

**Republic of Estonia**

**UPDATED  
CONVERGENCE PROGRAMME  
2007**

**Tallinn  
November 2007**



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## **INTRODUCTION**

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According to the EU's rules on coordination of budgetary policies the Member States of the European Union must annually submit updated stability and convergence programmes (the members of the euro area and the Member States who are not using the euro, respectively). Estonia submitted its Convergence Programme to the European Commission and the Council of the European Union for assessment in May 2004. The present programme is the fourth update of the Programme. The purpose of the Convergence Programme is to express the government policy upon fulfilment of the convergence criteria and transition to the single currency, the euro. The present stability and convergence programmes submitted by the Member States will be assessed by the European Commission and the Council of the European Union at the end of 2007 and in the beginning of 2008.

The Updated Convergence Programme 2007 was drafted by the Ministry of Finance and it reflects Estonian budgetary policy based on the State Budget Strategy 2008–2011 approved by the Government on 31 May 2007 and the draft State Budget Act 2008 submitted to the Riigikogu by the Government. Estonian budgetary policy continues to be in compliance with the Stability and Growth Pact and the Broad Economic Policy Guidelines. The Programme has been drafted pursuant to the goals of the Government and the policies of achieving them, as stipulated in the Governing Coalition Agreement and strategic development plans (incl. the Estonian National Action Plan for Growth and Jobs).

The Updated Convergence Programme 2007 is based on the current economic and budgetary policy situation and on the Ministry of Finance's autumn forecast which was completed just before the Convergence Programme was submitted to Government.

The time horizon of the Updated Convergence Programme 2007 reaches to 2011, as prescribed by the Estonian State Budget Act (the next budgetary year and three following years). The document comprises seven parts, which give an overview of the economic policy goals, economic developments in recent years and future outlooks, the fiscal framework, a comparison with the previous programme, improvement of the quality of public finance, long-term sustainability of the budgetary policy and institutional functions.

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# 1. ECONOMIC POLICY GOALS

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The goal of the economic policy of the Government is to create conditions for strong economic growth, which will result in increased welfare and real convergence with the European Union. The precondition for stable economic development is ensuring macroeconomic stability as well as internal and external balance. Estonia's economic development has thus far been favourable and the same applies to the outlook for the near future. Currently our risks in the economic environment are mainly related to imbalances in economic development – inflation and high current account deficit. The reduction of the imbalances and maintenance of the pace of real convergence depends on the preservation of Estonia's competitiveness. It is important to maintain a favourable business environment and the flexibility of the economy. Developments during this year refers clearly to the fact that the development phase of quick potential-exceeding growth in Estonian economy is ending, and the adjustment to more sustainable growth rate is taking place. Loan growth and the intensive real estate market causing the overly fast growth are retreating, thus, we can expect a decrease of the imbalances and risk occurred in the economy.

One of the main objectives of fiscal policy is to support the macroeconomic stability and contain the risks threatening sustainable economic development. This is especially important to assure the effective operation of currency board system and fixed exchange rate. We need to adjust our tax system and shape the expenditure side of the budget in such a manner than it would further support economic development. Furthermore, we have to ensure the long-term sustainability of fiscal policy in the conditions of an aging population. Ensuring a stable economic environment, channelling budgetary funds to improvement of the economic growth and employment, and ensuring long-term sustainability are the three areas which Estonia will focus on in its economic policy in the coming years.

The goal of the Government is to become a full member of the European Economic and Monetary Union (EMU) as soon as possible, in order to boost long-term economic development and increase monetary stability. Therefore Estonia has joined ERM II (Exchange Rate Mechanism), unilaterally preserving its currency board system along with the fixed exchange rate.

To introduce the euro, Estonia must fulfil the convergence criteria provided for in the Maastricht Treaty regarding public finance, price stability, interest rates and exchange rate stability. In order to fulfil the Maastricht criteria, the Government will continue to implement a conservative budgetary policy and avoid excessive administrative price increases.

The medium-term budgetary objective (MTO) of the Government is to keep the general government budget in surplus. A conservative fiscal policy will ensure a low level of government debt, which is a prerequisite for ensuring the long-term sustainability of public finances.

Drawing up a balanced budget each year may mean that in certain conditions the budgetary policy may become pro-cyclical, but setting a nominal balance objective has been right for Estonia, because the structural changes in the economy have been extensive and they have not allowed for evaluating the economic cycle or the cyclical position of the budget with sufficient reliability. Despite this the fiscal policy has been supportive to the stable economic development during the last decade. In case of accelerating growth of domestic demand also the budget surplus has been increasing. In respect to appearing risks of overheating in the economy a shift in fiscal policy took place and Government started to plan budgets in surplus instead of balanced budget as till now.

State budgets for 2007 and 2008 were already planned this way that the general government budget would be in surplus. Taking into account the cyclical position of the economy, still high current account deficit and recent problems in financial markets the Government plans to continue to prepare budgets in surplus in coming years.

**Figure 1**

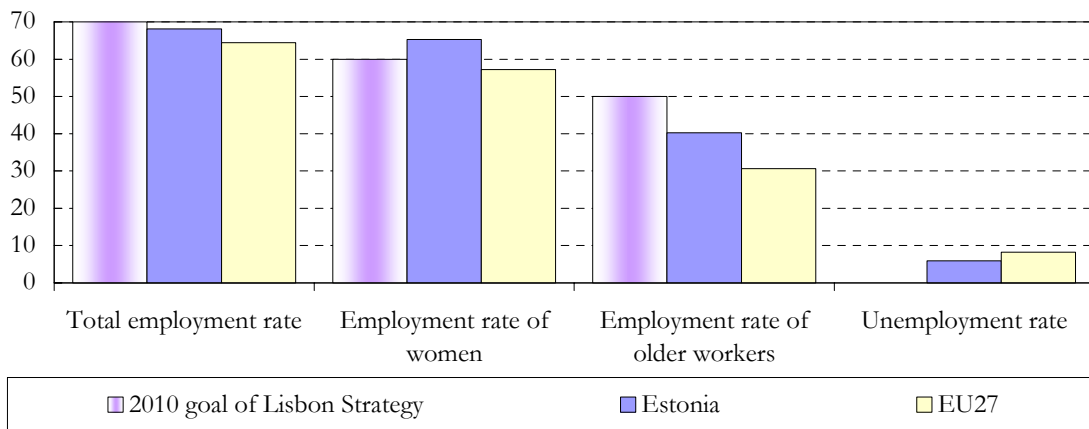
**Real convergence with the EU and employment goals of the Lisbon Strategy**

(percentage)

**A. Estonia's real convergence with the EU27**



**B. Employment rates in 2006 (people aged 15–64)**



Source: Statistical Office of Estonia, Eurostat.

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## 2. ESTONIAN ECONOMIC DEVELOPMENT AND OUTLOOK

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### 2.1. Recent economic developments

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#### 2.1.1. Macroeconomic situation

The developments during the first three-quarters of 2007 indicate that the expected smooth adjustment of the economy is taking place. The factors which caused the overly fast growth during the last two years – loan growth and extremely quick development of the real estate sector – are retreating and as a result the economy will return to a sustainable level of growth. As a result, the imbalances and risks that have emerged so far have also started to decrease.

Estonian **economic growth** strengthened in 2006 up to 11.2%, exceeding the previous year's growth (10.2%). The economic growth was backed by considerably stronger domestic demand whose pace of growth rose to 16.1%, relying on the strong growth of private consumption as well as investments. In H1 2007, economic growth moderated to 8.8%. The economic growth was continuously based on domestic demand, but its annual growth rate slowed down to 12.7%. The growth rates of the export and import of goods and services decreased also, but exports grew by 1.7 percentage points more quickly than imports, resulting in improved external balance.

Considerable growth of **private consumption** in 2006 met the expectations – the annual real growth reached 15.1%. The main reasons lied in the growth of income attributable to the strong growth in employment and average wages and salaries, supported by the continued reduction of income tax and strong borrowing intensity. The consumer confidence index which shows increased readiness for consumption, was at the all-time high throughout 2006. The increase of consumption was probably significantly influenced also by the rapid increase in real estate prices until the beginning of 2007, both owing to the effect of wealth as well as realised real estate investments. In Q2 2007, the growth of private consumption moderated substantially (to 12%) and this is expected to continue, although initially the consumption growth still exceeds the GDP growth.

In H1 2007, no noticeable decrease in **investment** growth has occurred and the growth of gross capital formation reached 18.5%. The moderation of the growth pace of enterprises' investments was compensated by significantly increased capital expenditure of the general government. Both the ministries and local governments made higher capital investments, in particular on account of construction, where also the increased use of the Structural Funds of the EU had a role. Decreasing demand for new housing was not yet reflected by the increase of the investments of households, but it cannot be ruled out in the second half of the year. As regards enterprises, the moderation of growth rates is mostly due to lower level of investments into real estate development, as well as into electricity, gas and water supply.

The contribution of the **export** of goods and services to economic growth continued falling also in H1 2007 in spite of constantly strong external demand. The contribution of export to economic growth decreased from 7.5% in 2006 to 2.9% in Q2 2007. Although, the moderation of export growth could be interpreted as a competitiveness problem, the reason for the slowdown still lies in



a couple of product groups. The considerable moderation of export growth was caused by the decrease of the transit of mineral fuel and export of electronic products, whereas the export of the remaining product groups continued growth. The exporters face strong cost pressures and the transit sector is influenced by cooled economic relations with Russia.

In 2006, the **import** of goods and services grew more than twice as fast as exports as a result of which the contribution of net export to the economic growth turned negative again. Import growth remained strong owing to strong domestic demand. In H1 2007, the import growth lost pace much more than the export growth and, as a result, the contribution of the negative balance of goods and services to economic growth decreased considerably.

Although external imbalance increased noticeably in Q1 2007, amounting to almost 22% of the GDP, the current account deficit has also significantly decreased with the increase of domestic demand, reaching in Q3 about 11% of GDP according to a flash evaluation. The largest share in the imbalance still accounts for goods, although the income balance deficit is also considerable<sup>1</sup>. Thereby reinvested income accounted for 100.7% of the income balance in H1 2007.

Following the peak of the recent years reached in 2005, **domestic savings** decreased in 2006, accounting for 22.7% of GDP. The same trend continued in H1 2007, but to a lower extent. While public sector savings increased somewhat due to a faster growth of the general government budgetary revenue when compared to the expenditure, as well as due to increased capital expenditure, the saving ability of the private sector decreased. The latter was mainly the result of strong domestic demand whose financing required more foreign loans when compared to the level a year ago.

**Value added growth** strengthened in 2006 both in the industry as well as service sectors. By areas of activity, manufacturing's contribution to the economic growth was the highest. Its 12.8% growth could be attributed to increased domestic demand and strong export growth. The value added of the areas of activity relating to business services rose 12.3% in 2006. The raise was influenced primarily by growth of value added in wholesale and retail trade (13.1%), transport, storage and communications (11.6%), financial intermediation (23.3%), and real estate, renting and business services (8.7%). The construction sector made a strong contribution to the growth, although its growth pace moderated to 12.5% due to a marked rise in prices. The growth of value added of the economic activities where the share of the general government is large (public administration, national defence, social insurance, health care, social care) and of primary sector was below the average economic growth (5.0% and 3.4%, respectively), and its contribution to the economic growth remained marginal.

In H1 2007, the value added of manufacturing sector was 11.0%, accounting for 26.8% of the total growth of value added. The growth was almost equally backed by increased domestic demand and export growth, although their growth rates slightly decreased when compared to the previous year. The contribution of business services to the total growth of value added fell from 7.0% in 2006 to 5.5% in H1 2007, which was mainly due to growth moderation in real estate, renting and business activities (to 2.1%) and in hotel and restaurant business (to 6.2%). Financial intermediation, construction and wholesale and retail trade continuously outpaced the average economic growth, i.e. 23.0%, 12.4%, and 12.0%, respectively. The value added of transport, storage, and communications increased as well in spite of the decrease of transit by 10.4%.

In 2005 the number of **the employed** rose 2%, i.e. by 11,900 persons, whereas in 2006 the increase in the number of the employed rose to 6.4%, which means that the number of employed persons exceeds that of 2005 by 39,000. At the same time the number of the unemployed decreased by 12,000 and the number of inactive people by 27,000. The unemployment rate fell to 7.9% in 2005 and decreased further to 5.9% in 2006. In H1 2007 the growth in employment rate has continued,

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<sup>1</sup> The income balance deficit was in Q1 influenced by a one-off bonus issue by one company, accounting for 0.8% of GDP of H1 2007.

reaching 1.7%, and the unemployment rate decreased to 5% in Q2. During the first three-quarters of 2007 the growth in employment rate has continued, reaching 1.7%, and in Q3 the unemployment decreased to 4.2%. In 2006, the employment increased the most in construction, wholesale and retail trade, as well as in transport, storage and communications. In 2007, the rapid increase of employment in the construction sector has continued, and in addition the employment growth has been relatively high in the financial sector. The employment is falling in the primary sector, and in 2007 has started to decrease in education.

In 2006 the **gross wages and salaries** rose 16.5% and the real wages and salaries rose 11.6%. This was followed by an even steeper growth in the first half of this year, i.e. nominal growth of 20.9% and real growth of 14.4%. Against the background of fast growth of the employed the growth of productivity moderated to 4.5% in the last year. In the first quarter of this year, an increase in labour productivity growth was noticeable (up to 8.0%), but the slowed economic growth of the second quarter also inhibited the labour productivity growth to 6.2%. This means that the growth of wages and salaries is over two times quicker than that of labour productivity for two consecutive years now. Although the share of wage expenditure in GDP is in Estonia lower than the EU average, such tendency cannot last long as it reduces the competitiveness of companies. In the event of rapid increase of employment, the marginal productivity of each additional employee decreases, and therefore the moderation of the growth of average labour productivity is natural. Lower than average productivity may be anticipated mainly in the non-traded sector, where the employment growth has been stronger in the recent years. At the same time the demand for labour in the economy persists, causing further pressure on the growth of wages and salaries.

During the nine months of 2007 the intensive demand environment favoured the acceleration of **inflation**. The recent years' income growth not in conformity with the labour productivity and the continuing consumption boom brought about significantly higher demand-side price pressures. From the other side, the increasing labour costs of enterprises is also having its impact. Higher increase can be seen in the prices of goods and services which are not open to external competition. This is expressed in noticeably higher base inflation<sup>2</sup> which has almost doubled within the year, reaching 6.9% in September. In Q3, nationally regulated price increases, as well as external factors, such as increased prices of raw material for food and to a lesser extent those of oil in the world market, were added too. As a result, the harmonised consumer price index increased to 7.5% in September. By product groups, the influence on inflation has been higher with regard to significant price increase of housing, food, and services, such as eating out and leisure time. Rising housing costs can be attributed to a strong rise in administrative prices (distant heating, furnace heating, gas) as well as freely forming prices (rent, redecoration of housing). Rise in food prices is caused by the increase of the aforesaid world market prices of foodstuffs and domestic factors such as cost pressures and increased demand. Within the nine months of this year, the oil prices have stayed relatively lower than a year earlier; therefore motor fuels have not accelerated inflation.

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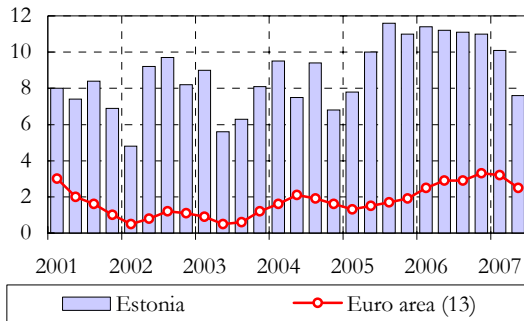
<sup>2</sup> Base inflation is an aggregate figure of the consumer price index, excluding food, alcohol, tobacco and energy. Thus, base inflation involves mainly domestic factors which are not influenced by the increase of different excise duties nor by the prices of foodstuffs influenced by weather conditions. The price developments of motor fuel, gas, and heat influenced by the external environment are not reflected, either.

**Figure 2**

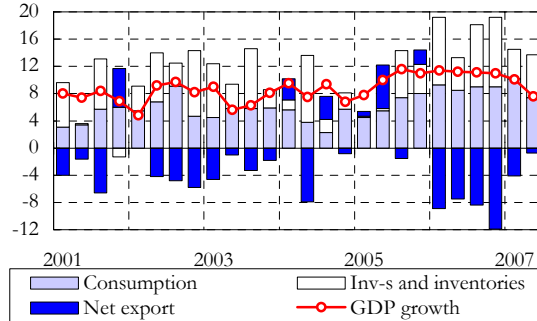
**Main indicators of Estonian economy**

(percentage)

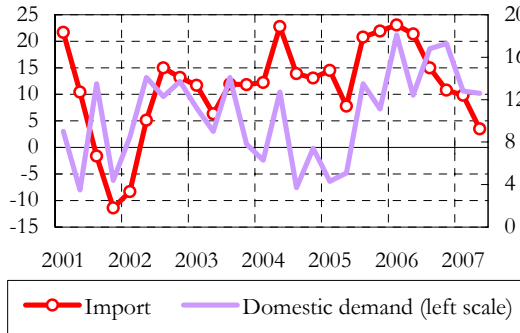
**A. Economic growth of Estonia and euro area**



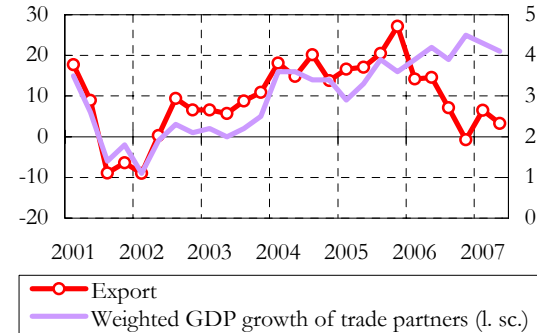
**B. Contribution to economic growth**



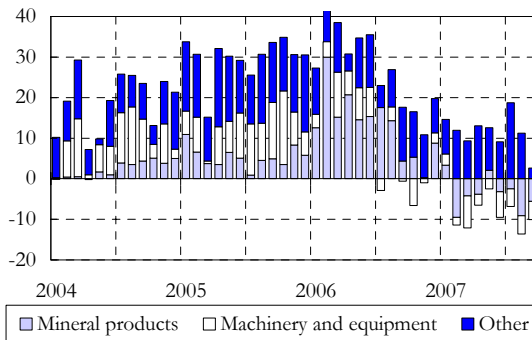
**C. Real growth of domestic demand and imports**



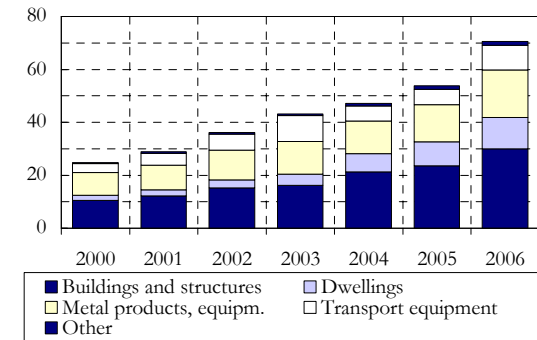
**D. Real growth of exports**



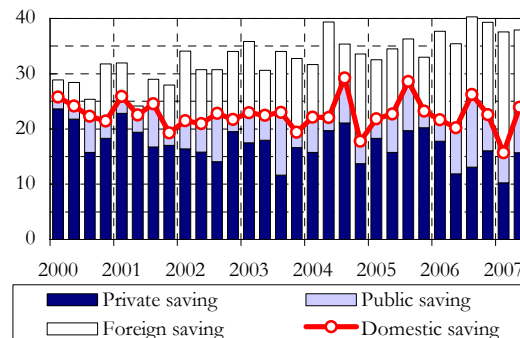
**E. Contribution to goods export growth**



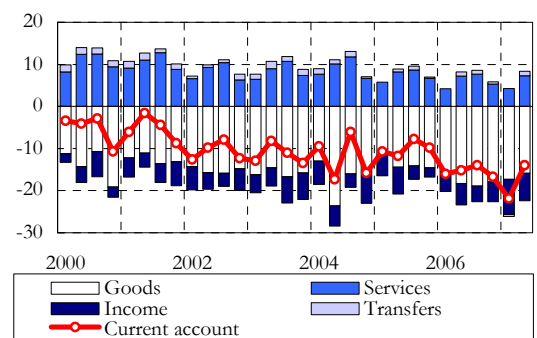
**F. Structure of investments (billion EEK)**



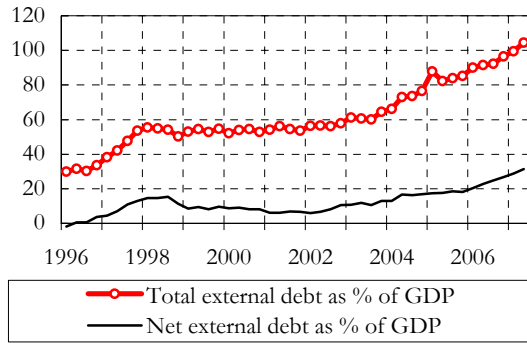
**G. Savings rate (% of GDP)**



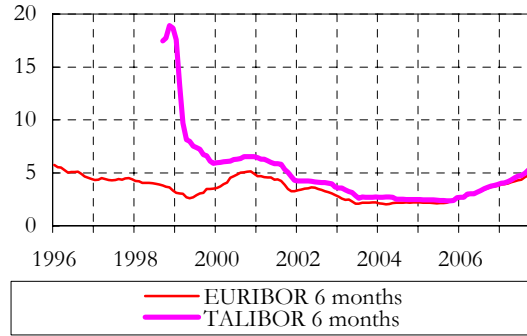
**H. Current account (% of GDP)**



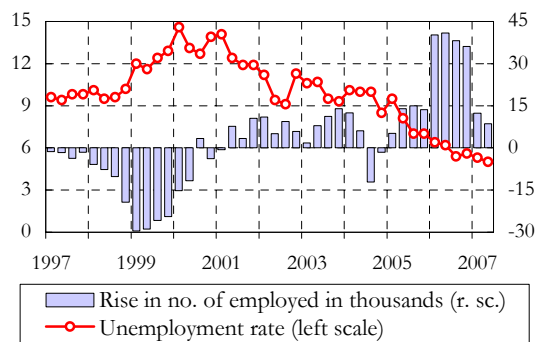
**I. Total external debt**



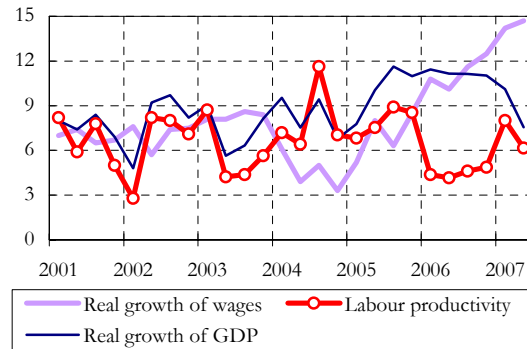
**J. Interest rates**



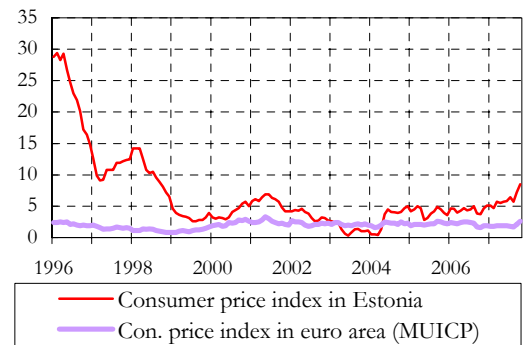
**K. Employment and unemployment**



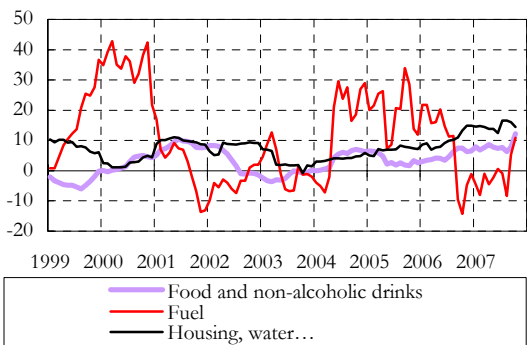
**L. Labour productivity**



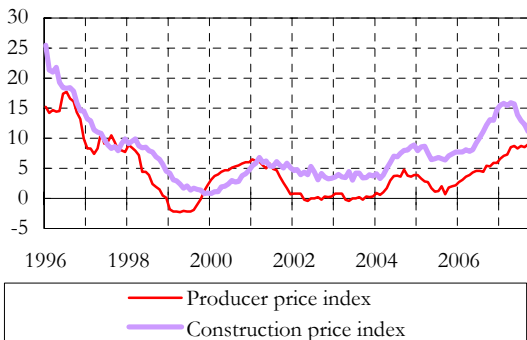
**M. Consumer price index in Estonia and euro area**



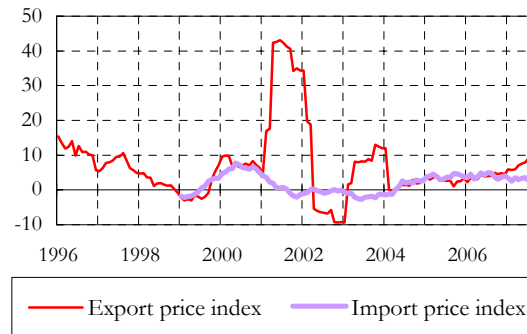
**N. Main drivers of inflation in Estonia**



**O. Producer and construction price index**



**P. Export and import price index**



Source: Statistical Office of Estonia, Estonian Bank, Eurostat.

**Box 1. Economic relations with Russia**

In 2006 Russia was in Estonian foreign trade after Finland, Sweden, and Latvia the fourth most important export partner and after Finland the second most important import partner. In the first eight months of 2007 Russia maintained its position among the export partners, but as regards imports, it fell to the third place after Finland and Germany.

In 2006 Russia accounted for EEK 9.5 billion or 7.9% of the **export of goods**. The Russian market is important for the Estonian food industry (strong alcohol, canned fish, dairy products), chemical industry, paper industry, engineering industry (spare parts of motor vehicles, passenger cars), and metal industry (hot-rolled steel products). The increase of the export of goods to Russia has consistently slowed down mainly due to lower export of certain product groups (metal products, machinery, animal products) or significant deceleration of growth (paper pulp) when compared to the previous year. In August, the export of food products to Russia had not yet reached the high levels of the beginning of 2007, while the average growth of the recent months was higher than the last year's aggregate growth.

In 2006 Russia accounted for EEK 21.7 billion or 13.1% of the **import of goods**. As regards the import of goods, Russia is an important source of raw materials (fuel, metal, timber). The even stronger decrease of import from Russia when compared to export from July 2006 can be explained by the decrease of import of mineral fuel.

In 2006 Russia accounted for EEK 4.2 billion or 9.8% of the export of **services**, and EEK 2.9 billion or 9.5% of the import of services. As regards the export/import of both transport and travel services, the share of Russia was more than 10%.

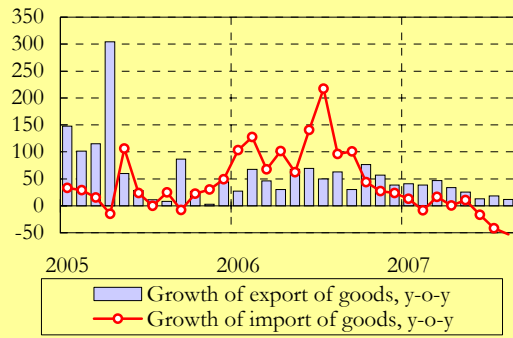
From May 2007 **the transit flow** from Russia has strongly decreased – from May to September, railway transit was 41% lower than in a year earlier. Decrease of transit on railways has significantly influenced also the activity of ports – from May to September, shipping of goods in ports has decreased 27% when compared to the same period in a year before.

Decrease of trade flows towards Estonia is attributable to the development of Russian ports and channelling of export flows to its own ports, which is a strategic objective for Russia. Therefore, the events in April this year accelerated the processes initiated a long time ago.

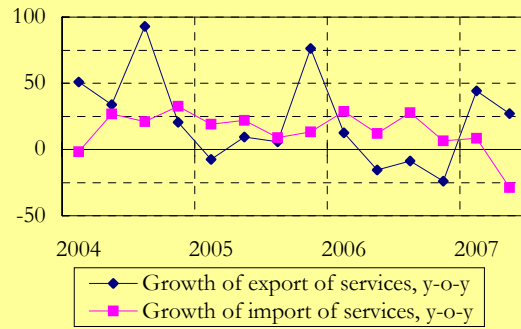
The number of tourists from Russia increased 25.8% in 2006, accounting for 3.8% of the total number of foreign visitors. This trend of increase continued also this year – from the beginning of the year to April, the number of Russian tourists increased 14.3%. From May, their number started to decrease and from May to August the number of tourists using the services of Estonian accommodation establishments was 32.4% lower than a year before.

The impact of the events in April on the whole economy of Estonia remained modest, as the Estonian economy is in general weakly connected to the Russian market. According to different evaluations, the impact of temporary worsening of economic relations was between 0.5 and 1 percentage point of GDP. The events occurred added momentum to ongoing processes whereby Russia develops intensively its export channels and directs the trade flows through its own ports, if possible.

**A. Trade of goods with Russia, %**



**B. Trade of services with Russia, %**



Source: Statistical Office of Estonia, Bank of Estonia.

