## Republic of Estonia

# UPDATED CONVERGENCE PROGRAMME 2008

Tallinn
4th December 2008

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#### INTRODUCTION

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 fifth update of the Programme. The purpose of the Convergence Programme is to express the government policy upon fulfilment of the Maastricht 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 2008 and in the beginning of 2009.

The Updated Convergence Programme 2008 was drafted by the Ministry of Finance and it reflects Estonian budgetary policy based on the State Budget Strategy 2009-2012 approved by the Government on 29 May 2008 and the draft State Budget Act 2009 submitted to the Riigikogu by the Government and subsequent decisions of the Government. Resulting from changed economic environment, especially in the 2<sup>nd</sup> half of 2008, programme is addressing the need for economic and fiscal policy measures that are focused on macroeconomic stability and creating the basis for sustainable development.

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 2008 is based on the current economic and budgetary policy situation and on the Ministry of Finance's autumn forecast that was completed just before the Convergence Programme was submitted to Government.

The time horizon of the Updated Convergence Programme 2008 reaches to 2012, 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.

### 1. ECONOMIC POLICY GOALS

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 and flexibility as well as internal and external balance. The pace of Estonian real convergence has been remarkable and in past years we have rapidly come closer to European Union's average. Credit driven economic growth led to increasing imbalances and risks but they are diminishing promptly and thus the vulnerability of our economy is decreasing. Short-term perspective of Estonian economy is largely dependent on how big was the loss of our international competitiveness in boom years and how long-lasting the restructuring process is going to be. Along with credit crisis the outlook for global growth prospects is related with great deal of uncertainty. In the changed economic environment fiscal policy and its' support to economic development is gaining further importance. It is also important to maintain favourable business environment and the flexibility of the economy.

One of the main objectives of fiscal policy is to support the macroeconomic stability through the effectiveness and flexibility of markets 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 Government is planning to continue with sustainable fiscal policy. 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.

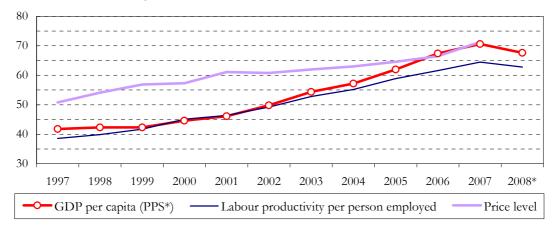
Drawing up a balanced budget each year may mean that in certain conditions the budgetary policy may become pro-cyclical, but setting a nominal balance objective has been right for Estonia, because the structural changes in the economy have been extensive and they have not allowed for evaluating the economic 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. State budget for 2009 was planned to be in balance in accordance with the international economy situation. The economic downturn has been deeper than expected and this has therefore deteriorated the budgetary position. In the medium term, Government plans to continue preparing at least balanced budgets, taking into account the cyclical position of the economy, still high current account deficit and recent problems in financial markets.

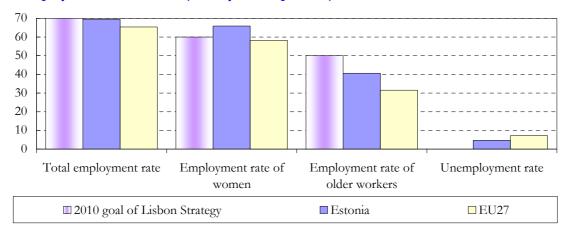
#### Figure 1

# Real convergence with the EU and employment goals of the Lisbon Strategy (percentage)

#### A. Estonia's real convergence with the EU (% of EU27)



#### B. Employment rates in 2007 (15–64-year old persons)



Sources: Statistical Office of Estonia, Eurostat.

# 2. ESTONIAN ECONOMIC DEVELOPMENT AND OUTLOOK

#### 2.1. Recent economic developments

#### 2.1.1. Macroeconomic situation

The developments during the first three quarters of 2008 indicate a rapid adjustment of the Estonian economy following the period of above-potential growth. Imbalances and risks that emerged during the period of economic growth – current account deficit, wage growth outpacing labour productivity growth, demand-side inflationary pressures, rapid credit growth – are rapidly decreasing, creating preconditions for more balanced development in the near future.

In the first three quarters of 2008, the GDP value calculated on the basis of chain-linking method decreased by 1.4% year-on-year at constant prices<sup>1</sup>. Economic recession is mainly caused by the declined demand in the domestic market – the recession that started off from the real estate sector has had an adverse impact on the growth in private consumption and on investments. As a positive side-effect of the decline in domestic demand, there has been a decrease in risks – in the deficit of the balance of goods and services, as a consequence of which the contribution of net exports to GDP growth proved to be positive in the first half-year.

In the first six months, an important factor behind negative economic growth was a decrease in private consumption, which was influenced by the weakening consumer confidence and, consequently, less active borrowing. Real consumption growth was inhibited also by CPI inflation at the level of 11%. The further decline in the growth of private consumption is indicated also by a decline in the sales volumes of retailers and car trade and by more unfavourable credit conditions. Credit growth is more and more restrained by the caution of banks.

In the first six months of 2008, investment decreased due to the modest investment activity of households and companies. Weak economic environment, weakened future expectations and sluggish real estate market do not favour private sector capital investment. General government investment still grew considerably in the first half-year at the expense of increasing volumes of foreign grants. Private sector investment is increasingly restrained by the strategic decision of commercial banks to give credit only at the expense of domestic savings.

Due to a significant slowdown in the economic growth of Estonia's trading partners, Russian politics and domestic factors (low productivity and rapidly increasing production costs), export competitiveness problems have somewhat increased in 2008. The export volumes of processed motor fuel have decreased considerably. A smaller decline can be seen in exports of timber and timber products, textiles and transport equipment. As regards timber products, this is related to the reduced availability of commodities mainly due to the rise in the export duties of Russia. The decline in textile exports has resulted from the gradual transfer of production into countries with

1

<sup>&</sup>lt;sup>1</sup> The GDP and the real growth of its components are calculated by a new chain-linking method. On 8 September, Statistics Estonia issued the GDP time series starting from 2001 found on the basis of the chain-linking method.

lower production costs. As for transport equipment, demand for land transport equipment in other Baltic States has decreased. The factor behind the decreased export volumes of low value added processed motor fuel is the decision of Russia to partly redirect freights to the ports of neighbouring countries. At the same time, favourable developments are taking place in several sectors due to strong demand, good product quality and improved competitiveness: exports of metals, metal products, chemical products and electrical machinery and equipment have shown faster growth. Their share in exports of goods is nearly one third. Although in nominal terms, exports of goods and services was increasing in 2008, in terms of chained prices, the real growth rate was negative (-3.5% in the first half-year) due to soaring export prices. As regards exports of services, growth in transport services has been restricted by the decline in freights; however, there have been favourable developments in exports of travel and construction services.

Decline in the volume of goods and services imports at chained prices (-7.3% in the first half-year) has been larger primarily because of the decreasing domestic demand. Therefore, the contribution of net exports to economic growth is positive in 2008. Decline in the volume of goods imports is triggered mainly by two groups of goods: land transport equipment, and timber and timber products.

During the downward phase of the business cycle, external imbalances have decreased due to the low consumer and investment activity. In the second quarter, the current account deficit declined to 10% of GDP mainly due to the improved foreign trade balance. Faster growth in exports of services compared to imports in the first half-year also had positive influence on the external balance. Income deficit is still so big due to the income that foreign investors earned from direct investments and then reinvested into Estonian business (in the second quarter accounted for -8.1% of GDP).

By economic sectors, in the first half of 2008 the fall in GDP was most influenced by a decrease in business sector value added by 1.5%. A decline in the value added of domestic trade, transportation, storage, and power, gas and water supply and manufacturing had a significant impact. The role of the financial sector in creating value added also diminished considerably – its contribution to GDP growth decreased from 0.6% in the first half of 2007 to 0.1% in 2008. At the same time, general government supported the creation of value added, the growth rate of which increased to 4.2% in the second quarter. The weakening confidence of entrepreneurs and consumers, and the development indicators of the sectors of the economy indicate that the downward phase of the business cycle will last and the general economic situation is not expected to improve in the coming quarters. In fact, the downward trend accelerated in all areas, most substantially in trade, industry, financial intermediation, real estate, construction and transportation.

The number of the employed increased in the first quarter of 2008 despite a significant slowdown in real economic growth, amounting to 1.5%, and the unemployment rate decreased to 4.2%. In the second quarter of 2008, employment decreased as a result of negative economic growth by 0.3% and the unemployment rate fell to the record level of 4%, which is the lowest in 15 years. In the third quarter, employment continued to decline, falling by 0.2%, and the unemployment rate increased to the highest level in the past two years – 6.2%. The noticeable increase in unemployment was caused by the decline in economic activity and the related decrease in demand for labour. A decrease in employment and increase in unemployment are also expected to continue, which is reflected in the significantly decreased number of those who receive payments according to the Tax and Customs Board as well as in data on the increase in the number of the registered unemployed published by the Labour Market Board. According to the Labour Market Board, the number of the registered unemployed increased in October 2008 by nearly 9,200 persons or 68%, year-on-year.

The first quarter of 2008 marked the beginning of a downward trend in wage growth, with 19.5% growth in gross wages and 7.6% growth in real wages. Labour productivity or the created value added per employee declined by 1.3% in the first quarter resulting from the slowdown in economic growth and the simultaneous acceleration of employment growth. Along with slower economic

growth and the following recession, the second quarter of 2008 saw the continuation of a clear slowdown in wage moderation, with 15.2% increase in gross wages and 3.4% increase in real wages. The current data of the Tax and Customs Board on the size of an average payment also reflects the further trend of wage moderation. Thus one can say that the labour market has started to react to surrounding changes, which is essential for reducing economic imbalances.

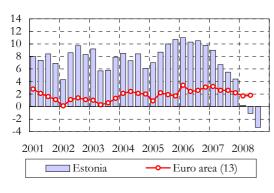
After the sharp acceleration of inflation in autumn 2007, consumer price growth has stabilised at 11% in the first 9 months of 2008. Increase in the world market prices of energy and food on the one hand and in indirect taxes on the other lead to the double-digit inflation. Increase in the price of crude oil has strongly influenced also the prices of natural gas and distant heating, thereby raising the inflation of 2008 by nearly 1%. On 1 January 2008 excise duty rates on energy products (motor fuel, electricity), tobacco and alcohol were raised, and on 1 July excise duty rates on tobacco and alcohol were raised for a second time. The impact of these measures on consumer prices of 2008-2009 amounts to 1.5% and 0.9% respectively. A decline in external inflationary pressures observed since the middle of summer has been replaced by the impact of the second increase of tax rates on tobacco and alcoholic beverages, which is why the inflation has remained high. Yet in line with the weak economic environment and easing wage pressures, core inflation has rapidly slowed down since spring, declining to 5.7% in September. This has happened on account of a slowdown in the prices of both services and manufactured goods. Due to a decline in external upward price pressures, HICP decelerated to 10.1% in October.

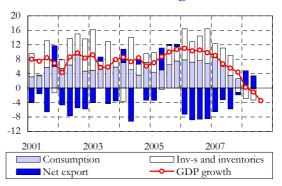
Figure 2

#### Main indicators of Estonian economy

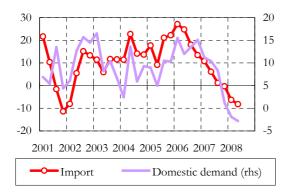
(percentage)

#### A. Economic growth of Estonia and euro area B. Contribution to economic growth

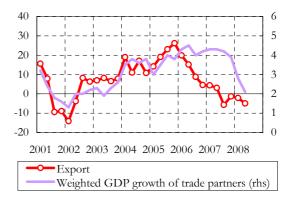




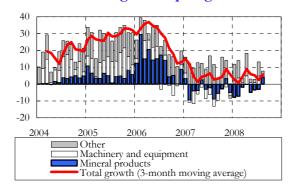
#### C. Real growth of domestic demand and imports



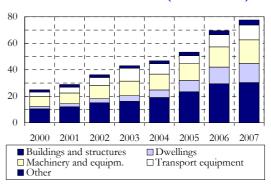
#### D. Real growth of exports



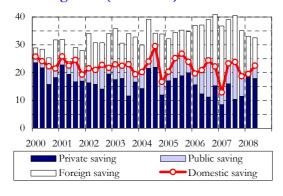
#### E. Contribution to goods export growth



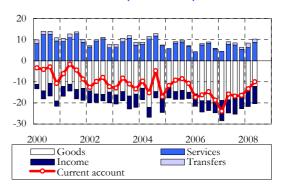
#### F. Structure of investments (billion EEK)



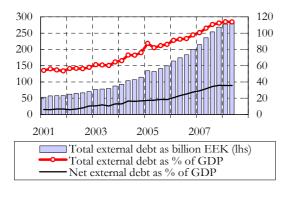
#### G. Savings rate (% of GDP)



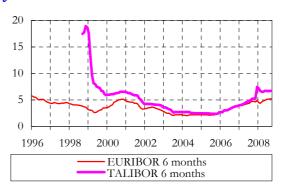
#### H. Current account (% of GDP)



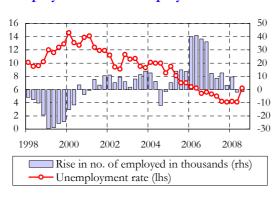
#### I. External debt



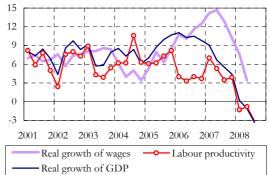
#### J. Interest rates



#### K. Employment and unemployment

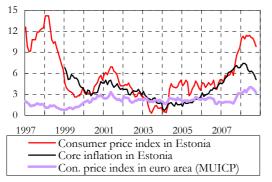


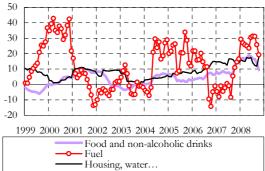
#### L. Labour productivity



# M. Consumer price index in Estonia and euro area

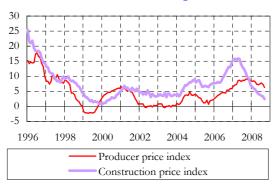
#### N. Main drivers of inflation in Estonia

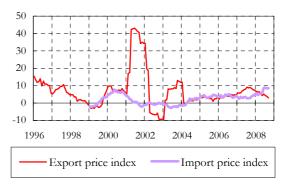




#### O. Producer and construction price index

#### P. Export and import price index





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

#### Box 1. Developments in unemployment and labour shortage

Along with the slower economic growth and the following recession, the labour market has also started to react to surrounding changes. The number of the employed decreased by nearly 2,000 persons on average in the second and third quarter of 2008. It is also expected that in the near future, employment and labour demand will continue to fall and thereby result in unemployment growth. Due to a time lag in the publication of employment and unemployment data by Statistics Estonia and the fact that the situation might change rapidly, the statistics of the Tax and Customs Board and the Unemployment Insurance Fund are used to provide more up-to-date assessment of labour market developments.

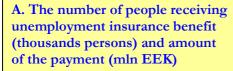
Changes in employment are reflected in the noticeable decrease in the number of those who have received wage payments in recent months according to the Tax and Customs Board. As the average of the past nine months, year-on-year, this indicator has decreased the most in construction and other business activities. The decrease in the number of wage recipients is the result of changes in the overall economic situation and slowdown in economic activity. A decline in the construction volume due to lower demand has an impact on the number of those who receive payments in the field of construction, and also influences the number of employees.

Increased unemployment can also be seen in the data on registered unemployment published by the Labour Market Board. According to the Labour Market Board, the number of the registered unemployed (aged 15-74 years) increased in October 2008 by nearly 9,200 persons or 68%, year-on-year. In October registered unemployment increased from the 2.0% level in 2007 to 3.3%; the share of the registered unemployed accounted for approximately 33% of the total number of the unemployed in the first half-year. The increase in unemployment can also be seen in the data

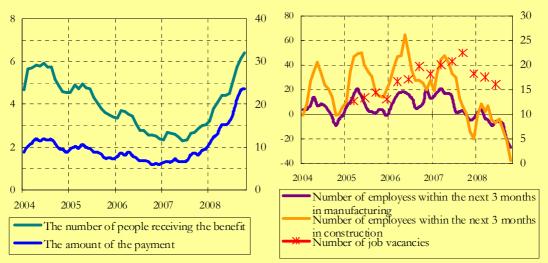
published by the Unemployment Insurance Fund, according to which the number of those who receive unemployment insurance benefit increased by 126% to 6,400 persons in September compared to the same period of 2007. The amount of the unemployment insurance benefit payments has also increased considerably in 2008, reaching the level of 23.6 million kroons in September compared to 8.2 million kroons in 2007 (187% growth).

In recent years, the Estonian labour market has been characterised by high demand for labour and shortage of available labour force, but the demand for labour has started to fall as a result of the slowdown in economic growth. Mitigation of labour shortage is confirmed by a sharp fall in the number of vacancies in the first (-12%) and second (-23%) quarter of 2008. The largest decrease in the number of vacancies is observed in manufacturing, public administration, construction, wholesale and retail trade and financial intermediation – in total by approximately 4,700 vacancies in the first quarter of 2008. According to the Estonian Institute of Economic Research, in the next three months the number of employees is expected to decrease in the manufacturing, construction, trade, as well as in the services sector. The decrease in the number of employees will continue to be the biggest in the construction sector.

Against this background it may be concluded that the labour market is about to react to the changes taking place in the economy. The slowing economic growth will increase the unemployment and decrease the labour shortage, which can already be confirmed by existing indicators. Although it is not exactly clear what the new developments in the labour market will be, the continuous trend of decrease in employment and increase in unemployment can be expected.



# B. The change in the number of employees within the next 3 months and the number of job vacancies (thousand)



Sources: Statistical Office of Estonia, Estonian Unemployment Insurance Fund, Estonian Institute of Economic Research

#### Box 2. Impact of the financial sector on household disposable income

The impact of the financial sector on household disposable income has been remarkable over the last years. In the last six years (2002-2008), the stock of household loans and leasing has grown more than eight times – from 15 billion kroons to 128 billion kroons. The ratio of loan stock to GDP has increased from 14% to 51% in this period. While until 2006 the credit flows from the financial sector to households grew fast, since 2007 the net credit flows (increase in loan stock minus interest payments) are declining and are expected to become negative (interest payments to banks exceeds the loan stock growth) in 2009.

Household borrowing picked up substantially since spring 2005, caused by the joint impact of several factors. Estonia's credibility had increased owing to the accession to the European Union, the price of loan money in the world market was at a historically low level, local banks were competing for market share, residents' income grew fast (15-25% yearly until the beginning of 2008), housing loan repayment periods extended and the starting level of debt was relatively low.

While the growth pace of income from employment amounted to 25% in 2006, the total increase in income from employment and money from net borrowing (increase in loan stock minus interest payments) amounted to 33% in both 2005 and 2006 (Figure A). Income from employment has increased rapidly also in 2007-2008 but the moderation of loan growth since the second half of 2007 and the continuous increase in interest rates rapidly reduce the cash flow from the financial sector to households.

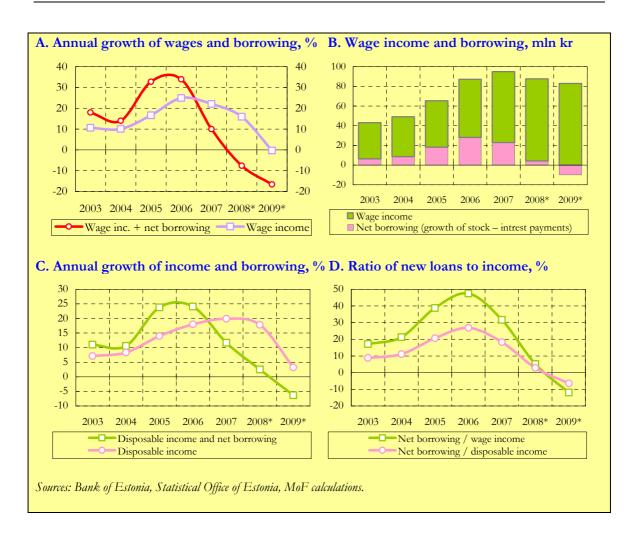
In 2006 households increased their loan stock by 32 billion kroons and paid approximately 4 billion kroons of interest; therefore, the net flow from the financial sector to households was approximately 28 billion kroons (excluding deposits). In 2007 the net flow amounted to 23 billion kroons, and the forecasted figure for 2008 is just 4 billion, i.e. 19 billion kroons less than in 2007. At the same time, income from employment in 2008 is expected to increase only by 11 billion kroons compared to 2007. Thus the amount of money received from employment income and net borrowing will decrease in both 2008 and 2009 compared to the previous year (Figure B). (In this example we use income from employment instead of disposable income, because employment income accounts for more than a half of household disposable income, and loans are serviced mainly from employment income.)

The rise in disposable money has been somewhat more stable than growth in income from employment, amounting to 20% in 2007. Along with loan money, disposable money of households increased by 24% in 2005-2006. The expected annual growth in disposable income (of wages and social contributions) of 2008 is expectedly 18%, and of 2009 3% (due to pension increase; income from employment will most likely decrease); yet the halt in borrowing will probably wipe it out completely in 2009 (Figure C).

Figure D indicates that the ratio of money from net borrowing to both, income from employment and disposable income, has been large in recent years. In some quarters of 2006 the ratio of loan money to income from employment amounted to as much as 50%. By the end of 2008 the net cash flow from the financial sector to households will become marginal, and since the loan stock is not expected to increase in 2009, interest payments on the existing loan stock will reduce household disposable income in full.

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Interest payments have been calculated based on the loan stocks and interest rates published by Eesti Pank on a quarterly basis. The calculation of income from employment is based on average net wages and salaries and the total number of the employed. Interest payments as well as income from employment are analytical and approximate.



#### 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 raised Estonia's rating to level A already in spring 2005. Along with the then valid assessment on the possibility of quick introduction of the euro in Estonia, all rating agencies attributed a positive outlook of the rating. By November 2008, Fitch, Standard & Poor's as well as Moody's had lowered the rating outlook to negative (the latter on 7 November 2008) and on 3 October 2008 Fitch lowered Estonia's long-term foreign currency liabilities rating from level A to level A-.

Estonia's economic environment is still viewed as positive in the longer perspective. Things noted are strong institutions, flexible economy (including the labour market), conservative fiscal policy supporting the currency board system, relatively efficient public sector and rapid real convergence. Risks are seen mainly in external imbalances and macroeconomic volatility. Estonia's net external indebtedness is very high (approximately 36% of GDP in the first half of 2008) compared to countries with A rating and the current account deficit is remarkable.

Fitch considers the negative economic growth in the first half of 2008 a "hard landing" and the risk of economic recession in Europe inhibits strong positive developments driven by external demand in the near future. The rapid decline in domestic demand fortunately reduces price pressures as well as the current account deficit quickly.

