

Republic of Estonia

**UPDATED
CONVERGENCE PROGRAMME
2010**

**Tallinn
28 January 2010**

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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 that 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. This programme is its fifth update. The purpose of the Convergence Programme is to express the government policy upon fulfilment of the convergence criteria and transition to the single currency, the euro. The present stability and convergence programmes submitted by the Member States will be assessed by the European Commission and the Council of the European Union through February-April 2010.

The Ministry of Finance prepared the Updated Convergence Programme 2010 and it reflects Estonia's budgetary policy in line with the State Budget Strategy 2010-2013 approved by the Government and the State Budget Act 2010 adopted by the Riigikogu on 9 December 2009 as well as later decisions of the governing coalition.

Estonia's budgetary policy remains in compliance with the Stability and Growth Pact and the European Economic Recovery Plan. The Programme has been drafted pursuant to the goals of the Government of the Republic and the policies of achieving them, as stipulated in the Governing Coalition Agreement and strategic development plans (incl. the Estonian Action Plan for Growth and Jobs).

The Updated Convergence Programme 2010 is based on the current economic and budgetary policy situation and the forecast of the Ministry of Finance completed just before submitting the Updated Convergence Programme to the Government.

The time horizon of the Updated Convergence Programme 2010 reaches to 2013, 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 the 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 prerequisite for stable economic development is ensuring macroeconomic stability, which supports internal and external balance. The pace of Estonia's real convergence has been strong and we have vigorously moved towards the European Union average. The credit inflow-based economic growth in recent years involved an increase of risks and imbalances, but these have quickly backed off in the adaptation process and the vulnerability of the economy has decreased. The global credit risk resulted in a strong contraction of the global economy and trade, resulting in a serious deterioration of the future outlook of the Estonian economy for it is an open economy. In the changed economic situation the upholding of the reliability of the budgetary policy and its support to the economic development are becoming more important. Maintaining of a favourable business environment and increasing the economy's flexibility have become the key issues.

One of the main goals of the budgetary policy is to support the macroeconomic stability through the flexibility and effectiveness of markets and control risks that threaten the balanced development of the economy. This is especially important for the purpose of ensuring effective functioning of the fixed exchange rate and currency board system. 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 the budgetary policy in the conditions of an aging population. Ensuring a stable economic environment, channelling budget 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 of the Republic 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. Furthermore, the prospect of joining the euro zone also gives a chance to show the persistence of the reliability of the fiscal policy in the setting of the economic crisis. 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's objective is to continue pursuing a sustainable budgetary 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.

Setting a nominal balance objective has in general been right for Estonia, because the structural changes in such a small and open economy have been extensive and they have not allowed for evaluating the economic cycle or the cyclical position of the budget with sufficient reliability. Nevertheless, the budgetary policy has generally been supportive of stable development of the economy over the last decade. With the strengthening of the growth rate of domestic demand the budget surplus has increased as well. In connection with the emergence of risks of the economy

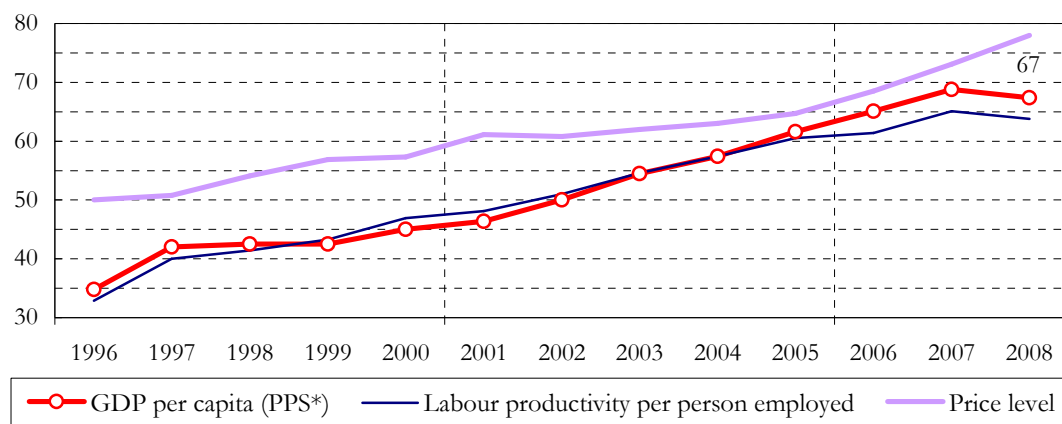
overheating, the budgetary policy of the Government changed and a budget surplus was planned instead of the former balance. The state budgets for 2007 and 2008 were planned such as to achieve a surplus of the general government budget. However, the budgetary position of 2008 turned out to be much worse due to strong deceleration of the economic growth. The budget for 2009 was planned to be balanced in accordance with the events that had taken place in the global economy, but the deeper-than-expected economic recession worsened the budgetary position in comparison with the planned one and in order to stay within the deficit limit of 3% of GDP the Government has had to take additional steps for improving the budgetary position. Considering the cyclical position of the economy and the problems of international financial markets, the Government is planning on returning to a budget surplus in the medium term.

Figure 1

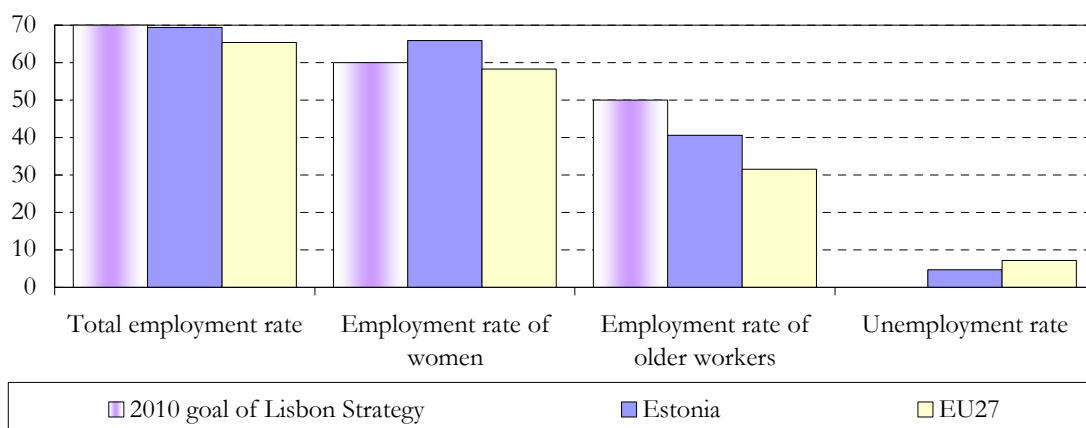
Real convergence with the EU and employment goals of the Lisbon Strategy

(percentage)

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



B. Employment rates in 2008 (15–64-year old persons)



Sources: Statistics Estonia, Eurostat.

2. ECONOMIC DEVELOPMENT AND OUTLOOK

2.1. Recent economic developments

2.1.1. Macroeconomic situation

After the potential-exceeding growth period Estonian economy has undergone rapid changes. Imbalances and risks that emerged during the period of economic growth have vanished and they have been replaced by the trade balance that is in surplus due to the declined domestic demand, falling employment rate, declined wages, and negative inflation. The stability needed in the currency board system is ensured by the consistency of the state's economic policy and the flexibility of the budgetary policy as well as adjustment processes taking place in the real sector.

Estonian economy has been falling steep for the first three quarters of 2009. According to the first estimate of the Statistical Office, the Gross Domestic Product fell by 15.6% over the first three quarters of 2009 in comparison with the same period in 2008. The economic recession was due to a strong fall in the domestic demand and exports. The domestic demand fell 26%, being influenced by a rapid decline in private consumption, gross fixed capital formation and inventories. Due to the weak domestic demand the imports of goods and services fell considerably, resulting in a positive contribution of the net export to the GDP growth.

Private consumption that fell by 19.5% made the strongest contribution to the decline of the domestic demand over the first three quarters of 2009. As of the start of 2009 the consumer confidence that had been falling since the spring of 2007 and the resulting loss of the consumption courage were accompanied by a decrease in income through a fall of the employment rate as well as the average wage. A major negative contribution to private consumption has been made by a fall in the prices of residential property, which by the end of 2009 reached nearly 50% of the peak of the real estate boom observed in the spring of 2007. The consumer confidence indicator has, similarly to the EU average, improved in a stable manner, but for the time being it is not yet expressed in the growth of the propensity to consume. The balance of outstanding consumption loans is declining rapidly and in spite of the notable fall of wages the deposits of residents have remained at the same level over the past year. This gives reason to conclude that the consumers are still very conservative and that the labour market risk groups do not have any substantial savings or buffers which to use in the case of losing a job.

The rate of growth of the gross fixed capital formation was -34.4% over the first three quarters of 2009. Thereby the gross fixed capital formation of enterprises fell by 39% and residents' real estate investments by 39%. The investment activity has been strongly hampered by a steep fall in demand as well as a decrease of sales revenues and profits arising therefrom, accompanied by the banks' increased cautiousness in granting new loans and extending old ones. The investment need is kept low by the level of utilisation of production capacities, which in industry was below 60% in 2009. Residents' real estate investments have been decelerated by the approx. 30% fall in prices continuing in 2009 and the rapidly rising unemployment rate. The impact of the base interest rate that has undergone a strong decline is compensated by the rise of the risk margin from 1% at the end of 2008 to 2.5% and stricter credit terms of banks. The total investment is somewhat stabilised by the general government where investments even increased in the first half of 2009.

Similarly to other EU Member States the crisis resulted in a substantial decrease of exports in Estonia at the end of 2008. The fall in exports also deepened in the beginning of 2009 and by now the annual decline has somewhat decelerated. Over 9 months the volume of exports of goods and services has decreased by 12.3%, thereby the exports of services have coped with the poor economic environment better. In current prices the fall in export volumes is much deeper due to the rapid decline in export prices. The fall in the exports of goods has been broad-based, only the exports of mineral fuels, i.e. transit goods of little value added increased over the 9 months. The exports of capital goods have fallen the most: machinery and equipment (mostly electrical machinery and equipment), base metals and articles of base metal, and transport vehicles (transit of automobiles through Estonia). Due to the contraction of domestic demand and imports of inputs necessary for exports the decrease of imports in the first 9 months of 2009 has been steep, reaching to -28.3%.

In 2008 the current account was running a huge deficit, but following a strong correction in domestic demand and the global crisis the current account was balanced in the beginning of 2009 and thereafter turned to surplus that reached 6.6% of GDP in the third quarter. With a rise in savings the vulnerability of the economy and the need for external financing has decreased considerably. The external balance has improved with regard to all accounts. Due to a notable decrease in investments and consumption the import volumes have fallen considerably, resulting in a decrease of the trade deficit. In the worsened economic environment the profits of foreign enterprises have fallen rapidly and therefore the income account deficit was one of the lowest in this decade. In 2009 the accrual of EU funds has increased strongly both due to an increase in current transfers as well as in the capital account surplus.

In terms of economic sectors the enterprise sector influenced the decrease of the GDP the most in 2009, with the value added falling by 21% in comparison with the first 9 months of 2008. Due to the weak domestic and external demand the workload both in the industrial sector as well as in most of the service branches shrunk considerably, resulting in tougher competition and a fall in prices, reducing enterprises' sales revenue and profitability. The decline has affected all areas of the economy, but the shrinking of the total value added of business was influenced mostly by manufacturing, which contributed 4.5% of the decline. Value added declined in all industries due to low domestic demand and a decrease of exports. Due to insufficient demand manufacturing exploited merely 60% of its production capacity in Q3 2009, i.e. 8 percentage points less than a year ago. The decrease of value added was the strongest in construction (31% compared to the first 9 months of the previous year). The decrease can be attributed mainly to a decrease in construction of buildings and, above all, residential buildings. The decrease of the value added of wholesale and retail trade, transportation and warehousing, and real estate, renting and business services influenced the value added a lot due to weak demand in the local market. The decrease of the value added generated in the financial sector deepened to 30% in Q3 2009 mainly due to a strong decrease of financial and interest income and service fee income.

A sudden change in employment took place in the first quarter of 2009 when the number of employed fell by 6.8% and the rapid rise of the unemployment rate that had started in the second half of 2008 continued. The unemployment rate reached 11.4% in the first quarter. The unemployment rate continued rising in the second as well as third quarter, amounting to 13.5% and 14.6%, respectively. The last time the unemployment rate was at such a high level after restoration of Estonia's independence was in 2000, but at the time the number of employed was smaller, amounting to approx. 570,000. The number of unemployed rose in Q3 2009 by 58,400 people to 102,300 people. Compared to the 9.7% in Q2 the speed of the fall in the employment rate remained the same, reaching 9.4%. Thus, entrepreneurs have found different ways of optimising expenditure in tough economic conditions, but once the situation improves they are ready to meet the demand. To that end they have partially cut the number of employees, but in comparison with the previous year the number of part-time workers has increased. In Q3 2009 the number of part-time workers increased by more than a third in comparison with the same period last year.

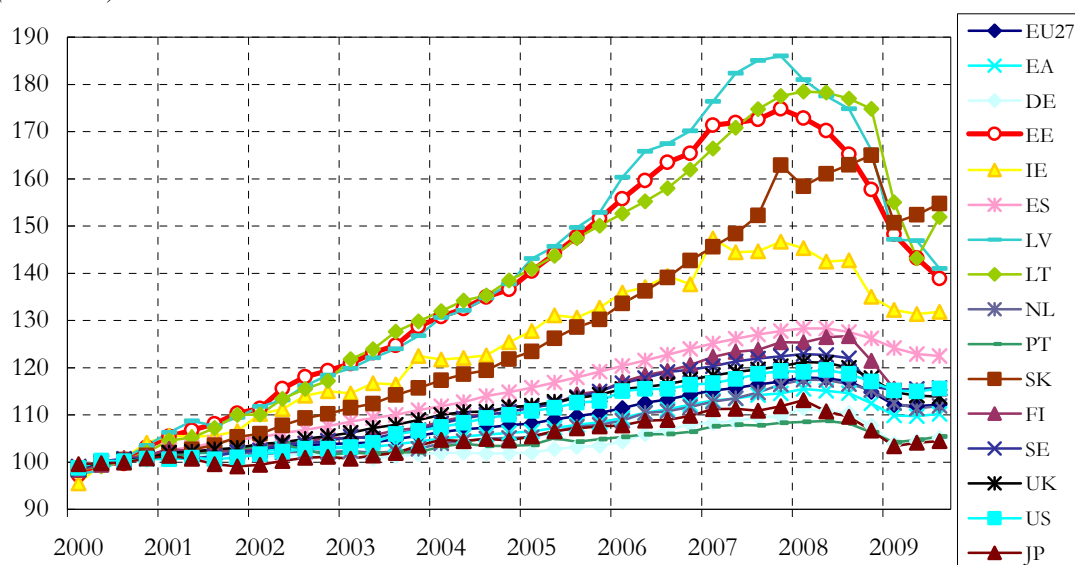
In Q1 2009 average gross wages fell by 1.5%, which is the first fall since 1993. Real wages, i.e. wages less inflation fell by 4.5%. The fall in wages that started in the first quarter of the year continued in the second quarter when the gross wages fell 4.4% and real wages fell 4.1%. In the third quarter the average gross wages fell 5.9% and real wages by 5.8%. In order to cut wage costs enterprises have reduced the number of workers, workload and bonuses and the overall decline in wage levels has continued, too. The fall in the average wages has remained moderate, giving reason to believe that optimisation of enterprises' costs has taken place first of all through reducing the number of workers and the workload.

Factors arising from the external environment such as a favourable level of commodity prices (food, energy) brought about a strong deceleration of consumer prices in Estonia in the beginning of 2009 and in spring the change of the price level turned negative. In spite of the raising of the VAT rate on July 1 the annual decrease in consumer prices deepened and in the final months of the year it stabilised at -2%. Due to a weak economic environment enterprises could not add the entire rise in the VAT rate to the prices, as a result of which consumers had to bear nearly a half of it. The core inflation that indicates the impact of domestic factors on prices has gradually decelerated over 2009 and only recently, in November, turned negative. Weak domestic demand and a fall in wages are the main reasons for the decrease of core inflation. Moreover, in the adjustment phase of the economy enterprises have reduced wage costs mainly by reducing the number of workers and workload, while the fall in the average wages has remained moderate. As for services, the prices of housing services have fallen the most due to a steep fall in rent prices and the prices of leisure services have fallen a lot as well due to lower accommodation costs.

Figure 2

Impact of Global Economic Crisis- countries' GDP back on 2005–2006 level

(2000=100)



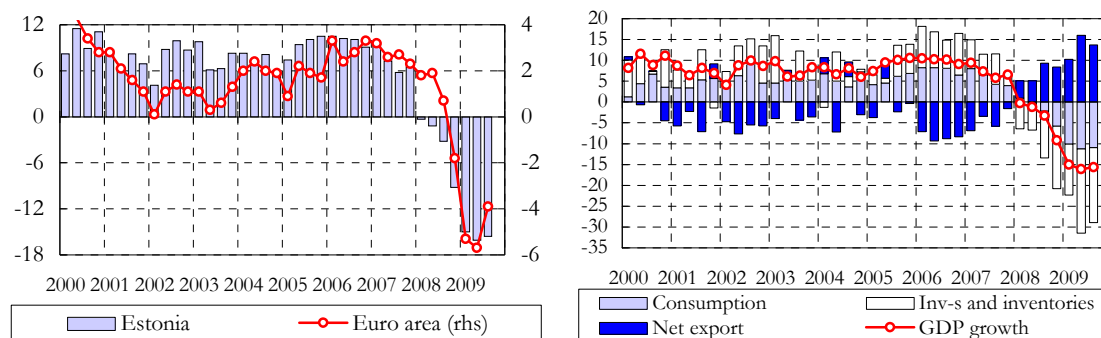
Sources: Statistics Estonia, Bank of Estonia, Eurostat.

Figure 3

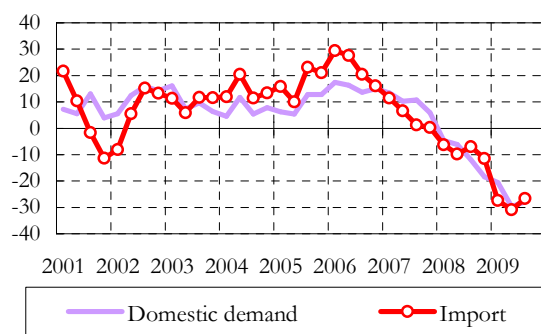
Main indicators of Estonian economy

(percentage)

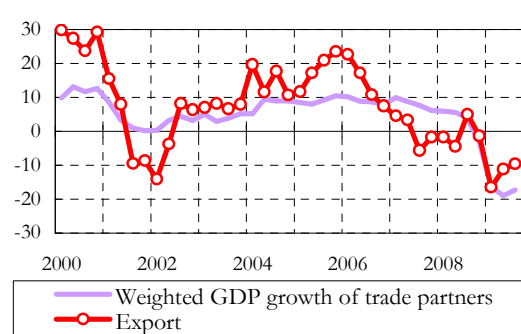
A. Economic growth of Estonia and euro area B. Contribution to economic growth



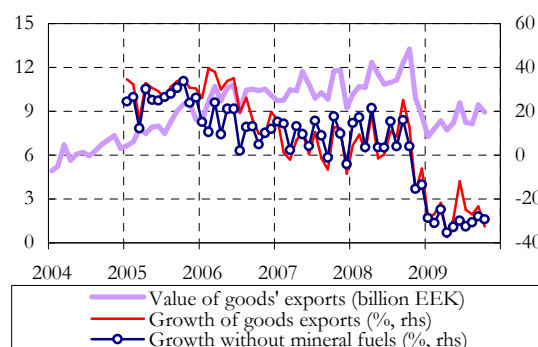
C. Real growth of domestic demand and imports



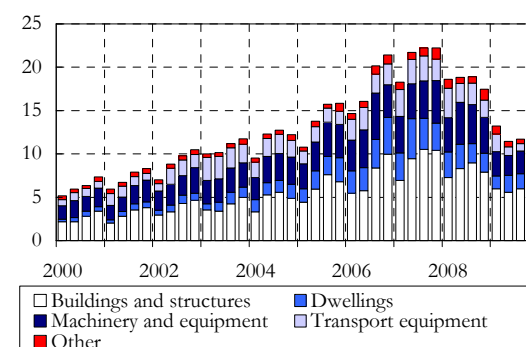
D. Real growth of exports



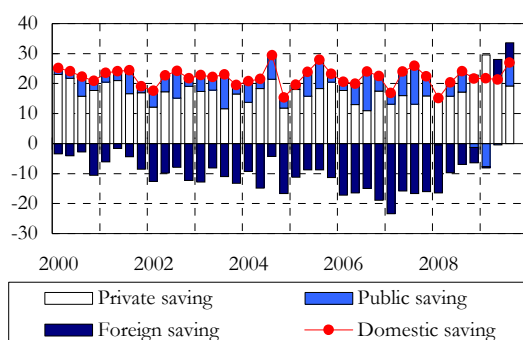
E. Value and growth of goods' exports



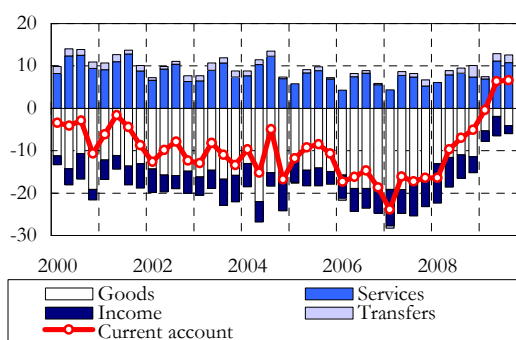
F. Structure of investments (billion EEK)



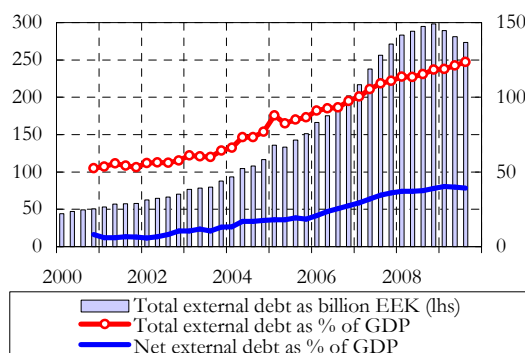
G. Savings rate (% of GDP)



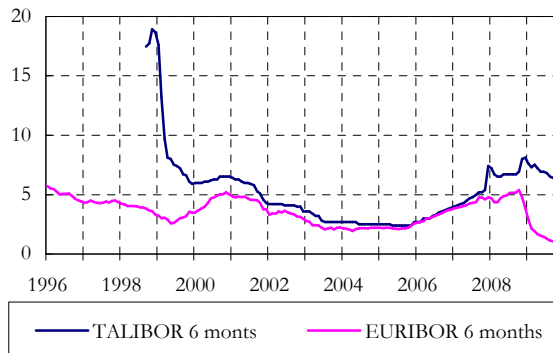
H. Current account (% of GDP)



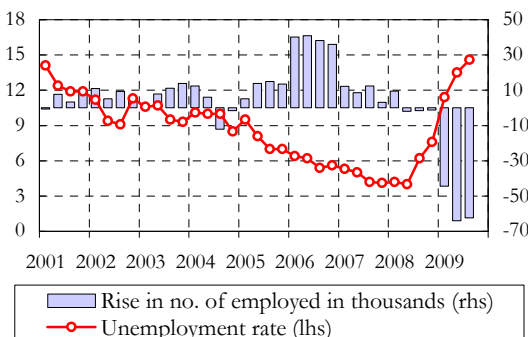
I. External debt



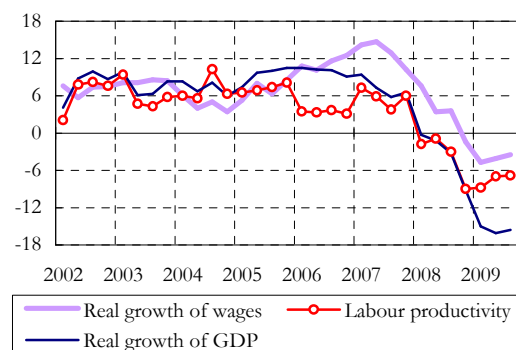
J. Interest rates



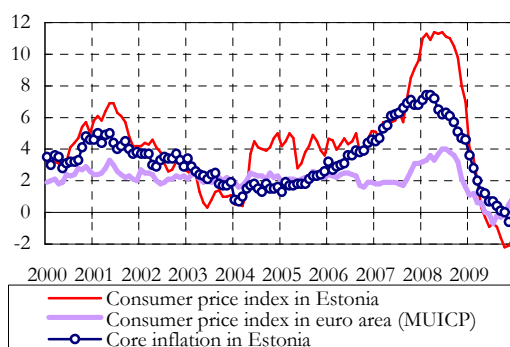
K. Employment and unemployment



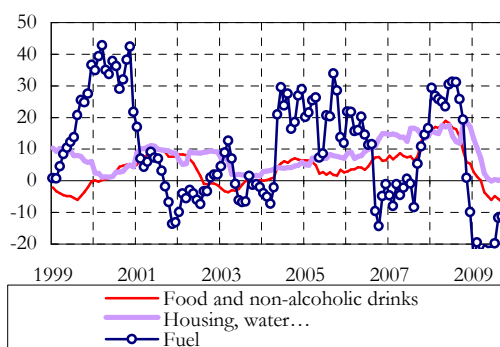
L. Labour productivity



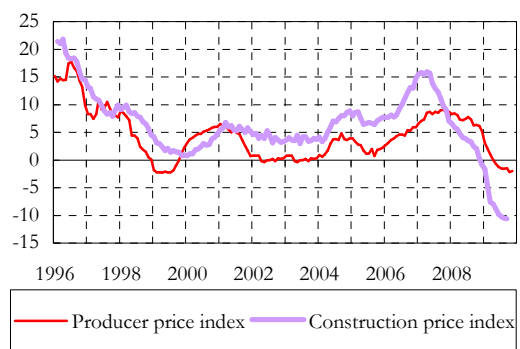
M. Consumer price index in Estonia and euro area



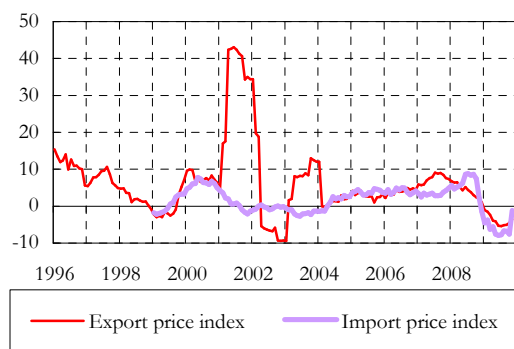
N. Main drivers of inflation in Estonia



O. Producer and construction price index



P. Export and import price index



Sources: Statistics Estonia, Bank of Estonia, Eurostat.

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 ratings as well as Standard & Poor's lifted Estonia's country rating to level A in 2004, while Moody's had lifted Estonia's rating to level A1 already back in 2002. Along with the estimate to the possibility of quick introduction of the euro that was prevalent at the time, Estonia was attributed a positive rating outlook by all the rating agencies. By the end of 2009 Fitch had lowered Estonia's country rating by two levels to BBB+ and S&P's by one level to A-. Moody's has not lowered Estonia's country rating, but the rating outlooks of all the three rating agencies are currently negative.

In spite of some ratings having been lowered and a negative outlook, the qualities found in the Estonian economic environment against the background of the global crisis are positive. A complicated budgetary policy situation in the conditions of the steep economic recession and the private sector's high debt burden in a foreign currency are considered to be the main risks. S&P's and Fitch's last ratings have been given in spring/summer 2009, but robust measures improving the budgetary position had not been fully taken by that time, although the difficulties in balancing the budget were obvious. Keeping of the budget deficit within the limits of 3% was considered the greatest challenge and the main factor that could impede the introduction of the euro in 2011. At the end of 2009 it is likely that Estonia will fulfil the budget deficit criterion even with some room to spare and thus the main uncertainty factor should be gone by now.

Some risks are also seen in the high debt burden, considering the level of income in Estonia, but this is not considered a threat to the financial stability. The banks operating in Estonia are well-capitalised and 98% of them have foreign owners. In addition to the support of the parent banks, effective cooperation with the Swedish Central Bank in ensuring financial stability is important.

Estonia's flexible institutions, competitive business environment, historically conservative budgetary policy and existence of the resulting reserves are considered positive factors. This allows turning the economic development to the path of growth as soon as the demand of Estonia's export partners is restored. Introduction of the euro as soon as possible is considered a very important risk mitigator.

According to the Heritage Foundation's Economic Freedom Report 2009, Estonia holds the sixth rank among the Member States of the European Union (EU 27) and the 13th rank among all countries. We are ahead of our closest neighbours: Latvia has been ranked 45th, Lithuania 30th, Finland 17th and Sweden 26th. However, economic freedom alone does not guarantee strong economic growth or a high level of welfare, but should lay the institutional foundations for the competitiveness of the economy. Latvia and Lithuania are far behind Estonia in terms of protecting ownership and somewhat behind also in terms of freedom of investment. As for the flexibility of the labour market, owing to the new Employment Contracts Act Estonia has clearly surpassed its southern neighbours. The difference between developed countries and Estonia lies in its relatively high level of corruption and modest general government.

In previous years Estonia has also achieved high rankings in competitiveness comparisons. According to the World Competitiveness Yearbook 2009 of the Institute for Management Development (IMD), Estonia was ranked 35th, which means that its competitiveness has decreased by 12 places. A few years ago Estonia outran all other EU newcomers covered by the report (the Czech Republic, Slovenia, Slovakia, Hungary and Poland), but by now the first three of them have overtaken Estonia. The list is traditionally topped by the US, Hong Kong, Singapore and the first three of the EU Member States are Denmark, Sweden and Finland. Estonia's steep fall may partially be explained by the fact that the economic crisis in Estonia started much sooner than in the neighbouring states and the list is mainly based on the indicators of 2008. The main reason for the fall is the fact that in addition to the current economic situation the index also takes into account

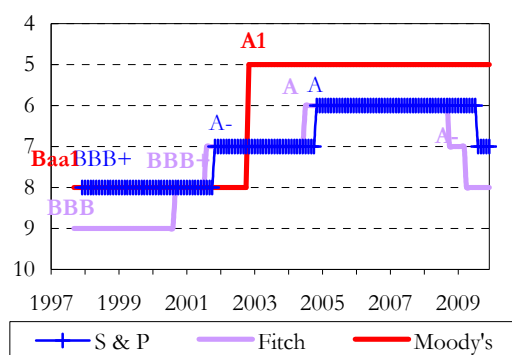
softer factors such as the environment, quality of life, technological level, and knowledge. These factors change more slowly over time and allow the states that are fundamentally competitive retain their ranking even in the circumstances of a serious crisis.

