Republic of Estonia

UPDATED CONVERGENCE PROGRAMME 2005

Tallinn

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INTRODUCTION

According to the rules for co-ordination of EU budget policies, EU member states are required to submit updated stability and convergence programmes (members of the euro area and member states that have not yet introduced euro, respectively) once a year. Estonia submitted its Convergence Programme to the European Commission and the Council of Ministers for evaluation in May 2004. This programme is the second update of the Convergence Programme. The aim of the Convergence Programme is to express the Government's economic policy in meeting the Maastricht convergence criteria and introducing the single currency euro. The current stability and convergence programmes submitted by the member states will be assessed by the European Commission and the Council of the European Union at the end of 2005 – beginning of 2006.

The Updated Convergence Programme 2005 was prepared by the Ministry of Finance of Estonia in co-operation with the Bank of Estonia and it reflects the fiscal policy of Estonia on the basis of the draft state budget for the year 2006 submitted by the Government of the Republic to the Parliament. Estonia's fiscal policy remains in line with the Stability and Growth Pact and Broad Economic Policy Guidelines. The Programme has been prepared based on the objectives of the Government of the Republic and its policies for achieving those, set by the Coalition Agreement and other strategic development plans (incl. The National Action Plan for Growth and Jobs). The Government of the Republic approved the Updated Convergence Programme on 1 December 2005.

The Updated Convergence Programme 2005 is based on the present economic and budgetary policy situation, and the forecast presented is the one on which the budget for 2006 was based. The forecast is based on the acts of law applicable at the moment of compiling the forecast.

The time horizon of the Updated Convergence Programme 2005 reaches the year 2009, as required by the State Budget Act of Estonia (the next fiscal year and three years following that). The document consists of six parts providing an overview of the economic policy objectives, economic development of the recent years and future prospects, the fiscal framework, a comparison with the previous programme, improvement of the quality of the public finances, and long-term sustainability of the public finances.

1. ECONOMIC POLICY GOALS

The objective of the Government's economic policy is to create conditions for fast economic growth, which would entail increased welfare and real convergence with the European Union. A pre-condition for stable economic development is to ensure macroeconomic stability and internal and external balance. The economic development of Estonia has been favourable so far, and also the prospects for the near future are favourable. However, at the same time, there have appeared some unbalances and risks that must be dealt with. At the moment, our risks in the economic environment are related to the rapid credit growth the high current account deficit.

In the currency board arrangement, fiscal policy is the main measure for influencing economy and restricting the risks threatening economic development. We must adjust our tax system and restructure the expenditure side of the budget in the way that it would support economic development even more. In addition, long-term sustainability of public finances in the conditions of ageing population must be ensured. Ensuring a stable economic environment, directing the budgetary resources to support economic growth and employment and ensuring long-term sustainability are the three areas on which Estonia will concentrate its macroeconomical policy in the coming years.

As a member of the European Union (EU) it is inevitable that Estonia heads to the introduction of the euro. The goal of the Government of the Republic is to become a full member of the Economic and Monetary Union (EMU) as soon as possible to accelerate long-term economic development and increase monetary stability. Resulting from that, Estonia has joined the exchange rate mechanism ERM II by maintaining, as a unilateral commitment, the present currency board arrangement with a fixed exchanged rate.

To introduce the single currency euro, Estonia must fulfil the convergence criteria, established by the EU Maastricht Treaty, concerning budget deficit (must not exceed 3% of GDP), government debt (must not exceed 60% of GDP), inflation and interest rates (both close to the average of the three best performing states in the EU). To fulfil the Maastricht criteria and to be among the first new member states introducing the euro, the Government continues to apply conservative fiscal policy and control rise in administrative prices.

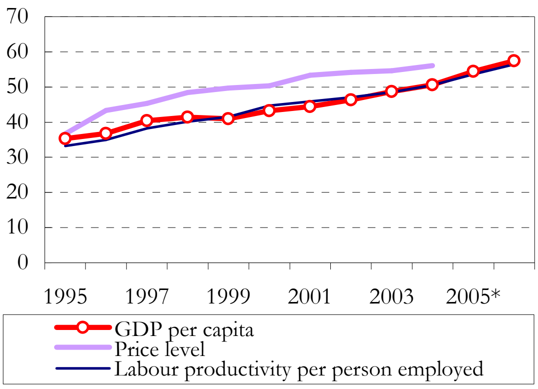
The medium-term budgetary objective (MTO) of the Government is to keep the general government's budget in balance. The balanced budget policy ensures a favourable environment for economic development and contributes to maintaining economic growth by stabilising inflation and increasing the sentiment of consumers and investors. Such fiscal policy ensures that the general government's debt burden stays on a low level, which, in turn, is one of the pre-conditions for long-term sustainability of the public finances. Continuation of the conservative fiscal policy as well as the pension reform carried out are important activities for managing the demographic trends in Estonia (primarily the ageing of the population).

Despite the goal of the budget's nominal balance, our fiscal policy has in practice mostly turned out to be counter-cyclical and is in compliance with the requirements of the Stability and Growth Pact. Setting the goal of nominal balance has been justified for Estonia as there have been major structural changes in the economy, not enabling reliable assessment of the economic cycle or the cyclical position of the budget. During the coming years, the Government plans to continue with the rule of annual budget balance and, at the same time, to continue work on elaborating the methodology for assessing cyclically-adjusted budgetary position.

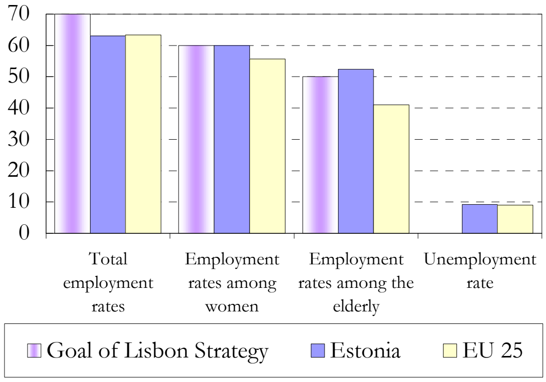
Figure 1

Real Convergence with the EU and Employment Goals of the Lisbon Strategy
(per cent)

A. Estonia's real convergence with the EU25



B. Employment rates in 2004 (15–64-year-old)



Source: Statistical Office of Estonia, Eurostat.

2. ESTONIA'S ECONOMIC DEVELOPMENT AND PERSPECTIVES

2.1. Recent Economic Developments

2.1.1. Macroeconomic Situation

Estonia's 8.6% **economic growth** in the 1st half of 2005 is the fastest during recent years, exceeding also the growth of last year (7.8%). The economic growth was supported by accelerated growth of domestic demand and increased net export. The growth rate of domestic demand increased to 5.8%, compared with the same period of last year, based on strong growth of both private consumption and investments. The proportion of domestic demand in the gross domestic product decreased to 101.6%.

The 2005 summer forecast in July was based on a corrected GDP reference base and the actual growth in the 1st quarter of 2005 and, for that reason, we corrected the 2005 economic growth estimation upwards. At the same time, the actual growth in the 2nd quarter, which was 9.9%, proved considerably faster than expected.

The real growth of **private consumption expenditures** accelerated to 6.7% in the 1st half-year, compared with the same period of last year. The growth was supported by noticeably quickened growth of private income, caused by fast increase of employment and average wages and decreased tax burden of the labour force. The high consumption activity of the population was fostered by low interest rates of loans and deposits and good loan and lease conditions.