The negative outlook is explained by a possible unemployment growth due to the economic recession, which would endanger households' loan-servicing ability. Support measures offered by

Sweden to its banks still seem to play an important role in ensuring the stability of the financial sector and should help to ensure the stability of financing their subsidiaries also in Estonia.

Rating downgrades in the future may arise from currency devaluation (which is not considered likely by any rating agency), problems with financing the current account deficit and a decline in the quality of financial intermediaries' assets due to a longer economic downturn. Accession to the euro area is not considered likely before 2012 and this has already been taken into account in the rating outlook.

The last to lower Estonia's bonds rating (A1) outlook was Moody's. It is viewed as problematic that problems in the Estonian economy started to appear before the deepening of the international liquidity crisis in September 2008, which can, in turn, aggravate the recession. However, an abrupt decline in foreign capital inflow and a balance of payments crisis are not expected. The very low level of government debt and considerable assets, are the positive observations that are brought out. Strong connections with other Baltic economies are seen as a threat and the continuous global liquidity crisis and the worsening economic situation of the Baltic States in general may result in lowering the rating to level A2.

According to the Heritage Foundation's **Economic Freedom** Report 2008, Estonia holds the fifth rank among the Member States of the European Union (EU27) and the 12th rank among all states. Estonia ranks twelfth according to the data of 2006 in the Index of Economic Freedom 2008 of the Fraser Institute. Estonia's position in that index has remained stable over the past three years. Estonia is blamed mainly for the formal rigidity of the labour market.

Estonia has received high marks in **competitiveness** indices as well. According to *World Competitiveness Yearbook 2008* of the IMD², Estonia held 23rd place among 55 countries and regions as regards competitiveness. 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 2003–2007 the average economic growth of Estonia has been one of the highest in the EU (8.0%), which was outpaced only by Latvia and Lithuania. 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.

In the previous five years through 2003-2007 Estonia has managed to increase its relative wealth position in the EU the most compared to other Eastern European countries. In those five years the level of output adjusted with Estonian purchase power increased from 50% to 71% of the EU27 average. In 2007 the per capita output not adjusted with the purchase power was still only 46% of the EU27 average. As of 2007 the Estonian price level amounts to 71% of the EU27 average.

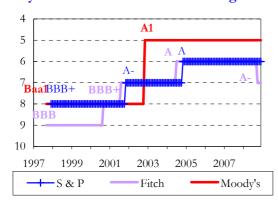
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<sup>&</sup>lt;sup>2</sup> Institute for Management Development

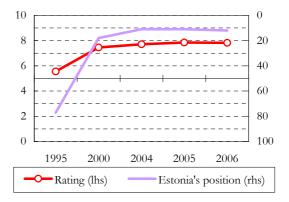
Figure 3

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

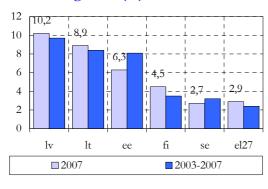
#### A. Dynamics of Estonia's credit ratings



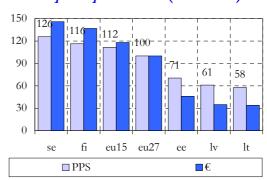
#### B. Economic freedom index (Fraser Inst.)



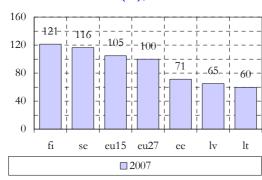
#### C. Economic growth (%)



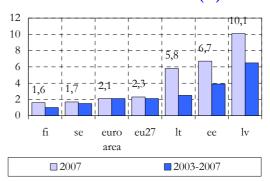
#### D. GDP per capita in 2007 (PPS and €)



#### E. Price level in 2006 (%), EU27=100



#### F. HICP in 2007 and 2003–2007 (%)



Sources: Statistical Office of Estonia, Eurostat, Standard & Poor's, Fitch Ratings, Moody's, Fraser Institute.

#### 2.2. Economic forecast

#### 2.2.1. Macroeconomic forecast for 2008–2012

The global economy is decelerating in 2008 and 2009 due to lower economic activity in the world. The highest risks endangering the growth of the world economy is the exceptionally uncertain economic situation which is pressurised by the deepening and broadening of the financial crisis. The expected global slowdown should ease price pressures in commodity markets and as a result inflationary pressures are abating. In 2010 economic growth is expected to accelerate as financial markets stabilise, confidence and trade recovers. Economic growth in the European Union will also moderate considerably in the worsened economic environment. Gradual recovery of economic growth is forecasted from 2010 in most of the Member States. The negative risks from the financial crisis are stronger in those Member States where the economic growth of recent years was accompanied by a strong credit expansion. The growth of Estonian trade partners in coming years will slow down considerably. The main contributors to external demand in 2009 are Russia and Finland, in 2010 Sweden will be added.

The **GDP** growth of Estonia slowed down to 6.3% in 2007. It was mostly based on domestic demand. The annual growth of domestic demand dropped by 6.5 percentage points to 7.5% compared to 2006. The slowdown of the growth of investments and private consumption was behind it. The share of domestic demand remained at the same level than a year before, constituting 110.3% of GDP in 2007. Growth of exports halted, growth of imports slowed down and negative contribution of net exports to GDP growth decreased significantly (to -3.9%).

According to the forecast, Estonian **economic growth** will be negative during 2008-2009. This is the result of declining domestic demand: -4.6% in 2008 and -5.3% in 2009. Falling domestic demand will lower the import volumes, resulting in the positive contribution of net exports to GDP during 2008-2009.

In 2010, recovery in output growth can be expected. Since export growth will accelerate in line with the economic growth of main export partners turning to positive side. Recovery will be supported by the domestic demand also while confidence starts to increase, supported by the positive signals coming from export markets. During 2011-2012 economic growth will accelerate. The contribution of domestic demand to economic growth will increase, coming from higher growth rates of private consumption, investments and government final consumption expenditures. The growth of exports will continue and its growth rate will be higher compared to GDP growth. The growth of imports will accelerate during 2011-2012 in line with the developments of internal demand, but will be somewhat lower than exports growth rate.

The developments of manufacturing will hinder weakening domestic demand, cooling export markets and growing production costs during 2008-2009, resulting in some loss of competitiveness. The growth of manufacturing will be affected mostly by the decline of production of industrial sectors oriented to serving domestic market and the decline of profits. During 2010-2012 manufacturing will grow in a higher pace than the average of the economy. This will be supported both by the exporting sector and higher demand of domestic market. The growth of value added will ensure the reorientation towards higher value added and less labour-intensive industrial sectors, introducing new technologies and the automation of the production processes. The service sector will decline during 2008-2009, affected by the contraction of consumption and investment activity. Among sectors, stronger decline of value added can be expected in domestic trade, financial

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<sup>&</sup>lt;sup>3</sup> On 8 September 2008, The Statistical Office of Estonia published the time series of GDP and its components in constant prices according to a new methodology (chain linking approach).

intermediation, construction and real estate activities. In 2010 the recovery of the growth of services sector can be expected. This is in line with more intense domestic demand and stronger growth of services exports.

Private consumption growth was the highest in the first quarter of 2007. Due to high propensity to consume and active borrowing, consumption expenditure rose in par with wage income (22%) and real consumption growth was 14%. Nominal wage bill growth stayed at the same level until Q1 of 2008, but consumption expenditure growth declined to 10% during that period, and 11% inflation made real growth nonexistent. Yearly wage growth started to decline in Q2 of 2008 and the net nominal wage bill will be smaller in 2009 than 2008. The aggregate disposable income of households will grow slightly on account of robust pension growth.

Consumer sentiment indexes started to decline in spring 2007 and the global financial crisis has intensified the trend. Due to still high wage growth and stable employment, people assess their current financial position as "very good". On the other hand, deteriorating future prospects will probably induce even more conservative consumer behaviour in the future.

The prices and number of contracts on the real estate market are still declining and this trend is not expected to turn in 2009. In addition, it is significantly harder and more expensive to get housing loans from the banks, so declining base interest rates and EURIBOR may not stimulate demand for loans as expected. Commercial banks have declared, that the loan stock will be increased only on account of domestic savings and no foreign resources will be involved. Interest payments of households will probably surpass significantly the possible growth of loan stock in 2009.

Propensity to consume will stay low during the next years due to negative future prospects, rising unemployment and declining housing wealth. Private consumption will decline 2% in 2008 and 2.4% in 2009 according to the forecast. By the end of the forecast horizon, private consumption growth should recover to 5%.

The share of **gross fixed capital formation** rose to 34% in 2006, due to contributions from all sectors. Households' investments decreased significantly in the second half of 2007, as the real estate boom ended and a declining trend of real estate investments started.

We expect investments to decline in 2008 by 6% and in 2009 by 13%, due to both demand and supply side factors. Households have postponed their investment decisions due to declining real estate prices and rising interest rates (especially risk margins). In addition, lending practices of commercial banks have become more and more conservative. The stock of loans has been decreasing in construction, sales, transportation and manufacturing during recent months. Decreasing corporate profits in conjunction with cautious credit policies by banks are limiting investment possibilities of corporations. The contribution of the public sector to investments growth has been significant during the recent years and it will be positive, although small, also in 2008 and 2009. The investments of households and corporations will decline as the economic sentiment worsens and credit is constrained in 2008 and 2009. Some growth can bee expected in 2010, if the external economic climate is supportive

Although in the second half of the 2008 export volumes of goods and services will increase due to base effect (exports of mineral fuels decreased markedly since summer 2007), the exports for the whole 2008 will decrease by 1.1% in constant prices. In near-time, the cool-down of the global economic environment will worsen the outlook of the main export markets, constraining the development of the industrial sector. Besides, in terms of weak domestic demand, companies are forced to concentrate more into foreign markets, which is also supported by the preference of financing of the commercial banks. Taking into account the flexibility of the companies, their relatively good reorientation capacity and the gradual recovery of the import demand of our trading partners, better growth rates of the exports can be expected from 2010. Due to the weak economic climate the volumes of imports of goods and services are modest in 2008-2009. Afterwards in the growth cycle of the economy and the expansion of exports, growth rates of imports will start to

recover also. Mostly through the decrease of the foreign trade deficit the current account deficit will shrink considerably. Owing to unfavourable economic situation, the income on direct investments of the foreign investors in Estonia will start to decrease from the second half of 2008, supporting the improvement of external balance (via smaller deficit of income account). During 2008-2009 higher amounts of transfers of European Union will increase the surplus of current transfers.

Headline inflation (HICP) accelerates to 10.6% in 2008, then slowing down to 4.2% in 2009 and to 2.8% in 2010. Inflation peaked in summer 2008 and due to favourable developments of crude oil and food prices in world markets the increase of consumer prices will slow down significantly in Q4 2008. Decline in domestic demand and the slowdown of wage growth to the lowest level of the decade will decelerate the increase of the prices of services and industrial goods in 2009. While the confidence of the consumers has worsened and price sensitivity has increased, purchases will be made more carefully. Therefore for staying competitive, the companies will have to correct the prices of goods and services. For comparison, during last couple of years the price mark-ups of the food and industrial goods have risen. Thus in terms of declining demand there should be some space for cutting the margins. Measures in the state budget for increasing the revenues of the fiscal year 2009 like higher state duties and rising the reduced VAT rate for goods and services will rise the inflation by 0.34% in 2009.

Due to the fall of the crude oil prices the contribution of the energy prices to inflation will decrease in coming years. Motor fuel prices will drop and the increase of heating energy prices will slow down. Because of the considerable price increases of heating energy in the end of 2008, it will have an impact on the consumer prices of 2009 as well. In addition to the receding impact of foreign factors (energy and food), also the impact of the excise duty increases will diminish next year. Considering also the slowdown of core inflation due to weak domestic demand, headline inflation will decelerate significantly in 2009-2010. Thereupon a recovery of the economy can be expected and the developments of productivity and wage growth will be in line, therefore the impact of domestic factors on the inflation will be small and the headline inflation will stabilise around 3%.

In the context of slower economic growth and decreased demand for labour, the number of employed is expected to decrease continuously in 2008-2010 by about 28 thousand people. Employment decreases mainly in the domestic demand oriented branches and therefore labour hiring in the open sector becomes easier on the account of released labour and thereby it allows coping with the surrounding changes better. The number of employed persons in the recent months has increased in export-oriented sectors where the labour hiring has become easier on the account of released labour. The decrease of the population of the working age due to sharp decrease of birth rate from the beginning of 1990s will have a growing impact – from the 2007 level of 1,046,000 it should decrease by the end of the forecast period by 27,000 people. In the following years the unemployment will increase considerably due to the lower economic activity and decreased demand for labour. In 2008 the unemployment rate will increase to 5.3% and in 2009 to 8.6%, by the end of the forecast period the unemployment rate reaches 8.8%.

Due to the deceleration of profitability of companies the nominal growth of wages is expected to decrease considerably since enterprises are not able to go on increasing salaries at earlier assumed rate in the modest economic activity. The decline of wage growth is also influenced by decreased demand for labour and recent high real growth of wages that exceeded the labour productivity growth. As a result in 2008 the nominal growth of wages is expected to decrease to 14.8% and in 2009 to 4.1%. The growth of wages will start to accelerate from 2010 in accordance with the recovery of economic growth and stays nearby 8% in the end of forecast period (years 2011-2012). The real growth of wages will also start to accelerate from 2010 and stays nearby 5% in the end of the forecast period due to deceleration of inflation.

Table 1

#### GDP forecast for 2007-2012

	2007	2007	2008*	2009*	2010*	2011*	2012*
	billion EEK	%	%	%	%	%	%
1. Real GDP	163 578,1	6,3	-2,2	-3,5	2,6	4,8	5,0
2. Nominal GDP	238 928,9	16,5	6,3	0,8	5,6	8,3	8,6
Sources of growth							
3. Private consumption expenditure							
(incl. non-profit organisations)	100 833,4	7,8	-2,0	-2,4	2,0	5,0	5,4
4. Government final cons. expenditure	21 861,0	3,9	2,5	-2,2	1,3	1,4	2,2
5. Gross fixed capital formation	57 749,3	4,8	-6,4	-12,9	5,1	4,8	4,9
6. Changes in inventories (% of GDP)		5,4	3,4	3,4	3,5	3,6	3,5
7. Exports of goods and services	134 159,4	0,0	-1,2	0,0	3,1	5,7	5,8
8. Imports of goods and services	175 276,1	4,2	-5,7	-2,8	3,2	5,0	5,3
Contribution to GDP growth 1)							
9. Domestic demand (excl. inventories)		6,6	-2,7	-5,3	2,7	4,3	4,7
10. Change in inventories		1,7	-2,3	-0,3	0,1	0,2	0,2
11. External balance of goods and							
services		-3,9	4,0	2,2	-0,2	0,3	0,2
Growth of value added							
12. Primary sector		-10,4	1,3	-1,8	1,5	2,2	2,2
13. Industry		8,0	-1,4	-1,7	3,0	5,0	5,2
14. Construction		10,0	0,2	-12,6	2,8	4,8	5,0
15. Other services		6,2	-2,0	-3,3	2,4	4,8	5,1

<sup>1)</sup> 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). Sources: Ministry of Finance of Estonia, Statistical Office of Estonia.

#### Table 2

#### Price forecast for 2007-2012

(percentage)

	2007	2007	2008*	2009*	2010*	2011*	2012*
	2000=100	%	%	%	%	%	%
1. GDP deflator	146,1	9,6	8,8	4,4	3,0	3,3	3,4
2. Private consumption deflator	130,7	7,8	10,2	4,2	2,8	3,0	3,2
3. Harmonised index of consumer							
prices	124,3	6,7	10,6	4,2	2,8	3,0	3,2
3a. Consumer price index	124,3	6,6	10,4	4,1	2,8	3,0	3,2
4. Public consumption deflator	188,3	17,0	13,4	4,6	2,9	5,4	5,9
5. Investment deflator	134,3	6,5	-0,6	0,5	1,7	2,4	2,3
6. Export price deflator	132,5	7,1	7,2	2,9	2,9	3,0	3,0
7. Import price deflator	116,2	3,1	6,3	2,7	2,6	2,9	2,9

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

Table 3
Labour market forecast for 2007–2012 (15–74-year old persons)

	2007	2007	2008*	2009*	2010*	2011*	2012*
	Level	%	%	%	%	%	%
1. Employment, persons	655,4 <sup>1)</sup>	1,4	-0,3	-3,4	-0,7	0,2	0,0
3. Employment rate (%)		4,7	5,3	8,6	9,3	9,0	8,8
4. Labour productivity, persons	249,6	4,9	-2,0	-0,2	3,3	4,6	5,0
6. Compensation of employees	116 935 <sup>2)</sup>	25,8	14,1	1,6	4,6	8,4	8,5
7. Compensation per employee (6./1.)	178,4 <sup>3)</sup>	24,1	14,4	5,1	5,3	8,2	8,5

- 1) Thousand persons.
- 2) Billion EEK.
- 3) Thousand EEK

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

#### Table 4

#### Balance of payments forecast for 2007-2012

(%of GDP)

	2007	2008*	2009*	2010*	2011*	2012*
1. Net lending/borrowing vis-à-vis the rest of the world	-16,9	-10,5	-5,1	-5,0	-4,7	-4,7
Of which:	,	,	,	,	,	,
- Balance of goods and services	-11,3	-6,1	-3,7	-3,5	-3,0	-2,6
- Balance of primary incomes and transfers	-6,8	-6,1	-3,5	-3,7	-3,9	-4,2
- Capital account	1,1	1,6	2,1	2,2	2,2	2,1
1a. Current account	-18,1	-12,1	-7,2	-7,1	-6,9	-6,7
4. Statistical discrepancy	0,7	0,4				

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

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

Changes in the economic environment in the recent months have been very fast. Therefore in this Convergence Programme the European Commission's common external assumptions are not taken for the basis of this forecast. The common assumptions published by the Commission turned out to be somewhat outdated by the moment of fixing the assumptions of Ministry of Finance. The most important change was expecting more negative outlook for global economic growth in the end of 2008 and 2009 and partly due to that lower level of energy prices. All this refers to exceptionally uncertain situation what is inevitably included in the present forecast. If based on Commission's common assumptions, Estonian economic growth outlook in coming years would have been more positive, more exact information about this scenario is in chapter 4.1.

The average weighed growth of Estonia's trade partners and the European Union as the main trading partner of Estonia growth will moderate noticeably in 2008 and 2009. Short-term interest rates move on the downward trend as European Central Bank wants to support economic environment and decrease liquidity problems by loosening monetary policy already in the end of this year. Monetary policy will be tightened once again in 2010 when the economic cycle is expected to turn to ascending phase again. The euro exchange rate against the US dollar stays close to the recent average of this year. In 2009 the euro strengthens again and remains around the 2006-2007

year level until the end of the forecast period. It is expected that oil prices will decrease in 2009 but after the recovery of demand the oil prices will increase again and amount to 85 dollars per barrel by the end of the forecast period.

Table 5

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

(percentage)

		Ministry of Finance autumn 2008							Commission autumn 2008		
	2006	2007	2008	2009	2010	2011	2012	2008	2009	2010	
1. Euribor, 3-month (annual average)	3,1	4,3	4,6	3,2	3,5	4,0	4,0	4,6	3,5	4,1	
2. Long-term interest rate of the euro area (annual average)	3,8	4,1	4,1	4,0	4,1	4,1	4,1	4,1	4,0	4,1	
3. USD/EUR exchange rate (annual average)	0,80	0,73	0,68	0,77	0,77	0,77	0,77	0,68	0,74	0,74	
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	4,3	2,5	3,5	4,3	4,3	4,3	2,9	3,8	
6. World growth of imports (excloding EU27)	3,1	2,9	1,4	-0,2	1,0	1,8	1,8	1,4	0,2	1,1	
7. EU27 GDP growth	4,2	4,1	1,6	-0,1	1,0	2,5	2,5	1,8	0,5	1,5	
8. Growth of export markets of Estonia	8,6	7,2	5,2	3,0	4,3	5,3	5,3	6,0	3,1	4,7	
9. Oil price (Brent, USD/barrel)	65,2	72,4	99,5	65,0	75,0	80,0	85,0	104	85,7	90,4	

Sources: Ministry of Finance of Estonia, European Commission.

Analysts have lowered their expectations for the economic growth in 2008. The analysts expect a slowdown of Estonian economic growth in 2008, mainly due to deceleration of domestic demand growth. Economic growth turned to negative side in 2008 mainly due to correction in the real estate market and decreased consumption activity. This appears in decreased growth rates in real estate activity, transport, storage, financial intermediation, construction and domestic trade. In addition economic growth is affected by the transport sector where the growth slowdown is conditioned by considerable lessening of the Russian transit. Due to decreased domestic and external demand the growth of manufacturing sector will also slow down in domestic oriented branches as well as in exporting manufacturing and mainly in cheap labour costs based branches of industry. Global financial crisis has made the situation worse which therefore intensifies the decline and pushes the turning point of the economic cycle to more distant future.

If a half year ago most of the forecasts expected economic growth to turn positive in 2009, then after the publication of flash estimated economic growth of the second quarter of 2008 and due to the signals coming from the financial markets, the economic growth recovery perspectives have worsened considerably. The absorption of the economic downturn in the third quarter of 2008 has not reflected in different institution's economic forecasts. The growth of Estonian product's target market will be substantially worse compared with the prior and therefore the export growth will not have great support on the recovery of economic growth. In addition the recovery of domestic demand is constrained by the pro-cyclical influence of financial sector.

Forecasting of the turning points of economic cycle is complicated and therefore the bottom of the Estonian economic cycle and the following recovery growth rate may turn out different from the

expected one. In addition the developments in the global economy are related with substantial uncertainties which are increased by the possible policy measures which are applicable by the governments.

#### Table 6

#### Comparison of economic forecasts

	Real GDP growth, %			Nominal GDP growth, %				
	2008	2009	2010	2008	2009	2010		
Ministry of Finance of Estonia	-2,2	-3,5	2,6	6,3	0,8	5,6		
European Commission	-1,3	-1,2	2,0	7,8	4,0	5,4		
IMF	-1,5	0,5	5,2	_	_	_		
OECD	-1,9	-2,0	2,9	_	_	_		
Bank of Estonia	-1,8	-2,1	3,0	7,1	3,8	6,2		
Estonian Institute of Economic Research	0,0	-		11,0	-	-		
SEB	-2,0	-4,0	-1,0	_	_	_		
Hansabank Markets	-1,9	-2,3	2,0	10,0	2,4	5,8		

	Consumer price index, %			Current account, % of GDP				
	2008	2009	2010	2008	2009	2010		
Ministry of Finance of Estonia	10,4 (10,6*)	4,1 (4,2*)	2,8 (2,8*)	-12,1 (-10,5**)	-7,2 (-5,1**)	-7,1 (-5,0**)		
European Commission	10,6*	4,9*	3,3*	-12,1 (-10,8**)	-8,1 (-6,6**)	-6,5 (-4,8**)		
IMF	10,2	5,1	2,9	-10,8	-8,7	-9,3		
OECD	10,7*	5,1*	3,2*	_	_	_		
Bank of Estonia	10,7*	4,8*	2,8*	-11,1 (-9,1**)	-6,5 (-4,8**)	-7,1 (-4,0**)		
Estonian Institute of Economic Research	9,8	-	_	-11,1	_	-		
SEB	10,5*	3,9*	1,9*	_	_	_		
Hansabank Markets	10,3 (10,5')	4,3 (4,5*)	2,8 (3,0*)	-9,5**	-5,0**	-4,5**		

<sup>\*</sup> Harmonised index of consumer prices.