### 2.1.2. Estonian economy in international context

Accession to the European Union and ERM II had a positive impact on the reliability of the Estonian economy in the eyes of rating agencies. Both Fitch IBCA and Standard & Poor's had raised Estonia's rating by one level – to level A – in the spring of 2005. Along with the then valid assessment on the possibility for quick introduction of the euro in Estonia, all rating agencies attributed a positive outlook of the rating. Even in the last year, the short-term postponement of the introduction of the euro was not considered to be a problem and the positive outlook of ratings was maintained. But the inflation developments occurred this year have shown that in the next couple of years the introduction of the euro is unlikely, and therefore the rating agencies have also drawn the rating outlook from positive to neutral. The main reason lies in the increase of uncertainty as regards the introduction of the euro. Although, in general the assessments on the economic development and economic policy of Estonia are positive and a “soft landing” is expected to be the most probable scenario, it has been realised that in spite of certain stabilisation occurred recently, the risks in economy continue to be high (increase of current account deficit, stronger inflation, growth of wages and salaries not in conformity with the growth of labour productivity).

According to the Heritage Foundation's **Economic Freedom Report 2007**, Estonia holds the fourth rank among the Member States of the European Union (EU 27) and the 12<sup>th</sup> rank among all the 157 states. However, economic freedom alone does not guarantee strong economic growth or a high level of welfare, but should lay the institutional foundations for the competitiveness of the economy.

Estonia ranks eighth according to the data of 2005 in the Index of Economic Freedom 2007 of the Fraser Institute. Estonia's position in that index has constantly improved, except for the year 2004, when accession to the EU brought about certain foreign trade restrictions.

Estonia has received high marks in **competitiveness** indices as well. According to *World Competitiveness Yearbook 2007* of the IMD<sup>3</sup>, in 2006 Estonia's competitiveness fell by 3 places to hold 22<sup>nd</sup> place among 55 countries and regions. In terms of the aggregate index Estonia outperforms all other new EU Member States covered by the report. The openness of the economy, low personal income tax burden and strong economic growth are considered Estonia's main strengths. The improvement of Estonia's competitiveness is impeded by a high current account deficit, restrictions on importing labour force, paying little attention to social cohesion, lack of skilled labour, strong growth of labour costs, little investment in research and education, health problems (HIV/AIDS, alcohol, drugs) and great energy intensity of the economy.

Since the beginning of the 1990s the economies of the new Member States of the EU have grown more or less at the same pace, but in the last five years the strength of the economic growth of the Baltic States has notably exceeded the average of other new Member States. Through 2002-2006 the average economic growth of Estonia has been one of the highest in the EU (9.0%). Owing to its strong economic growth, liberal economic environment (notably the rapid privatisation process and exemption of undistributed profit from income tax) and close integration into the European economic space, Estonia has managed to attract far more foreign investments than the new Member States on average.

According to the Commission's forecast, in 2007 the level of output adjusted with Estonian purchase power will rise from 67.9% in 2006 to 72.1% which is the average level of EU 27, i.e. by 4.2 percentage points. The output not adjusted with the purchase power per capita is in Estonia still only 41.7% of the average of the EU 27. As of 2005 the Estonian price level amounts to 67% of the average of the EU 27. In previous years Estonia's relatively high inflation has partially been

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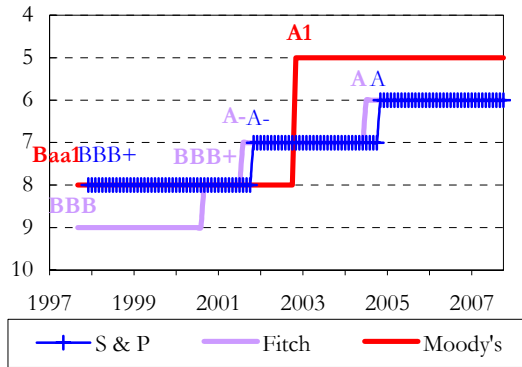
<sup>3</sup> Institute for Management Development (IMD).

caused by the model of the open economy of our small state, while inflationary pressures have been mainly on the supply side. In 2006 consumer prices were affected primarily by domestic supply-side factors. The higher level of Estonia's harmonised consumer price index (HCPI) in comparison with the EU average can partially be attributed to the continuing convergence of our price levels with the EU.

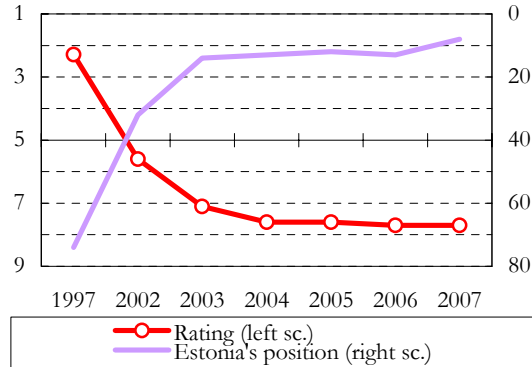
**Figure 3**

**International evaluation and comparison of Estonia's development**

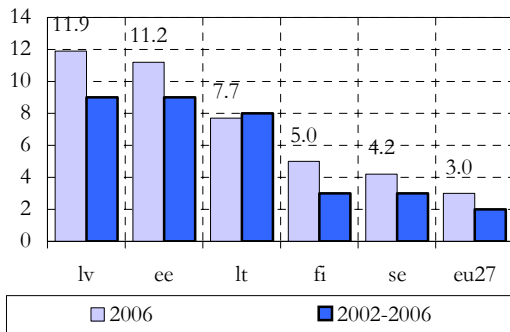
**A. Dynamics of Estonia's national ratings**



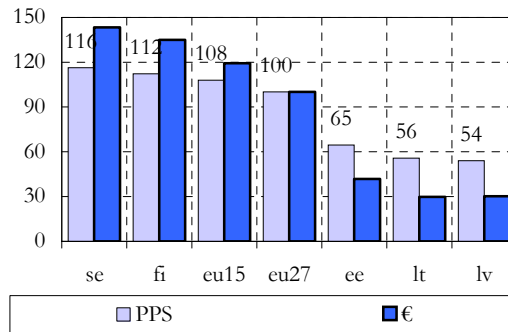
**B. Economic freedom index (Fraser Inst.)**



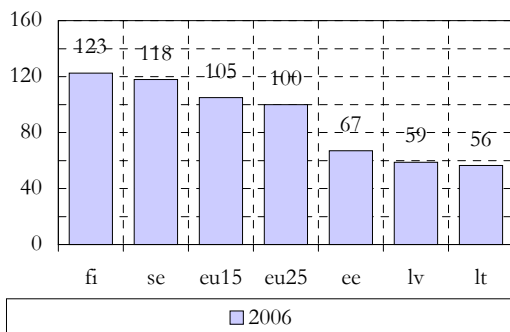
**C. Economic growth (%)**



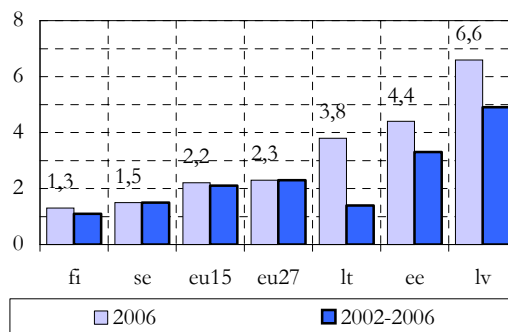
**D. GDP per capita in 2006 (PPS and €)**



**E. Proce level in 2006 (%), EU27=100**



**F. HICP in 2006 and 2002-2006 (%)**



Source: Statistical Office of Estonia, Eurostat, Standard & Poor's, Fitch Ratings, Moody's, Heritage Foundation



## 2.2. Economic forecast

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### 2.2.1. Macroeconomic forecast for 2007–2011

**The global economy** decelerates in 2007 due to lower economic activity mainly in the US, but also in Europe and Latin America. Economic slowdown will continue in 2008, in spite of the significant increase of growth in the United States. The highest risks endangering the growth of the world economy are, in addition to the imbalances of the economy of the US and fluctuations of oil price, the liquidity crisis influencing the world financial markets this summer as well. Economic growth in the European Union will in 2008 moderate from the high base of 2006 to the region of the potential level mainly as a consequence of deceleration of export growth. The medium-term growth in Europe is a little lower than the short-term growth due to some problems in the implementation of economic reforms which impedes the international competitiveness of the Estonian economy. Demand in the main export markets of Estonia continues to be relatively high, the main contributors to external demand are Latvia, Russia, and Finland.

In 2006, Estonian **economic growth** accelerated to 11.2%, mainly based on considerably increased domestic demand. Annual growth rate of domestic demand reached 16.1% when compared to 2005. The acceleration of domestic demand growth was mainly caused by elevated growth of private consumption and investments, and the growth was also supported by government final consumption expenditure. The share of domestic demand increased to 108.7% of GDP at current prices. The export growth rate decelerated in 2006 and its contribution to the economic growth decreased to 7.5%. Import growth strengthened noticeably and its pace of growth was higher than the export growth, due to which the impact of net export on economic growth turned negative again.

According to the forecast, **Estonian economic growth** will reach 7.4% in 2007 with the support of domestic demand and export growth, but their growth rates will moderate. The growth pace of domestic demand will slow down considerably in 2007 (to 9.7%), notably on account of the growth of private consumption and gross capital formation. The growth rates of export and import will moderate and import will grow quicker than export, but as a result of slowing down of domestic demand growth, the negative impact of net export on economic growth will decrease.

It is expected that in 2008 economic growth will decrease to 5.2% and this is mainly caused by the slowing down of the growth rates of the main components of domestic demand (private consumption and investments). The growth rate of the components of domestic demand will decrease to 3.9%, and therefore their contribution to economic growth will moderate considerably when compared to 2007. The pace of export growth should increase, import will grow more moderately than export, and therefore the contribution of net export will turn positive.

In the medium term we expect an average economic growth of 6.6%, which is lower than the average growth in the last five years. The role of domestic demand in the development of the economic growth should decrease. Export growth should remain lower than average due to certain problems with the adjustment of the economy, and the moderation of external demand growth will also have an impact. Growth of import will accelerate over the medium term in compliance with domestic demand developments.

Through 2007–2011 manufacturing will outpace the average economic growth, albeit moderately in comparison with 2006, resulting equally from both the internal and the external market. In the forecast period, the growth of the service sector will moderate and its pace will be lower than the average economic growth. The growth is influenced by the cooling of the real estate market, decrease of transit, and lower consumption activity of the population, resulting in lower growth

rates in the case of real estate activity, transport, storage, financial intermediation, construction and wholesale and retail trade.

The growth of **private consumption** will decelerate in 2007 to 12%, in spite of the extremely high pace of salary increases and some growth of employment in the first half of the year. From the beginning of 2007, the growth of the loan stock of households has started to moderate and in connection with voluminous and long-term housing loans interest payments will considerably reduce the impact of the wage income on consumption at the end of 2007. The rate of growth of average wages and salaries, which in 2007 is also clearly exceeding productivity growth, will decrease. Thus, the rate of growth of private consumption will fall below the GDP growth as from 2009 and the share of private consumption in the GDP will fall to 52% by the end of the period.

Although **investment activity** stayed on a high level in H1 2007, a number of signs are referring to quick moderation of the growth rate. Firstly, the banks have strengthened the financing terms and conditions for real estate development projects; secondly the real estate sector is cooling down, and thirdly, expectations towards future developments have turned clearly more pessimistic. Loan growth has decelerated quicker than expected, new loans are issued less than a year before and this is valid both for businesses and households. Due to considerable decrease in demand for new housing, the capital investments of households may start to fall in H2 2007 and the fall will be even steeper in 2008. The growth rate of enterprises' investments is moderating in particular due to the lower extent of capital investments made in the internal market. The enterprises' quickly increasing labour costs and the increase of prices and interest rates may be the reason for the postponement of investment decisions. Due to the decrease of domestic demand more focus is given on the improvement of the competitiveness of the export sector. Due to increasing volume of the resources allocated from the Structural Funds of the EU, the general government will invest during the forecast period actively into buildings and structures, raising its share up to about one-fifth of the total investments. Due to these developments, the growth of investments will drop from 10.0% in 2007 to 2.6% in 2008. In 2009, the pace of growth will increase to a certain extent up to 4.7% due to recovery in households' investments and extensive general government capital investments.

The growth of **export** of goods and services will moderate in 2007 as a result of extensive decrease in the export of two important product groups (transit of mineral fuel and outsourcing of electronic equipment). The strong export growth of the remaining product groups will continue. In 2008, we expect certain acceleration of export growth due to the disappearance of the impact of the base effect. In the medium term, export growth should remain lower than average due to certain problems in the adjustment of economy. The moderation of external demand growth from the historically high level of 2006 will also have an impact. In 2007–2008 the growth pace of the **import** of goods and services is moderate due to considerably slowed increase of domestic demand. Thereafter, import growth will recover slightly in 2009–2011 upon the acceleration of domestic demand growth. Decrease of the **current account** deficit from 2008 results from diminished goods and services balance deficit.

**Inflation** (HICP) will accelerate from 6.6% in 2007 to 8.6% in 2008 and will then decelerate to 5.6 in 2009. This year the acceleration of price growth has been caused mainly by domestic factors which have in the second half of the year been accompanied by administrative and external factors. The recent income increase that has been the fastest during the recent years and exceeds productivity has on the one hand caused demand-side inflation, and on the other hand cost pressure on enterprises, which can be compensated in strong demand environment by the increase of final prices of products mainly in the areas of activity directed to the internal market. The aforesaid external factors refer to price increases of food products and motor fuel caused by the increase of world market prices. While in 2008 the base inflation will start to decelerate due to moderation of price pressures and deceleration in salary increase resulting from domestic demand, the tax amendments<sup>4</sup> occurring in the beginning and middle of 2008 will contribute to the acceleration of HICP. Raising the excise duties will cause in 2008–2009 additional inflation of 1.6

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<sup>4</sup> Raise of the excise duty rates on alcohol, tobacco, motor fuel, and other energy products.

and 0.9 percentage points. Another factor causing upward pressures on inflation is the increase of world market prices for food. In addition, the influence of administrative price changes, such as more expensive heat and energy, on inflation is also higher in the next year. But in 2009 inflation will start to decelerate, supported by lower economic activity and decrease of the impact of raised excise duty rates.

If economic activity remains the same in 2007, the demand for labour will also persist, but employment increase is inhibited by the shortage of labour force, especially as regards qualified employees. The decrease of the population of the working age will have a growing impact – from the 2007 level of 1,046,000 it should decrease by the end of the forecast period by 20,000 people. This year the number of the employed will rise 1.2% up to 654,000 persons, and unemployment will fall to 5.3%, remaining on that level up to the end of the forecast period. As for the economic sectors, the decrease of the number of the employed will continue in the primary sector. In industry, we presume that the level of employment will remain the same. This year, mainly service sector is contributing to the increase of the employed, where the major role is played by construction; but in 2008, retreating of labour force demand is expected also in construction. Due to the shortage of labour force and concurrent strong economic growth the real growth of the **average gross monthly wages and salaries** will strengthen to 13.5% in this year and decrease to 6.7% in 2008. As a result of rapid growth of the employed and decrease in unemployment the increase of **labour productivity** will both in 2007 and 2008 remain on a lower level than the real wage growth. The faster growth of the labour costs over the growth of value added refers to a weakening of the competitiveness of enterprises based on cheap labour in the international market.

Table 1

GDP forecast for 2006–2011 <sup>5</sup>

	2006	2006	2007*	2008*	2009*	2010*	2011*
	<i>mln EEK</i>	%	%	%	%	%	%
1. Real GDP	157,901.3	11.2	7.4	5.2	6.1	6.7	7.0
2. Nominal GDP	207,061.3	18.1	16.8	14.0	11.8	10.8	10.8
<b>Components of real GDP</b>							
3. Private consumption expenditure (incl. non-profit organisations)	93,477.2	14.9	11.8	5.6	5.4	7.3	7.5
4. Government final cons. expenditure	21,425.4	2.6	3.5	1.4	1.8	2.3	2.6
5. Gross fixed capital formation	56,595.4	22.4	10.0	2.6	4.7	6.6	7.6
6. Changes in inventories (% of GDP)		4.1	4.1	3.8	3.7	3.6	3.6
7. Exports of goods and services	139,010.6	8.3	2.5	6.4	7.7	7.7	7.7
8. Imports of goods and services	161,982.3	17.1	3.5	4.7	5.9	7.3	7.5
<b>Contributions to real GDP growth <sup>1)</sup></b>							
9. Domestic demand (excl. inventories)		16.2	11.0	4.6	5.2	7.1	7.6
10. Changes in inventories		1.2	0.0	-0.1	0.1	0.2	0.1
11. Ext. balance of goods and services		-9.2	-1.4	0.7	0.7	-0.6	-0.7
<b>Added value growth</b>							
12. Primary sector		3.4	-7.7	2.8	1.8	2.0	2.0
13. Industry		11.9	8.8	8.5	8.8	9.0	9.1
14. Construction		12.5	11.0	2.8	4.6	7.8	9.6
15. Other services		11.1	7.1	4.3	5.3	5.9	6.1

1) Contribution to GDP growth indicates the share of a specific field in the economic growth. It is calculated by multiplying the field's growth with its share in GDP. The sum of the fields' share makes up the economic growth (the reason for a little difference is a statistical error – the part of GDP that could not be divided between the fields).

Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

<sup>5</sup> Autumn forecast of 2007 of the Ministry of Finance, completed after methodology changes of the GDP published in September, 10th, 2007 by the Statistical Office of Estonia.

**Table 2****Price forecast for 2006–2011***(percentage)*

	2006	2006	2007*	2008*	2009*	2010*	2011*
	2000=100	%	%	%	%	%	%
1. GDP deflator	131.1	6.2	8.7	8.3	5.4	3.8	3.6
2. Private consumption deflator	119.8	3.8	4.8	6.3	4.4	2.5	2.0
3. Harmonised index of consumer prices	124.3	4.4	6.6	8.6	5.6	3.6	3.5
3a. Consumer price index	124.3	4.4	6.5	8.5	5.5	3.6	3.5
4. Public consumption deflator	158.1	10.2	15.0	14.4	11.0	8.5	8.2
5. Investment deflator	124.7	7.3	6.0	5.6	5.2	4.8	4.7
6. Export price deflator	118.3	9.6	5.0	5.5	4.9	4.6	4.3
7. Import price deflator	116.0	7.2	3.0	3.9	4.9	4.6	4.3

Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

**Table 3****Labour market forecast for 2006–2011 (15–74-year old persons)**

	2006	2006	2007*	2008*	2009*	2010*	2011*
		%	%	%	%	%	%
1. Employment, persons	646.3 <sup>1)</sup>	6.4	1.2	0.4	0.0	0.0	0.0
3. Employment rate (%)		5.9	5.2	5.3	5.3	5.3	5.3
4. Labour productivity, persons	244.3	4.5	6.1	4.7	6.1	6.7	7.0
6. Compensation of employees	92,285.9 <sup>2)</sup>	20.3	23.9	16.5	14.0	11.1	10.2
7. Compensation per employee (6./1.)	142.8 <sup>3)</sup>	13.1	22.5				

1) Thousand persons.

2) Mln EEK.

3) Thousand EEK

Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

**Table 4****Balance of payments forecast for 2006–2011***(% of GDP)*

	2006	2007*	2008*	2009*	2010*	2011*
1. Net lending/borrowing vis-à-vis the rest of the world	-13.2	-14.0	-9.9	-8.2	-7.8	-7.4
Of which:						
- Balance of goods and services	-11.6	-9.6	-7.1	-5.8	-5.6	-5.5
- Balance of primary incomes and transfers	-3.9	-6.0	-4.7	-4.4	-4.2	-3.8
- Capital account	2.3	1.6	1.8	2.0	2.0	1.9
1a. Current account	-15.5	-15.6	-11.7	-10.2	-9.7	-9.3
4. Statistical discrepancy	0.2	0.4				

Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

## 2.2.2. Forecast assumptions and comparison with the forecasts of other institutions

The Ministry of Finance used at preparing its autumn forecast for the years 2007–2009 the external expectations employed in the autumn forecast of the European Commission. The averaged weighed economic growth of Estonia's trade partners and the economic growth of the European Union as the main trading partner of Estonia will moderate noticeably in 2008. The cycle of rise in short-term interest rates will also achieve its peak in 2008. Continued rises of the key interest rate will support a strong exchange rate of the euro against the US dollar. Oil prices will increase in 2008 probably both in dollars and euros.

**Table 5**

### Comparison of external assumptions of the Ministry of Finance of Estonia and the European Commission

(percentage)

	Ministry of Finance autumn 2007							Commission autumn 2007		
	2005	2006	2007	2008	2009	2010	2011	2007	2008	2009
1. Euribor, 3-month (annual average)	2.2	3.1	4.3	4.4	4.3	4.0	3.8	4.3	4.4	4.3
2. Long-term interest rate of the euro area (annual average)	3.4	3.8	4.3	4.4	4.5	4.2	4.0	4.3	4.4	4.5
3. USD/EUR exchange rate (annual average)	0.80	0.80	0.74	0.70	0.70	0.74	0.76	0.74	0.70	0.70
4. EEK/EUR exchange rate (annual average)	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
5. Growth of world GDP (without EU27)	5.6	6.0	5.6	5.3	5.4	5.3	5.3	5.6	5.3	5.4
6. World growth of imports (excluding EU27)	9.0	8.5	8.1	7.4	7.9	7.7	7.7	8.1	7.4	7.9
7. EU27 GDP growth	1.8	3.0	2.9	2.4	2.4	2.3	2.3	2.9	2.4	2.4
8. Growth of export markets of Estonia	3.4	4.1	3.9	3.2	2.8	2.8	2.8	–		
9. Oil price (Brent, USD/barrel)	54.6	65.2	70.6	78.8	76.0	70.4	69.0	70.6	78.8	76.0

Source: Ministry of Finance of Estonia, European Commission.

Upon comparison of the forecasts of the Ministry of Finance and other institutions it must be taken into account that the forecasts have been made at slightly different times and thus, based on different information, which brings about differences in the prerequisites and results of the forecast. The forecast of the Ministry of Finance was made on 13.11.2007. The forecast of the Estonian Institute of Economic Research was published in September 2007, that of SEB on 10.10.2007, that of the Bank of Estonia on 16.10.2007, that of the IMF on 17.10.2007, that of Hansabank on 31.10.2007, and that of the European Commission on 9.11.2007. All the forecasts have been made after correction of the GDP time series on 10 September 2007.

The analysts unanimously expect a slowdown of Estonian economic growth in 2008, mainly due to deceleration of domestic demand growth. Most of the forecasts expect thereafter, in 2009, a slight acceleration of economic growth with the support of a low reference base. Inflation will accelerate in 2008 according to the majority of assessments due to a rise of the excise duty rates, and then the price pressures will moderate again. The current account deficit should decrease in 2008 with the

deceleration of domestic demand; however, the extent of decrease of deficit differs in different forecasts. Economic experts agree on the deepening of negative risks associated with Estonian economic development, highlighting different domestic risks (real estate sector, potential increase of inflation expectations), as well as external risks (global liquidity crisis and its influence on real economy, high price for oil).

**Table 6****Comparison of economic forecasts**

	GDP growth, %			GDP growth in current prices, %			Consumer price index, %		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
<b>Ministry of Finance</b>	7.4	5.2	6.1	16.8	14.0	11.8	6.5 (6.6*)	8.5 (8.6*)	5.5 (5.6*)
European Commission	7.8	6.4	6.2	17.1	15.1	12.9	6.2 (6.3*)	7.4 (7.3*)	4.8 (4.8*)
IMF	8.0	6.0	–	–	–	–	6.0	7.0	–
Bank of Estonia	7.3	4.3	5.7	16.8	12.3	11.0	6.3*	7.4*	4.6*
Estonian Institute of Economic Research	8.5	–	–	14.0	–	–	6.0	–	–
SEB	7.0	4.0	5.5	–	–	–	6.5	5.0	3.0
Hansabank Markets	6.8	5.5	6.5	14.1	9.9	9.0	6.4 (6.3*)	5.2(5.0*)	3.5(3.4*)

	Current account, % of GDP		
	2007	2008	2009
<b>Ministry of Finance</b>	-15.6 (-14.0**)	-11.7 (-9.9**)	-10.2 (-8.2**)
European Commission	-14.6 (-13.6**)	-12.3 (-11.2**)	-10.9 (-9.6**)
IMF	-16.9	-15.9	–
Bank of Estonia	-15.0 (-12.9**)	-11.8 (-9.9**)	-9.6 (-7.8**)
Estonian Institute of Economic Research	-14.8	–	–
SEB	-14.5	-9.0	-10.0
Hansabank Markets	-11.0**	-5.0**	-4.8**

\* Harmonised index of consumer prices.

\*\* Net lending/ borrowing vis-à-vis the rest of the world.

Sources:

Ministry of Finance of Estonia.

European Commission. *Economic Forecasts. Autumn 2007.*

IMF. *World Economic Outlook. October 2007*

Bank of Estonia *Economic Forecast 2007–2009. October 16, 2007.*

Estonian Institute of Economic Research. *Konjunktuur, No. 3, September 2007.*

SEB. *Eastern European Outlook. October 10, 2007.*

Hansabank Markets. *Macroeconomic outlook. October 31, 2007.*

## 2.3. Macroeconomic policy

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### 2.3.1. Macroeconomic policy in coming years

The primary objective of the macroeconomic policy of the Government of the Republic is to ensure macroeconomic stability and internal and external balance. Currently, the risks in Estonian economic environment are mainly related to the imbalances of the economy. **The growth recorded in the first three-quarters of this year refers clearly to the fact that the development phase of quick potential-exceeding growth in Estonian economy is ending, and the adjustment to more sustainable growth rate is taking place. Loan growth and the intensive real estate market causing the overly fast growth are retreating, thus, we can expect a decrease of the imbalances and risk occurred in the economy.**

The highest risks for Estonian economy are related to a continuous rise in wages and salaries exceeding the growth of productivity and accelerating inflation. The current account deficit causing worry so far shows signs of decrease in line with the moderation of domestic demand growth.

The combination of quick increase in wages and salaries and employment and low interest rates benefited to the credit ability of households, supported by quick increase in demand resulting from the general optimism. This led to the occurrence of supply-side restrictions. By now, the borrowing opportunities have significantly decreased – growth of interest rates in the euro area and stricter loan conditions by the banks along with the general decrease of optimism have caused the moderation of borrowing intensity.

**As for the current account deficit it should be noted that its reason does not lie in the weakening of the competitiveness of Estonian enterprises in foreign markets<sup>6</sup>, but in import of capital goods and an increase of the deficit of the income balance. The increased deficit of the income balance does not show the actual outflow of capital, because it is mostly reinvested profit. Re-invested profits are shown in the balance of payments by two simultaneous entries – in the current account as outflow of income and in the financial account as inflow of foreign investments (which means that even if there is no real movement of money, there is great outflow of income in the current account of Estonia). The share of reinvested profit has increased in recent years owing to a strong inflow of foreign investments and the profitability thereof. The goal of the Government is reduction of the current account deficit in the long-term to a sustainable level,<sup>7</sup> however, it is clear that it will take time and, due to developments of the balance of income, Estonia's current account deficit will remain, in comparison with other countries, high for years.<sup>8</sup>**

It is also important to observe inflation developments to avoid a fast rise in prices. In this year, the demand-side price pressures have increased. In addition, in the recent months the world market price developments of food products and oil have contributed to rising inflation (see Appendix 3 for further information). In recent years inflation of durable goods has been essentially on the EU average level. Inflation is hold up by the price increase in the non-traded sector (services), where the share of salary is high. **In context of general convergence of the Estonian economy with**

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<sup>6</sup> See also the final statement of the IMF's Article IV consultations of 2005 – IMF, 22 July 2005 (<http://www.eestipank.info/pub/et/majandus/IMF/20050722.pdf?objId=652670>), and Estonia's current account deficit: a sign of success or a problem? – ECFIN Country Focus Volume 2, Issue 13, 7.07.2005 ([http://europa.eu.int/comm/economy\\_finance/publications/country\\_focus/2005/countryfocus13\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/country_focus/2005/countryfocus13_en.htm)).

<sup>7</sup> IMF has estimated that in the case of the Baltic States the sustainable level of the current account deficit is 7.5% of GDP in the medium term and 5% of GDP in the long term – see IMF Country Report No. 03/331. Republic of Estonia: Selected Issues and Statistical Appendix. October 2003.

<sup>8</sup> For the reasons for the Estonia's current account deficit, see also the Convergence Programme 2004, Appendix 2.

**the European Union, the price level in the non-traded sector is also converging. Therefore the current level of inflation does not threaten the Estonian economy.**

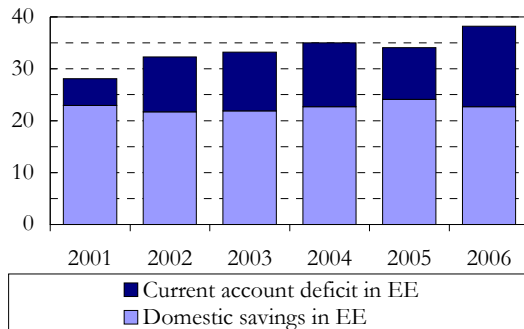
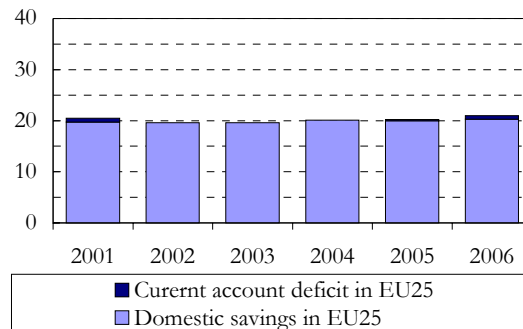
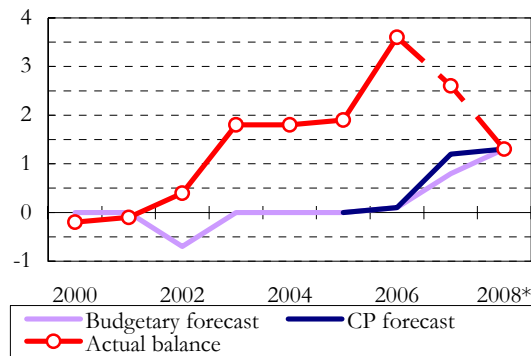
In order to improve Estonia's competitiveness, it is important to raise the value added and lead the structure of economy towards an increased importance of sectors where qualifications and labour productivity are higher and labour force demand is lower. For that purpose, it is necessary to improve both the business environment and raise the flexibility of labour market and the quality of human capital. As regards the business environment, the key activities are related to increasing the enterprises' R&D activities via national support programmes and to the improvement of access to capital with the establishment of the Development Fund (i.e. a national venture capital fund) which would make early-stage equity investments into start-up enterprises whose activities are dominated by knowledge and technology.