Following the peak period of **investments** in 2003, their share in GDP has decreased as a result of considerably diminished capital investments in the field of energetics. In the 1st half of 2005, the growth of investments remained moderate, reaching 9%. Lowering of interest margins and a favourable economic climate together with the inflow of foreign investments keep the investment environment favourable. The main contribution to the growth of investments comes from domestic households, where the rapid growth of borrowing activity has substantially increased the resources directed by households to improving their dwelling conditions. The general government's capital investments, which decreased in 2004, have started to grow again in the 1st half of the year, which should also be supported both by the increase of the absorbance ability of EU resources and additional resources from the supplementary budget for 2005. Although capital investments of enterprises have not considerably grown in the 1st half of the year, the favourable economic situation should favour capital investments in the future.

In the 1st half of 2005, **export** played a more important role in the economic growth than earlier, which occurred despite the lower foreign demand, compared with last year, as the economic growth of Estonia's main trade partners has been lower than earlier. The proportion of export in the GDP increased, compared to the same period last year, to 79.6% in the 2nd quarter. The growth of the export of goods and services reached 17.4% in the 1st half of 2005, caused mainly by increased volume of goods sent abroad. The export was probably supported by improved external trade conditions (joining the European Common Market and the disappearance of the so-called double customs duties with Russia in May 2004) and increased competitiveness of Estonian goods. The growth of goods and services **import** was noticeably smaller than that of export, reaching 10.7%. The growth of goods and services import slowed substantially in 2005 in connection with the high reference base caused by acquiring of stocks last year before joining the EU. Of product groups, the import of intermediate consumption goods increased the fastest, reflecting the rapid growth of industrial production.

There is still great **external imbalance** in the Estonian economy although the current account deficit showed long-awaited signs of decrease. As the sum of two quarters, the deficit still reached 10.7% of GDP. The decrease of deficit, compared to the last year, was caused by diminishing of the trade balance deficit in the 1st half of the year. An increasingly important role in forming of the current account deficit was played by net income balance, which reached -6.8% of GDP in the 1st half of 2005 and continues to increase due to the growth of investments volume and good profitability of enterprises. Net income balance of reinvested revenue formed 74.2% of the net income balance.

Savings have been positively affected by the general government's fiscal policy, as a result of which the proportion of the general government's savings should diminish in the future due to the planned budgetary balance. Formation of domestic savings has greatly been influenced by the saving behaviour of enterprises – the growth of profitability and the favourable tax policy should foster increased savings of enterprises in the future years as well. The saving behaviour of households has considerably been affected by the interests environment together with the rising of incomes, which has made more and more households able to borrow from banks, and is reflected in the fast credit growth of the recent years, particularly in the area of housing loans. Here also positive developments can be noticed – increasing personal contribution to future pension due to the pension reform should change people's saving behaviour, and the increased loan burden should make people securing themselves against possible interest increases and create a reserve buffer in the form of savings.

By fields of economic activity, the added value growth accelerated in the 1st half of 2005 both in manufacturing and in most fields connected with business service. The economic growth was affected the most by manufacturing, whose proportion in the total added value reached 18.7%. The 12.6% increase in the manufacturing was mainly caused by increased exports, supported by considerably enhanced private consumption.

The added value growth of the service sector picked up in the 1st half of the year, reaching 10.7% and being most influenced by the increased added value in the area of financial intermediation (25.1%), domestic trade (10.8%), and transport, storage and communication (9.3%). Financial intermediation was affected by active loan and lease activities, domestic trade by increase of wholesale and retail volumes and rising of the profit margin, and transport, storage and communication by increase of transport service export and the stable growth of the communication sector.

The increase of added value of hotels and restaurants continued in a fast speed in the 1st half of the year, reaching 16.6%, however, its contribution to the economic growth was only marginal. The added value growth in the area of construction accelerated in the 2nd quarter but was, however, slower than in the last year's same period, being 8.3%. In the 1st half of the year, the growth of added value in the area of real estate, renting and business services was slower (5.6%) than the average economic growth.

The added value of the general government's fields of activity with a great proportion (public administration, state defence, social security, health and social work) grew marginally: by 1.8% compared to the 1st half of the last year. The real growth of added value in the primary sector proved negative in the 1st half of the year, caused primarily by deceleration of the growth of livestock farming production and continued rise in prices.

Supported by strong foreign and domestic demand, positive trends continued also in the 3rd quarter and, therefore, it can be expected that, as the summary of the year 2005, the actual growth proves faster than forecasted both in the manufacturing and service industry, primarily in financial intermediation, construction, and domestic trade.

The 1st half of 2005 saw more favourable trends in the **labour market** than expected – on the background of the fast growth of employment, the unemployment rate as well as inactivity decreased. In the 1st half of 2005, **employment** increased by 1.6% or by 9,500 persons, compared to the last year's same period. The fields of activity most affecting the increase in employment in the 1st half of 2005 were hotels and restaurants, transport, real estate, renting and business activities. The growth in the employment rate in hotels and restaurants is related to added accommodation places and an increase in the number of tourists. The employment rate in transport was most influenced by positive development in the field of transit and a fast increase in logistics and storage. In the field of real estate, the growth of employment rate was fostered by intense real estate activities. **Unemployment** decreased from the 10% level in the first three quarters of 2004 to 9.5% in the 1st quarter of 2005, to 8.1% in the 2nd quarter, and even to 7.0% in the 3rd quarter. The reasons for the decrease in unemployment are primarily favourable developments in the service sector, but an important contribution has also been focusing labour market policy on active labour market measures (labour market training, labour market support for the unemployed to start their business and support to employers in employing unemployed persons).

In the 1st half of 2005, the nominal growth of average **gross wages** accelerated, compared with the 1st half of 2004. In the 1st quarter of 2005, the average gross wage was 7,427 Estonian kroons, which was 10.1% more than in the last year's same period. In the 2nd quarter of 2005, the respective indicators were 8,291 kroons and 11.8%. In the 1st quarter of 2005, the real growth of salaries was 5.3%. Despite the accelerated growth of inflation to 4.2% in the 2nd quarter of 2005, the real average wage growth reached 8% in the 2nd quarter. The fields of activity behind the fast wage growth are manufacturing, construction, and health care. Wages in manufacturing have been positively affected by increased production volumes and effectiveness, and the growth of export. In the field of construction, wages have risen due to a lack of qualified labour force, which is also a problem in other areas. Wage increase in health care was caused by administrative wage increase, supported by increased costs of health care institutions due to a rise in prices. **Labour productivity** increased in the 1st half of 2005, despite the rapid growth of employment, in a similar pace with real average wage growth – 5.9% in the 1st quarter and 7.9% in the 2nd quarter. Labour costs in the 1st half-year formed on average 52% of GDP, which can be compared to level of the last year's same period.

Box 1. Measures directed to decreasing unemployment

The main problem on the Estonian labour market is structural unemployment, where the educational level, skills and experience of labour force are not in compliance with fast changing demands of the labour market. To solve the problem, Estonian labour market policy has been focused, with the help of the European Social Fund (ESF), on applying active labour market measures. The ESF is a structural fund of the European Union, whose goal is to increase employment level through developing human resources. Resulting from that, the general objective established in the measure 1.3. „Equal Opportunities on Labour Market" of the National Development Plan (in Estonian called RAK) is more comprehensive and effective prevention and alleviation of poverty and social rejectedness and enhancing social involvement. The European Union has allocated 413 million kroons to co-finance, between 2004–2008, the projects set in the Measure 1.3.

As of June 2005, 68 projects have been financed in the framework of Measure 1.3. Regionally, all counties are included in the projects, whereas most of the financial resources have been directed to Ida Viru County with the highest unemployment rate in Estonia. Based on monitoring data of the projects, in site checks and meetings with implementers of the projects it can be said that the projects are realised according to the schedules. The projects have probably been more effective than planned as the percentage of employed persons is higher than expected.