Through 2001-2007 until the last great economic crisis Estonia's economic growth (8.1% on average) and real convergence towards the EU's average was very rapid. Only Latvia's growth rate was stronger and Lithuania had the same level. Owing to a slightly better starting platform, Estonia's GDP *per capita* in the PPS terms rose to 69% with regard to the average of the EU27 by 2007 (Latvia 56%, Lithuania 59%). The economic crisis commencing after the sudden end of the real estate and credit boom hit Estonia slightly sooner than Latvia and Lithuania and the rest of the EU. Estonian and Latvian economies started decreasing already in 2008 and the EU's deepest economic recession through 2009-2010 is taking place in the Baltic States. As a result thereof Estonia's relative position towards the EU average in terms of the GDP *per capita* is falling both in euros as well as when looking at price level differences. At the same time Estonia is the only new Member State of the EU that is about to fulfil all the Maastricht criteria by the spring of 2010 and become a fully fledged member of the euro zone in 2011. This should positively contribute to creating financial stability as well as a positive background for new investments.

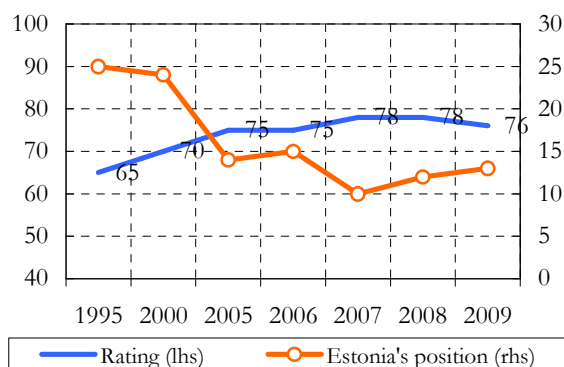
Figure 4

International evaluation of Estonia and comparison of Estonia's development

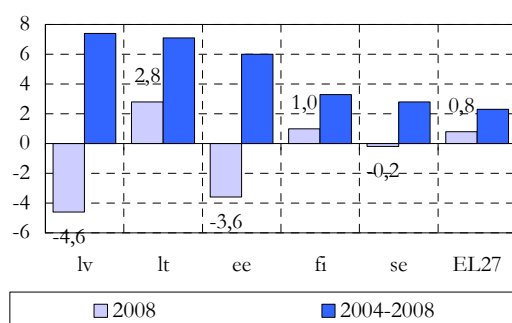
A. Dynamics of Estonia's credit ratings



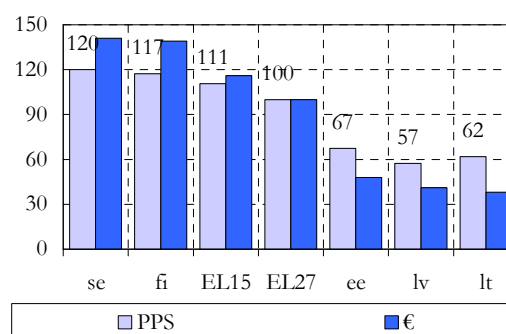
B. Economic freedom index (Fraser Inst.)



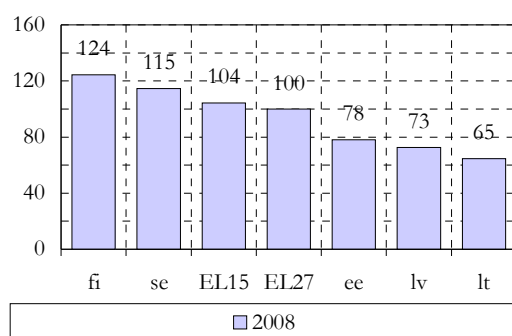
C. Economic growth (%)



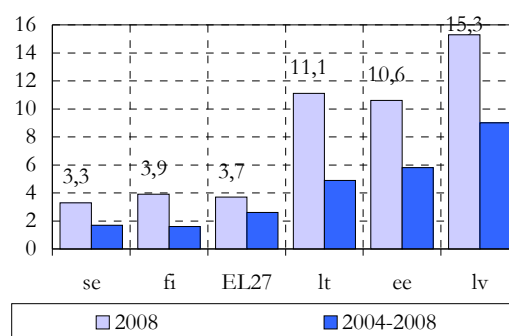
D. GDP per capita 2008 (PPS and €)



E. Price level in 2008 (%), EU27=100



F. HICP 2008 and 2004–2008 (%)



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

2.2. Economic forecast

2.2.1. Macroeconomic forecast for 2009-2013

Global economy is beginning to recover from the sudden and the deepest economic recession after World War II. The EU's economy is at a turning point and slowly recovering from the longest and broadest recession in the history of the European Union. The economy of the European Union has been falling since the last quarter of 2008, but the pace of the economic recession considerably slowed down in the second quarter of 2009 and in the third quarter the GDP growth turned positive on a quarterly basis, reaching 0.2%. The economic growth was influenced by improvement of the external environment as well as effective growth-supporting budgetary and monetary policy measures. We expect the weighted average economic recession of Estonia's trade partners to be 6.0% in 2009. In 2010 in the conditions of the strengthening confidence the economic growth of the trade partners is expected to slightly restore and the situation should stabilise.

In 2008 Estonia's economy shrunk by 3.6% in comparison with 2007. The decrease was mostly affected by a decrease in domestic demand by 10.5% as a result of which the share of domestic demand fell by 7.3 percentage points over the year to 105.1% of GDP calculated at current prices. The reason behind the decrease of domestic demand is the rapid decrease of investments and inventories, with private consumption contributing significantly as well. Weak domestic demand resulted in a rapid decline of imports, while exports fell marginally, resulting in positive contribution of net exports to the economic growth.

According to the forecast, Estonia's **economy** will shrink by 14.5% in 2009 and continue shrinking in annual comparison until the middle of 2010. Owing to an increase of the probability of introduction of the euro on 1 January 2011, the economic forecast takes into account the resulting positive impacts as of the second half of 2010. In 2009 the economic recession could be attributed to a decrease in domestic and external demand, but in 2010 the weakness of domestic demand will exert negative influence on the economy. In 2009 domestic demand fell by 24.5% and in 2010 it will decrease further by 2.5%. The economic recession should come to a halt in the second half of 2010 once the economic situation in the export markets improves and Estonia's export growth starts recovering. The decrease of imports will continue due to weak domestic demand, as a result of which in the coming year the contribution of net exports will remain positive.

In 2011 we expect the economic growth to recover based mainly on exports. The rising export demand will in turn exert positive influence on the domestic market, bringing about a rise in the confidence of entrepreneurs and consumers. As for the domestic demand components, the recovery is mostly affected by investments, mainly private sector investments in production capacities and a rise in inventories. The growth of private sector and general government consumption expenditure will remain lower than the average growth of the economy. Through 2012-2013 the economic growth is expected to strengthen. The role of the domestic demand in shaping the economic growth should increase owing to investments as well as the growth of private consumption and general government final consumption expenditure. The growth of exports of goods and services should exceed the average economic growth, but rising domestic demand will increase the need for imports as a result of which the rate of growth of imports will exceed the rate of growth of exports.

In 2009 generation of value added by the industrial sector will be impeded by low domestic and export demand and the resulting fall in orders, as a result of which the industrial output may decrease 25-27% in comparison with the previous year. In the second half of 2010 the situation of the industry should improve, especially in export-oriented industries whose growth largely depends

on the improvement of competitiveness. The strengthening of the growth of industry can be expected in 2011 along with the rise in demand in export markets and stabilisation of the domestic demand. Through 2012-2013 the industrial sector should grow faster than the average of the economy. The growth should be ensured by reorientation towards industries that offer a higher value added, product development, introduction of new technologies, and the launch of new markets. The construction market should start rising again only in 2011 along with a rise in construction investments by the general government and the private sector. The growth of the service sector will remain negative in 2009 and 2010 due to weak domestic and external demand. As of 2011 the growth of the service sector will start recovering, especially in service branches aimed at exports. Through 2012-2013 growth is expected to pick up in line with a rise in investment and consumption activities, whereby the growth of the fields of activity oriented mostly towards the domestic market, e.g. trade, financial intermediation and real estate, will remain below the average economic growth.

Private consumption has been declining since the start of 2008 and by Q2 2009 the annual decrease had risen to 20.8%. In the last quarter of the year the annual decrease of consumption should slightly decelerate due to the base effect and we expect the annual decrease to be 19%. The expected fall in wages and employment until the second half of 2010 means the continuance of the fall in private consumption. In 2010 the consumption decrease rate should remain at 5% owing to the expected stability of pension income. The consumption propensity could be increased by stabilisation of employment at the end of the year, which allows for expecting a consumption growth of 2.5% in 2011, slightly exceeding the growth of real income. Until the end of the forecast period the growth in private consumption will remain at the modest 2%, because a low employment rate, interest rates that are likely to rise and a conservative financial sector will not fuel a new consumption boom. Also, significant inflow of foreign funds cannot be expected in the form of new housing loans.

The share of **gross fixed capital formation** in GDP fell to 29% in 2008 and in 2009 it will reach the level of 23% (2006–2007 35%). Household investments underwent a 26% fall in 2008 (corporate investments fell 14%) and in 2009 the decrease of the gross fixed capital formation will deepen to 32% in 2009 for the whole economy. In recent months the housing market has shown some signs of stabilisation and it can be expected that the fall will come to a halt in the first half of 2010. It is supported by a price level that, in comparison with the peak of the real estate boom, has fallen by 50% on average. As of 2011 the rate of housing investments could once again start exceeding the economic growth, because the new price level makes acquisition of a dwelling more accessible to a much broader circle of residents. However, the development of the housing market largely depends on the banks' credit policy, which due to the relatively high loan burden of the residents may remain very conservative for a longer period.

In the near future corporate investments are limited by radically decreased profits as well as a cautious financial sector. In 2009 the decrease of private enterprises' investments may reach 40% and the decrease is likely to continue in 2010 as well. Since the level of utilisation of production capacities is currently very low, in the short term the output can be increased without making additional investments. Owing to an obvious rise in general government investments we expect the total investment to decrease by 4% in 2010. In the coming years the growth of investments should clearly exceed the economic growth, amounting to 7-9%. In terms of investment developments the prospect of introducing the euro is important, as it increases considerably the reliability of the Estonian economy and lays the foundations for making new investments.

In 2009 the fall in **exports** was mainly sparked by a deep economic recession of the trade partners which gradually started to abate at the end of the year. The decrease in exports of goods and services in the fourth quarter will be the lowest of the year mainly due to a low comparison base in Q4 2008 and in total the decrease will reach 10.8% in terms of volume in 2009. In recent months various global economic indicators have referred to the fact that the bottom of the fall is behind and growth will recover soon. In the light of this various European countries have adjusted upwards their forecasts for the coming years. Additionally, due to the adjustment and reduction of

the cost level in enterprises the competitiveness position in export markets can be expected to improve. Thus, more positive outlook in the main foreign markets and improvement of the effectiveness of industrial enterprises allow for taking the Estonian export sector out of its fall and raise exports by 2%. Thereby exports largely depend on orders originating from Finland and Sweden who use local industrial enterprises as subcontractors. The general picture of foreign trade may be influenced by transit trade, especially volatile volumes of mineral fuels. In the coming years export growth is expected to pick up in line with stronger growth of external demand.

Imports of goods and services will decrease 26.2% in 2009. Although export will return to the growth path in 2010, import volumes will continue falling due to contraction of domestic demand. This means an increase of the current account surplus, which will reach 5.9% of GDP in 2010. The overall recovery of the confidence indicators and the positive impulse arising from the export sector help to gradually revive the domestic demand in 2011, as a result of which the import growth will be faster than export growth. In addition to an increase of the deficit of the balance of goods the profitability of foreign investors will start improving along with the improvement of economic environment and it will be reflected in deterioration of the income balance. All in all, the current account surplus will start decreasing and turn negative by the end of the forecast period.

In 2009 **consumer prices** (CPI) fell 0.1%, in 2010 they will rise 0.4% and in 2011 1.9%. The annual fall in consumer prices will start decelerating in the beginning of 2010 and in spring the inflationary environment will return. This can be attributed to a rise in energy prices caused by external environment factors as well as the government's measures relating to raising excise duties. A rise in the energy prices such as motor fuel and district heating is largely related to developments in the prices of crude oil in the world market which, according to futures, are on the rising trend. Tax measures (incl. excise duties on tobacco, alcohol and motor fuel) planned for improving the budgetary position, which will enter into force through 2010-2011 will increase inflation by 0.7% and 0.5%, respectively (see Annex 3. Impact of Administrative Price Increases on CPI). The emerging price pressures are alleviated by a fall in service prices caused by low domestic demand and a decrease in wages. Although food prices should start rising in the second half of 2010, the price of a food basket will remain smaller than a year ago. All in all, the change in consumer prices will remain slightly positive in 2010. In the coming years due to the recovery of domestic demand, positive labour market developments and due to continuing harmonisation of the price level, inflation is expected to pick up, but it will be lower than the average of the present decade.

In the context of economic recession **the number of employed** is expected to decrease by approx. 58,000 in 2009 and by approx. 15,000 in 2010, i.e. by a total of 73,000 people. The decrease of the employment is influenced by a decrease of work volumes caused by a decline in demand, which has a stronger impact on construction and manufacturing sector. The decrease of employment is also affected by optimisation of costs by enterprises in the conditions of weak demand, as a result of which employers are forced to cut the number of employees. In addition, in the long run the employment rate is influenced by a decrease of the population of the working age due to demographic changes arising from a steep fall of the birth rate from the beginning of 1990s. In the following years the unemployment rate will increase noticeably due to a decrease in economic activity and the related decrease in the demand for labour. In 2009 the unemployment rate will rise to 13.7% and in 2010 to 14.8%. By the end of the forecast period the unemployment rate will fall to 8.5%. The unemployment rate will be partially decreased by the fact that the long-term unemployed will give up an active search for work and become inactive.

Little consumption demand caused by the worsening economic situation and rise of the unemployment rate will result in a **fall in wages**. Reduction of the wage levels through 2009-2010 is influenced by a smaller workload, reduction of the share of bonuses as well as changes in the employment. In 2009 the nominal wages are expected to decrease by 4.5% and in 2010 by 3.4%. A greater correction in the average wages will be expected in 2010 mainly in sectors related to construction and trade. By the end of the forecast period the nominal growth of wages will reach 4.4%, being in line with the overall trends in the economy. The real growth of wages will start to accelerate from 2011 and will reach 1.7% by the end of the forecast period.

Table 1**GDP forecast for 2008–2013**

	2008	2008	2009*	2010*	2011*	2012*	2013*
	<i>mio EEK</i>	%	%	%	%	%	%
1. Real GDP	160 455,3	-3,6	-14,5	-0,1	3,3	3,7	4,0
2. Nominal GDP	251 492,8	2,9	-15,3	-1,2	5,0	6,3	6,8
Sources of growth							
3. Private consumption expenditure (incl. non-profit organisations)	96 823,5	-4,7	-18,2	-5,2	2,5	2,0	1,8
4. Government final cons. expenditure	22 965,2	4,1	-2,9	-4,7	0,3	0,9	2,3
5. Gross fixed capital formation	55 218,8	-12,1	-32,2	-4,1	7,2	8,3	9,0
6. Changes in inventories (% of GDP)		0,4	-3,7	-1,2	0,5	1,4	2,3
7. Exports of goods and services	133 951,2	-0,7	-10,8	2,0	4,8	5,1	6,4
8. Imports of goods and services	162 551,5	-8,7	-26,2	-1,3	6,5	6,4	8,1
Contribution to GDP growth ¹⁾							
9. Domestic demand (excl. inventories)		-6,1	-20,2	-4,8	3,0	3,2	3,6
10. Change in inventories		-5,7	-4,2	2,6	1,7	0,9	0,9
11. External balance of goods and services		6,8	12,8	2,3	-0,8	-0,6	-0,8
Growth of value added							
12. Primary sector		0,2	-4,8	0,9	1,6	1,7	2,0
13. Industry		-4,7	-24,4	1,9	4,2	4,4	5,2
14. Construction		-5,3	-30,2	-3,3	2,8	3,8	5,0
15. Other services		-2,9	-14,1	-0,7	3,2	3,5	3,6

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

Sources: Ministry of Finance of Estonia, Statistics Estonia.

Table 2**Price forecast for 2008–2013**

(percentage)

	2008	2008	2009*	2010*	2011*	2012*	2013*
	2000=100	%	%	%	%	%	%
1. GDP deflator	156,7	6,7	-0,9	-1,2	1,6	2,5	2,7
2. Private consumption deflator	145,3	9,2	-0,7	0,5	2,2	2,4	2,8
3. Harmonised index of consumer prices	146,7	10,6	0,2	0,4	1,9	2,3	2,7
3a. Consumer price index	146,3	10,4	-0,1	0,4	1,9	2,3	2,7
4. Public consumption deflator	212,5	13,7	-0,8	-4,6	1,1	2,0	1,7
5. Investment deflator	133,6	-0,6	-1,4	1,1	3,1	3,6	4,6
6. Export price deflator	142,0	7,7	-10,2	-0,5	1,7	1,8	2,0
7. Import price deflator	123,5	6,9	-4,8	0,9	1,2	1,9	2,2

Sources: Ministry of Finance of Estonia, Statistics Estonia.

Table 3**Labour market forecast for 2008–2013 (15–74- year old persons)**

	2008	2008	2009*	2010*	2011*	2012*	2013*
		%	%	%	%	%	%
1. Employment, persons	656,6 ¹⁾	0,2	-8,8	-2,4	0,6	1,6	2,3
3. Employment rate (%)		5,5	13,7	14,8	13,1	11,1	8,5
4. Labour productivity, persons	244,4	-3,7	-6,3	2,4	2,7	2,1	1,7
6. Compensation of employees	128 932 ²⁾	11,6	-12,3	-3,6	3,8	5,7	6,9
7. Compensation per employee (6./1.)	196,4 ³⁾	11,4	-3,9	-1,4	3,4	4,1	4,6

1) Thousand persons.

2) Billion EEK.

3) Thousand EEK

Sources: Ministry of Finance of Estonia, Statistics Estonia.

Table 4**Balance of payments forecast for 2008–2013**

(% of GDP)

	2008	2009*	2010*	2011*	2012*	2013*
1. Net lending/borrowing vis-à-vis the rest of the world	-8,4	6,9	8,5	6,3	2,9	-1,0
Of which:						
- Balance of goods and services	-4,3	5,6	6,8	6,2	5,4	4,2
- Balance of primary incomes and transfers	-5,1	-1,1	-0,9	-2,1	-4,0	-6,6
- Capital account	1,0	2,4	2,6	2,2	1,5	1,4
1a. Current account	-9,4	4,5	5,9	4,1	1,4	-2,4
4. Statistical discrepancy	0,1	0,0				

Sources: Ministry of Finance of Estonia, Statistics Estonia.

2.2.2. Forecast assumptions and comparison with forecasts of other institutions

Upon preparation of the convergence programme forecast Ministry of Finance used the common external assumptions used in the autumn forecast of the European Commission for 2009-2011. The economies of Estonia's trade partners and the European Union, the most important trade partner of Estonia, will contract in 2009, but in 2010 will turn growing once the confidence picks up. Consumer prices will start rising from the present very low level, because of the improving economic situation and rising energy prices will start exerting upward price pressures. Short-term interest rates will remain at a lower level than in recent years.

Table 5**Comparison of external assumptions of the Ministry of Finance of Estonia and the European Commission***(percentage)*

	Ministry of Finance Dec 2009/Jan 2010							Commission autumn 2009		
	2007	2008	2009	2010	2011	2012	2013	2009	2010	2011
1. Euribor, 3-month (annual average)	4,3	4,6	1,3	1,5	2,5	2,7	3,0	1,3	1,5	2,5
2. Long-term interest rate of the euro area (annual average)	4,1	4,0	3,2	3,5	3,8	3,8	3,8	3,2	3,5	3,8
3. EUR/USD exchange rate (annual average)	0,76	0,68	0,72	0,68	0,68	0,72	0,75	0,72	0,68	0,68
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)	5,8	3,8	-0,4	3,8	4,1	4,3	4,3	-0,4	3,8	4,1
6. EU27 GDP growth	2,9	1,0	-4,1	0,7	1,6	1,8	2,0	-4,1	0,7	1,6
7. Growth of export markets of Estonia	4,1	1,0	-6,0	0,3	1,7	2,0	2,5	-		
8. World growth of imports (excluding EU27)	7,6	4,6	-12,6	4,6	5,0	5,3	5,3	-12,6	4,6	5,0
9. Oil price (Brent, USD/barrel)	72,4	98,5	61,3	76,5	80,5	84,0	85,0	61,3	76,5	80,5

Sources: Ministry of Finance of Estonia, European Commission.

Estonia's economic growth expectations have gradually turned more negative since the start of 2008. The impact of the end of the credit growth-based real estate boom on the domestic demand has been stronger than expected and the global financial crisis that emerged in autumn 2008 rendered a negative impulse to export developments. Downwards revision of economic forecasts ended in the summer of 2009, when the expected economic growth for 2009 was nearly -15% and -2% for 2010.

After the growth results of Q2 2009 became clear in August-September, the expectations were largely more positive regarding Q3 than the actual developments: the economic downturn was expected to slow down or come to a halt and the economic growth expected for the year was -13.5 to -14.5%. Estonia's Q3 economic growth of -15.6% year-on-year and -3.0% growth in comparison with Q2 remained on the more pessimistic side of the expectations. This was confirmed by economic forecasts published in recent months where the economic growth forecasts for 2009 have been adjusted close to the level of -14.5%. In the event of weaker-than-expected deceleration of the quarterly contraction in Q4 the average annual economic growth of nearly -15% cannot be precluded, but for the time being the halting of the quarterly negative economic growth is most likely and as a result of it annual economic growth will remain around -14.5%.

Currently, Eesti Pank and Swedbank are the most optimistic about 2010, expecting an economic growth of 1.5%, while the rest expect zero growth or rather a decrease of up to a couple of percentages. The main reasons for the more optimistic forecast lie in a more positive view of the import demand of Estonia's export partners and an important positive impact of the introduction of the euro in 2011 on the domestic demand already in 2010. Considering the adjustment of the economic growth rates of the trade partners in recent months and the increase of the probability of introduction of the euro, one may think that other institutions will be more positive about 2010 as well.

Forecasting the turning points of the economic cycle is difficult and therefore the rate of growth of the recovery following the bottom of Estonia's economic cycle may prove to be different from the expected rate. In forecasts the development expectations of export partners as well as a sudden possible rise of the confidence that may arise from the introduction of the euro in 2011 along with the faster recovery of the domestic demand cause insecurity in forecasts.

Table 6

Comparison of economic forecasts

	Real GDP growth, %			Nominal GDP growth, %		
	2009	2010	2011	2009	2010	2011
Ministry of Finance of Estonia	-14,5	-0,1	3,3	-15,3	-1,2	5,0
European Commission	-13,7	-0,1	4,2	-13,9	-3,2	6,2
IMF	-14,7	-1,5	2,8	-14,6	-2,8	—
OECD	-14,4	-0,8	3,9	—	—	—
Bank of Estonia	-14,2	1,4	4,7	-14,9	-1,0	5,9
Estonian Institute of Economic Research	-13,5	2,0	—	-14,5	-0,9	—
SEB	-13,6	-0,3	4,0	—	—	—
Swedbank	-14,0	1,5	4,5	-14,1	0,0	5,1
Danske	-15,0	-2,7	—	—	—	—
Nordea	-15,0	-0,5	4,0	-15,1	-1,5	5,0

	Consumer price index, %			Current account, % of GDP		
	2009	2010	2011	2009	2010	2011
Ministry of Finance of Estonia	-0,1 (0,2*)	0,4 (0,4*)	1,9 (1,9*)	4,5 (6,9**)	5,9 (8,5**)	4,1 (6,3**)
European Commission	0,2*	0,5*	2,1*	3,9 (6,3**)	1,3 (3,7**)	-0,3 (2,4**)
IMF	0,0 (0,2*)	-0,2 (-0,2*)	0,5 (0,5*)	3,3	2,0	1,6
OECD	0,0	0,1	0,4	—	—	—
Bank of Estonia	0,1*	-0,4*	1,7*	6,3 (8,4**)	0,4 (3,4**)	-5,3 (-2,3**)
Estonian Institute of Economic Research	0,0	0,0	—	-4,0	0,0	—
SEB	-0,1	1,0	2,4	2,6	6,0	5,0
Swedbank	-0,1	0,5	1,8	6,0**	6,5**	6,0**
Danske	-0,1	-0,8	—	—	—	—
Nordea	-0,1*	-1,0*	1,5*	4,0	1,0	-2,0

* Harmonised index of consumer prices.

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

Sources:

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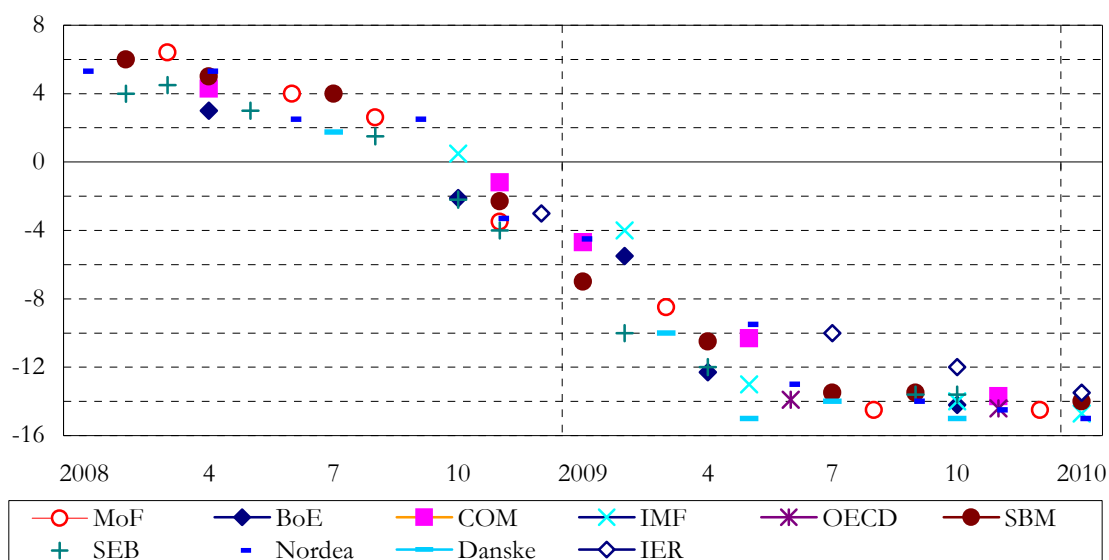
Nordea. *Economic Outlook*. January 2010. 19.01.2010.

Figure 5

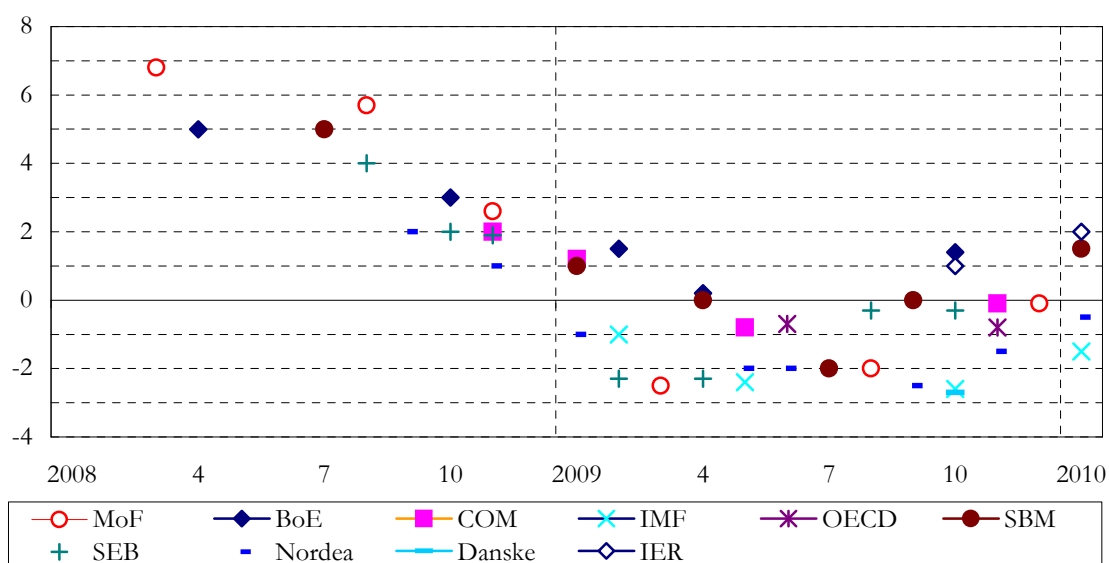
Development of economic forecast for Estonia

(percentage)

A. Estonian economic forecasts for 2009 by time of publication



B. Estonian economic forecasts for 2010 by time of publication



Sources: Ministry of Finance of Estonia, Bank of Estonia, European Commission, IMF, OECD, Swedbank, SEB, Nordea, Danske Markets, Estonian Institute of Economic Research.

2.3. Macroeconomic policy

2.3.1. Estonia's participation in Exchange Rate Mechanism ERM II

The agreement on the participation of the Estonian kroon in ERM II is based on the solid promise of Estonian authorities to continue pursuing a trustworthy budgetary policy, in order to ensure the preservation of the macroeconomic stability and the sustainability to the convergence process. Jointly with respective EU agencies the authorities continue monitoring economic developments and are ready to strengthen the budgetary position, where necessary. For the purpose of strengthening national adaptation mechanisms and ensuring the overall competitiveness of the economy timely structural reforms improving the flexibility and adaptability of the economy are carried out.

Developments taking place in the Estonian economy after joining the Exchange Rate Mechanism ERM II have not fully met the expectations of that time. In 2004 the Ministry of Finance expected the economic growth to stabilise at the long-term average level. However, after the EU accession strong financial integration took place, interest rates fell and loan repayment periods extended. In addition, labour market opened up. Due to the timing of these effects short-term imbalances emerged, expressed in an increase of the current account deficit, growth in wages not in line with productivity, and higher inflation. In the long term the openness of markets will certainly render a positive impact, but in the case of Estonia the main problem was that the timing did not really match with our economic cycle. The fact that the emergence of the imbalances was short-term and caused by the growth phase of the economic cycle and positive effects arising from European Union accession is confirmed by the developments in recent years showing adjustment of the economy and reduction of imbalances. The reduction of imbalances has in some cases been stronger than expected.