Sources:

Ministry of Finance of Estonia.

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

#### 2.3. Macroeconomic policy

#### 2.3.1. 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 fiscal policy in order to ensure the maintenance of macroeconomic stability and thereby support the steady and considerable 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 fiscal 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 the 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 at the long-term average level. But after accession to the European Union, there was an intensive financial integration, interest rates decreased and loan repayment periods extended. In addition, the labour market opened up. Due to the timing of these effects, short-term imbalances occurred that were expressed as a current account deficit increase, an increase in wages and salaries not in line with productivity, as well as accelerated 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 business cycle. The short-term nature of the imbalances is confirmed by the developments of last year and this year, where we can see the adjustment of economy and moderation of imbalances. The moderation of imbalances has in some cases been faster than expected.

Fiscal policy is the main measure for influencing the economy and restraining the risks threatening balanced economic development. And Estonia has used it actively – in the growth phase of the business cycle, 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. The state budget of 2008 was for the first time compiled with a 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 of 2007 was on the level of 2.7% of GDP due to higher than expected tax revenues. The government presented the state budget of 2009 to the parliament in accordance with the summer forecast of the Ministry of Finance in balance. Slowdown of economic growth has its impact also on the fiscal outlook, which is why the Ministry of Finance expects budget deficit in 2008–2010. The deficit will amount to 1.9, 1.7% and 1.0% of GDP respectively.

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

- O At the end of 2004, the households eligible to KredEx housing loan guarantees was limited, and the maximum loan guarantee limit was reduced by a quarter, from 400,000 kroons to 300,000 kroons.
- O Since 2005, the government reduced the maximum rate of housing loan interests, training costs, and presents, donations, 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 restrict consumption and loan growth.

- Eesti Pank 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 September 2006, in order to ensure the availability of the required liquidity buffers in banks in the environment of robust credit growth. In comparison: the minimum reserve requirement in the euro system is 2%.
- O At the end of 2005 Eesti Pank decided to make stricter the housing loan regulations for commercial banks as of 1 March 2006:
  - The risk weighting of housing loans were increased from 50% to 100% in the capital adequacy calculation, i.e. banks will have to increase the share of their own capital 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 were 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 loans at the issue than established by Eesti Pank when calculating the capital adequacy ratio.

In many analyses, including different economic freedom indices and competitiveness indices, the rigidity of the labour market is marked as a main shortcoming of Estonia. However, at least at the national level, the Estonian labour market is considered relatively flexible since wage formation and entering into contracts of employment are decentralised and the movement of labour between sectors has been high at least in the upward phase of the business cycle. The Estonian labour market is classified as rigid due to the out-of-date legislation that does not take into account the changed employment relationships. There are not many collective agreements between trade unions and employers either, which enable greater flexibility in employment relationships. To enhance labour market flexibility, it has been decided to amend the Employment Contracts Act.

The real estate market has significantly cooled down and price increase has stopped *inter alia* as a consequence of such economic policy by the government and Eesti Pank (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 a problem in 2007 was inflation, where due to domestic pressures there has been a considerable acceleration of the core inflation; however, in line with the decline in domestic demand, the core inflation has also started a downward trend in 2008. 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 in 2010-2011 has improved and the introduction of the euro in the coming years is therefore more likely.

Table 7
Policy commitments undertaken in ERM II entry communiqué

Policy area	Commitment	Implementation
Preserving macroeconomic stability	Continue with sound fiscal policies	General government budget has restrained domestic demand and general government has been in surplus up to 2007.
	Contain domestic credit growth and ensure effective financial supervision	Several measures have been taken in order to limit credit growth.
Reducing the external imbalance	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, incl introducing new Labour Law

Sources:

Ministry of Finance of Estonia.

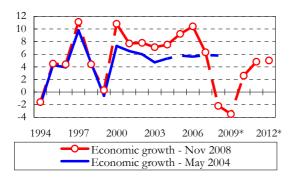
Action Plan for Growth and Jobs 2008-2011 for the implementation of the Lisbon Strategy [http://www.riigikantselei.ee/failid/2008\_12\_15\_Estonian\_Action\_Plan\_2008\_2011\_EN\_final\_kujundatud2.pdf].

#### Figure 4

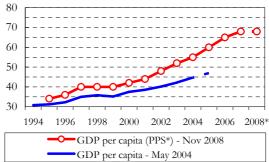
# Economic Developments in the Ministry of Finance Forecasts when joining ERM II and in CP update 2008

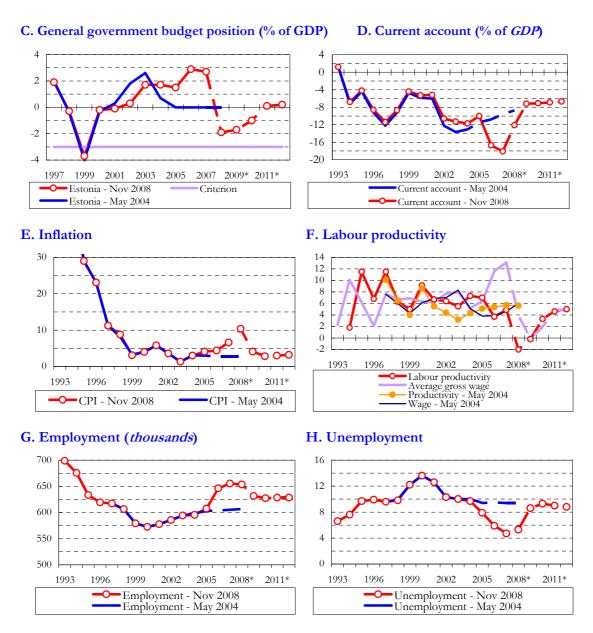
(percentage)

#### A. Economic growth



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





Labour productivity – GDP per person employed.

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

#### 2.3.2. 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. The economic slowdown that started in 2007 indicates clearly that the development phase of rapid above-potential growth rates has ended in the Estonian economy and adjustment towards a more sustainable GDP level is taking place. Loan growth and activity of the real estate market causing the overly fast growth have retreated, which is quickly reducing the imbalances and risks occurred in the economy.

Inflation rate is according to ecpecations decreasing quickly and this will improve Estonia's opportunities to meet the Maastricht price stability criterion in 2010-2011; this is currently the only criterion that prevents the adoption of euro. In relation to the expected slowdown in inflation, the government has paid more attention to the **rapid introduction of the euro**, but given the future

<sup>\*</sup> PPS –purchasing power standard.

uncertainty, meeting all of the Maastricht criteria will be a challenge. The adoption of the euro will increase the credibility of the Estonian economy as it eliminates theoretical speculations about the devaluation of the kroon. Membership of the Monetary Union will also reduce the vulnerability of the economy to external shocks and enables to have a say in the shaping of the euro area monetary policy. The latter is especially important, since pursuant to the currency board arrangement the exchange rate of the kroon is fixed to the euro and Estonia is basically unable to implement active monetary policy by changing the interest rates; instead, Estonia is influenced by the monetary policy decisions of the euro area.

The highest risks in the Estonian economy are still related to the fact that wage growth exceeds productivity growth. The current account deficit and inflation that have so far caused concerns are now, in line with the slowing domestic demand, showing signs of decline.

The combination of quick increase in wages and employment and low interest rates increased households' creditworthiness, which was supported by the rapid growth of demand driven by overall optimism and resulted in the occurrence of supply-side restrictions. By now, credit opportunities have narrowed significantly – increased level of euro area interest rates and stricter credit conditions of banks together with the general decrease of optimism have reduced borrowing activity.

As for the current account deficit it should be noted that its reason does not lie in the weakening of the competitiveness of the Estonian enterprises in foreign markets4 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. Reinvested 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. This 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 level5; 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. At the same time, the developments of the first half of 2008 have shown that the decrease in domestic demand has an essential impact on the trade balance deficit and has caused the improvement of the trade balance to -3.4% of GDP (for more information about the current account and its financing, see Box 3).

It is also important to observe inflation developments to avoid a fast rise in prices. This year, the demand-driven price pressures have declined together with the decreasing domestic demand, and high inflation is caused by high commodity prices in the world market as well as by the indirect tax increases on 1 January and 1 July 2008. In recent years the inflation of durable goods has been basically on the average EU level. In the context of general convergence of the Estonian economy with the European Union, the price level in the non-tradable sector is also converging. Therefore, the current level of inflation does not threaten the Estonian economy.

<sup>4</sup> See also for example the final statement of the IMF's Article IV consultations 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).

<sup>&</sup>lt;sup>5</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.

#### Ensuring a stable and flexible economic environment

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 demand is lower. For that purpose, it is necessary to do both improve the business environment and raise the flexibility of the 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 addition, in the changed economic situation, a new challenge for the coming years is the state support for the restructuring of enterprises. The current situation in the financial market is intensifying pessimism in respect of investment financing, for the reaction of commercial banks to the financial market uncertainty has not given reasons to hope for the foreign credit inflow to continue, and crediting can rely mainly on domestic resources through the growth of deposits and loan amortisation payments. In the upward phase of the business cycle, the customer-related risks were underestimated in the context of overall optimism and now risks are being reassessed. Therefore, banks set stricter limits on issuing credit, which amplifies the effects of the whole business cycle.

In this context it is understandable that the restructuring of enterprises may not get enough support from the financial sector and there might be a need for the state to intervene. The state can contribute primarily through a more efficient implementation of the EU funds.

#### Increasing labour market flexibility

When taking into account the experience of the best-performing EU Member States, there is room for increasing the employment rate at the expense of inactivity in order to increase the flexibility of the labour market and make better use of Estonia's current human capital. This requires increased supply of active labour market measures based on people's individual needs, which would enable the unemployed and inactive to be competitive in the labour market via continuous development of their qualifications, as well as even greater contribution to the integral development of the skills of the labour force through a well-functioning and quickly adapting education system and life-long learning. 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 retirement age). Therefore, this year and also in the following years the government will pay 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 relationships, with regard to which a draft of the new Employment Contracts Act is under hearing in the Riigikogu.

The Ministry of Social Affairs introduced the draft of the new Employment Contracts Act on 10 January. The draft was approved by the social partners in April and by the government in June and passed the first reading in the Riigikogu in October. According to expectations, the new Employment Contracts Act will enter into force in 2010, although discussions are held for an earlier enforcement already on 1 July 2009 so that it would support the adjustment of the labour market during the economic downturn.

The draft of the Employment Contracts Act is aimed at laying down a framework governing employment relationships (entry into employment contract, amendment and termination of employment contract, the rights and duties of parties); the draft updates labour law and makes it more flexible. The current Republic of Estonia Employment Contracts Act originates from 1992

and requires essential amendments and supplementary provisions, as it does not satisfy the needs of the modern labour market. The overriding principle of the Employment Contracts Act draft is secure flexibility for both the employee and the employer. The aim of the Act is to govern the relations between employers and employees, ensuring employees sufficient security proceeding from the values of the welfare state, enabling entrepreneurs to realise their constitutional right of commercial freedom and contributing to the growth of Estonia's economic competitiveness.

The new Employment Contracts Act entails changes for both employers and employees. One significant change is the compensation paid by the employer to employees upon lay-off, which is reduced to compensation equal to one month's wages. If the employment relationship has lasted 5-10 years, the Unemployment Insurance Fund will pay additional compensation equal to one month's wages and in the case of employment relationship over 10 years, it will pay compensation equal to two months' wages. In addition, the advantage notice time in the case of lay-off will be reduced from the current 2-4 months to 15-90 days. The draft provides also an opportunity for the employer to temporarily diminish employee's wages if it is not possible for the employer - due to objective economic reasons outside his/her control - to provide the employee with work in the agreed volume. Under the current legislation, it is possible to apply part-time working time or grant holidays with partial pay upon temporary decrease in work volume or orders. In addition to the above, the requirement to submit internal work procedure rules to the labour inspector for approval as well as the requirement to maintain employment record books and personnel files will be removed. The draft extends also opportunities for entering into fixed-term employment contract. The security of employees is raised by the increase in the unemployment insurance benefit rate and the extension of insurance cover. The unemployment insurance benefit is raised as follows: for the first hundred days of unemployment from the current 50% to 70% and for the next 101-360 days from the current 40% to 50% of the employee's average wages of the last 12 months. The unemployment allowance rate will also be raised and thus the minimum unemployment allowance rate will be 50% of minimum wage starting from 2010.

In order to improve the administrative performance of the institutions providing labour market measures, the agreement concluded with social partners in the framework of the Employment Contracts Act draft foresees the merger of the Labour Market Board and the Estonian Unemployment Insurance Fund, in the result of which integration of labour market services and supports will be ensured better; better control will be enabled and prerequisites for the increase in administrative performance will be created.

The Employment Contracts Act draft will change the procedure for granting study leave set out in the Adult Education Act. The draft will simplify the granting of study leave and maintains the employee's average wages for a longer period while on study leave. Study leave for acquiring formal education within the adult education system will be granted despite the form of study and study load. Employees will be entitled to claim altogether 30 days of study leave within a calendar year. Employee's average wages will be maintained for 20 calendar days, provided that study leave is taken for the purpose of acquiring formal education within the adult education system or vocational training. The rest 10 days is unpaid leave. For the completion of formal education acquired within the adult education system, employees are entitled to additional 15 days of study leave, for which the minimum wage established by the Government of the Republic will be paid.

#### The role of fiscal policy in economy

In the case of the currency board system used in Estonia, fiscal policy is the main measure for influencing the economy and restraining the risks threatening balanced economic development. For supporting a stable economic environment, Estonia has planned state budgets so that the general government budget would be at least in balance.

The annual nominal balancing of the general government budget has worked relatively well for Estonia; the budgetary position has generally proven to be levelling the cycle. At this point, a

question may arise whether it is more expedient to balance the general government budget over the business cycle, i.e. to use the structural balance instead of the annual nominal balancing. The following factors support nominal balancing:

- O Uncertainty in the assessments of the potential GDP level and developments, which may lead to an incorrect assessment of the cyclically adjusted budgetary position:
  - the methodology for calculating GDP has been changed/improved quite often, which is why the output gap (difference between actual and potential GDP) has been revaluated and the assessment of the influence of the budgetary position in the business cycle has changed in hindsight,
  - it is difficult to distinguish between cyclical and structural developments in a rapidly changing environment,
  - arises a certain political risk inaccuracy in the assessments of potential growth may raise questions about the arbitrariness of the set deficit objective.
- o In the case of a small open economy, fiscal policy might not be effective enough because an important role in developments is played by conditions "imposed" by the external environment, such as interest rate, etc.
- O As for Estonia, due to the high volatility of economic indicators it is advisable to maintain strict fiscal policy in order to avoid exceeding the Maastricht deficit criterion (3% of GDP) in the case of unfavourable external developments.
- Markets would not initially favour deficit planning (when growth remains below the potential), which means that there is a risk that the effects from increasing fiscal demand will not exceed negative factors.

Regarding the use of the nominal balance objective, it should be taken into account that the efficiency of this option is related to its implementation – if the revenue is different from the planned one, automatic stabilisers should be allowed to work, and if there is additional revenue, spending this through supplementary budgets should be avoided.

The government has generally followed this path and, as a consequence of a more than expected positive economic development, since 2002, the budget of the Estonian general government has been in surplus instead of the planned balance. The stricter-than-planned budgetary position has inhibited the growth of domestic demand. The general government deficit of 2008 is expected to be around 1.9% of GDP, which will help to level the business cycle in its downward phase. According to current expectations, the trough of the economic decline will be in 2009; therefore, in the event of pro-cyclical fiscal policy, the nominal budgetary position of the general government should loosen even more. Yet due to the priority of the adoption of the euro and possible negative risks regarding future economic developments, it is necessary for the government to compile the budget for 2009 as pro-cyclical in order to rule out the possibilities for increasing the general government deficit above 3% of GDP.

Against the background of the global financial crisis, it is very difficult and in some cases almost impossible for governments to finance the deficit in the near future by borrowing from the market. Therefore, Estonia's position in the coming years in financing the possible fiscal deficit can be considered relatively good compared to other countries. The collection of the reserve of unexpected revenue accrued in the upward phase of the business cycle has been a justified decision and will help to cushion the fall in the years of crisis without increasing financial liabilities.

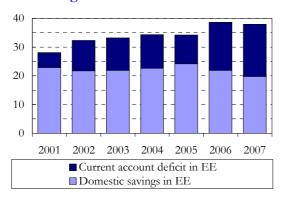
The Government and Bank of Estonia are constantly monitoring the situation and taking care to ensure macroeconomic stability. If necessary, additional measures will be taken.

Figure 5

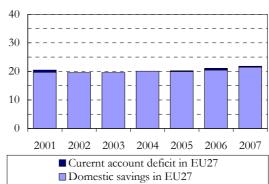
#### **Economic development indicators**

(%of GDP)

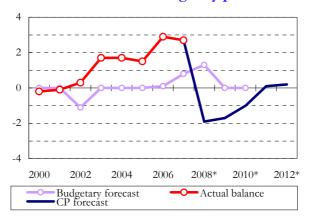
#### A. Financing of investments in Estonia



#### B. Financing of investments in EU



#### C. Planned and actual budgetary positions



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

#### Connection with the Action Plan for Growth and Jobs

The convergence programme and the Estonian Action Plan for Growth and Jobs 2008–2011 have been compiled based on the same objectives. The Action Plan for Growth and Jobs 2008–2011 is the central strategy of the Government of the Republic for increasing the competitiveness of the economy. The plan sets goals to increase the Estonian labour productivity to 80% of the European Union average, to increase research and development activities to 2% of GDP and the growth of the overall employment rate to 70.5%, the realisation of which should keep the pace of Estonia's convergence relatively high.

The Action Plan for Growth and Jobs lists the following key challenges facing the Estonian Government in ensuring continuous economic development:

- o to develop education based on the needs of enterprises, and modernise employment relations in order to increase safe flexibility of the labour market,
- o to increase the potential of research and development activities, and bring them closer to enterprise,
- o to develop the economic and investment environment that supports innovation and international competitiveness of enterprises,

o to move towards environmentally friendlier energy, and at the same time ensure the security of the energy supply and the competitiveness of the energy sector.

The Action Plan for Growth and Jobs stresses that the prerequisites for economic growth and competitiveness are a stable macroeconomic environment, conservative fiscal policy and the adoption of the euro.

For ensuring a stable macroeconomic environment, the action plan points out the following key measures:

- o preparing a state budget, which ensures budget balance for the general government, in 2008-2011,
- o reducing the debt burden of the central government.

Making necessary preparations for the adoption of the euro and considering the Maastricht criteria when creating government policies are also important.

For ensuring long-term sustainability of fiscal policy, the action plan lists the following key measures:

- o amending the health insurance benefits system and updating the incapacity benefits system towards greater own responsibility of employers and employees;
- o reducing the number of people receiving special pensions, and changing the conditions seeking to reduce the burden on the state budget in the long run;
- o amending the system of old-age pensions under favourable conditions and superannuated pensions seeking to reduce the burden on the state budget in the long run.

A longer list of measures is included in Appendix 3. A comprehensive overview of the measures of the Estonian Action Plan for Growth and Jobs 2008-2011 together with the budget forecast is available on the homepage of the State Chancellery.

The government approved the convergence programme two months after the approval of the Action Plan for Growth and Jobs (9 October 2008), which is why the economic forecast and several assessments concerning the macroeconomic environment differ between the two documents. However, government policies have not changed, which enables to confirm that the action plan and the convergence programme mentioned are in complete compliance as regards their content.

#### Box 3. Current account deficit and its financing

The robust development of domestic demand that had greatly relied on the remarkable inflow of cheap external funds led to the above-potential economic growth and increased external imbalances. The current account deficit peaked in 2007 at 18.1% of GDP (43.2 billion kroons) due to the accelerated imports of goods and increased income account deficit.

The profitability of foreign enterprises operating in Estonia is high; therefore, the developments of the income account are increasingly influencing the current account. In 2007 the negative balance of the income account amounted to 7.5% of GDP. It should be stressed that approximately 80% of the income earned on direct investment is reinvested7 into the Estonian economy and there is no real movement of money out of Estonia. Commercial banks stand out with high profitability of income on direct investment, and account for nearly a half of the retained profits of foreign-owned

<sup>&</sup>lt;sup>6</sup> In Estonian <a href="http://www.riigikantselei.ee/?id=5864">http://www.riigikantselei.ee/?id=73395</a>.

<sup>&</sup>lt;sup>7</sup> Re-invested profits are shown in the balance of payments through simultaneous double entries – in the current account as outflow of income and in the financial account as inflow of foreign direct investments.

enterprises. Other areas of activity where foreign capital is gaining good income are real estate, industry and trade.

2008 saw significant improvement in external balance: the weakness of domestic demand has considerably reduced the current account deficit, which declined to 10.0% of GDP in the second quarter. The last time the deficit was so low was 3 years ago. Taking into account the decline in investments and private consumption expenditures, and lower profitability of enterprises with foreign capital in 2009, the current account deficit will decrease even more. In the medium term, when the import demand of trading partners and the local economic activity have improved, the ratio of the current account deficit to GDP will stabilise at around 7%.

Since the boom period, the main financing resources of the current account deficit have been loans acquired by commercial banks from their parent banks in Scandinavia. Such resources were used for financing the high loan demand of the private sector. In 2008 the need for borrowing from parent banks has considerably decreased due to the weak economic environment. The share of foreign direct investments in financing the current account deficit has remained at around 30% in recent years.