In order to increase the flexibility of the labour market and benefit more from Estonian current human capital, there is space for improving the employment on account of inactivity, when we view the experience of the successful countries of the European Union. This requires on the one hand increased supply of active labour market measures which would enable the unemployed and inactive persons to acquire qualification in correspondence with demand. In addition to the improvement of active labour market services and more focused direction of these to specific target groups, the government will raise the amount of financing for active employment measures. On the other hand, it is necessary to improve the flexibility of forms of work and working time in order to engage students, mothers of small children and older people (of pension age). Therefore, the government will pay this year and also in the following years even more attention to the enhancement of cooperation relations between enterprises, educational institutions and the Labour Market Board. In addition, efforts are made to improve the flexibility of legislation governing employment relations with regard to which many important legal acts are being prepared. The hearing of the Employment Contracts Act by the Riigikogu has been scheduled in the first half of 2008.

Considering Estonia's peculiarities or the use of the currency board system, budgetary policy is the main measure for influencing the economy and restraining risks threatening balanced economic development. The budget of the Estonian general government has been in surplus since 2002. Since the budget has previously been in balance, the stricter-than-planned budgetary position has inhibited the growth of domestic demand. This year, a surplus amounting to 2.6% of GDP is expected. For the first time, the budget of the general government planned for the next year is in a considerable surplus – 1.3% of GDP. Estonia is one of the few EU Member States to fulfil the requirement of the Stability and Growth Pact to achieve a near-balance or surplus budgetary position. The Government considers it important to implement a strict budgetary policy in the near future as well.

**The Government and the Bank of Estonia are constantly monitoring the situation and taking care to ensure macroeconomic stability. In the case of necessity, additional measures will be applied.**



**Figure 4****Economic development indicators***(% of GDP)***A. Financing of investments in Estonia****B. Financing of investments in EU****C. Planned and actual budgetary positions**

Sources: Statistical Office of Estonia, Ministry of Finance of Estonia, Eurostat.

**2.3.2. Introduction of the euro and fulfilment of convergence criteria**

As a Member State of the EU, Estonia is obligated to introduce the euro once the required level of nominal convergence has been achieved. EU's Maastricht Treaty stipulates the criteria regarding the public finances, price stability, interest rates and stability of the exchange rate. Furthermore, a Member State must have joined ERM II and spent at least two years there.

Given the currency board system Estonia has been *de facto* a member of the monetary union for over 15 years. Therefore joining the euro area is a logical step for the Estonian economy. During the entire period of circulation of the kroon the Estonian economy has proven its adaptability and has coped with problems. This shows that Estonia can successfully cope with problems as a member of the euro area and is thus virtually ready to join the euro area.

Estonia continues to fulfil all the nominal criteria except for the price stability criterion:

- o Estonian **general government budget position** has been near balance within the last decade, and the surplus in recent years has been one of the highest among EU members. As a result of the implementation of conservative budgetary policy, we have a very small national debt, one of the lowest among the EU Member States.
- o Due to both domestic and external price pressures – the rise in food prices – the 12 months' average **inflation** in Estonia is currently higher than the reference value of the price stability criterion (see Appendix 3 for further information).

- o Over the last four years **Estonia's long-term interest rates**<sup>9</sup> have been close to those of the euro area and below the reference value. Low interest rates show trust in Estonia's economic policy. Although the interest indicator based on the interest rate of long-term kroon loans cannot be directly compared with that of other countries the European Commission has, referring to low kroon interest rates, a small government debt and a good budgetary position, expressed the opinion that Estonia should have no problems in fulfilling the interest criterion and creation of a new instrument for evaluation of the fulfilment of the interest criterion is not required.
- o Estonia has been a member of ERM II for over 2 compulsory years and the **exchange rate** of the kroon has been stable during that period. Thus, Estonia fulfils the exchange rate stability criterion and the fixed exchange rate of the kroon against the euro also ensures fulfilment of the criterion in the future.

Due to inflation which exceeds the reference value the Estonian government was forced to postpone introduction of the euro which was initially planned for 1 January 2007. On 27 April 2006 the government set 1 January 2008 as the new target, but in the light of further developments regarding inflation achievement of this target turned impossible as well. On 30 November 2006, the government decided due to uncertainty related to the inflation developments forecasts not to set a dated objective for the introduction of the euro. Due to the volatility of price developments it is difficult to forecast inflation in a reliable manner for more than a few years. Therefore it is impossible to estimate when Estonia could fulfil the price stability criterion and become a full member of the euro area. **The government still aims at the introduction of the euro as soon as possible. This will be done as soon as we fulfil all necessary criteria.**

In order to increase the probability for the fulfilment of the Maastricht inflation criterion necessary for changeover to the euro in the years 2010–2011, the government decided to bring the raising of excise duties scheduled for the years 2009–2010 forward to 2008, when the fulfilment of the criterion would have been impossible anyway. According to the forecast of the Ministry of Finance, such timing will bring about quicker moderation of inflation in the following years which would increase the probability for the fulfilment of the criterion in the years 2010–2011. As a result of the earlier raise of excise duties the impact of price increases by state on inflation will diminish in the years 2010–2011 by 0.5% and 0.2%. These are excise duties (except alcohol) that need to be raised up to the minimum level required by the EU directives, i.e. obligatory raises of excise duties.

Inflation which exceeds that of the euro area by a couple of percentage points is normal for a rapidly converging country and it cannot be considered excessive. Low interest rates also show the absence of an inflationary problem. Considering our relatively low price level in comparison with the euro area inflation in Estonia will remain higher than that of the euro area for years and the fulfilment of the price stability criterion will be complicated. According to the recent forecasts of the Ministry of Finance and other institutions Estonia will not be able to fulfil the price stability criterion in the coming years.

During 2007, the inflationary differences with the euro area have increased. Also in 2008, the implementation of different administrative actions would not allow for the moderation of price increase. The normalisation of the situation is expected in 2009, when inflation will start to approach the level of the period before the economic boom.

However, Estonia has limited means for reducing inflation below the reference value of the price stability criterion. The monetary policy based on the currency board system ensures long-term price stability, but does not allow for controlling the possible short-term price pressures. In the conditions of an open economy the budgetary policy is a relatively inefficient tool for limiting price pressures. The government has excluded one-off measures such as, for instance, reduction of indirect taxes, which would temporarily lower the rate of inflation. Such measures do not ensure a

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<sup>9</sup> Due to a very small government debt Estonia does not have the right instrument for evaluation of the convergence of interest rates – a 10-year government bond issued in Estonian kroons.

sustainable low rate of inflation and may not ensure fulfilment of the inflation criterion. Moreover, such “tricks” may negatively impact the reliability of the economic policy. Reduction of indirect taxes as one of these “tricks” is in conflict with the government’s objective of shifting taxation off from labour force and capital towards consumption and exhaustion of natural resources.

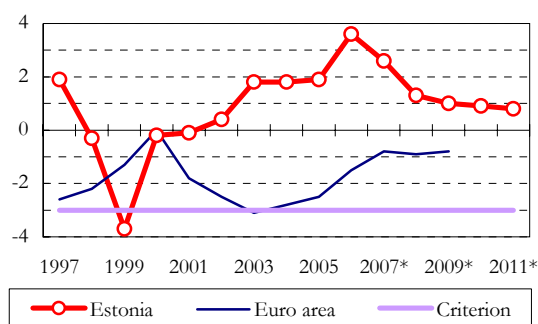
The markets have reacted calmly to the postponement of the introduction of the euro. This may be interpreted as a sign of the reliability of the Estonian economic policy. **The government will continue implementing the economic policy which has generated reliability towards Estonia and will join the euro area as soon as possible once the convergence criteria have been fulfilled.**

**Figure 5**

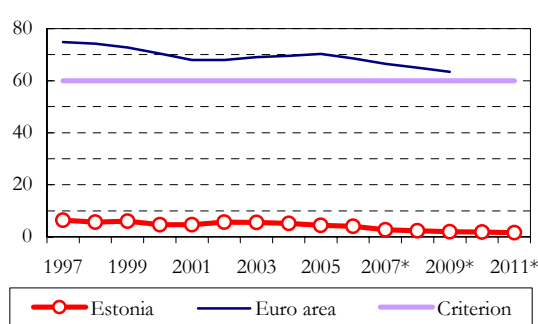
**Nominal convergence and fulfilment of Maastricht criteria**

(% of GDP)

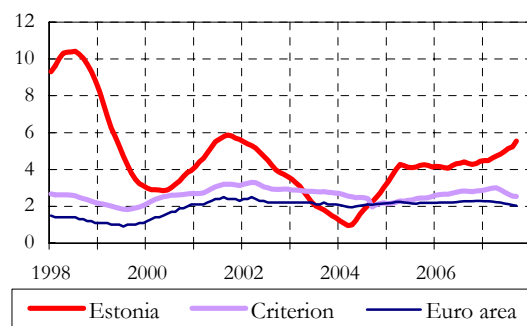
**A. General government budget position**



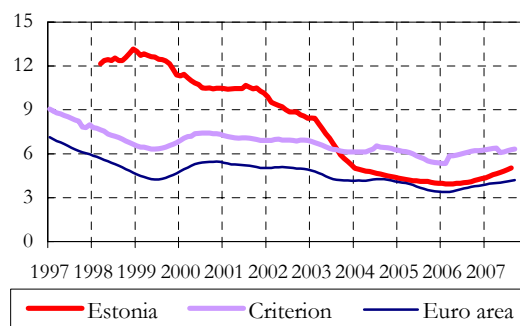
**B. General government debt**



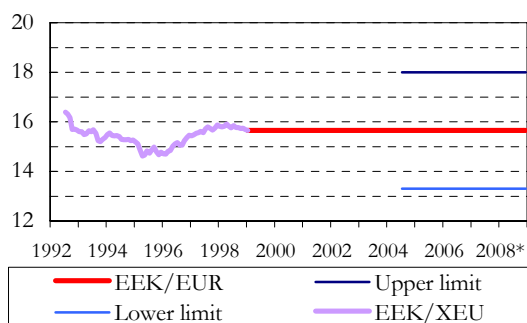
**C. Inflation (%)**



**D. Interest rates (%)**



**E. EEK/EUR exchange rate**



Sources: Ministry of Finance of Estonia, Statistical Office of Estonia, Eurostat, European Commission.

### 2.3.3. Estonian participation in ERM II

**The agreement on the involvement of the Estonian kroon in ERM II** is based on the firm commitment of the Estonian authorities to continue the implementation of reliable budgetary policy, in order to ensure the maintenance of macroeconomic stability and thereby support the regular and important lowering of the current account deficit and the sustainability of the convergence process. The authorities will continuously monitor in cooperation with relevant EU authorities the economic developments and are, if necessary, ready to strengthen the budgetary stance. In order to reduce the external imbalance and hold it on a sustainable level, the authorities will take measures for the moderation of domestic loan growth and ensuring efficient supervision over the financial sector, as well as for supporting moderate increase in wages and salaries. For strengthening domestic adjustment mechanisms and ensuring general competitiveness of the economy, timely structural reforms aimed at enhancing economy's flexibility and adaptability will be implemented.

The developments occurred in Estonian economy after joining the exchange rate mechanism ERM II are not completely in accordance with the expectations of that time. The Ministry of Finance expected in 2004 the stabilisation of economic growth in the long-term average level. But after accession to the European Union there occurred more intensive financial integration, interest rates decreased and loan terms extended. In addition, the labour market opened up. Due to the timing of these effects, there occurred short-term imbalances that were expressed as a current account deficit increase, an increase in wages and salaries not in conformity with productivity, as well as accelerating inflation. In the longer run, the openness of markets will certainly have a positive effect, but in the case of Estonia, the main problem lied in the fact that the timing was not very well in conformity with our economic cycle. The short-term nature of the imbalances is confirmed by the developments of this year, where we can see the smooth adjustment of economy and moderation of imbalances.

Budgetary policy is the main measure for influencing the economy and restraining the risks threatening balanced economic development. Whereas Estonia has used it actively – domestic demand has been restricted by the general government budget surplus, which according to the recommendations has been considerably higher than planned.

The budget of the Estonian general government has been in surplus since 2002. In 2006 the general government budget surplus was 3.6% of GDP. This year's state budget was for the first time compiled with planned general government surplus. Instead of the level of 1.2% of GDP forecast in the previous updated convergence programme, the general government budget surplus will be in 2007 on the level of 2.6% of GDP due to higher than expected tax revenues. The state budget of 2008 now under discussion will foresee the general government surplus of 1.3% of GDP for the coming year.

Furthermore, other measures aimed at controlling excessive demand have been taken:

- At the end of 2004, the scope of people eligible to KredEx housing loan security was limited, and the upper loan security limit was reduced by a quarter, from 400,000 kroons to 300,000 kroons.
- Since 2005, the government reduced the maximum rate of housing loan interests, training costs, and presents, donations and entry and membership fees of trade unions, deductible from income tax by 50% to 50,000 kroons a year. The effect of the measure is similar to increasing of interest rates, and it should help to restrict consumption and loan growth.
- The Bank of Estonia kept the minimum reserve requirement of commercial banks at the level of 13% for a long time, and raised it up to 15% on 1.09.2006, in order to ensure the availability of the required liquidity buffers in banks in the environment of robust credit growth. As a comparison: the compulsory reserve requirement in the euro system is 2%.

- At the end of 2005 the Bank of Estonia decided to make stricter the housing loan regulations for commercial banks as of 1 March 2006:
  - to increase the risk weighting of housing loans from 50% to 100% in the capital adequacy calculation, i.e. banks will have to increase the share of their own funds as regards the funding of housing loans.
  - In order to ensure a level playing field, the supervisors/regulators of branches of foreign banks and parent banks of subsidiaries of foreign banks will be asked to implement, if possible, a 100% risk weighting on housing loans granted to Estonian residents when calculating the capital adequacy ratio.
  - To include 50% of the housing loans portfolio to the reserve requirement calculation base should a bank apply a lower risk weighting to the loans it issues rather than that established by Eesti Pank

In addition to specific measures, the restriction of domestic demand is enhanced by general favouring of saving (e.g. by implementation of the pension reform) and development of exports.

The real estate market has recently cooled down and price increase has stopped *inter alia* as a consequence of such economic policy by the government and the Bank of Estonia (in addition, raise of interest rates by ECB, tightening of loan conditions by commercial banks). Taking measures that restrict loan growth has had an influence and the loan growth has moderated. But higher inflation is a problem, where due to domestic pressures there has been a considerable acceleration of the base inflation. According to the forecast of Estonia's 12 months' average harmonised index of consumer prices (HICP) and the reference value of the price stability criterion calculated on the basis of the three Member States of the EU where the inflation rate is the lowest, published in the autumn forecast of the European Commission, our outlook for the fulfilment of the inflation criterion has seriously deteriorated and the introduction of the euro in the coming years is therefore more difficult.

**Table 7**

**Policy commitments undertaken in ERM II entry communique**

Policy area	Commitment	Implementation
Preserving macroeconomic stability	Continue with sound fiscal policies	General government budget has restrained domestic demand and general government is in surplus in medium term
Reducing the external imbalance	Contain domestic credit growth and ensure effective financial supervision	Several measures have been taken in order to limit credit growth
	Promote wage moderation	Wage growth has been faster than expected and has exceeded the productivity growth. At the same time public sector wage growth is lagging behind compared to private sector wage developments
Strengthening domestic adjustment mechanisms and maintain the overall competitiveness of the economy	Timely structural reforms aimed at further enhancing the economy's flexibility and adaptability	In Estonian Action Plan for Growth and Jobs there have been planned several reform measures to improve business environment and to increase labour market flexibility

Sources:

Ministry of Finance of Estonia.

Progress Report on the Action Plan for Growth and Jobs 2005-2007 (2007)

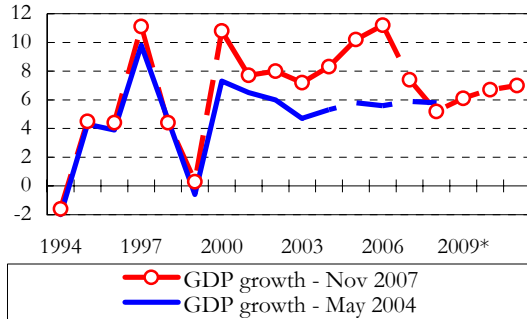
[[http://www.rigikantslei.ee/failid/Lisbon\\_Strategy\\_Progress\\_Report\\_Estonia\\_2007.pdf](http://www.rigikantslei.ee/failid/Lisbon_Strategy_Progress_Report_Estonia_2007.pdf)].

**Figure 6**

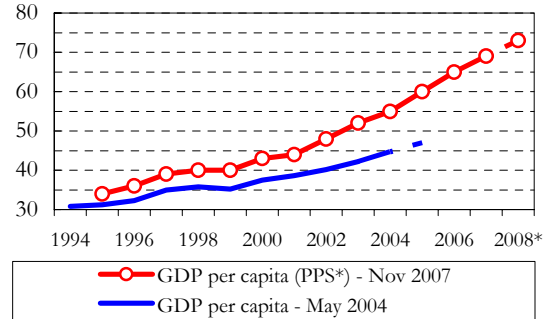
**Economic Developments in the Ministry of Finance Forecasts when joining ERM II and in CP update 2007**

(percentage)

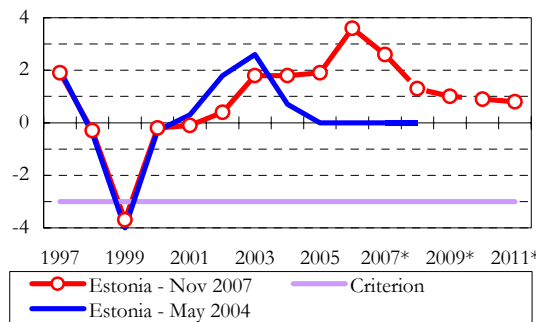
**A. Economic growth**



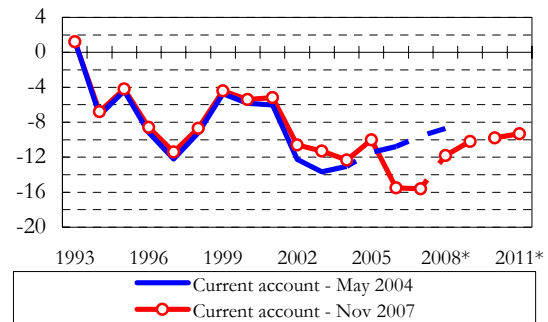
**B. Real convergence with EU (EU25=100)**



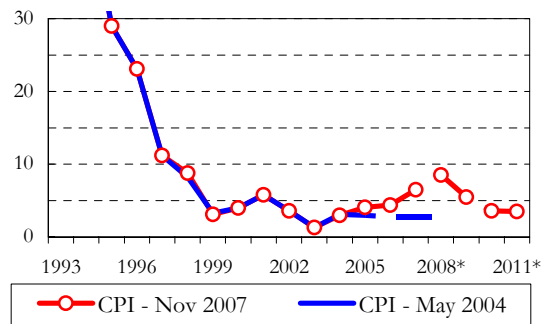
**C. General government budget position (% of GDP)**



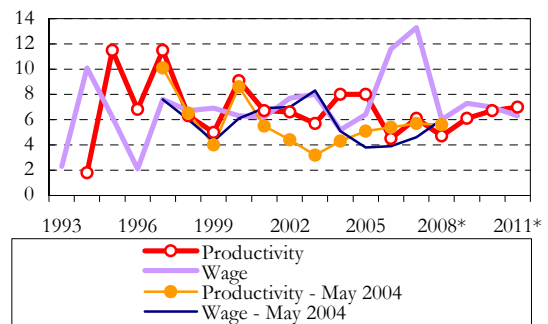
**D. Current account (% of GDP)**



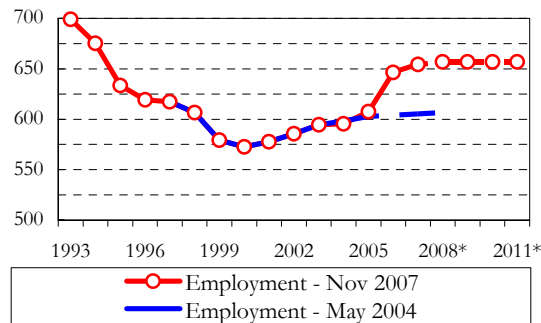
**E. Inflation**



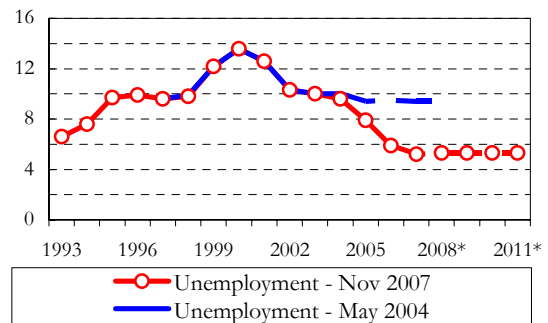
**F. Labour productivity**



**G. Employment (thousands)**



**H. Unemployment**



\* PPS –purchasing power standard.

Sources: Ministry of Finance of Estonia, Statistical Office of Estonia, Eurostat.

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## 3. FISCAL FRAMEWORK

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### 3.1. Government's fiscal policy goals

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#### 3.1.1. Fiscal policy goals

The fiscal policy goals of the Government of the Republic which took the office on 5 April this year are:<sup>10</sup>

- o to continue with strict and surplus fiscal policy and decrease of the government debt burden,
- o to hold the tax system stable, simple and transparent,
- o to improve the efficiency and effectiveness of budgeting and continue aiming budgetary expenditure at economic development;
- o to ensure the long-term sustainability of budgetary policy.

#### *The general government budget will be held in surplus over the medium term*

**The Government will continue its strict fiscal policy. The medium-term objective (MTO) of the government is to keep the general government budget in surplus. This objective meets the requirements of the Maastricht Treaty and the Stability and Growth Pact.**

The government continues what was started in the state budget of 2007: **the state budget will be prepared for medium-term already at the planning stage in such a manner that the general government budget is in surplus**, i.e. that all revenue is not allocated for expenditure right away. Furthermore, the revenue exceeding the forecast will be saved. A strict budgetary policy ensures an environment, which favours economic growth and contributes to balancing the economic cycle, reducing the imbalances of the economy and sending a positive signal to foreign investors and other market participants.

Such budgetary policy will also keep the general government debt low and increase the reserves, which is one of the prerequisites for the long-term sustainability of public finance. In the environment of the pressure of the growth of pension, health care and welfare costs arising from demographic developments and the decrease of the population of the working age and the related tax revenue, it ensures sufficient flexibility and opportunities for making financing decisions which are necessary for developing the state. In addition to making budgets with a surplus **the government will continue reducing the central government debt over the medium term.**

#### *The tax system is held stable, simple and transparent*

The government has established the goal of shifting the tax burden from taxation of income to taxation of consumption, use of natural resources and pollution of the environment. At the same

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<sup>10</sup> Similar objectives had already been set forth in the pre-accession economic programmes for 2001–2003, in the Convergence Programme presented in May 2004, and in the previous updates of the Convergence Programme; see also the Coalition Programme for 2007–2011 (<http://www.valitsus.ee/?id=1307>).

time the system should remain **stable, simple and transparent** with as few exceptions and differences as possible.

The government will maintain the present success-bringing income tax system, according to which the profit of entrepreneurs who have invested it in business is not taxed. In order to reduce the labour force's tax burden the government will lower the income tax rate, increase the basic allowance and introduce the income tax exemption as of the first child. In order to turn the use of energy and materials more efficient and bearing in mind the aim of changeover to the euro as soon as possible, it will harmonise the excise duty and resource tax policy, i.e. it will harmonise as quickly as possible the excise duty rates with the minimum requirements of the European Union and will continue the development of the concept of implementation of an ecological tax reform.

#### *Improvement of the efficiency and effectiveness of budgeting and aiming of budgetary expenditure at economic development*

Due to limitation of the budget expenditure growth and also the overall economic considerations it is important that the planned activities and the use of budget funds be as efficient and effective as possible and not increase any economic risks. To that end the government will direct state budget funds more into activities which increase the economy's development potential (incl. into reduction of the supply-side restrictions). It is planned to increase Estonian R&D expenditure, which are low in comparison with other Member States of the European Union. More resources will also be spent on the implementation of an active labour market policy. The government is planning on finding more opportunities of involving the private sector in capital-intensive projects, e.g. R&D investments and the process of implementation of structural funds. To ensure the sustainability of public finance **more attention must be paid to increasing the flexibility of redirecting state budget expenditure** (fiscal space), for the purpose of which the share of revenue-related expenditure in the budget must be reduced.

Furthermore, it is important **to make budgeting more accurate and to improve implementation of the budgetary policy**. The more accurately the needs and possibilities have been foreseen upon budgeting and the more effectively the activities are implemented, the smaller the need to incur additional costs and the greater the chance to ensure the stability of the economic environment. This requires further development of the systems, methods and processes of forecasting as well as national strategic planning and financial management (incl. budgeting) (see subsection 7.1).

#### *Maintaining long-term sustainability of budgetary policy*

Estonia's budgetary policy has so far been conservative. The conservative policy must continue in order to cope with adverse demographic changes (aging population) and ensure the sustainability of the public finance in the long run. The public finances are also strengthened by a successfully implemented pension reform.

### **3.1.2. Budgetary priorities of the Government for 2008–2011**

**The budgetary priorities of the government are approved with the State Budget Strategy 2008–2011<sup>14</sup>. The goal of the activities of the Government of the Republic is to ensure the strong and sustainable development of Estonia.** This goal has three sub-goals:

- an increase of the competitiveness of the economy,
- an increase of social cohesion,
- an increase of sustainable use of the environment.

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<sup>14</sup> Source: State budget strategy 2008–2011 (<http://www.fin.ee/doc.php?78476>).



Long-term development depends primarily on the speed of economic growth: for that the international competitiveness of the economy needs to be increased and economic stability ensured. Also, it is important to pay attention to the distribution of the increasing welfare in society, i.e. social and regional balance, which determines the cohesion of society. Otherwise, the long-term prospects of development will be under threat, because social problems will be amplified and the state's means and development opportunities will not be used in the best manner. Sustainable economic growth cannot be ensured without increasing environmental friendliness.

**To achieve the overall goal the Government of the Republic has established the following priorities for 2008–2011:**

- **Survival of the Estonian nation.** The task of the Estonian state is to ensure the preservation of the Estonian nation, culture and language through time. Therefore, the government's goal is to achieve a positive birth rate, longer average life expectancy, and improvement of the people's quality of life. As a result thereof we will be able to ensure the sustainability of public finance and the required labour force in the future. To achieve the goals we have to invest in: increasing the supply of labour and prevention of unemployment, which have posed a problem so far; reduction of the risk of poverty, especially regarding children; reduction of the illness burden of the population and emphasising the importance of the health of growing children.
- **Good education and creation of knowledge.** In the globalising world the success of each Estonian and Estonia as a whole depends more and more on the education of people – the transition to the knowledge-based economy makes education and research activities more important for the state. Therefore the government focuses on ensuring competitive and available education, which offers for everyone equal opportunities and favours lifelong learning. Also, research and development, i.e. the capacity of creation of new knowledge and using modern technologies is strongly supported as well. This will help us to overcome the problem of lack of employment and increase people's own ability of increasing their welfare – better education increases work and development opportunities.
- **People's prosperity and welfare.** For the purpose of ensuring long-term and stable economic growth the government continues pursuing and developing the present liberal economic policy and considers it vital to introduce the euro as soon as possible, so that the internal and external balance of the economy is ensured at all times. We have to make the Estonian economy more productive, international, effective (incl. in terms of using resources) and knowledge-based. This will help us to cope with the challenges arising from structural unemployment and decreasing and ageing population, and directly increase general well-being. Thereby it is important to ensure that each citizen, regardless of their age, place of residence, gender or nationality benefits from the increased welfare. To that end the government supports active participation of the elderly in social life, creating, among other things, opportunities for lifelong learning and working.
- **Active life and better and new jobs throughout Estonia.** In Estonia all areas have to enjoy strong and even development. High living standards and growth of well-paid jobs also have to be ensured in the countryside and periphery. For that the state eliminates deficiencies in the national infrastructure as well as in local business and living environments and cooperates with local authorities, local associations and village movements, societies, congregations, researchers and entrepreneurs. Furthermore, invested will be developing rural life, agriculture and fishery, which constitute additional factors upon regional balancing of development, and in improvement of connections between different regions, incl. through development of public transport and information society.
- **Ensuring internal peace and international security.** The development of people and the state is possible only in a stable environment where the residents and corporations have the feeling of security regarding their health and property. The constitutional order and internal peace and the protection of human lives, health and property has to be secured in the Estonian state. For that the capacity of securing the order must be increased. For the government it is extremely important to ensure Estonia's own security and military protection as well as to ensure stability and justice elsewhere in the world. Both targets must be achieved as effectively as possible and taking into account international trends and strategic risks.

## 3.2. General government budget balance

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### 3.2.1. Nominal balance of general government

**In 2006** the general government budget surplus amounted to EEK 7.4 billion (3.6% of GDP), which is the highest result over the years. The trends of 2006 regarding the development of the position of the general government were characterised by the disappearance of the deficit of local governments and an increase of the surplus of central government and social insurance funds.