The budgetary policy is the main measure for influencing the economy and controlling the risks threatening balanced economic development. Estonia as actively used the tool: in the growth phase of the business cycle the domestic demand has been limited by the surplus of the general government budget, which according to recommendations has been much higher than planned. At the same time, in the conditions of the economic recession the budgetary policy has been used for reviving the economy and for partial compensation of the private sector demand which has considerably decreased due to the crisis.

In the conditions of rapid credit growth other, incl. regulatory measures that help to balance the economy better in the growth phase of the next economic cycle were applied for controlling the excessive demand

- 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.
- 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%.

- At the end of 2005 the bank of Estonia decided to make stricter the housing loan regulations for commercial banks as of 1 March 2006:
 - 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.

Estonian general government budget has been in surplus through 2002-2007. The budget for 2008 was planned with a surplus in the expectations of moderate economic growth, but due to the worse-than-expected economic situation a deficit of 2.7% of GDP became reality. General government budget position for 2009 will be approximately the same, but two negative supplementary budgets have been prepared to that end and additional steps have been taken to improve the budgetary position. The budget for 2010 has been made with the presumption that the general government budget position remains within the terms set out in the treaty establishing the European Union and the Stability and Growth Pact, i.e. the deficit does not exceed 3% of GDP. Where necessary, the Government is prepared to take additional steps to keep the budget deficit smaller than the promised 3% of GDP.

As a result of, among other things, such economic policy pursued by the Government and Eesti Pank (plus the raising of interests rates by the ECB, stricter credit conditions of commercial banks) the rapid rise of the real estate market was replaced by cooling and, upon a turn of the economic cycle, a decrease in prices and number of transactions. By now the speed of inflation that was problematic due to domestic pressures in 2007 has been replaced by deflation in line with a fall in the domestic demand. In November 2009 Estonia met the price stability criterion when the 12-month average Harmonised Consumer Price Index (HCPI) fell to 1.0 percent. Considering the forecast of price developments in Estonia and the price stability criterion's reference value calculated on the basis of the three EU Member States whose inflation rate disclosed in the autumn forecast of the European Commission is the lowest, the 12-month average Harmonised Consumer Price Index will remain below the reference value through 2010-2011 as well.

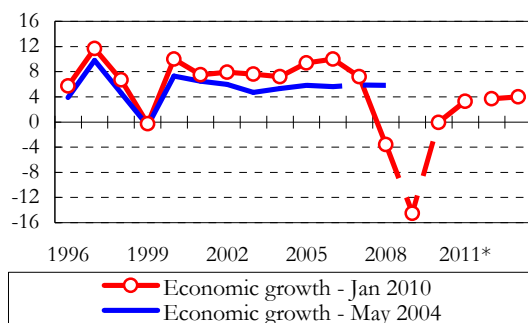
In various analyses, including in various economic freedom and competitiveness indices, one of the most important bottlenecks noted with regard to Estonia is its labour market rigidity. At least nationally Estonia's labour market is considered relatively flexible, because wage formation and entry into employment contracts is decentralised and movement of labour force between sectors has been high at least in the growth phase of the economic cycle. The reason behind classifying Estonia's labour market as rigid was outdated legislation that does not take into account the changed employment relationships. The number of collective agreements between trade unions, which allow for a greater flexibility in employment relations, is low as well. In order to increase the flexibility of the Estonian labour market, the Employment Contracts Act was amended and the amendments entered into force on 1 July 2009. However, the legislative amendment did not bring about noticeable changes in the labour market in the form of a sudden increase of the unemployment rate, because the cuts in the number of employees and wages had largely been made by that time, referring to the flexibility of the labour market at the time preceding the amendments.

Figure 6

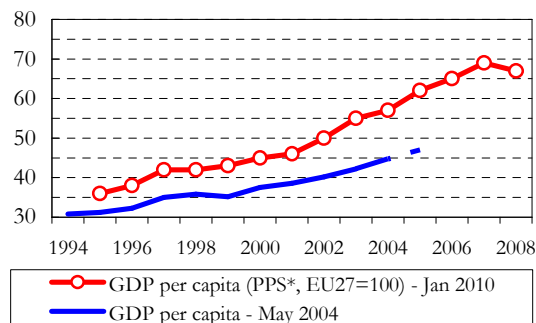
Economic Developments in the Ministry of Finance Forecasts when joining ERM II and in current CP update

(percentage)

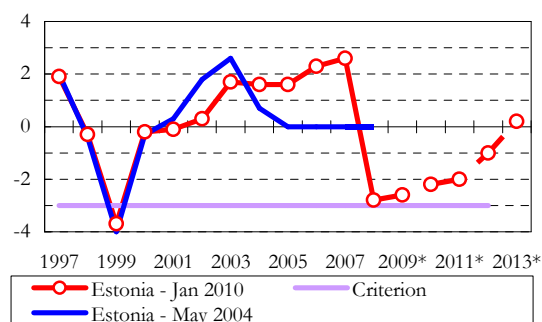
A. Economic growth



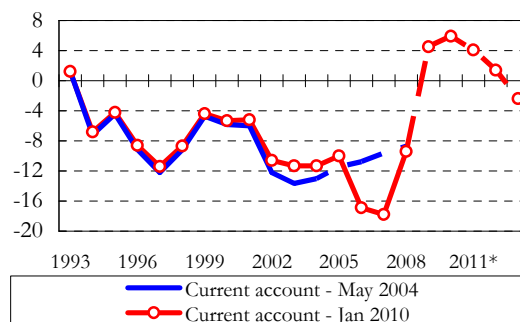
B. Real convergence with EU (EL25=100)



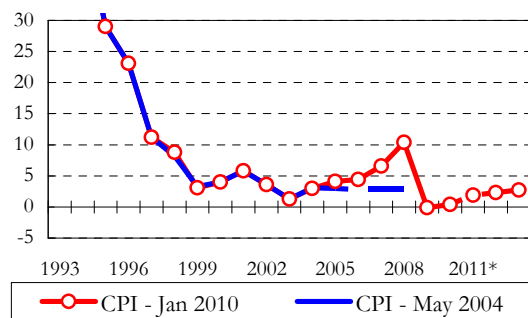
C. General government budget position (% of GDP)



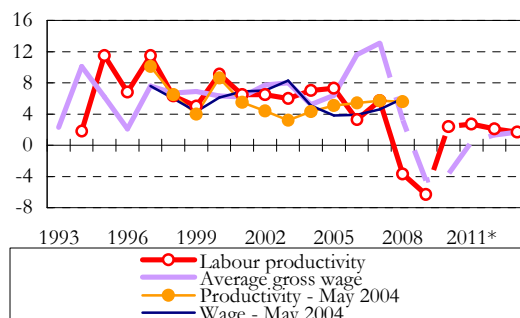
D. Current account (% of GDP)



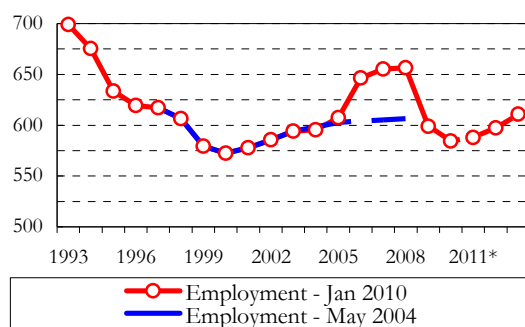
E. Inflation



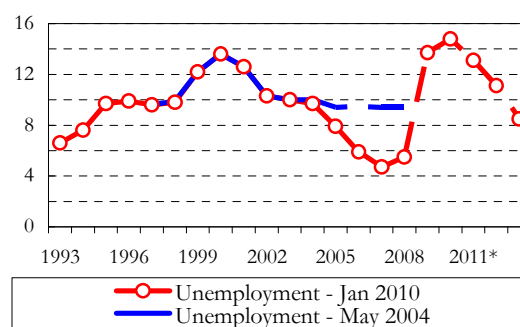
F. Labour productivity



G. Employment (*thousands*)



H. Unemployment



Labour productivity – GDP per person employed. PPS – purchasing power standard.

Sources: Ministry of Finance of Estonia, Statistics Estonia, Eurostat.

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 budget has been in surplus up to 2007. In 2009-2010 Estonia is one of the few EU member states that can keep general government deficit below 3% of GDP.
Reducing the external imbalance	Contain domestic credit growth and ensure effective financial supervision	Several measures have been taken in order to limit credit growth. Credibility of financial system has held good in times of financial crisis. Buffers are sufficient.
	Promote wage moderation	Wage growth has been faster than expected and exceeded productivity growth during 2006–2008. In 2009 nominal wages decreased by ca 5% that is remarkable adjustment when taking into account traditional downward rigidity of wages.
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 order to increase labour market flexibility, new labour law was introduced in 01.07.2009. In Estonian Strategy for Competitiveness there have been planned several reform measures to improve business environment and to increase labour market flexibility

Sources:

Ministry of Finance of Estonia.

Estonian Strategy for Competitiveness 2009-2011. Overview and Updates to the Estonian Action Plan for Growth and Jobs 2008-2011. (http://www.riigikantselei.ee/failid/Estonian_Strategy_for_Competitiveness_2009_2011.pdf)

2.3.2. Macroeconomic policy in coming years

Ensuring macroeconomic stability

The primary objective of the macroeconomic policy of the Government of the Republic is to ensure macroeconomic stability and internal and external balance. The imbalances and risks emerging through 2005-2007 in the period of rapid potential-exceeding economic growth have rapidly fallen at the turn of the economic cycle. Further economic policy must reduce the possibilities of emergence of such risks in a new growth phase and use the current time for improving the competitiveness of the economy.

During the economic recession Estonian economy has demonstrated considerable flexibility both on the side of the private sector as well as the Government. In the circumstances of the economic recession the Government has been able to keep the budget within the limit set in the treaty establishing the European Union, creating the state a good starting position because as a result of the crisis the general government debt has not increased much and most of the measures improving the budget position have a long-term impact.

The flexibility of the Estonian labour market or the fast adjustment expressed in a rapid decrease of the employment rate and wages during the economic crisis is remarkable in the context of the European Union. As a result of the crisis the employment rate has fallen by approx. 11% and the average wage by 8%. Since wages are, as a rule, considered rigid, Rõõm and Messina¹ find that Estonia is considerably different from other states² that were under observation in the survey on the rigidity of wages, because in Estonia it is usual practice to lower wages in addition to freezing wages. The reasons lie in the following:

- a flexible institutional environment for wage formation; the number of people covered by collective wage agreements is the lowest among the observed countries; the amendments of the Employment Contracts Act that entered into force in the middle of 2009 have increased the flexibility of the labour market and decreased enterprises' costs upon laying off employees. Following amendment of the Employment Contracts Act, the Employment Protection Legislation (EPL) in Estonia is the least strict among the observed countries.
- The economic recession has been stronger than in other observed countries.

In November 2009 rapidly decelerating inflation rate fell below the reference value of the Maastricht price stability criterion, which had for a long time after the EU accession been the only criterion that posed an obstacle to the introduction of the euro. According to inflation forecasts for 2010-2011, Estonia should not have problems with the sustainable fulfilment of the given criterion. Due to decreased economic activity the state's tax revenues collection has fallen steeply, placing the budget in a tense situation and making it more difficult to fulfil the criteria established to public finance in order to prevent the emergence of an excessive budget deficit. In 2009 the Government adopted a number of measures improving the budgetary position, which enable keeping the general government budget deficit below 3% of GDP. The budget for 2010 has also been made in such a manner that the deficit limit of 3% of GDP is not exceeded and if the economic recovery takes longer than expected, additional measures for improvement of the budget position may be taken, where necessary.

The Government's objective is to introduce the euro, the European single currency, and join the euro zone on 1 January 2011, which gives for Estonia a chance to increase the reliability of the country and gives an advantage for as quick a way out of the economic crisis as possible. The fall of reliability and an increase of the devaluation risk in the conditions of the economic recession is one of the major problems due to which foreign investors and trade partners may avoid economic

¹ *Downward Wage rigidity during Current Financial and Economic Crisis*. T. Rõõm, J. Messina. 2.11.2009. (http://www.eestipank.info/pub/en/yldine/pank/uuringud/seminarid/kokkuv_091217.pdf).

² Austria, Belgium, the Czech Republic, Estonia, Spain, France, Italy, Luxembourg, the Netherlands, Poland.

relationships with Baltic, including Estonian enterprises. At the moment Estonia clearly stands out among other Central and Eastern European countries, because it has been able to sufficiently contract its state budget and keep the general government deficit below the level of 3% of GDP.

Considering the limit set out in the treaty establishing the European Union for the budget deficits of the Member States and the desire of the Estonian government to fulfil the Maastricht criteria in order to introduce the euro as soon as possible, there was no room for loosening the budgetary policy of general government. It was found that **controlling the budget deficit and debt level and introduction of the single currency of the EU, the euro, offers greater confidence and stabilises the economic environment as an additional fiscal stimulus.** The experience of Estonia as well as other countries showed that the attitude towards the budget deficits of developing states was in general stricter than towards those of developed major powers and the related lowering of country ratings and risk premiums made the situation of the economy more difficult.

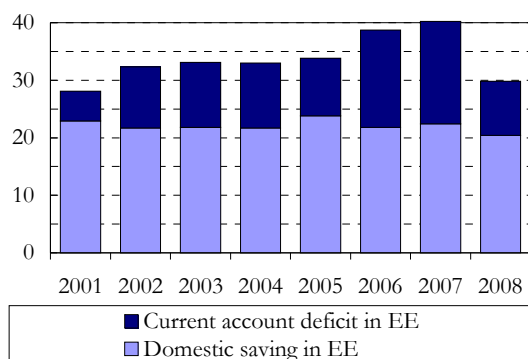
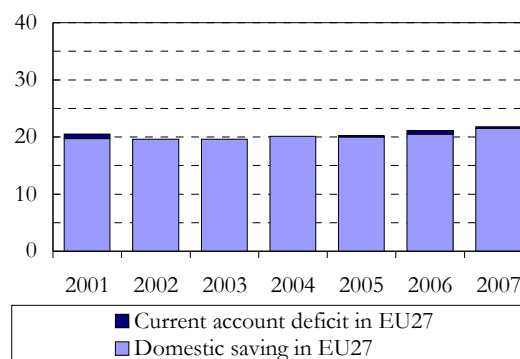
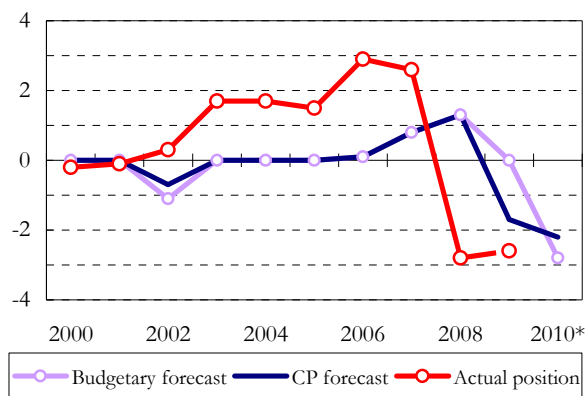
It can be presumed that in the case of a small open economy fiscal stimuli result in significant leaks to the external environment, which makes their implementation ineffective. This means that the Government has limited budgetary policy measures for supporting the economy in the conditions of a crisis, i.e. it is not possible to give an additional stimulus to the economy in the form of loosening the budgetary policy. The given step, i.e. **keeping the general government budget deficit below 3% of GDP is in line with the European Economic Recovery Plan³**, according to which the countries falling outside the euro area and having considerable external and internal imbalances should aim their budgetary policy at reducing these imbalances.

So far Estonia's economic policy has been aimed at flexibility and relatively little interference by the state. The behaviour of the private sector proceeded from it at the onset of the financial crisis. In addition to loosening the budgetary position the Government offers support for ironing the economic cycle by way of changing the cost structure in such a manner as to reduce the operating and other running expenses of the Government and retain a high level of investments in the conditions of limited means. More robust use of the EU Structural Funds and an increase of volumes in comparison with previous years offered a quantitative fiscal stimulus via introducing additional foreign funds to the economy.

Introduction of the euro will increase the reliability of the Estonian economy, because it precludes theoretical speculations regarding devaluation of the kroon. Also, the membership of the monetary union reduces the vulnerability of the economy by external shocks and allows for having a say in shaping the monetary policy of the euro zone. The latter is an especially important aspect, because in the currency board system the exchange rate of the kroon and the euro is fixed and virtually Estonia cannot pursue an active monetary policy by changing interest rates, but is influenced by the monetary policy decisions of the euro zone.

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

³ *A European Economic Recovery Plan. Brussels, 26.11.2008. COM(2008) 800*
(http://ec.europa.eu/commission_barroso/president/pdf/Comm_20081126.pdf).

Figure 7**Economic development indicators***(% of GDP)***A. Financing of investments in Estonia****B. Financing of investments in EU****C. Planned and actual budgetary positions**

Sources: Statistics Estonia, Ministry of Finance of Estonia, Eurostat.

Ensuring a stable and flexible economic environment

According to the European Economic Recovery Plan, state policies must, in addition to monetary and budgetary policy stimuli aimed at the recovery of the economy, contain a voluminous programme for structural reforms that would correspond to the needs of the Member State. On the basis thereof Estonia has updated its Action Plan for Growth and Jobs, i.e. prepared the Strategy for Competitiveness 2009-2011.⁴

The Strategy for Competitiveness establishes the following priority objectives based on the changed macroeconomic environment and new opportunities and challenges in raising Estonia's competitiveness:

1. **Implementation of a conservative macroeconomic policy** with the aim of keeping the general government deficit below 3% of GDP, join the euro zone in 2011 and control the rise of the public sector debt burden, thereby preserving Estonia's investment capacity in the coming years.

⁴ Estonian Strategy for Competitiveness 2009-2011. Implementation report and Update of the Estonian Action Plan for Growth and Jobs 2008-2011. Approved 5.11.2009. (http://www.riigikantselei.ee/failid/Estonian_Strategy_for_Competitiveness_2009_2011.pdf).

2. **Raising the export potential of enterprises**, supporting the creation of favourable environment for the growth of productivity, preserving the export volumes as a ratio to GDP at the level of 2008, and increasing the attractiveness of Estonia to foreign investments through targeted and sector-based work with investors, which ensures Estonia's position among the first three in the EU in terms of the level of direct investments as a ratio to GDP.
3. **Development of employees' skills** by increasing the funding of lifelong learning, contributing more to supplementary and re-training and taking advantage of the low employment rate for increasing the skills of 50,000 people by one level.⁵
4. **Maintaining employment levels** by improving the business environment, increasing the volume of public sector investments and supporting preservation of jobs with the aim of recovering an overall employment rate of 63.5% (aged 15-64) by 2011.

To achieve these goals the Government has taken several steps in 2009, ensuring the stability of the budget and alleviating the impact on the Estonian economy by a decrease in the global (incl. Estonian) demand. The Economic Recovery Plan of the Estonian Government aims at exiting the economic crisis as soon and as strong as possible. Therefore it focuses on speeding up investments in very specific fields, supporting employment, developing export opportunities of Estonian enterprises and keeping the budgetary position of the general government as close to the balance as possible.

Increasing the flexibility of the labour market

The new Employment Contracts Act entered into force on 1 July 2009 and the main principle contained in it is the **flexicurity** of employees and employers. This means that the regulation of employment relationships must allow the parties to design an employment relationship that would take the needs and interests of the parties into account in the best possible manner. The purpose of the act is to regulate relationships between employers and employees, granting employees sufficient security arising from the values of a welfare state, allowing entrepreneurs to realise their constitutional right to the freedom of enterprise and contributing to the growth of the competitiveness of the Estonian economy. The former Republic of Estonia Employment Contracts Act dated back to 1992 and needed considerable amendment and modification, because it did not meet the needs of the present labour market.

The new Employment Contracts Act brought along changes to employers and employees. An important change is the compensation paid by the employer in the event of cancellation of the employment contract due to a lay-off, which decreased to one month's compensation. If the employment relationship has lasted 5-10 years, the Unemployment Insurance Fund will pay compensation amounting to one month's wage and if the employment relationship has lasted for over 10 years, compensation amounting to two months' wage. In addition, to employees whose employment relationship has lasted for over 20 years the Estonian Unemployment Insurance Fund will pay compensation amounting to three months' wage if the employment contract is terminated before 15 January 2015. In addition, the advance notice term decreased from 2-4 months to 15-90 days. The new act gives the employer the opportunity to temporarily reduce the employee's wages. If the employer cannot provide the employee with work to the agreed extent due to unforeseen economic circumstances beyond the employer's control, the employer may reduce the wage for up to three months over a 12-month period to a reasonable extent, but not below the minimum wage approved by the Government of the Republic, if payment of the agreed wage would be unreasonably burdensome for the employer.

The regulation of the employee's liability changed considerably. The former solidary collective proprietary liability of employees ceased to exist: proprietary liability can be placed on an employee only in very limited conditions and an agreement on material liability is effective only if the

⁵ According to the levels set out in the Adult Education Development Plan 2009-2013. (<http://www.hm.ee/index.php?popup=download&id=9426>).

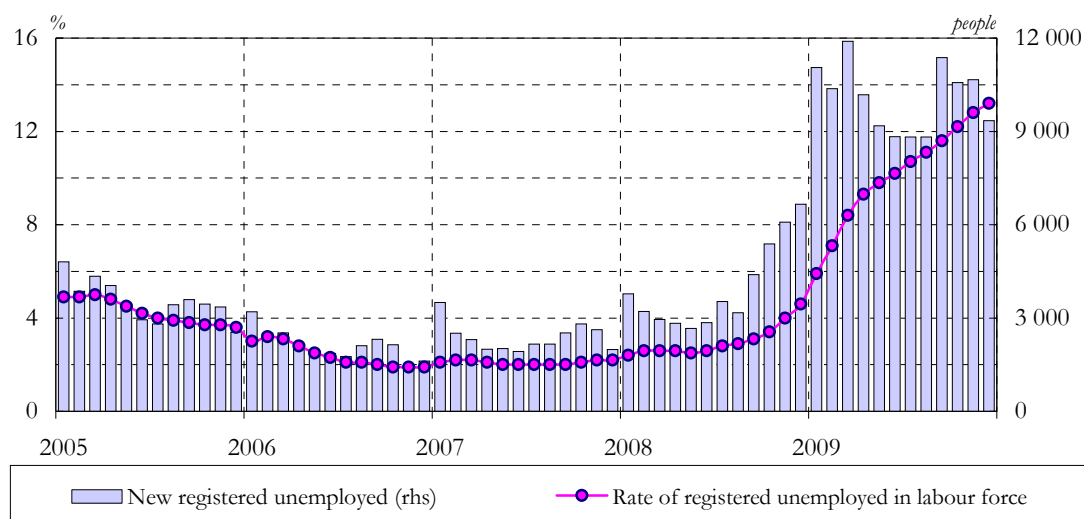
employee receives separate compensation for it. The liability of an employee depends on the level of their guilt and an agreement on compensation for possible damage made before suffering the damage is null and void. Additionally, the state supervision over the employment relationship decreased. Thereby the new act no longer requires coordination of the internal work procedure rules with the Labour Inspectorate. The obligation to keep employment record books and personnel files was abolished as well.

In order to increase the administrative capacity of the institutions that provide labour market services, the Labour Market Board and the Estonian Unemployment Insurance Fund were merged. As a result thereof the integration of labour market services and benefits is ensured better, establishment of better control is enabled and prerequisites for increasing the administrative capacity have been created.

In spite of concerns the new Employment Contracts Act which entered into force on 1 July 2009 has not brought along any major changes in the labour market development trends. Nevertheless, the new act increases the flexibility of the labour market and in the future the labour market may start reacting more quickly to changes taking place in the economy, paving the way for a quicker decrease as well as increase of employment.

Figure 8

New registered unemployed (inflow) and rate of registered unemployed in labour force



Source: Estonian Unemployment Insurance Fund.

2.3.3. Estonia's steps towards ensuring financial stability

Developments in the Estonian financial sector

The international liquidity environment has improved compared to the situation a year ago and stabilisation and reduction of risk assessments can also be seen in the kroon money market. In the last quarters of 2009 the parent banks of the banks operating in Estonia have been able to obtain funds from markets at lower prices and in various instances without using national support programmes. This means that the opportunities of funding the Estonian economy have improved.

Throughout 2009 the domestic and external demand have been very weak and enterprises and households have limited their consumption and investments. As of the end of November the loan

and leasing portfolio has shrunk by 6% year-on-year. In terms of economic sectors the loan turnover has decreased the most in the trade, real estate and construction sectors. As expected in the case of credit granted to households, the volume of consumer loans and car lease has decreased the most.

Thereby the worsening of the quality of the loan portfolio has remained more modest than feared in the spring of 2009. Partially, it can be attributed to the fact that both borrowers as well as banks have actively tried to resolve problems and have found solutions for continuing servicing loans. The growth of overdue loans is likely to continue at a much slower pace and the maximum level of problem loans remains in the spring of 2010. The growth of the loan volume may be forecasted only in the second half of 2010 with the support of the improving demand environment.

The behaviour of banks in administration of their loan portfolios has been conservative, being expressed in high discount rates. In 2009 the volume of discounts given by banks reached over 4% of the value of the loan portfolio of the real sector, which means that nearly 70% of the problem loans are already covered with provisions. Thus, the need for additional discounts will be much smaller in next year and it is possible that the banking sector will be able to end the year 2010 with a profit. If the situation of borrowers improves along with the improvement of the economy, the released loan provisions reserve will support the profitability and capitalisation of banks in a new growth environment.

The average capitalisation of the banking sector has remained good, rising in 2009. At the end of September the average capitalisation of bank groups reached 14.5%. This could be attributed to the growth of own funds at the expense of the retained profit as well as a decrease of risk assets. In the beginning of 2010 the loss of the risk assets reduction limits established also for the transition to the method of calculation of new capital requirements at the end of 2009 supported as well.

Stabilisation and some recovery can be seen in the remaining financial sector. The index of the Tallinn Stock Exchange rose by approx. 47% in 2009, although the activeness of the bond market was relatively low. Against the background of the calming of international financial markets the average yield and volume of the assets of investment and pension funds have increased as well. In spite of the fact that the state suspended its contributions to the pension funds of the second pillar, nearly 40% of the subscribers have expressed their desire to voluntarily continue making the contributions. The activities of insurance companies have been profitable as well.

All in all, the risks threatening Estonia's financial stability have decreased in 2009 and the buffers of the banking sector are sufficient, although the risks of the external environment remain above the average and the level of income and solvency of individuals and enterprises is lower than in the period a year ago.

Developments in the legal environment of financial stability

According to estimates, the extensive measures adopted by the Member States of the EU as of the spring of 2008 for recapitalisation of banks and giving them security throughout the European Union has prevented a possible collapse of the European banking system. Furthermore, these measures have helped to restore liquidity in the interbank money market. The EU Member States have promised a colossal amount of guarantees, i.e. nearly 3 trillion euros, for keeping the banking system afloat. In addition, various recapitalisation schemes have been drawn up or direct capital injections have been made by the governments of the Member States in the amount of 300 million euros for the purpose of pepping up banks.

Estonia has been one of the few countries where the government has not been directly forced to interfere financially for the purpose of supporting the banks. However, for the purpose of improving its financial security network and making its financial crisis management organisation more effective Estonia has taken or is taking various regulatory steps.

On 11 March 2009 the Riigikogu adopted an act amending the State Budget Act, the Participation in Legal Persons in Private Law by the State Act and the Riigikogu Rules of Procedure and Internal Rules Act. The main goal of the act was to simplify and speed up the use of the state's finances in a financial crisis. Obviously, in case there is a reasonable need for it. According to the former law, the Estonian state had the right to use similar measures in comparison with other states in a financial crisis – to acquire shareholding in a bank or provide it with financial support in another form. At the same time the respective right also contained certain hindrances which could limit the effective and operative process of management and resolution of the financial crisis. Therefore the legislative amendments clarified the purpose of use of the stabilisation reserve and the granting of state guarantees and loans in a state of financial crisis and abolished unreasonable restrictions that could become a hindrance to an effective crisis management process. History has shown that in a financial crisis it may be necessary to make decisions within a day or a few hours. In a cross-border financial crisis situation the need for reaching urgent agreements with other states, e.g. regarding distribution of costs of helping a large banking group, must be taken into account as well. Therefore it was stipulated by way of a temporary solution that the Riigikogu may make the respective financial decisions to support the financial system by way of one reading instead of the former two readings. The said temporary solution remains effective until 1 July 2010. Where necessary, the state considers extension of this possibility in the future.

In addition to the aforementioned act adopted by the Riigikogu, the Ministry of Finance has, in cooperation with the Financial Supervision Authority, drafted an act whose main objective is to expand the opportunities of state institutions in prevention of a financial crisis and allow for more effective and operative coping in the event of a possible financial crisis. The draft act increases the powers and opportunities of the Financial Supervision Authority for faster and preventive interference with the activities of banks in the event of an increase of the respective risks. Furthermore, one of the goals of the said draft act is to bring the national legislation in compliance with the recent amendments made to the directive on deposit-guarantee schemes (2009/14/EC). Negative developments in financial markets have confirmed the important role of deposit-guarantee schemes in preserving the reliability of the banking sector. On the basis thereof the deposit guarantee limit is raised from the former 50,000 euros to 100,000 euros per depositor in one credit institution (the said new upper limit will enter into force as of the start of 2011). The deposit compensation period is also reduced from 3 months to 20 working days. These amendments are also contained in the said draft act. Thus, the confidence of the depositors should rise further. The draft act will be submitted to the Government of the Republic for approval in the spring of 2010.

The Ministry of Finance is preparing a cooperation agreement for ensuring financial stability in this region in cooperation with other state institutions of the Nordic and Baltic countries. The cooperation agreement supplements a supra-national cooperation agreement made in the spring of 2008 in connection with management of financial crises. The Nordic-Baltic cooperation agreement will be signed between the Nordic-Baltic ministries of finance, financial supervision authorities and central banks in the beginning of 2010. The cooperation agreement stipulates general grounds for exchanging the required information, formation of joint work groups, carrying out crisis exercises and regular meetings. It also includes the work organisation and joint procedures in case the financial crisis should hit some banking group in this region.

Keeping in mind the systematic nature of the crisis and the mutual dependency of the financial sector enterprises and customers, various initiatives have been made in the European Community for restoring the trust in the financial system. Thereby a number of concrete proposals have been made regarding regulatory, supervisory and general improvement measures and proposals have been submitted for improvement of the cross-border crisis management framework of the banking sector. As a result thereof the EU financial supervision organisation reform has emerged. At the moment the financial supervision committees operating in the EU are mostly advisory, but according to the new organisation they will have greater powers to intervene in the activities of national financial supervision authorities and in organising and coordinating crisis management.

The new EU financial supervision authorities to be formed instead of the former committees should commence operation as of 2011.