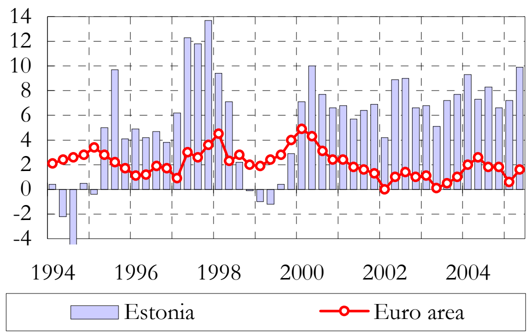
Realisation of the projects of Measure 1.3. is supported by extensive changes in Estonian labour market policy started at the beginning of 2004, when the concept of labour market measures was elaborated, on the basis of which the new Act of Labour Market Services and Supports, coming into effect in January 2006, was elaborated. The new act focuses on better targeting of labour market services and supports, client-centeredness, and effectiveness. The new act supplemented the existing choice of labour market services and conditions for obtaining the services and supports.

Acceleration of inflation accompanied by Estonia's accession to the EU in May 2004 was one-time and, with the disappearance of the base effect in May 2005, rise in prises slowed down to 2.8% from inflation rates exceeding 4% during the previous 12 months. Contrary to expectations, inflation started to increase again in June, driven by rising world market prices of oil. The rise in the prices was at its highest in September this year, when inflation reached 4.9%, and engine fuel prices rose by 34% compared to the last year's same period. In addition to that, residential services became more expensive, caused mainly by a 13% increase of electricity price for home consumers and a rise in prices of waste disposal and water supply. So far, the acceleration of inflation has not brought along any noticeable second-round effects – the base inflation remains around 2%. As positive aspects, it can be also noted that rise in prices of foodstuffs has stayed moderate since the disappearance of EU influence: between 1.8–2.7%. The trend of lowering prices of communication services has continued constantly, staying at -4% in 2005. The above-named developments refer to sensitivity of Estonian inflation to external shocks, which is natural in the case of a small open economy. The development of the base inflation also shows that temporary shocks do not have any long-term impact on the inflation and, if external factors are left aside, Estonian inflation is stable.

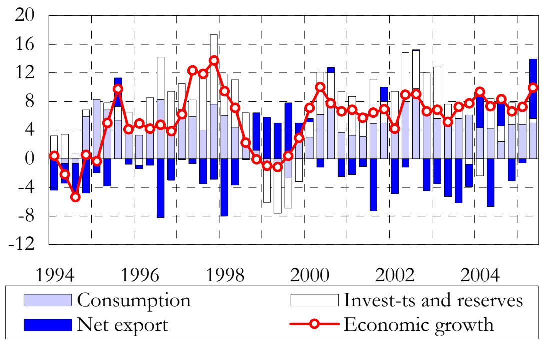
Figure 2

Development of Main Indicators of Estonian Economy
(per cent)

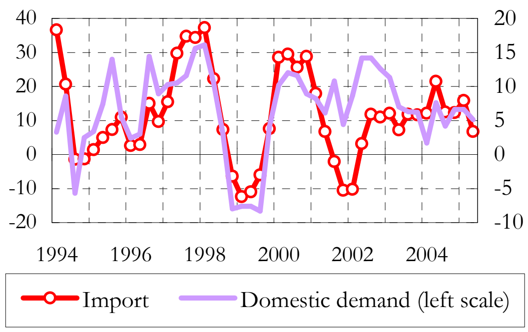
A. Economic growth of Estonia and euro area



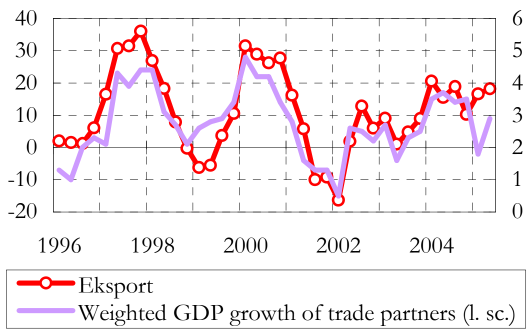
B. Contribution to economic growth



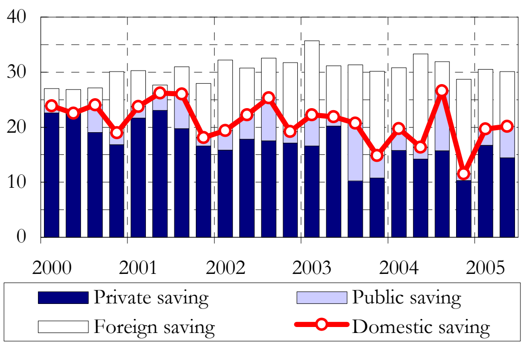
C. Real growth of domestic demand and imports



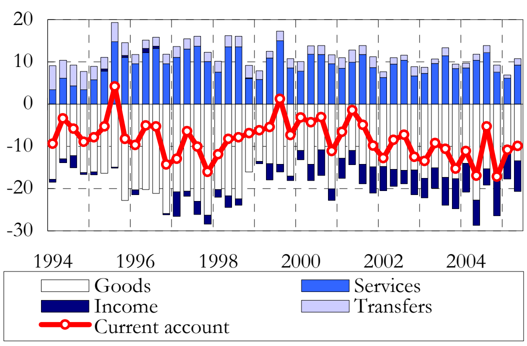
D. Real growth of exports



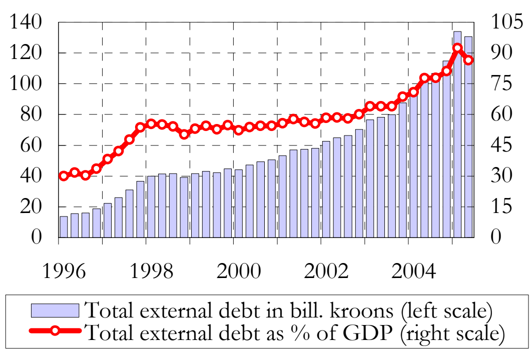
E. Savings rate (% of GDP)



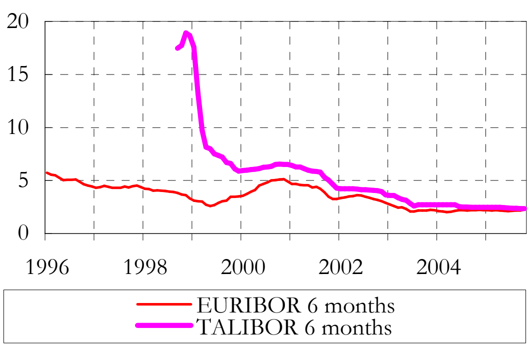
F. Structure of current account (% of GDP)



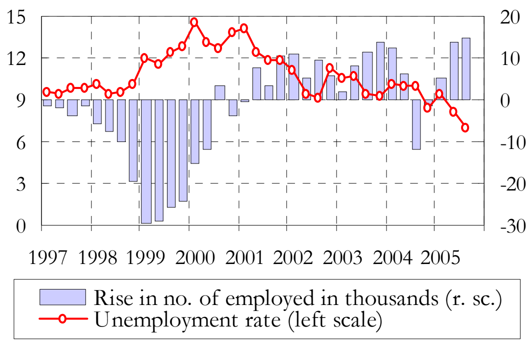
G. Total external debt



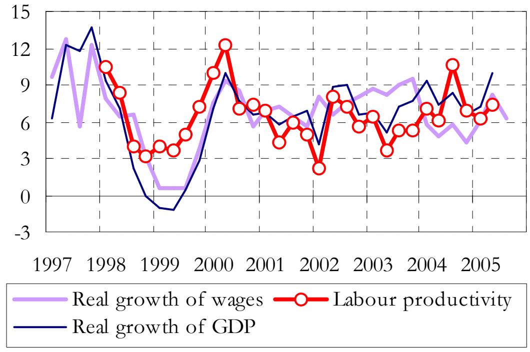
H. Interests



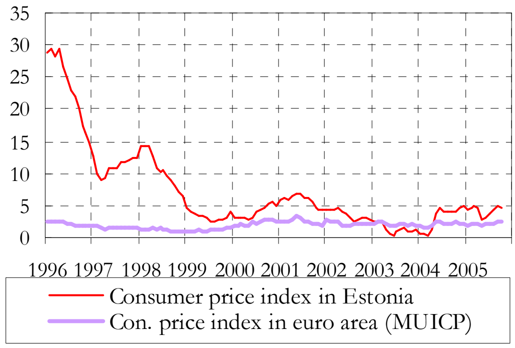
I. Employment and unemployment[1]