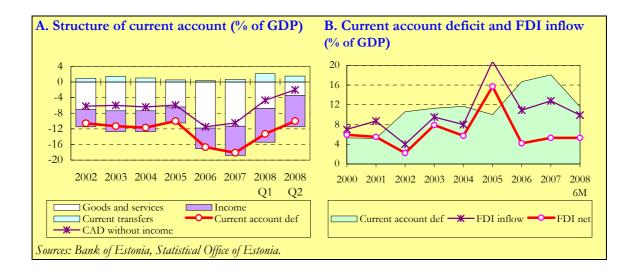
Therefore, through the declined import demand, the downward phase of the business cycle has brought about a significant decrease in the current account deficit. It also means a lower dependency on foreign loan capital and refers to a decrease in the vulnerability of the Estonian economy. **Due to the large foreign direct investments of the previous years,** in the context of which we are also among the most successful CEE countries, and their good profitability, the income account is becoming the major component causing the current account deficit. Considering also the decreasing trend of the goods and services account deficit, it means that, in reality, external financing requires involving less loan capital than it could be expected on the basis of the aggregate current account deficit.

According to Eesti Pank, the need for external financing has decreased substantially: while in 2007 it amounted to 12.1% of GDP, in the second quarter of 2008 it accounted for only 3.4% of GDP8. In the next years, its share in GDP will be even smaller. Therefore, despite the constrained access to foreign loans and the increased caution of foreign investors towards the CEE countries with large imbalances (high current account deficit and financing it with foreign loans, substantially increased debt burden of the private sector, high inflation, foreign capital outflow, weakening of the exchange rate), induced by the global financial crisis, it should not result in bigger shocks for the Estonian economy. Negative effects spill over into the real economy through the tightening of credit conditions (increase in interest margins, more constrained access to loans) and the somewhat worsening outlook of the exporting sector, which extends the duration of the decline phase of the business cycle.

In a situation, in which imbalances are decreasing, reserves of the general government with a low debt burden for coping with the economic recession are considerable, profitability of foreign investors is still good, banks are foreign-owned and well-capitalised, and the fixed exchange rate based on the currency board system is a cornerstone of the strong economic development, there is no reason for the foreign capital to leave and thereby the risk of a balance of payments crisis9 is marginal.

<sup>8</sup> Current account deficit in Estonia: how will it adjust in turbulent times? Eesti Pank. 31 October 2008. <a href="http://www.eestipank.info/pub/en/dokumendid/publikatsioonid/seeriad/paevakaja/">http://www.eestipank.info/pub/en/dokumendid/publikatsioonid/seeriad/paevakaja/</a> 20081031.pdf.

<sup>9</sup> A balance of payments crisis is a situation in which a country's foreign exchange reserves are rapidly decreasing, which is why the country is unable to service external liabilities or involve new foreign capital. Foreign investors withdraw the capital, which can be seen in the massive sale of the country's currency until the foreign exchange reserves of the central bank dry up. In order to balance the balance of payments, the country can turn to the International Monetary Fund for involving additional financial resources. Every member of the IMF has a quota, which determines the extent of the use of loan resources in the case of a balance of payments crisis.



#### 2.3.3. Measures for ensuring financial stability in Estonia

One of the main measures of the state for increasing the credibility of the Estonian banking market is raising the guarantee on bank deposits. This amendment was adopted by the Riigikogu on 23 October. It stipulates that the state guarantees the deposits of all private persons and SMEs held in banks registered in Estonia (i.e. excluding their branches) 100% in the extent of 50,000 euros. This amendment entered into force retroactively on 9 October.

Although contrary to many other countries, the Estonian financial sector has not faced liquidity or payment difficulties, and banks operating in Estonia are well-capitalised and, therefore, there is no actual need for taking particular stabilisation measures, Estonia should stand ready to react rapidly and sufficiently, whenever needed.

Similar to other countries, Estonia is able to give credit to local banks that face difficulties, acquire holdings in banks, provide a state guarantee or acquire bank bonds or problem assets according to the current legal framework.

At the cabinet meeting of the Government of the Republic on 30 October, additional measures the state could take in connection with the management of the financial crises were discussed. There it was decided to improve the ways for the state to give guarantees or loans quicker. The first set of amendments to relevant laws, which makes the management of financial crises by the state more flexible, is submitted to the government by the Ministry of Finance during November. The second set, meant for making the implementation of financial supervision in a crisis situation more operative and for specifying the rules according to which the deposit guarantee scheme will be launched, will be submitted to the government during February 2009.

The purpose of providing financial support by the state is, all in all, ensuring the stability of the financial system and preventing the transmission of risks to real economy.

Considering the high level of integration of the Nordic and Baltic banking sector, a common cooperation agreement of this region for the management of financial crises is under preparation. Within the framework of the common cooperation agreement, all ministries of finance, financial supervision authorities and central banks of the countries belonging to this region would cooperate. The future cooperation agreement, in turn, is based on the cross-EU cooperation agreement in relation to the management of financial crises concluded in spring 2008.

# 2.3.4. 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 been its member for at least two years.

Under the conditions of the fixed exchange rate based on the currency board system, Estonia has been *de facto* a member of the monetary union for over 16 years. Therefore, joining the euro area is a logical step for Estonian economy. Estonia differs from other countries belonging to the euro area by the existence of exchange rate and we have no right to participate in the shaping of the euro area monetary policy. During the entire period of the circulation of the kroon, Estonian economy has shown rapid development, proven its adaptability and overcome challenges. This shows that Estonia can successfully cope with problems also as a member of the euro area and is thus virtually ready to join the euro area.

On 7 May 2008, the European Central Bank and the European Commission published convergence reports that assess the readiness of non-euro area countries for the changeover to the euro. The assessment showed that Estonia fulfils all the nominal criteria for the adoption of the euro 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 the EU members. As a result of the implementation of conservative fiscal policy, we have a very small general government debt, one of the lowest among the EU Member States. In the downward phase of the business cycle, the general government takes the role of a stabiliser, which is why in the next years the budget will be in deficit, but it does not threaten the level of 3% as a ratio to GDP.
- The increase in commodity prices (food and fuel) in the world market and the raise of excise duties have caused a temporary divergence of the Estonian **inflation** from the reference value. However, along with the decrease in economic activity, since spring the core inflation has witnessed a clear downward trend, and in autumn, price increases caused by the external environment have started to moderate. Considering also the gradual fading out of the influence of raising indirect taxes from inflation at the beginning of 2009, in near future we will witness considerably lower inflation compared to 2008.
- Estonia does not have the right instrument for the evaluation of the convergence of interest rates according to strict rules and the interest indicator based on the interest rate of long-term kroon loans compiled in cooperation between the European Central Bank and Eesti Pank cannot be directly compared with that of other EU countries. Over the last four years Estonia's long-term interest rates<sup>10</sup> have been close to those of the euro area and below the reference value. Low interest rates show the credibility of Estonia's economic policy. The European Commission and the European Central Bank have in their convergence reports, referring to low kroon interest rates, a small government debt and a good budgetary position, expressed the opinion that Estonia will fulfil the interest criterion. An increase in uncertainty in global financial markets has changed investors' attitude towards the Baltic States. Since the Baltic States are viewed as a single region, increased concerns about the vulnerability of the economy to external environmental shocks, such as the preservation of the exchange rate, spread also into the interest rates of the Estonian kroon. Therefore, the interest indicator increased above the reference value in the middle of 2008, but this does not give enough reason for claiming that we will not fulfil the criterion. Yet taking into account the adjustment of the Estonian economy to a more feasible level of GDP, moderation of imbalances and considerable decrease in inflation from the beginning of 2009, the belief of market participants regarding economic

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<sup>&</sup>lt;sup>10</sup> Due to a very small government debt Estonia does not have the right instrument for the evaluation of the convergence of interest rates – a 10-year government bond issued in Estonian kroons. The interest indicator is based on the interest rates of the private sector kroon loans with the maturity of up to five years.

- competitiveness and the current macroeconomic policy will recur, which also means that the interest rates of kroon loans will decline.
- 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 exceeding the reference value the Estonian government was forced to postpone introduction of the euro, which was initially planned for 1st of January 2007. On 27th of April 2006 the government set 1st January 2008 as the new target date, but in the light of further developments regarding inflation, achievement of this target turned impossible as well. On 30th of 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 couple of years ahead.

Because of the uncertainty of global economy caused by the downward phase of the business cycle and the financial crisis, the outlook for the decline of inflation to a level near the reference value has improved in recent years. Based on the autumn forecast of the Ministry of Finance, the 12-month average HICP will slow down to a level below 3% in the middle of 2010, remaining there also in 2011. The reference value of the three EU Member States with the lowest inflation calculated on the basis of the autumn forecast of the European Commission will also remain close to 3% in 2010. Consequently, the changeover to the euro may become more probable from the second half of 2011 or the beginning of 2012. 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 the changeover to the euro in the years 2010-2011, the government brought the raising of excise duties scheduled for the years 2009-2010 forward to 2008, when the fulfilment of the criterion was 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 the state on inflation will diminish in the years 2010-2011 by 0.5% and 0.2% respectively. These are excise duties (except alcohol) that needed to be raised up to the minimum level required by the EU directives, i.e. obligatory raises of excise duties.

The economic model oriented towards an open economy together with cyclical and one-off factors temporarily led to the two-digit inflation. After the decrease of imbalances caused by the above-potential economic growth and stabilisation of commodity prices in the world market, inflation can be expected to moderate to a low level for a converging country, thus supporting economic growth. Since the Estonian price level forms approximately 70% of the EU average, it means that due to the convergence of the standard of living and the price level, the increase in consumer prices will be for years higher than the EU average. However, in the currently weak economic environment where it is difficult to estimate the impact of the global financial crisis on the non-financial sector, there are downward risks to inflation and so the fulfilment of the price stability criterion may be quite likely. The autumn forecast of Bank of Estonia also points to a robust decline in price pressures, expecting a 2.8% increase in consumer prices in 2010 similar to the Ministry of Finance.

It should be taken into account that Estonia has limited means for reducing inflation below the reference value of the price stability criterion. 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 fiscal policy is a relatively inefficient tool for limiting price pressures.

The markets have reacted calmly to the postponement of the introduction of the euro, although in the context of the general uncertainty of the global economy, the importance of the adoption of the

euro has been emphasised. 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 6

# Nominal convergence and fulfilment of Maastricht criteria (%of GDP)



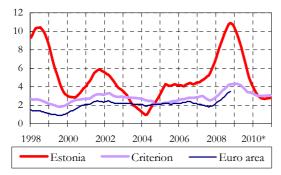
# B. General government debt

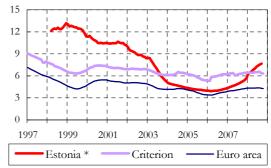




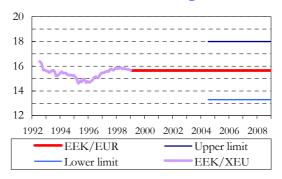
# C. Inflation (%)

# D. Interest rates (%)





### E. EEK/EUR exchange rate



<sup>\*</sup> For Estonia: long-term kroon loan interest rate for households and non-financial institutions, that is not directly comparable with reference value of the criterion and with other countries' long-term government bond interest rates.

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

# 3. FISCAL FRAMEWORK

# 3.1. Government's fiscal policy goals

# 3.1.1. Fiscal policy goals

State budget strategy 2009-2012 defined three areas to which Estonian fiscal policy will focus in upcoming years. Ensuring stabile economic environment, directing fiscal policy to promote the overall development (including ensuring the sustainable growth path for economic growth in the long-term) and guaranteeing the long term sustainability create a framework, based on which the fiscal policy goals of the government are:

- 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, furthermore the attention must be given to increase the flexibility in aiming budgetary expenditure;
- 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.

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.

Current period of economic slowdown will apply significant negative pressure on general government budget position and in upcoming years the expected budget position will differ from the medium-term goal set by the government. The Government will plan the budgets for next years in a way, which ensures quick restoration of general government budget position to at least a balance.

# 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 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. The present system of taxation will be maintained in case of entrepreneurs i.e. monthly taxation of distributed profits. The government will reduce the labour force's tax burden but in reaction to the economic recession the lowering the income tax rate and increase of the income tax threshold will be suspended for one year, together with suspension for one year of the income tax exemption as of the first child. In order to shift the tax burden from the taxation of labour to taxation of consumption and using the environment, the government has harmonized 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. Differences in VAT rates will be reduced and tax expenditures will be covered by next year's budget statement.

# 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, as a general rule, does not find it rational to increase the staff costs in state budget (ensuring though the increases of wages and salaries to guarantee the competence in the public sector) and will direct state budget funds more into activities which increase the economy's development potential (incl. into reduction of the supply-side restrictions).

Also the government plans to continue with domestic investments and using the European Union funds in maximum capacity in order to support the sustainable economic development and internal demand. 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 and the expenditure fixed directly by legislation in the budget must be reduced. According to current system the level of growth in expenditures directly linked with revenues exceeds considerably the growth of revenues not tied with spending. This means for 2009 and 2010 that despite of increase in revenues not tied with spending – the opportunities to finance new initiatives and projects are smaller compared to previous years. Thus in medium term the review of legislation is inevitable for the general government balance as well as fiscal sustainability.

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).

# 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. Changes in the pension insurance act and implementation of the new pension index, passed in 2007, increase considerably the ratio of average pension and average wage, thus throwing a major challenge to financial system of the state. Close-to-balance position of general government requires the deficit of pension insurance to be covered by savings on other spending.

# 3.1.2. Budgetary priorities of the Government for 2008–2012

The budgetary priorities of the government are approved with the State Budget Stratgey 2009–2012<sup>11</sup>. The goal of the activities of the Government of the Republic is to ensure the strong and sustainable development of Estonia and specially in the current circumstances, where the speed of economic growth of previous years has slowed and the conditions in the world economy are uncertain.

Development is mostly dependent on duration and rate of economic growth. Estonia is not the lone player on the market but together with other countries and nations, thus the increasing of international competitiveness is constant requirement. Our competitiveness is our state based on rule of law, our economic environment, the society of our citizens; it includes the institutional and physical infrastructure supporting the businesses as well as suitably trained and motivated labour force. It is also important to pay attention to distribution of growing wealth in the society i.e. social and regional balance, which defines the cohesion of the society. Otherwise the longevity of states longer term development is at risk, because social problems are amounting and means and development opportunities are not used in the best way possible. Sustainable economic growth cannot be ensured only at the expense of environmental friendliness but by supporting and considering both.

Keeping in mind of the goal of to ensure the strong and sustainable economic development of Estonia, the Government of the Republic agreed in May 2007 the State Budget Stategy 2008-2011 with three sub-goals:

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

Those objectives continue to be valid in current economic environment when the decline in economic activity, slowdown of private consumption and of increase of wage spending will bring along lower tax revenues compared to the levels forecasted before and thus restricted budgetary options for financing the development in different areas.

In context of tighter budgetary conditions it has become more important to use the existing cashand human resources, also the state assets, as effectively as possible. For this reason the priority has been set throughout the areas to analyse the effectiveness and efficiency of area policies so far. This makes it possible to find the additional budgetary resource and directing it to achieving goals mentioned above. It is though important to understand that all the areas, where state has been involved and all the support schemes, which were implemented at the beginning of reindependence might not be necessary today.

In addition it is important to follow, that budget policy would not intensify the growths and falls of economy but would smooth the short-term fluctuations in economic growth.

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<sup>&</sup>lt;sup>11</sup> Source: State budget strategy 2009–2012 (http://www.fin.ee/doc.php?80331).

# 3.2. General government budget balance

# 3.2.1. Nominal balance of general government

In 2007, the general government budget surplus amounted to EEK 6.4 billion (2.7% of GDP). Central government and social security funds ended a year with a surplus, the deficit of local governments amounted to 0.5% of GDP.

The surplus of central government contributed the most to the overall budget surplus of the general government and constituted 90% from that. It was achieved due to better income of revenues and carry over of some expenditure (a supplentary budget was adopted in December). State budget expenditure turned out to be lower than expected because of the changes made to the State Budget Law, according to which up to three percent of expenditures can be carried over and used for the same purposes during the following accounting year. This provision was adopted to reduce the year-end expenditures of ministries and constitutional institutions aimed at exhausting all their budget funds. Expenditures in the amount of EEK 4.6 billion were carried over to 2007 (1.9% of GDP) and EEK 5.2 billion to 2008 (2.0% of GDP). The surplus of the Estonian Health Insurance Fund resulted from better than expected tax revenues because of the positive developments in the labour market. As for the Estonian Unemployment Insurance Fund, in addition to good tax revenues, also lower than planned execution of expenditure played a role in the budget surplus, due to the decreasing unemployment rate.

The budget of 2008 was made with a surplus of EEK 2.7 billion, which constituted 1.1% of GDP. Due to worse-than-expected economic developments and expectations of the spring forecast of the Ministry of Finance, the government decided to draw up a negative supplementary budget for 2008. In the supplementary budget the revenues were reduced up to EEK 6.1 billion and expenditure up to EEK 3.2 billion. Savings in planned expenditure of constitutional institutions, State Chancellery and ministries constituted the largest part of reduction in expenditures, amounting to EEK 1.6 billion. The expenditures in the administrative areas of ministries and State Chancellery were reduced by 7% on average.

According to the forecast of the Ministry of Finance the general government **budget deficit in 2008** will be approximately EEK 5 billion (1.9% of GDP). The central government will make the largest contribution to the general government deficit, but it is also expected that the aggregate budget of local governments will be in deficit.

According to the forecast the general government budget deficit in 2009–2010 will amount to 1.7% and 1.0% of GDP respectively. In accordance with the mid-term goal set by the government, a slight general government budget surplus will be expected in 2011–2012. Due to the slowdown of economic growth and negative developments in the labour market, the social security funds are expected to be in deficit for the forecast period. The local governments will also continue with a budget deficit.

Table 8

# General government budget position 2004–2012

	2004	2005	2006	2007	2008*	2009*	2010*	2011*	2012*
General government (% of GDP)	1.7	1.5	2.9	2.7	-1.9	-1.7	-1.0	0.1	0.2
Central government	1.7	1.5	2.2	2.6	-1.8	-1.3	-0.3	0.6	0.5
Social security funds	-0.4	-0.5	0.1	-0.5	-0.3	-0.1	-0.1	-0.1	-0.1
Local government	0.4	0.5	0.6	0.6	0.1	-0.3	-0.6	-0.5	-0.3

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

# Figure 7

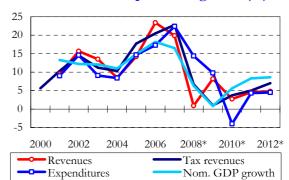
# **General Government Budget Position**

(% of GDP)

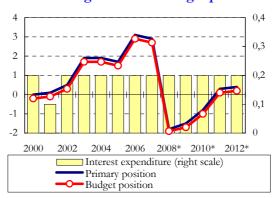
# A. Revenues and expenditures

# 46 42 38 34 30 2000 2002 2004 2006 2008\* 2010\* 2012\* General government revenues General government expenditures

# B. Revenue and expenditure growth (%)



# C. General government budget position

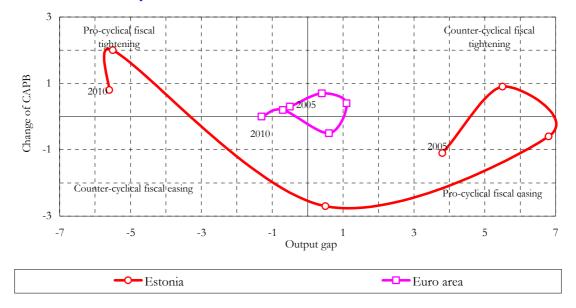


Sources: Statistical Office of Estonia, Ministry of Finance of Estonia.

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 2005-2010



Sources: Ministry of Finance of Estonia, Eurostat, European Commission autumn forecast 2008.

# 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 years 2004-2007 Estonian GDP exceeded potential level and positive output gap expanded to 6.8% of GDP in 2007. Credit-led over potential growth period was followed by rapid downward adjustment in the middle of 2007, when growth decelerated remarkably, being 4.4% at the end of the year.

In 2008, these developments continued and growth slowed down and turned negative due to fall in domestic demand, being faster than previously expected. Thus adjustment is occurring in domestic demand side, led by deceleration of previous growth drivers: credit growth and real estate sector development. In addition, high wage increases and rise in costs of other production inputs will have an impact on economic development, therefore positive output gap will decrease substantially. With the continuation of recession, output gap becomes negative in 2009 and the levels of actual and potential GDP are expected to come closer in 2011. Fast real convergence with European Union has already taken place, large share of investments have been made to the closed economy and negative demographic trends – these are the factors that are reducing growth potential of Estonian economy in coming years.

Evaluations on cyclically adjusted budget position, made on the basis of output gap show that Estonia's budgetary policy will stay pro-cyclical in 2008, because the nominal budget deficit forms under the conditions of under potential growth. The budgetary policy will remain pro-cyclical during the years 2009–2011. By 2012, the impact of the cyclical component has been reduced and budgetary policy will turn counter-cyclical.

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

Table 9

# Cyclical developments in 2006–2012

(% of GDP)

	2006	2007	2008*	2009*	2010*	2011*	2012*
1. Real GDP growth (%)	10.4	6.3	-2.2	-3.5	2.6	4.8	5.0
2. Net lending of general							
government	2.9	2.7	-1.9	-1.7	-1.0	0.1	0.2
3. Interest expenditure	0.2	0.2	0.2	0.2	0.2	0.2	0.2
4. One-off and other temporary							
measures	1.1	0.4	0.2	0.1	0.4	0.1	0.0
5. Potential GDP growth (%)	8.6	5.0	3.9	2.7	2.7	2.7	2.9
6. Output gap (6 t-1 +1 - 5)	5.5	6.8	0.5	-5.5	-5.6	-3.7	-1.8
7. Cyclical budgetary component							
(6 * sensitivity)	1.7	2.0	0.2	-1.7	-1.7	-1.1	-0.5
8. Cyclically-adjusted balance (2 - 7)	1.3	0.7	-2.1	-0.1	0.7	1.2	0.7
9. Cyclically-adjusted primary balance (8							
+ 3)	1.4	0.8	-1.9	0.1	0.9	1.4	1.0
10. Structural balance (8 - 4)	0.2	0.3	-2.3	-0.1	0.3	1.1	0.7

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

# 3.2.3. Structural balance of general government

The structural budget position of the general government is calculated by removing from the nominal budget 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 1.1%, in 2007 it was 0.4%, in 2008 it will be 0.2%, in 2009 it will be 0.1%, in 2010 it will be 0.4% and in 2011 it will be 0.1% of GDP. In recent years the dividend payments from AS Eesti Energia have been the major one-off revenue. In 2010, the main one-off revenue will be the temporary abolishment of the additional basic allowance for the first child.

The structural position of the Estonian general government budget amounted to 0.2% of GDP in 2006, 0.3% of GDP in 2007 and it is expected that in 2008 and 2009 the structural position will be -2.3% and -0.1% of GDP respectively. In 2010–2012 the structural budget of the Estonian general government will be in surplus.