The surplus of central government was partially based on lower costs as compared to the budget and partially on surplus income of revenues. State budget expenditure was lower than expected because of changes made to the State Budget Law, according to which up to three percent of determined expenditures can be handled as transferred costs and be used for the same purposes during the following accounting year. This provision was adopted for the purpose of reducing the year-end expenditure of ministries and constitutional institutions aimed at exhausting all their budget funds. Resources in the amount of EEK 2.9 billion were transferred to the year 2006 (1.4% of GDP), and EEK 4.6 billion to the year 2007 (1.9% of GDP). Behind the surplus of the Estonian Health Insurance Fund and the local governments there were good tax revenues resulting from positive developments of the labour market, and in the case of the Estonian Unemployment Insurance Fund, in addition to good tax revenues, also lower than planned expenses due to the decreasing unemployment rate.

**The budget of 2007** was planned with a surplus of EEK 1.1 billion. Due to better-than-expected economic developments the revenue was higher than planned and on the basis of the summer forecast of the Ministry of Finance, the government decided to draw up a **supplementary budget** for 2007 which is still in the Parliament. The revenue of the supplementary budget amounted to EEK 6.2 billion and expenditure to EEK 2.7 billion. When preparing the supplementary budget it was decided that not all of the supplementary income would be used and an increase in running expenses would be avoided. The main objectives of the supplementary budget were to increase reserves and investment.

As the higher-than-expected revenues received in 2007 will not be fully spent under the supplementary budget and based on the results of the first three-quarters of the year it is apparent that less expenditure than planned will be made during the whole year by the central government, then based on the forecast of the Ministry of Finance the expected general government budget surplus in **2007** is EEK 6.2 billion (2.6% of GDP). The central government will make the largest contribution to the general government surplus, and also the Estonian Health Insurance Fund has a surplus. Taking into consideration the amount of the budget, the Estonian Unemployment Insurance Fund will also have a considerable surplus by the end of the year. Usually, the budgetary position is worsened by the activities of local governments, but in 2007 it is expected that the aggregate budget of local governments will be in balance.

**In 2008 the general government budget surplus will be 1.3% of GDP according to the forecast. In the years 2009–2011 the general government budget will also remain in surplus.** The goal set by the government in the national budget strategy is the general government budget surplus up to 0.5% of GDP. The social insurance funds will be in a slight surplus and local governments will be in balance, which means that the general government surplus results mainly from the central government surplus. (See subsection 5.1 and Table 15 for the forecast of the following years.)

**Table 8**

**General government budget position 2006–2011**

	2003	2004	2005	2006	2007*	2008*	2009*	2010*	2011*
<b>General government (% of GDP)</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>3.6</b>	<b>2.6</b>	<b>1.3</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>
Central government	1.6	1.8	1.7	3.0	2.2	1.0	0.8	0.7	0.6
Local government	-0.3	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
Social security funds	0.8	0.3	0.5	0.6	0.4	0.3	0.2	0.2	0.2

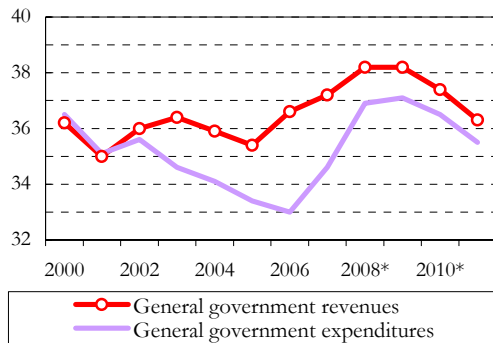
\* forecast. Surplus for years 2009–2011 is based on technical calculations – expenditures agreed in the State Budget Strategy (SBS) 2008–2011 were adjusted by changes in revenue forecast in case of expenditures that are connected with revenues. Forecast also takes into account planned changes in the Pension Insurance Act related to indexation rules. Expenditures will be revised in spring 2008 while preparing the SBS 2009–2012 and general government budget position might change. Government objective stated in SBS 2008–2011 is general government surplus of 0.5% of GDP for 2008–2011.

Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

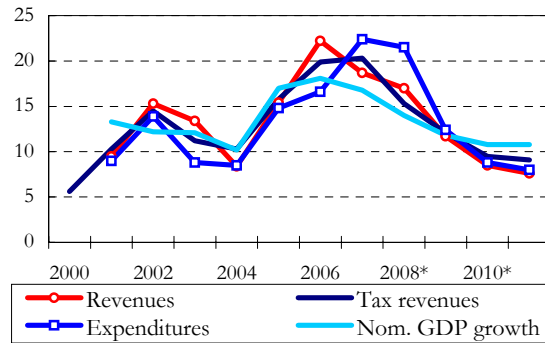
**Figure 7**

**General government budget position**  
(% of GDP)

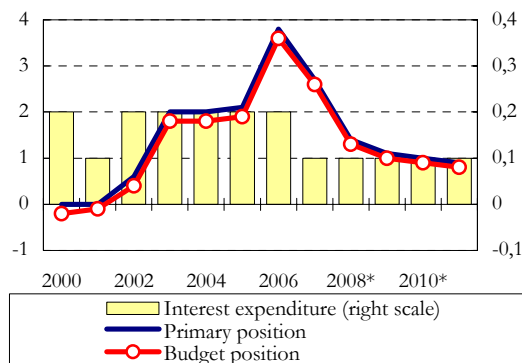
**A. Revenues and expenditures**



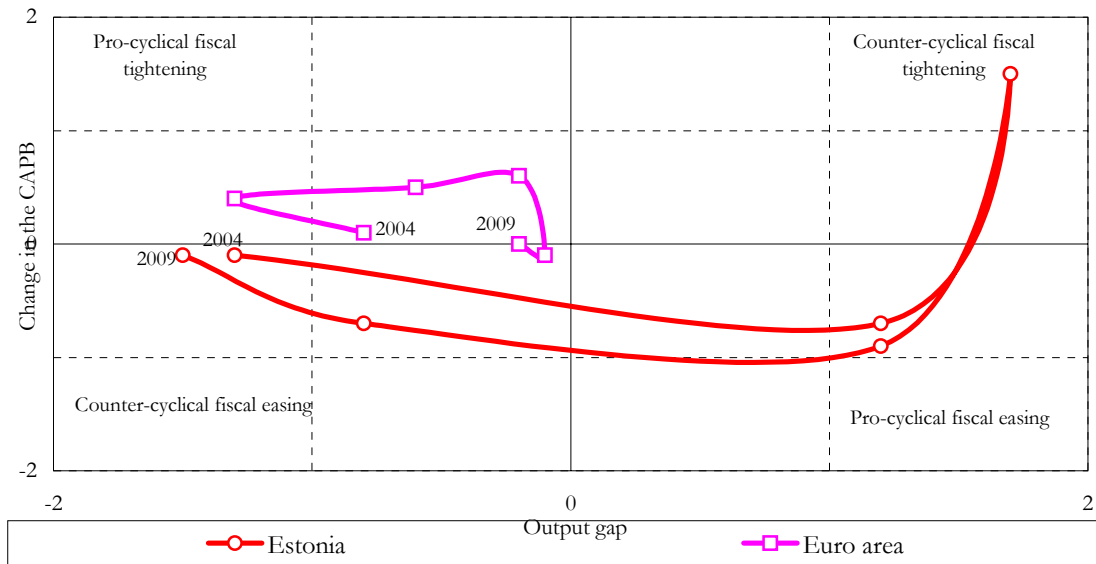
**B. Revenue and expenditure growth (%)**



**C. General government budget position**



Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

**Figure 8****Fiscal policy in Estonia and in the euro area***(% of GDP)***A. Fiscal stance and cyclical conditions in Estonia and in euro area 2004–2009**

Source: Ministry of Finance of Estonia, Eurostat, European Commission autumn forecast 2007.

**3.2.2. Cyclically adjusted balance of general government**

The analysis of the Ministry of Finance using the production function method<sup>12</sup> shows that in 2006 the GDP grew over the potential level and the positive gap amounted to 1.7% of GDP. Although in the beginning of 2007, the economy continued the potential-exceeding growth based on the credit inflow, the results of Q2 and Q3 refer to the beginning of the adjustment of economy, as a result of which the output gap concentration can be expected in the second half of the year.

The expected moderation of economic growth in 2008 due to the slowing down of domestic demand is stronger in comparison to the previous scenarios. There will be a considerable adjustment as regards domestic demand caused by the moderation of the loan growth and growth of the real estate sector having generated the economic growth. In addition, the higher salary costs and costs of other production inputs will have an impact on the economic development, causing the decrease of the expected level of GDP under the potential level, reaching -0.8% of GDP in 2008. In 2010–2011 the negative output gap will start to concentrate and approach its potential rate, but due to the structure of investments made so far the existing workforce potential cannot be fully used through the raise of labour productivity. Investments have in recent years concentrated mainly on the non-traded sector, and therefore the investments of the traded sector ensuring sustainable growth are partially left behind.

Evaluations made on the basis of the output gap about the cyclically adjusted position of Estonia's budget show that Estonia's budgetary policy will become counter-cyclical in 2008. If in 2007 the policy becomes pro-cyclical mainly due to a decrease in the nominal budget surplus of the general government in the environment of quicker economic growth, then in 2008, when the output gap

<sup>12</sup> On the output gap and cyclically adjusted budget position evaluation methodology see Estonia's Convergence Programme of May 2004.

becomes negative, the decrease in the nominal budget surplus of the general government will turn the budgetary policy counter-cyclical. During the rest of the forecast period, the budgetary policy will remain weakly counter-cyclical (except in 2009), as in the environment of growth that is weaker than the potential level the nominal budget surplus of the general government will also fall.

**Table 9****Cyclical developments in 2005–2011***(% of GDP)*

	2005	2006*	2007*	2008*	2009*	2010*	2011*
<b>1. Real GDP growth (%)</b>	<b>10.2</b>	<b>11.2</b>	<b>7.4</b>	<b>5.2</b>	<b>6.1</b>	<b>6.7</b>	<b>7.0</b>
<b>2. Net lending of general government</b>	<b>1.9</b>	<b>3.6</b>	<b>2.6</b>	<b>1.3</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>
<b>3. Interest expenditure</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>4. One-off and other temporary measures</b>	<b>0.0</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
5. Potential GDP growth (%)	7.4	10.6	7.9	7.4	6.8	6.6	6.5
6. Output gap ( $6_{t-1} + 1 - 5$ )	1.2	1.7	1.2	-0.8	-1.5	-1.3	-0.8
7. Cyclical budgetary component ( $6 * \text{sensitivity}$ )	0.4	0.5	0.4	-0.2	-0.5	-0.4	-0.2
8. Cyclically-adjusted balance ( $2 - 7$ )	1.5	3.1	2.2	1.5	1.5	1.3	1.0
9. Cyclically-adjusted primary balance ( $8 + 3$ )	1.7	3.2	2.3	1.6	1.6	1.4	1.1
10. Structural balance ( $8 - 4$ )	1.5	2.4	1.6	1.0	1.5	1.3	1.0

*Source: Ministry of Finance of Estonia, Statistical Office of Estonia.*

**3.2.3. Structural balance of general government**

The structural budgetary position of the general government is calculated by removing from the nominal position, in addition to the impact of the economic cycle, one-off and temporary factors, which may distort the budgetary position. One-off and temporary measures are measures which have a significant impact on the budget and a temporary and non-repeating significant (to an extent of at least 0.1% of GDP) impact on the cyclically adjusted budgetary position. Although general principles proceeding from which the impact of a measure is classified as temporary have been determined, it will be decided separately whether to take any particular case into account or not.

The one-off measures affecting the Estonian general government budgetary position have been set out in Table 10. In 2006 their volume was 0.7%, in 2007 it was 0.6% and in 2008 it will be 0.5% of GDP. In Estonia the major one-off measures influencing the budget are the extraordinary volume of sale of state property and the dividend payments from AS Eesti Energia. The structural position of the Estonian general government budget amounted to 1.5% of GDP in 2005, 2.4% of GDP in 2006, and it is expected that in 2007 and 2008 the structural position will be 1.6% and 1.0% of GDP, respectively.

**Table 10****Impact of one-off measures 2006–2008**

Measure	Year	mio EEK*	% of GDP
<b>Mõju tuludele</b>			
Revenues from the sale of assets (higher than in previous years) <sup>13</sup>	2006	792	0,4
One-off decrease in VAT collection due to a change in law	2006 <sup>14</sup>	-125	-0,1
Income tax from the revenues earned from the sale of shares of Hansapank	2006	312	0,2
Dividends from Estonian Energy	2006	500	0,2
Revenues from the sale of assets (higher than in previous years)	2007	515	0,2
Dividends from Estonian Energy	2007	1,000	0,4
Revenues from the sale of assets (higher than in previous years)	2008	858	0,3
Dividends from Estonian Energy	2008	652	0,2
VAT taxation moment is shifted due to a change in law	2008	-203	0,1
<b>TOTAL</b>	2006	<b>1,479</b>	<b>0,7</b>
	2007	<b>1,515</b>	<b>0,6</b>
	2008	<b>1,307</b>	<b>0,5</b>

\* – *approximative*

Source: Ministry of Finance of Estonia.

<sup>13</sup> Calculations to find regular revenue from the sale of assets are based on the average revenue in 2001–2005 which is 240 million EEK in a year. The revenue higher than in previous years is the sum above this level.

<sup>14</sup> The change in law was published in Riigi Teataja on 22 December 2005. The change stepped into force retroactively on 1 November 2005 but an effect is expected only just in 2006.

### **3.3. Roles and budgetary balances of various levels of government**

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The Estonian **central government** consists of ministries, constitutional institutions, state pension insurance, most public legal entities, and foundations controlled and financed by central government. The tasks of the central government are related to administrating the state, as well as guaranteeing security and public policy. The central government's task, with the help of different institutions, is to regulate agriculture, environmental protection, infrastructure and culture. Social welfare, the health service and education are administered in cooperation with social security funds and local governments.

The financial position of the central government is most closely related to the economic cycle, mostly due to financing – as the major share of central government revenues consists of taxes more sensitive to economic development. Therefore, the central government has been the main cause of the deficit during the economic recession cycle (for example in 1999), while recent years have been characterised by surplus, due to better collection of taxes. At the end of 2006 the central government ended the year in surplus for the seventh year in a row – the surplus was 3.0% of GDP. Based on the latest data the surplus in 2007 is expected to reach 2.2% of GDP. In the medium-term, the central government will continue in surplus which is ensured based on the objective of general government budget surplus.

**Pension insurance**, being part of the central government, is in modest surplus this year, but will suffer from a deficit during the years to come. With its aging population, Estonia has carried through its pension reform and has started a three-pillar system (compulsory state pension insurance, compulsory funded pension and additional private pension) to maintain the sustainability of public finance. The income of the state pension insurance comprises 20% of the social tax base of which 4% will be transferred to the funded pension system in the case of those who have joined the 2<sup>nd</sup> pillar. To find additional funds for financing pension insurance (and also health insurance), the minimum social tax obligation will be raised by 2009 to the minimum monthly wage of the previous year. It has been decided to transfer EEK 1.8 billion from the surplus in 2005 and EEK 2.0 billion under the supplementary budget of 2006 to the pension insurance reserve for the purpose of strengthening the financial position of pension insurance. At the end of 2006, the reserve amounted to EEK 5.7 billion (2.7% of GDP).

The rise in pensions has been established by the State Pension Insurance Act, according to which state pension will be annually indexed on April 1 using an index whose value is, from 2008, 20% of the annual growth of the CPI and 80% of the annual growth of the pension insurance share of social tax revenues (previously 50%/50%). In addition, the index of the base amount of pension will be multiplied by 1.1 and the annual factor by 0.9, in order to raise the solidarity of the pension system. The estimated rise in the average monthly pension will be from 4,588 kroons in 2008 to 6,715 kroons in 2011.

The Estonian Health Insurance Fund and the Estonian Unemployment Insurance Fund belong to the sector of **social insurance funds**. **The Estonian Health Insurance Fund** is a social insurance fund operating pursuant to the principle of solidarity, which is funded out of the social tax (13% of the social tax base). The budgetary position of health insurance has been stable so far and the aim is to maintain at least a balanced financial position for state health insurance. Financing of the health care system can be improved by increasing the tax base through the raise of the sum serving as the minimum social tax obligation. According to forecasts the Estonian Health Insurance Fund will be in surplus in 2007 and 2008 and in balance over the medium term. The reason for the surplus lies in good tax collection arising from a robust growth in wages and salaries.

The main tasks of the Estonian Unemployment Insurance Fund are the payment of unemployment insurance premiums, insurance premiums if collective agreements are rescinded and insurance

premiums if an employer becomes insolvent. The Estonian Unemployment Insurance Fund receives resources from the obligatory unemployment insurance payments of the insured, the rate of which as stipulated by the Unemployment Insurance Act can be 0.5–2% for the insured and 0.25–1% for the employer from gross earnings. Due to low cost level and a continuously increasing surplus the government lowered the tax rate as from 2006 – the employee's tax rate was lowered from 1.0% to 0.6% and the employer's from 0.5% to 0.3%.

The surplus of the Estonian Unemployment Insurance Fund initially arose from the characteristic low level of the opening years of the system (the Unemployment Insurance Fund was established in 2002) and the need to create a sufficient reserve. The improving situation of the labour market has been the reason for the lower-than-planned costs. Due to lower expenditure and higher receipts, the Estonian Unemployment Insurance Fund has had a surplus each year and the accumulated reserves were 2.4 billion kroons at the end of 2006. Also in the medium term the Estonian Unemployment Insurance Fund will remain in surplus and the volume of the assets will increase according to the forecast up to 5.6 billion kroons by 2011.

The main tasks of **local governments** include co-ordination of local life and the primary education system, as well as promotion of human activities through social benefits. The number of functions delegated to local governments by the central government has increased over the last few years, whereas one of the largest expenditure items in the budgets of local authorities as of 2000 is the payment of teachers' salaries. Since 2005 resources for the social care of disabled persons were transferred to the budgets of local governments and investments to be made from the state budget in the field of education were added to the per capita tax of schools for general education.

Cities and rural municipalities have a constitutional right to independent budgeting, which implies that they have relative freedom to form budget income and expenditures. Using the possibilities granted by the Constitution, local governments have had a deficit in their budgets, starting since independence with high inflation during the first few years. The surplus of local governments in 2006 occurred for the first time and was associated with better-than-expected accrual of tax revenues and considerably increased sale of assets.

The average volume of the revenues of the budgets of Estonian local governments has amounted to 8.6% of GDP in previous years, which is considerably lower than the average indicator of the Member States of the EU, while the share of the tax revenues of the local governments (4.2% of GDP) is equal to the EU average. The volume of the expenditure of the local governments has been at the level of 9.0% of GDP in previous years.

The share of local governments in receiving personal income tax has been increased to strengthen their financial position. When the state started lowering the income tax rate, the existing distribution basis of the income tax of a private person was changed – instead of 56% of the total receipt, local governments' share was stipulated to form 11.4% of a taxpayer's taxable income, i.e. the share received by the local governments does not decrease after the lowering of the income tax rate. In 2006 the share was raised to 11.8% and in 2007 to 11.9%. As of 2001 the share of local governments has decreased by approximately 1% of GDP and according to the forecast, in the medium term it will remain in balance. Limitations on debt obligations to local governments have been stipulated by Rural Municipality and City Budgets Act. (See also subsection 7.2). On one hand, the disappearance of deficit is caused by the setting of the goal of achieving balanced budgets in the medium term by local governments (mainly Tallinn), and on the other by reaching the borrowing limits.

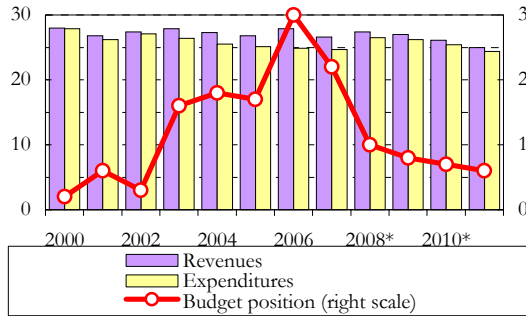


**Figure 9**

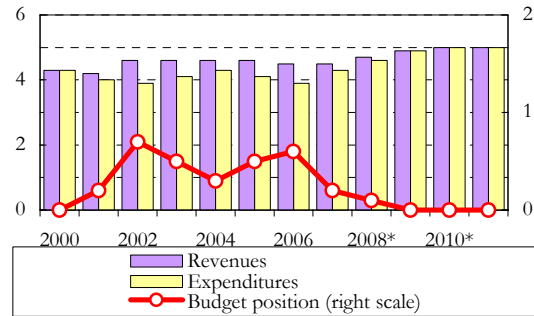
**Revenues and expenditures of general government levels 2000–2011**

(% of GDP)

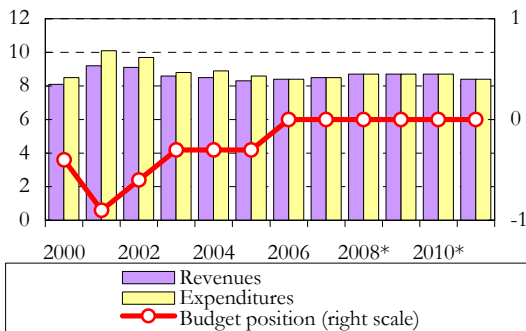
**A. Central government**



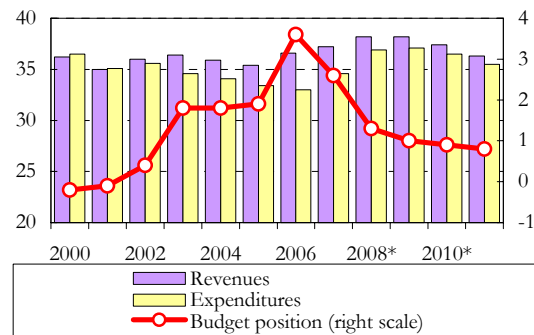
**B. Social security funds**



**C. Local government**



**D. General government**



Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

## 3.4. General government financing

### 3.4.1. General government debt

The main goal of Estonia's budgetary policy ever since the restoration of independence has been to keep the general government budget (at least) in balance over the medium term, which is expressed in the low level of debt. At the end of 2006 the general government debt of Estonia was 4.0% of GDP. The government debt of EEK 8.3 billion included a local government debt (57.3% in 2006), which has decreased by 15.3 percentage points since 2001. The major cause of the above is the continuous deficit of local governments, as it is no longer possible to sell property to cover the deficit and therefore local governments have been borrowing. In 2006 the central government debt decreased, because in the conditions of a surplus there is no need for using external funds and loans were repaid on the basis of the prescribed repayment schedules.

The debt to external creditors amounted to 57.6% of the total debt, being EEK 4.8 billion as of the turn of the year, whereas the external debt of the central government amounted to EEK 2.7 billion and the external debt of local governments amounted to EEK 2.1 billion. The domestic debt has slightly decreased in comparison with the previous year due to more active borrowing by the local governments in the external markets, amounting to EEK 3.5 billion as of the end of 2006.

**Table 11**

#### Change of general government debt burden in 2006

	31. december 2005		31. december 2006		Change
	mio EEK	% of GDP	mio EEK	% of GDP	%
<b>General Government</b>	<b>7,698</b>	<b>4.4%</b>	<b>8,301</b>	<b>4.0%</b>	<b>7.8%</b>
Domestic debt	3,788	2.2%	3,521	1.7%	-7.1%
Foreign debt	4,001	2.3%	4,780	2.3%	19.5%
<b>Central Government</b>	<b>3,616</b>	<b>2.1%</b>	<b>3,588</b>	<b>1.7%</b>	<b>-0.8%</b>
Domestic debt	909	0.5%	915	0.4%	0.7%
Foreign debt	2,707	1.5%	2,673	1.3%	-1.3%
<b>Local Government</b>	<b>4,173</b>	<b>2.4%</b>	<b>4,758</b>	<b>2.3%</b>	<b>14.0%</b>
Domestic debt	2,879	1.6%	2,651	1.3%	-7.9%
Foreign debt	1,294	0.7%	2,107	1.0%	62.8%
<b>Social Security</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Domestic debt	0	0	0	0	0
Foreign debt	-	..	-	..	..

Source: Statistical Office of Estonia.

In spite of the general government budget surplus, the general government debt has nominally slightly increased over the recent years. The reason can mainly be found in the fact that the central government has not used the surplus for prior repayment and decreasing of debt since by international standards the debt burden is very low and advanced repayment of debt would not be useful for Estonia arising from agreements concluded. The surplus has been used for increasing deposits and formation of reserves comprising of liquid financial assets, i.e. usually low-risk bonds. The share of privatisation income has been marginal in recent years.

**In the coming years the general government debt will decrease to 1.6% of GDP by the end of 2011.** The financial conditions of local governments have improved and therefore the need for additional borrowing has decreased. According to the forecast the budget of local governments will be from 2007 in balance and as a result the proportion of debt in the GDP will decrease. However, the threat to the budgetary position of the general government and consequently to the fiscal policy

of the central government will decrease when the objective of a balanced budget is maintained, because several local governments have been in the previous years approaching the borrowing limit established by law and this will result in conservative budgeting for them.

**Table 12****General government debt developments in 2006–2011***(% of GDP)*

	2006	2007*	2008*	2009*	2010*	2011*
<b>1. Gross debt</b>	<b>4.0</b>	<b>2.7</b>	<b>2.3</b>	<b>2.0</b>	<b>1.8</b>	<b>1.6</b>
2. Change in gross debt ratio	-0.4	-1.3	-0.4	-0.3	-0.2	-0.2
<b>Contributions to change in gross debt</b>						
<b>3. Primary balance (-)</b>	<b>-3.8</b>	<b>-2.7</b>	<b>-1.4</b>	<b>-1.1</b>	<b>-1.0</b>	<b>-0.9</b>
<b>4. Interest expenditure</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>5. Stock-flow adjustment</b>	<b>3.9</b>	<b>1.9</b>	<b>1.2</b>	<b>1.0</b>	<b>0.9</b>	<b>0.8</b>
5.1. of which net accumulation of financial assets	4.4	2.4	1.7	1.5	1.4	1.3
5.2. of which adjustments	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
6. Nominal GDP growth	-0.7	-0.6	-0.3	-0.3	-0.2	-0.2
<b>Implicit interest rate on debt (%)</b>	<b>4.6</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>4.9</b>	<b>5.0</b>

Sources: Ministry of Finance of Estonia, Statistical Office of Estonia.

**Box 2. Stock-flow adjustments**

A stock-flow adjustment (SFA) is an indicator characterising the difference between the debt positions (stock) and deficit (flow) in the previous and this year.

$$\text{Debt}(t) - \text{Debt}(t-1) = \text{SFA}(t) - \text{Deficit}(t)$$

Positive (negative) SFA indicates that besides the deficit (surplus) the debt is also increased (decreased) by other changes (financial transactions, re-evaluations, and the difference between cash and accrual reporting).

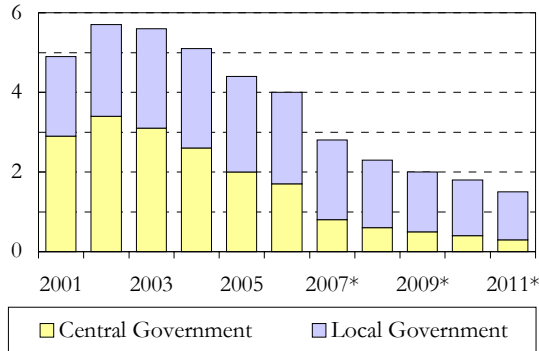
In theory the change in the debt should be relatively similar to the deficit/surplus at least in a longer period, but especially recent years have indicated that the correlation between the change in the debt and the deficit has weakened in the case of various countries. In the case of Estonia SFA has been high especially in the case of recent years, because the surplus has not been used for reduction of the debt, but for increasing reserves. The same tendency characterises the Nordic countries that create reserves in the social insurance sector in order to be better prepared for a rise in the costs arising from the aging of the population. SFA indirectly indicates that there may still be problems with the budget statistics in some countries.

**Figure 10**

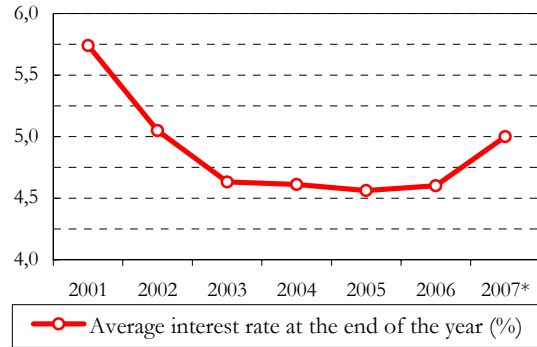
**Debt developments**

(% of GDP)

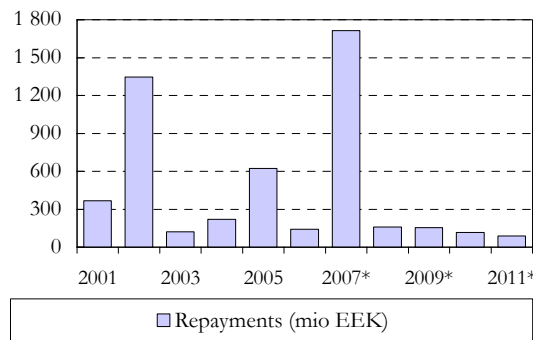
**A. General government debt**



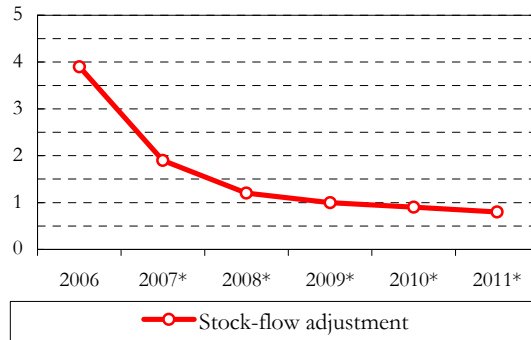
**B. Average interest of central government<sup>15</sup> loans**



**C. Repayment of central government loans**



**D. Stock-flow adjustment**



Sources: Ministry of Finance of Estonia, Statistical Office of Estonia, Eurostat.