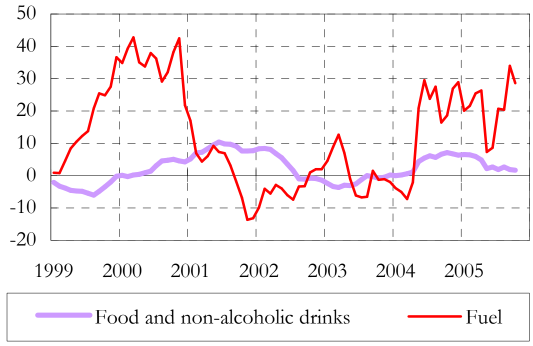
J. Labour productivity



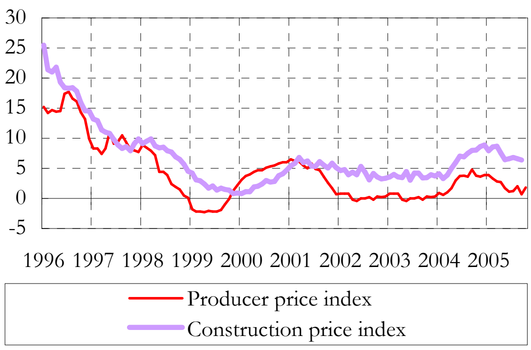
K. Consumer price index in Estonia and euro area



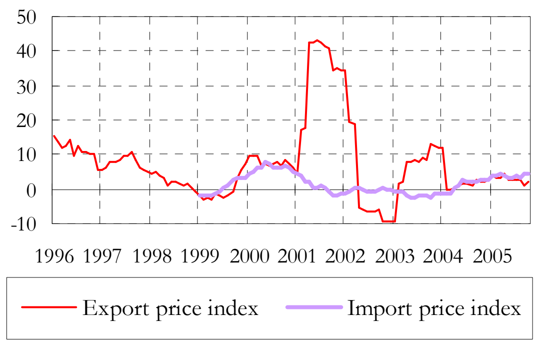
L. Changes in food and fuel prices in Estonia



M. Producer and construction price index



N. Export and import price index



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

[1] ILO definition, 15–74 years old.

2.1.2. International Evaluation of Estonian Economy

Estonia's accession to the European Union and joining ERM II had positive effects on credibility of the Estonian economy in the eyes of rating agencies, followed by raising of the national rating by Fitch IBCA and Standard & Poor's by one degree to level A. Estonia continues its course towards fast introduction of euro. Fitch and S&P consider the adoption of euro a very positive factor from the position of a country's credit ability as it reduces risks resulting from imbalances in the balance of payments and foreign shocks. Due to that and better economic results than expected, S&P changed the outlook of the national rating to positive in July 2005. To ensure increase of the rating, the competitiveness of the Estonian economy must be maintained and the strong economic policy directed to joining the euro area must be continued. In addition to the accession to the EU and NATO, the rating agencies stressed as positive for Estonia its great success in implementing structural reforms, harmonising its legislation with the EU, the existence of conservative fiscal policy and currency board system, which have strengthened fundamental indicators of the economy and ensured rapid economic growth. The greatest problems are still considered the record current account deficit and the low living standard.

One of Estonia's characteristics is its **economic freedom**. In the *Heritage Foundation*'s economic freedom index 2005, Estonia occupied the 4th position among 155 countries. The high place was granted to Estonia because of its relatively liberal trade policy, openness to foreign investments, little price control, and its well-developed banking sector. The evaluation given to Estonia improved in comparison with the last year as in 2003 inflation slowed down noticeably. Problematic areas for Estonia mentioned were the lack of transparency of the Estonian legal system (incl. interpretation of law and selecting new judges), the so-called favouritism caused by the small size of the country, and the great proportion of underground economy.

Estonia's **competitiveness** is also highly valued internationally. On the estimation of the *World Competitiveness Yearbook* 2005 of the Institute of Management Development (IMD), Estonia's competitiveness increased by 2 places to the 26th place among 60 countries. In the total index, Estonia is ahead of the new EU members included in the report (Latvia and Lithuania are not included in the compilation). According to the research, Estonia's strengths are its rapid economic growth and economic freedom. Improvement of Estonia's competitiveness is restricted by the lack of skilled workers and scarce contribution to science and education. The worst evaluation given to Estonia is in the category of business environment effectiveness, evaluating innovativeness and profitability of enterprises, and in the area of infrastructure, which shows the level of compliance of the base infrastructure and technological, scientific and human resources with needs of enterprises. On the estimation of the IMD, one of the primary factors inhibiting Estonia's competitiveness is the lack of qualified work force, including engineers and mid-level managers. Negative evaluation was received by the Government's strict immigration rules not allowing companies to import skilled workers from abroad. The institute also found that, partly due to what was mentioned before, workers' wage increase is faster than favourable for the country's competitiveness.

Competitiveness of countries is also evaluated by the World Economic Forum (WEF), which placed Estonia on the highest position among the new EU member states in its international competitiveness report 2005–2006. In the growth competitiveness index, providing an estimation for prospects of country's *per capita* economic growth in the next 5–8 years, Estonia was on the 20th position for the second year. According to the index, the main problems in the Estonian economy are the lack of educated work force, ineffective bureaucracy, access to financing, low work ethics, and insufficient infrastructure. Less problematic were considered currency exchange, political instability, inflation, corruption, and labour regulation. In the business climate index, evaluating productivity of countries or their GDP *per capita,* Estonia moved up by one place to the 26th position, whereas business environment received a better evaluation than work organisation and management of enterprises.

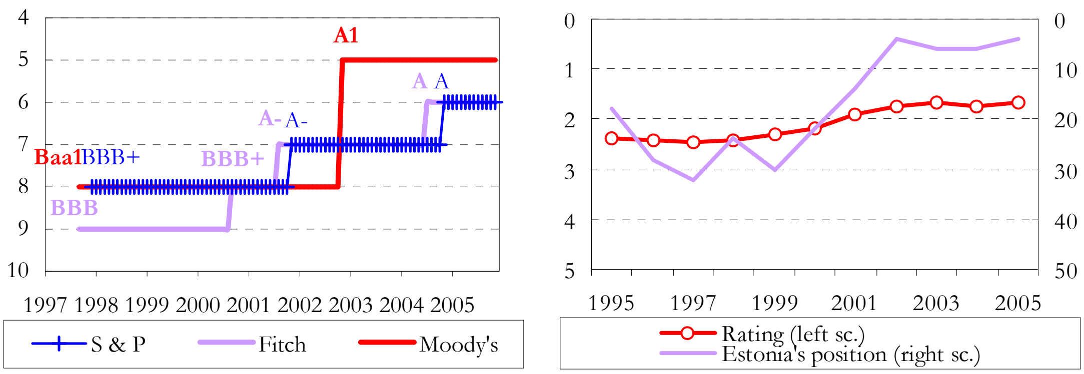
Low level of corruption is also important from the viewpoint of a country's development. *Transparency International*'s corruption perception index 2005 placed Estonia on the 27th position among 159 countries, whereas in the last year Estonia was on the 31st position among 146 countries. Estonia is ahead of all new EU member states, excl. Malta on the 25th position. Foreign observers evaluated positively Estonia's constant attention to repelling corruption. Transaction of affairs has become easier in several areas and the scope of work of the State Audit Office of Estonia has extended (the right to check local governments has been added).