Table 10

# Impact of one-off measures 2006–2011

Measure	Year	mio <i>EEK</i> *	% of GDP
Influence to revenues			
One-off decrease in VAT collection due to a change in law	200613	-125	-0.1
Income tax from the revenues earned from the sale of shares of Hansapank	2006	312	0.2
Revenues from the sale of assets (higher than 0.5% GDP)	2006	1 556	0.8
Dividends from Estonian Energy	2006	500	0.2
Liquidation of debts of RAS Ookean	2007	-243	-0.1
Revenues from the sale of assets (higher than 0.5% GDP)	2007	125	0.1
Dividends from Estonian Energy	2007	1 000	0.4
VAT taxation moment shift due to a change in law	2008	-203	-0.1
Dividends from Estonian Energy	2008	652	0.3
Revenues from the sale of assets (higher than 0.5% GDP)	2009	171	0.1
Abolishment of the additional basic allowance for the first child	2010	1 050	0.4
Revenues from the sale of assets (higher than 0.5% GDP)	2011	214	0.1
TOTAL	2006	2 243	1.1
	2007	882	0.4
	2008	449	0.2
	2009	171	0.1
	2010	1 050	0.4
	2011	214	0.1

<sup>\*-</sup>approximate estimation.

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

<sup>&</sup>lt;sup>13</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 different levels of government

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, while recent years have been characterised by surplus, due to better collection of taxes. At the end of 2007 the central government ended the year in surplus for the seventh year in a row – the surplus was 3.0% of GDP.

**Pension insurance**, being part of the central government, is in deficit this year and 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.. At the end of 2007, the pension insurance reserve amounted to EEK 6.2 billion.

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 4,560 kroons in 2008 to 5,567 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 end the year 2008 with a modest budget surplus, but it will be in deficit during the years to come.

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. According to the forecast Estonian Unemployment Insurance Fund will end the year 2008 with a budget surplus, but resulting from the negative

developments in the labour market and additional costs because of the enforcement of the new labor agreement act, it will be in deficit during the medium term - despite the planned raise in unemployment insurance payments in 2009.

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. Local governments adopt sometimes several changes in the budget during the year and are therefore more flexible in budgetary questions than the state level. Cities and rural municipalities have a constitutional right to independent budgeting, which implies that they have relative freedom to form budget income and expenditures. For 2008, the forecasted deficit of local governments is 0,7 bln EEK. The main reasons are that Tallinn and Tartu among many other municipalities have adopted a budget that is already in deficit for 2008, the growth of personal income tax and revenues from selling assets is not as fast as in previous years and it is expected that the possible additional revenue will not cover the deficit.

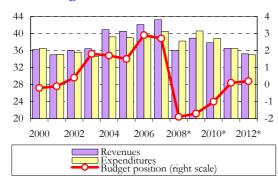
For 2009–2012 it is expected that the budget deficit of local governments will be 200 mio EEK based on enhancing their financial capabilities and implementation of measures ment for improving the budget position. The state has made an offer to the local governments, that it they limit their budget deficit they will get additional grants from the state. The goal of this measure is also to improve the self-financing capabilities of the local governments, so that they can make necessary investments without using other external resources. As for the implementation effectiveness, the local elections in 2009 carry a risk as the local governments have an incentive to make more investments and since their financial possibilities have increased signiffically in recent years, they are willing to borrow more and for longer periods of time. The mentioned measures still lack a strong legislative bases and therefore it can not be expected for local governments to further decrease their forecasted budget deficit.

# Figure 9

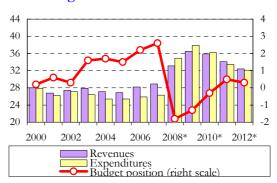
# Revenues and expenditures of general government levels

(% of GDP)

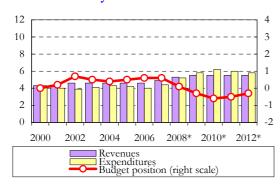
# A. General government



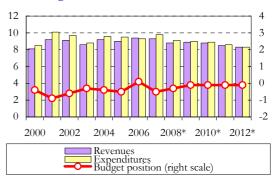
# B. Central government



# C. Social security funds



# D. Local governments



Source: Eurostat, Ministy of Finance.

# 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 2007, the general government debt of Estonia was 3.5% of GDP. The debt of local government constituted 69.4% of the general government overall debt of EEK 8.3 billion and the share has increased by 23.8 percentage points since 2001. The main reason for that is the continuous deficit of local governments and as it is no longer possible to sell property, additional borrowing has been a way to finance the deficit. In 2007, the central government debt decreased, because under the budget surplus there is no need for use of external funds and current loans were repaid on the basis of determined repayment schedules.

The debt to external creditors amounted to 41.3% of the total debt, being EEK 3.4 billion in the end of the year, whereas the external debt of the central government decreased to EEK 0.9 billion and the external debt of local governments increased to EEK 2.5 billion. Compared to the previous year, the domestic debt has increased in both levels of the government,. As the external debt in general government decreased about 30% and in central government about 60%, the external debt of local governments increased about 16% - mainly caused by their budget deficit.

Table 11
Change of General Government debt burden in 2007

	31. decen	nber 2006	31. decen	Change	
	% of GDP	mio EEK	% of GDP	% of GDP	mio EEK
General Government	8 727	4.26%	8 333	3.49%	-4.51%
Domestic debt	3 996	1.95%	4 889	2.05%	22.35%
Foreign debt	4 731	2.31%	3 444	1.44%	-27.20%
Central Government	3 471	1.69%	2 637	1.10%	-24.03%
Domestic debt	847	0.41%	1 646	0.69%	94.33%
Foreign debt	2 624	1.28%	991	0.41%	-62.23%
Local Government	5 321	2.60%	5 788	2.42%	8.78%
Domestic debt	3 214	1.57%	3 335	1.40%	3.76%
Foreign debt	2 107	1.03%	2 453	1.03%	16.42%
Social Security	0	0	0	0	0
Domestic debt	0	0	0	0	0
Foreign debt	0	0	0	0	0

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 budget surplus for early repayment of debt, since by international standards the debt burden is very low and also it would not be beneficial for Estonia because of the conditions set in concluded agreements. The surplus has been used for increasing deposits and formation of reserves from liquid financial assets, i.e. low-risk bonds. The share of revenues from privatisation has been marginal in recent years.

In 2008, general government debt will increase to 3.7% of GDP and stay in that level also for 2009. The main reason for increase is the borrowing of local governments. However, in the coming years the general government debt will decrease to 2.8% of GDP by the end of 2012. As for

the local governments, the improvement of financial situation is expected and consequently the need for additional borrowing is decreasing.

Table 12

# General Government debt developments in 2007–2012

(% of GDP)

	2007	2008*	2009*	2010*	2011*	2012*
1. Gross debt	3.5	3.7	3.7	3.5	3.0	2.8
2. Change in gross debt ratio	-0.8	0.2	0.0	-0.2	-0.5	-0.2
Contributions to change in gross debt						
3. Primary balance (-)	2.9	-1.8	-1.5	-0.8	0.3	0.4
4. Interest expenditure	0.2	0.2	0.2	0.2	0.2	0.2
5. Stock-flow adjustment	2.5	-1.6	-1.7	-1.0	-0.2	0.2
5.1. of which net accumulation of						
financial assets	3.0	-1.1	-1.2	-0.5	0.3	0.7
5.2. of which adjustments	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
6. Nominal GDP growth	-0.6	-0.2	0.0	-0.2	-0.2	-0.2
Implicit interest rate on debt (%)	4.9	5.0	5.2	5.2	5.2	4.8

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

# Box 4. 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.

$$Debt(t) - Debt(t-1) = SFA(t) - Deficit(t)$$

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 been cash and accrual reporting).

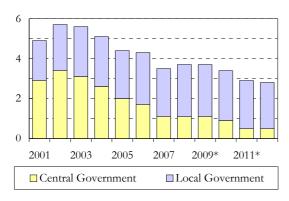
In theory the change in the debt should be relatively similar to the deficit/surplus at least in a longer period, but especially recent years have indicated that the correlation between the change in the debt and the deficit has weakened in the case of various countries. In the case of Estonia SFA has 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)

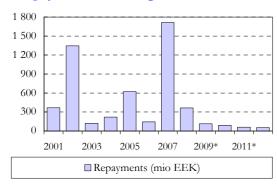
### A. General government debt



# B. Average interest of central government<sup>14</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 notable general government budget surplus over the recent years, especially in central government and social insurance funds, the reserves of the given levels of government have constantly grown. As of the end of 2007, the financial reserves of the central government exceeded the debt of the central government by over eight times and amounted to EEK 21.6 billion, i.e. to 9.0% of GDP. The larger part of the financial reserves – EEK 17.0 billion – has been invested in low-risk bonds and 4.5 billion is held with various deposit and other accounts. As of the end of Q3 2008, the reserves of the central government amounted to EEK 21.6 billion, having grown by 0.5% in a year.

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 fulfillment 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>&</sup>lt;sup>14</sup> Central Government without foundations and public-legal entities.

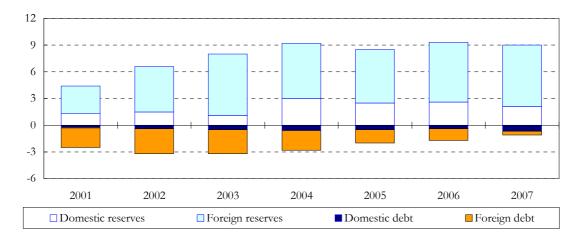
Management of reserves includes a combination of a passive investment strategy where an optimal standard portfolio has been prepared for each amount of resources and an active investment process making use of the actual possibilities of the market, where the standard portfolio is deliberately discarded. 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.

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.

# 4. SENSITIVITY ANALYSIS AND COMPARISON WITH THE PREVIOUS PROGRAMME

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

### 4.1.1. Risk scenarios

Ministry of Finance composes also risk scenarios in conjunction with economic forecasts, which show possible alternative developments. The probability of risk scenarios is lower than the probability of the base scenario. While just six months ago, most of the uncertainty was related to processes taking place in the Estonian economy, but starting from autumn 2008, also the foreign environment has become significantly insecure.

Developments of Estonian economy during the past year have been in the anticipated direction, but steeper – the developments of risk forecasts have moved into base scenarios. On the positive side, this has meant more rapid correction of external imbalances, which reduces our vulnerability. This means decrease of the current account deficit and slowdown of the growth of external debt.

The main internal risks to future economic development have not changed much during the past year. Adjustment of the labour market is still crucial and determines, how painful the adjustment of the whole economy will be, and what will be the new equilibrium state. Although first signs of the adjustment of the labour market can be seen, the biggest changes will probably happen during the next year.

Uncertainty of the developments of the world economy has risen significantly during the summer and autumn of 2008. Crude oil price peak in July and the subsequent rapid decline indicate to very high volatility of the markets. The global financial markets collapsed in September due to extensive distrust. These events in the external conditions have increased uncertainty and reduced the possibility of recovery of economic growth in Estonia.

The common external assumptions proposed by the European Commission, which should be taken as the basis for the forecast of the convergence programme, have outdated. So the forecast based on those common assumptions should be considered as an optimistic one for 2008–2010. It should also be noted, that this scenario does not take into account recent GDP data for the 3rd quarter (published during composition of the forecast), as they indicate a more negative development.

Table 13 presents the scenario, which is based on the Commission's common external assumptions. By the time this forecast was composed, the growth prospects of Estonian export markets (part of Commission' assumptions) were significantly decreased. Oil price and inflation forecasts have been changed as well. So this scenario can bee called as a "positive risk".

Table 14 presents a negative risk scenario, which presumes a slight decline in Estonia's export markets in 2009 and recovery in 2010. The global financial crisis will continue, which reduces the willingness and ability to supply credit to Estonian enterprises and households. The loan stock of the private sector will stay at the level of 2008 for the next two years. On the other hand, lower oil

price assumption and the cooling economy will have a positive effect on inflation, which reduces the impact of negative developments to the real growth.

Biggest risks are related to the decline of investments, which is a result of declining profits, limited credit and falling future prospects. Decline in private consumption is supported by decreasing employment, a stop in wage growth and impact from the financial sector, which turns from positive (until autumn 2008) to negative. (See Box 2, Impact of the financial sector to the disposable income of households). Negative developments of the world economy reduce further the propensity to consume, which has been on a rapidly declining trend since spring 2007.

# Table 13

# Risk scenario using common external assumptions by European Commision for 2008-2010

(percentage)

		Risk so	cenario	Difference from base line forecast			
	2007 2008* 2009* 2010*				2008*	2009*	2010*
Real GDP growth	6,3	-1,8	-1,5	3,4	0,4	2,0	0,8
Nominal GDP growth	16,5	6,9	3,5	6,8	0,6	2,7	1,2
Domestic demand growth	7,5	-4,0	-3,9	3,0	0,6	1,4	0,3
СРІ	6,6	10,5	5,0	3,1	0,1	0,9	0,3
Employment growth	1,4	-0,6	-2,1	-0,7	-0,3	1,3	0,0
Real wage growth	13,1	3,8	0,9	2,6	-0,1	0,9	0,7
Current account (% of GDP)	-18,1	-11,9	-7,6	-7,3	0,2	-0,4	-0,2

<sup>\*\*</sup> Includes statistical discrepancy.

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

# Table 14

# Negative risk scenario for 2008-2010

(percentage)

		Risk s	cenario	Difference from base line forecast			
	2007 2008* 2009* 2010*				2008*	2009*	2010*
Real GDP growth	6,3	-2,2	-5,0	1,0	0,0	-1,5	-1,5
Nominal GDP growth	16,5	6,3	-1,4	3,4	0,0	-2,2	-2,2
Domestic demand growth	7,5	-4,6	-8,1	1,0	0,0	-2,8	-1,6
CPI	6,6	10,4	3,7	2,4	0,0	-0,4	-0,4
Employment growth	1,4	-0,3	-4,0	-1,2	0,0	-0,7	-0,5
Real wage growth	13,1	3,9	-1,6	0,1	0,0	-1,6	-1,8
Current account (% of GDP)	-18,1	-12,1	-5,1	-4,9	0,0	2,1	2,2

<sup>\*\*</sup> Includes statistical discrepancy.

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

# 4.1.2. Impact of risk scenarios on the budgetary position of the general government

This subsection is dedicated on the assessment of the influence of the positive and negative risk scenarios 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 **positive risk scenario** foresees that in 2008–2010 the nominal growth of GDP will be higher than the base forecast, which would bring about more tax revenues. According to the risk scenario in 2008, the accrual of tax revenues will increase in comparison to the base forecast by 0.6% of GDP, in 2009 by 3.5% of GDP and in 2010 by 4.9% of GDP. When the general government budget deficit in 2008 will be 1.8% of GDP, then in 2009 the deficit will decrease to 0.7% of GDP and by 2010 the revenues exceed the expenditures by 0.4% of GDP. According to the scenario, the budget surplus will be used to increase reserves and therefore there is no impact on the debt burden of the general government.

Table 15

Positive risk scenario impact on general government budget balance and debt burden (% of GDP)

	2008	2009	2010
Baseline forecast			
General government budget balance	-1.9	-1.7	-1.0
General government debt burden	3.7	3.7	3.5
Risk scenario			
General government budget balance	-1.8	-0.7	0.4
General government debt burden	3.7	3.7	3.5
Difference			
General government budget balance	0.1	1.0	1.4
General government debt burden	0.0	0.0	0.0

Source: Ministry of Finance of Estonia.

The **negative risk scenario** foresees that in 2009–2010 the nominal growth of GDP will be lower than the baseline forecast, which also means decrease in tax revenues. According to the risk scenario, the accrual of tax revenues in 2009 will decrease by 2.4% of GDP and in 2010 by 4.8% of GDP, in comparison to the baseline forecast. When the general government budget deficit in 2008 will be 1.9% of GDP, then in 2009 the deficit increases to 2.5% of GDP and in 2010 the deficit remains at the same level. According to the risk scenario, the budget deficit will be financed using reserves and therefore there is no impact on the debt burden of the general government.

# Table 16

# Negative risk scenario impact on general government budget balance and debt burden

(% of GDP)

	2008	2009	2010
Baseline forecast			
General government budget balance	-1.9	-1.7	-1.0
General government debt burden	3.7	3.7	3.5
Risk scenario			
General government budget balance	-1.9	-2.5	-2.5
General government debt burden	3.7	3.7	3.5
Difference			
General government budget balance	0.0	-0.8	-1.5
General government debt burden	0.0	0.0	0.0

Source: Ministry of Finance of Estonia.

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

The economic growth expectations of Estonia's trading partners, incl. the European Union, are much more pessimistic in the autumn of 2008 than in the autumn of 2007. The financial market instability that struck early last year has, a year later, culminated in a widespread credit crisis that has cast doubt on and significantly lowered the growth prospects of the global economy. Interest rate expectations are lower and the forecast exchange rate of the euro with regard to the US dollar is weaker as well. In view of interim developments, the forecast for oil prices has been raised again. An exception is foreseen for 2009 when the oil price is expected to remain below the past year's forecast.

In September 2008 the Statistical Office of Estonia published the data of the adjusted gross domestic product since 2000. This data was amended after transition to the chain-linking method that led to the adjustment of published GDP data at constant prices and corresponding growth rates. The real GDP growth of 2001–2006, established by the chain-linking method, was reduced by -0.1 to -1.0 percentage points from the previously published levels.

Under the new method, Estonia's real GDP growth during 2007 was 1.1% lower than forecast the year before, while nominal GDP growth tallied with expectations, remaining 0.3% below the forecast. In its forecast in autumn 2007 the Ministry of Finance expected the real growth rates of the **economy** in 2008 and 2009 to be 8.3% and 7.7%, respectively. According to this autumn's forecast, Estonian GDP shall decrease by 2.2% in 2008 and an even sharper 3.5% decrease is expected in 2009, mainly due to the downward adjustment of forecasts of domestic demand components.

**Private consumption** will remain below previous expectations, mostly due to reduced propensity to consume and to sharply reduced credit inflow. The increase in disposable income will be limited by a significantly slower average wage growth during 2008–2009 and by the postponement of income tax reform until 2010 or later. The deteriorating economic outlook shall have an increasing impact on employment.

Lower domestic and foreign demand and financing difficulties shall lead to sharp cuts in **investments**. The expected stabilisation of the residential property market shall not materialise in 2009 as interest in buying is likely to remain low due to increased uncertainty and declining real estate prices. The banks' loan policy in autumn 2008 is significantly stiffer than in the previous year, and is unlikely to ease in the coming years as the credit crisis deepens. Corporate investment is limited by slowing demand, rapidly falling profits and the increasing conservatism of banks. Government investments shall not be realised to the extent that was planned due to problems with the implementation of EU structural funds.

**Export** forecasts have become significantly more pessimistic due to the slower growth of trading partners' import demand and impeded access to credit **Import** growth forecasts have been reduced in line with changes in domestic and foreign demand forecasts. Improvements in foreign trade balance and income balance have resulted in a lower current account deficit forecast than indicated in the previous year's convergence programme.

Consumer price increases shall remain below the levels forecast in the previous convergence programme. The shift has been caused by both domestic and foreign factors. Among the foreign factors are the dropping oil prices, translating into cheaper motor fuel and slower hikes in the prices of natural gas and district heating. World market prices for raw materials of food are showing a downward trend as well, and the rise in food prices shall thus remain modest. Core inflation shall

fall faster than previously expected, notably in terms of service prices. Gradual resumption of economic activity shall again boost the rise in consumer prices from 2011 onwards.

The **employment** growth forecast of this year's convergence programme remains lower than in the previous autumn due to slowing economic growth and reduced labour demand. The average **wage** forecast has also been cut as a result of the economic slowdown and reduction of corporate profits. Wage growth is also inhibited by lower labour demand and the previous wage growth exceeding productivity growth.

The forecast of the **general government budgetary position** for 2008 has deteriorated in comparison to the 2007 Convergence Programme Update. Because of the economic situation, there has been a substantial revenue shortfall in 2008 and this has resulted in general government budget deficit. In State Budget Strategy for 2009-2012 that was adopted in may 2008, a thorough plan for possible expenditures was made. According to the expenditure agreed in the strategy and the updated revenue forecast, a budget deficit is planned for 2008-2010.

The difference between the **general government debt forecast** in the 2007 Convergence Programme Update and the current forecast arises primarily from adjustment of the GDP time series and the forecast, increased borrowing of local governments and the changes in the list of institutions that are included in the government sector. Early repayment of the central government debt has not been planned and the debt will be repaid according to the agreed repayment schedule.

Table 17

Comparison with the forecast of the previous Convergence Programme Update

	2007	2008*	2009*	2010*	2011*	2012*
Real GDP growth (%)						
Previous update	7.4	5.2	6.1	6.7	7.0	-
Present update	6.3	-2.2	-3.5	2.6	4.8	5.0
Difference	-1.1	-7.4	-9.6	-4.1	-2.2	-
Nominal GDP growth (%)						
Previous update	16.8	14.0	11.8	10.8	10.8	-
Present update	16.5	6.3	0.8	5.6	8.3	8.6
Difference	-0.3	-7.7	-11.0	-5.2	-2.5	-
General government budget balanc	e (% of GDI	P)				
Previous update	2.6	1.3	1.0	0.9	0.8	-
Present update	2.7	-1.9	-1.7	-1.0	0.1	0.2
Difference	0.1	-3.2	-2.7	-1.9	-0.7	-
General government debt (% of GD	P)		•			
Previous update	2.7	2.3	2.0	1.8	1.6	-
Present update	3.5	3.7	3.7	3.5	3.0	2.8
Difference	0.8	1.4	1.7	1.7	1.4	-
Harmonised index of Consumer Pri	ices (HICP,	%)	•		•	
Previous update	6.6	8.6	5.6	3.6	3.5	-
Present update	6.7	10.6	4.2	2.8	3.0	3.2
Difference	0.1	2.0	-1.4	-0.8	-0.5	-
Current account (% of GDP)			•			
Previous update	-15.6	-11.7	-10.2	-9.7	-9.3	-
Present update	-18.1	-12.1	-7.2	-7.1	-6.9	-6.7
Difference	-2.5	-0.4	3.0	2.6	2.4	-

Source: Ministry of Finance of Estonia.

# 5. QUALITY OF PUBLIC FINANCES

# 5.1. General government budget forecast until 2012

In 2007, the general government budget surplus reached **6.4 billion kroons i.e 2.7% of GDP.** Central government and social security funds ended a year with a surplus, the deficit of local governments was 0.5% of GDP. A key factor in the general government budget surplus was economic developments favouring accrual of revenues, but also lower than forecasted execution of expenditure. The administration of revenue collection has improved as well.

According to the forecast, the general government **deficit in 2008 will reach 1.9% of GDP**. The general government deficit results mainly from the central government deficit. Estonian Unemployment Insurance Fund and Estonian Health Insurance Fund are in surplus, but the forecast indicates that they will be in deficit in the following years. The budget of local governments is in deficit.