**3.4.2. General government reserves**

Owing to the remarkable general government budget surplus over the recent years, especially in the sector of the central government and social insurance funds, the reserves of the given levels of government have constantly grown. As of the end of 2006 the financial reserves of the central government exceeded the debt of the central government by over four times and amounted to EEK 19.3 billion, i.e. to 9.3% of GDP. The larger part of the financial reserves – EEK 14.3 billion – has been invested in low-risk bonds, but 5.0 billion is held with various deposit and other accounts. As of the end of Q3 2007 the reserves of the central government amounted to EEK 21.5 billion, having grown by 9.4%.

The objective of forming the management strategy for financial reserves is to guarantee sufficient liquidity for servicing the state budget as well as for the timely fulfilment of state obligations. Upon creation of the stabilisation reserve investment strategy it is presumed that the reserve will be used in the conditions of economic growth and balanced budget only for alleviation of socio-economic crises.

<sup>15</sup> Central Government without foundations and public-legal entities.

Management of reserves includes a combination of a passive investment strategy where an optimal standard portfolio has been prepared for each amount of resources and an active investment process making use of the actual possibilities of the market, where the standard portfolio is deliberately discarded. The standard portfolios express investor's risk bearing and profitability expectations and must guarantee fulfilment of the fundamental objectives of investing the resources – maintaining the value of the resources and sufficient liquidity within the investment period set, and obtaining the maximum profit within the risk limitations set. Currency, interest, liquidity and credit risks will be managed upon administration of reserves.

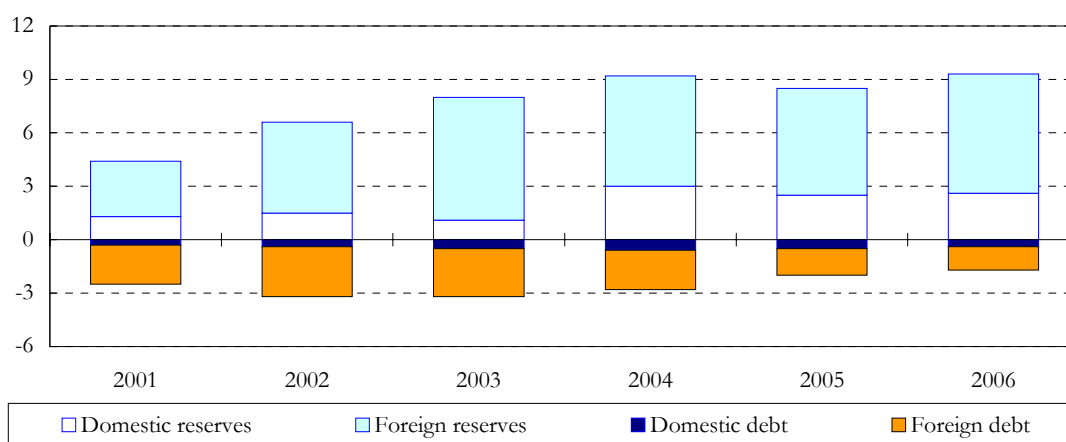
The current investment strategy of the Stabilisation Reserve Fund has been prepared considering the principle that would guarantee with 95% probability non-negative profitability of the reserve in a three-month perspective in any market situation. It has also been presumed that the resources of the reserve can be fully used after three months. Therefore the means of the reserve are invested only in high-liquidity and low-risk bonds. In the coming years the investment strategy will be updated in such a manner that a yield exceeding the inflation of the investments would be ensured in the medium term.

When investing the resources and reserves used for managing liquidity of the daily state budget, continuously high liquidity and short-term investing is maintained, in order to efficiently manage the disparity that comes from different timing of revenue received and expenditures made. Seasonality arising from a divergence of state budget revenues and expenditures has increased due to extensive application of the EU subsidiary schemes and a great number of financing transactions. For instance, through 2007–2011 the support schemes of the European Union will be bridge-financed out of the state budget funds before accrual of the money from the support to the extent of approximately EEK 3 billion in each calendar year.

**Figure 11**

### Central government debt and reserves at the end of the period

(% of GDP)



Sources: Ministry of Finance of Estonia, Statistical Office of Estonia, Eurostat.

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## **4. SENSITIVITY ANALYSIS AND COMPARISON WITH THE PREVIOUS PROGRAMME**

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### **4.1. Alternative scenarios and their impact on the budget balance**

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#### **4.1.1. Real estate market risk scenario – not just a little scare**

Within the framework of economic forecasts the Ministry of Finance will also prepare risk scenarios which reflect potential alternative developments of economic development, but whose occurrence probability is smaller than that of the base scenario. In the spring 2007 forecast, the Ministry of Finance considered possible the occurrence of the wage-productivity gap, and in the summer 2007 forecast the slowdown of the real estate market; below, the latter is dealt with more closely.

In spring 2007, the major threat to the Estonian economy seemed to be the wage growth continuously exceeding the productivity. The risk scenario of the spring forecast outlined some further developments which can occur due to the wage growth exceeding for a longer time the productivity and constantly strong borrowing intensity feeding the consumption and real estate boom. Rapidly increasing domestic demand fuels inflation which in the conditions of increasing lack of workforce will in turn put pressure on further increase in wages and salaries. In the non-traded sector the rise in salaries will be directly transferred into prices, whereas with regard to the goods of the traded sector, imports will start freezing out domestic products, and in addition reduce the competitiveness of the exporting industry in foreign markets, where the participants are price-takers. As the former investments of enterprises have to a large extent been related to real estate (60% of the foreign resources involved by the enterprises from domestic banks, March 2007<sup>16</sup>), the enterprises have not sufficiently raised the growth potential of labour productivity and are not able to adjust to increasing labour costs.

**The risks of the spring forecast are partially realising.** The salary growth has exceeded in H1 2007 the fears of the risk scenario, exceeding the level of 20%. The CPI forecast exceeds the spring risk scenario by 0.8 percentage points. The current account is in a worse condition than expected and in Q1 the growth in private consumption broke the record of this century (16.7%). In Q2 the growth in private consumption has still decreased to 12%. The growth of export is modest, although an extensive loss of competitiveness in foreign markets cannot be noticed yet – the enterprises have initially been able to adjust to increased salary costs. But the risks of the spring prognosis were to realise not before 2008–2009.

**New risks will signal themselves and cooling down of the real estate sector may turn to be too fast.** By the summer of 2007, there emerged new risks which may partially reduce the spring risks, but also intensify them, depending on their mutual timing of realisation. The end of the price rally of residential property has with few success been forecast for some time but the developments of the summer and autumn of 2007 are confirming it. The number of purchase-sales transactions has decreased, the average price of transaction has stabilised and the number of sales offers has for a longer time been quickly increasing and as a result the sales periods have extended. The monthly

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<sup>16</sup> Financial Stability Review, May 2007, the Bank of Estonia.

volumes of new housing loans have fallen to the level of the beginning of 2006 and the amounts of new loan contracts will remain more often under half a million kroons which allows for the purchase of just a new small room at the current price level.

The real estate developers regard this situation as a calmed-down market, but for example according to the forecast by Danske Bank the real estate market of the Baltic States would suffer a long-term and deep fall<sup>17</sup> and the local press amplifies the fears and expectations of a real estate crash which contributes to the waiting position of purchasers. At the same time, the sellers who are not forced to sell do not feel that it is necessary to significantly lower the prices and offer rental services instead of purchase.

**The residential property price in Estonia is in comparison to the level of wages and salaries high and this limits the circle of potential borrowers to higher income deciles, but such persons have by now to a large extent exhausted their borrowing power or need.** The banks grant loans on the basis of official income (mainly the wage or salary) and according to the division thereof it can be assumed that in the nearest future no significant number of new salaried workers will qualify to be included in the circle of borrowers taking a loan for buying new apartments.

In addition, many fundamental figures in Estonia are biased. The average gross monthly wages in Tallinn were in Q2 2007 about 13,000 kroons, but in the case of purchase-sales transactions made with apartments, the price for one square meter was twice as high<sup>18</sup> and the prices for one square meter of new apartments exceed the average wages by almost three times. In developed countries the monthly wages are almost equal to the price per square meter of housing, although in the recent years real estate has become relatively more expensive elsewhere, as well. In addition, the relation between the rental and purchase prices of apartments is shifted – supply at the rent market does not ensure a reasonable rate of return on property taking into consideration the current prices and inflation (and not considering further quick increase of real estate).

To sum it up, it can be said that at the price level developed by autumn 2007, the demand and supply at the residential property market have diverged from each other and there is a threat that the decrease in real estate transactions and further price decrease will have a negative impact on the whole economic development in the next couple of years.

**According to the risk scenario the influx of credit will moderate significantly (when compared to the base scenario) both to the households and to the real estate sector in 2008–2009, as demand for it falls and supply will become more conservative due to certain uncertainty and rising interest rates.** The reason lies in the disappearance of purchase power and wish on the current price level and the expectations amplified by the media of a forthcoming price decrease which is still allowing itself to be awaited. As the share of credit in the resources at the disposal of households is remarkable, such fall will cause a strong setback on the residents' investments and consumption.

Fall of demand especially for new apartments makes the real estate developers revise their plans and postpone planned or initiated development projects. Smaller developers will run into solvency problems, the banks will become more cautious as regards the real estate developers whose future is uncertain and as a result the investments into residential property development will fall considerably. As according to forecasts there will be by the end of 2008 also an oversupply of commercial premises,<sup>19</sup> the real estate sector will remain in a decline for a couple of years, losing turnover and profit and releasing workforce.

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<sup>17</sup> Danske Bank. *Baltics: Property prices have peaked.*

<sup>18</sup> Real estate transactions statistics by the Estonian Land Board: <http://www.maaamet.ee/kinnisvara/htraru/>.

<sup>19</sup> BREC Kinnisvara. Real estate market review of the first half-year of 2007: <http://www.brec.ee/turuylevaade2007I>.

The negative impact of the decrease of real estate investments will reach with about a year's lag to the building sector which would bring about the decrease of turnover and profit and certain workforce surplus. In addition to the companies of construction and real estate, turnover will also fall in the companies servicing them, and in particular in the financial sector.

However, the building materials industry can partially compensate the decrease of domestic demand with export to the nearby states, in particular to Russia, unless political barriers are set thereto. In addition, the public sector will have a favourable opportunity to use the released building resources for the establishment of municipal housing stock and infrastructure objects.

As the favourable real estate investments made with the help of cheap and accessible credit have in the recent years been the engine of economic growth, the decrease of investments in these areas of activity in 2008–2009 will have a significant negative impact on the whole economy.

**Private consumption will decrease due to the loss of confidence of residents and more modest growth of the volume of money at their disposal.** Due to the developments described above unemployment will increase and the pressure upon quick growth in wages and salaries will decrease in the whole economy. Negative developments at the labour market and the decrease of the real estate wealth of the residents will reduce the consumer confidence, which will bring about more moderate growth of consumer loans and much more cautious consumer behaviour than before.

**The final result:** the domestic demand driving the economic growth in the recent years with the support of credit will suffer a strong setback. The level of consumption raised high with the help of expected future earnings or in other words high volume of credit will remain almost unchanged for some years.

In the event that the favourable external environment is maintained, the demand at the real estate market will start to balance the supply from the autumn of 2009, as objective need for new and higher quality housing has grown, the residents' possibilities have widened and confidence towards positive developments in the real estate sector has partially recovered. (Estonian housing stock has depreciated and in the growth centres there is lack of good quality housings.) By that time, the average wages and salaries have from autumn 2007 grown 20% and the price of real estate offers has fallen 20%, which has resulted in a major improvement in the relation between the average wages and salaries and the square meter of an apartment. In addition, the banks will again kindly offer real estate loans, as the major price correction did not take place this time. But the credit offer will initially not be as aggressive as before the crisis.

**The spring and summer risk scenarios may when entwining either amplify or balance each other.** If the crisis originating from the real estate sector succeeds in moderating the growth of wages and salaries before the significant decrease of the exporters' competitiveness, the real estate crisis may balance the threats outlined in the spring risk scenario and the exporting sector will help to alleviate the depression. But if the fall of the exporting sector arrives earlier than feared due to fast growth of wages and salaries and the general economic situation should therefore worsen, then it can only deepen the crisis of the real estate sector.



**Table 13****Real estate sector contraction risk scenario 2007–2011***(percentage)*

	Risk scenario						Difference from base line forecast				
	2006	2007*	2008*	2009*	2010*	2011*	2007*	2008*	2009*	2010*	2011*
Real GDP growth	11.2	7.6	3.1	3.8	8.4	7.0	0.1	-2.1	-2.2	1.7	-0.1
CPI	4.4	6.4	7.3	3.9	4.0	3.5	-0.1	-1.2	-1.6	0.4	0.0
Employment growth	6.4	1.2	-1.7	0.0	0.6	0.2	0.0	-2.1	0.0	0.6	0.2
Real wage growth	11.6	13.2	2.8	3.5	7.2	6.5	-0.1	-3.2	-3.8	0.2	0.2
Current account (% of GDP)	-15.5	-15.7	-10.4	-8.8	-8.7	-8.5	-0.1	1.3	1.4	1.1	0.8

\*\* Includes statistical discrepancy.

Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

**4.1.2. Budgetary impact of real estate risk scenario**

This subsection is dedicated on the assessment of the influence of the real estate market downturn risk scenario on the budgetary position and debt of the general government. For that purpose, the results of the sensitivity analysis are used, whereas it is expected that non-tax revenue and the expenditure of the general government will remain on the level of the base scenario. The risk scenario foresees that in 2007–2011 the nominal growth of GDP will be lower than the base forecast (except for the year 2010), which would bring about less tax revenues. According to the risk scenario, the accrual of tax revenues will decrease in 2007 in comparison to the base forecast by 0.3% of GDP, but in 2008 by 1.9% of GDP and by 2011 the realisation of the risk scenario will reduce the tax revenue already by almost 4% of GDP when compared to the base forecast. If the general government is at the end of 2007 in spite of lower revenues in surplus, then from **2008 the difference between the general government revenue and expenditure will turn negative**, reaching by 2011 the level of 3.7% of GDP. The arising deficit will according to the risk scenario be immediately financed by new loans and this would raise year-by-year **the general government debt**. In 2008–2011 the general government debt will increase by EEK 27.3 billion in total and will reach in 2011 the level of 9.5% of GDP instead of the 1.6% of GDP foreseen in the base scenario.

**Figure 14****Real estate sector contraction risk scenario impact on general government budget balance and debt burden***(% of GDP)*

	2007	2008	2009	2010	2011
<b>Base line forecast</b>					
General government budget balance	2.6	1.3	1.0	0.9	0.8
General government debt burden	2.7	2.3	2.0	1.8	1.6
<b>Risk scenario</b>					
General government budget balance	2.3	-0.6	-2.8	-2.4	-2.9
General government debt burden	2.8	3.1	5.6	7.3	9.5
<b>Difference</b>					
<b>General government budget balance</b>	<b>-0.3</b>	<b>-1.9</b>	<b>-3.9</b>	<b>-3.3</b>	<b>-3.7</b>
<b>General government debt burden</b>	<b>0.0</b>	<b>0.8</b>	<b>3.6</b>	<b>5.5</b>	<b>7.9</b>

Source: Ministry of Finance of Estonia.

## 4.2. Comparison with the forecast of the previous convergence programme

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The economic growth expectations of Estonia's trading partners, incl. the European Union, are more optimistic in the autumn of 2007 than in the autumn of 2006. Therefore the interest rate expectations have been higher and the forecast exchange rate of the euro with regard to the US dollar has been stronger than expected. After the interim developments the forecast of the oil prices has been lifted again. At the same time, the inflation expectations of the euro area for the years 2008–2009 have remained the same. But the inflation of the euro area in 2007 should be lower than previously expected in relation to the lower-than-expected impact of raising the VAT in Germany.

In September 2007 the Statistical Office published the data of the adjusted Gross Domestic Product as of 2003, which were amended in connection with the update of the methodology of accounting the national economy pursuant to the system of the tables of supply and use. In addition to this the Statistical Office adjusted GDP components and aggregate figures for 2005 on the basis of calculations based on the data of the annual accounts, and the year 2006 was revised. As a result of the adjustment, the level of GDP in Estonia turned out to be 1.2–2.3% higher in 2003–2006 at current prices. At constant prices the changes were minor – the level of GDP changed by -0.2 to +0.1%.

The growth in the GDP of Estonia in 2006 met the previous year's expectations, being only by 0.2% higher. In its forecast of the autumn of 2006 the Ministry of Finance expected the real growth rates of the **economy** in 2007 and 2008 as 8.3% and 7.7%. According to the forecast of the autumn of this year, the Ministry of Finance expects in 2007 the economic growth of 7.4%, resulting mainly from the moderation of domestic demand. Acceleration of price increase will raise the nominal growth of GDP, but at the same time will decrease the expectations towards real growth. The first three-quarters of this year have indicated that Estonian economy is undergoing an adjustment process which should result in lower risks and drive the GDP closer to the long-term sustainable level. By 2008, the Ministry of Finance will expect the moderation of economic growth to the level of 5.2%, resulting from decreasing domestic demand due to lower credit growth.

The downward adjustment of the **investments** forecast is caused by the specification of the GDP time series and secondly by the decrease of real estate investments due to the elapse of the real estate boom and stricter financing terms set forth by the banks.

The forecasts of the nominal and real growth of Estonian **export** are for the years 2007–2010 more pessimistic than in a year before in relation to problems with international competitiveness resulting from the wage-productivity gap. The growth forecast for **import** for the years 2007–2010 were reduced in conformity with changes in domestic demand and export forecast. The Ministry of Finance expects the decrease of the current account deficit still from the year 2008.

When compared to the forecast set out in the previous convergence programme the expectations towards price developments have become more pessimistic. The forecast of the **harmonised consumer price index** for the years 2007–2008 was raised by 2.3 and 4.2 percentage points respectively. The unexpected growth in income and the occurrence of the consumption boom along with the additional external factors caused a significant acceleration of inflation in 2007. As external factors we can refer to the sharp increase of the world market prices of raw material for food and the unexpectedly high growth of heat as a result of increase in the purchase prices of natural gas. These external factors are also among the reasons for raising the 2008 forecast. But higher impact is caused by the transferral of the raise of different excise duty rates to the year 2008,

which would cause supplementary inflation by 1.6 percentage points. The demand-side price increase pressures will also be in 2008 stronger in comparison to the forecast in a year before.

The forecast of the **general government budgetary position** has in comparison to the Convergence Programme 2006 increased by 2007, but in the medium term the forecast shows a bit lower surplus. Owing to favourable economic developments revenues have increased in 2007 and on the basis of the data of three-quarters it can be presumed that the central government will incur fewer costs. Therefore, the forecast of the surplus of 2007 has increased as well. The budget of 2008 was made with a surplus similarly to this year and it serves as the basis for the surplus of the whole general government. A thorough expenditure forecast was made in the framework of the State Budget Strategy 2008–2011 adopted in May 2007. According to the expenditure agreed in the strategy and the updated revenue forecast, a surplus has been forecast for 2009–2011. The changes in the indexing of pensions have also been taken into account, which influenced the most the 2009–2011 expenditure forecast.

The difference between the **general government debt forecast** in the Convergence Programme 2006 and the current forecast arises primarily from adjustment of the GDP time series by the Statistical Office and the increased borrowing of local governments in 2006. Early repayment of the government debt has not been planned and the debt will be repaid pursuant to the agreed repayment schedule.

**Table 15****Comparison with the forecast of the previous convergence programme**

	2006	2007*	2008*	2009*	2010*	2011*
<b>Real GDP growth (%)</b>						
Previous update	11.0	8.3	7.7	7.6	7.5	-
Present update	11.2	7.4	5.2	6.1	6.7	7.0
Difference	0.2	-0.9	-2.5	-1.5	-0.8	-
<b>Nominal GDP growth (%)</b>						
Previous update	17.4	13.1	12.5	11.4	10.9	-
Present update	18.1	16.8	14.0	11.8	10.8	10.8
Difference	0.7	3.7	1.5	0.4	-0.1	-
<b>General government budget balance (% of GDP)</b>						
Previous update	2.6	1.2	1.3	1.6	1.5	-
Present update	3.6	2.6	1.3	1.0	0.9	0.8
Difference	1.0	1.4	0.0	-0.6	-0.6	-
<b>General government debt (% of GDP)</b>						
Previous update	3.7	2.6	2.3	2.1	1.9	-
Present update	4.0	2.7	2.3	2.0	1.8	1.6
Difference	0.3	0.1	0.0	-0.1	-0.1	-
<b>Harmonised index of Consumer Prices (HICP, %)</b>						
Previous update	4.4	4.3	4.4	3.5	3.2	-
Present update	4.4	6.6	8.6	5.6	3.6	3.5
Difference	0	2.3	4.2	2.1	0.4	-
<b>Current account (% of GDP)</b>						
Previous update	-12.4	-13.4	-11.8	-10.7	-9.0	-
Present update	-15.5	-15.6	-11.7	-10.2	-9.7	-9.3
Difference	-3.1	-2.2	0.0	0.5	-0.7	-

Source: Ministry of Finance of Estonia.

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## 5. QUALITY OF PUBLIC FINANCES

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### 5.1. General government budget forecast until 2011

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In 2006 the general government budget was for the fifth year in a row in surplus reaching **3.6% of GDP**. A key factor of the improvement of the budgetary position are economic developments favouring accrual of revenues, but also lower expenses than expected. The administration of revenue collection has improved, as well. The medium-term objective is to continuously keep the general government budget in surplus.

The economic developments of 2007 turned out to be better than forecast at the time of drafting the budget, and as a result the revenue collected was higher than expected and during the whole year the central government will have lower expenditure than planned. Therefore, according to the Ministry of Finance the general government **surplus of 2007 will reach EEK 6.2 billion (2.6% of GDP)**. A considerable surplus is welcomed, as the growth of the Estonian economy is in 2007 over the potential and the surplus is in line with the recommendations of the IMF and the European Commission to save in the economic growth phase.

**In 2008 the general government budget surplus will be 1.3% of GDP according to the forecast.** The largest contribution to the general government surplus is made by the central government whose budget forecast is with surplus in spite of the deficit of the pension insurance. The surplus of the Estonian Unemployment Insurance Fund is on the level of the recent years, i.e. 0.2% of GDP, which is significant considering the volume of budget of the agency. The surplus of the Estonian Health Insurance Fund amounts to 0.1% of GDP. The reason for the surplus of the Estonian Health Insurance Fund lies in good tax collection arising from robust growth in wages and salaries, but in the medium term the forecast indicates a balanced budgetary position for the Estonian Health Insurance Fund. The budget of local governments is in balance.

For the years **2009–2011** the goal set by the government in the State Budget Strategy is the surplus of 0.5% of GDP. The social insurance funds will be in surplus and local governments will be in balance, which means that the general government surplus results mainly from the central government surplus.

In the coming years, the volume of general government revenue and expenditure in relation to GDP will increase, and this is valid for all levels of the sector. At the end of the forecast period the growth of revenue and expenses will be lower than the general economic growth, whereas the revenue will adjust almost to the level of 2006, but the level of expenditure will remain on a slightly higher level. Behind the increase in the share of revenue there is a strong increase in social insurance payments and other revenues (including state fees, general government revenue from sale of goods and services, EU grants, etc.). The share of social insurance payments received will approach the share of the highest revenue item so far – production and consumption taxes. In the coming years, the highest increase as regards expenditure items refers to the share of gross fixed capital formation, social transfers and employee compensations which reflect the increase in the volume of investments, raising of pensions, family allowances, etc., and the increase in the salaries paid from the general government budget.

**Table 16****General government revenues and expenditures 2006–2011**

	2006	2006	2007*	2008*	2009*	2010*	2011*
	mio EEK	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
<b>Net lending by sub-sector</b>							
1. General government	7,380.5	3.6	2.6	1.3	1.0	0.9	0.8
2. Central government	6,161.0	3.0	2.2	1.0	0.8	0.7	0.6
4. Local government	5.7	0.0	0.0	0.0	0.0	0.0	0.0
5. Social security	1,213.8	0.6	0.4	0.3	0.2	0.2	0.2
<b>General government</b>							
6. Total revenue	75,792.4	36.6	37.2	38.2	38.2	37.4	36.3
7. Total expenditure	68,411.9	33.0	34.6	36.9	37.2	36.5	35.5
8. Net lending/borrowing	7,380.5	3.6	2.6	1.3	1.0	0.9	0.8
9. Interest expenditure	329.3	0.2	0.1	0.1	0.1	0.1	0.1
10. Primary balance	7,709.8	3.7	2.7	1.4	1.1	1.0	0.8
11. One-off and temporary measures	1,479.0	0.7	0.6	0.5	0.0	0.0	0.0
<b>Selected components of revenue</b>							
12. Total taxes	42,359.2	20.5	20.8	20.8	20.5	19.9	19.4
12a. Taxes on production and imports	27,556.0	13.3	13.1	13.4	13.5	13.1	12.8
12b. Current taxes on income, wealth etc	14,803.2	7.1	7.7	7.4	7.0	6.8	6.6
12c. Capital taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Social contributions	21,355.7	10.3	10.8	11.1	11.6	11.7	11.8
14. Property income	2,531.0	1.2	1.2	0.8	0.5	0.5	0.4
15. Other	9,546.5	4.6	4.4	5.5	5.6	5.3	4.7
16. Total revenue	75,792.4	36.6	37.2	38.2	38.2	37.4	36.3
Tax burden	64,268.0	31.0	32.0	32.3	32.5	32.1	31.6
<b>Selected components of expenditure</b>							
17. Compensation of employees + intermediate consumption	31,779.0	15.3%	15.5%	16.5%	16.2%	15.9%	15.6%
18. Social transfers	22,000.6	10.6%	11.1%	11.9%	12.1%	12.0%	11.8%
18a. Social transfers in kind supplied via market producers	3,701.0	1.8%	1.9%	2.0%	2.0%	2.0%	1.9%
18b. Social transfers other than in kind	18,299.6	8.8%	9.2%	9.9%	10.1%	10.0%	9.9%
19. Interest expenditure	329.3	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
20. Subsidies	2,074.8	1.0%	1.0%	1.1%	1.1%	1.1%	1.1%
21. Gross fixed capital formation	9,372.5	4.5%	5.6%	5.8%	6.1%	5.9%	5.5%
22. Other	2,855.7	1.4%	1.3%	1.5%	1.6%	1.5%	1.4%
23. Total expenditure	68,411.9	33.0%	34.6%	36.9%	37.2%	36.5%	35.5%
p.m. Government consumption (nominal)	33,874.6	16.4%	16.7%	17.0%	17.2%	17.2%	17.2%

\* forecast. Surplus for years 2009–2011 is based on technical calculations – expenditures agreed in the State Budget Strategy (SBS) 2008–2011 were adjusted by changes in revenue forecast in case of expenditures that are connected with revenues. Forecast also takes into account planned changes in the Pension Insurance Act related to indexation rules. Expenditures will be revised in spring 2008 while preparing the SBS 2009–2012 and general government budget position might change. Government objective stated in SBS 2008–2011 is general government surplus of 0.5% of GDP for 2008–2011.

Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

## 5.2. General government revenues

### 5.2.1. General government revenue structure

Through 2000–2005 the general government revenue accounted for 35.9% of GDP on average, while in 2006 the share was 36.6%. The division of revenue between tax and non-tax revenue through 2000–2006 has been on average 85.8% tax and 14.2% non-tax revenue. Indirect taxes, including value added tax, excise duties, customs duties, gambling tax, land tax, heavy vehicle tax, most of local taxes and some fees account for the largest share (36.4% in 2006) of the general government revenue.<sup>20</sup> The share of the indirect taxes increased in 2006 in comparison with 2005 by 0.3% of GDP, to 13.3% of GDP. In the coming years the share of the indirect taxes should increase further. Social security contributions, which include social tax and unemployment insurance contributions accounted for 28.2% of the general government revenue (10.3% of GDP) and direct taxes accounted for 19.5% of the general government revenue (7.1% of GDP) in 2006. Personal income tax accounts for the largest share of the latter, followed by corporate income tax. Local direct taxes include motor vehicle, boat and animal taxes. In addition to tax revenue various non-tax revenues also accrue to the general government budget: state fees, receipts from economic activities, property income, receipts from sale of state-owned assets, subsidies and other. In 2005 non-tax revenue accounted for 15.9% of the general government revenue (5.8% of GDP).

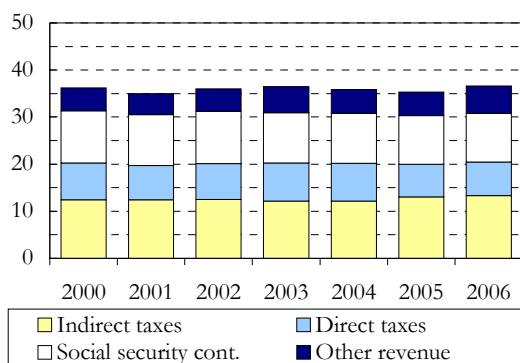
Through 2002–2006 the general government revenue accounted for 36.1% of GDP on average in Estonia. The EU27 average in the same period exceeded the Estonian level by 8.5 percentage points, amounting to 44.6% of GDP. No remarkable changes have taken place in the period under review with regard to the structure of the Estonian general government revenue – the share of direct taxes and social security contributions has increased by 0.4 and 0.8 percentage points of GDP respectively, while the share of indirect taxes and other revenue has decreased by 0.8 and 1.0 percentage points of GDP respectively. The share of social security contributions has decreased by 0.1 percentage points of GDP in the structure of the revenue of the EU27, while the share of other revenue has increased: direct taxes 0.5 percentage points of GDP, indirect taxes 0.3 percentage points, and other revenue 0.1 percentage points of GDP.