In the World Bank's **business activity simplicity** study *Doing Business 2006*, Estonia looks quite good among 155 countries, on the 16th position. Ahead of Estonia there are, however, Denmark, the United Kingdom, Ireland, Finland, Sweden, Lithuania. Positive are little expenses on founding an enterprise and registration of real estate, short time/small costs of coming into force of acts of law, and the simplicity of laying off workers. Founding an enterprise and registration of real estate take, however, long time compared with other countries, and employees' work time is not very flexible, costs of loan security acquisition are high and closing enterprises requires quite a lot of resources.

Figure 3

International Evaluation of Estonia's Development

A. Dynamics of Estonia's national ratings **B. Economic freedom index**



Source: Standard & Poor's, Fitch Ratings, Moody's, Heritage Foundation.

2.2. Economic Forecast

2.2.1. Macroeconomic Forecast for Years 2005–2009

The growth of the world economy was almost the fastest of the last three decades in 2004, reaching 4.6%. This and the next year are expected to bring slowing of the growth. The EU economic growth will slow down in 2005 and accelerate again in 2006. The greatest contribution to the EU economic growth will be given by domestic demand of 2005–2006: investments supported by low interest rates and gradually increasing private consumption. Slowing of the world economic growth and the strong rate of the euro against the US dollar will inhibit EU exports: real growth of exports should slow down in 2005–2006.

In 2004 the growth of the Estonian economy accelerated to 7.8% due to considerable increase of exports. Substantial contribution to the economic growth was also given by domestic demand, although its annual growth rate slowed down to 4.6%. The deceleration of domestic demand was mainly caused by decreasing of the growth rate of private consumption and investments to 3.1% and 6%, respectively.

In the years 2005 and 2006, the Estonian economy will grow, according to our forecast, by 6.5% and 6.6%, respectively. Besides to great increase in exports, also the role of domestic demand will increase, whose growth pace should accelerate, compared to 2004. Growth of domestic demand is also supported both by the acceleration of private consumption growth and high investment activity, whereas the growth rate of the general government final consumption expenditure should slow down at the same time. In the years 2005–2006, growth rate of exports and imports will slow down but exports will grow faster than imports. In the medium-term period, we expect 6.3% economic growth on average, which is slower than the average GDP growth of last five years.

In the nearest years to come, economic growth will be driven by manufacturing, which will grow quicker than the average economic growth in 2005–2006. The growth will be based both on increase of production capability and improvement of products' competitiveness and effectiveness of enterprises' activities. The growth rate of the service sector will decelerate and be slower than the average growth within the last five years.

Growth of private consumption will accelerate to 6.7% in 2005, supported by both increase of the payroll fund and reduction of income tax rate and increase of tax-exempt income. For 2006 we forecast deceleration of the growth of private consumption primarily owing to deceleration of the growth pace of net wages. In the years 2007–2009, the upward tendency of private consumption will continue, however, itsspeed will slow down and be slower than the GDP growth. The growth will, in addition to the enhanced loan burden, be affected also by deceleration of the growth of personal income and accelerated rise in prices. The share of private consumption in GDP will diminish to 55.5% by the end of the forecast period.

Besides households' capital investments, which grow substantially due to the favourable monetary environment, moderate increase in the inflow of foreign investments also supports acceleration of investments growth. In addition to investments into the export-oriented sector, the growth is also fostered by enhancing of the absorption ability of the structural funds by the general government. In the medium-term period, stabilisation of investment activities at 29% of GDP can be expected.

We expect continuation of the rapid growth of goods and services export within the forecast period. The export growth will be supported both by the growth of trade partners' import and GDP which is fasterthan the last five years' average growth rateand continued improvement of the competitiveness of Estonian products and services, reflected in the expanded market share of Estonia on the EU market. Owing to deceleration of domestic demand in 2006–2009, we expect also slowing down of import growth in the period. Reduction of the current count deficit in the forecast period will be caused mainly by diminishing of the trade balance deficit, which, in its turn, is affected by forward growth of export of goods compared with the export.

Acceleration of inflation to 3.0% in 2004 resulted primarily from changes in tax and foreign trade policies entailed by the accession to the EU but, at the same time, rise in prices not regulated administratively remained moderate. Pressure to the surge in prices was added by rising oil prices on the world market. In addition to the high level of oil prices, acceleration of the inflation of 2005 to 3.6% is also influenced by rise in prices of residential costs, incl. the rise of electricity prices on 1 March 2005. In the year 2006, diminishing of the growth of consumer prices to 2.6% is expected, mainly due to lesser contribution of administrative rise of prices, which still will remain an important factor affecting prices, compared to 2005. Within the medium-term period, the growth pace of inflation will slow down on the background of the low inflation level of other EU countries.

Active labour market policy and improved economic situation will support reduction of unemployment in the medium-term period. Average employment growth 0.6% in the period 2005–2009 will be in compliance with moderate wage and productivity increase. In the next years, positive developments on the Estonian labour market will be affected by maintaining flexibility on the Estonian labour market, vocational education reform, and enhanced mobility of the work force.

The main domestic risk in the nearest years will be continuing rapid growth of domestic demand, which will threaten improvement of external balance and deteriorate long-term prospects of the Estonian economy. The main risks resulting from foreign economy are developments related to world market prices of oil. Inflation developments in 2005 and 2006 may also entail risks for the Estonian economy. If there will be not sufficiently fast reduction of inflation, fulfilment of the Maastricht Criteria and the introduction of euro at the beginning of 2007 will be in danger. To reduce this risk, it is important to have administrative price rises under control.

Table 1

GDP Forecast for 2004–2009 [2]

	2004	2004	2005*	2006*	2007*	2008*	2009*
	mln EEK	%	%	%	%	%	%
1. Real GDP	122,049.3	7.8	6.5	6.6	6.3	6.3	6.3
2. Nominal GDP	141,493.4	11.1	10.4	9.5	9.1	9.3	9.3
Components of real GDP							
3. Private consumption expenditure (incl. non-profit organisations) [1)]	69,390.3	3.4	6.6	6.6	6.2	6.2	6.1
4. Government final cons. expenditure	22,921.9	6.9	5.3	5.0	4.5	4.5	4.5
5. Gross fixed capital formation	36,208.4	6.0	7.2	6.1	5.8	5.5	5.5
6. Changes in inventories (% of GDP)		2.8	2.5	2.3	2.2	2.1	2.0
7. Exports of goods and services	101,471.8	16.0	15.4	13.3	10.5	10.4	10.4
8. Imports of goods and services	114,870.3	14.6	12.6	11.9	9.5	9.5	9.5
Contributions to real GDP growth [2)]							
9. Domestic demand (without stocks)		5.1	6.9	6.6	6.2	6.1	6.0
10. Changes in inventories		-0.1	0.0	0.1	0.1	0.1	0.1
11. Ext. balance of goods and services		-0.6	0.9	0.1	0.1	0.1	0.2
Added value growth							
12. Primary sector		1.6	0.2	2.7	2.6	2.5	2.8
13. Industry		8.6	8.5	9.2	8.6	8.8	8.5
14. Construction		10.5	7.9	8.8	7.2	8.7	7.4
15. Other services		7.2	5.8	5.6	5.6	5.3	5.4

[2] Economic forecast of 2005 of the Ministry of Finance, completed on 16 August 2005, which was the basis for compiling the state budget for 2006.