According to the State Budget Strategy for **2009–2012**, the goal of government is to keep the general government budget at least balanced. The social security funds and local governments will be in deficit in the medium term, but starting from 2011, the central government surplus will compensate it.

The share of the general government revenue and expenditure to GDP will increase in 2009 and is forecasted to decrease in the following years – for 2010–2012 the growth of general government revenue and expenditure will be lower than the general economic growth. The increase in the share of revenue results from a substantial 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 will near the share of the highest revenue item so far – production and consumption taxes. As for the expenditures, the highest increase of shares in coming years can be noticed in social transfers and employee compensations, which reflect the growth in pensions, family allowances, etc., and the increase in the salaries paid from the general government budget.

Table 18

General government revenues and expenditures 2007–2012

	2007	2007	2008*	2009*	2010*	2011*	2012*
	mio	% of	% of	% of	% of	% of	% of
	EEK	GDP	GDP	GDP	GDP	GDP	GDP
Net lending by sub-sector							
1. General government	6,448.0	2.7	-1.9	-1.7	-1.0	0.1	0.2
2. Central government	6,236.0	2.6	-1.8	-1.3	-0.3	0.6	0.5
4. Local government	-1,131.0	-0.5	-0.3	-0.1	-0.1	-0.1	-0.1
5. Social security	1,343.0	0.6	0.1	-0.3	-0.6	-0.5	-0.3
General government							
6. Total revenue	91,225.0	38.2	36.2	38.9	37.8	36.5	35.2
7. Total expenditure	84,770.2	35.5	38.2	40.6	38.8	36.4	35.0
8. Net lending/borrowing	6,454.8	2.7	-1.9	-1.7	0.0	0.1	0.2
9. Interest expenditure	383.3	0.2	0.2	0.2	0.2	0.2	0.2
10. Primary balance	6,838.1	2.9	-1.8	-1.5	0.2	0.3	0.4
11. One-off and temporary measures	882.0	0.4	0.2	0.1	0.4	0.1	0.0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)	51,742.9	21.7	20.2	20.4	19.9	18.8	18.3
12a. Taxes on production and imports	33,018.6	13.8	12.4	13.3	13.1	12.8	12.6
12b. Current taxes on income, wealth etc	18,724.3	7.8	7.8	7.0	6.8	6.0	5.7
12c. Capital taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Social contributions	26,576.2	11.1	11.8	12.2	12.1	12.1	12.1
14. Property income	3,662.1	1.5	0.9	1.0	0.6	0.5	0.5
15. Other	9,243.8	3.9	3.4	5.3	5.3	5.0	4.3
16.=6. Total revenue	91,225.0	38.2	36.2	38.9	37.8	36.5	35.2
p.m. Tax burden (D.2 (incl. paid to	78,999.2	33.1	32.2	32.8	32.2	31.2	30.7
EU)+D.5+D.611+D.91-D.995)	10,999.2	33.1	32.2	32.0	32.2	31.2	30.7
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	39,427.7	16.5	17.9	18.5	17.6	16.5	15.4
18. Social transfers (18=18a+18b)	26,123.9	10.9	12.5	14.5	14.1	13.2	12.9
18a. Social transfers in kind supplied via market producers	4,631.5	1.9	2.2	2.5	2.3	2.0	1.8
18b. Social transfers other than in kind	21,492.4	9.0	10.3	12.0	11.8	11.2	11.1
19.=9. Interest expenditure	383.3	0.2	0.2	0.2	0.2	0.2	0.2
20. Subsidies	1,995.0	0.8	1.1	1.1	1.1	1.1	1.1
21. Gross fixed capital formation	12,972.3	5.4	5.1	5.1	5.0	5.0	5.0
22. Other	3,868.0	1.6	1.4	1.2	0.8	0.6	0.4
23.=7. Total expenditure	84,770.2	35.5	38.2	40.6	38.8	36.4	35.0
p.m. Government consumption (nominal)	41,154.0	17.2	18.6	19.2	18.3	17.0	16.1

<sup>\*</sup> forecast.

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

# 5.2. General government revenues

### 5.2.1. General government revenue structure

Through 2000–2006, the general government revenue accounted for 34.5% of GDP on average, while in 2007 the share was 34.3%. The division of revenue between tax and non-tax revenue through 2000–2007 has been on average 84.2% tax and 15.8% non-tax revenue. Indirect taxes<sup>15</sup>, including value added tax, excise duties, customs duty, gambling tax, land tax, heavy-vehicle tax, most of local taxes and some fees account for the largest share (41.4% in 2007) of the general government revenue. The share of the indirect taxes increased in 2007 in comparison with 2006 by 0.4% of GDP to 14.2% of GDP. In the coming years the share of the indirect taxes should increase even further. Social security contributions, which include social tax and unemployment insurance contributions, accounted for 32.1% of the general government revenue (11.0% of GDP) and direct taxes accounted for 22.8% of the general government revenue (7.8% of GDP) in 2007. 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 2006 non-tax revenue accounted for 17.4% of the general government revenue (6.0% of GDP).

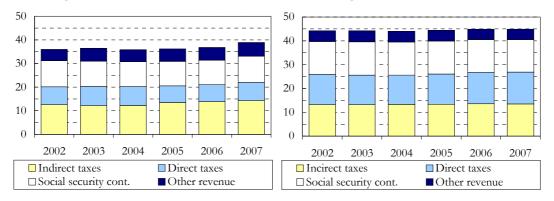
Through 2002–2007 the general government revenue accounted for 35.2% of GDP on average in Estonia. The EU27 average in the same period exceeded the Estonian level by 9.5 percentage points, amounting to 44.7% of GDP. No remarkable changes have taken place in the period under review with regard to the structure of the Estonian general government revenue – the share of social security contributions has reached the level of 2002 (11.0% of GDP) in 2007, the share of direct and indirect taxes have increased by 1.7 and 0.2 percentage points of GDP respectively. The share of social security contributions has decreased by 0.2 percentage points of GDP in the structure of the revenue of the EU27, while the share of other revenue has increased: direct taxes 0.7 percentage points of GDP, indirect taxes 0.3 percentage points, and other revenue 0.7 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



<sup>&</sup>lt;sup>15</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).

Sources: Eurostat, Statistical Office of Estonia.

# 5.2.2. Future developments in tax policy and main changes in revenue policies affecting the budget for 2009

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 21% in 2008. The income tax rate will be annually reduced until 2012, when the 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.

Taking into consideration the influence of raising indirect taxes on inflation, the Government 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 was 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 was 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 was shifted to 2008. According to the amended legislation adopted in June 2007 the excise duty rates on motor fuel was raised to the minimum levels of the European Union from 1 January 2008, and also the excise rates on fiscally marked fuel was raised. From 2008, excise duty was imposed on natural gas and electricity and the excise duty exemption on shale-derived fuel oil was 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.

It is the governments intention to increase the decreased rate of VAT from 5% to 9% and also cut the list of goods and services entitled to reduced rate. The reduced rate of 9% will remain for books and workbooks, periodicals and accommodation services. Handling of hazardous waste, funeral services and tickets for cultural events will no longer be entitled to reduced VAT rate. The forecasted budgetary effect will be ca 400 mio EEK, in 2009.

At the first time, all tax expenditures are represented in explanatory memorandum of state budget.

The maximum rate of fringe benefit of company cars, which serve as a basis of calculation of self-supply under VAT Law, will be raised from 2000 kroons to 4000 kroons. The amendment increases VAT revenues by EEK 78 million and total tax revenues by EEK 370 million.

Figure 13

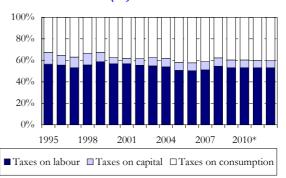
# Development of tax burden in Estonia

(% of GDP)

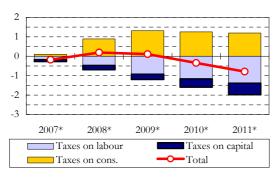
# A. Tax burden



# B. Tax revenues (%)



# C. Efect of tax amendments<sup>16</sup>



# D. Tax burden of low-wage workers



Source: Ministry of Finance, Eurostat.

<sup>&</sup>lt;sup>16</sup> Effect compared to the situation if no changes were made since 31.12.2007.

Table 19

Main tax amendments in 2008 and 2009 and their effects<sup>17</sup>
(% of GDP)

	Enactment	Effect 2008	Effect 2009	
Total tax revenues		0.19	0.92	
Reduction of labour taxation:	•			
Reduction of income tax rate	1 January 2008/	-0.40	-0.37	
Reduction of personal income tax rate	1 January 2010 1 January 2008/ 1 January 2010	-0.31	-0.29	
Reduction of corportate income tax rate	1 January 2008/ 1 January 2010	-0.09	-0.09	
Increase of basic allowance	1 January 2008/ 1 January 2010	-0.16	-0.18	
Increase of fringe benefit of company cars	1 January 2009	-	0.14	
Higher taxation of consumption and environment	t exploitation:			
Raising VAT reduced rate from 5% to 9% and limiting the use of reduced rate	1 January 2009	-	0.14	
Raising excise tax on cigarettes	1 January 2008/ 1 July 2010	0.06	0.28	
Raising excise tax on most alcohol sorts	1 January 2008/ 1 July 2010	0.10	0.23	
Raising excise tax on different fuels	1 January 2008	0.26	0.45	
Introducing excise on electricity	1 January 2008	0.13	0.14	
Other tax changes:				
Increase of the basic sum of minimal duty of social tax	1 January 2008/ 1 January 2009	0.11	0.43	
Reestablishment the level of unemployment insurance payment	1 January 2009	-	0.20	

Source: Ministry of Finance of Estonia.

### 5.2.3. Tax expenditure

The following is a description of tax expenditure included in the Estonian state budget in 2009–2012. The value of tax expenditures has been estimated on the basis of the revenue loss method and cash-based accounting data, taking into account the time gap between the implementation and actual application of specific provisions. Only the "first-round effects" of established tax expenditure have been evaluated. For example, the provision of additional tax-exempt income has been evaluated in terms of its immediate effect on tax revenues, but any additional VAT revenue from increased consumption by individuals benefiting from the tax cut has not been taken into account. Tax expenditures directly related to other taxes have been accounted for in the overall effect of established tax expenditure, e. g. tax expenditure arising from the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act influences VAT revenues at the rate of final consumption. By implementing the revenue loss method, various behavioural effects and budgetary constraints have

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<sup>&</sup>lt;sup>17</sup> Effect compared to the situation if no changes were made since 31.12.2007.

been overlooked when evaluating the value of tax expenditures – for example, by assuming the unit-elasticity of goods and services consumption (relative changes in volume correspond to relative price changes).

When calculating the value of tax expenditures, it is important to note that each tax expenditure provision has been evaluated separately and not in conjunction with other provisions, which implies that the sum of various provisions cannot be used to calculate the total amount of tax expenditure, but can be used to evaluate the level and trends of established tax expenditures.

Major tax expenditures influencing the state budget revenues are set out in three different instruments – the Income Tax Act, Value Added Tax Act and Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. Under the Value Added Tax Act<sup>18</sup> (VATA), tax expenditures – in other words, major deviations from the desirable fiscal regime – arise from the provisions stipulating more favourable tax rates to support the consumption of certain goods or services. Under the Income Tax Act<sup>19</sup> (ITA), tax expenditures or major deviations from the desirable fiscal regime arise from the provisions stipulating more favourable tax rates to support undertakings in certain sectors, certain groups of natural persons or families or natural persons bearing certain expenses or using certain services. In the case of ITA, it has been assumed that the exemption deductible from the income of a resident natural person during a period of taxation under Section 23 is part of the desirable fiscal regime (and shall not count as a tax expenditure). In the case of the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act <sup>20</sup> (ATFEEDA), tax expenditures or major deviations from the desirable fiscal regime arise from the provisions stipulating more favourable excise rates or excise exemptions to support undertakings in specific sectors or the production of specific goods.

Revenues of the 2009–2012 state budgets will be influenced by 17 various tax expenditure provisions of the Value Added Tax Act, Income Tax Act and Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. The total amount of major tax expenditures in 2009 is almost 4.9 bln kroons or 1.8 per cent of the gross domestic product. The largest tax expenditures are on increased basic exemption for the family's first child as well as more favourable excise duty rates for diesel fuel for specific purposes and light heating oil. The two largest tax expenditures shall amount to some 50 per cent of all tax expenditures established for 2009.

To analyse tax expenditure dynamics by functions of the government,<sup>21</sup> a relevant function of the government has been established for each tax expenditure provision. The following table indicates that in 2009–2012, tax expenditures shall be used to support six out of ten functions of the government (economic affairs; housing and community amenities; health; recreation, culture and religion; education; social protection). In 2009, the largest share shall be covered by the "social protection" (2 385.0 mln kroons or 48.6% of all tax expenditures), "economic affairs" (1 141.5 mln kroons or 23.3%) and "housing and community amenities" (525.0 mln kroons or 10.7%) functions. Tax expenditures under other functions of the government remain below 500 mln kroons or 10% of total tax expenditures.

<sup>&</sup>lt;sup>18</sup> Value Added Tax Act. (2008). – State Gazette (2003, 82, 554; 2007, 32, 259). [WWW] <a href="https://www.riigiteataja.ee/ert/act.jsp?id=12869417">https://www.riigiteataja.ee/ert/act.jsp?id=12869417</a> (18.04.2008)

<sup>&</sup>lt;sup>19</sup> Income Tax Act. (2008). – State Gazette (1999, 101, 903; 2007, 44, 318) – [WWW] <a href="https://www.riigiteataja.ee/ert/act.jsp?id=12851790">https://www.riigiteataja.ee/ert/act.jsp?id=12851790</a> (18.04.2008)

<sup>&</sup>lt;sup>20</sup> Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. (2008). – State Gazette (2003, 2, 17; 2007, 74, 452). [WWW] <a href="https://www.riigiteataja.ee/ert/act.jsp?id=12906565">https://www.riigiteataja.ee/ert/act.jsp?id=12906565</a> (18.04.2008)

<sup>&</sup>lt;sup>21</sup> Statistical Board. (2008). Valitsemisfunktsioonide klassifikaator (Classification of the Functions of Government). – [WWW] <a href="http://metaweb.stat.ee/view\_xml.htm?id=1129771&siteLanguage=ee">http://metaweb.stat.ee/view\_xml.htm?id=1129771&siteLanguage=ee</a> (28.04.2008)

Table 20

# Tax expenditure in 2009-2012<sup>22</sup>

(mio EEK)

Tax expenditure	Article	Functions of the government 23	2009	2010	2011	2012
1.9% of VAT on books	VAT act § 15 lg 2 p 1	9	76,0	82,0	89,0	97,0
2 9% of VAT workbooks	VAT act § 15 lg 2 p 1	8	25,0	27,0	30,0	32,0
2 9% of VAT for medicine and medical equipment	VAT act § 15 lg 2 p 2	7	431,0	466,0	505,0	546,0
3 9% of VAT for periodicals	VAT act § 15 lg 2 p 9	8	37,0	40,0	43,0	46,0
4. Additional tax allowance for every child	Income tax act §231	10	1 370,0	380,0	1 450,0	1 520,0
5. Additional tax allowance on pensions	Income tax act §23 <sup>2</sup>	10	823,0	905,0	905,0	903,0
6. Additional tax allowance in case of job-related accidents or occup.desease	Income tax act §23³	10	3,0	4,0	4,0	4,0
7. Deduction of mortgage interests	Income tax act §25	6	525,0	577,0	577,0	576,0
8. Deduction on education costs	Income tax act §26	9	246,0	271,0	271,0	270,0
9. Deduction of student loan interests	Income tax act §26	9	28,0	31,0	31,0	30,0
10. Gifts and presents	Income tax act §27 lg 1	8	10,0	11,0	11,0	11,0
11. Membership fees of trade unions	Income tax act §27 lg 2	10	12,0	14,0	14,0	14,0
12. Insurance payments and pension fund shares	Income tax act §28	10	177,0	194,0	194,0	194,0
13. Additional tax allowance on selling of agricultural products or timber	Income tax act §32 lg 4	4	68,0	71,0	70,0	69,0
14. 50% reduction of excise duty for small-size beer manufacturers	Act on Excise duties §46 lg 1	4	1,0	1,0	1,0	1,0
15. Tax exemption on biofuel	Act on Excise duties §27 lg28, lg28¹; §66 lg 148	4	3,8	3,8	3,8	3,8
16. Reduced rate for diesel used for special purposes and heating oil	Act on Excise duties §66 lg7	4	1 049,0	1 012,0	990,0	968,0
17. Excise duty exemtpion for fishermen	Act on Excise duties §74 <sup>2</sup>	4	19,7	20,2	20,7	21,3
Total			4 904,5	4 110,0	5 208,5	5 305,1

Source: Ministry of Finance.

<sup>&</sup>lt;sup>22</sup> Tax expenditure is calculated only for these articles that are in force in 01.01.2009.

<sup>&</sup>lt;sup>23</sup> Functions: 1. general activities; 2. state defence; 3. public order and security; 4. economy; 5. environment protection; 6. dwelling and public construction; 7. healthcare; 8. leisure, culture and religion; 9. education; 10. social protection.

# 5.2.4. Simplification and improvement of tax administration; effectiveness of tax collection

The forecast growth of tax revenue of the general government in 2008 will not exceed economic growth. The growth of tax revenues not related to macroeconomic developments and amendments to the laws may be attributed to effective tax collection by the tax authority.

### 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 the development of the e-Tax Board 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 2007 those figures had increased to 85.4%, 88.4% and 90% respectively. The share of electronically submitted declarations has further increased in 2008 to 88.2%, 91.5% and 93.1% of the respective declarations and 98.1% of customs declarations submitted over three-quarters. The e-Tax Board provides a considerable reduction in costs for both entrepreneurs and the state, while being an operative instrument for tax collection analyses and rapid detection of fraudulent conduct.

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 respective software. This reduces the time of carrying out inspections on the one hand, while allowing the analysis of greater amounts of data on the other hand. This method is mostly used in larger enterprises. From the end of Ql 2007, all tax auditors of the control units of large enterprises possess the means necessary for e-inspection. The equipment of control units of large enterprises shall be upgraded in 2008 and e-inspection shall be extended to other users.

In 2005, 22 e-inspections were commenced and 9 completed, 44 were commenced and 32 completed in 2006, 29 commenced and 33 commenced in 2007, and 35 had been commenced and completed by Q3 2008. No target rate of e-inspections has been established since 2007 as all e-auditors generally perform only e-inspections. As of October 2008, the Tax and Customs Board has 30 auditors using the specific e-inspection software. As the number of undertakings using electronic accounting and taxation systems continues to grow, the aim is to harmonise/standardise the contents, structure and format of data items requested from undertakings for inspection, subject to the functionality of accounting software used by taxpayers. The Tax and Customs Board hopes that the standardised audit file structure for facilitating tax inspection shall be established by the Taxation Act in the second half of 2009.

One of the priorities of the Tax and Customs Board in 2007 and 2008 has been the inspection of companies caught using the so-called invoice mills. Invoice mills are companies or natural persons who issue invoices for non-existent transactions. Such bogus invoices are issued for a fee to real companies who use the service in attempt to achieve the following:

- o obtain cash for the payment of envelope salaries;
- o obtain cash for the purchase of goods or services lacking the required documentation;
- o reduce VAT payments to state budget by deducting input VAT from VAT payable without legal basis for such deduction, as the real seller of goods/services is not a VAT payer or the transaction has not occurred in reality.

The inspection department has embraced a soft approach by sending notification letters to companies known to have used invoice mills. The objective of such letters is to enable the companies to check their accounting for taxation purposes and voluntarily amend tax returns. Companies that fail to react to letters of notification or adjust their accounting shall be subjected to detailed inspection or a tax audit by the inspection department.

Under the said soft control approach the tax authority issued a total of 435 letters of notification which prompted 46% of the recipient companies to voluntarily correct their tax returns. In addition to the letters, communication with taxpayers and provision of explanations regarding invoice mill transactions helped ensure the measure's success. Some 20 mln kroons of adjusted taxes were received as a result of the said notifications.

# 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 achieve a higher level of competitiveness by evading taxes, i.e. saving costs. According to the Estonian Institute of Economic Research, in 2007 on average 14% of salaried employees in Estonia received undisclosed earnings. In comparison with 2006 the share of recipients of envelope salaries has increased by 3 percentage points. Meanwhile, the overall share of envelope salaries in all earnings has fallen from 51% in 2006 to 35% in 2007.

The reasons for an increase of the share of legal earnings:

- o free movement of labour, which forces Estonian entrepreneurs to pay wages and salaries legally in order to avoid the flight of qualified labour 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 all of their earnings;
- o coordinated activities of the Tax and Customs Board in fighting undisclosed salaries; the creation of an inter-agency working group in 2005 for the purpose of combating envelope salaries.

During the nine months of 2008 the tax authority has carried out 82 envelope salary raids and completed the audits of 69 cases of payment of envelope salary which resulted in corrected declarations being submitted and additional taxes of some 15 million kroons imposed. Most envelope tax raids have been carried out in companies operating in the service sector. Construction companies and workforce rental businesses have also been checked.

In its efforts against envelope salaries the Tax and Customs Board continued the new approach, i. e. observation visits to construction sites. The preventive aim of such visits is to persuade persons to improve their tax behaviour and submit correct tax declarations to the tax authority. The visits do not constitute inspection, but rather gathering of evidence for possible later inspection. The visits require minimal inspection resources but cover a large number of persons and help persuade them to pay taxes voluntarily. After companies have submitted tax declarations the need for further inspection must be established with regard to each company by comparing the data gathered during the visit and the data declared by the company. In the event that the data indicated in the tax declarations is in conformity with the data recorded during the visit and no tax risk exists, the tax authority shall take no further action with regard to the taxpayer. If the person has a tax risk, i.e. our observation data does not correspond to the declared data, an individual audit shall be carried out in order to establish the specific circumstances. The activities of a total of 114 companies were observed at construction sites during 2007. It is estimated that the observation helped bring some 5.8 mln kroons to the state budget, incl. 3.5 mln kroons of social tax and 2.3 mln kroons of income tax.