For Estonia the new model of organisation of supervision is largely acceptable. For small countries like Estonia it is important that the rights and duties of national supervisory authorities have a sufficient and reasoned balance and that the decisions made by the EU supervisory authorities do not bring along unreasonable fiscal liabilities to the Member State. It is important that the new supervision organisation does not demolish the current well-functioning system of supervisory committees (i.e. where the financial supervision authorities of several states exercise joint supervision over a cross-border financial group).

2.3.4. Introduction of single currency and fulfilment of convergence criteria

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

In terms of a fixed exchange rate based on the currency board system Estonia has *de facto* been a member of the monetary union for more than 17 years. Therefore joining the euro area is a logical step for the Estonian economy. Estonia's difference from the countries belonging to the euro area lies in the existence of an exchange rate and we do not have the right to participate in formation the monetary policy of the euro zone. Throughout the period of circulation of the kroon the Estonian economy has showed rapid development, proven its adaptability and ability to cope with bottlenecks. This shows that Estonia can successfully cope with problems as a member of the euro area and is thus practically ready to join the euro area.

Due to inflation which exceeded the reference value the Estonian government was forced to postpone introduction of the euro which was initially planned for 1 January 2007. On 27 April 2006 the Government set 1 January 2008 as the new target, but in the light of further inflation developments achievement of this target proved impossible as well. On 30 November 2006 the Government decided to give up setting a target date for euro introduction due to the uncertainty related to forecasting inflationary developments. On 9 April 2009 the Government set a new goal of introducing the euro not later than by 1 January 2011.

The recent regular convergence reports evaluating the readiness of non-euro area states for transition to the euro were published by the European Commission and the European Central Bank on 7 May 2008. The evaluation showed that Estonia met all the nominal criteria established for introduction of the euro except for the price stability criterion. In spite of the impact of the global financial and economic crisis Estonia's position in fulfilment of the criteria has improved:

- o The **general government budget position** in Estonia has been close to balance over the last decade and the surplus through 2006-2007 was one of the highest among the Member States of the EU. As a result of the conservative budgetary policy our general government debt is very small, the lowest among the Member States of the EU. In the decline phase of the economic cycle the budget revenues have decreased considerably, but with the help of additional budgetary policy measures the Government has been able to keep the general government budget deficit below 3% of GDP.
- o Estonia's 12-month **Harmonised Consumer Price Index** (HICP) has slowed down in 2009 due to rapidly decelerating external and domestic factors. In November the 12-month average HICP slowed down to 1.0%, thus falling below the reference value of the price stability criterion. The reference value of the criterion has also decreased over the recent year, amounting to 1.7% in November. The three Member States with the lowest positive inflation on the basis of whom the reference value was calculated in November were France (0.1%), Belgium (0.2%) and Cyprus (0.2%). Based on a forecast of the Ministry of Finance that takes into account the additional tax measures decided in the final months of the last year the 12-

month Estonian average HICP will remain below the reference value of the criterion through 2010-2011. Thus, there should be no problems with the fulfilment of the sustainability requirement of the price stability criterion. Developments in commodity prices in international markets will remain the main risk in the short term. Since both the recovery of the domestic market as well as improvement of the situation in the labour market are slow according to the forecast, the price pressure risks arising from the domestic factors remain small. As for administrative actions, the future depends on the budgetary position that determines the need to keep the deficit below the required level of 3% of GDP which may require for additional measures.

- o Estonia does not have a proper instrument for evaluation of the convergence of interest rates (i.e. at least 10-year government bonds issued in Estonian kroons). According to the Convergence Report of 2008 of the European Commission, based on the interest level of the loans granted to the private sector in Estonia and the low level of government debt Estonia fulfilled the interest rate criterion. The evaluation was made, among other things, on the basis of a interest rate indicator developed by Eesti Pank, the European Commission and the European Central Bank based on the interest rates of kroon loans granted to households and non-financial corporations, which is not directly comparable with the criterion's reference value or the interest rates of the government bonds of other Member States. Due to the global financial and domestic real estate crisis there have been major structural shifts in the demand for loans, resulting in the addition of loans with an extraordinarily high credit risk to the former interest rate indicator and therefore the former interest rate indicator is no longer reliable. Although in the first half of 2009 many indicators showed that the risk level of Estonia has considerably increased in the conditions of the financial crisis, as of the beginning of 2010 the indicators characterising the risk assessments of market participants (e.g. interbank money market interest rates, forward premium, CDS premium, etc.) have lowered to the level observed before the peak of the financial crisis.
- o Estonia has been a member of ERM II for over 5 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.

Drop of commodity prices in international markets allowed Estonia to fulfil the inflation criterion sooner than expected in the previous Convergence Programme. Similarly to 2009 the inflation will remain marginal this year. In the coming years the inflation can be expected to pick up due to domestic and external factors, but unlike in the previous decade the rise in prices will be more contained. In the past, robust loan growth, productivity-exceeding wage growth and excessively optimistic future outlook caused a strong rise in consumer prices and convergence of price levels with the EU average. Domestic demand recovery will remain slow in the coming years due to a high unemployment rate, modest future outlook as well as stricter credit conditions of banks. Instead of domestic demand the driving force behind economic growth will be exports, while the wage growth will largely depend on developments in productivity. As for administrative actions, the obligations assumed upon accession to the European Union regarding bringing the excise duties to the required (minimum) levels have been fulfilled and the post-crisis steps for improvement of the budgetary position (e.g. raising VAT, additional rises of excise duties) have largely been taken. Therefore the inflationary risks arising from administrative measures are under control. Risks arise from external factors related to unexpected developments in commodity prices. Based on the experience in previous years it can be seen that sudden steep world market price rises of food and oil affect the price level in Estonia more than on average in Europe.

The crisis that hit the global financial markets and heightened risks temporarily changed the attitudes of the market players, which attitudes were reflected in the lowering of Estonia's country ratings, the rise of the CDS level and in the rapid and temporary rise in the risk margins. Owing to staying true to the former economic policy principles accountable for the past success even in the most difficult times and quick reaction in changed economic environment notably through considerable improvement of the budgetary position and establishment of the goal of introduction of the euro on 1 January 2011 has restored confidence among the market players. The forecast of

the Ministry of Finance regarding the general government budget position also refers to the continued compliance with the Maastricht criteria.

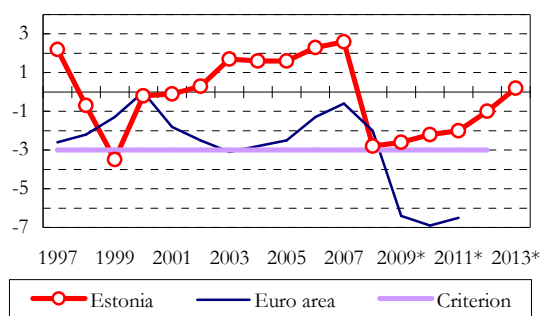
The Government will continue implementing the economic policy which has generated reliability towards Estonia and will join the euro area as soon as possible once the convergence criteria have been fulfilled.

Figure 9

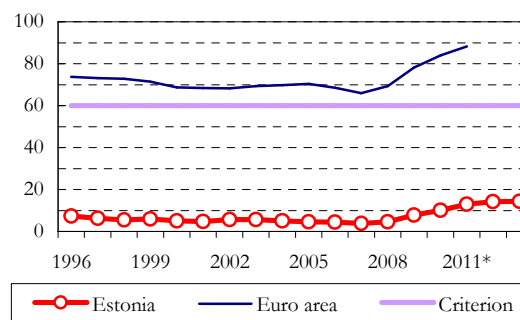
Nominal convergence and fulfilment of Maastricht criteria

(% of GDP)

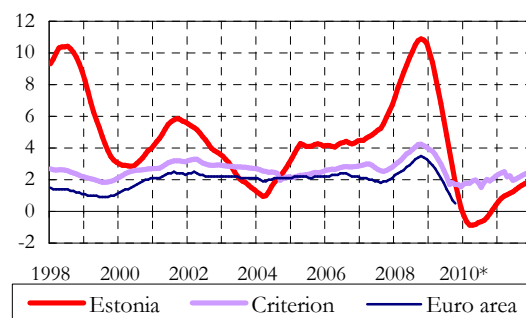
A. General government budget position



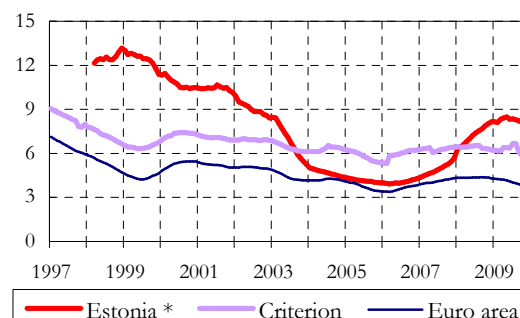
B. General government debt



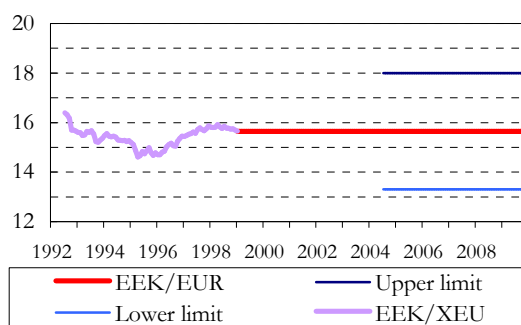
C. Inflation (%)



D. Interest rates (%)



E. EEK/EUR exchange rate



* Due to very low general government debt level Estonia does not have a proper instrument for evaluation of the convergence of interest rates – at least 10-year government bonds issued in Estonian kroons. Interest rate indicator for Estonia is based on the interest rates of kroon loans granted to households and non-financial corporations, which is not directly comparable with the criterion's reference value or the interest rates of the government bonds of other Member States. Due to the global financial and domestic real estate crisis there have been major structural shifts in the demand for loans, resulting in the addition of loans with an extraordinarily high credit risk to the former convergence indicator and therefore the former convergence indicator is no longer reliable.

Sources: Ministry of Finance of Estonia, Statistics Estonia, Eurostat, European Commission.

3. FISCAL FRAMEWORK

3.1. Fiscal policy goals and budgetary priorities of Government of Republic through 2010-2013

In the framework of the State Budget Strategy 2010-2013 the Government of the Republic has established the following budgetary policy objectives: **to support macroeconomic stability through the flexibility and effectiveness of markets and control risks undermining the balanced development of the economy.**

The Government's **medium-term budgetary policy guideline is to keep the general government budget in surplus**, which means that the budgetary policy is kept in conformity with the requirements of the treaty establishing the EU and the Stability and Growth Pact. The medium term objective is the restoration of the **state's liquid financial assets** that have been accumulated and put into use in the present situation.

It is important to make the budgetary policy more flexible overall. The budgetary priorities have been set on the basis of **ensuring the long-term sustainability of the fiscal policy and adaptability of the fiscal policy in a changing environment and improvement of economic growth and employment through the fiscal policy.**

Furthermore, we have **to ensure the long-term sustainability of the budgetary policy in the conditions of an aging population.**

On the basis thereof the fiscal policy objectives of the Government of the Republic include the following:

1. to continue with a conservative budgetary policy and reduction of the government debt burden;
2. to keep the tax system stable, simple and transparent;
3. to increase the efficiency and effectiveness of budgeting and to continue redirecting budgetary expenditures to support economic development; in addition, more attention must be paid to increasing the flexibility of redirecting state budget expenditures;
4. to ensure long-term sustainability of the budgetary policy.

The general government budget will be kept in surplus over the medium term

The Government will continue pursuing a strict budgetary policy. **The medium-term objective (MTO) of the Government is to keep the general government budget in surplus.** Such objective is more ambitious than the minimum level established in the Stability and Growth Pact with regard to the size of the medium-term budgetary objective defined on the basis of the need for ensuring the long-term sustainability of the budget (-1% of GDP in the case of the euro area and ERM II Member States).⁶ Thus, upon planning the budget position the required adjustment has

⁶ The range for the country-specific MTOs for the euro area and ERM II Member States would thus be, in cyclically adjusted terms, net of one-off and temporary measures, between -1% of GDP for low debt/high potential growth countries and balance or surplus for high debt/low potential growth countries.

already been taken into account today for the purpose of ensuring financial sustainability in the long term.

Estonia has fulfilled its MTO until the onset of the global economic crisis, but as of 2008 the budgetary position has been weaker than the objective. According to the Stability and Growth Pact, the Member States of the euro area and ERM II who fall short of the MTO established by them must adjust their structural budgetary position on average by 0.5% per annum until achieving the MTO.⁷ This principle has been followed upon setting the budgetary position objectives specified in this programme and as a result thereof the general government budget will reach a nominal surplus again in 2013.

A conservative budgetary policy will help to 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 that are necessary for developing the state.

This period of economic recession has a substantial adverse impact on the general government budgetary position and in the coming years the expected budgetary position will deviate from the medium-term budgetary position objective established by the Government of the Republic. The Government plans the budgets of the following years in such a manner that the general government budget position would quickly return at least to balance.

What has been done:

- in 2009 the Government made decisions improving the budgetary position by approx. 20 billion kroons, i.e. over 9% of GDP;
- according to Eurostat, at the end of 2008 the general government debt burden in Estonia was the lowest in the European Union with 4.6% of GDP, followed by Luxembourg (13.5%) and Romania (13.6%).

Indicators:

- the structural budgetary position of the general government is improved on average by 0.5% of GDP per annum;
- the general government budgetary position will reach a surplus of 0.2% of GDP in 2013;
- the general government debt will stabilise by the end of the forecast period and the volume of financial assets will rise.

The tax system is kept stable, simple and transparent

The Government has established the objective of shifting the tax burden from taxation of income to taxation of consumption, use of natural resources and pollution of the environment. In order to keep the system stable, simple and transparent with as few exceptions and differences as possible, it is planned to limit tax incentives.

Upon shifting the tax burden from labour to consumption and use of the environment, the Government has harmonised the excise duty rates with the minimum requirements of the European Union. The Government continues developing the concept of an ecological tax reform and increasing the tax burden of bad habits.

⁷ In order to reach their MTO, Member States of the euro zone or of ERM II should pursue an annual adjustment in cyclically adjusted terms, incl. one-offs and other temporary measures, of 0.5% of GDP as a benchmark.

What has been done:

- through 2008-2009 various budgetary policy changes were made in the framework of controlling the general government deficit and these changes had a substantial impact on the tax policy; in addition to reducing value added tax exemptions and abolishing the right to deduct entry and membership fees paid to a trade union and interest paid on a student loan from the taxable income, the additional income tax exemption for the first child was abolished.
- 2009:
 - the value added tax rate was raised by 2% as of July 1;
 - as for consumption taxes, the excise duty on natural gas was raised from 157 kroons to 357 kroons per 1,000 m³ as of 1 July 2009; the excise duty on petrol was raised from 5,620 kroons to 6,228 kroons per 1,000 litres as of 1 July 2009; and the excise duty on diesel fuel was raised from 5,165 to 5,787 kroons per 1,000 litres as of 1 July 2009;
 - in addition, the share of income tax accruing to local authorities as of 1 April 2009 was reduced from 11.9% to 11.4%.
- 2010:
 - as of January 1 the reduction of the income tax rate and the increase the income tax threshold have been suspended;
 - in addition to abolishing the tax exemptions the excise duty on alcohol was raised 10% and that on tobacco by 5% as of 1 January 2010. An additional rise in the excise duty on tobacco has been planned for 1 January 2011;
 - as of 1 January 2010 the excise duty on fiscally marked fuels was raised from 1,056 kroons to 1,736 kroons per 1,000 litres. The excise duty on petrol was raised from 6,228 kroons to 6,615 kroons and the excise duty on diesel fuel was raised from 5,787 kroons to 6,148 kroons per 1,000 litres;
 - In addition, it has been decided that the excise duty on electricity will be raised from 50 to 70 kroons per MWh as of March 1.

Indicators:

- the sustainable level of the overall tax burden should be sufficient to ensure the functioning of the public sector and not too high to become a “burden” for the economy. In annual comparison the fluctuation must be below 1.5% of GDP and the target level must remain between 33% and 36% of GDP by the end of the period;
- by the end of the period the tax structure, i.e. the share of indirect taxes in the total tax revenue should amount to at least 46%.

Increasing the efficiency and effectiveness of budgeting and channelling budgetary expenditures towards economic development

For the purpose of limitation of the budget expenditures and based on 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 considers it useful as a rule not to increase the share of operating expenses in the state budget (thereby ensuring the required rises in wages in order to ensure competence in the public sector) and channels state budget funds more towards activities increasing the economy's growth potential (including towards reduction of supply-side limits). The Government also continues making national investments for supporting sustainable economic development and domestic demand and takes the maximum out of the opportunities offered by the EU funds. 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 the structural funds.

For the purpose of ensuring the sustainability of public finance **ways of increasing the flexibility (fiscal space) of the state budget funds must be found.** To that end the share of revenue-bound expenditures and obligations arising directly from various legislation must be reduced in the budget. In the medium term partial revision of the legislation in force is thus inevitable for the

purpose of the balance and fiscal sustainability of the general government. Termination or reduction of the earmarking of tax revenues would allow, among other things, to reduce the direct dependence of various areas on the economic cycle and create more flexible opportunities for expenditure policy decisions in prosperous times.

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 is the need to incur additional costs and the greater is the chance to ensure the stability of the economic environment. This requires developing the systems, methods and process of forecasting as well as national strategic planning and financial management (incl. budgeting) further.

Increasing the efficiency of budgeting is considered to provide additional opportunities for restructuring the structures and functions and improving the quality of public services. For instance, it is planned to optimise in a coordinated manner the effectiveness of the use of premises by state agencies, improve the quality of administration and save administrative expenses owing to the economies of scale as well as to consolidate the support functions. The objective is to achieve more effective use of the funds and channel the released funds to measures supporting economic development. Here the increase of the share of investments (incl. export-supporting investments) and budget funds aimed at creating opportunities for developing the environment at the account of (activity) support should be pointed out. In addition to investments, it is planned to increase the channelling of funds to R&D and education as much as can be afforded.

Furthermore, it is planned to create additional opportunities under the responsibility and in the interests of employers and individuals and for the purpose of development of risk-based financing schemes, thereby, for instance, also through creation of private insurance opportunities as well as increasing the excess.

What has been done:

- In spite of the fact that Estonia's economic recession has been one of the deepest in the European Union and thereby we have managed to take more budget consolidation measures than any other Member State of the European Union, the objective of stimulating the economy has not been forgotten: considering the weakening of the budgetary position and the rise in EU assistance volumes we have invested more in stimulating the economy than other Member States of the EU on average. The main bottlenecks in need of improvement have remained the same regardless of the economic recession, only their importance has somewhat changed and the need for taking alleviating measures has become more urgent.
- Unpegging expenditures incurred in the field of the environment from revenues of the excise duty on electricity and partially also from environmental charges. By adoption of the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act the earmarked expenditures of the Environmental Investment Centre were unpegged from revenues of the excise duty on electricity. By amendment of the Environmental Charges Act the earmarked expenditures of the Environmental Investment Centre was partially unpegged from revenue of environmental charges. The rise in revenue in 2010 in comparison with 2009 remains in the state revenues. The forecast growth is approx. 20% a year.
- Substantial changes have been made in the wage policy of public servants for the purpose of unpegging the wage expenditures from the average wage of the country and making the wage policy more transparent. In 2009 the Temporary Arrangement of Payment of Wages Pegged to Average Wage in Estonia Act was amended so that the wages of the members of the Riigikogu and officials appointed by the President of the Republic were frozen. By the said decision the wages of the positions pegged to the average wage were temporarily unpegged from the average wage indicator. The decision concerned a period from 1 July 2009 until 31 December 2010.
- In addition, remuneration of the higher public servants has been adjusted by the Higher Public Servants Wages Act, which will enter into force on the date when the powers of the XII composition of the Riigikogu enter into force in 2011. According to the act, the highest wage

level of higher public servants is indexed with an index whose value is 50% of the arithmetical average of the annual change of the CPI and annual change in the social tax collection.

- In the first half of 2009 the Labour Market Board was merged with the Unemployment Insurance Fund.
- In 2009 the Office of the Minister of Population and Ethnic Affairs whose functions were divided between the areas of government of the Ministry of Social Affairs, the Ministry of Culture, the Ministry of Education and Research, and the Ministry of the Interior (Minister of Regional Affairs).
- As of 1 January 2010 the Plant Production Inspectorate was reorganised into the Agricultural Board in the area of government of the Ministry of Agriculture, thus uniting the regional land improvement bureaus (13) operating as state agencies in the area of government of the Ministry of Agriculture and the Land Improvement Bureau of Supervision and Expertise.
- In the area of government of the Ministry of the Environment the Radiation Centre, the county environmental services of the Ministry and the State Nature Conservation Centre were merged with the Environmental Board in 2009.
- In the area of government of the Ministry of Economic Affairs and Communications the Estonian Motor Vehicle Registration Centre, Road Administration, local offices of the Road Administration and administered state agencies were merged into the Road Administration and regional Road Administrations in 2009.
- In the area of government of the Ministry of the Interior the Police Board, the Border Guard Board and the Citizenship and Migration Board were merged into the Police and Border Guard Board as of 1 January 2010.
- As of 1 January 2010 the Health Care Board, the Health Protection Inspectorate and the Chemicals Notification Centre were reorganised and merged into the Health Board.
- In December 2009 the Cabinet decided to commence the introduction of universal financial, staff and payroll accounting software in state agencies. The planned project optimises accounting within the area of government of each ministry, making the areas of government comparable in the same information system. The transition is realised by areas of government between 1 July 2010 and 1 January 2013.
- With the Rural Municipality and City Budget Act the borrowing opportunities of local authorities and foundations and companies controlled by local authorities were limited as of 1 March 2009. According to the amendment, a loan may be taken solely for cofinancing external funds.
- The Government has prepared its proposals to the European Commission for amendment of the operational programmes of the Structural Funds. Also, measures have been taken for speeding up the use of assistance.

Indicator:

- the growth of non-fixed expenditures increases at least at the same rate as the total budget expenditures.

To ensure long-term sustainability of the budgetary policy

Estonia's budgetary policy has so far been conservative. In order to cope with negative demographic trends (aging population) and ensure the sustainability of public finances in the long term, the policy must be oriented towards sustainability. The public finances are also strengthened by a successfully implemented pension reform.

Amendments of the Pension Insurance Act approved in 2007 and application of a new pension index will considerably increase the ratio of the average wage and pension in comparison with the former system, posing a considerable challenge to the financial system of the state. In the conditions of close-to-balance general government budget position it means covering the pension insurance deficit by cutting other costs of the state.

In the present demographic situation ensuring the long-term sustainability of the budgetary policy means changes mainly in the social field whose costs amount to over 42% of the budget and which is the most affected by changes in the population structure. Since the other general government is largely related to the social field (labour market policy and health care policy), its impact on the general government position is substantial. However, it does not mean that other sector policies do not play a role in ensuring the long-term sustainability of the budgetary policy.

What has been done:

- For the purpose of controlling the deficit of the pension insurance expenditures paid at the account of social tax revenues a legislative amendment was made in 2009 reducing the pension index to 1.05 on 1 April 2009. The amendment gave the Government the chance to approve a lower index where the expected real growth of the GDP in the same year is negative or the difference between the state pension insurance expenditure and the presumable accrual to the state pension insurance funds of social tax exceeds 1% of GDP expected for the year. In addition, the ordinary index rate and the part of the index that was not raised/reduced is set off within five years as of the year of application of the changed index.
- Amendment of the system of benefits for temporary incapacity for work for the purpose of improvement of the long-term sustainability of the health insurance system towards increasing the excess of employees and employers. In the course of the reform the excess of employees was increased from one day to three days and the liability of the employer from the fourth to the eighth day was applied. As of the ninth day the Health Insurance Funds takes over the payment obligation. In addition, the sickness benefit rate was reduced from 80% to 70% of the employee's wage and the rate of care allowances was reduced from 100% to 80%.
- On 16 December 2009 the Government of the Republic decided to approve and submit to the Riigikogu amendments to the State Pension Insurance Act, according to which the retirement age would rise by 3 months per annum as of 2017 until it reaches the level of 65 years by 2026 (at present the retirement age of men is 63 years and that of women 60.5 years, rising to 63 years by 2016).
- With the Rural Municipality and City Budget Act the borrowing opportunities of local authorities and foundations and companies controlled by local authorities were limited as of 1 March 2009. According to the amendment, a loan may be taken solely for cofinancing external funds.
- The State Assets Act has been amended in a manner that allows the Government to influence the activities of the foundations of the general government for the purpose of ensuring the sustainability of the budgetary policy and the financial stability of the foundations.

Indicator:

- the European Commission's evaluation of the long-term sustainability of Estonia's budgetary policy, according to which Estonia is classified as a low-risk country, is viewed.

3.2. General government budgetary position

3.2.1. Nominal position of general government budget

In 2008 the general government deficit amounted to EEK 6.9 billion, amounting to 2.8% of GDP. The central government (-2.4% of GDP) and the aggregate budget of local authorities (-0.6% of GDP) were in a deficit, while social insurance funds were in surplus (0.2% of GDP).

The central government deficit was the main driver behind the general government deficit, accounting for 85% of the latter. The reason for the deficit lied in the worse-than-expected revenue collection. Revenues amounted to 94% of the approved state budget, incl. 95.7% in tax revenues. Funds transferred to the year 2008 amounted to EEK 5.2 billion (2% of GDP) and transfers to 2009 amounted to EEK 2 billion (0.9% of GDP). As for the social insurance funds, the year 2008 was ended in surplus both by the Health Insurance Fund as well as the Unemployment Insurance Fund. The reason behind the surplus lies in the social tax revenue collection being according to expectations.

The state budget for 2009 was prepared with a deficit of EEK 2.3 billion, which accounted for 0.9% of GDP. Due to worse-than-expected economic developments the Government decided to prepare a **negative supplementary budget** in February 2009. On the basis of the expectations contained in the spring forecast of the Ministry of Finance the **second negative supplementary budget** was prepared in the summer of 2009. In the framework of the **first supplementary budget** the general government budget position in 2009 was improved to the extent of EEK 8 billion (incl. reduction of the state budget expenditures by EEK 5.3 billion and an increase of the revenues by EEK 1.2 billion). Reduction of a pension rise to 5% to the extent of EEK 1.2 billion and cutting operating expenses and benefits in the amount of EEK 1 billion account for the largest portion of the cut. In the framework of the **second supplementary budget** the general government budget position in 2009 was improved to the extent of approx. EEK 8.1 billion. With the supplementary budgets for 2009 and a decision of the Government of the Republic the general government budget position in 2009 has been improved to the extent of approx. EEK 20 billion (over 9% of GDP).

The general government budget deficit of 2009 is, according to the forecast of the Ministry of Finance, approx. EEK 5.6 billion (2.6% of GDP). The largest contribution to the emergence of the general government deficit comes from the central government (EEK 2.3 billion), while all the remaining levels of the general government also remain in a deficit according to the same forecast.

According to the economic forecast and the medium-term objective (MTO) established by the Government of the Republic, the general government budget will reach the nominal surplus again in 2013. The Government of the Republic has established the objective of keeping the general government budget in surplus. Estonia fulfilled its MTO until the onset of the global economic crisis, but as of 2008 the budgetary position has been weaker than the objective. According to the Stability and Growth Pact, the Member States of the euro area and ERM II who fall short of the MTO established by them must adjust their structural budgetary position on average by 0.5% per annum until achieving the MTO. This principle has been followed also upon establishing the budgetary position objectives specified in this programme and hence the general government budget deficit through 2011-2012 is 2% and 1% of GDP, respectively, and by 2013 the nominal surplus of 0.2% of GDP will be achieved once again.

Due to slow recovery of economic growth the central government as well as local authorities are still in a deficit. Due to reduction of the benefits payable by the Unemployment Insurance Fund and raising the unemployment insurance premium to the level of 4.2% in 2009, the budgetary

position of the social insurance funds will reach surplus in 2010 and by 2013 it will rise to 0.9% of GDP.

Table 8

General government budget position 2004–2013

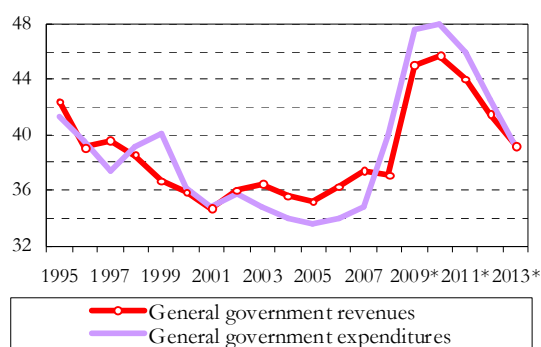
	2004	2005	2006	2007	2008	2009*	2010*	2011*	2012*	2013*
General government (% of GDP)	1,6	1,6	2,3	2,6	-2,8	-2,6	-2,2	-2,0	-1,0	0,2
Central government	1,7	1,5	1,8	2,5	-2,4	-1,1	-2,0	-2,3	-1,2	-0,1
Local government	-0,4	-0,3	-0,2	-0,5	-0,6	-0,8	-0,3	-0,2	-0,6	-0,6
Social security funds	0,3	0,5	0,6	0,6	0,2	-0,8	0,1	0,5	0,8	0,9

Sources: Statistics Estonia, Ministry of Finance of Estonia.