1) Data on 2004 private consumption expenditure were corrected on 28.09.2005 by the Statistical Office of Estonia, which is the reason for the non-compliance of private consumption figures here and in Annex 1.
2) Contribution to GDP growth indicates the share of a specific field in the economic growth. It is calculated by multiplying the field's growth with its share in GDP. The sum of the fields' share makes up the economic growth (the reason for a little difference is a statistical error – the part of GDP that could not be divided between the fields).
Source: Ministry of Finance of Estonia, Statistical Office of Estonia

Table 2

Price Forecast for 2004–2009

(percentage)

	2004	2005*	2006*	2007*	2008*	2009*
1. GDP deflator	3.1	3.7	2.8	2.7	2.8	2.8
2. Private consumption deflator	3.2	3.5	2.7	2.6	2.8	2.8
3. Harmonised consumer price index	3.0	3.5	2.6	2.6	2.7	2.7
3a. Consumer price index	3.0	3.6	2.6	2.6	2.8	2.8
4. Public consumption deflator	2.0	4.0	3.3	2.4	2.8	2.9
5. Investment deflator	3.1	2.8	2.3	2.1	2.1	2.1
6. Export price deflator	1.0	3.2	3.2	3.4	3.5	3.5
7. Import price deflator	2.0	3.5	3.1	2.8	2.8	2.8

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

Table 3

Labour Market Forecast for 2004–2009 (15–74-year old persons)

	2004	2004	2005*	2006*	2007*	2008*	2009*
		%	%	%	%	%	%
1. Employment, persons	595.5 [1)]	0.2	0.6	0.6	0.8	0.7	0.4
2. Unemployment rate[3]		9.7	9.3	9.2	8.8	8.5	8.4
3. Labour productivity, persons		7.3	5.7	5.9	5.5	5.6	5.8
4. Compensation of employees	65,763 [2)]	10.1	11.7	10.3	9.5	9.6	9.4

1) Thousand people.
2) Million EEK.
Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

Table 4

Balance of Payments Forecast for 2004–2009

(% of GDP)

	2004	2005*	2006*	2007*	2008*	2009*
1. Net lending/borrowing *vis-á-vis* the rest of the world	-11.8	-9.0	-8.2	-7.4	-6.3	-5.0
1a. Current account	-12.7	-10.4	-9.6	-8.6	-7.4	-6.0
2. Balance on goods and services	-7.8	-6.3	-5.4	-4.2	-2.8	-1.3
3. Balance of prmary incomes and transfers	-4.9	-4.1	-4.2	-4.4	-4.6	-4.6
4. Capital account	0.7	1.4	1.4	1.2	1.2	1.0
5. Errors and omissions	-0.7					

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

[3] ILO definition, 15–74 years old.

2.2.2. Forecast Assumptions and Comparison with Economic Forecasts of Other Institutions

In determination of external assumptions in the forecast of the Ministry of Finance, information existing by the moment was used.[4] In the meanwhile, actual economic developments have made numerous corrections in the attitudes of the analysts. In this summer the forecasted inflation in the euro area and the resulting expectations of increase of short-term interests rates were lower. As to euro/USD exchange rate, the Ministry of Finance expects its more gradual adaptation in the period 2006–2007 than the European Commission. The Ministry of Finance and the European Commission share a similar opinion in the matter of upward tendency of the economic growth of the world and the USA, whereas certain differences in the opinions result from different methodologies used. In the summer 2005, most analysts had lower expectations concerning oil price than now. Among other things, nobody could predict hurricanes of such strength on the east coast of USA, which caused a lot of damage to oil refinement factories and oil rigs.

Table 5

Comparison of foreign assumptions of the Ministry of Finance of Estonia and the European Commission

(percentages)

	Ministry of Finance, summer 2005							the Commission, autumn 2005		
	2003	2004	2005	2006	2007	2008	2009	2005	2006	2007
1. Euribor, 3 months (annual average)	2.3	2.1	2.1	2.2	2.5	2.9	3.3	–		
2. Long-term interest rate of the euro area (annual average)	4.1	4.1	4.1	4.2	4.4	4.6	4.8	–		
3. USD/EUR exchange rate (annual average)	1.13	1.24	1.26	1.24	1.20	1.15	1.10	1.25	1.21	1.22
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. Global economic growth*	3.9	4.6	4.5	4.3	3.8	3.8	3.8	Not comparable**		
6. US GDP growth*	3.0	4.4	3.6	3.3	3.2	3.2	3.2	3.5	3.2	2.7
7. EU-25 GDP growth*	0.9	2.2	2.0	2.3	2.0	2.0	2.0	1.5	2.1	2.4
8. Growth of export markets of Estonia	2.3	3.3	2.8	3.0	2.7	2.7	2.7	–		
9. Oil price (Brent, USD/barrel)	28.8	38.2	54.0	53.1	51.1	50.1	49.0	55.0	61.4	60.3
10. Nominal effective exchange rate	3.7	1.0	-	-	-	-	-	-0.1	0.0	0.2
11. World import volumes, excluding EU	-	-	-	-	-	-	-	8.6	8.7	8.4

** In assumptions of the MoF, GDP growth has been corrected with the number of workdays and on seasonal basis.*
*** The Commission's assumption – the world, excluding EU – is not comparable to the assumption of the Ministry of Finance (includes EU). The Commission forecasts global economic growth, excluding EU, 5.1% in 2005, 4.9% in 2006, and 4.6% in 2007.*
Source: Ministry of Finance of Estonia, the European Commission.

Table 6 presents differences between the forecasts of the Ministry of Finance and other institutions. Comparing them, the following must be taken into account:

- The forecasts have been made at different times and, thus on the basis of different information, which causes differences in assumptions and results of the forecasts. The forecasts by the

[4] Foreign assumptions were fixed in July 2005.

European Commission, the Bank of Estonia and the IMF have been made a couple of months later than the forecast by the Ministry of Finance. The forecast of the Ministry of Finance was completed on 16.08.2005, that of the Bank of Estonia was made public on 24.11.2005, that of the European Commission on 17.11.2005, and that of the IMF on 04.11.2005.

- The forecast of the Estonian Institute of Economic Research was completed in December 2004, before the change in the GDP methodology of the Statistical Office of Estonia and publication of figures of 2003 and 2004, specified on the basis of yearly reports, therefore the forecast cannot be directly compared with the rest.

Comparison of different forecasts reveals regularities that the later the forecast was completed, the more optimistic it is regarding the economic growth. This is only logical as the economic growth of the 2nd quarter was noticeably faster than expected and, during the last few months, several institutions have corrected their GDP potential estimations upwards. The main growth engine in the forecasts is domestic demand, although the export growth is also fast. However, the growth of domestic demand and export is expected to slow down in 2006. In forecasts published in November, expectations have been based on the record-breaking oil prices of the recent months, which, among other things, have also affected inflation in Estonia. In the summer of 2005, oil price expectations were considerably lower. As for the current account, everybody expects its gradual decrease. Economic experts perceive, despite the rapid economic growth, also several risks: high oil price and great imbalance of the USA/rest of the world in the foreign environment and high current account deficit and lack of labour force in Estonia.

Table 6

Comparison of Economic Forecasts

	GDP growth, %		Consumer price index, %		Current account, % of GDP	
	2005	2006	2005	2006	2005	2006
Ministry of Finance	6.5	6.6	3.6 (3.5*)	2.6 (2.6*)	-10.4	-9.6
European Commission	8.4	7.2	4.1*	3.3*	-9.9	-7.7
IMF	7.9	6.5	4.0	3.4	-11.1	-10.4
Bank of Estonia	8.0	6.8	4.2*	3.4*	-9.4	-8.5
Estonian Institute of Economic Research	6.5	–	3.5	–	-9.0	–

** Harmonised index of consumer prices.*
Sources:
Ministry of Finance of Estonia.
European Commission. Economic Forecast. Autumn 2005.
IMF. Republic of Estonia: 2005 Article IV Consultation – Staff Report. November 4, 2005.
Bank of Estonia. Economic Forecast (Majandusprognoos). Autumn 2005.
Estonian Institute of Economic Research. Economic Situation (Konjunktuur), No. 3. September 2005.