**Figure 12**

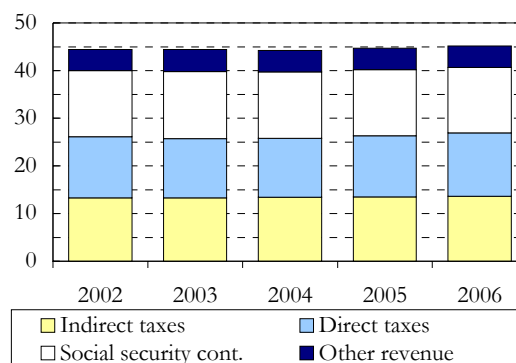
### General government revenues and their structure

(% of GDP)

#### A. General government revenues in Estonia



#### B. General government revenues in EU27



Sources: Eurostat, Statistical Office of Estonia.

<sup>20</sup> Division of taxes into direct taxes, indirect taxes and social insurance payments is made on the basis of the publication "Taxation trends in the European Union" (2007 edition) (p. 399).

### **5.2.2. Future developments in tax policy and main changes in revenue policies affecting the budget for 2008**

The government has established the goal of shifting the tax burden from taxation of income to taxation of consumption, use of natural resources and pollution of the environment. At the same time the system should remain stable, simple and transparent with as few exceptions and differences as possible.

In 2007 the total impact of tax amendments on the general government budget amounts to -0.18% of GDP. Reduction of the income tax burden has an impact reducing the tax burden, while the application of the ordinary rate of VAT instead of the previous reimbursement rate to certain medical equipment and distant heating will raise the tax burden. In 2008 the impact of tax amendments on the state budget amounts to +0.19% of GDP, whereas similarly to this year the reduction of the income tax burden has the strongest negative impact. However, the tax burden increases by the raise of many excise duty rates and of the minimum social tax obligation.

When we view the impact of the tax amendments by tax types, we can see that the tax amendments scheduled during the forecast period will shift the tax burden from the workforce and capital to consumption. As a result of tax amendments, in 2011 the tax burden on workforce will be lower by 1.38% of GDP and the tax burden on capital will be lower by 0.60% of GDP than it would have been when the situation of the end of 2006 had continued. But the share of taxes paid on consumption in GDP will be higher by 1.19% of GDP.

#### **Reduction of labour taxation**

One of the goals of the government is to promote job creation through reduction of the tax burden. To that end the income exempt from tax has been increased annually since 2004 and as from 2005 the income tax rate has been reduced annually. While in 2003 the amount exempt from income tax was 1,000 kroons a month, then in 2006 it is already 2,000 kroons a month, and by 2011 it will be raised up to 3,000 kroons a month. In the long term the goal is to equalise the income exempt from tax with the minimum wages and salaries. Increasing tax-free income makes it possible to reduce the tax burden of low-income workers, which was in Estonia in 2005 after a one year break again higher than the average of the European Union. The income tax rate has been reduced from 26% in 2004 to 22% in 2007. The income tax rate will be annually reduced until 2011 by 1%. By 2011 the income tax rate will be 18%. Considering global developments and the former positive experience, it is planned to continue taxing the income of natural as well as legal persons on the basis of a proportional income tax rate.

#### **Higher taxation of consumption and use of environment**

In Estonia the main taxes deemed as environmental have already been established. These include fuel excise duty, packaging excise duty, heavy goods vehicle tax, pollution charges and fees for use of natural resources. In the framework of the green tax reform the existing taxes and fees will be increased and new taxes and fees will be imposed. Heretofore untaxed cars are one of the potential targets of the environment tax, thus in the long run the relative importance of transport taxes should grow.

Taking into consideration the influence of raising indirect taxes on inflation, the Government of the Republic decided to shift the raises of the excise duty of the coming years to 2008. This step will reduce the inflationary pressure in the coming years which would contribute to the fulfilment of the Maastricht inflation criteria.

Considering the rate of growth of average wages and salaries and the fact that in recent years the price of alcohol has risen less than the prices of other consumer goods, raising the rate of the alcohol excise duty is justified. Subject to the amendments to the legislation passed in June 2007, the rates of excise duty on alcohol will be raised in addition to the 10% increase on 1 January 2008 by additional 20% from 1 July 2008. In the longer term, in order to ensure the desired impact of the alcohol price policy on the public health, the rates of alcohol excise duty must be changed depending on the inflation and changes in the purchase power of the population.

The raise of the excise duty rate on cigarettes is shifted to 1 July 2008. According to the amended legislation adopted in June 2007, the excise duty on cigarettes will be raised according to the minimum rate applicable in the European Union.

The goal of taxation of energy products is, in addition to receiving budget revenue, to influence people to consume more economically. Therefore excise tax will be applied to energy products made from non-reproducible resources, so as to increase the effectiveness of energy usage and promote development of renewable energy.

Also the raise of the excise duty on energy products has been shifted to 2008. According to the amended legislation adopted in June 2007 the excise duty rates on motor fuel will be raised to the minimum levels of the European Union from 1 January 2008, and also the excise rates on fiscally marked fuel will be raised. From 2008, excise duty will be imposed on natural gas and electricity and the excise duty exemption on shale-derived fuel oil will be abolished.

#### *Reduction of tax exceptions*

Tax exemptions diverging from their original aim and thus unjustified will be critically inspected and disclaimed. In the case of each tax incentive it will be analysed whether it is proportional to the achieved goal, whether it meets the expectations and needs of society and whether it is the most expedient way to achieve this goal through the tax incentive. If necessary, the incentive will be made for a specific period of time, which allows for analysing the effectiveness of the incentive upon achievement of the goal and deciding on the basis of the analysis whether the incentive should be extended.

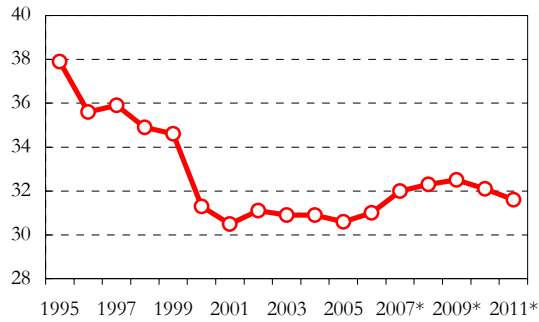
Estonia's tax policy choices regarding value added tax are very closely related to developments in the European Union. The goal of the European Union is to move towards reduction of the administrative burden through harmonisation and simplification of the value added tax system. Compared to other Member States Estonia has few divergences in VAT rates, which enables it to preserve a rather low standard tax rate (18%). According to the government action programme, no further reduced VAT rates will be set on any goods or services in the coming years.



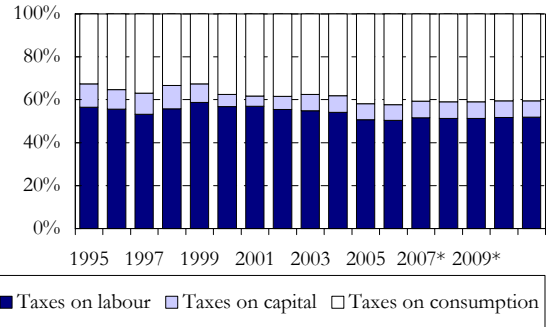
**Figure 13**

**Development of tax burden in Estonia**  
(% of GDP)

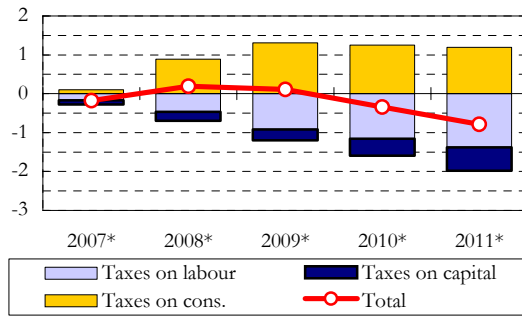
**A. Tax burden**



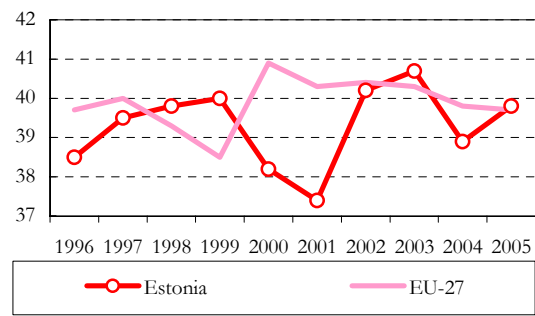
**B. Tax revenues (%)**



**C. Effect of of tax amendments <sup>21</sup>**



**D. Tax burden of low-wage workers**



Sources: Ministry of Finance of Estonia, Eurostat.

<sup>21</sup> Effect compared to the situation if no changes were made since 31.12.2006.

**Table 17****Main tax amendments in 2007 and 2008 and their effects<sup>22</sup>***(% of GDP)*

	Enactment	Effect 2007	Effect 2008
		% of GDP	% of GDP
<b>Total tax revenues</b>		<b>-0,18</b>	<b>0,19</b>
<b>Reduction of labour taxation:</b>			
Reduction of income tax rate	1 January 2007/ 1 January 2008	-0,37	-0,76
<i>Reduction of personal income tax rate</i>	<i>1 January 2007/ 1 January 2008</i>	<i>-0,27</i>	<i>-0,56</i>
<i>Reduction of corporate income tax rate</i>	<i>1 January 2007/ 1 January 2008</i>	<i>-0,09</i>	<i>-0,20</i>
Increase of basic allowance	1. January 2008	-	-0,14
<b>Higher taxation of consumption and environment exploitation:</b>			
Raising excise tax on cigarettes	1 January 2008/ 1 July 2008	-	0,05
Raising excise tax on most alcohol sorts	1 January 2008/ 1 July 2008	-	0,09
Raising excise tax on different fuels	1 January 2008	-	0,45
Introducing excise on electricity	1 January 2008	-	0,13
<b>Reducing differences in taxation:</b>			
Raising VAT rate on some medical equipment	1 January 2007	0,03	0,03
Raising VAT rate on heat sold to individuals, housing associations, apartment associations, churches, congregations, and agencies or organizations financed from the state or local municipality budget, and peat, fuel briquettes, coal and firewood sold to individuals.	1 July 2007	0,07	0,14
<b>Other tax changes:</b>			
Increase of the basic sum of minimal duty of social	1 January 2007/ 1 January 2008	0,09	0,19
Increase of the share of local governments in personal income tax	1 January 2007	-0,03	-0,03

*Source: Ministry of Finance of Estonia.***5.2.3. Simplification and improvement of tax administration, effectiveness of tax collection**

In 2007, the growth of the tax revenue of the general government will exceed the economic growth similarly to the previous year. It cannot be overlooked that the receipts of social tax and VAT were good. The growth of accrual of value added tax has been higher than the growth of final consumption in 2002, 2005 and 2006 and according to estimates the situation will be the same this year. The growth of tax revenues cannot only be seen as a consequence of macroeconomic developments and the amendments to the laws, but the effective job done by the tax authority collecting taxes should also be referred to.

<sup>22</sup> Effect compared to the situation if no changes were made since 31.12.2006.

### *Improvement of tax behaviour through simplification of tax administration*

One of the goals of the Estonian tax policy is to make the tax collection process as simple and as transparent as possible. One of the priorities is development of the e-Tax Board which was launched in 2000. In 2004, 58.3% of the tax returns of natural persons, 65.8% of social tax and income tax returns, and 74.8% of value added tax returns were submitted electronically, whereas by 2006 the respective figures were already 79.9%, 82.9% and 86.5%, respectively. This year, the share of electronically submitted declarations has increased further, being 85.4%, 88.1% and 89.8%, respectively, of all declarations submitted over three-quarters. The e-Tax Board makes possible a considerable reduction of expenses for both entrepreneurs and the state; furthermore, it is an operative instrument for analysing tax collection and quick detection of possible tax evasion.

As of 2005 the Tax and Customs Board carries out e-inspections in the course of which electronic data received from companies is analysed using the respective software. On the one hand, this reduces the time of carrying out inspections. On the other hand, it allows for analysing a greater amount of data. This method is used mainly in larger enterprises. From the end of Q1 2007, all tax auditors of the control units of large-scale companies possess means necessary for the performance of e-inspection.

In 2005, 22 e-inspections and in 2006, 44 e-inspections were launched. As of 30.09.2007, 21 e-inspections have been launched. For 2007 no goal was established as for the number of e-inspections that each region must carry out, all e-auditors will in general perform e-inspections. As of 30.09.2007 the Tax and Customs Board has 29 e-auditors. Often there occur problems with the receipt of high-quality data from taxpayers. Therefore, it is planned to establish in 2008 with legislation the structure of a standard audit file foreseeing a certain structure and formats for the data. Accounting programmes enable to generate such files quite easily.

### *Improvement of tax collection by way of reduction of the share of concealed pay*

Concealed pay (envelope salaries) can be associated with employers' desire to get a better competitive position by evading taxes, i.e. saving costs. According to the Estonian Institute of Economic Research, in 2006 on average 11% of salaried employees in Estonia received undisclosed earnings. In comparison with 1999 the share of recipients of envelope salaries has decreased by 8%.

The presumed reasons for the decrease in the percentage of undisclosed earnings are the following:

- o The free movement of labour, which forces Estonian entrepreneurs to pay wages and salaries legally, in order to avoid the situation where qualified labour moves abroad (especially in the building sector);
- o The growth of private borrowing (housing loans) and establishment of the parental benefit, which motivate salaried employees to legally declare their full wage and salary.
- o The coordinated activities of the Tax and Customs Board in restraining illegal pay-packets. In 2005 a work group was established between different state agencies for the purpose of combating envelope salaries.
- o In the nine months of 2007 the tax authority has carried out 53 envelope salary raids and completed the audits of 52 instances of payment of envelope salary as a result of which corrected declarations were submitted and additional taxes were determined in the total amount of EEK 9.3 million. Usually, envelope tax raids have been carried out in companies operating in the service sector. In addition, the companies dealing with construction and workforce rental have been checked.
- o In its efforts against envelope salaries the Tax and Customs Board started practicing a new approach in Q3 2007, namely visits of construction sites. The visits have a preventive goal of influencing persons to improve their tax behaviour and submit true tax declarations to the tax authority. These are not inspections, but aim at the collection of proof for possible further inspections. With the visits minimum inspection resources are used, a great amount of persons

can be influenced and directed to voluntary payment of taxes. Section 72 of the Taxation Act allows the tax authority to collect proof in order to ensure the correctness of the calculation and payment of taxes both during preliminary audit and follow-up audit, i.e. both before or after the date of occurrence of the respective tax obligation. After the submission of tax declarations by the companies, it must be decided in the case of each company the need for further inspection, comparing the data recorded during the visit against the data declared by the company. In the event that the data indicated in the tax declarations are in conformity with the data recorded during the visit and there is no tax risk, then no further actions will be taken by the tax authority against the taxpayer. In a situation where the person remains with a tax risk, i.e. the data recorded at our visit are not in correspondence with the data declared, the audit of an individual case must be performed for finding out the relevant circumstances. A more detailed analysis of changes in tax behaviour in the given companies will be made in the fourth quarter.

***Improvement of tax collection owing to reduction of the share of the illicit market of goods subject to excise duty***

According to the Estonian Institute for Economic Research, the share of illegal alcohol decreased in 1999–2005 from 44% to 22.5% and in 2006 by additional 5 percentage points to 17.5%, which indicates that the efforts of the Tax and Customs Board and the Police at combating the market of illicit alcohol is continuously efficient. In addition to continued joint raids of the Tax and Customs Board strong alcohol has been revenue-stamped since 1 July 2006 in order to reduce the share of illicit alcohol. The alcohol revenue stamp allows for easy differentiation between legal and illegal alcohol and the purpose of the revenue stamps is to prevent realisation of strong alcohol on which no excise duty has been paid in the legal sales network. The data about the revenue from alcohol excise duty of H2 2006 and H1 2007 reflect that revenue stamps of alcohol have contributed to the growing revenue from the alcohol excise duty.

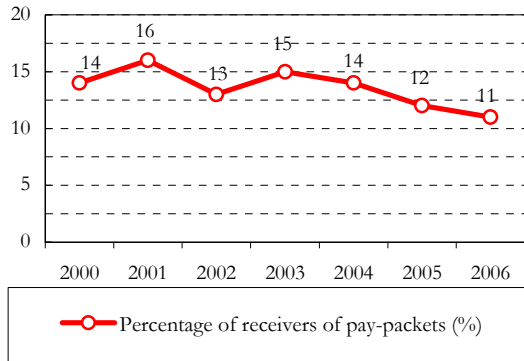
According to the Estonian Institute for Economic Research, the share of illicit cigarettes decreased through 1999–2006 in spite of various rises in the excise duty from 33% to 22.5%. In the years ahead reduction of the share of the illicit market may become more and more difficult as a result of raising the excise duty on cigarettes in 2008 up to the minimum level fixed by the European Union bringing about price increase. To control the market of illicit cigarettes the Tax and Customs Board has acquired two mobile transparency devices in cooperation with the Border Guard, which allow for more effective border control owing to their mobile nature. Improvement of inspection is aimed first and foremost at the eastern border, but the devices are also used for operations on other borders. The method of operation-based mobile units has been used more effectively for combating and preventing violations crossing the southern border.

In the fuel market the problem is the fuel illicitly imported from Russia and the use of fiscally marked fuel for the wrong purpose. In connection therewith it is planned to reduce the difference between the ordinary fuel and fiscally marked fuel, in order to make the use of the fiscally marked fuel less attractive. The first major step towards that end has already been taken – as of 1 January 2005 the excise duty rate of fiscally marked fuel was raised and in comparison with 2004 its consumption (the quantity released for free circulation) decreased by 13% in 2005 and by 6.1% in 2006 and in the 9 months of 2007 by another 0.8%. The next raise of the excise duty of fiscally marked fuel will occur on 1 January 2008.

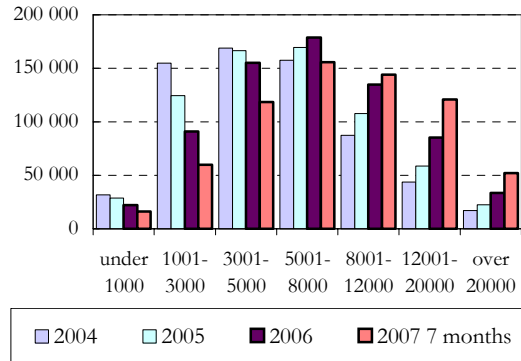
**Figure 14**

**Developments of tax administration in Estonia**

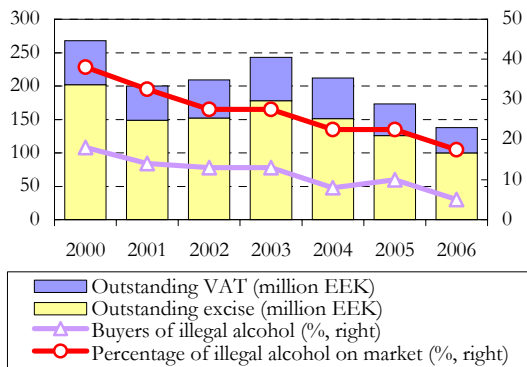
**A. Percentage of pay-packets in economy**



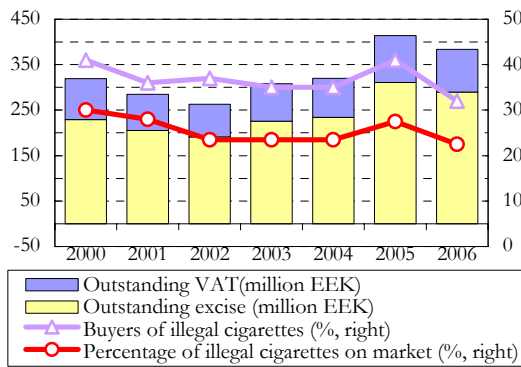
**B. Different wage ranges of labour force (EEK)**



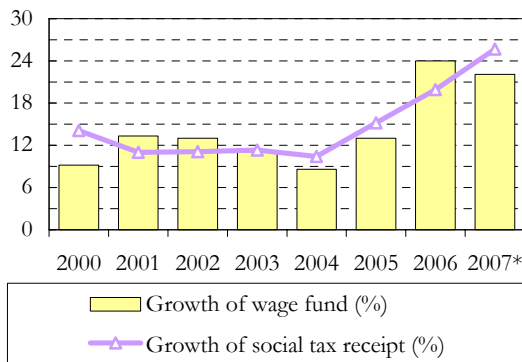
**C. Percentage of illegal alcohol**



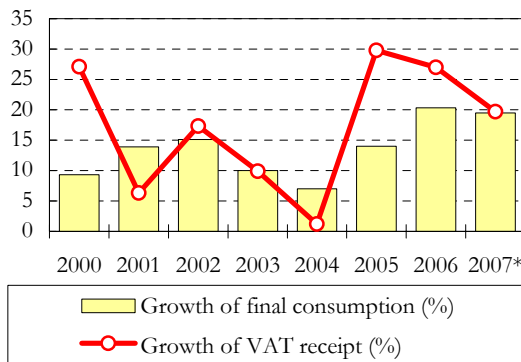
**D. Percentage of illegal cigarettes**



**E. Social tax receipt compared to wage fund**



**F. VAT receipt compared to final consumption**



Sources: Estonian Institute of Economic Research, Tax and Customs Board, Ministry of Finance of Estonia.

## 5.3. General government expenditure

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### 5.3.1. General government expenditure structure

Through 2000–2006 the general government expenditure accounted for 34.6% of GDP. In 2000 and 2001 the expenditure of the general government exceeded revenue, but as of 2002 the difference between the revenue and expenditure of the general government has been constantly positive, increasing year by year. As of 2004 the general government expenditure as a percentage of GDP has decreased, amounting to 33.0% of GDP in 2006.

As of 2000 the government final consumption expenditure has constantly amounted to about 50% of the expenditure of the general government, amounting to 18.2% of GDP on average through 2000–2006. The government final consumption expenditure includes collective consumption expenditure and individual consumption expenditure. In the case of the goods and services offered by the general government it is differentiated between individual and collective goods and services proceeding from the classifications of the functions of the Government (COFOG). Collective consumption means services offered concurrently to all members of society or to the members of a part of society. They include, for instance, expenditure on environmental protection and maintenance of the health care system of the public sector. For example, expenditure on education and health care is considered individual. In the case of the general government the individual consumption expenditure equals social transfers in kind. Through 2000–2006 individual consumption expenses have constantly exceeded expenditure on collective goods and services, amounting on average to 9.0% and 7.4% of GDP, respectively.

Social benefits account for the second largest share of the expenditure of the general government. Among social expenses the largest expenditure classes are pension expenditure, as well as treatment, medical procedures, sickness benefits and medicinal product compensation expenditure incurred by the Estonian Health Insurance Fund. General government expenditure for the payment of social benefits have constantly been decreasing in 2000–2006 reaching 10.7% of GDP in 2000 and 9.0% of GDP in 2006.

3.0% of the general government expenditure, i.e. 1.0% of GDP was allocated for payment of subsidies in 2006. Subsidies are unilateral payments which producers receive from the general government or institutions of the European Union. The goal of the payments is to influence the level of production, prices or compensate the costs relating to production.

The interest expenditure accounts for the smallest share – in 2006 this amounted to 0.6% of all the general government expenditure, i.e. 0.2% of GDP. The smallness of the interest expenditure arises from the small debt of Estonia.

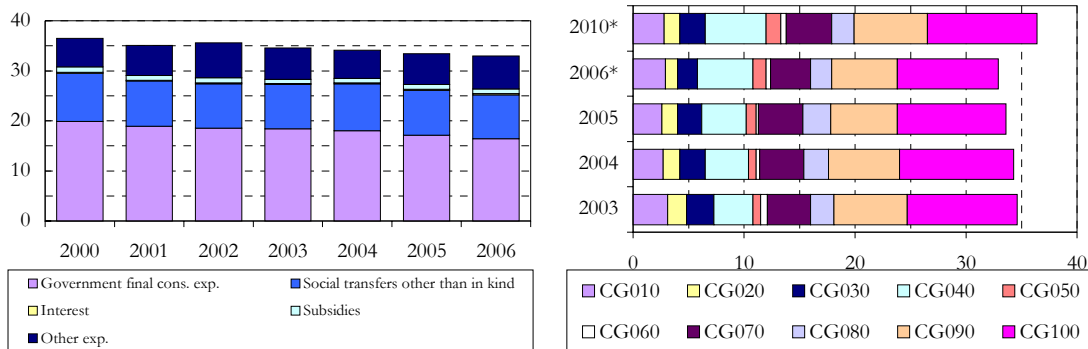
Looking at the expenses by economic activity, the share of expenditure on social protection is always the largest, amounting to 9.1% of GDP in 2006 according to the Ministry of Finance; the smallest share – 0.4% of GDP in 2006 is spent on housing and utilities. In most of the areas the percentage of expenditure of GDP has been more or less at the same level. The expenditure in the field of the economy has grown considerably and the greatest reduction has been in education.

**Figure 15**

**General government expenditure and it's structure**

(% of GDP)

**A. Expenditure by economic content in Estonia B. Expenditure by function in Estonia <sup>23</sup>**



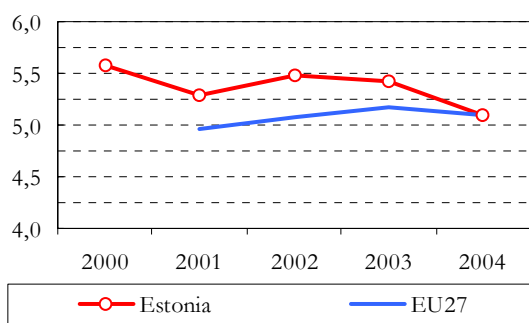
Sources: Eurostat, Statistical Office of Estonia, Ministry of Finance of Estonia.

**Figure 16**

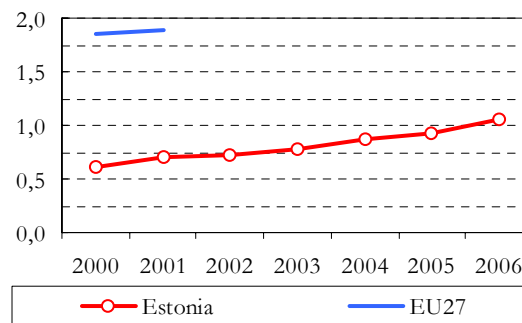
**Government investments into physical and human capital**

(% of GDP)

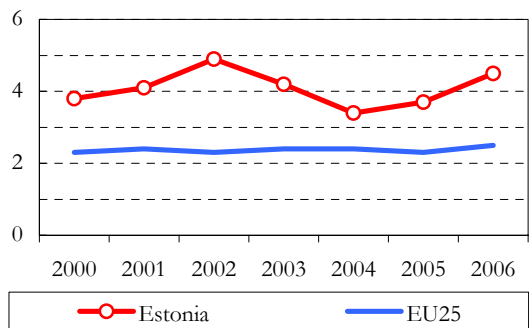
**A. Public expenditure on education**



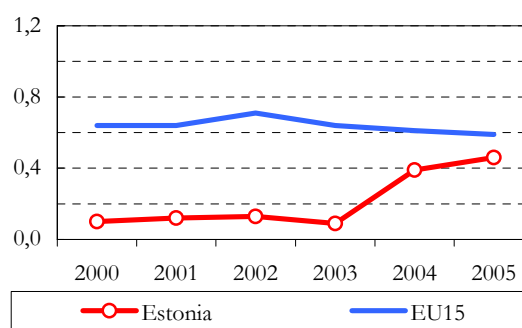
**B. R&D expenditure**



**C. General gov. gross fixed capital formation**



**D. Total state aid**



Source: Eurostat.

<sup>23</sup> CG010 – general public services; CG020 – defence; CG030 – public order and safety; CG040 – economic affairs; CG050 – environmental protection; CG060 – housing and community amenities; CG070 – health; CG080 – recreation, culture and religion; CG090 – education; CG100 – social protection.

**Table 18****General government expenditures by function (COFOG)**  
(% of GDP)

	COFOG code	2005	2006	2007*	2008*	2009*	2010*
1. General public services	1	2.6	2.9	3.1	2.9	2.9	2.8
2. Defence	2	1.4	1.1	1.4	1.4	1.5	1.4
3. Public order and safety	3	2.2	1.8	1.9	2.4	2.4	2.3
4. Economic affairs	4	4.0	5.0	5.6	5.6	5.6	5.5
5. Environmental protection	5	0.9	1.2	1.2	1.3	1.3	1.3
6. Housing and community amenities	6	0.2	0.4	0.5	0.5	0.5	0.5
7. Health	7	4.0	3.6	3.9	4.1	4.1	4.1
8. Recreation, culture and religion	8	2.5	1.9	2.0	2.0	2.0	2.0
9. Education	9	6.0	5.9	6.3	6.7	6.7	6.6
10. Social protection	10	9.8	9.1	8.8	10.0	10.1	9.9
<b>11. Total expenditure</b>	<b>TE</b>	<b>33.4</b>	<b>33.0</b>	<b>34.6</b>	<b>36.9</b>	<b>37.2</b>	<b>36.5</b>

Sources: Eurostat, Statistical Office of Estonia, Ministry of Finance of Estonia.

**5.3.2. Major changes in expenditure policies affecting the state budget of 2008**

In 2008 the state budget expenditure will increase by 25.2% compared to 2007, amounting to 34.1% of GDP, whereas the growth rates of various economic activities vary from the 2.8% growth of general public services expenditure to 47.8% growth of public order and safety expenditure.