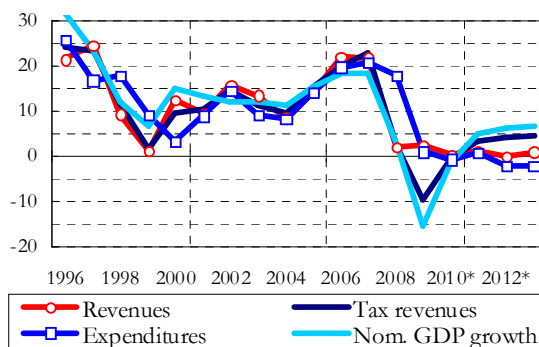
Figure 10

General Government Budget Position
(% of GDP)

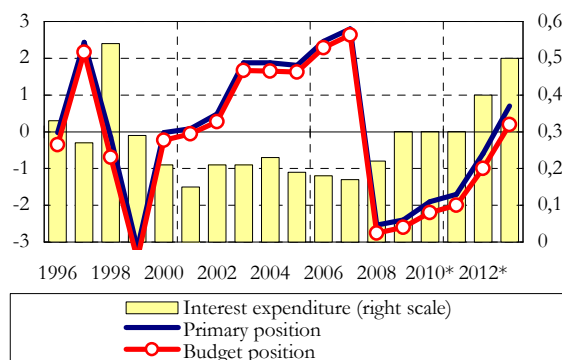
A. Revenues and expenditure



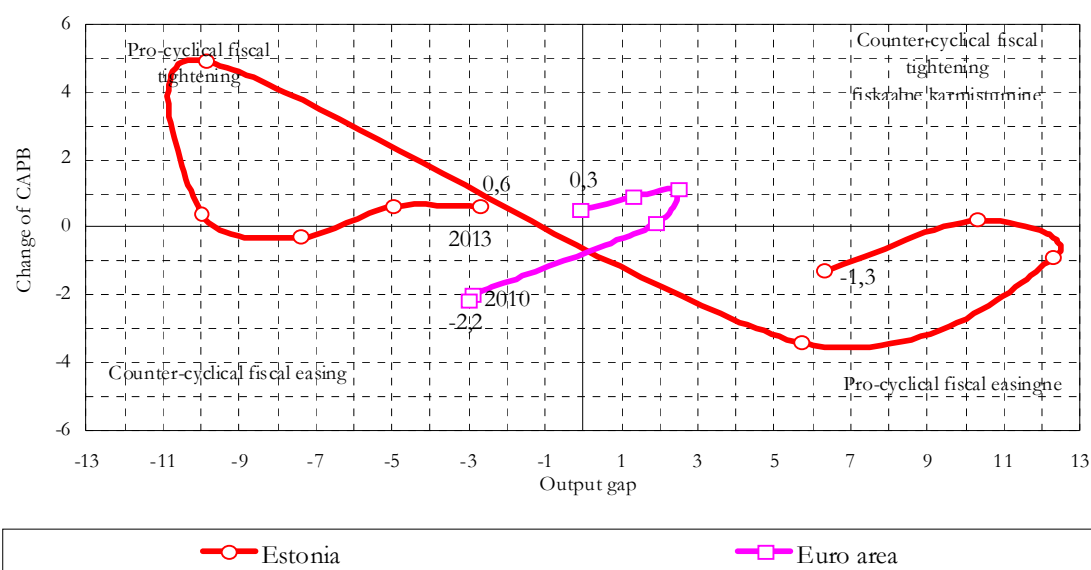
B. Revenue and expenditure growth (%)



C. General government budget position



Sources: Statistics Estonia, Ministry of Finance of Estonia.

Figure 11**Fiscal stance and cyclical conditions in Estonia and in euro area 2005–2013***(% of GDP)*

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

3.2.2. Cyclically adjusted position of general government budget

An analysis carried out by the Ministry of Finance using the production function method⁸ shows that through 2004–2007 the Estonian GDP rose considerably over the potential level and the positive gap rose over 12% of GDP by 2007. The potential-exceeding growth period based on credit inflow was followed by sudden adjustment of the economy with growth slowing down substantially and eventually turning negative.

In 2008 the difference between the actual and potential GDP levels started shrinking rapidly and in 2009 the expected GDP level will be lower than the potential one. Domestic demand is undergoing substantial adjustment due to the lapse of the factors that generated growth so far (credit growth and development of the real estate sector). In addition, the ordinary domestic demand downwards cycle is amplified by the global financial crisis that broke out in the autumn of 2008 and as a result of that external demand suffered a negative shock at the end of 2008. As a result thereof the negative output gap amounts to nearly 10% of GDP in 2010. Deepening uncertainty restrains demand and the production resources created during the domestic demand boom do not correspond to the changed demand structure, as a result of which the expected growth potential will remain smaller than before. Once the economic growth turns positive the output gap will start reducing gradually, but will remain negative until the end of the forecast period (i.e. the forecasted GDP level will remain below the potential level).

Evaluations of the cyclically adjusted position of the Estonian budget based on the output gap show that Estonia's budgetary policy through 2009–2013 is pro-cyclical, except in 2011. In 2009 the cyclically adjusted primary position will worsen in the conditions of economic growth falling short of the potential.

⁸ On the output gap and cyclically adjusted and structural budget position evaluation methodology see Annex 3 for Estonia's Convergence Programme of May 2004.

The reason for such behaviour by the Government lies on the one hand in the fact that during growth phase of the economic cycle the budget deficit could have been higher, in 2009 and in following years the Government no longer has any room for reviving the economy through easing the budgetary position. The freedom of activity of the Government is at the same time limited by demographic changes related to the aging of the population, which are expressed mainly in the aging of the population of the working age and an increase of the number of dependants, as a result of which it is necessary to keep a strict line in the budget today in order to ensure possibilities of reacting to changes in the future. In addition, Estonia must fulfil the requirements for the budgetary position arising from the EC Treaty and the Stability and Growth Pact, which contribute to the introduction of the euro in 2011. **Controlling the budget deficit and debt level and introduction of the single currency of the EU, the euro, offers greater confidence and stabilises the economic environment as an additional fiscal stimulus.**

Table 9

Cyclical developments in 2007–2013

(% of GDP)

	2007	2008	2009*	2010*	2011*	2012*	2013*
1. Real GDP growth (%)	7,2	-3,6	-14,5	-0,1	3,3	3,7	4,0
2. Net lending of general government	2,6	-2,8	-2,6	-2,2	-2,0	-1,0	0,2
3. Interest expenditure	0,2	0,2	0,3	0,3	0,3	0,4	0,5
4. One-off and other temporary measures	0,3	0,0	1,2	1,9	0,6	0,0	0,0
5. Potential GDP growth (%)	5,3	2,4	0,3	0,0	0,4	1,0	1,5
6. Output gap ($6_{t-1} + 1 - 5$)	12,3	5,7	-9,9	-10,0	-7,4	-5,0	-2,7
7. Cyclical budgetary component ($6 * \text{sensitivity}$)	3,7	1,7	-3,0	-3,0	-2,2	-1,5	-0,8
8. Cyclically-adjusted balance ($2 - 7$)	-1,1	-4,5	0,4	0,8	0,2	0,5	1,0
9. Cyclically-adjusted primary balance ($8 + 3$)	-0,9	-4,3	0,7	1,0	0,5	0,9	1,5
10. Structural balance ($8 - 4$)	-1,3	-4,5	-0,8	-1,1	-0,3	0,5	1,0

Sources: Ministry of Finance of Estonia, Statistics Estonia.

3.2.3. Structural position of general government budget

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

The one-off measures influencing the Estonian general government budget position have been given in Table 10. In 2007 their volume was 0.3% of GDP and the dividends of Eesti Energia had the strongest impact (an amount of dividends and income tax exceeding EEK 500 million has been taken into account). In 2008 the impact of one-off measures was 0.0% of GDP: the dividends from Eesti Energia and postponement of the moment of payment of value added tax balanced one another. In 2009 the impact of one-off measures amounted to 1.2% of GDP and the dividends from Eesti Energia and suspension of contributions to the second pillar of the pension system have the strongest impact. The impact in 2009 includes the portion of the sale of the state assets

exceeding 0.5% of GDP as well as dividends from Eesti Telekom to the extent exceeding the regular level (EEK 330 million) and the state's income tax refund of EEK 395 million arising from the Sylvester court dispute. The income tax exemption on the first child also remains in 2009 with an impact of EEK -735 million. The major one-off measures in 2010 is the dividends from Eesti Energia (EEK 1,660 million) and suspension of contributions to the second pillar of the pension system (EEK 2,320 million) and their combined impact amounts to 1.9% of GDP. The measures in 2011 include suspension of the contributions to the second pillar of the pension system amounting to 0.6% of GDP.

In 2007 the structural position of the general government budget in Estonia accounted for -1.3% of GDP, falling to -4.5% of GDP by 2008. By 2013 the structural position will improve to 1.0% of GDP. Since no one-off measures have been foreseen for 2012-2013, the structural position of the budget will overlap the cyclically adjusted budgetary position.

Table 10

Impact of one-off measures 2007–2011

Measure	Year	mio EEK*	% of GDP
Influence to revenues			
Liquidation of debts of RAS Ookean	2007	-245	-0,1
Revenues from the sale of assets (higher than 0.5% GDP)	2007	100	0,0
Dividends from Estonian Energy	2007	780	0,3
VAT taxation moment shift due to a change in law	2008	-200	-0,1
Dividends from Estonian Energy	2008	325	0,1
Revenues from the sale of assets (higher than 0.5% GDP)	2009	680	0,3
Additional basic allowance for the first child	2009	-735	-0,3
Dividends from Estonian Energy	2009	1 220	0,6
Suspension of the contributions to the second pillar	2009	1 300	0,6
Tax refund arising from the Sylvester court dispute	2009	-395	-0,2
Dividends from Estonian Telecom	2009	440	0,2
Dividends from Estonian Energy	2010	1 660	0,8
Suspension of the contributions to the second pillar	2010	2 320	1,1
Suspension of the contributions to the second pillar	2011	1 250	0,6
TOTAL	2007	635	0,3
	2008	125	0,0
	2009	2 510	1,2
	2010	3 980	1,9
	2011	1 250	0,6

*—approximate estimation.

Sources: Statistics Estonia, Ministry of Finance of Estonia

3.3. Roles and budgetary positions of various levels of government

In Estonia the **central government** comprises ministries, constitutional institutions, state pension insurance, most of the legal persons in public law and foundations controlled and financed by the central government. The duties of the central government are related to state administration. It is also the duty of the central government to ensure security and public order. The duty of the central government is to organise agriculture, environmental protection, the infrastructure and culture. Social welfare, health care and education are organised in cooperation with social insurance funds and local authorities.

The financial position of the central government is connected primarily with the economic cycle as regards financing – a large share of the revenues of the central government consists of taxes that are sensitive to economic development. Thus, the central government has been the main generator of the deficit in the downward phase of the economic cycle. In 2008 the central government ended the year in a deficit that amounted to 2.4% of GDP.

The **state pension insurance** that forms part of the central government was in a deficit in 2009 and will be in a deficit in the coming years. In order to ensure the sustainability of public finances in the environment of aging population Estonia carried out a pension reform and established a three-pillar pension system (state pension insurance, mandatory funded pension and supplementary private pension). The revenue of the state pension insurance comprises 20% of the social tax base and in the case of persons that have joined the second pillar 4% of it is transferred to the funded pension system. In order to find additional funds for financing pension insurance (and health insurance), the minimum social tax obligation in 2009 was raised to the minimum monthly wage of the previous year. The rise in pensions has been prescribed in the State Pension Insurance Act, according to which on April 1 each year state pensions are indexed with an index whose value as of 2008 is 20% of the annual rise of the Consumer Price Index and 80% of the annual rise of the pension insurance portion of social tax (formerly, 50/50). In addition, the base part of pension is multiplied by 1.1 and the annual score is multiplied by 0.9 in order to increase the solidarity of the pension system. In 2009 it was decided by way of an extraordinary measure to give up the planned indexed pension rise of approx. 15% and as a result of the decision the average pension rose by approx. 5%. Due to the expected decrease of the revenue collection of the pension insurance portion of social tax and a fall of the CPI no pension rise can be expected in the coming years.

For the purpose of cutting state budget expenditures it was decided to suspend mandatory funded pension contributions as of 1 July 2009. As of 2010 the insured can voluntarily continue making their contributions, while the state's contributions have been suspended in full. Based on the applications submitted by 30 November 2009 approx. 200,000 insured persons voluntarily continue making funded pension contributions. As of 2011 the contributions will be restored to the extent of a half and as of 2012 in full.

The Health Insurance Fund and the Unemployment Insurance Fund belong to the sector of **social insurance funds**. The **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). So far the budgetary position of health insurance has been stable and the objective is to retain at least a balanced financial position of the state health insurance. The financing of the health care system is improved by increasing the tax base, e.g. through raising the amount serving as the basis for the minimum social tax obligation. According to the forecast, the Health Insurance Fund ended the year in a deficit in 2009 and will reach a balanced budgetary position by 2012.

The duty of the Unemployment Insurance Fund is to pay unemployment insurance benefits, collective employment contract cancellation insurance benefits and employer's insolvency insurance benefits. The resources of the Health Insurance Fund are obtained from the mandatory

unemployment insurance premium of the insured persons. As of 1 August 2009 the rate of the premium is 2.8% for employers and 1.4% for employees. According to this forecast the budget of the Unemployment Insurance Fund in 2009 is in a deficit, but due to a decrease of the volume of the insurance benefits and a higher rate the budget of the Unemployment Insurance Fund will be in surplus as of 2010.

The main duty of **local authorities** is to organise the local life, general education system and to ensure the daily subsistence of people through social benefits. Local authorities are much more flexible than the state in altering their budget, often making various budget changes over the year. According to the Constitution, cities and rural municipalities have a separate budget and therefore local authorities have relatively extensive discretion in shaping their budgets. The estimated budget deficit of local authorities in 2009 is EEK 1.6 billion. Only in 2006 the aggregate budget of local authorities was not in any substantial deficit. The deficit is caused by higher costs as well as a decrease of revenue from personal income tax and sale of assets. Through 2009-2011 the budgetary position is influenced by the restrictions imposed by the Government in 2009 regarding increasing the debt burden of local authorities. According to the established regulation, local authorities can take a loan only for the purpose of cofinancing in the case of foreign aid projects. With regard to the 2010-2011 period it is presumed that with the exhaustion of the existing reserves and the impact of credit restrictions the deficit will remain around EEK 0.5-0.6 billion. In the coming years the deficit will rise to approx. EEK 1.5 billion owing to loosening credit restrictions.

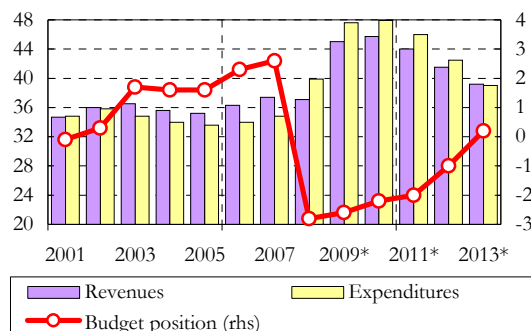
To ensure the financial discipline of local authorities the legislation in force establishes a restriction on the total debt burden: 60% of the net revenue in the budgetary year. For the purpose of controlling the aggregate budget deficit of local authorities a rule was established as of 1 March 2009, which allows local authorities to take a loan only with the approval of the Ministry of Finance for the purpose of covering the self-financing portion of foreign aid projects, foreign aid bridge financing and refinancing of obligations. The restriction remains in force until the end of 2011.

The Riigikogu is discussing a draft Financial Management of Local Authorities Act, which establishes a debt burden limit depending on the individual capacity and the requirement of the balance/surplus of the current revenues and expenditures as financial discipline measures. Long-term inability to abide by the financial discipline measures leads to compulsory reorganisation. The general government budgetary position can be controlled by the measure of establishing the annual limit for the aggregate deficit of local authorities and the latter have to come to an agreement on taking loans. If they cannot reach an agreement, the central government will intervene. Abiding by the financial discipline measures is monitored with regard to the entire local authority consolidation group.

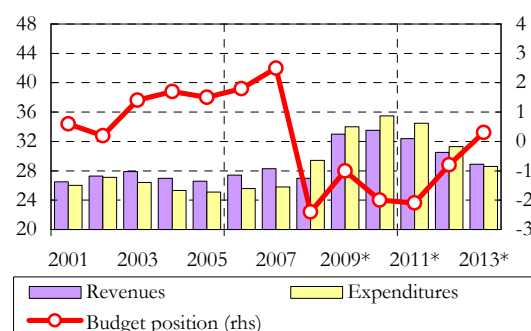
Figure 12

Revenues and expenditure of general government levels (% of GDP)

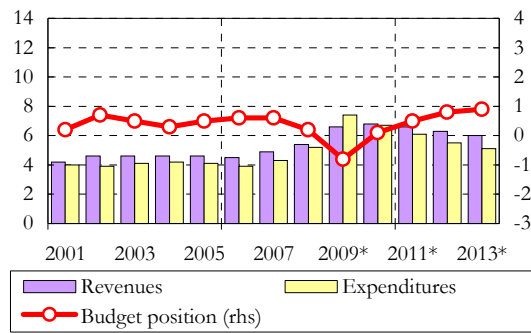
A. General government



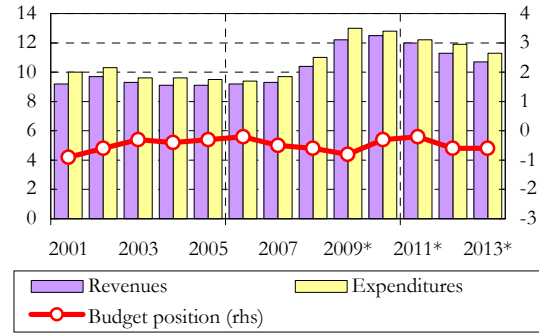
B. Central government



C. Social security funds



D. Local governments



Source: Eurostat, Ministry of Finance.

3.4. General government financing

3.4.1. General government debt

The main objective of Estonia's budgetary policy during independence years has been to keep the general government position in balance over the medium term and, where possible, in surplus. This objective has been expressed in a low debt burden. At the end of 2008 Estonian general government debt was 4.8% of GDP. The debt of local authorities amounted to 67.7% of the general government debt of nearly EEK 11.9 billion. Since local authorities ended 2008 in a deficit, their debt burden rose over the year as well. The central government debt rose by nearly EEK 1.5 billion in 2008 to EEK 4.1 billion, i.e. 1.6% of GDP.

Especially through 2009-2010 a rise in the debt burden can be expected owing to the financing need of the deficit of the central government as well as local authorities. In addition to the budget deficit the need for involvement of external funds is increased by the loans issued by the central government and other financing transactions that in 2010 will account for a substantial portion of the entire credit need. Through 2012-2013 the debt level will stabilise.

The budget deficit of 2010 will be financed both with a loan as well as reserves, but as of 2011 the reserves will no longer be used and the entire deficit is covered with a loan.

In connection with the termination in 2012 of the credit restriction imposed on local authorities as of 2009, their loan burden is expected to rise considerably through 2012-2013 due to great investment needs.

Table 11

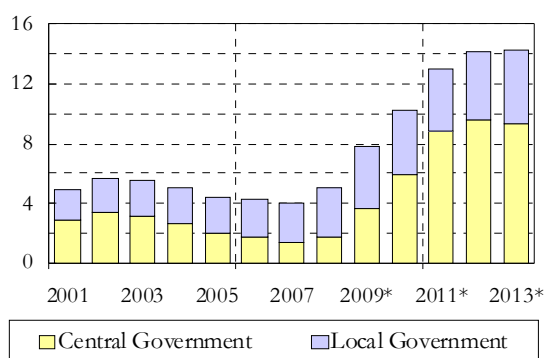
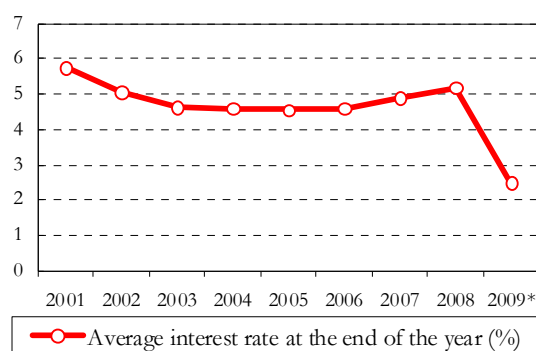
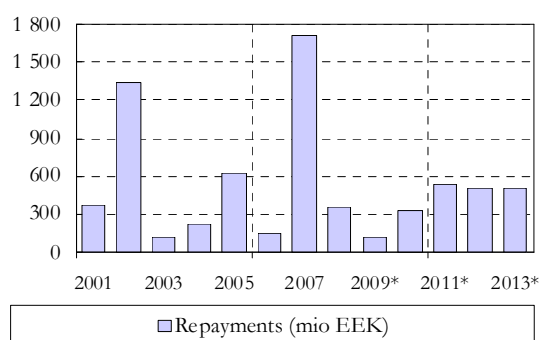
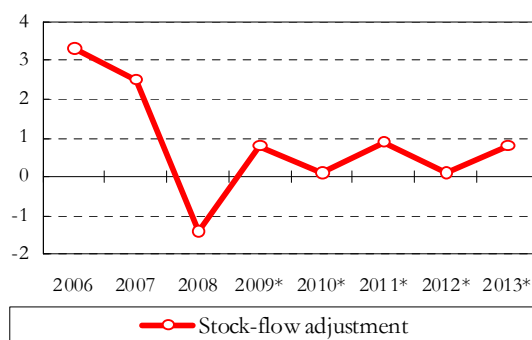
Change of General Government debt burden in 2008

	31. December 2007		31. December 2008		Change
	% of GDP	mio EEK	% of GDP	% of GDP	mio EEK
General Government	9 268	3,8	11 600	4,6	25,2
Domestic debt	5 845	2,4	7 342	2,9	25,6
Foreign debt	3 423	1,4	4 258	1,7	24,4
Central Government	3 267	1,3	4 439	1,8	35,9
Domestic debt	2 285	0,9	3 029	1,2	32,6
Foreign debt	9 82	0,4	1 410	0,6	43,6
Local Government	6 646	2,7	8 048	3,2	21,1
Domestic debt	4 205	1,7	5 200	2,1	23,7
Foreign debt	2 441	1,0	2 848	1,1	16,7
Social Security	0	0	0	0	0
Domestic debt	0	0	0	0	0
Foreign debt	0	0	0	0	0

Source: Statistics Estonia.

Table 12**General Government debt developments in 2008–2013***(% of GDP)*

	2008	2009*	2010*	2011*	2012*	2013*
1. Gross debt	4,6	7,8	10,1	13,0	14,2	14,3
2. Change in gross debt ratio	1,3	3,2	2,3	2,9	1,2	0,1
Contributions to change in gross debt						
3. Primary balance (-)	-2,5	-2,3	-1,9	-1,7	-0,6	0,7
4. Interest expenditure	0,2	0,3	0,3	0,3	0,4	0,5
5. Stock-flow adjustment	-1,4	0,6	0,1	0,9	0,2	0,9
Implicit interest rate on debt (%)	5,2	2,5	2,5	3,0	3,5	4,0

*Sources: Ministry of Finance of Estonia, Statistics Estonia.***Figure 13****Debt developments in 2001–2013***(% of GDP)***A. General government debt****B. Average interest of central government⁹ loans****C. Repayment of central government loans****D. Stock-flow adjustment***Sources: Ministry of Finance of Estonia, Statistics Estonia, Eurostat.*⁹ Central Government without foundations and public-legal entities.

Box 1. Stock-flow adjustments (SFA)

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

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

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

In theory the change in the debt should be relatively similar to the deficit/surplus at least in a longer period, but especially recent years have indicated that the correlation between the change in the debt and the deficit has weakened in the case of various countries. Inexplicably, SFA indicates that there may be problems with budget statistics in some states.

Over the forecast period Estonia's SFA has been positive, because the rise of the debt burden has exceeded the budget deficit. The reason lies in the fact that the financing need of the central government and local authorities (also considering financing transactions) exceeds the general government budget deficit. This is enabled by the budget surplus of the social insurance funds that do not need to repay the debt due to the absence of respective obligations.

3.4.2. General government reserves

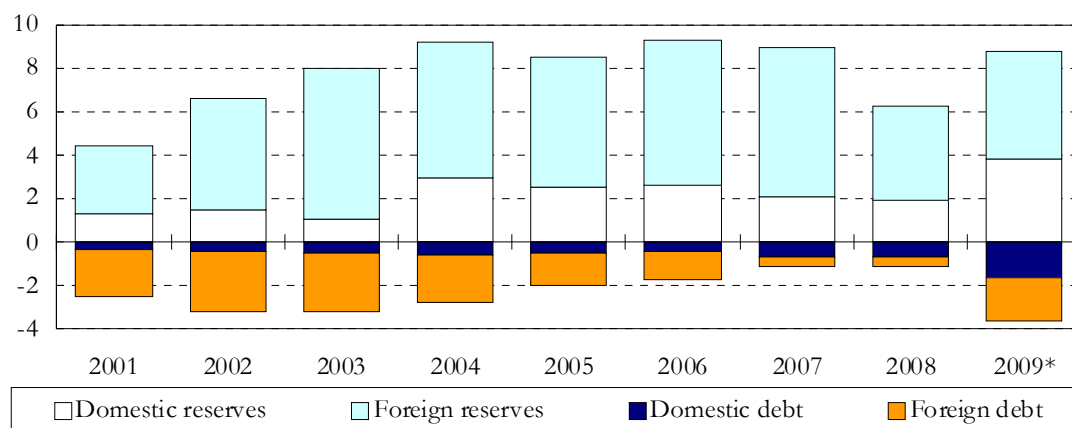
The liquid financial assets of the central government amounted to approx. EEK 18.5 billion by the end of 2009, i.e. 8.7% of GDP. The stabilisation reserve accounted for EEK 4.6 billion thereof. In comparison with the end of 2008 the volume of the reserves has increased both nominally as well as as a share of GDP. In part, the reason lies in the revenues earned from selling the shareholding in AS Eesti Telekom. The reduction of the reserves in 2008 was caused by the budget deficit that increased notably in the last months of the year and financing the deficit out of the existing reserves.

In 2010 the financial assets are expected to decrease due to financing the budget deficit and the purchase transaction of OÜ Elering, but these will stabilise through 2012-2013 between EEK 12-13 billion. As of 2013 the volume of the assets will start rising again owing to the planned budget deficit.

Figure 14

Central government debt and reserves at the end of the period

(% of GDP)



Sources: Ministry of Finance of Estonia, Statistics Estonia.

4. SENSITIVITY ANALYSIS AND COMPARISON WITH PREVIOUS PROGRAMME

4.1. Alternative scenarios

4.1.1. Risk scenario

The Ministry of Finance also prepares risk scenarios in the framework of economic forecasts, which show the possible alternative developments of the economy, but whose probability is lower than that of the base scenario.

Risks related to the sudden end of the domestic demand boom have largely been realised in the economy by today and due to the global economic crisis the dependence of economic growth in Estonia on external development has increased considerably. Against the background of the current conservative credit policy of commercial banks and the continuance of negative developments in the labour market the contribution of the domestic demand remains far more modest in comparison with the previous years (2005-2007).

Domestic post-boom adjustment processes have largely been completed by now. Future developments are largely dependant on the wellbeing of our export partners. Given that the export volumes have stabilised at the same level to which they fell in the beginning of 2009 and the cost reduction, one may think that Estonia's export potential has not suffered much due to the crisis and restoration of the economic growth is expected to be driven by exports.

Downwards adjustments of the forecasts ended in summer, the confidence of economic agents is on a solid rise and the growth expectations of export partners are following the positive scenarios of the forecasts. At the same time the real indicators of the economy have not yet turned upwards that clearly. There has been some stabilisation on the exports side, but the situation of the domestic demand continued worsening in Q3 2009. The annual domestic demand fall figures remained at the level of Q2, but it must be taken into account that the domestic demand was already undergoing a fall back at the beginning of 2008 and the continuance of the downward trend refers to the worsening of the situation. This is also confirmed by the acceleration of the annual fall in retail sales. Given the continued rise in unemployment, households' propensity to save is expected to rise further.

Based on the possibility of a deeper fall of domestic demand the Ministry of Finance prepared a negative development scenario of the forecast (see the table below). According to the scenario, the former signs referring to the recovery of growth will not be confirmed by the real economy and the recover of economic growth will be postponed by the end of 2010.

Due to a worsening situation of the labour market the domestic demand will suffer a stronger fall and even the increase of the euro introduction prospects will be unable to lift optimism to such an extent. So far the signs of exports recovery have been modest. When looking and the additional scenario of the summer forecast, our export partners' developments in Q3 and Q4 will probably be according to positive scenario, while the developments of exports do not indicate any faster restoration compared to the base line forecast and the total economic growth may be even slightly more negative due to the domestic demand.

According to the given risk scenario, the economy will recover more slowly in comparison with the base line forecast, i.e. it describes the development difference possibilities in the next 6-12 months, but as regards the long-term development it largely coincides with the base line forecast.

Table 13

Negative risk scenario for 2009–2012

(percentage)

	Risk scenario					Difference from base line forecast			
	2008	2009*	2010*	2011*	2012*	2009*	2010*	2011*	2012*
Real GDP growth	-3,6	-14,7	-2,6	3,0	3,5	-0,2	-2,5	-0,3	-0,2
Nominal GDP growth	2,9	-15,5	-4,2	4,3	5,8	-0,1	-3,0	-0,7	-0,5
Domestic demand growth	-10,5	-24,6	-5,5	3,7	3,9	-0,1	-3,1	-0,7	-0,5
CPI	10,4	-0,1	-0,1	1,4	2,2	0,0	-0,5	-0,5	-0,1
Employment growth	0,2	-8,8	-4,0	-0,1	1,2	0,0	-1,6	-0,7	-0,4
Real wage growth	3,2	-4,5	-4,7	0,2	1,0	0,0	-1,0	-0,2	-0,3
Current account (% of GDP)	-9,4	4,6	7,0	5,8	3,3	0,1	1,1	1,7	1,9

Sources: Ministry of Finance of Estonia, Statistics Estonia.

4.1.2. Impact of risk scenario on general government budgetary position

Next, the impact of the negative risk scenario on the general government sector budget position and debt burden are assessed. To that end the results of the sensitivity analysis are used, whereby according to expectations non-tax revenue and general government budget expenditures remain at the level of the base line scenario.

According to the **negative risk scenario**, through 2009-2012 the nominal growth of the GDP will be lower than specified in the base line forecast, resulting in a decrease of tax revenue. According to the risk scenario, the tax revenue collection in 2010 will decrease by 0.9% of GDP in comparison with the base line forecast, 1.1% of GDP in 2011 and by 2012 the realisation of the risk scenario will reduce the tax revenue by nearly 1.2% of GDP in comparison with the base line forecast. When in 2010 the deficit will rise to 3.2% of GDP and remain at the same level in 2011, the expenditures will exceed the revenues by 2.3% of GDP by 2012. The given deficit will presumably be financed by increasing the debt burden, as a result of which the general government debt will rise to 18% of GDP by 2012.

Table 14**The impact of the negative risk scenario on general government budget position and debt burden***(% of GDP)*

	2009	2010	2011	2012
Base line forecast				
General government budget balance	-2,6	-2,2	-2,0	-1,0
General government debt burden	7,8	10,1	13,0	14,2
Risk scenario				
General government budget balance	-2,6	-3,2	-3,2	-2,3
General government debt burden	7,8	11,4	15,5	18,0
Difference				
General government budget balance	0,0	-1,0	-1,2	-1,3
General government debt burden	0,0	1,3	2,5	3,8

Source: Ministry of Finance.

4.2. Comparison with forecast of previous convergence programme

The economic growth expectations of Estonia's trade partners, incl. the European Union are more pessimistic in the autumn of 2009 compared to the autumn of 2008. The expectations are much more negative especially for 2009. In 2010 in the conditions of the strengthening confidence the economic growth of the trade partners is expected to slightly recover and the situation should stabilise. Compared to the situation a year ago the interest rate expectations are much lower, because the financial crisis has proven more long-term and deeper than could be anticipated in the autumn of 2008. In 2009 the demand for oil products has considerably diminished as a result of the economic recession and the expected price of oil is thus also lower compared to the forecast a year ago. Once the economic situation improves in the coming years, the prices of oil will move upwards in the world market.