2.3. Introduction of the Single Currency Euro

2.3.1. Fulfilment of Convergence Criteria

For introduction of euro, the EU members not using euro yet, incl. Estonia, must achieve a certain level of nominal convergence or fulfil the convergence criteria established in the EU Maastricht Contract. These convergence criteria concern budget deficit (must not exceed 3% of GDP), state debt (must not exceed 60% of GDP), inflation and interest rates (close to the average of three EU members with the lowest results). In addition to that, the member state must join the exchange rate mechanism ERM II. **In case Estonia continues its conservative fiscal policy, there should not be great problems with meeting the Maastricht Criteria in 2006 and, presumably Estonia will be among the first new member states to introduce the single currency euro.**

Considering the faster economic growth of Estonia, compared with that of the older EU member states, the only problems may arise with meeting the **price stability** criterion, which is a „moving target" or changes each year. The reference value of the price stability is the last 12 months' average inflation of three EU member states with the best performance plus 1.5 percentage points. According to convergence reports published by the European Commission and the European Central Bank in October 2004, Estonia fulfilled the price stability criterion. In May 2004, there was, however, rapid increase of inflation, the influence of which disappeared in May 2005. Thus since May 2005 inflation slowed down considerably, however, the rapid oil price increase together with the cheapening of euro brought along new acceleration of inflation since July 2005. Although, according to the summer forecast of the Ministry of Finance, Estonian inflation would have been more close to the criterion in the 2nd half of 2006, the risk of not fulfilling the price stability requirement has been increased with further rise in oil price in August and September and some additional administrative price rises, not taken into account in the summer forecast of the Ministry. The effect of rise of oil price has been considerably greater for Estonia than in the EU on average as the proportion of fuel and energy in our consumer basket is nearly twice as big as the average of the EU[5]. However, the factors causing acceleration of inflation have only a temporary impact – so far they have not been accompanied by the so-called second-round effects. Therefore, it may be assumed that Estonia has no substantial inflation problems as it is only temporary acceleration of rise in prices and the inflation will slow down with disappearance of the one-time effects. To sum it up, it may be said that, in connection with the increase in oil prices during the last year, risks related to the possibility of not fulfilling the price stability criterion have enhanced, however, it is still early to say that Estonia will not be able to fulfil the criterion in the 2nd half of 2006.

The budget of the Estonian general government has been near balance within the last decade, and the surplus of the recent years has been one of the highest among the EU members. As a result of implementation of conservative fiscal policy, we have very small national debt, one of the lowest among the EU member states. At the same time, realisation of several risks can never be eliminated as it happened in 1999 – resulting from economic downfall and compilation of an optimistic budget, the budget deficit of the general government was over 3% of GDP then. In setting fiscal policy goals it must be taken into account that, although the EU Foundation Contract establishes the limit for budget deficit to be 3% of GDP, the goal established in the Stability and Growth Pact is a lot stricter. According to the SGP, the member states must achieve near balance or surplus budget position in the medium-term period, which should ensure that the 3% limit is not exceeded even with economic difficulties. Also the size of the current account deficit of Estonia requires a stricter fiscal policy. Therefore, it is very important that we continue implementing conservative fiscal policy in the future as well and at least maintain the balance of the general government's

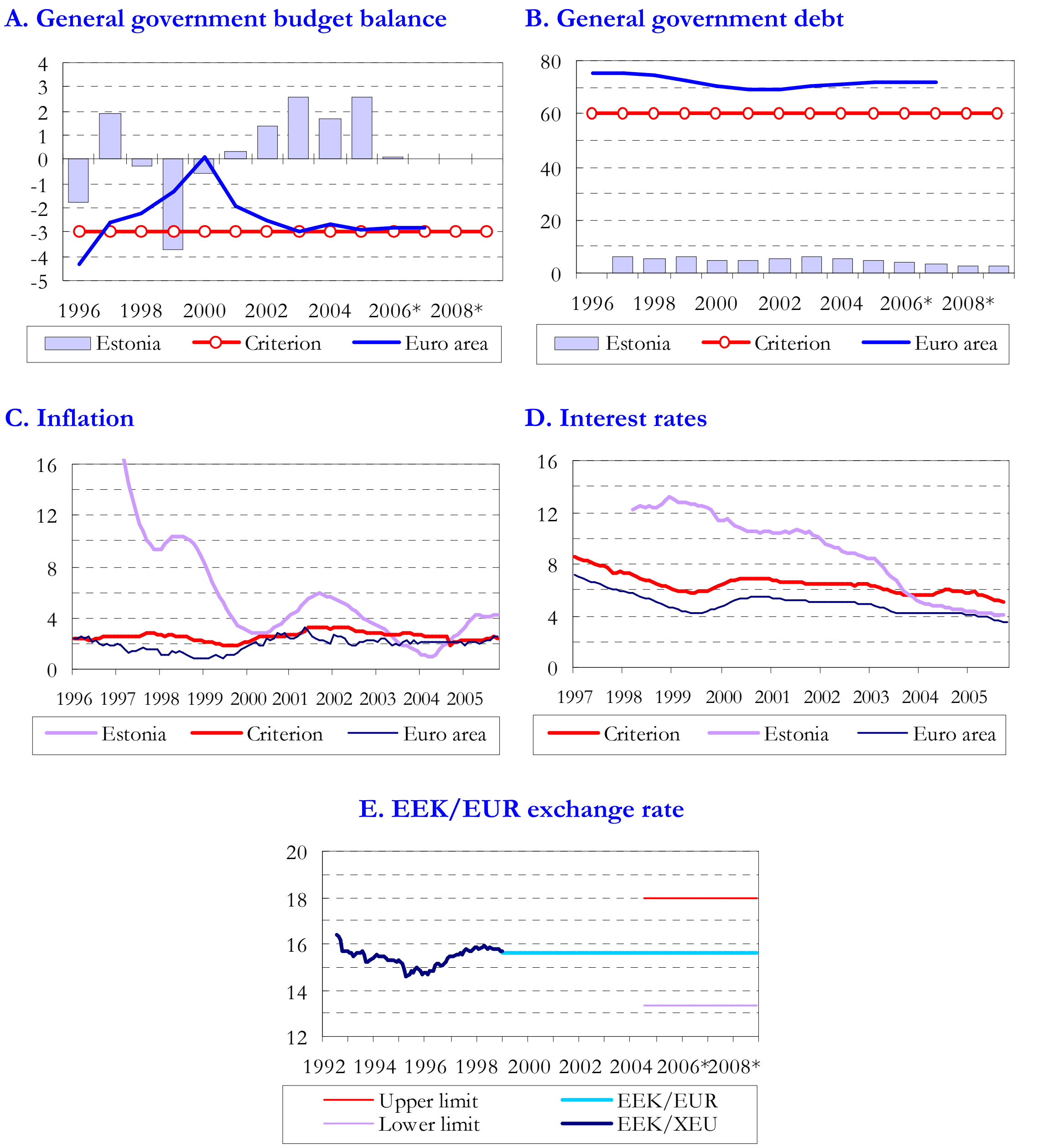
[5] The average EU share of fuel and energy in the harmonised consumer price index is 3.8% and 8.7%, respectively. In Estonia the respective shares are 6.4% and 13.5%.

budget. Achieving the goal requires also changes in the fiscal policy of Estonian local governments – the consolidated budget of local governments has consistently run a deficit within the last years.

Figure 4

Nominal Convergence and Fulfilment of Maastricht Criteria

(percentages)



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

Our present **exchange rate system** met the ERM II conditions, which is why Estonia joined the exchange rate mechanism ERM II on 28 June 2004, maintaining the currency board system and assuming a unilateral commitment to maintain the EEK rate fixed to euro (1 EUR=15.6466 EEK). Prior to the introduction of euro, Estonia must be a member of ERM II for two years and retain a stable currency exchange rate during that period. This is ensured by the fixed rate.