In January 2008 the Tax and Customs Board sent notifications to 1001 companies to inform them of the low competitiveness of their declared wage payments in comparison with the average levels of the specific region and sector, which might imply the unofficial remuneration of employees. The notification requested companies to check their accounting and tax data and make any necessary amendments in accounting for taxation purposes. The aim is to improve overall tax behaviour, facilitate fair competition and ensure tax proceeds for the state budget. Notifications are among the Tax and Customs Board's most important inspection-related measures related to the fight against unofficial salary payments. The evaluation of the envelope salary risk was based on the comparison of companies' payments with payments of other companies operating in the same region and sector. Besides verifying the proper payment of taxes, the tax authority aims to prevent violations

of tax legislation and establish conditions where companies have a limited period for bringing their economic activities into compliance with applicable legislation and amending their tax declarations accordingly, instead of bearing the burden of tax audits or violation proceedings. As a new measure, letters of notification were sent to about 2000 natural persons in 2008. In its notification the tax authority referred to applicable social guarantees and the risks, i.e. the person's potential loss from unofficial salaries. With those letters the tax authority sought to raise the addressees' awareness of the benefits of paying taxes. Companies that do not respond to the letter of notification or correct their declarations and appear to have no objective reasons for paying abnormally low wages shall be included in the inspection schedule after further analysis. The letters of notification are estimated to have brought about 10 mln kroons of tax receipts to the state budget during the first four months of 2008.

### Improvement of tax collection due to a reduction in the illicit market of excise goods

According to the Estonian Institute for Economic Research, the share of illicit alcohol fell from 44% to 17.5% during 1999–2006 and to 10% in 2007. Strong alcoholic beverages have been revenue-stamped since 1 July 2006 in order to reduce the share of illicit alcohol. Following a three-month transition period when both stamped and unstamped alcohol were permitted to be sold, data from the Estonian Vodka Association indicated an average 30.5% growth in domestic vodka sales, while receipts from the excise duty on alcohol increased by an average of 10.6%. The data on revenue from excise duty on alcohol in H2 2006 and HI 2007 indicates that revenue stamps of alcohol have contributed to the growth of receipts from the excise duty on alcohol. The excise hikes of 2008 make it impossible to evaluate the current volume of the alcohol market because tax receipts have not yet been recovered from the sale of stocked quantities.

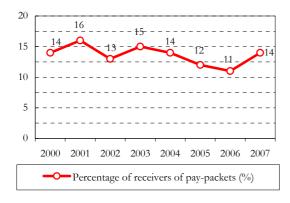
According to the Estonian Institute for Economic Research, the share of illicit cigarettes decreased from 33% to 22.5% during 1999–2006 and remained at that level in 2007 despite several increases in the excise duty rate. An 82% increase in the excise duty rate in 2008 shall raise the retail price of cigarettes by almost 50%, significantly increasing the profits from illicit sale of cigarettes intended for the Russian market. As Latvia imposed a similar excise duty hike, cigarettes with Latvian revenue stamps have all but disappeared from the Estonian market. To combat the sale of illicit cigarettes the Tax and Customs Board has acquired two mobile transparency devices in cooperation with the Border Guard, which provide for more effective border control due to their mobility. Increased control efficiency is mostly targeted at the eastern border, but the devices are also used during operations at other borders. The method of mobile unit operations has also been more effectively applied for combating and preventing violations at the southern border. In April 2008, the Tax and Customs Board launched the Automated Plate Recognition System (ANTS) at the eastern border. This system enables one to automatically pinpoint risk vehicles in the cross-border traffic flow, including suspected excise goods traffickers.

In the fuel market, the majority of problems is caused by fuel illicitly imported from Russia and the misuse of fiscally marked fuel. Plans have therefore been made to reduce the excise gap between ordinary and fiscally marked fuels in order to render the use of the fiscally marked fuel less attractive. The first step towards that end has been taken already – the excise duty rate of fiscally marked fuel <a href="was raised as of 1 January">was raised as of 1 January</a> 2005 and its consumption (the quantity released for free circulation) in comparison with 2004 decreased by 13% in 2005, 3% in 2006 and by 2% in 2007. Another increase in the excise duty rate in 2008 reduced the quantity released for free circulation by 12.8% during the first eight months of the year.

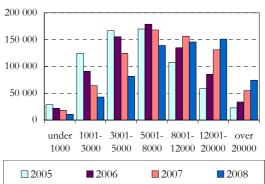
#### Figure 14

#### Developments of tax administration in Estonia

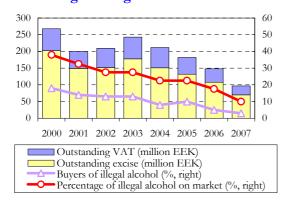
#### A. Percentage of pay-packets in economy



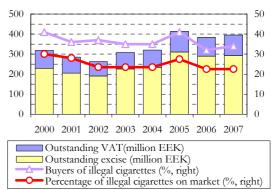
# B. Different wage ranges of labour force (EEK)



#### C. Percentage of illegal alcohol

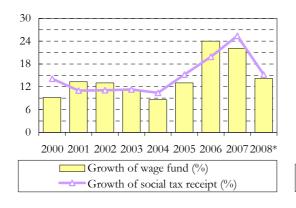


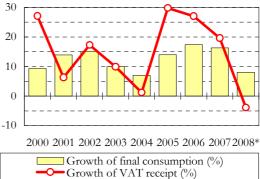
#### D. Percentage of illegal cigarettes



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







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

#### 5.3. General government expenditure

#### 5.3.1. General government expenditure structure

Through 2000–2007 the general government expenditure accounted for 35% 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 35% of GDP in 2007.

As of 2000 the government final consumption expenditure has constantly amounted to about 50% of the expenditure of the general government, amounting to 17.5% of GDP on average through 2000–2007. 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.

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 8,9% of GDP in 2006 and 9.0% of GDP in 2007.

2.0% of the general government expenditure, i.e. 1.0% of GDP was allocated for payment of subsidies in 2007. 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 2007 this amounted to 0.5% 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.

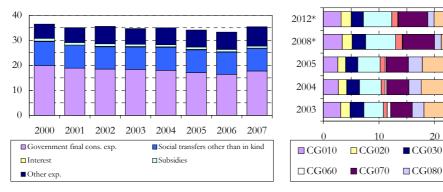
Looking at the expenses by economic activity, the share of expenditure on social protection is always the largest, amounting to 11.9% of GDP in 2007 according to the Ministry of Finance; the smallest share -0.1% of GDP in 2007 was spent on housing and utilities. In most of the areas the percentage of 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 24



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

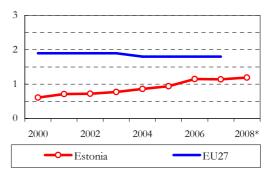
#### Figure 16

# Government investments into physical and human capital (% of GDP)

#### A. Public expenditure on education

# 6 2 2 0 2000 2001 2002 2003 2004 2005 Estonia EU27

#### B. R&D expenditure



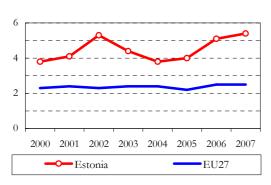
■CG050

■CG100

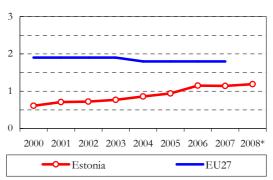
■ CG040

**□** CG090

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



#### D. Total state aid



Source: Eurostat.

<sup>&</sup>lt;sup>24</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.

#### 5.3.2. Major changes in expenditure policies affecting the state budget of 2009

In 2009 general government expenditure shall increase by 2.4% of the GDP, compared to 2008, to the level of 40.6% of the GDP.

#### Table 21

#### General government expenditures by function (COFOG)

(% of GDP)

	COFOG code	2007	2008*	2009*	2010*	2011*	2012*
1. General public services	1	3.2	3.4	3.7	3.5	3.4	3.3
2. Defence	2	1.7	1.8	1.8	1.9	2.0	2.0
3. Public order and safety	3	2.3	2.4	2.4	2.4	2.3	2.2
4. Economic affairs	4	4.9	5.5	5.7	5.5	5.3	5.1
5. Environmental protection	5	1.1	1.2	1.3	1.2	1.2	1.1
6. Housing and community amenities	6	0.1	0.1	0.1	0.1	0.1	0.1
7. Health	7	5.3	5.7	5.7	5.8	5.5	5.3
8. Recreation, culture and religion	8	1.3	1.2	1.2	1.2	1.2	1.1
9. Education	9	3.8	4.1	4.3	4.2	4.0	3.9
10. Social protection	10	11.9	13.1	14.2	12.9	11.7	11.2
11. Total expenditure	TE	35.5	38.2	40.6	38.8	36.4	35.0

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

#### General public services

General public services shall increase by 1.2 bln kroons. This field includes the activities of most constitutional institutions (Chancellery of the Riigikogu, President of the Republic, State Audit Office, Chancellor of Justice and State Chancellery) as well as the membership fees of international organisations paid by all ministries.

A majority of the increase is attributable to membership fees of international organisations, except defence organisations, which make up 3.2 bln kroons of the 2009 expenditure in this area.

#### National defence

National defence includes national military defence, civil defence and foreign military aid.

- National military defence includes national defence services, operation of land, sea and air forces, operation of engineering, transport, communication, intelligence, personnel and other non-combat defence forces; operation or support of reserve and auxiliary forces of the defence establishment.
- Civil defence includes civil defence services; formulation of contingency plans; organization of
  exercises involving civilian institutions and populations; operation or support of civil defence
  forces.
- o Foreign military aid includes the administration of military aid and operation of military aid missions accredited to foreign governments or attached to international military organizations or alliances, military aid in the form of grants (in cash or in kind); contributions to international peacekeeping forces including the assignment of manpower.

#### Public order and safety

The area of public order and safety covers the police, border guards, rescue services, courts and custodial institutions.

Police covers all police affairs and services, including alien registration, issuing work and travel documents to immigrants, maintenance of arrest records and statistics related to police work,

- road traffic regulation and control, prevention of smuggling; operation of police laboratories and operation or support of police training programmes.
- Operation of border and coast guards and of other special forces.
- Rescue services include fire-fighting and other rescue services, the operation of regular and auxiliary fire brigades and other rescue units, the operation and support of rescue training programmes.
- Courts cover the administration, operation or support of civil and criminal law courts and the
  judicial system, including enforcement of fines and legal settlements imposed by the courts.
  This includes administrative courts, the ombudsman etc.
- O Prison management includes the administration, operation or support of prisons and other places for the detention or rehabilitation of criminals such as prison farms, workhouses, reformatories, borstals, asylums for the criminally insane, etc.

In 2009 the expenditure in the area will increase 1.6% in comparison with 2008:

- o personnel expenditure increase of the Police Board 3 348 mln kroons;
- o purchase of two multifunctional ships for the Border Guard Administration 202.0 mln kroons;
- o increase of special equipment for the Rescue Board 76 mln kroons;
- o strengthening of external borders 141 mln kroons;
- o personnel expenditure increase of custodial institutions 50.6 mln kroons;
- o personnel expenditure increase of the courts of first and second instance 32.7 mln kroons.

#### Economic affairs

This field covers general economic and commercial affairs, agriculture, forestry, fishing and hunting, fuel and energy, mining, manufacturing and construction, transport and communication.

The growth of the economic affairs budget in 2009 is due to the following activities:

- o allocations for supporting rural life, agriculture and fisheries an increase of 231.4 mln kroons compared to 2008;
- o road management a decrease of 302.9 mln kroons compared to 2008;
- o allocations to Enterprise Estonia for enterprise support an increase of 23.6 mln kroons compared to 2008;
- o public (passenger) transport services an increase of 135 mln kroons compared to 2008.

#### Environmental protection

Environmental protection activities are classified in accordance with the Classification of environment protection activities (CEPA) established in the European System for the Collection of Economic Information on the Environment (SERIEE) of the Statistical Office of the European Communities (Eurostat).

Environmental expenditure shall increase by 11.9% in 2009 as a result of the following:

- o expenditures covered by foreign financing shall increase by 581.7 mln kroons or 57.9% compared to 2008, including a 124.7 mln kroon increase in expenditures for water economy investments of local municipalities;
- o reduction of operational expenditure by 46.4 mln kroons or 5.7%, incl. personnel expenditure by 8.4 mln kroons and management expenditure by 38.0 mln kroons, including a 22.3 mln kroon decrease in environmental monitoring and spatial data services procured by the Ministry of the Environment and the Land Board.

#### Housing and community amenities

The area of housing and community amenities covers the housing development, community development, water supply and other development services. Housing and community amenities expenditures in the budget of the Ministry of Economic Affairs and Communications shall increase by 47.6 mln kroons in 2009.

#### Health

Public health expenditures cover the individual and collective health services. Collective health services include the drafting of health policies and standards for medical and paramedical practitioners, hospitals, medical practices etc, the regulation and licensing of health service providers and applied health research and development. The management and operational expenditures of hospitals, clinics, medical practices, etc are classified as individual service expenditures.

The overall 5.34% increase in healthcare expenditures in 2009 results from the approximately 700 mln kroon increase in the health insurance budget.

#### Recreation, culture and religion

The field of recreation, culture and religion includes recreational and sporting services, cultural services, broadcasting, publishing, religious and other community services.

Recreation and sports services cover the provision of sporting and recreational services; administration of sporting and recreational affairs; supervision and regulation of sporting facilities; operation or support of facilities for active sporting pursuits or events (fields, courts, running tracks, courses, rings, rinks, gymnasia etc.); operation or support of facilities for passive sporting pursuits or events (chiefly specially equipped venues for playing cards, board games, etc.); operation or support of facilities for recreational pursuits (parks, beaches, camping grounds, swimming pools etc.); grants, loans or subsidies to support teams or individual competitors or players.

Cultural services cover the provision of cultural services; administration of cultural affairs; supervision and regulation of cultural facilities; operation or support of facilities for cultural pursuits (libraries, museums, art galleries, theatres, exhibition halls, monuments, historic houses and sites, zoological and botanical gardens, aquaria, arboreta, etc.); production, operation or support of cultural events (concerts, stage and film productions, art shows, etc.); grants, loans or subsidies to support individual artists, writers, designers, composers and others working in the arts or to organizations engaged in promoting cultural activities.

Broadcasting and publishing services include the administration of broadcasting and publishing affairs; supervision and regulation of broadcasting and publishing services; operation or support of broadcasting and publishing services; grants or subsidies to support the construction or acquisition of facilities for television or radio broadcasting; the construction or acquisition of plant, equipment or materials for newspaper, magazine or book publishing; the production of material for, and its presentation by, broadcasting; the gathering of news or other information; the distribution of published works.

Religious and other community services include the administration of religious and other community affairs; provision of facilities for religious and other community services, including support for their operation, maintenance and repair; payment of clergy or other officers of religious institutions; support for the holding of religious services; grants or subsidies to support fraternal, civic, youth and social organizations or labour unions and political parties.

The changes in expenditure in this field mainly result from the following activities:

- o investments for upgrading the technical equipment and work environment of the Estonian Public Broadcasting total about 30 mln kroons (a decrease of 4 mln kroons compared to 2008);
- o 25 mln kroons has been assigned to Estonian Public Broadcasting for the establishment of a multicultural TV channel;
- o 25.8 mln kroons shall be assigned for investments into cultural and sporting facilities of local municipalities (decrease of 123.4 mln kroons compared to 2008);
- o about 26 mln kroons shall be assigned for the renovation of churches and houses of worship in 2009;

- o about 56 mln kroons shall be assigned for the renovation of manor schools, including some 49 mln kroons of Norwegian aid (22.9 mln kroon increase compared to 2008);
- o 26.3 mln kroons is assigned for the acquisition of books and other materials for libraries (decrease of 8.5 mln kroons in 2009);
- o 21.7 mln kroons is assigned for activities related to the Song and Dance Festival.

#### Education

The classification of education is based on categories of the International Standard Classification of Education (ISCED) of the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Estonian classification of levels of education and the ISCED levels are generally not compatible. The COFOG classification is therefore used, which matches the Estonian classification of study programmes. Education covers military schools and colleges with study programmes similar to civilian schools, police colleges which provide general education in addition to police training.

Financing of higher education is a priority of the Government of the Republic; on the other hand, the Government has increased annually the share of research and development (R&D) investments. According to the draft budget for 2009, R&D expenditure shall increase by 45% compared to 2008. Educational expenditures related to structural aid shall increase by 783 mln kroons.

#### Social protection

The social protection functions and definitions are based on Eurostat's European System of integrated Social Protection Statistics (ESSPROS). In ESSPROS, social protection includes healthcare, while COFOG classifies it separately under the "Health" section.

Social protection expenditures shall increase by 11.6% in 2009, mainly due to the following:

- o pension expenditure under public social insurance shall increase by <u>2527 mln kroons compared</u> to 2008;
- o parental benefit expenditure shall increase by 495.9 mln kroons compared to 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. Population projections used are the ones of Eurostat (Statistical authority of EU) Europop2008. The macroeconomic forecast of this programme has been used with regard to years 2008–2012

As a most significant change in terms of sustainability, a new pension index used for annual increasing of pensions was introduced by Riigikogu on 14 November 2007 (first indexation according to the new index was on 1 April 2008), which ensures keeping the ratio of average wage and average pension in current level also in the long-term perspective. Compared to previous index, the new index is based more on the social tax increase (80% of social tax increase + 20% of annual CPI, previously 50%+50%) and, according to forecast, increases the pensions significantly more. Also from April 2008 the co-efficients are implemented on basic pension and on cash value of one year of pensionable length of service and pension insurance coefficient in order to increase the solidarity of pension system.

According to current forecast the pension insurance reserve will not be sufficient to cover the payments of pensions for the whole period of this programme. Due to the fact that the sums paid out as pensions will exceed the amounts collected from the social tax for pension insurance for at least another 15 years, the solution on financing on account of other expenditure has to be found. In assessing the sustainability of the pension system it has to be noted that in context of pension reform a part of the pension obligation was moved to fully financed pension funds, which, in longer-term will compensate for the decrease of spending of state pension insurance (see figure 17). According to current projections the ratio of average pension and average wage will not worsen despite of increase in number of retired persons and decrease in the number of employed. While interpreting the following graphs and tables – it has to be noted that those are based on assumption of no policy change and on assumption described at the beginning of the paragraph.

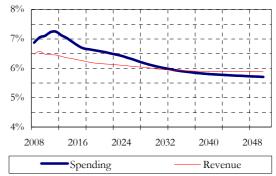
#### Figure 17

# Revenue and spending of the pension insurance (% of GDP)

#### A. Total spending (I+II pillar)

# 8% 6% 4% 2% 2008 2016 2024 2032 2040 2048

#### B. State pension system



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

Table 22

Long-term sustainability of public finances 2008–2050 (% of GDP)

	2008	2010	2020	2030	2050
Total expenditure	38,2%	37,8%	38,6%	38,3%	38,0%
Pensions	7,0%	7,9%	6,9%	6,6%	6,3%
social security pensions	7,0%	7,9%	6,9%	6,6%	6,3%
old-age pension	5,9%	6,7%	5,8%	5,6%	5,4%
other (disability, survivors)	1,1%	1,3%	1,1%	1,0%	0,8%
occupational pensions (if in GG budget)	-	-	-	-	-
Health care	4,9%	5,0%	4,9%	4,8%	4,8%
Long-term care (previously part of health care expenditure)	0,1%	0,1%	0,1%	0,1%	0,1%
Interest expenditure	0,2%	0,2%	0,2%	0,2%	0,2%
Total revenue	36,2%	38,8%	38,6%	38,3%	38,0%
of which: interest revenues	1,0%	1,1%	1,1%	1,1%	1,1%
of which: social security contributions for pension	11,8%	12,1%	11,9%	11,7%	11,5%
Pension reserve fund assets (I pillar)	2,4%	0,0%	0,0%	0,0%	0,0%
of which: consolidated public pension fund assets (assets other than government liabilities)	2,4%	0,0%	0,0%	0,0%	0,0%
Assumptions:					
Labour productivity growth	-2,0%	3,3%	3,3%	2,7%	1,7%
Real GDP growth	-2,2%	2,6%	2,6%	2,2%	0,6%
Participation rate, males (aged 20-64)	85,9%	85,7%	85,2%	84,3%	82,4%
Participation rate, females (aged 20-64)	75,7%	75,3%	76,4%	77,1%	75,8%
Total participation rate (aged 20-64)	80,6%	80,3%	80,7%	80,6%	79,1%
Unemployment rate	5,3%	9,3%	3,5%	3,5%	3,5%
Population aged 65+ over total population	17,2%	17,0%	18,8%	21,7%	27,4%

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

#### Measures for ensuring the long-term sustainability of the pension system

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.

It is important in a longer perspective to find the solution in order to increase the supply side of the labour market, which is weakened by the demographic trends. Possible measures to be considered

here include increasing the retirement age (after the year 2016) and larger involvement of foreign labour in the economic life.

Further increase of the retirement age is also supported by the population projections, which envisages relatively rapid continuing increase in life expectancy. According to Eurostat projections by 2060 the life expectancy at birth will reach the level 87,1 years for females and 80,4 years for males.

It is worth mentioning that compared to 2008, by the year 2060 the life expectancy at 63 will increase by 63 years for females and by 7,3 years for males.

## Figure 18

#### Average life expectancy

(in years)

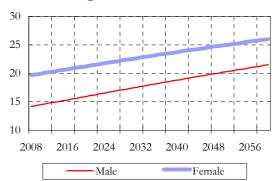
#### A. At birth

# 85 80 75 70

2048

Female

#### B. At the age of 63



Source: Eurostat.

2016

Male

2008

## 7. INSTITUTIONAL FUNCTIONS

#### 7.1. Developing the budget process

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. Inter-ministerial workgroups were formed to work out the concept paper and State Audit Office was also involved.

In the beginning of 2008, the concept paper was presented and the discussions went on in the cabinet meetings of the Government. In October, a report "Actions by the Ministry of Finance on forming the budgetary processes" by the State Audit Office, which also partly covered the concept paper, was completed. The conclusions and possible developments set in the report were discussed in the State Budget Audit Commission in the Parliament. In order to introduce the concept paper and the report by the State Audit Office, a seminar in the Parliament was planned in December.

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.

To implement the developments set in the concept paper, the Ministry of Finance plans to work out pilot projects according to the suggestion made by the State Audit Office. After the implementation of pilot projects it is possible to decide, how and to what extent the developments can be implied to the whole system.

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

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

- O 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.
- O 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.
- o 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.
- o 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.
- o 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.

- O 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,% of GDP);
  - $\checkmark$  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).
- O 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

O As for **fiscal institutions**<sup>25</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

<sup>&</sup>lt;sup>25</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.