In its forecast in autumn 2008 the Ministry of Finance expected moderate economic recession for 2008 and 2009 and relatively quick recovery of the economic growth. In reality, however, the impact arising from the global crisis on the Estonian economy proved much stronger, as a result of which the domestic demand and exports plummeted in the final months of 2008. As a result thereof the growth projections of the Estonian economy have substantially been cut downwards and the expected rate of recovery of the economic growth has been reduced. In the forecast of the Convergence Programme the Ministry of Finance expects -14.5% economic growth for 2009, while in 2010 the downward trend will stop (-0.1% growth rate). In 2011 the economic growth will gradually start picking up based on exports.

Private consumption will remain much more modest in comparison with the forecast a year ago due to downwards adjustment of the households' income. Fall in employment and wage has been stronger than expected and the decrease of the real estate wealth has been more robust. The record-breaking unemployment rate is forcing people to be more economical. Thus, in 2010 the growth of private consumption will remain negative and is expected to be modest in the coming years.

According to the forecast, the growth of **investments** will not recover in 2010, because the demand for output will remain far below previously expected demand for several years. A deeper-than-expected decrease of the total output has decreased the level of production capacities utilisation and thus also the need for investment has dropped. In 2009 the housing market did not observe the expected stabilisation, although at the end of the year signs of stabilisation could be found. At the same time the prospects of introducing the euro have improved a lot by now and could increase investment courage. Low key interest rates are of no support to investments for the time being, because demand is weak and banks are cautious.

The notable contraction of the world trade caused a substantial correction in **exports** in Estonia in 2009, as a result of which the assumptions of the previous forecast were not true with regard to the deepness of the fall of the main trade partners and this forecast had to be adjusted downwards. In the coming years exports are expected to grow, but the growth expectations are slightly more modest than in the previous Convergence Programme due to the weaker growth of the export markets. The **import** forecast for 2009-2010 was adjusted much more negative due to the stronger-than-expected contraction of the domestic demand. Mainly due to negative developments in the domestic demand the **current account** will be in surplus in the coming years.

The rise in **consumer prices** (HICP) in the coming years will be much lower than in the previous Convergence Programme. Due to the fall in commodity prices, weak economic sentiment and negative labour market developments consumer prices will rise marginally through 2009-2010. In the coming years inflation will remain lower than previously forecasted, owing mainly to the slower-than-expected recovery of economic activity.

In the forecast of this year's Convergence Programme the expectations of the decrease of the **employment rate** in the conditions of the economic recession are more pessimistic in comparison with the previous autumn. The fall of the employment rate is influenced by reduction of workload arising from lower demand and the resulting cost optimisation by enterprises, which forces employers to reduce the number of employees. The forecast of the average **wage** has also been adjusted substantially. In autumn 2008 a moderate rise in wages was expected for 2009 and 2010, but in this forecast the small consumption demand and rise of the unemployment rate will bring about a **fall in wages** in both years.

The **general government budget position** outlook for 2009 has worsened in comparison with the Convergence Programme 2008. The budget position has been adjusted to be more negative with regard to all levels of the general government. In spite of the fact that the central government is the largest general government level in terms of the volume of expenditures and revenues, its budget deficit will remain around the same level as the deficit of the social insurance funds and local authorities. The reason lies mainly in the supplementary budgets approved in 2009, which have improved the budgetary position outlook over the year. The medium-term objective has been changed in comparison with the Convergence Programme 2008 and it is bound to the improvement of the structural budgetary position as of 2011.

The difference between the **general government debt** forecast in the Convergence Programme 2008 and this forecast arises mainly from a change in the budgetary position outlook and in drawing up new financing plans. Early repayment of the central government debt has not been planned and the debt will be repaid pursuant to the agreed repayment schedule.

Table 15**Comparison with the forecast of the previous Convergence Programme Update**

	2008	2009*	2010*	2011*	2012*	2013*
Real GDP growth (%)						
Previous update	-2,2	-3,5	2,6	4,8	5,0	-
Present update	-3,6	-14,5	-0,1	3,3	3,7	4,0
Difference	-1,4	-11,0	-2,7	-1,5	-1,3	-
Nominal GDP growth (%)						
Previous update	6,3	0,8	5,6	8,3	8,6	-
Present update	2,9	-15,3	-1,2	5,0	6,3	6,8
Difference	-3,4	-16,1	-6,8	-3,3	-2,3	-
General government budget position (% of GDP)						
Previous update	-1,9	-1,7	-1,0	0,1	0,2	-
Present update	-2,8	-2,6	-2,2	-2,0	-1,0	0,2
Difference	-0,9	-0,9	-1,2	-2,1	-1,0	-
General government debt (% of GDP)						
Previous update	3,7	3,7	3,5	3,0	2,8	-
Present update	4,6	7,8	10,1	13,0	14,2	14,3
Difference	0,9	4,1	6,6	10,0	11,4	-
Harmonised index of Consumer Prices (HICP) (%)						
Previous update	10,6	4,2	2,8	3,0	3,2	-
Present update	10,6	0,2	0,4	1,9	2,3	2,7
Difference	0,0	-4,0	-2,4	-1,1	-0,9	-
Current account (% of GDP)						
Previous update	-12,1	-7,2	-7,1	-6,9	-6,7	-
Present update	-9,4	4,5	5,9	4,1	1,4	-2,4
Difference	2,7	11,7	13,0	11,0	8,1	-

Source: Ministry of Finance of Estonia.

5. IMPROVEMENT OF THE QUALITY OF PUBLIC FINANCES

5.1. General government budget forecast until 2013

In **2008** the general government budget surplus amounted to **EEK 6.9 billion**, i.e. 2.8% of GDP. In 2008 the general government budget position was influenced by the in-deficit central government (-2.4% of GDP) and local authorities (-0.6% of GDP), while the social insurance funds ended the year in surplus (0.2% of GDP). The budget deficit arose mainly from lower-than-expected budget revenue in the last quarter of the year and so there was little possibility for a quick adjustment of the expenditures to the revenues.

According to the forecast in 2010 the general government budget deficit will amount to 2.2% of GDP. The central government makes the strongest contribution to the emergence of the general government budget deficit. The budget of the social insurance funds is in surplus owing largely to the Unemployment Insurance Fund and, expecting preservation of the unemployment insurance rates at the present level, it supports the entire general government budgetary position also in the medium term. The aggregate budget of local authorities is in surplus throughout the forecast period.

According to the forecast, the **general government revenues** as a percentage of GDP will rise through 2009-2010, reaching 45.7% of GDP. The reason lies mainly in the fact that in the conditions of deep economic recession the government has taken various revenue policy measures. As of 2011 the share of revenues will start decreasing and by 2013 it will amount to 39.2% of GDP, slightly increasing the level of 2008.

Tax revenues will rise from 20.1% in 2008 to 21.4% of GDP in 2013, thereby production and import tax revenues will rise from 12.1% to 14.1% of GDP mainly owing to the rise of value added tax. Income and wealth tax revenues will fall from 7.9% in 2008 to 7.3% in 2013 both due to a decrease of the personal income tax and corporate income tax. Social insurance payments will rise from 12.1% in 2008 to 12.7% in 2013. The reason lies in the rise of the unemployment insurance premium in 2009 (from 0.9% to 4.2%). The tax burden will rise from 32.2% in 2008 to 34.1% in 2013.

The **general government expenditures** will steeply rise as a share of GDP in 2009, reaching 47.6% of GDP. As of 2011 the expenditure level will start decreasing in the conditions of nominal GDP growth and by 2013 it will amount to 39.0% of GDP. In the forecast period the benefits to employees and interim consumption will decrease from 18.4% to 16.6%, while social transfers will rise from 12.8% to 13.5% and the gross fixed capital formation will remain at the same level by the end of the period.

Table 16**General government revenues and expenditure 2008–2013**

	2008	2008	2009*	2010*	2011*	2012*	2013*
	mio EEK	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending by sub-sector							
1. General government	-6 946,6	-2,8	-2,6	-2,2	-2,0	-1,0	0,2
2. Central government	-5 952,3	-2,4	-1,1	-2,0	-2,3	-1,2	-0,1
4. Local government	-1 620,4	-0,6	-0,8	-0,3	-0,2	-0,6	-0,6
5. Social security	626,1	0,2	-0,8	0,1	0,5	0,8	0,9
General government							
6. Total revenue	93 324,8	37,1	45,0	45,7	44,0	41,5	39,2
7. Total expenditure	100 270,3	39,9	47,6	47,9	46,0	42,5	39,0
8. Net lending/borrowing	-6 946,6	-2,8	-2,6	-2,2	-2,0	-1,0	0,2
9. Interest expenditure	556,5	0,2	0,3	0,3	0,3	0,4	0,5
10. Primary balance	-6 390,1	-2,5	-2,3	-2,0	-1,7	-0,6	0,7
11. One-off and temporary measures	125,0	0,0	1,2	1,9	0,6	0,0	0,0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)	50 448,7	20,1	22,2	22,7	22,1	22,0	21,4
12a. Taxes on production and imports	30 466,6	12,1	14,6	14,9	14,5	14,5	14,1
12b. Current taxes on income, wealth etc	19 982,1	7,9	7,7	7,8	7,5	7,4	7,3
12c. Capital taxes	0,0	0,0	0,0	0,0	0,0	0,0	0,0
13. Social contributions	30 415,5	12,1	13,8	14,4	13,7	12,9	12,7
14. Property income	3 730,1	1,5	2,5	1,7	1,1	0,7	0,7
15. Other	8 729,5	3,5	6,4	6,9	7,1	5,8	4,4
16.=6. Total revenue	93 324,8	37,1	45,0	45,7	44,0	41,5	39,2
p.m. Tax burden (D.2 (incl. paid to EU)+D.5+D.611+D.91-D.995)	80 914,4	32,2	36,0	37,0	35,8	34,9	34,1
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	46 360,8	18,4	20,9	20,6	19,2	18,2	16,6
18. Social transfers (18=18a+18b)	32 225,8	12,8	15,9	16,2	15,6	14,6	13,5
18a. Social transfers in kind supplied via market producers	5 470,2	2,2	2,7	2,9	2,8	2,8	2,5
18b. Social transfers other than in kind	26 755,6	10,6	13,2	13,4	12,8	11,8	11,0
19.=9. Interest expenditure	556,5	0,2	0,3	0,3	0,3	0,4	0,5
20. Subsidies	2 558,8	1,0	1,2	1,2	1,2	1,1	1,0
21. Gross fixed capital formation	13 380,2	5,3	5,8	6,1	6,5	5,8	5,3
22. Other	5 188,2	2,1	3,5	3,5	3,3	2,5	2,1
23.=7. Total expenditure	100 270,3	39,9	47,6	47,9	46,0	42,5	39,0
p.m. Government consumption (nominal)	48 800,0	19,4	22,1	20,3	19,6	19,0	18,5

* forecast.

Source: Statistics Estonia, Ministry of Finance.

5.2. General government revenues

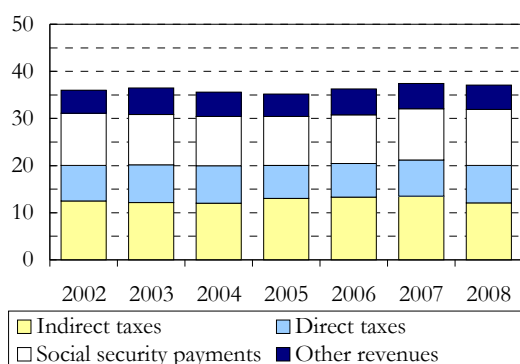
5.2.1. General government revenue structure

The structure of the general government revenues has recently been influenced by rising indirect taxes, but their share of GDP has not increased considerably. The reason lies partially in the fact that, for instance, the impact of the rise in excise duties is manifested with a delay and the decrease of value added tax collection was stronger in comparison with the decrease of the GDP. In the coming years the impact of rising indirect taxes on the respective indicator is expected to rise, but, for instance, the rise of the rate of the unemployment insurance premium also exerts additional influence on the revenue structure, increasing the share of social insurance payments and reducing the share of direct taxes (the rate of the unemployment insurance premium rose from 0.9% to 4.2% in 2009).

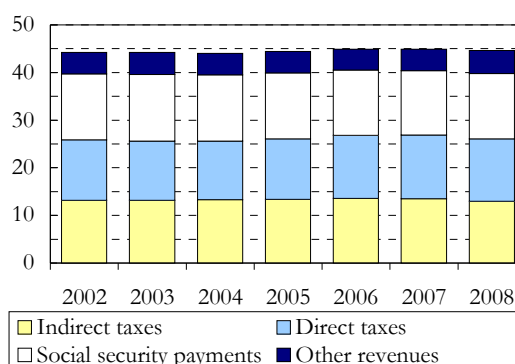
Figure 15

General government revenues and their structure (% of GDP)

A. General government revenues in Estonia



B. General government revenues in EU27



Source: Eurostat.

5.2.2. Future developments in tax policy and main changes in revenue policies affecting the budget for 2010

The Government's objective is to shift the tax burden from taxation of income to taxation of consumption, use of natural resources and pollution of the environment. At the same time it tries to keep the system stable, simple and transparent with as few exemptions and differences as possible.

In 2008 the total impact of tax amendments on the general government budget position amounted to +0.19% of GDP, while reduction of the income tax burden had the strongest negative impact. The tax burden was increased by various excise duty rises and a rise in the minimum social tax obligation. In 2009 the total impact of tax amendments on the state budget amounted to +1.12% of GDP. The rise of the amount serving as the basis for the minimum social tax obligation to EEK 4,350 had the strongest positive impact on the state budget revenue. The tax burden was also increased by the rise of the rate of the unemployment insurance premium to 4.2%, the rise of value added tax rate to 20% and the rises in the excise duties of fuel and natural gas. Additional tax-free

income as of the first child reduced the tax burden. Compared to the end of 2008, in 2010 the tax burden is increased, in addition to the said tax amendments, by suspension of the reduction of the income tax rate, suspension of raising income tax threshold, abolition of the additional income tax exemption on the first child, and raising the excise duties of alcohol, tobacco, fuel and electricity. In 2010 the total impact of tax amendments on the state budget revenues will amount to +3.38% of GDP.

Reduction of taxation of labour

One of the objectives of the Government is to promote job creation through reduction of the tax burden on labour. To that end the share of income tax threshold has been increased several times since 2004 and as from 2005 the income tax rate has been reduced annually. In the long term the objective is to equalise the income tax threshold with the minimum wage. Increasing the income tax threshold helps to reduce the tax burden of low-income people which in 2005 was higher in Estonia than on average in the European Union after a one-year break. The income tax rate has been reduced from 26% in 2004 to 21% in 2008. Based on the surrounding economic environment the reduction of the income tax rate has for the time being been suspended at the level of 2008, while the rate of unemployment insurance premium has been raised for the purpose of compensating for rising social expenditures.

Higher taxation of consumption and use of the environment

Taxes, charges and fees that can be considered environmental charges in Estonia include fuel and package excise, heavy vehicle tax, pollution fees and fees for using natural resources. In the framework of a green tax reform an increase of the current tax rates and introduction of new taxes, charges and fees cannot be precluded.

Tax amendments

The impact of tax amendments has been described separately below, i.e. without taking other tax amendments into account, in comparison with the situation on 31 December 2008.

Suspension of reduction of income tax rate

As things stood at the end of 2008, the tax rate would have fallen to 18% by 2012. The amendment positively influences the personal income tax and corporate income tax revenue forecast through 2009-2013. In 2010 the revenue from personal income tax and corporate income tax will be higher by approx. EEK 610 million and EEK 110 million, respectively. In 2011 the combined positive impact will be approx. EEK 1,350 million.

Suspension of the rise of income tax threshold

As things stood at the end of 2008, the income tax threshold would have risen to EEK 3,000 per month by 2012. The amendment increases the personal income tax revenue forecast by approx. EEK 340 million in 2010. In 2011 the positive impact will be approx. EEK 640 million.

Abolition of the additional income tax exemption on the first child

The amendment increases the personal income tax revenue forecast by approx. EEK 740 million in 2010 and by approx. EEK 780 million in 2011. The estimate has been made based on the number of children receiving child benefits and it has been presumed that it will remain constant.

Reduction of the share of income tax allocated to local authorities

According to the change, as of 1 April 2009 local authorities will receive 11.4% of the taxable income of resident natural persons instead of the former 11.93%. As a result of the amendment state budget revenues will increase by approx. EEK 430 million in 2010.

Increasing the rate of unemployment insurance premium

Raising the unemployment insurance premium rate to 2.8% for employees and 1.4% for employers will increase unemployment insurance premium revenue by approx. EEK 2,220 in 2010 and by EEK 2,240 in 2011. With the rise of the unemployment insurance premium rate the personal income tax revenues will decrease (by EEK 300-330 million a year), which has been taken into account in the aforementioned combined impact.

Raising value added tax rate

On 1 July 2009 the value added tax rate was raised from 18% to 20% in order to compensate for the falling budget revenue. The expected impact in 2010 is approx. EEK 850 million.

Raising excise duties on alcohol and tobacco

The excise duties on alcohol and tobacco products were raised as of 1 January 2010 by 10% and 5%, respectively. With regard to tobacco products an additional raise is to be expected as of 1 January 2011.

Taxation of energy

The objective of taxation of energy products is, in addition to receiving budget revenue, to influence people to consume more economically. Therefore energy products produced from non-renewable natural resources are subject to an excise duty in order to increase the effectiveness of energy use and to promote the development of renewable energy. The rate of the excise duty on energy products was raised in the middle of 2009 and in the beginning of 2010.

Reduction of tax incentives

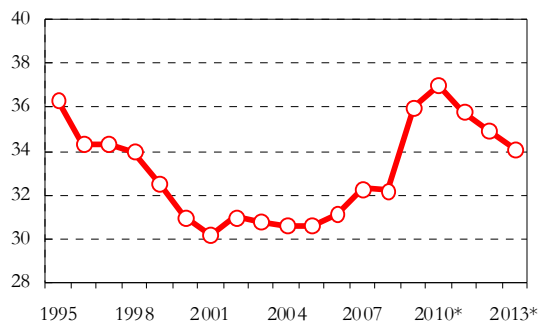
It is planned to critically review and abolish tax incentives which have been alienated from the initial objective and are unjustified. In the case of each tax incentives it will be analysed whether it is proportional to the achieved objective, whether it meets the expectations and needs of society and whether it is the most expedient to achieve this objective 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 objective and deciding on the basis of the analysis whether the incentive should be extended.

Figure 16

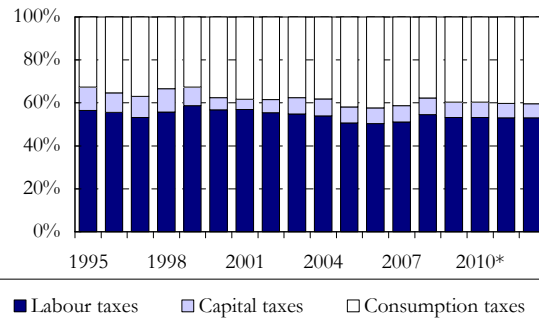
Developments in tax burden

(% of GDP)

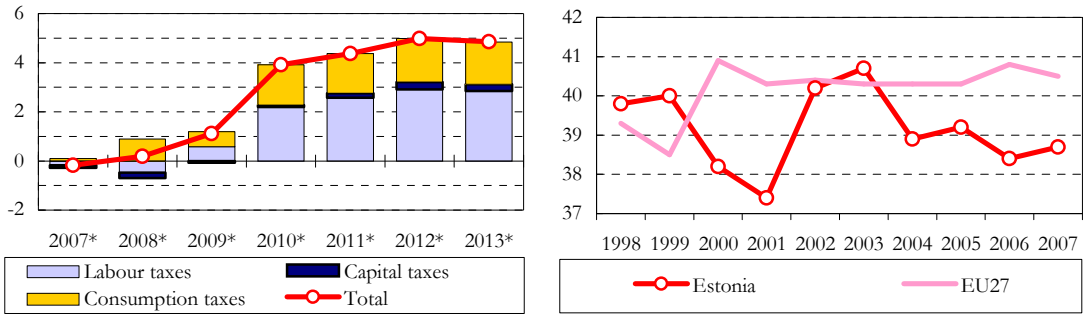
A. Tax burden



B. Tax revenues (%)



C. The impact of changes in the tax system¹⁰ D. Tax burden of low-wage workers



Source: Ministry of Finance, Eurostat.

¹⁰ Impact compared to the situation if no changes were made since 31.12.2007.

Table 17**Main changes in the tax system in 2009 and 2010 and their effects¹¹***(% of GDP)*

	Enactment	Impact in 2009	Impact in 2010
Total tax revenue		1,12	3,91
Taxing labour:			
Suspending the reduction of income tax rate	1. Jan 2010	0,00	0,40
<i>PIT</i>	1. Jan 2010	0,00	0,31
<i>CIT</i>	1. Jan 2010	0,00	0,09
Suspending the increase in basic tax allowance	1. Jan 2010	0,00	0,16
Suspending the additional basic tax allowance from the first child	1. Jan 2009	0,00	0,35
Higher taxation of consumption and use of environment			
Increase in VAT reduced rate from 5% to 9% and limiting the use of reduced rate	1. Jan 2009	0,15	0,17
Increase in VAT rate from 18% to 20%	1. July 2009	0,35	0,85
Increase in tobacco excise by 5%	1. Jan 2010	0,00	0,03
Increase in alcohol excise by 10%	1. Jan 2010	0,00	0,09
Increase in excise on natural gas by 127%	1. July 2009	0,02	0,06
Increase in petrol excise by 11%	1. July 2009	0,03	0,08
Increase in diesel excise by 12%	1. July 2009	0,04	0,11
Increase in light oil excise by 10%	1. July 2009	0,00	0,01
Increase in petrol excise by 6%	1. Jan 2010	0,00	0,06
Increase in diesel excise by 6%	1. Jan 2010	0,00	0,05
Increase in excise on fuel for special purposes by 64%	1. Jan 2010	0,00	0,06
Increase in electricity excise by 40%	1. March 2010	0,00	0,05
Other changes:			
Increase in minimum compulsory payment to the social security funds	1. Jan 2009	0,45	0,48
Increase in payment to the Unemployment Fund to 3%	1. June 2009	0,33	0,58
Increase in payment to the Unemployment Fund to 4,2%	1. August 2009	0,13	0,33

*Source: Ministry of Finance***5.2.3. Tax expenditure**

The tax expenditure contained in the state budget of Estonia 2010-2013 has been described below. Upon evaluation of the values of tax expenditures, the revenue loss method and cash-based data have been used and the time between introduction of a provision and the actual application of the provision has been taken into account in the case of each tax expenditure provision. Only the so-called first round effects of introduction of 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 it has not been taken into account that additional tax-exempt income leaves more money to households and once they channel these additional funds into consumption, value added tax revenue will increase. In the case of the tax expenditure directly and solely bound to other taxes the aggregate impact of establishment of tax expenditure has been viewed: for instance, tax expenditure arising from the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act influences

¹¹ Impact compared to the situation if no changes were made since 31.12.2007.

value added tax revenue to the extent of final consumption. According to the revenue loss method, the various behavioural effects and budget restrictions have not been taken into account upon assessment of tax expenditure values: for instance, it has been presumed that the consumption of goods and services is unit-elastic (the relative change of quantity is as high as the relative change of the price).

Upon calculation of tax revenues, it is important to understand that each single tax expenditure provision has been evaluated separately, without taking into account the mutual impact of the provisions and thus finding the aggregate amount of tax expenditure by way of adding up various provisions is not correct, although at the same time it allows for evaluating the established level and trends of tax expenditure.

Important tax expenditure influencing state budget revenues are contained in three different acts: the Income Tax Act, the Value Added Tax Act and the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. In the case of the Value Added Tax Act¹² (VATA), the provision through which the consumption for certain goods or services is supported through a more favourable tax rate can be called the tax expenditure, i.e. major deviations from the target tax system. In the case of the Income Tax Act¹³ (ITA) the tax expenditure, i.e. major deviations from the target tax system, are provisions through which entrepreneurs in specific fields of activity, individuals or families of a certain type, certain expenditure-incurring or service-consuming individuals are supported. In the case of the ITA it has been presumed that the income exempt from tax which is deducted from the taxable income of a resident individual pursuant to § 23 is a part of the target tax system (and not tax expenditure). In the case of the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act¹⁴ (ATFEEDA) the provisions through which entrepreneurs of certain fields of activity or production of certain goods is supported through more favourable excise duty rates or exemptions can be called tax expenditure or major deviations from the target tax system.

The state budget revenues through 2010-2013 are influenced by 18 different tax revenue provisions in the Value Added Tax Act, Income Tax Act and Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. In total the volume of major tax expenditure in 2010 amounts to nearly EEK 4.7 billion, i.e. 2.3% of GDP. The additional tax-free income in the case of pension and the excise duty rate lower than the normal rate of the excise duty on diesel fuel in the case of diesel fuel used for specific purposes and light fuel oil account for the largest portion of the tax expenditure. The volume of the two largest tax expenditure accounts for 66.1% of the volume of the entirety of the established tax expenditure.

For an analysis of the tax expenditure dynamics based on the government functions¹⁵ the government function has been specified in the case of each provision of the tax expenditure, which function is associated with the specific provision of the tax expenditure. The following table shows that **six functions out of ten different government functions are supported via the tax expenditure through 2010-2013** (economy; housing and utilities construction; health care; leisure, culture and religion; education; social protection). In 2010 the largest government functions are social protection (EEK 2,340.0 million or 49.3% of the total tax expenditure), economy (EEK 1,404.0 million or 29.6%) and education (EEK 306.0 million or 6.4%). The tax expenditure falling under the remaining government functions is below EEK 300 million.

¹² Value Added Tax Act. (2008). – Riigi Teataja (2003, 82, 554; 2007, 32, 259). [WWW] <https://www.riigiteataja.ee/ert/act.jsp?id=12869417> (18.04.2008).

¹³ Income Tax Act. (2008). – Riigi Teataja (1999, 101, 903; 2007, 44, 318) – [WWW] <https://www.riigiteataja.ee/ert/act.jsp?id=12851790> (18.04.2008).

¹⁴ Alcohol, Tobacco, Fuel and Electricity Excise Duty Act. (2008). – Riigi Teataja (2003, 2, 17; 2007, 74, 452). [WWW] <https://www.riigiteataja.ee/ert/act.jsp?id=12906565> (18.04.2008).

¹⁵ Statistical Office. (2008d). Classifier of Government Functions. – [WWW] http://metaweb.stat.ee/view_xml.htm?id=1129771&siteLanguage=ee (28.04.2008).

Table 18**Tax expenditure in 2009–2012***(mio EEK)*

Tax expenditure	Article	Functions of the government 16	2010	2011	2012	2013
1. Reduced VAT rate for books and workbooks	VAT act § 15	9	53,0	56,0	58,0	61,0
2. Reduced VAT rate accommodation services	VAT act § 15	8	199,0	207,0	217,0	227,0
3. Reduced VAT rate for medicine and medical equipment	VAT act § 15	7	196,0	195,0	205,0	216,0
4. Reduced VAT rate for periodicals	VAT act § 15	8	53,0	55,0	58,0	60,0
5. Additional tax allowance on children	Income tax act §23 ¹	10	380,0	380,0	380,0	380,0
6. Additional tax allowance on pensions	Income tax act §23 ²	10	1 820,0	1 880,0	1 890,0	1 890,0
7. Additional tax allowance in case of job-related accidents or occup. disease	Income tax act §23 ³	10	3,0	3,0	3,0	3,0
8. Deduction of mortgage interests	Income tax act §25	6	241,0	263,0	368,0	390,0
9. Deduction of educational expenditure	Income tax act §26	9	228,0	229,0	237,0	248,0
10. Deduction of student loan interests	Income tax act §26	9	25,0	0,0	0,0	0,0
11. Deduction on gifts and donations	Income tax act §27	8	8,0	7,0	7,0	8,0
12. Deduction on membership fees of trade unions	Income tax act §27	10	12,0	0,0	0,0	0,0
13. Deduction on insurance payments and pension fund shares	Income tax act §28	10	125,0	118,0	121,0	128,0
14. Additional tax allowance on selling of agricultural products or timber for self employed persons	Income tax act §32	4	48,0	48,0	48,0	48,0
15. 50% reduction of excise duty for small-size beer manufacturers	Act on Excise duties §46	4	1,0	1,0	1,0	1,0
16. Tax exemption on biofuel	Act on Excise duties §27; §66	4	12,0	12,0	13,0	13,0
17. Reduced rate for diesel used for special purposes and heating oil	Act on Excise duties §66	4	1 316,0	1 326,0	1 360,0	1 397,0
18. Excise duty exemption for fishermen	Act on Excise duties §74 ²	4	27,0	27,0	28,0	29,0
Total			4 747,0	4 807,0	4 994,0	5 099,0

Source: Ministry of Finance.

¹⁶ 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

According to the forecast in 2009 the decrease of the general government tax revenues will be slower than the contraction of the economy. A slower fall of tax revenues which cannot fully be explained by the effects of macroeconomics or legislative amendments can be associated with the good work of the tax authority upon tax collection.

Improvement of tax behaviour through simplification of tax administration

One of the goals of the Estonian tax policy is to make the tax collection process as simple and as transparent as possible. One of the priorities is development of the e-tax board launched in 2000. In 2004 58.3% of individual tax returns, 65.8% of income and social tax returns and 74.8% of value added tax returns were submitted electronically. By 2007 the respective rates had risen to 85.4%, 88.4% and 90% and by 2008 to 88.2%, 91.7% and 92.8%. The rate of electronic submission of customs declarations was 98.1%. In the first two quarters of 2009 the share of electronically submitted declaration has increased further, amounting to 90.0%, 94.3% and 95.4% of the submitted returns and nearly 100% of customs declarations. Electronic declaration allows for considerably saving costs for the state as well as entrepreneurs. It is also an operative instrument for analysing tax collection and quick detection of possible fraud.

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

Concealed pay (unreported salaries) can be associated with employers' desire to get a better competitive position by evading taxes, i.e. saving costs. According to the Estonian Institute for Economic Research 12% of salaried employees received unreported salary in 2008 on average. In comparison with 2007 the share of recipients of unreported salary fell in 2008 by 2 percentage points.

The increase of the share of legal wages has the following reasons: in 2008 the tax authority has carried out 103 unreported salary raids as a result of which corrected declarations were submitted and taxpayers were ordered to pay approx. EEK 20 million in additional taxes. In the first half of 2009 93 unreported salary raids were carried out and as a result thereof taxpayers were ordered to pay an additional EEK 18.6 million in taxes.