**Social protection**

The share in the budget amounts to 32.4% and the growth in 2008 is 33.2% (EEK 7.6 billion). The growth of expenditure in this field mainly results from the following activities:

- Pensions (growth of expenditure by EEK 3.86 billion, i.e. 27.8%). In 2008, the ratio of the average old-age pension with average working years (44 years) will be EEK 4,588.
- Parental benefits (growth of expenditure by EEK 942.5 million, i.e. 106.6%). The reasons for the growth are the extension of the payment period by 4 months, and the increase in the rate of the benefit and the average wages and salaries.
- Family benefits (growth of expenditure by EEK 110.3 million, i.e. 6.1%). Support to children growing in foster and guardianship families will increase by EEK 1,500 a month and in addition the carer shall receive ordinary child allowance of EEK 300 or if there are more than two children in the family, EEK 900 for the third child. The amount of the parental benefit is also planned to be raised. From 1 January 2008 it is possible for the father of the child to take two weeks of holiday during the mother's pregnancy and maternity leave or within two years after the birth of the child. During paternity leave their average wages or salaries will be retained.

**Economic affairs**

The share of the economic activity in the budget is 14.9%. The economic activity will grow 14.9% in 2008 (EEK 1.8 billion). The highest growth will be recorded in the following activities:

- Public transport (passenger travel) subsidies, growth of EEK 59.4 million in comparison with 2007, i.e. 9.4%.
- Road maintenance, growth of EEK 1.5 billion in comparison with 2007, i.e. 63.2%;

**Health care**

The share of the area of activity in the budget is some of the most average ones with its 13.9%. In 2008 the financing of health care activities will grow 21.4% in comparison with the previous year (EEK 2.3 billion). The key activities are as follows:



- The state health insurance by the Estonian Health Insurance Fund, expenditure on which was increased by 33.2% or EEK 3.2 billion compared to the budget of 2007.
- Emergency medical care, the growth of the costs of which is 19.2% or EEK 59.4 million.
- Assignments for developing the hospital network whose expenditure increases by 25.45% or EEK 52.9 million.

### **Education**

The share of education in the state budget for 2008 is 11.7% and the growth in 2008 in comparison with 2007 is 29.1% (EEK 2.5 billion). Financing vocational education is still a priority, but each year the Government has increased the share of research and development. Proceeding from the draft budget for 2008 the growth of R&D expenditure in comparison with 2007 is 44.4%. A significant portion of the growth of education expenditure comprises the expenditure of the wages and salaries of teachers, which increase by no less than 20% in comparison with 2007.

### **Public order and safety**

The share of the public order and safety expenditure is 8.0%. In 2008 the expenditure in the area will increase 47.8% in comparison with the previous year (EEK 2.4 billion). The main growth in this area includes the following:

- Personnel expenses of the Police Board, Rescue Board, Border Guard Board, prison officers and judges and court officers amounting to EEK 750.9 million;
- Purchase of two multifunctional ships and a helicopter for the Border Guard Board – EEK 176 million;
- development of registers and information systems – EEK 74.5 million.

### **Defence**

The importance of the area in the budget for 2008 is 5.0%. The growth of defence expenditure in 2008 in comparison with 2007 is 22.7% (EEK 863.2 million). The following will increase the most among the defence expenditure:

- Investments for defence purposes – EEK 147 million;
- Personnel expenditure of the Defence Forces – EEK 227 million.

### **Environmental protection**

The share of environmental protection in the budget amounts to 3.4% and the growth in 2008 is 35.0% (EEK 830.2 million). The growth of expenditure in this field mainly results from following activities:

- The major part of the increase of environmental protection expenditure are the water management investments for local governments, increasing in comparison to 2007 by EEK 413.0 million or 42%. The reason lies in the opening of the funds of the new period 2007–2013 of the Structural Funds.
- The growth of operating expenses is EEK 101.6 million or 13.6%, whereas EEK 70.2 million are aimed at personnel expenditure and EEK 30.3 million at management expenditure. The highest increase of personnel expenditure, i.e. EEK 23.1 million (32% of the growth) is related to the strengthening of the environmental surveillance and the general salary increase of the inspectors, whereas the highest increase of management expenditure, i.e. EEK 15.1 million (48.8%) is related to the new responsibilities of the National Nature Conservation Centre – inspection of the measures of the Rural Development Plan and implementation of the programme of monitoring the live nature.

### **Recreation, culture and religion**

The share of recreation, culture and religion in the budget is 3.3% and the growth in 2008 is 13.0% (EEK 353.4 million). The growth of expenditure in this field mainly results from following activities:

- In 2008 the wages and salaries of culture employees with higher education will increase by approx. 15%, totalling EEK 813.9 million (growing EEK 69.5 million in 2007).

- Investments in modernising the technical equipment and working environment of Estonian Television and Estonian Radio amount to EEK 69.2 million in the next year (growing EEK 13.8 million in 2008).
- Resources allocated for the renovation of churches and places of worship amount in 2008 to EEK 51.3 million (growing EEK 17 million in 2008).

## 6. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

The assumptions of the long-term forecast are based on the assumptions stipulated by the Economic Policy Committee for all EU members on uniform terms, which largely coincide with the long-term forecasts of the Ministry of Finance of Estonia. The macroeconomic forecast of this programme has been used with regard to years 2007–2011.

On 14 November 2007, the Riigikogu enforced the new pension index serving as the basis for the annual raise of pensions (the first indexation on the basis of the new index will be made on 1 April 2008) which would ensure the maintenance of the relation between the pension and the average wages and salaries on the current level in the long run as well. The new pension index is based more than earlier on the increase of the social tax revenue (80% the growth of social tax revenue + 20% annual inflation, so far 50% + 50%) and will raise according to the forecast the pensions much more in comparison to the previous index. From April 2008 also the coefficients for amending the proportions of the base pension and a year of pensionable service at the formation of the pension helping to improve the solidarity of the pension system.

**Table 19**

### Long-term sustainability of public finances 2007–2050

(% of GDP)

	2007	2010	2020	2030	2050
<b>Total expenditure</b>	<b>34.6%</b>	<b>36.5%</b>	<b>34.6%</b>	<b>33.9%</b>	<b>33.6%</b>
Pensions	6.0%	7.1%	6.2%	5.7%	5.4%
social security pensions	6.0%	7.1%	6.2%	5.7%	5.4%
old-age pension	5.1%	6.1%	5.3%	4.9%	4.8%
other (disability, survivors)	0.9%	1.0%	0.9%	0.8%	0.6%
occupational pensions (if in GG budget)	-	-	-	-	-
Health care	4.7%	5.2%	5.1%	5.0%	4.8%
Long-term care (previously part of health care expenditure)	0.1%	0.1%	0.1%	0.1%	0.1%
Interest expenditure	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Total revenue</b>	<b>37.2%</b>	<b>37.4%</b>	<b>34.6%</b>	<b>33.9%</b>	<b>33.6%</b>
<i>of which:</i> interest revenues	1.0%	1.1%	1.1%	1.1%	1.1%
<i>of which:</i> social security contributions for pension	10.8%	11.7%	11.5%	11.3%	10.9%
Pension reserve fund assets (I pillar)	2.5%	0.3%	0.0%	0.0%	1.7%
<i>of which:</i> consolidated public pension fund assets (assets other than government liabilities)	2.5%	0.3%	0.0%	0.0%	1.7%
<b>Assumptions:</b>					
Labour productivity growth	6.1%	6.7%	3.6%	2.8%	1.7%
Real GDP growth	7.4%	6.7%	2.7%	2.1%	0.7%
Participation rate, males (aged 20-64)	83.9%	85.3%	87.4%	87.6%	85.8%
Participation rate, females (aged 20-64)	73.9%	75.4%	79.5%	79.8%	77.6%
Total participation rate (aged 20-64)	78.7%	80.1%	83.3%	83.6%	81.7%
Unemployment rate	5.2%	5.3%	6.3%	5.9%	5.3%
Population aged 65+ over total population	17.1%	17.1%	18.7%	20.9%	25.4%

Sources: Ministry of Finance of Estonia, Statistical Office of Estonia, EU Economic Policy Committee.

### *Measures of guaranteeing long-term sustainability of pension insurance*

In order to guarantee financial sustainability of the country in the situation of an aging population, Estonia has carried out a large scale pension reform and introduced a three-pillar system (obligatory state pension insurance, mandatory funded pension and supplementary funded pension). In the course of the reform the rise of the retirement age and the gradual equalisation of the retirement age of men and women were established. The retirement age of women will reach the uniform retirement age of 63 years in 2016. Today, the average age of leaving the labour market is over 62 years, i.e. close to the age up to which the retirement age is reaching. A number of special pensions (the Defence Forces, the police, etc.), early-retirement pension, old-age pensions under favourable conditions and superannuated pensions allow for retirement before the general pensionable age. The payment system of special pensions, old-age pensions under favourable terms and superannuated pensions are going to be reformed.

In order to find additional resources for financing state pension insurance (and also health insurance) the government will return to the original idea of the pension reform, according to which the minimal duty of social security tax must be fulfilled at the rate of minimum monthly wage. In 2007 the sum on which the minimum obligation is based was raised to EEK 2,000 per month and it will be raised stage by stage till the minimum of monthly salary. In order to increase sustainability, the employment rate must also grow – the more taxpayers, the more favourable ratio between taxpayers and dependants and better financing of pension insurance.

In order to strengthen the pension insurance and ensure sustainability, transfers to the pension reserve have been made out of the budget surpluses. EEK 1.8 billion was transferred from the surplus to the reserve in 2005 (1% of GDP) and EEK 2 billion (1.0% of GDP) was transferred to the reserve by the supplementary budget of 2006. Also, one-off payments have been made to the pension reserve out of the state budget in 2005 and 2006 (0.1% and 0.2% of GDP, respectively).

### *The effect of the new pension indexation formula on the pension system*

The following are the 2 scenarios for the development of pension insurance (both consider the 2<sup>nd</sup> pillar of pension insurance both on the side of incomes and expenses): The first of them reflects the situation which would have occurred if the index had not been amended, i.e. reflects the need and justifies the amendment. The second describes the influence of the new pension index on the pension system.

- **The first scenario** reflects a situation where the current pension index valid until 2008 will continue to be applied, i.e. the revenue of the pension insurance comes from social tax, while the expenditure of pension insurance rises pursuant to the pension index (50% of social tax revenue and 50% of the annual inflation). The average pension in 2007 being EEK 3,581 is taken as the basis. Such development would be financially sustainable over the period of 50 years (constant surplus would ensure building of considerable reserves, amounting to 40% in 2050). However, it is not the best solution for the pensioners, as it does not guarantee adequate income in the meaning of pension in the long term perspective. The ratio of average wages and salaries and pensions would worsen from the level of 40% in 2007 to 26.8% in 2050.
- **The second scenario** reflects a situation, where the basis for raising the pension is the pension index becoming effective from 2008. The new pension index depends 20% on the CPI and 80% of the increase of the pension insurance share of social tax revenues. In addition, the growth component of this index will be multiplied by the coefficient 1.1 in the case of the base amount of pension and by 0.9 in the case of the annual factor. The new index follows better the revenue of the state pension insurance and it will keep the replacement rate (1<sup>st</sup> and 2<sup>nd</sup> pillar together) relatively constant in the long run. Different coefficients applied to the index will improve the solidarity of the pension of the 1<sup>st</sup> pillar – mainly due to the fact that the base

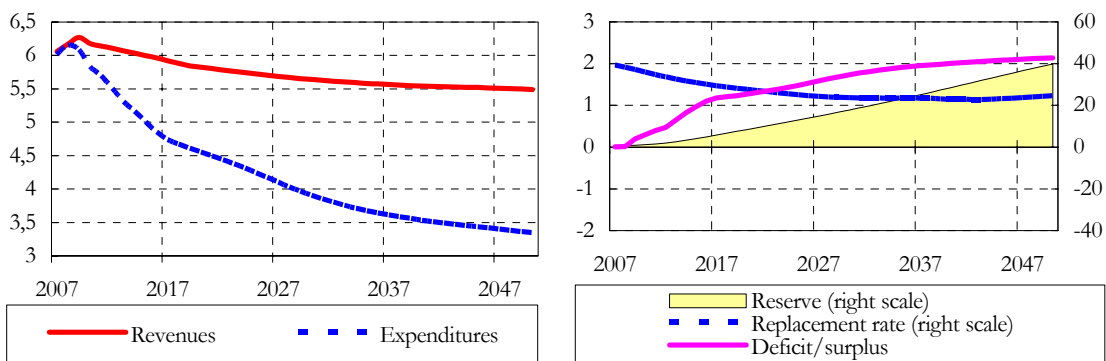
share grows faster than the annual factor. This would in turn help to compensate the decrease of solidarity in pensions resulting from the growth of the 2<sup>nd</sup> pillar and decrease of the importance of the components calculated on the basis of years of pensionable service. Under such scenario the pension insurance will be in deficit from 2012–2032, and the deficit in those years is up to 0.5% of GDP a year. Over a longer time horizon, the accrual of revenue must be improved or the pension expenditure must be financed on account of decrease of the general government expenditure, in order to cover the increasing expenditure of state pension insurance.

**Figure 17**

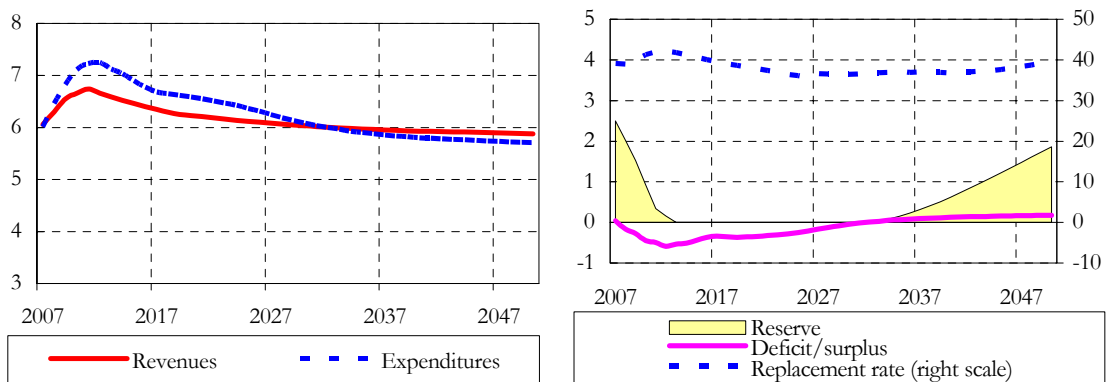
**Estimates of financial indicators of pension insurance**

(% of GDP)

**A. Scenario of continuance of the present policy (continuing with the pension indexation rules that are applied until 1st of April 2008)**



**B. Pension increase by new indexation rules (starting from 1<sup>st</sup> of April 2008)**



Sources: Ministry of Finance of Estonia, Statistical Office of Estonia.

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## **7. INSTITUTIONAL FUNCTIONS**

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### **7.1. Developing the budget process**

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There have been no major changes in current year in the budget process and budgeting procedures. The relevant work since the last Convergence Programme has been focussed on running improvement of existing processes, procedure and methods.

In 2006 Ministry of Finance commenced work on the concept paper for state's public financial management development in order to plan long-term development activities for enhancing the making and implementation of budgetary policy. The focus is on the public financial management as a whole as opposed to budgetary process more narrowly, due to the reason that budgeting is most efficiently carried out only when all the public financial management stages from planning and use of resources until the reporting and control work as a coherent system.

The draft concept paper was completed by Ministry of Finance in December 2006 with preliminary presentation and discussion of general development directions. Inter-ministerial working groups were formed in March 2007 that worked on developing the concept paper further in order to offer more concrete solutions.

Based on the working group results, Ministry of Finance prepared in September-October 2007 the full and final concept paper for public financial management development that was discussed in the general inter-ministerial working group and by the secretary generals of the ministries in November 2007. As the next step, the concept paper will be discussed by the Cabinet to decide on the implementation of proposed development solutions and the relevant time-schedule. The aim is to prepare and adopt necessary legislative amendments based on the concept paper to the organic budget law and its implementation acts within the year of 2008.

The proposals in the concept paper have been made in the following directions: developing the planning of resources and budgeting towards a performance-based and accrual-based system; developing the reporting system and tightening the link between reporting and planning; making the medium-term planning framework more stable; tightening the accountability mechanisms and internal control; developing the internal audit.

In addition, the Ministry of Finance has drafted a proposal for local municipality unit financial management law in order to modernize the budgetary arrangements and financial management at the local government level. The plan is to enforce the law starting from the beginning of 2009. With the proposed draft law, the aim is to implement accrual-based principles and medium-term framework in budgeting, linking the local municipalities' financial management more with general government fiscal position and implementing the related financial discipline warranting measures, establishing the proceedings for solving the severe financial situations and developing the accountability mechanisms.

## **7.2. Budgetary rules and fiscal institutions**

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In the beginning of 2006 the European Commission carried out a questionnaire about budgetary rules and fiscal institutions among EU member states. The given chapter presents Estonian budgetary rules and fiscal institutions based on the answers to the questionnaire, in addition the requirements for reserves of social security funds and limits to the budgetary loan, cash loan, loans given by the Government for performance of the public duties, bridge financing of foreign aid and size of the cash reserve provided by the State Budget Law are brought out.

### **Budgetary rules**

- The requirement of the budget balance (surplus) of the **general government or central government** has not been provided by law. So far the budgetary balance has been a goal set out in coalition agreements and strategic development plans. Thus, it is a “soft” rule, but it has been observed by all governments.
- According to the Constitution, an amendment to the state budget or a draft state budget act, which brings about a decrease of the expenditure, an increase of the revenue or a redivision of the expenditure stipulated therein shall be accompanied by financial calculations, which indicate the sources of income required for covering the expenditure. Also, the Riigikogu cannot delete or reduce expenditure included in the state budget or a draft state budget act on the basis of other acts. According to the State Budget Act, the Government can submit at latest three months before the end of the budgetary year a **draft supplementary state budget act** increasing the expenditure to the Riigikogu.
- The **Health Insurance Fund** Act states that the budget of the Health Insurance Fund shall set out the balance of the revenue and expenditure of the fund for one financial year. Requirements have been established regarding legal reserve and risk reserve. The legal reserve is a reserve formed of the budgetary means of the health insurance fund for reducing the risks to the health insurance system from macro-economic changes. The size of the legal reserves is 6% of the budget and annually at least 1/50 of the total budget of the Fund as well as better than expected social tax revenues are transferred to the reserve until the amount of the legal reserve provided by law is reached or restored. The legal reserve may only be used as an exception by an order of the Government of the Republic on the basis of a proposal of the Minister of Social Affairs. Prior to submitting a proposal to the Government the Minister of Social Affairs shall hear the opinion of the Supervisory Board of the Health Insurance Fund.
- The risk reserves of the Health Insurance Fund are reserves comprising the budget funds of the Health Insurance Fund for the purpose of hedging risks arising from obligations assumed for the health insurance system. The size of the risk reserves is 2% of the health insurance budget total of the Health Insurance Fund and it can be put into use by a resolution of the Supervisory Board of the Health Insurance Fund.
- The **Unemployment Insurance Fund** also has the legal reserve requirement for reducing the risks to the unemployment insurance system from macro-economic changes. The size of the legal reserves is at least 10% of the total assets of the Fund. The legal reserve may only be used as an exception by an order of the Supervisory Board of the Unemployment Insurance Fund, in the case of insufficiency of the Unemployment Insurance Fund's fund for specific purposes. Before making the respective order the Supervisory Board must, through the Minister of Social Affairs, make a proposal for the Government of the Republic to increase the unemployment insurance payment to the level which ensures sufficient receipts for the achievement of the objectives of the Unemployment Insurance Fund.

- The State Budget Act stipulates annual restrictions on the balance of the budgetary loan and cash loan (repaid within the year) in the budget act, the size of the cash reserve, the balance of the Government loans granted for performance of the public duties, the total bridge financing, etc. The total limits in the draft State Budget Act for 2008 are as follows:
  - ✓ the highest permitted balance of the budgetary loan is EEK 2,850 million (1.0% of GDP) and the highest permitted balance of the cash loan is EEK 5,750 million (2.0% of GDP);
  - ✓ the size of the cash reserve is EEK 2,990 million (1.1% of GDP);
  - ✓ the highest permitted balance of the loans given by the Government of the Republic for performance of the public duties is EEK 750 million (0.3% of GDP).
  - ✓ the highest permitted balance of bridge financing of foreign aid is EEK 3,500 million (1.3% of GDP);
  - ✓ the highest permitted balance of financing the expenditure exceeding the state budget revenue is EEK 5,000 million (1.8% of GDP).
- The **Rural Municipality and City Budgets Act** establishes a debt limit and a debt service limit for local authorities. A rural municipality and a city may take a loan, use financial lease, issue debt securities and assume other debt obligations on the following conditions:
  - ✓ the total amount of all outstanding loans, outstanding financial lease payments and issued bonds and the total amount of other debt obligations along with the loan taken, the financial lease used, the debt securities issued and the other debt obligations assumed must not exceed 60% of the budget revenue planned for the given budget year, less the allocations from the state budget intended for a specific purpose;
  - ✓ the total amount of outstanding loan principals and interest, financial lease payments and interest, costs of redemption of the bonds must not, in any coming budget year, exceed 20% of the budget revenue planned for taking loans, using financial lease or issuing bonds in the budget year, less the allocations from the state budget intended for a specific purpose;
  - ✓ the loan is taken, the financial lease is used and the bonds are issued for the purpose of the investments specified in the development plan of the rural municipality or city.

### Fiscal institutions

- As for **fiscal institutions**<sup>24</sup> in the Estonian context one can point out the State Audit Office, which is independent in its activities and evaluates the legality and effectiveness of the use of the public funds through economic inspections (audits). During the audit various aspects in the audited agencies are assessed, e.g. the internal audit system, the financial management, the economic activity, the management, the effectiveness of the organisation and activity, and the reliability of the information technology systems.

The State Audit Office is obliged to assess the Consolidated Annual Report of the State drawn up by the Ministry of Finance, covering all state accounting entities, and the annual reports of the constitutional institutions. In both events the compliance of the reports with the Accounting Act as well as the legality of the transactions contained in the reports are analysed. The assessment of the Consolidated Annual Report of the State is sent to the Government of the Republic for approval and thereafter it is submitted to the Riigikogu for approval. Thus, through approval or rejection of the assessment of the State Audit Office the Riigikogu assesses the work of the Government.

The audits of the State Audit Office and the proposals contained in the audit reports give the Riigikogu and the Government of the Republic as well as the taxpayers a better overview of the

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<sup>24</sup> According to the definition by the European Commission, budget institutions are institutions that (1) (regularly) analyse, assess or make recommendations regarding the fiscal policy of the state, (2) draw up independent forecasts of budget revenue or forecasts that are used upon comparison with the Government's forecasts. These institutions must also be financed from the public funds.



functioning of the public sector, while the recommendations of the State Audit Office should contribute to increasing effectiveness in the public sector. On the whole, this should lead to improvement of the quality of public finances.

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## **APPENDICES**

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## Appendix 1. Key indicators of Estonian economy 2000–2006

**Table 20**

### Gross domestic product in 2001–2006

	2001	2001	2002	2003	2004	2005	2006
	<i>mln EEK</i>	%	%	%	%	%	%
1. Real GDP	102,808.8	7.7	8.0	7.2	8.3	10.2	11.2
2. Nominal GDP	108,218.3	13.3	12.2	12.1	10.2	17.0	18.1
<b>Sources of growth</b>							
3. Private consumption expenditure (incl. non-profit institutions) <sup>1)</sup>	56,455.8	7.4	11.2	9.7	6.6	10.7	14.9
4. Government consumption expenditure	19,527.3	2.6	1.9	0.3	3.0	1.6	2.6
5. Gross fixed capital formation	27,229.2	9.7	24.1	19.2	4.4	9.9	22.4
6. Change in inventories (% of GDP)		1.5	2.6	1.6	3.6	3.5	4.1
7. Export of goods and services	83,140.4	2.0	1.7	8.0	16.6	20.5	8.3
8. Import of goods and services	88,001.8	3.5	6.0	10.4	15.5	16.3	17.1
<b>Contribution to GDP growth <sup>1)</sup></b>							
9. Domestic demand (excl. inventories)		7.1	12.9	10.9	5.8	9.6	16.2
10. Change in inventories		0.5	-0.3	0.3	2.5	-0.3	1.2
11. External balance of goods and services		-1.5	-3.8	-4.6	-0.7	2.0	-9.2
<b>Growth of value added</b>							
12. Primary sector		-5.2	8.3	5.0	-6.9	-2.8	3.4
13. Industry		10.4	7.3	10.6	8.5	11.0	11.9
14. Construction		2.2	11.6	0.9	3.1	26.2	12.5
15. Other services		8.0	7.6	6.9	8.9	9.7	11.1

*1) Contribution to GDP growth indicates the shares of specific sectors in economic growth. For calculation of the indicators, the growth of a sector is multiplied by its share in GDP. The sum of sectoral contributions is the economic growth (the small differences are caused by statistical error – share of GDP that could not be divided between the sectors).*

*Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.*

**Table 21**

### Prices in 2000–2006

*(percentage)*

	2000	2001	2002	2003	2004	2005	2006
1. GDP deflator		5.3	3.8	4.5	1.8	6.2	6.2
2. Private consumption deflator		6.2	2.9	1.0	1.7	2.7	3.8
3. Harmonised index of consumer prices	3.9	5.6	3.6	1.4	3.0	4.1	4.4
3a. Consumer price index	4.0	5.8	3.6	1.3	3.0	4.1	4.4
4. Government consumption expenditure deflator		5.0	7.2	11.1	5.1	9.1	10.2
5. Investment deflator		6.0	0.9	0.0	4.7	3.8	7.3
6. Export deflator		4.7	-2.5	1.2	1.0	3.4	9.6
7. Import deflator		2.0	0.1	-0.5	2.0	4.4	7.2

*Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.*

**Table 22****Labour market in 2000–2006**

	2000	2001	2002	2003	2004	2005	2006
		%	%	%	%	%	%
1. Employment, persons	572.5 <sup>1)</sup>	0.9	1.4	1.5	0.2	2.0	6.4
3. Unemployment rate	13.6	12.6	10.3	10.0	9.7	7.9	5.9
4. Labour productivity, persons	166.8 <sup>2)</sup>	6.7	6.6	5.7	8.0	8.0	4.5
6. Compensation of employees	43,588.9 <sup>2)</sup>	11.5	10.7	12.3	10.5	15.0	20.2
7. Compensation per employees (6./1.)	76.1 <sup>3)</sup>	10.5	9.2	10.6	10.2	12.7	13.1
7a. Average gross wage, EEK	4 907	12.3	11.5	9.4	8.4	10.8	16.5

1) Thousands of persons.

2) Mln EEK.

3) Thousand EEK.

Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

**Table 23****Balance of payments in 2000–2006**

(% of GDP)

	2000	2001	2002	2003	2004	2005	2006
1. Net lending/borrowing vis-à-vis the rest of the world	-5.0	-5.0	-10.1	-10.6	-11.5	-9.3	-13.2
<i>Of which:</i>							
- Balance of goods and services	-3.3	-2.1	-7.1	-7.4	-8.0	-6.3	-11.6
- Balance of primary incomes and transfers	-2.1	-3.1	-3.6	-3.9	-4.3	-3.7	-3.9
- Capital account	0.5	0.2	0.5	0.7	0.8	0.7	2.3
1a. Current account	-5.4	-5.2	-10.6	-11.3	-12.3	-10.0	-15.5
4. Statistical discrepancy	0.0	-0.1	0.6	-0.6	0.3	0.5	0.2

Sources: Statistical Office of Estonia, Bank of Estonia, Ministry of Finance of Estonia.

