestic demand will diminish; a very serious setback cannot be ruled out either. Since we have analysed possible risk scenarios of a hard landing in our previous forecasts, these

scenarios have not been included in the current autumn forecast. Compared to this spring, the risk related to raising external funds has sharply increased, but unfortunately it is not possible to quantify the extent of that risk.

Various forecasts expect the global economy to recover in about a year. At the same time, it cannot be excluded that the current problems will evolve into a longer stagnation. The related risk factors include lack of trust in the international financial system and the spread of financial turmoil to new regions. In addition, the global economy must overcome the imbalances of recent years.

For Estonia, global recession mainly entails weaker external demand, but the confidence crisis in the financial sector might have a large impact on the movement of savings between regions and in the global economy as a whole. As a result, Estonia might have difficulties in raising external funds and this will definitely inhibit our development.

Although our risk scenario expects zero growth in external demand, external funding will still be available. As a result, Estonia's export volumes will decrease faster than outlined in the base scenario, which will aggravate the pessimism of market participants. The rapid slowdown in global growth forces central banks to reduce the key interest rates, and commodity prices will also undergo a further adjustment. However, in the context of overall pessimism, these factors do not suffice for offsetting weak external demand.

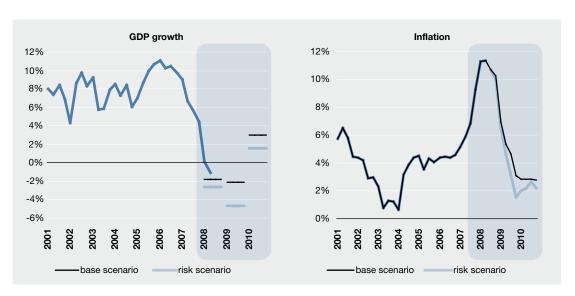


Figure 20. Scenarios for real GDP growth and inflation