In the fight against unreported salary it is important to focus the preventive and audit activities on areas where the risk of payment of unreported salary and hiding of supply is high. Based on a risk analysis a total of 48 observations of a place of business were carried out in the first half of 2009 in larger shopping centres and a major nationwide raid involving 170 officials of the Tax and Customs Board was carried out, involving observations of the place of business in 295 retail sales points. In the first half of 2009 three joint raids were carried out in cooperation with the Personal Protection Service, the Northern Police Prefecture and the Tallinn Transportation Department for inspecting taxi service providers.

Improvement of tax collection owing to the reduction of the share of the black market of products subject to excise duty

With the amendment of the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act that entered into force on 1 July 2009 the level of cigarettes permitted to be imported to Estonia from third countries was reduced to 40 cigarettes per person. In June the Tax and Customs Board launched an awareness raising campaign aimed at persons crossing the border, in the course of which people were informed of changes of the limits of the products subject to excise duty using posters, leaflets and press releases. In connection with implementation of the amendment the Tax and Customs

Board temporarily increased its manpower on the Eastern border with the help of the customs officers of the Northern and Western region.

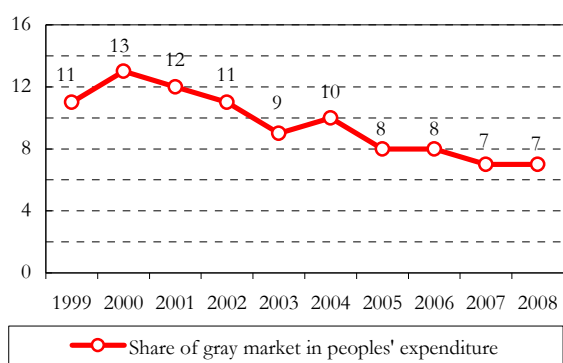
Another problem lies in the intra-EU value added tax and excise duty fraud on the fuel market. The Tax and Customs Board continues roadside fuel truck inspections as well as carries out daily road checks and excise duty operator inspections. In addition, in connection with fuel excise duty and value added tax fraud a meeting was organised between Estonian and Latvian authorities, explaining fraud schemes and emphasising the need for operative exchange of information with the Latvian customs authorities.

The Tax and Customs Board carries out risk analyses in the area of excise duties in order to identify risk areas, fraud schemes, trends and to profile risky persons. In the second half of 2009 the volume of specific control activities has been increased (e.g. to prevent illicit trafficking of fuel), the number of auditors has been increased, the process of informing problem clients has been enhanced, collection of tax arrears has been made more efficient, etc.

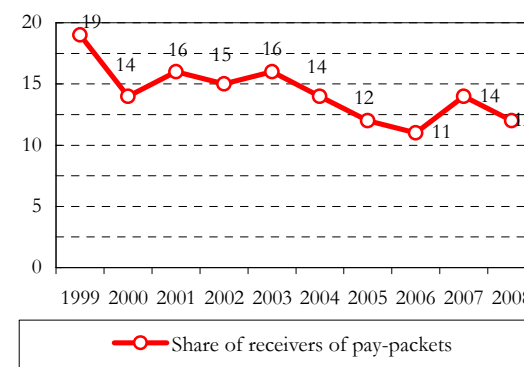
Figure 17

Developments in tax administration in Estonia

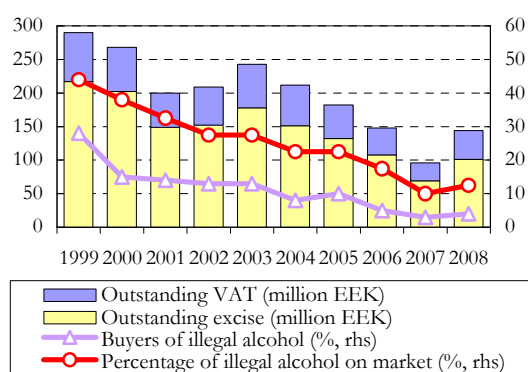
A. Share of gray market in expenditure



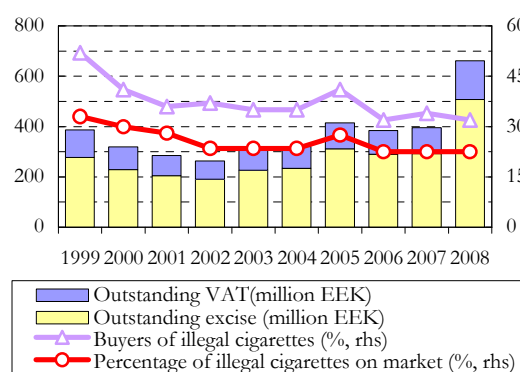
B. Percentage of pay-packets in economy



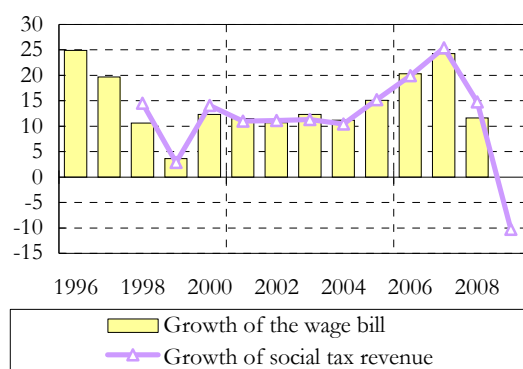
C. Percentage of illegal alcohol



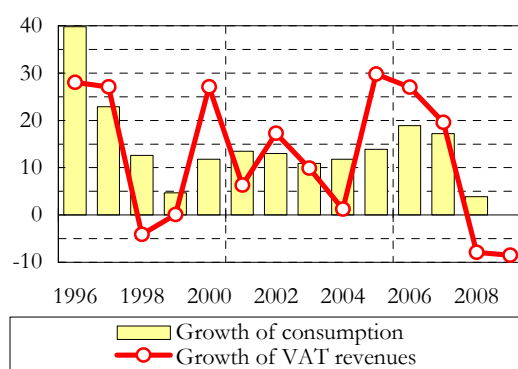
D. Percentage of illegal cigarettes



E. Growth of social tax revenue compared to growth of wage bill (%)



F. Growth of VAT receipts compared to growth of final consumption (%)



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

5.3. General government expenditure

5.3.1. General government expenditure structure

Through 2000-2007 the general government expenditure accounted for 35% of GDP on average, but by 2008 the share rose to 39.9% of GDP.

As of 2000 the final consumption of the general government has constantly been around 50% of the total expenditure of the general government, amounting to 18% of GDP on average through 2000-2008. The final consumption of the general government includes public consumption and individual consumption. In the case of the goods and services are offered by the general government it is differentiated between individual and social goods and services proceeding from the classifications of the functions of the Government (COFOG). Public 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 organisation of the health care system of the public sector. 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. The major expenditure items among social expenditure include pension expenditure and expenditure incurred by the Health Insurance Fund on prevention of diseases and promotion of health. Through 2000-2007 the general government's social benefits expenditure accounted for 10% of GDP on average, but by 2008 the share rose to 11.8% of GDP.

2.6% of the general government expenditure, i.e. 1.0% of GDP was allocated for payment of subsidies in 2008. 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 2008 these amounted to merely 0.56% of all the general government expenditure, i.e. 0.2% of GDP. The smallness of interest expenditure arises from the low debt burden of Estonia, but over the forecast period it will somewhat increase due to the budget deficit.

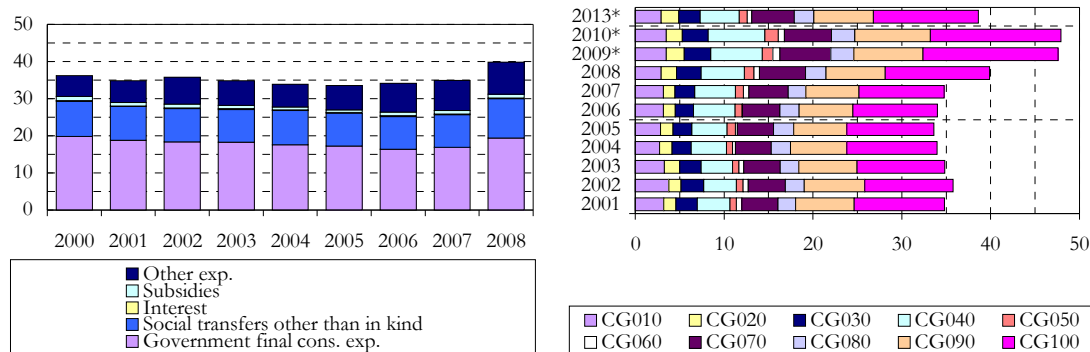
Looking at the expenses by economic activity, the share of expenditure on social protection is constantly the largest, amounting to 11.7% of GDP in 2008. In 2008 the least (0.1% of GDP) was spent on housing and public utilities. The structure of expenditure (% of GDP) has not changed much through 2000-2008.

Figure 18

General government expenditure and its structure

(% of GDP)

A. Expenditure by economic content in Estonia B. Expenditure by function in Estonia ¹⁷



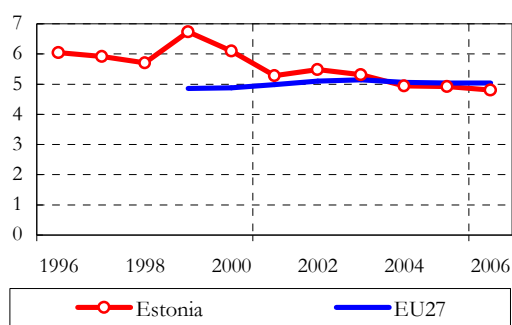
Sources: Eurostat, Statistics Estonia, Ministry of Finance of Estonia

Figure 19

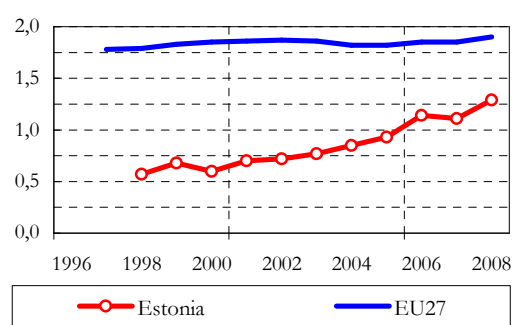
Government investments into physical and human capital

(% of GDP)

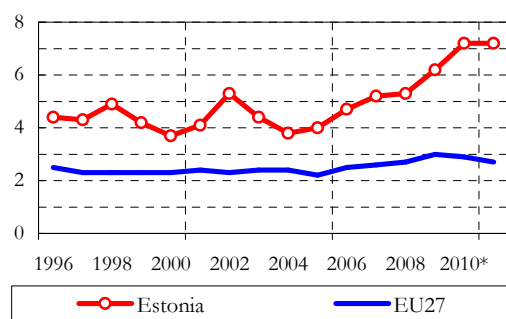
A. Public expenditure on education



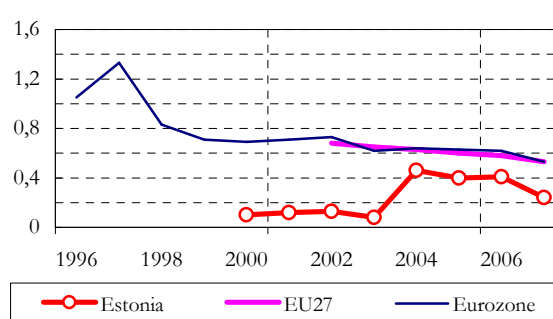
B. R&D expenditure



C. General gov. gross fixed capital formation



D. Total state aid



Source: Eurostat.

¹⁷ 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 2010

In 2010 the general government expenditure will increase by 0.4% of GDP in comparison with 2009, amounting to 47.9% of GDP. The total expenditure is expected to decrease to 39.0% of GDP by 2013, which is lower than the level of 2008. One important reason for the decrease of the expenditure is the decrease of the level of external assistance over the forecast period. Above all, this concerns expenditure on the economic affairs, education and the environment.

Table 19

General government expenditures by function (COFOG)

(% of GDP)

	COFOG	2006	2007	2008	2009*	2010*	2013*
1. General public services	1	3,2	3,2	2,9	3,5	3,5	2,9
2. Defence	2	1,3	1,3	1,8	2,0	1,8	2,0
3. Public order and safety	3	2,0	2,2	2,7	3,0	2,9	2,4
4. Economic affairs	4	4,7	4,6	4,9	5,8	6,4	4,6
5. Environmental protection	5	0,8	0,9	1,1	1,2	1,5	0,9
6. Housing and community amenities	6	0,1	0,6	0,6	0,8	0,7	0,5
7. Health	7	4,2	4,4	5,2	5,7	5,3	4,8
8. Recreation, culture and religion	8	2,1	2,0	2,3	2,6	2,6	2,2
9. Education	9	6,1	6,0	6,7	7,8	8,5	6,9
10. Social protection	10	9,5	9,6	11,7	15,2	14,7	11,8
11. Total expenditure	TE	34,0	34,8	39,9	47,6	47,9	39,0

Sources: Eurostat, Statistics Estonia, Ministry of Finance of Estonia.

General government services

The general government services will decrease by 2.64%, i.e. EEK 225 million. The expenditure will fall in connection with a decrease of the payments to the European Union by EEK 295 million.

National defence

In 2010 the expenditure on national defence will decrease by 7.15%, influenced mostly by a decrease of the external funds by EEK 236 million.

Public order and security

In 2010 the expenditure of the field of activity will fall by EEK 387 million, i.e. 7.52% in comparison with 2009. Including:

- external assistance to ensuring public order and security will decrease by EEK 176.7 million;
- the operating expenses of the authorities engaged in ensuring the public order and security will be cut by nearly 9%, incl. EEK 197.6 million in the area of government of the Ministry of the Interior;
- the staff costs of the Prosecutor's Office will decrease by EEK 3.82 million.

Economy

The notable growth of the budget of the field of economy (EEK 1,204.8 million) in 2010 arises from the following activities:

- road maintenance, an increase of EEK 1,086 million in comparison with 2009;
- allocations to Enterprise Estonia in the amount of EEK 159.7 million for supporting business;
- common area support and additional direct aid to agricultural producers, a growth of EEK 273 million in comparison with 2009;

- public transport (passenger carriage) subsidies, a growth of EEK 6 million in comparison with 2009.

Environmental protection

The expenditure of the area of environmental protection will rise by EEK 537.6 million in 2010, i.e. 19.13%. The major changes in the field of activity include:

- for the first time the budget reflects expenditure on green investment at the account of the sale of greenhouse gas quotas; total amount EEK 500 million;
- expenses in connection with external assistance will increase by EEK 273.7 million in comparison with 2009, i.e. 17.5%; thereby EEK 929.3 million will be allocated to local authorities for infrastructure investments;
- expenditure on national environmental monitoring and spatial data will decrease by EEK 19.7 million in comparison with the previous year in connection with the work and services performed and commissioned by the Environmental Board and Land Board.

Housing and community amenities

The expenditure of the housing and community amenities sector will decrease by EEK 200.4 million in 2010, i.e. by 79.65%. In comparison with 2009 the funds allocated for the energy saving programmes of the Ministry of Economic Affairs and Communications will decrease and the funds planned by KredEx for renovation of blocks of flats will decrease as well.

Health care

The 7.13% decrease of the health care expenditure in comparison with 2009 (EEK 942.8 million) is related to the reduction of the health insurance allocation by EEK 750 million. The accrual of the health insurance portion of social tax forecast for 2010 is comparable to the level of 2007, but the expenditure of health insurance remain at the level of 2008. Considering the reductions of the liabilities of the Health Insurance Fund in 2009 (dental benefits, benefits for incapacity for work) that in annual terms have an impact of approx. EEK 850 million on the health insurance budget and the total expenditure in 2010, the total expenditure of the Health Insurance Fund will remain at the level of 2008.

Leisure, culture and religion

In 2010 the expenditure of the field of activity will fall by EEK 122.2 million, i.e. 4.6% in comparison with 2009. The major changes are:

- reduction of operating expenses and activity support by 9%;
- the construction of the new building of the Estonian National Museum which costs approx. EEK 1 billion will commence; in 2010 approx. EEK 69 million will be allocated;
- the construction of the Estonian Maritime Museum will continue and approx. EEK 69 million has been allocated for the purpose.

Education

In 2010 the expenditure of the field of activity will rise by EEK 1,156.0 million, i.e. 11.53%. The increase is mainly influenced by the rise of the total structural assistance by more than EEK 1 billion. The highest rises are as follows:

- EEK 407.6 in vocation education (30.33%) mainly through modernisation of educational institutions;
- EEK 275.6 million (10.26%) in connection with modernisation of the infrastructure of R&D institutions and higher education in general;
- EEK 348.4 million in R&D (23.48%), incl. Operational Programme “Human Resources Development” sub-axis 2.1 “Sustainable and attractive research and development” will increase by EEK 150 million, Operational Programme “Economic Environment Development” “Supporting R&D programmes aimed at long-term economic development” will increase by EEK 120 million, Operational Programme “Economic Environment Development” sub-axis 2.2 “Development of centres of excellence and supporting participation in EU and Baltic Sea cooperation programmes” will increase by EEK 35 million, Operational Programme

“Economic Environment Development” sub-axis 2.4 “Modernisation of research equipment and devices” will increase by EEK 240 million.

Social protection

In 2010 the expenditure of the field of social protection will decrease by EEK 341.5 million, i.e. 1.16%. The decrease of the expenditure of the field of social protection can be attributed to the suspension of contributions to the second pillar of the pension system in the second half of 2009, which also affects the expenditure in 2010. Without the impact of the II pillar pension, the growth of the expenditure of social protection in 2010 amounts to EEK 465 million, which is mainly affected by:

- the growth of the state social insurance pensions in the amount of EEK 355.3 million;
- growth of the parental benefit expenditure by EEK 84.6 million.

6. LONG-TERM SUSTAINABILITY OF THE PUBLIC FINANCES

The assumptions established on uniform bases by the Economic Policy Committee of the European Union with regard to the entire EU, which largely coincide with the vision of the Ministry of Finance regarding long-term developments in Estonia, have been used as the assumptions for the long-term budget projections. The official 2008 projections Europop2008 by Eurostat, the statistical office of the European Union, have been used as the population projections. The macroeconomic forecast of the present programme have been used with regard to the coming years.

The impact of this crisis on the sustainability of public finance is long-term and expressed in lower employment rates and output levels. Upon making the projections it has been assumed that in the long term the growth levels forecasted previously will be achieved. The projections are based on the no policy change scenario and as a result of which they do not have to be interpreted as a forecast or the most probable development scenario. At the same time they reflect the size of the challenge arising from demographic developments which can be reacted to by making respective decisions.

As for steps taken in Estonia in recent years which affect the long-term sustainability of the fiscal policy, both the pension index as well as the retirement age have been changed. According to the projections, the decisions made do not ensure the constant replacement ratio for the future, reflecting the need for further decisions from the point of view of sustainability.

On 14 November 2007 the Riigikogu adopted a new pension index to serve as the basis for an annual rise of pensions (the first indexation based on the new index took place on 1 April 2008), which was originally meant to preserve the ratio of the average pension and average wages at the constant level in the long term. The new pension index was based more on the growth of social tax revenue (social tax growth 80% + annual inflation 20% instead of the former 50/50 ratio) and, according to the forecast, increased the pensions much more than the former index. Also, in 2008 coefficients for changing the shares of the base pension and the length of employment score were applied in shaping the pension, helping to increase the solidarity of the pension system.

According to the State Pension Insurance Act, the Government has the right to approve a lower rate of the pension index if:

- a) the real GDP growth in the same year is forecasted to be negative, or
- b) the difference between the state pension insurance expenditure and the presumable accrual to be transferred to the state pension insurance exceeds 1% of the expected GDP for the same year.

The ordinary index rate and the part of the index that was not raised/reduced is set off within five years as of the year of application of the changed index. The two-way flexibility of the system thus allows for later compensation of the lower pension rise arising from the reduced index as well as a later set-off reducing the ordinary index rate in the case the ordinary index values fall short of 1 (thereby without nominally reducing the pensions). Upon indexation on 1 April 2009 the Government of the Republic decided to limit the pension index to the level of 1.05 due to a complicated financial situation.

To find additional funds for financing the state pension insurance (and health insurance) the Government returned to the initial idea of the pension reform, according to which the minimum social tax obligation was taken to the level of the minimum monthly wages as of 1 January 2009.

According to the Social Tax Act, the employer must, on a monthly basis, pay social tax on the wages paid to the employee, but on an amount of no less than EEK 4,350, i.e. the employer's minimum social tax obligation is EEK 1436 a month (excl. the exceptions provided by law).

On 14 May 2009 the Riigikogu approved suspension of the contributions to the second pillar as of 1 July 2009 until 31 December 2010. The purpose of the step was to channel 4% of the subscribers' social tax to the first pillar and leave the additional 2% to the people in the given complicated financial situation instead of saving money for the second pillar. Saving money for the second pillar will be gradually restored as of 2011 and the former system, along with a higher social tax portion for those who voluntarily continued saving money, will be restored as of 2012.

On 16 December 2009 the Government of the Republic decided to approve and submit to the Riigikogu amendments of the State Pension Insurance Act, according to which the retirement age will rise by 3 months a year as of 2017, reaching the age of 65 years by 2026 (currently, the retirement age for men is 63 years and that of women is 60.5 years, rising to 63 years by 2016). It is worth noting that the life expectancy at the age 63 is forecasted to increase significantly by 2060. In comparison with 2009 the life expectancy for 63-year-old women will rise by 6 years and for 63-year-old men by 7 years. The purpose of the planned change is to ensure the adequacy and sustainability of the pension system (the decision allows for paying pensions that are approx. 5-10% higher by 2026). The amendments are carried by the idea of improving the supply of labour that will decrease due to demographic developments.

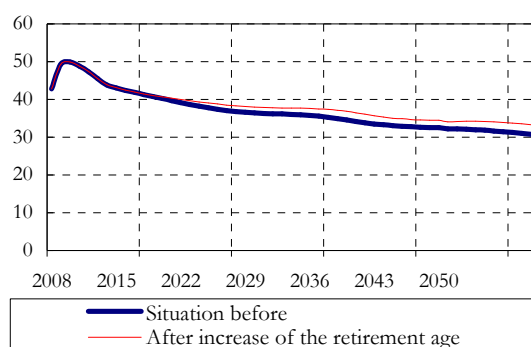
Improvement of sustainability as a result of raising the retirement age is also characterised by the following chart, which shows that the state pension insurance will exit the deficit in 2030. Without changing the retirement age the same would have been achieved by 2050.

Figure 20

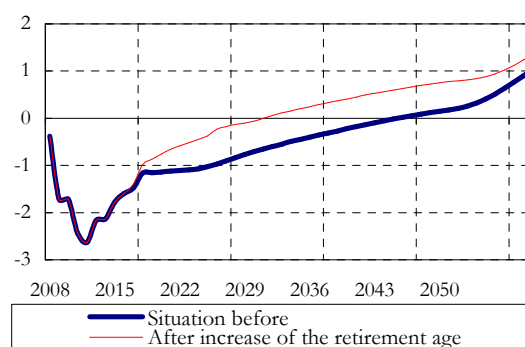
Impact of raising the retirement age on the pension system

(% of GDP)

A. Replacement rate (I+II pillar)



B. I pillar deficit



Source: Ministry of Finance

Table 20**Long-term sustainability of public finances 2008–2050***(% of GDP)*

	2009	2010	2020	2030	2050
Total expenditure	47,5%	47,9%	39,7%	39,0%	38,5%
Pensions	9,0%	9,2%	8,0%	7,4%	6,9%
social security pensions	9,0%	9,2%	8,0%	7,4%	6,9%
old-age pension	7,6%	7,8%	6,8%	6,3%	5,8%
other (disability, survivors)	1,4%	1,5%	1,2%	1,1%	1,1%
occupational pensions (if in GG budget)	-	-	-	-	-
Health care	5,7%	5,9%	5,8%	5,7%	5,7%
Long-term care (previously part of health care expenditure)	0,1%	0,1%	0,1%	0,1%	0,1%
Interest expenditure	0,3%	0,3%	0,4%	0,4%	0,4%
Total revenue	44,8%	45,7%	39,7%	39,0%	38,5%
<i>of which:</i> interest revenues	1,2%	1,1%	1,0%	1,0%	1,0%
<i>of which:</i> social security contributions for pension	13,8%	14,4%	12,5%	12,3%	12,1%
Pension reserve fund assets (I pillar)	0,7%	0,0%	0,0%	0,0%	0,0%
<i>of which:</i> consolidated public pension fund assets (assets other than government liabilities)	0,7%	0,0%	0,0%	0,0%	0,0%
Assumptions:					
Labour productivity growth	-6,3%	2,4%	3,2%	2,6%	1,7%
Real GDP growth	-14,5%	0,1%	2,4%	2,0%	0,5%
Participation rate, males (aged 20-64)	86,5%	86,3%	85,2%	84,3%	82,4%
Participation rate, females (aged 20-64)	76,5%	76,3%	76,4%	77,1%	75,8%
Total participation rate (aged 20-64)	81,6%	81,3%	80,7%	80,6%	79,1%
Unemployment rate	13,7%	14,8%	5,9%	3,5%	3,5%
Population aged 65+ over total population	17,2%	17,1%	18,8%	21,7%	27,4%

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

Activities for ensuring long-term sustainability of pension insurance

In order to ensure the sustainability of public finances in the environment of an aging population Estonia has carried out a pension reform and established a three-pillar pension system (mandatory state pension insurance, mandatory funded pension and supplementary private pension). During the reform a rise of the pensionable age and gradual harmonisation of the pensionable age of men and women were established. The joint retirement age of 63 years will be reached by 2016 in the case of women. According to the draft act submitted to the Riigikogu by the Government at the end of 2009, the retirement age will rise by 3 months per annum, reaching the level of 65 years by 2026 both in case of men and women. In recent years the average age of exiting the labour market has risen above 62 years, i.e. close to the retirement age. Thereby exceeding the average of the European Union (61.4 years).

With the last amendment of indexation of pensions a five-year cycle was foreseen for revising the suitability of the pension indices (both in terms of their adequacy as well as the financial aspect). The next regular overview has been planned for 2012.

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 plan of reforming the special pensions, old-age pensions under favourable conditions and superannuated pensions has been in principle approved by the

Government. To further strengthen the supply side of labour greater involvement of migrant workers should be considered.

7. INSTITUTIONAL FUNCTIONS

7.1. Development of budget process

The goal of the development of the state's budgetary process is to assure the integrity of resource planning and to increase the result-orientedness, accuracy and transparency.

In January 2008 the Ministry of Finance introduced to the Government of the Republic the Concept of Development of Financial Management of the State. The concept includes, in addition to the financial management development concept, also the performance management concept.

The performance management concept is a broad management system with the help of which public sector organisations can focus on their mission, achieving their goals and performing their tasks to systematically move towards established goals. The performance management concept is the general framework inside of which the planning and implementation of other public sector development activities increasing the effectiveness and efficiency take place.

Introduction of the performance management concept requires association of the four management functions given below:

1. strategic and annual planning;
2. performance-based budgeting;
3. performance measurement and reporting;
4. adjustment of plans based on actual results.

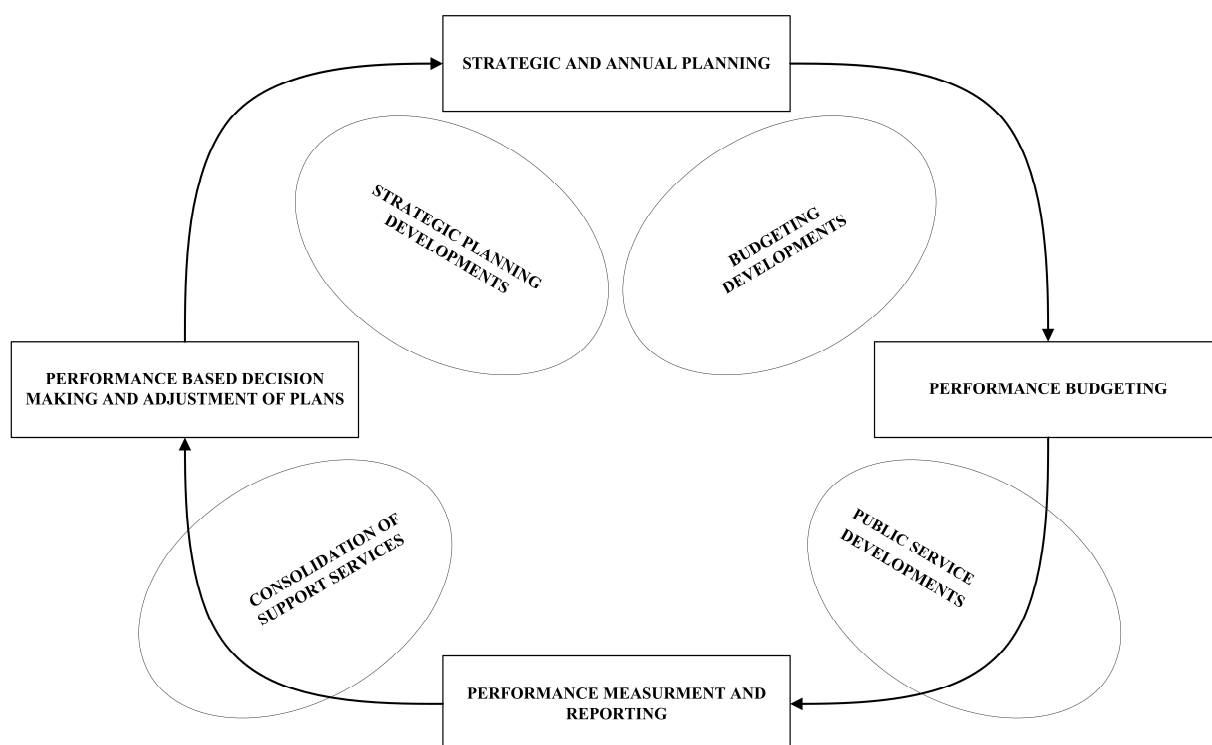
Developments in the following fields have been launched in the Ministry of Finance for systematic association of the management functions listed above:

1. strategic planning developments;
2. budgeting developments;
3. consolidation of support services (incl. harmonisation of the technological base used in staff and financial reporting);
4. public service developments.

In the Concept of Development of Financial Management of the State it was found that it is rational to introduce an accrual-based and performance-based budget for the purpose of harmonising the financial management chain of the state. For the purpose of improvement and gradual implementation of the Concept of Development of Financial Management of the State pilot projects of the accrual-based and performance-based budget will be implemented under the leadership of the Ministry of Finance in parallel with preparing and monitoring the state budgets for 2010 and 2011.

Figure 21

Performance management functions and developments



Source: Ministry of Finance of Estonia.