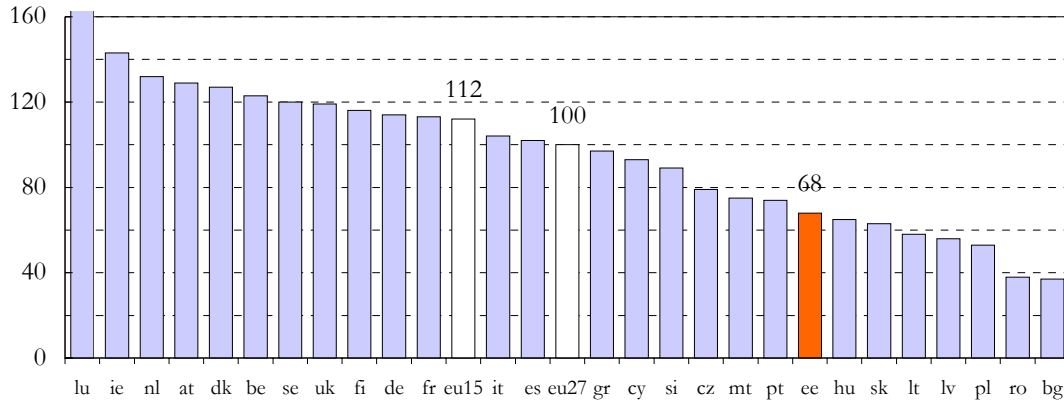
## Appendix 2. Comparison of Estonia with other EU member states

**Figure 18**

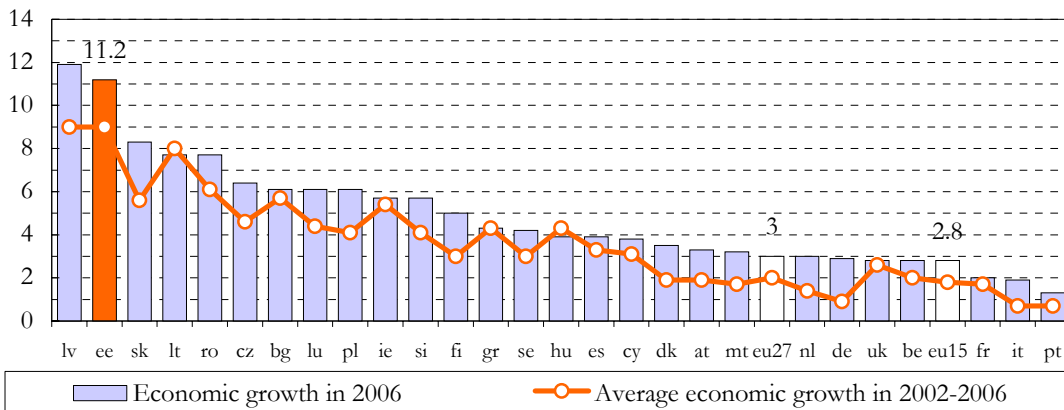
### Main macroeconomic indicators

(percentage)

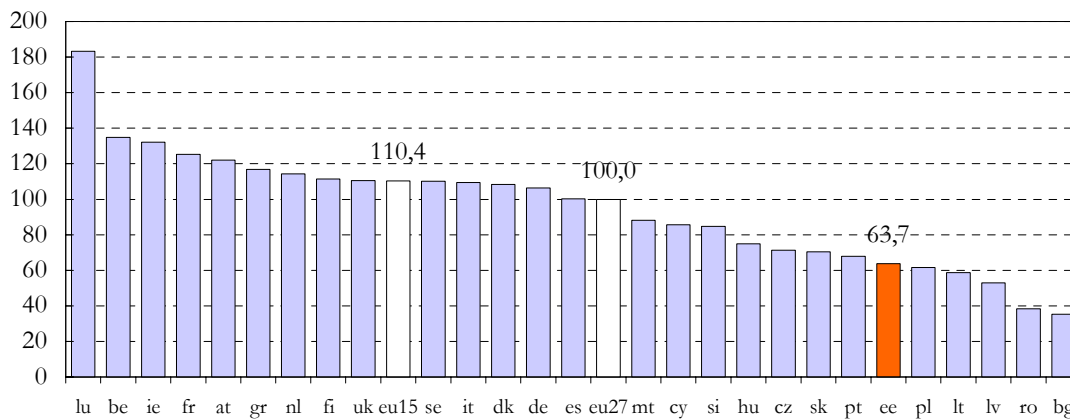
#### A. GDP per capita in purchasing power parities in 2006 (EU27=100)



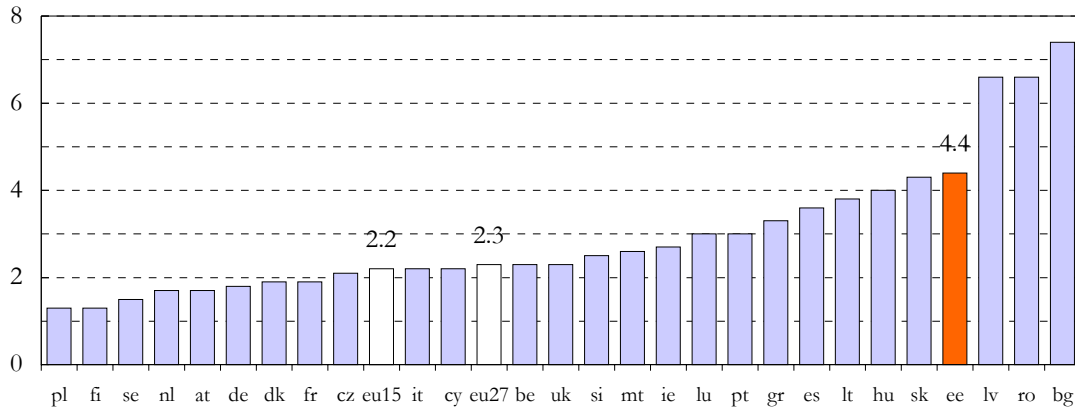
#### B. Economic growth in 2006



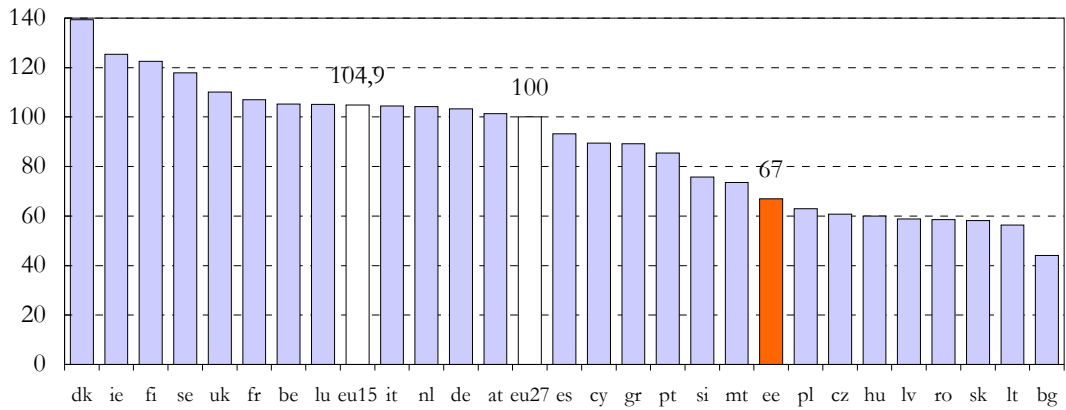
#### C. Labour productivity – GDP in purchasing power parities per person employed in 2006 (EU27=100)



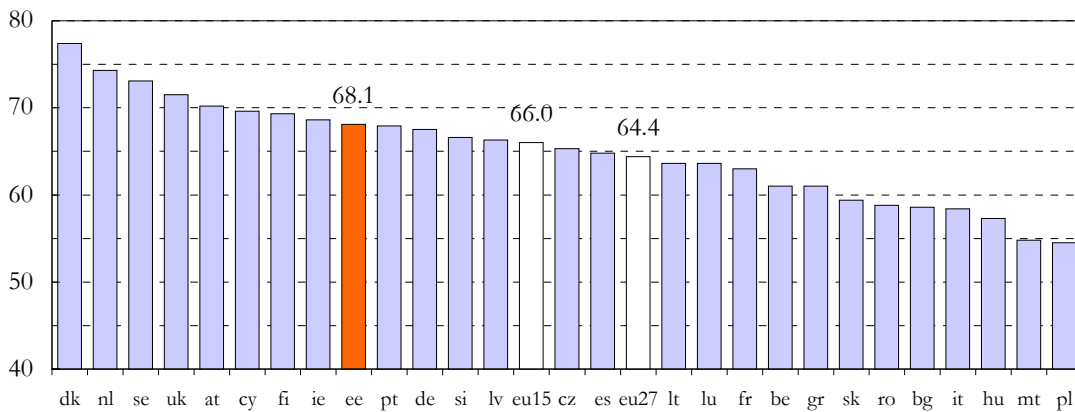
**D. Harmonised index of consumer prices in 2006**



**E. Comparative price level to EL27 average in 2006 (EL27=100)**



**F. Employment rate (15–64 years old) in 2006**

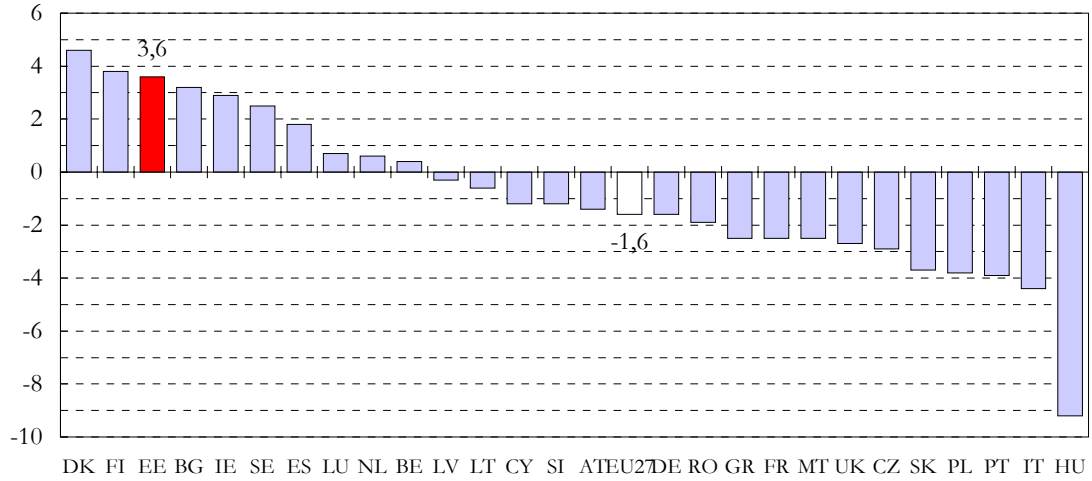


Sources: Eurostat, Statistical Office of Estonia, Ministry of Finance of Estonia.

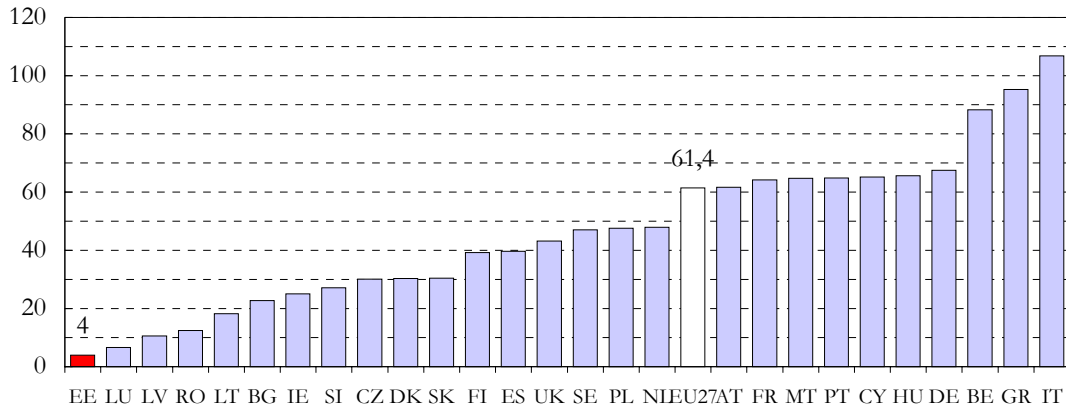
**Figure 19**

**General government fiscal position**  
(% of GDP)

**A. General government budget balance in 2006**



**B. General government debt in 2006**

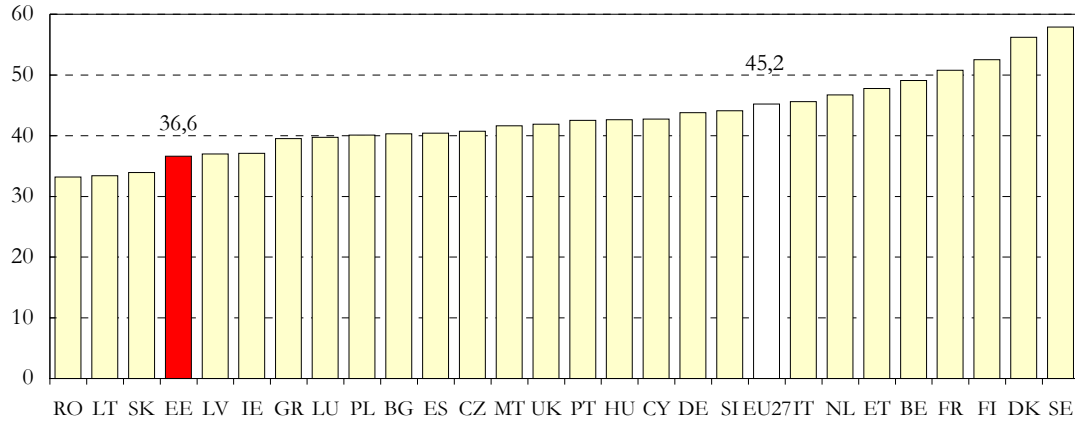


Sources: Eurostat, Ministry of Finance of Estonia.

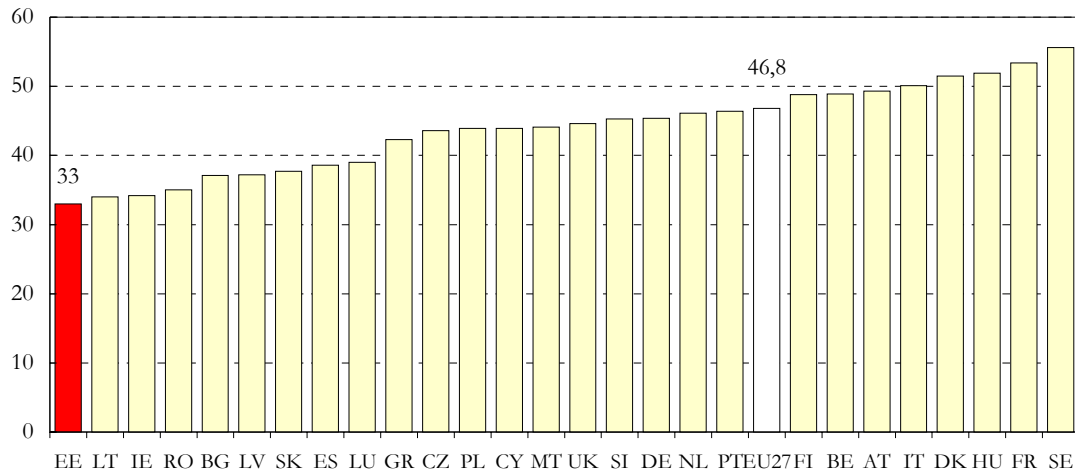
**Figure 20**

**General government revenue and expenditure**  
(% of GDP)

**A. General government revenues in 2006**



**B. General government expenditure in 2006**



Sources: Eurostat, Ministry of Finance of Estonia.



## **Appendix 3. Inflation expectations**

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### **1. Recent inflation developments in Estonia**

While after accession to the European Union the inflation fluctuated with some exceptions between 4% and 5%, then from spring 2007 the price increase has accelerated remarkably. This development was driven by extensive influx of foreign credit in the recent years which brought about economic growth of over 10% and caused a strong increase in the turnover and profit indicators of enterprises. Higher demand for workforce was expressed by the increase of the lack of workforce and by accelerating growth in wages and salaries exceeding the productivity. In addition to growing earnings the high loan demand favoured the occurrence of consumption boom and caused elevating price increase pressures in the economy.

While in the first half of this year the acceleration of inflation was mainly caused by domestic factors, then in the second half of the year they have been accompanied by administrative and external factors. Increase of domestic price pressures is mainly reflected by the acceleration of the base inflation which has almost doubled in a year. The income growth that has been the fastest during the recent years has on the one hand caused demand-side inflation and on the other hand cost pressure on enterprises, which can be compensated in strong demand environment by the increase of final prices of products mainly in the areas of activity directed to the domestic market. The prices for services influenced less by foreign competition (non-tradables) have increased more. The lasting consumption boom has allowed for the rise of the entrepreneurs' margins via increase in the prices of these products without any decrease in demand. Abolition of the VAT difference on thermal energy from July 2007 caused the increased influence by administratively regulated measures on the consumer price index (see Table 24).

The influence of external factors started to increase in autumn, when the rapid increase of the world market prices of food and oil raised the inflation to the highest level of the decade. The harmonised consumer price index increased in October for these reasons up to 8.7%. The price increase is caused by constantly increasing consumption of food products in developing Asian countries and fall of yield due to weather conditions. The prices of the dairy, flour and meat products have therefore strongly increased in autumn, in October the annual price increase of dairy and bread products amounted to 23% and 21%, respectively. Due to the small size and openness of the country, the influences of the foreign environment will appear more quickly and are more volatile than in the euro area. Also in the other Baltic States the price increase of the aforesaid food products caused by external factors has been similar to that in Estonia. The price increase has been accelerated by the record-breaking levels of the world market prices of oil, which has to a certain extent been compensated by the cheapening of the dollar against the euro. The effect on inflation was amplified by fall in fuel prices in the autumn of the previous year.

### **2. Administrative price increases in the coming years**

The share of administratively regulated prices in the consumer basket is 23.3% in 2007 and this has decreased in the recent years. While in 2006 the estimated influence of these measures on consumer price index was 0.67 percentage points, in 2007 it will reach 1 percentage point. These are mainly price increases related to housing. Increase of VAT on thermal energy in July 2007 had a stronger impact, raising inflation by even 0.54 percentage points.

In spring, when the inflationary pressures were more modest than six months later in autumn, the government decided to shift to the year 2008 (1 January and 1 July) the raises of excise duty rates scheduled for 2009–2010, which increases the probability for fulfilment of the inflation criterion in

2010–2011. It was decided to raise the rates of the excise duties on tobacco, alcohol, and energy products (incl. motor fuel). One of the reasons for raising the excise duty on tobacco and energy products is the fulfilment of the minimum requirements set forth by the EU directives. Earlier raise of excise duties will diminish the impact of price increases by state on consumer price index in the years 2010–2011 by 0.5% and 0.2%, respectively.

For the aforementioned reasons the impact of regulated price increases on CPI will rise in 2008–2009 to 2.7% and 1.3%<sup>25</sup>. In the event that under the influence of cyclical factors such as moderation of growth and slower increase in wages and salaries the base inflation will start slowing down in 2008, the regulated price increases and the increase of the world market prices of foodstuffs will postpone the moderation of inflation by one year. Resulting from the acquisition of stocks of tobacco products, the impact of the raise of excise duties will emerge with a lag, and therefore major impact on inflation is expected in 2009.

Most administrative price increases result from the higher costs on heat. This is to a large extent caused by the harmonisation of the purchase prices of natural gas as the main product of heat production with the level of Western Europe. By 2008, the price convergence of natural gas has been attained and thereafter the price of heating will depend on the world market price changes of liquid fuel.

### **3. Consumers' inflation expectations**

The expectations of households as regards price increase for the next 12 months have in the recent years been rather volatile. Inflation expectations started to increase remarkably a year before accession to the European Union. Frights of price increase shocks accompanying accession raised the indicator reflecting the development of expectations to a very high level. Then after accession the situation stabilised over a short period. The next rise in the expectations as regards price increases was in the late summer and autumn of 2005 due to the sharp price increase of motor fuel caused by the increase of world market prices. In 2006, the expectations as regards price increases were the lowest of the recent years. The temporary increase noticed in summer can be explained by the increase of the price of unprocessed food products (fruit and vegetables) due to adverse weather conditions, as well as by increasing housing costs. The rapid decrease of oil prices following in autumn drew the expectations' indicator down again.

In the middle of 2007, the accelerating increase of consumer prices started to be reflected by elevating expectations as regards price increase. Certain factors are difficult to be indicated, as the price increase has been extensive. It can be said that the quick increase of purchasing power as a result of robust growth of wages and salaries has enabled the consumers to pay less attention to price increases, which is also reflected by the low level of the indicator in H1 2007. But in the second half of the year the price increases gaining momentum have to a higher extent also influenced the households' costs. Sharp increase of the prices of foodstuffs as the main expenditure item, and increase of the price of motor fuel in autumn raised the inflation in October to the highest level over the decade. Noticeable price increase of heating at the beginning of the heating period, also resulting from external factors, will raise the heating expenditure considerably. To a larger extent, the reasons mentioned above will influence the population with low income, whose shopping basket is mainly composed of food products (whose price increase outpaces the average inflation) and housing costs. Therefore the major pressure on the increase of the indicator may originate from this population group. Population with higher income should not be very much influenced by inflation developments. Also the more intensive price increase of services, although mainly due to increasing labour costs as the main input, has made a contribution to the dynamics of the indicator of price increase expectations. According to the autumn survey of the Estonian Institute for Economic Research, half of the respondents have not changed their consumption

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<sup>25</sup> The impact of the raises of excise duties on CPI will reach 1.6% and 0.9% in 2008–2009, respectively.

behaviour due to price increases. Almost 40% of the respondents have slightly limited their purchases or bought cheaper goods and services.

Although in the second half of 2007, the expectations indicator has risen in conformity with the acceleration of inflation, the higher inflation expectations of consumers cannot be ruled out in relation to the considerable raising of excise duties by the state in the next year. This is supported by the upward step in price expectations before accession to the European Union. Alternatively (if the increase of excise duties is not taken into consideration in price increase expectations), the influence of tax amendments in 2008 may raise the price expectations even more.

Increased inflation expectations in the following months may start influencing further developments of wages and salaries. While so far, salary increase could mainly be attributed to cyclical factors whose falling influence should also bring about adjustments in the salary increase in 2008, then due to higher price increase expectations further pressure for additional increase of wages and salaries may occur in order to compensate higher inflation. This will in turn add to consumption additional financial resources, causing price increase pressures again. Therefore, the risk of emergence of the wage-inflation spiral is increasing. On the other hand, due to quick wage increase it can be seen that the share of profits in the value added reduces, which will hinder the enterprises from raising the wages and salaries with such pace, if they wish to maintain profitability. At the moment, the value added is being redistributed between the employers and employees, which will become more similar to the EU – labour expenditure amounted to 44.5% of GDP in 2006, whereas the EU average was 48.7% of GDP.

In a situation where the inflation of the recent months has mainly resulted from external factors and the forthcoming raises of excise duty rates have been set forth by legislation, the state has in the circumstances of monetary policy with fixed exchange rate based on the currency board system no measures for the control of short-term inflation pressures. The only measure is to continue the pro-cyclical budgetary policy that would prevent additional pressures on inflation by the state.

#### **4. Risks**

In spite of the lowering of economic activity, moderated loan demand and offer of money and more pessimistic future expectations, it has not yet been reflected in inflation indicators. The reasons lie in more tightened labour market developments which have not enabled the inflation to slow down. Also in the closer perspective, the inflation risks are mainly upward:

- o Wage-inflation spiral. During 2007, inflation and growth of wages and salaries have remarkably accelerated. According to the forecast, the acceleration of inflation will continue, reaching a high level in 2008. Although we expect a deceleration of the growth of wages and salaries in the years to come, the situation where in the case of ever increasing prices the employees demand bigger increase of wages, and vice versa, the increasing income will bring about higher prices. Escaping from such spiral is quite complicated. Growing inflation expectations are one of the risk factors.
- o Uncertainty as regards future energy prices. Constantly increasing demand for oil products, insufficient production capacities of refiners and geopolitical risks may raise the price of oil more than we have expected. The dependence of the prices of natural gas and therefore of thermal energy on Gazprom and the political decisions of Russia is also having an impact. The price of electricity may at the end of the forecast period be raised in a higher pace by the voluminous investments of AS Eesti Energia into new energy blocks that must be ready by 2012; and also the gradual opening up of the electricity market.
- o Cost pressures of enterprises. Many enterprises see still the labour force as a factor limiting development, which maintains labour force demand on a high level and creates conditions for the continuing of too fast growth in wages and salaries (not in conformity with labour productivity).
- o Possible underestimation of the indirect effects arising from the raising of excise duties.

**Table 24**

**Influence of Known Administrative Price Increases on Inflation 2006–2009**  
(percentage)

Administrative actions	Enforcement	Price increase (%)	Effect on CPI (% points)			
			2006	2007	2008	2009
<b>Changes in tax policy</b>						
Gas oil for specific purposes	01.01.2008		-	-	0.01	-
Increase of excise duty on motor fuels	01.01.2008	10.0	-	-	0.60	-
Excise duty on shale oil	01.01.2008	5.0	-	-	0.02	-
Excise duty on natural gas	01.01.2008		-	-	0.05	-
Increase of excise duty on liquid gas and petroleum	01.01.2008		-	-	0.01	-
Increase of excise duty on tobacco	01.07.2005	7.5	0.14	-	-	-
Increase of excise duty on tobacco	01.01.2008	17.8	-	-	0.09	0.26
Increase of excise duty on tobacco	01.07.2008	23.4	-	-	0.11	0.34
Increase of excise duty on alcohol	01.01.2008	5.0	-	-	0.28	-
Increase of excise duty on alcohol	01.07.2008	10.0	-	-	0.28	0.28
<i>Excise duty on electricity</i>	<i>01.01.2008</i>	<i>4.7</i>	-	-	<i>0.13</i>	-
Some medical equipment is taxed at 18% instead of former 5%	01.01.2007	12.0	-	0.10	-	-
Replacement of 5% VAT tax rate by 18% rate for heating energy, peat, compressed peat, coal and firewood	01.07.2007	12.0	-	0.27	0.27	-
<b>Other administrative price changes</b>						
Lowering of state duties (notarial fees)	01.01.2007		-	-0.12	-	-
Raising the state duties (passport)	22.05.2007		-	0.09	0.06	-
Refuse collection	1.11.05–30.03.06	17.0	0.05	-	-	-
Refuse collection	01.01.2007	11.0	-	0.04	-	-
Electricity	01.03.2005	13.3	0.07	-	-	-
Electricity	1.03–05.2007	0.8		0.02	-	-
<i>Electricity (growing production costs and oil shale)</i>	<i>01.06.2008</i>	<i>ca 7.0</i>	-	-	<i>0.12</i>	<i>0.08</i>
Price increase of water supply and sewerage in Tallinn	1.01 (2006–2010)	12.3	0.06	0.07	0.08	0.04
Natural gas	01.01.2006	11.4	0.04	-	-	-
Natural gas	01.10.2006	54.0	0.03	0.10	-	-
Natural gas	01.10.2007	16.0	-	0.01	0.03	-
Price increase of distance heating due to the price increase of shale oil	1.01–1.04.2006	50.0	0.18	0.02	-	-
Price increase of heating energy based on natural gas in Tallinn	01.08.2006	7.5	0.05	0.06	-	-
Price increase of heating energy based on natural gas in Tallinn	01.08.2007	17.6	-	0.10	0.14	-
<i>Price increase of heating energy in Tallinn</i>	<i>01.12.2007–01.01.2008</i>	<i>22.7</i>	-	<i>0.01</i>	<i>0.29</i>	-
Price increase of heating energy elsewhere	1.10–1.12.2006	<i>ca 13.0</i>	0.04	0.16	-	-
Price increase of heating energy elsewhere	1.10–1.12.2007	<i>ca 12.0</i>	-	0.05	0.12	-
<i>Heating energy in Tallinn and elsewhere</i>	<i>01.01.2009</i>	<i>ca 10.0</i>	-	-	-	<i>0.30</i>
<b>Total</b>			<b>0.67</b>	<b>0.98</b>	<b>2.69</b>	<b>1.30</b>

PS. Administrative measures which have been adjusted compared to the summer forecast in terms of additional information are in italic.

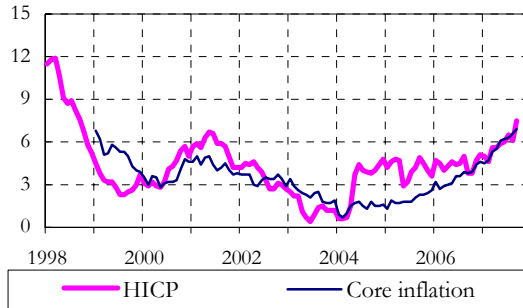
Sources: Statistical Office of Estonia, Ministry of Finance of Estonia, Energy Market Inspectorate.

**Figure 21**

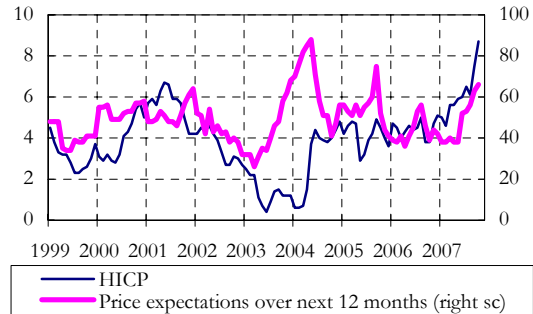
**Price developments in Estonia**

(percentage)

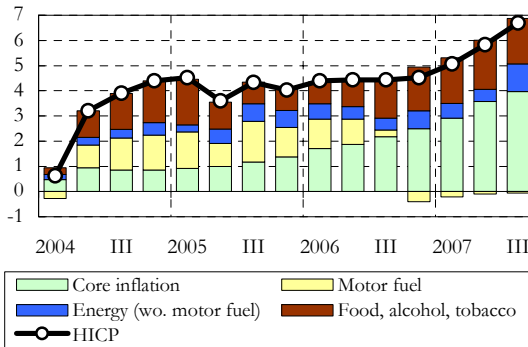
**A. Estonian HICP and core inflation**



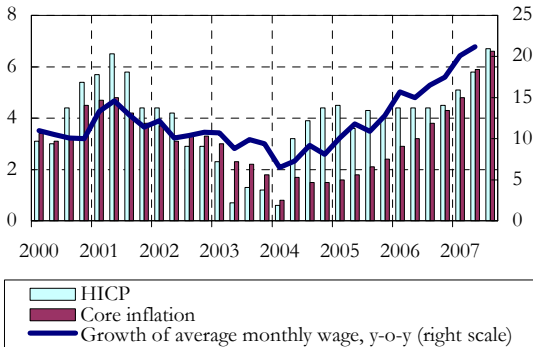
**B. Inflation expectations**



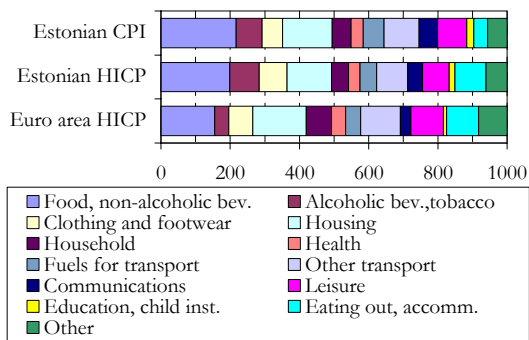
**C. Contribution of HICP**



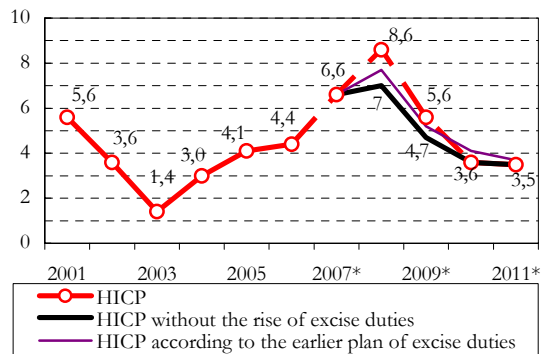
**D. Inflation and wage growth dynamics**



**E. Consumer baskets in 2007**



**F. Scenarios of HICP forecasts**



Sources: Statistical Office of Estonia, Ministry of Finance of Estonia, Eurostat, European Commission.