## **APPENDICES**

## Appendix 1. Key indicators of Estonian economy 2000–2007

Table 23
Gross domestic product in 2001–2007

	2001	2001	2002	2003	2004	2005	2006	2007
	mln EEK	%	%	%	%	%	%	%
1. Real GDP	102 808,1	7,7	7,8	7,1	7,5	9,2	10,4	6,3
2. Nominal GDP	108 218,3	13,3	12,2	12,1	11,0	14,9	18,2	16,5
Sources of growth								
3. Private consumption								
expenditure (incl. non-profit								
institutions) 1)	56 455,8	7,4	11,0	10,0	9,5	9,9	12,7	7,9
4. Government consumption								
expenditure	19 527,3	2,6	1,7	-0,1	2,3	1,9	1,8	3,9
5. Gross fixed capital formation	27 229,1	9,7	24,0	18,6	5,2	9,4	19,5	4,8
6. Change in inventories (% of								
GDP)		1,5	2,6	1,6	3,3	3,5	4,7	5,4
7. Export of goods and services	81 897,6	0,4	-1,0	7,4	14,2	20,9	11,6	0,0
8. Import of goods and services	88 002,0	3,5	6,2	10,1	15,5	17,5	20,4	4,2
Contribution to GDP growth 1)								
9. Domestic demand (excl.								
inventories)			12,9	11,1	7,4	8,8	13,4	6,6
10. Change in inventories			-0,2	-0,2	1,1	0,7	1,6	1,7
11. External balance of goods								
and services			-5,9	-2,6	-2,0	1,0	-8,3	-3,9
Growth of value added								
12. Primary sector		-5,2	7,0	2,3	-9,2	-4,3	-3,2	-10,4
13. Industry		10,4	7,0	10,2	8,9	9,9	10,9	8,0
14. Construction		2,2	11,2	0,6	9,8	25,6	17,8	10,0
15. Other services		7,9	7,4	6,7	7,8	9,1	11,4	6,2

<sup>1)</sup> 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 24

#### Prices in 2000-2007

(percentage)

	2000	2001	2002	2003	2004	2005	2006	2007
1. GDP deflator		5,3	4,0	4,6	3,3	5,3	7,0	9,6
2. Private consumption deflator		6,2	3,1	0,7	1,9	3,5	4,1	7,9
3. Harmonised index of								
consumer prices	3,9	5,6	3,6	1,4	3,0	4,1	4,4	6,7
3a. Consumer price index	4,0	5,8	3,6	1,3	3,0	4,1	4,4	6,6
4. Government consumption								
expenditure deflator		5,0	7,4	11,6	4,8	9,9	10,9	17,0
5. Investment deflator		6,0	1,0	0,5	3,3	4,1	9,0	6,5
6. Export deflator		6,3	0,2	1,8	2,2	4,3	7,0	7,1
7. Import deflator		2,0	-0,1	-0,2	1,5	4,0	5,1	3,1

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

## Table 25

#### Labour market in 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
		%	%	%	%	%	%	%
1. Employment, persons	572,5 <sup>1)</sup>	0,9	1,4	1,5	0,2	2,0	6,4	1,4
3. Unemployment rate	13,6	12,6	10,3	10,0	9,7	7,9	5,9	4,7
4. Labour productivity, persons	166,8 <sup>2)</sup>	6,7	6,4	5,5	7,3	7,0	3,7	4,9
	43 588,							
6. Compensation of employees	9 2)	11,5	10,7	12,3	11,1	14,8	20,6	25,8
7. Compensation per employees								
(6./1.)	76,1 <sup>3)</sup>	10,5	9,2	10,6	10,9	12,5	13,4	24,1
7a. Average gross wage, EEK	4 907	12,3	11,5	9,4	8,4	10,8	16,5	20,5

<sup>1)</sup> Thousands of persons.

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

<sup>2)</sup> Mln EEK.

<sup>3)</sup> Thousand EEK.

## Table 26

## Balance of payments in 2000-2006

(% SKPst)

	2000	2001	2002	2003	2004	2005	2006	2007
1. Net lending/borrowing vis-à-vis								-16,9
the rest of the world	-5,0	-5,0	-10,1	-10,6	-11,0	-9,2	-14,6	
Of which:								
- Balance of goods and services	-3,3	-2,1	-7,1	-7,4	-7,4	-6,4	-11,8	-11,3
- Balance of primary incomes and								-6,8
transfers	-2,1	-3,1	-3,6	-3,9	-4,3	-3,7	-4,9	
- Capital account	0,5	0,2	0,5	0,7	0,7	0,8	2,1	1,1
1a. Current account	-5,4	-5,2	-10,6	-11,3	-11,7	-10,0	-16,7	-18,1
4. Statistical discrepancy	0,0	-0,1	0,6	-0,6	-0,2	0,6	0,3	0,7

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

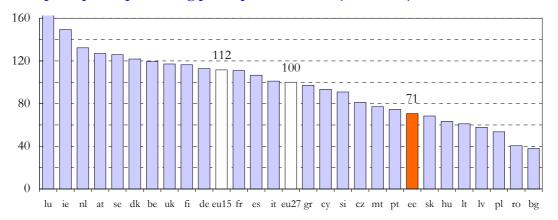
## Appendix 2. Comparison of Estonia with other EU member states

## Figure 19

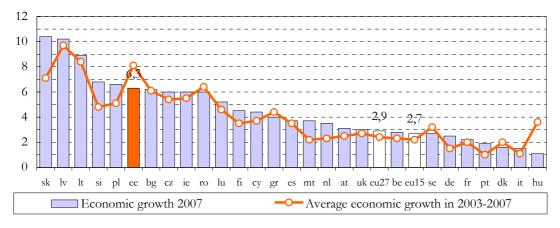
#### Main macroeconomic indicators

(percentage)

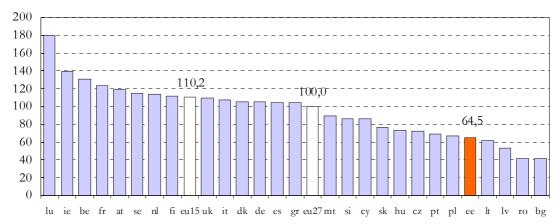
#### A. GDP per capita in purchasing power parities in 2007 (EU27=100)



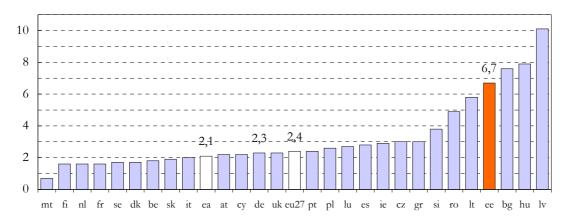
#### B. Economic growth in 2007 and 2003-2007



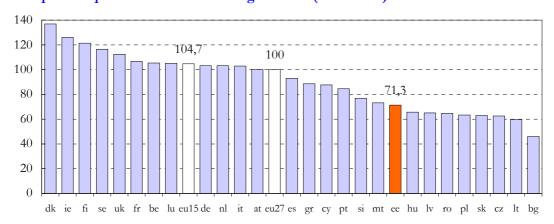
# C. Labour productivity – GDP in purchasing power parities per person employed in 2007 (EU27=100)



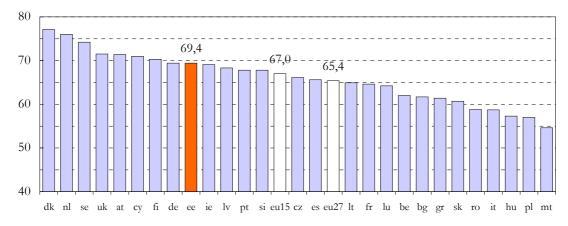
#### D. Harmonised index of consumer prices in 2007



#### E. Comparative price level to EL27 average in 2007 (EU27=100)



#### F. Employment rate (15-64 years old) in 2007



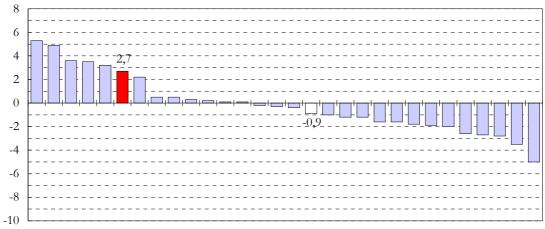
Sources: Eurostat, Statistical Office of Estonia, Ministry of Finance of Estonia.

## Figure 20

### General government fiscal position

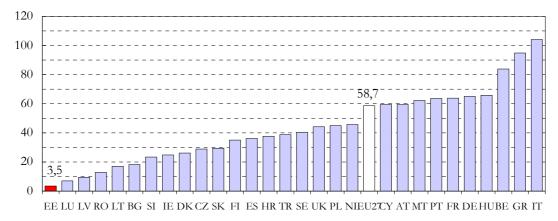
(% of GDP)

#### A. General government budget balance in 2007



FI DK SE CY LU EE ES RO SI NL IE LV BG DEBE ATEU27CZ TR LT IT HR MT SK PL PT FR UK GR HU

#### B. General government debt in 2007

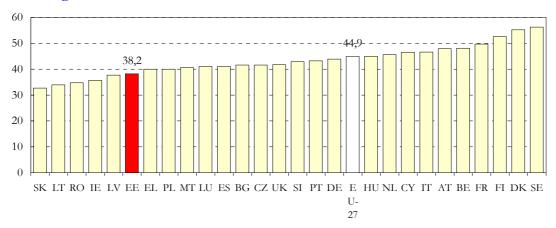


## Figure 21

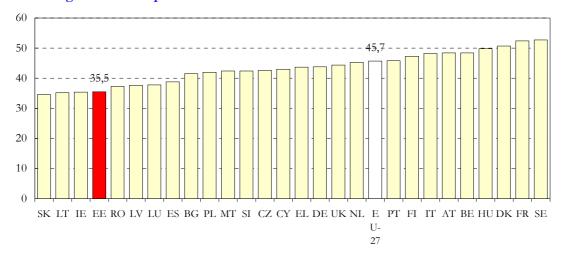
### General government revenue and expenditure

(% of GDP)

#### A. General government revenues in 2007



#### B. General government expenditure in 2007



Sources: Eurostat, Ministry of Finance.

# Appendix 3. Measures of the Estonian Action Plan for Growth and Jobs taken into account in the Convergence Programme

A comprehensive overview of the measures of the Estonian Action Plan for Growth and Jobs 2008–2011 together with budget forecasts is available at the State Chancellery's website.<sup>26</sup>

The action plan for growth and jobs lists the following key challenges in ensuring continued economic growth:

- o to develop education based on the needs of companies, and modernise work relations in order to increase safe flexibility (flexicurity) of the labour market;
- o to increase the ability of research and development activities, and direct these to be more business related;
- o to develop an economic and investment environment that supports innovation and international competitiveness of enterprises;
- o to increase the use of environmentally friendly energy, while at the same time ensuring the security of energy supply and the competitiveness of the energy sector.

The action plan stresses the importance of macroeconomic stability, conservative fiscal policy and adoption of the euro as the prerequisites for economic growth and higher competitiveness.

The action plan specifies the following measures for ensuring the stability of the macroeconomic environment:

- o preparing the 2008–2011 state budgets to ensure a balanced budget for the government sector;
- o reducing general government debt.

Preparations for transition to the euro and the observation of Maastricht criteria in policy-making are also listed as important factors.

The following measures are set out in the action plan to ensure the long-term sustainability of fiscal policies:

- o amending the health insurance benefits system and adjusting incapacity benefits towards greater own responsibility of employers and employees;
- o reducing the number of people receiving special pensions and changing the conditions thereof to cut the long-term fiscal burden;
- changing the early retirement pension system and superannuated pension system in order to cut the long-term fiscal burden.

The following measures are planned for increasing the international competitiveness of research and development activities:

- o launching and implementing a programme of updating the infrastructure of research and development institutions and higher education necessary, with the aim of educating researchers and top specialists and ensuring the international competitiveness of R&D activities;
- o drafting a road map for the development of equipment infrastructure for research and development;
- drafting the concept of pan-Estonian core laboratories (joint usage of infrastructure) and developing the network of such laboratories with focus on the needs of the Baltic Sea region;<sup>27</sup>

In Estonian <a href="http://www.riigikantselei.ee/?id=5864">http://www.riigikantselei.ee/?id=5864</a> and in English <a href="http://www.riigikantselei.ee/?id=73395">http://www.riigikantselei.ee/?id=73395</a>.

<sup>&</sup>lt;sup>27</sup> Intended for creating basic laboratories (accredited laboratories) and improving their ability to provide services to the industry.

o promoting the implementation of international projects and agreements by research institutions by offering co-financing and support to cover expenses related to participation in international projects.

A set of measures is established for increasing the productivity and international competitiveness of enterprises, including the following new measures that should facilitate economic activity in the medium term:

- o a novel concept in Estonia is the creation of a possibility of flexible combination of support schemes for large investors (starting from a certain amount of investment); the aim is to develop a system for providing large investors in priority fields with support packages, from employee training to the creation of necessary public infrastructure;
- developing and implementing a recruitment scheme for development workers (researchers and engineers, designers, marketing managers, managers of development projects from Estonia and abroad); this measure is targeted at improving the top-level development capacity of small and medium-sized enterprises;
- o launching of a technology transfer support programme with the aim of supporting the employment of new technologies in industrial enterprises (2008–2013); this programme is also aimed at small and medium-sized enterprises with more limited access to credit;
- o implementing a mezzanine-financing scheme by offering equity loans worth 1–16 million to high growth operating small enterprises;
- o supporting early-stage equity capital investments to alleviate the capital deficit of research- and technology-intensive start-up enterprises;
- o increasing the volume of the support programme for R&D activities in enterprises and research and development institutions, focusing on supporting preliminary and applied research projects and product development projects<sup>28</sup> (2008–2013);
- o supporting the establishment of new competence centres and continuing to support the activities of existing centres in launching and carrying out long-term and market-oriented cooperation projects;
- o developing a programme of innovation vouchers and implementing it in order to promote and facilitate the beginning of cooperation between small and medium-sized enterprises and R&D institutions;
- o expanding the scheme of medium- and long-term export guarantees to offer a significantly larger volume of guarantees;<sup>29</sup>
- o focusing on the programmes of Estonia's relatively strong research and development fields, including:
  - implementing the national research and development programme for Estonian energy technologies,
  - launching and implementing the national research and development programme for Estonian information and communication technologies,
  - launching and implementing the national research and development programme for Estonian biotechnologies,
  - launching and implementing the national research and development programme for Estonian materials technologies.

The objective of those programmes is to engage the joint support of different ministries for the development of the competitiveness of enterprises in a given field.

Agreed measures for developing a business environment favourable to enterprise and entrepreneurship include the following:

o analysing the possibilities to lower the minimum amount of share capital required for setting up a limited-liability company and limit its reporting obligations, followed by appropriate amendments in legislation;

<sup>&</sup>lt;sup>28</sup> The programme shall support the development of new products, services and technologies, product development processes and the improvement of existing processes.

<sup>&</sup>lt;sup>29</sup> Incl. increasing the KredEx endowment from 100 to 500 mln kroons and amending the system for covering potential losses.

- o developing reorganisation procedures and enacting relevant legislation; this measure should increase the attractiveness of Estonian companies for potential investors;
- o reducing the number of areas of activity that require business operators to obtain operating licences and authorizations and simplifying the procedures for obtaining licences; codifying all aspects of economic administrative law.

A number of infrastructure projects are also planned in order to increase the capacity of international transport links and improve their quality (the extension of Tallinn Airport has been completed, reconstruction plans for Ülemiste and Russalka junctions are being prepared, detours around Tartu and Pärnu are being planned).

# The following measures are intended for improving the skills of the labour force and labour market flexibility:

- o the Government has submitted to the Riigikogu a new draft Employment Contracts Act that simplifies formal labour relations and facilitates the expansion of Estonian enterprises and possibilities for swift reorganisation; employee security shall be improved by increasing unemployment benefits and extending training and retraining options for workers and the unemployed;
- o improving adult education by offering working adults free in-service training and retraining in vocational education institutions, professional higher education institutions and informal education centres;
- o strengthening the institutional capacity of higher education institutions, modernising the accreditation system in higher education and changing the principles for the national recognition of diplomas, with the long-term objective of improving cooperation and consolidation in Estonian higher education;
- o analysing the effects of separating the upper secondary school level from the basic school level.

Table 27
Budgetary impact of main structural reforms

	200	08	200	)9	201	0	2011	
Main structural reform measures	mln EEK	% of GDP						
OBJECTIVE 1: Ensure a stable macroeconomic environment, incl:	-2 852	-1,1%	113	0,0%	298	0,1%	270	0,1%
Prepare a supplementary budget in 2008 to decrease expenditure in the 2008 state budget	-3 215	-1,3%	0	0,0%	0	0,0%	0	0,0%
Reduce the debt burden of the central government (2008-2011)	363	0,1%	113	0,0%	88	0,0%	60	0,0%
In order to promote private savings and investments bring taxation conditions for private securities investments in line with those for investments by legal persons (2008-2009)	0	0,0%	0	0,0%	210	0,1%	210	0,1%
OBJECTIVE 2: Develop a tax system that strongly promotes economic growth, incl:	1 170	0,5%	780	0,3%	1 980	0,7%	3 340	1,1%
Reduce the income tax rate to 18% and increase basic exemption to 3 000 EEK per month (2008-2012)	1 170	0,5%	1 180	0,5%	2 460	0,9%	3 860	1,3%
Increase the VAT incentive from 5% to 9% and lose the incentives for performances and concerts, waste handling, and funeral goods and services (2008-2009)	0	0,0%	-400	-0,2%	-480	-0,2%	-520	-0,2%
OBJECTIVE 3: Ensuring the long-term sustainability of fiscal policies, incl:	0	0,0%	-859	-0,3%	-85	0,0%	-81	0,0%
Improvement of the long-term sustainability of the health insurance system by increasing the number of people covered by health insurance	0	0,0%	109	0,0%	115	0,0%	119	0,0%
Make state fees cost-oriented	0	0,0%	-216	-0,1%	-200	-0,1%	-200	-0,1%
Reduce public sector expenses (salaries and administrative expenses) (2008-2009)	0	0,0%	-752	-0,3%	0	0,0%	0	0,0%
OBJECTIVE 4: Increase the international competitiveness of research and development activities, incl:	1 031	0,4%	1 640	0,6%	2 801	1,0%	4 469	1,5%

Develop the human capital for research and development	49	0,0%	159	0,1%	230	0,1%	184	0,1%
Develop an internationally competitive research and development		,						
environment	139	0,1%	588	0,2%	1 411	0,5%	3 070	1,0%
Ensure better focus of funding for research and development activities, carrying out a functionality analysis of the base-line, grant and targeted								
financing instruments for research, reorganize those financing								
instruments and increase the volume of the instruments for financing	0.40	0.00/		0.00/		0.407		0.407
research	843	0,3%	893	0,3%	1 160	0,4%	1 215	0,4%
OBJECTIVE 5: Increase the productivity and international								
competitiveness of enterprises, incl:	1 713	0,7%	1 632	0,6%	1 303	0,5%	1 042	0,4%
Develop strategic competencies in enterprises	30	0,0%	152	0,1%	175	0,1%	174	0,1%
Support the internationalisation of enterprises via expanding the target group of marketing support, offering support for participation in trade								
fairs, expanding the scheme of medium- and long-term export								
guarantees	140	0,1%	122	0,0%	82	0,0%	86	0,0%
Promote foreign investments	37	0,0%	41	0,0%	43	0,0%	42	0,0%
Support investments in the development of technologies, products and								
services Support enterprises with high growth potential by supporting early-stage	890	0,4%	925	0,4%	928	0,3%	648	0,2%
equity capital investments to alleviate the capital requirements of								
research- and technology-intensive start-up enterprises; promote								
cooperation with international companies and support existing								
incubators and those yet to be established	615	0,2%	392	0,2%	75	0,0%	92	0,0%
OBJECTIVE 6: Develop a business environment favourable to								
enterprise and entrepreneurship, incl:	1 335	0,5%	1 979	0,8%	2 372	0,9%	1 724	0,6%
Increase entrepreneurship and support small enterprises	79	0,0%	73	0,0%	71	0,0%	60	0,0%
Support the investments of micro-enterprises to diversify their	504	0.207	450	0.40/	70	0.00/	450	0.40/
economic activity in rural areas (2008-2013)	506	0,2%	150	0,1%	79	0,0%	150	0,1%
Develop the business-related regulatory environment Guarantee competition, incl: develop and implement a leniency	8	0,0%	16	0,0%	8	0,0%	0	0,0%
programme; develop new methodologies for competition supervision								
analyses	0	0,0%	0	0,0%	0	0,0%	0	0,0%
Enhance the availability and quality of public e-services	62	0,0%	84	0,0%	88	0,0%	93	0,0%
Improve international transport links	679	0,3%	1 656	0,6%	2 125	0,8%	1 421	0,5%
OBJECTIVE 7: Ensure the security of energy supply and develop								
a competitive and environmentally-friendly energy sector, incl:	74	0,0%	632	0,2%	456	0,2%	579	0,2%
Develop environmentally friendly energy sector, incl: support for								
investments in constructing thermal and/or power plants and boiler								
plants that use renewable energy sources; support for investments in producing biomass, bio-fuel and/or bio-energy in the agricultural sector	45	0,0%	129	0,1%	232	0,1%	384	0,1%
Increase energy efficiency, incl: improve the availability of energy	13	0,070	12)	0,170	252	0,170	301	0,170
efficiency information, supporting investments	17	0,0%	29	0,0%	31	0,0%	57	0,0%
Promote the use of environmentally friendly transport, incl: increase the	10	0.007	455	0.20/	402	0.40/	120	0.007
quality of passenger rail traffic	12	0,0%	475	0,2%	193	0,1%	138	0,0%
OBJECTIVE 8: Improve the skills of the labour force, incl:	901	0,4%	1 461	0,6%	1 699	0,6%	2 467	0,8%
Better correspondence of education and labour market	607	0,2%	1 242	0,5%	1 318	0,5%	1 944	0,7%
Popularize sciences and technology	0	0,0%	0	0,0%	52	0,0%	92	0,0%
Reducing the number of early school leavers	95	0,0%	22	0,0%	215	0,1%	344	0,1%
Encourage lifelong learning Bring risk groups to the labour market, incl: broaden the range of active	58	0,0%	90	0,0%	89	0,0%	86	0,0%
labour market measures and develop measures to support national								
labour market services	140	0,1%	106	0,0%	25	0,0%	0	0,0%
Simplify the use of highly qualified foreign labour and invite Estonians								
working abroad to return	2	0,0%	0	0,0%	1	0,0%	1	0,0%
OBJECTIVE 9: Increase the flexibility of the labour market and								
improve the quality of working life, incl:	78	0,0%	276	0,1%	903	0,3%	685	0,2%
Increase the secure flexibility and transparency of labour relations	75	0,0%	262	0,1%	889	0,3%	671	0,2%
Ensure a working environment that supports the health of employees	2	0,0%	14	0,0%	14	0,0%	14	0,0%
Total impact on the budgetary balance	3 448,2	1,4%	7 654,2	3,0%	11 726,9	4,3%	14 494,7	4,9%

Sources: Ministry of Finance of Estonia, Action Plan for Growth and Jobs 2008 2011 for the implementation of the Lisbon Strategy

[http://www.riigikantselei.ee/failid/2008\_12\_15\_Estonian\_Action\_Plan\_2008\_2011\_EN\_final\_kujundatud2.pdf].