Accrual-based and performance-based budget working groups have been created for implementing the pilot projects. As a result of the work of these working groups methodological instructions will be prepared in 2010 for preparation of an accrual-based and performance-based budget. In the course of the mentioned developments the budgeting and financial accounting in the state will be harmonised. The prerequisite for introduction of performance-based method budgeting is, in addition to development of the respective budgeting method, reorganisation of the performance management system. To reorganise the performance management system additional strategic planning methods will be developed with the guidance of the Ministry of Finance and pilot projects will be implemented to test the developed methods. Amendment proposals of the strategic planning and budgeting regulations will be prepared by the end of 2010.

As a result of the planned budgeting process development better information for management of the state as a whole can be obtained and reaction to changes arising from the economic environment can be more flexible.

7.2. Fiscal rules and institutions

At the beginning of 2006 the European Commission carried out a survey among the Member States regarding fiscal rules and institutions. On the basis of the replies given to the questions asked the given section describes Estonian fiscal rules and institutions, also setting out the legal reserve requirements of the social insurance funds as well as the restrictions on the budgetary loan and liquidity loan balance, size of the cash reserve, balance of Government loans granted for performance of public functions and total bridge financing provided for in the State Budget Act.

Fiscal rules

- The requirement of the budget balance (surplus) of the general government or central government has not been provided by law, but the budgetary balance has been a goal set out in coalition agreements and strategic development plans. Thus, it is a soft rule, but so far all governments have followed it.
- 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 meets at least three months before the end of the budgetary year in order to submit to the Riigikogu a draft supplementary state budget act increasing the expenditure.
- In the Health Insurance Fund Act it has been stipulated that the budget of the Health Insurance Fund comprises balanced revenue and expenditure of the Health Insurance Fund in one financial year. Requirements have been established with regard to legal reserves and risk reserves. The legal 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 macroeconomic developments, which threaten the health insurance system. The size of the legal reserves is 6% of the total budget and annually at least 1/50 of the total budget of the Health Insurance Fund as well as excessive social tax revenues are transferred to the reserves until the amount of the legal reserves provided by law has been achieved or restored. The legal reserves may be put into use in exceptional circumstances on the basis of an order of the Government of the Republic made on the basis of a proposal of the Minister of Social Affairs. Before submission of a proposal to the Government of the Republic the Minister of Social Affairs hears the proposal of the Supervisory Board of the Health Insurance Fund.
- The risk reserves of the Health Insurance Fund are reserves comprising the budget funds of the Health Insurance Fund for the purpose of hedging risks arising from obligations assumed for the health insurance system. The size of the risk reserves is 2% of the health insurance budget total of the Health Insurance Fund and it can be put into use by a resolution of the Supervisory Board of the Health Insurance Fund.
- The Unemployment Insurance Fund also has the legal reserve requirement in order to hedge the risks arising from macroeconomic developments, which threaten the unemployment insurance system. The size of the legal reserves is at least 10% of the total assets of the Unemployment Insurance Fund. The legal reserves may be put into use only exceptionally, in the case of insufficiency of the Unemployment Insurance Fund's fund for specific purposes, on the basis of a resolution of the Supervisory Board of the Unemployment Insurance Fund. Before making the respective resolution the Supervisory Board must, through the Minister of

Social Affairs, make the Government of the Republic a proposal for increasing the unemployment insurance payment to a level that ensures accrual of funds sufficient for the achievement of the objectives of the Unemployment Insurance Fund.

- The State Budget Act stipulates annual restrictions on the balance of the budgetary loan and liquidity 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, and the total bridge financing. In the 2010 State Budget Act the restrictions are as follows:
 - ✓ the highest permitted balance of the budgetary loan is EEK 15 billion (approx. 7% of GDP) and the highest permitted balance of the liquidity loan is EEK 5.5 billion (approx. 2% of GDP);
 - ✓ the size of the cash reserve is EEK 100 million;
 - ✓ the highest permitted balance of the loans given by the Government of the Republic for performance of the public duties is EEK 6 billion (approx. 3% of GDP);
 - ✓ the highest permitted balance of bridge financing of foreign aid is EEK 6 billion (approx. 3% of GDP);
 - ✓ the highest permitted balance of financing the expenditure exceeding the state budget revenue is EEK 11 billion (approx. 5% of GDP).
- The Rural Municipality and City Budgets Act establishes a debt limit and a debt service limit for local authorities. A rural municipality and a city may take a loan, use financial lease, issue debt securities and assume other debt obligations on the following conditions:
 - ✓ the total amount of all outstanding loans, outstanding financial lease payments and issued bonds and the total amount of other debt obligations along with the loan taken, the financial lease used, the debt securities issued and the other debt obligations assumed must not exceed 60% of the budget revenue planned for the given budget year, less the allocations from the state budget intended for a specific purpose;
 - ✓ the total amount of outstanding loan principals and interest, financial lease payments and interest, costs of redemption of the bonds must not, in any coming budget year, exceed 20% of the budget revenue planned for taking loans, using financial lease or issuing bonds in the budget year, less the allocations from the state budget intended for a specific purpose;
 - ✓ the loan is taken, the financial lease is used and the bonds are issued for the purpose of the investments specified in the development plan of the rural municipality or city.
- From 1 March 2009 to 31 December 2011 local authorities and, for the purpose of the Accounting Act, units under their direct or indirect dominant influence over a half of whose revenue comes from a rural municipality or city, the state or other legal persons in public law or from foundations under the dominant influence of the former person (hereinafter *dependant unit*), may issue bonds, take loans, financial lease and factoring obligations, assume obligations arising from a service concession agreement, long-term obligations before suppliers and other long-term obligations that call for payment of money in the future only for the bridge financing of the following assistance or for providing the self-financing required for obtaining the assistance:
 - ✓ assistance received or to be received on the basis of the 2004-2006 Structural Assistance Act and 2007-2013 Structural Assistance Act;
 - ✓ European Union assistance to be received on the basis of other legislation;
 - ✓ assistance allocated to the Republic of Estonia based on international agreements.

The assumption of an obligation must be approved by the Ministry of Finance. Violation of the act results in sanctions that include suspension of the transfer of funds to the respective local authority until elimination of the violation. Once the violation has been eliminated the withheld funds will be returned.

Fiscal institutions

- o As for **fiscal institutions**¹⁸ in the Estonian context one can point out the National 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 National 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 National Audit Office the Riigikogu assesses the work of the Government.

The audits of the National 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 functioning of the public sector, while the recommendations of the National 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.

¹⁸ According to the European Commission's definition, fiscal 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.

APPENDICES

Appendix 1. Key indicators of Estonian economy 2000–2008

Table 21

Gross domestic product in 2000–2008

	2000	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>mio EEK</i>	%	%	%	%	%	%	%	%	%
1. Real GDP	96 380,5	10,0	7,5	7,9	7,6	7,2	9,4	10,0	7,2	-3,6
2. Nominal GDP	96 380,5	15,0	13,2	11,6	12,1	11,1	15,5	18,3	18,1	2,9
Sources of growth										
3. Private consumption expenditure (incl. non-profit institutions)	53 457,2	7,9	7,1	10,3	8,7	9,5	9,8	12,9	9,0	-4,7
4. Government consumption expenditure	19 038,0	-2,2	2,6	2,6	0,8	2,0	-0,2	3,5	3,7	4,1
5. Gross fixed capital formation	24 817,4	16,9	9,7	24,0	18,6	5,2	15,4	18,5	9,0	12,1
6. Change in inventories (% of GDP)		2,6	1,5	2,6	1,6	2,2	1,7	3,8	5,7	0,4
7. Export of goods and services	81 532,4	27,4	0,4	-1,0	7,4	14,6	18,6	14,0	0,0	-0,7
8. Import of goods and services	85 008,2	27,2	3,5	6,2	10,1	14,4	17,5	22,9	4,7	-8,7
Contribution to GDP growth ¹⁾										
9. Domestic demand (excl. inventories)		8,2	7,0	12,6	10,6	7,3	10,2	13,7	8,8	-6,1
10. Change in inventories		2,3	0,5	-0,2	-0,2	0,6	-0,2	2,8	2,2	-5,7
11. External balance of goods and services		-1,2	-2,7	-5,9	-2,6	-0,9	-0,5	-8,4	-4,4	6,8
Growth of value added										
12. Primary sector	4150,9	16,8	-5,1	10,7	3,7	-9,3	-3,2	-4,0	6,5	0,2
13. Industry	18 934,6	17,7	10,4	6,9	10,2	8,7	10,3	9,6	7,1	-4,7
14. Construction	4780,7	18,3	2,2	11,2	0,6	9,8	22,0	18,6	11,8	-5,3
15. Other services	58267,9	6,9	7,7	7,5	7,2	6,8	8,9	9,4	6,1	-2,4

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

Sources: Statistics Estonia, Ministry of Finance of Estonia.

Table 22**Prices in 2000–2008***(percentage)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008
1. GDP deflator	4,5	5,3	3,3	4,2	3,6	5,5	7,6	10,2	6,7
2. Private consumption deflator	3,7	6,2	2,7	2,1	2,0	3,6	5,3	7,5	9,3
3. Harmonised index of consumer prices	3,9	5,6	3,6	1,4	3,0	4,1	4,4	6,7	10,6
3a. Consumer price index	4,0	5,8	3,6	1,3	3,0	4,1	4,4	6,6	10,4
4. Government consumption expenditure deflator	5,6	5,0	6,5	10,6	4,9	12,6	8,8	17,3	13,8
5. Investment deflator	2,9	6,0	1,0	0,5	3,3	4,0	8,7	7,1	-0,6
6. Export deflator	8,3	6,3	0,2	1,8	2,3	3,6	7,0	7,3	7,7
7. Import deflator	5,8	2,0	-0,1	-0,2	1,5	3,3	5,1	3,2	6,9

*Sources: Statistics Estonia, Ministry of Finance of Estonia.***Table 23****Labour market in 2000–2008**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
		%	%	%	%	%	%	%	%
1. Employment, persons	572,5 ¹⁾	0,9	1,4	1,5	0,2	2,0	6,4	1,4	0,2
3. Unemployment rate	13,6	12,6	10,3	10,0	9,7	7,9	5,9	4,7	5,5
4. Labour productivity, persons	168,4 ²⁾	6,5	6,5	6,0	7,0	7,3	3,3	5,7	-3,7
6. Compensation of employees	43 588,9 ²⁾	11,5	10,7	12,3	11,2	15,1	20,3	24,3	11,6
7. Compensation per employees (6./1.)	76,1 ³⁾	10,5	9,2	10,6	11,0	12,8	13,0	22,6	11,4
7a. Average gross wage, EEK	4 907	12,3	11,5	9,4	8,4	10,8	16,5	20,5	13,9

*1) Thousands of persons.**2) Billion EEK.**3) Thousand EEK.**Sources: Statistics Estonia, Ministry of Finance of Estonia.*

Table 24**Balance of payments in 2000–2008***(% of GDP)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008
1. Net lending/borrowing vis-à-vis the rest of the world	-5,0	-5,0	-10,1	-10,6	-10,6	-9,2	-14,7	-16,8	-8,4
<i>Of which:</i>									
- Balance of goods and services	-3,3	-2,1	-7,1	-7,4	-7,0	-6,4	-12,1	-11,7	-4,3
- Balance of primary incomes and transfers	-2,1	-3,1	-3,6	-3,9	-4,3	-3,6	-4,8	-6,1	-5,1
- Capital account	0,5	0,2	0,5	0,7	0,7	0,8	2,2	1,0	1,0
1a. Current account	-5,4	-5,2	-10,6	-11,3	-11,3	-10,0	-16,9	-17,8	-9,4
4. Statistical discrepancy	0,0	-0,1	0,6	-0,6	-1,4	1,0	0,5	1,1	-0,6

Sources: Statistics Estonia, Bank of Estonia, Ministry of Finance of Estonia.

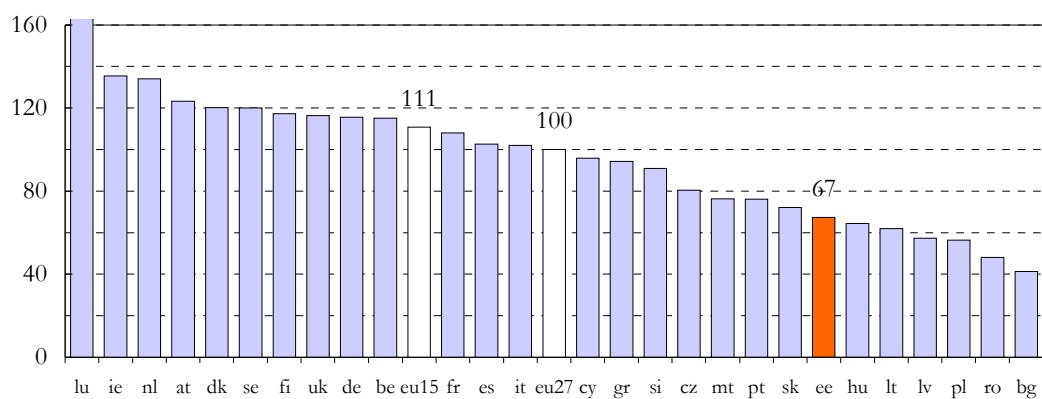
Appendix 2. Comparison of Estonia with other EU member states

Figure 22

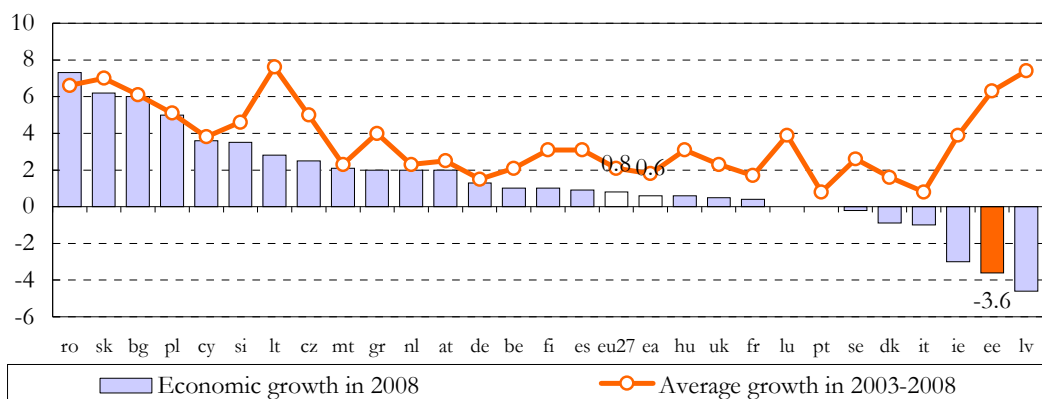
Main macroeconomic indicators

(percentage)

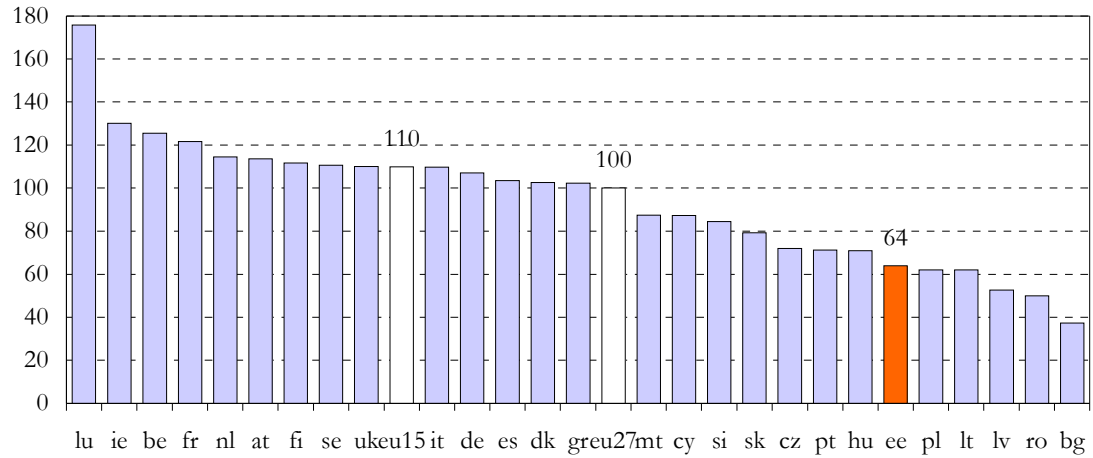
A. GDP per capita in purchasing power parities in 2008 (EU27=100)



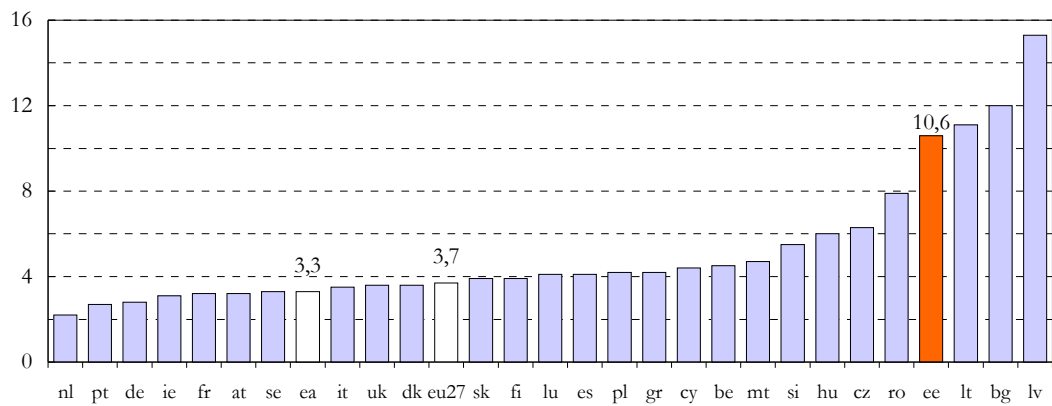
B. Economic growth in 2008 and 2003–2008



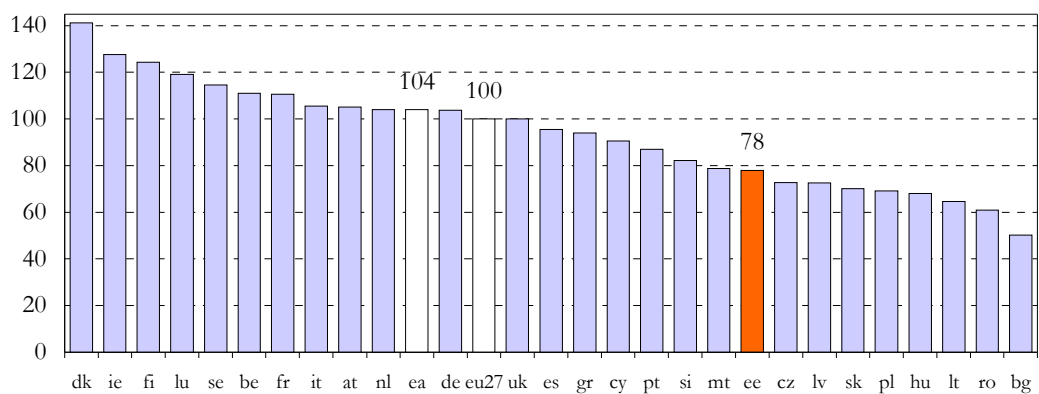
C. Labour productivity – GDP in purchasing power parities per person employed in 2008 (EU27=100)



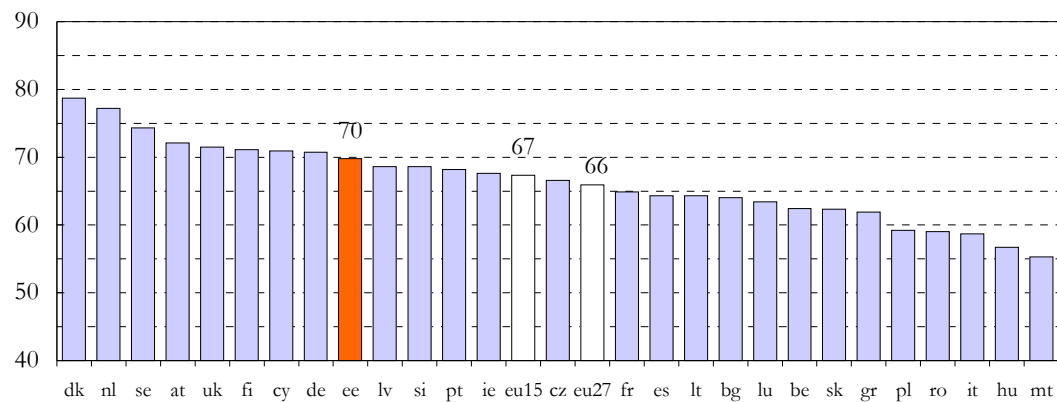
D. Harmonised index of consumer prices in 2008



E. Comparative price level to EU27 average in 2008 (EU27=100)



F. Employment rate (15–64 years old) in 2008



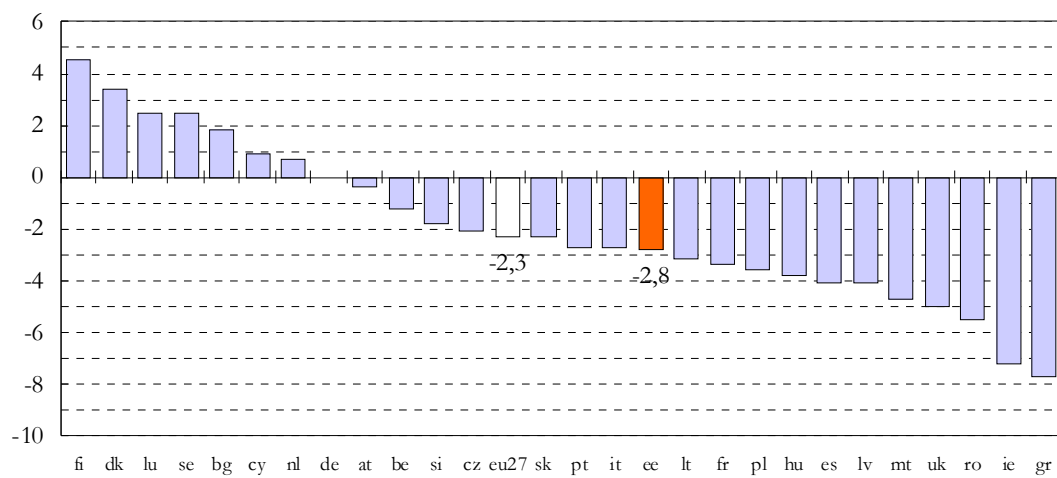
Sources: Eurostat.

Figure 23

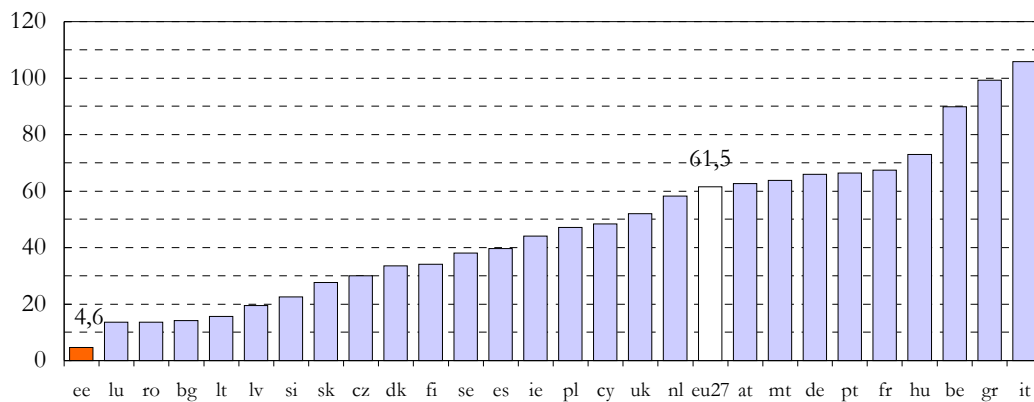
General government fiscal position

(% of GDP)

A. General government budget position in 2008



B. General government debt in 2008



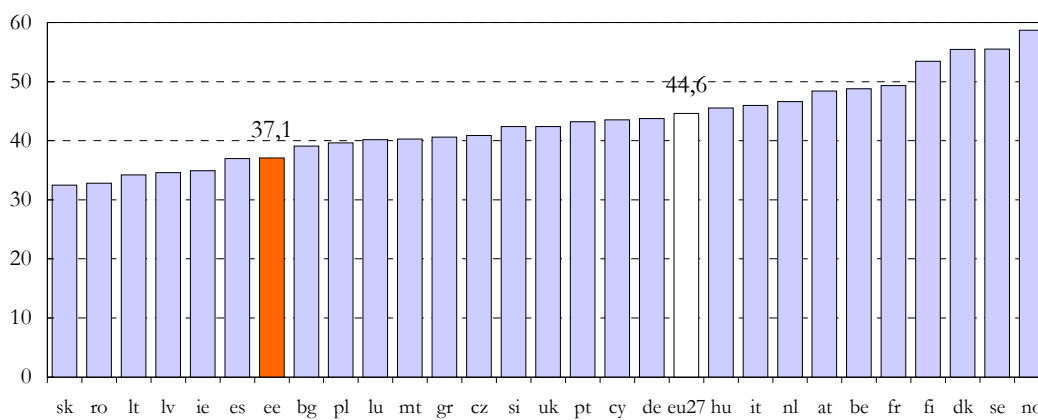
Sources: Eurostat.

Figure 24

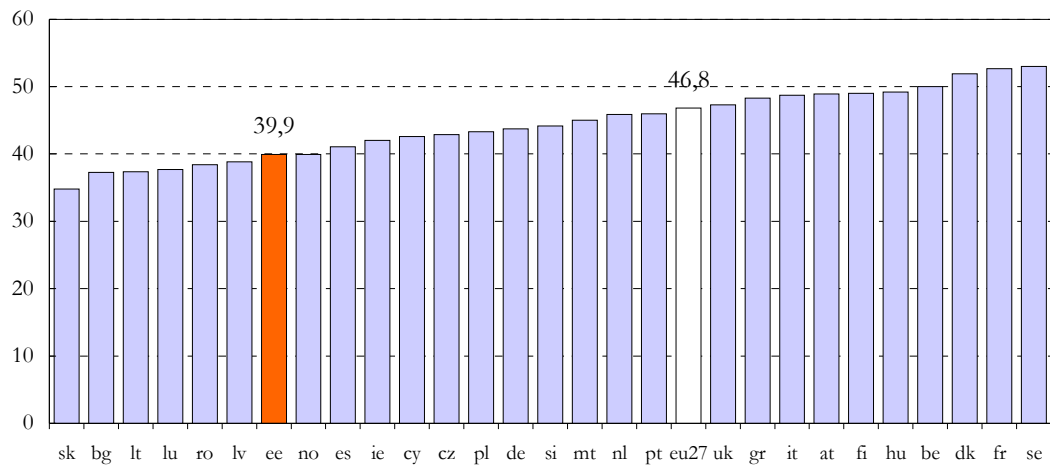
General government revenue and expenditure

(% of GDP)

A. General government revenues in 2008



B. General government expenditures in 2008



Sources: Eurostat.

Appendix 3. Impact of Administrative Price Increases on CPI

Table 25

Impact of Administrative Price Increases on CPI 2008–2012

(percentage)

Administrative actions	Enforcement	Price increase (%)	Effect on CPI (% points)				
			2008	2009	2010	2011	2012
Changes in tax policy			0.42	1.89	1.32	0.47	0.05
Increase of excise duty on tobacco	1.01.2008	17.8	0.10	0.25	-	-	-
Increase of excise duty on tobacco	1.07.2008	26.4	0.14	0.38	-	-	-
Increase of excise duty on alcohol	1.07.2008	8.0	0.18	0.22	-	-	-
State duties	1.01.2009		-	0.15	-	-	-
VAT of theatre and concerts. hazardous waste from 5% to 18%	1.01.2009	12.4	-	0.04	-	-	-
VAT of books, periodicals, accommodation, drugs from 5% to 9%	1.01.2009	3.8	-	0.15	-	-	-
Notary fees	1.06.2009		-	0.05	0.03	-	-
VAT from 18% to 20%*	1.07.2009	1.7	-	0.50	0.50	-	-
Higher excise on natural gas and network rates	1.07.2009	4.7	-	0.01	0.01	-	-
Increase of excise duty on motor fuels	1.07.2009	4.9	-	0.14	0.14	-	-
Increase of excise duty on motor fuels	1.01.2010	3.2	-	-	0.18	-	-
Increase of excise duty on tobacco (5%) + setting minimum excise on tobacco	1.01.2010	9.0	-	-	0.15	0.03	-
Increase of excise duty on alcohol (10%)	1.01.2010	4.0	-	-	0.19	0.04	-
Sales tax in Tallinn**	1.07.2010	0.8	-	-	0.12	0.12	-
Increase of excise duty on tobacco (20%)	1.01.2011	15.0	-	-	-	0.25	0.05
Excise duty on oil shale for heating purposes	1.01.2011		-	-	-	0.03	-
Other administrative price changes			1.70	0.61	0.48	0.34	0.20
Refuse collection **	1.01 (2009–12)		0.06	0.04	0.03	0.03	0.04
Electricity (growing production costs)	1.07.2008	4.9	0.07	0.07	-	-	-
Electricity (indexation + rise in environmental fees)**	1.01.2009; 2011–12	4.0–6.0	-	0.18	-	0.12	0.13
Electricity (network service rate)	1.03.2009	1.9	-	0.06	0.01	-	-
Electricity (e.g. decrease in environmental fees)	1.08.2009	-3.0	-	-0.03	-0.05	-	-
Electricity (rise in renewable energy fee, excise tax, network services)	1.01; 1.03.2010	7.7	-	-	0.19	0.01	-
Water supply and sewerage in Tallinn	1.01 (2009–12)		0.09	0.11	-0.01	0.01	0.02
Natural gas	1.10.2008	34.0	0.03	0.08	-	-	-
Natural gas	1.03.2009	-22.0	-	-0.06	-0.01	-	-
Natural gas	1.10.2009	-6.0	-	-0.01	-0.01	-	-
Natural gas **	2010–2012		-	-	0.05	0.03	0.01
Heating energy	1.01–1.12.2008	42.8	1.45	-	-	-	-
Heating energy	1.01.–1.12.2009	3.9	-	0.17	-	-	-
Heating energy **	1.01.–1.12.2010	6.5	-	-	0.28	-	-
Heating energy **	1.01.–1.12.2011	3.1	-	-	-	0.14	-
Total			2.12	2.50	1.80	0.81	0.25

* Actual effect from the rise of VAT on consumer prices.

** Estimations of the Ministry of Finance.

Sources: Statistics Estonia, Ministry of Finance of Estonia, Eesti Energia, Estonian Competition Authority.