The interest rate criterion is bound to the inflation criterion – lower inflation entails lower interest rates. Estonia has no proper instrument for estimation of convergence of interest rates (in the absence of 10-year government bonds in Estonian kroons) and, therefore, the interest indicator based on the interest rate of long-term debts in kroons, compiled by the European Central Bank and the Bank of Estonia, cannot be directly compared to those of other states. However, the Commission, based on the low level of kroon interests, minor government debt and a good budgetary position, has expressed its opinion that Estonia should have no problems in fulfilling the interest rate criterion, and Estonia will not be required to create a new instrument for estimation of fulfilment of the criterion.

2.3.2. Ensuring Technical Readiness

Estonia's government and Bank of Estonia have undertaken the practical preparations to adopt the euro on 1 January 2007. In the end of 2004, the Estonian government formed the National Changeover Committee to coordinate the activities necessary to ensure a smooth changeover. The National Changeover Committee formed 6 working groups with the task of defining and implementing the necessary preparations for the euro changeover. Working groups were set up to cover the following areas: legal issues, the public sector, communications, business environment, consumer protection, cash and settlements issues.

The working groups are made up of representatives from both the public and private sector, but also NGOs. The representatives in turn were able to consult their respective institutions at every stage of the process. For example, in the working group of Bank of Estonia and credit institutions, representatives from all banks operating in Estonia are present. In turn, these representatives enabled their banks to be integrally involved in the decision making process.

The national changeover plan was put together on the basis of the work done in the working groups. The draft national changeover plan was circulated amongst the representatives of all working groups and all banks. All parties were able to provide feedback, which was taken into account when finalizing the first version of the national changeover plan. The multilateral dialogue guaranteed that all parties' interests were taken into account to the maximum extent, while keeping all parties informed of the progress of the euro changeover preparations.

The national changeover plan was first approved by the government on 1 September, 2005. The Changeover Committee submits a progress report on the implementation of the national changeover plan for a review to the Government on a quarterly basis. The plan is updated after discussion in the Government once every quarter, last time on November 24th.

Following the approval of the national changeover plan, a detailed 'working plan' was put together, which lists all the activities that remain to be done to achieve complete readiness for euro changeover. While the big picture is already in place, it is scheduled that all technical preparations will be ready in time to adopt the euro on 1 January 2007.

In its last convergence report (autumn 2004), the European Commission expressed its opinion that paragraph 111 of the Estonian Constitution conflicts with the EU Treaty and the Statutes of the ESCB. In order to solve this problem, the Estonian Parliament will pass amendments to the Bank of Estonia law. Before the bill is passed in the Parliament, it will be referred to the Supreme Court for a review as to its constitutionality. If the Supreme Court rules that the Bank of Estonia law does not offend against the Constitution, legal certainty is ensured in that there is no conflict between the Estonian Constitution and the EU Treaty.

The Parliament is going to pass the Constitutional Review Court Procedure Act in December 2005, which will allow the Parliament to submit on the basis of majority vote the draft Bank of Estonia law to the Supreme Court for verifying its constitutionality. On 8 November 2005, the amendment to the Bank of Estonia law already passed its first reading in the Parliament. After the second reading and after receiving the opinion of the European Central Bank, the draft bill will be referred to the Supreme Court for verification as to its constitutionality. After the mentioned procedures, the Bank of Estonia law is due to be passed in early 2006.

In the field of cash and settlements, the Bank of Estonia, together with credit institutions, cash operating companies, Card Centre of Banks and other interested parties are finalising detailed changeover plans. Plans include frontloading, sub-frontloading, collections of national currency from circulation, ATMs, upgrades to payment card infrastructure etc. Bank of Estonia also has a highly detailed plan for cash changeover logistics. On October 19th the central bank signed a MoU with the Estonian Police to coordinate security issues of the changeover.

The design for the national side of the Estonian euro coin was chosen through telephone voting already in December 2004. Bank of Estonia has also chosen the mint for national euro coins and will conclude all practical preparations for minting by June 1st, 2006. Given, that minting the national coins for the changeover itself takes an estimated 1.5 months, Estonia would be ready for the changeover also if the decision to abrogate the derogation came only in autumn 2006.

Euro changeover communications reached an active stage immediately after the government approved the National Changeover Plan. In addition to the Ministry of Finance and Bank of Estonia, major commercial banks also set the plan up on their web sites. Given that nearly all residents have a bank account and 90% of all banking transactions in Estonia take place in the internet banking environment, the latter has an important impact on the dissemination of the euro changeover information.

Enterprises have been treated as a priority in the early stages, since they need to be the first to start preparations. On November 16 2005 all enterprises received an information brochure, which informed them of the main principles of changeover and in which they were encouraged to proceed with changeover preparations. Consumer initiatives, such as price monitoring, construction of the euro web site, lectures and meetings have also already begun. Most information materials to consumers are planned for 2006. On 8 November 2005, the Ministry of Finance signed a partnership agreement with the European Commission within the PRINCE programme framework, which will help advance euro changeover communications.

In sum, Estonia's changeover preparations have already reached an advanced stage. Estonia doesn't foresee any problems arising from technical preparations. Estonia's relatively small size allows for substantial flexibility and consequently decision-making processes are fast, which in turn help to carry out the changeover preparations at a rapid pace. Estonia's small size also keeps the time required for minting short and allows the country to be ready for euro adoption even if the decision of abrogating the derogation came later in 2006.

2.4. Macroeconomic Policy

The primary objective of the macroeconomic policy of the Government of the Republic is ensurance of macroeconomic stability and internal and external balance. Considering Estonia's peculiarities or the use of the currency board system, fiscal policy is the main measure for influencing the economy and restraining risks threatening balanced economic development.

At the moment, Estonia's major risks in the economic environment are those related to the fast growth of loans and a high current account deficit. Lately also overheating signs in some sectors and fast wage increase, which may start to exceed productivity growth, have been mentioned (e.g. Article IV in the report by the IMF). It is also important to observe inflation developments to avoid fast rise in prices. At the moment, inflation is mainly bound to the high oil price (see Annex 3 for details), and the present level of inflation does not threaten the Estonian economy or the price stability. The fast wage increase has been in accordance with the increase in productivity so far.

It must also be noted that the reason for the current account deficit in Estonia lies not in diminished competitiveness on foreign markets[6] but in import of capital goods and growing deficit of income balance. However, the deficit of the income balance does not show actual capital outflow as it is for the most part re-invested profits, whose proportion has grown in the last years due to great inflow of foreign investments and their profitability. Re-invested profits are shown in the balance of payments by two simultaneous entries – in the current account as outflow of income and in the financial account as inflow of foreign investments (which means that even if there is no real movement of money, there is great outflow of income in the current account of Estonia). In 2005 the current account deficit has diminished by the support of strong export. The goal of the Government is reduction of the current account deficit in the long-term to a sustainable level[7], however, it is clear that it will take time and, due to developments of the balance of income, Estonia's current account deficit will remain, in comparison with other countries, high for years.

In the light of such economic situation, the IMF in its Article IV missions and the European Commission and the Council of the European Union by assessing Estonian convergence programmes have recommended Estonia to implement restrictive fiscal policy and to achieve budget surplus instead of the general government's balance.

- Broad Economic Policy Guidelines (BEPG) for the years 2003–2005 (updated on 7 April 2004): In order to address the sizeable current account deficit through appropriate fiscal policy measures, Estonia is recommended to implement a fiscal policy that is in line with the conclusions to be reached by the Council in the context of the forthcoming budgetary surveillance exercise, and which is consistent with the objective to avoid pro-cyclical policies which can exacerbate the external imbalance.
- Council opinion on the Convergence Programme of Estonia, 2004–2008 (5 July 2004): The rapid reduction of surpluses as from 2004 over a period of continued buoyant growth, as envisaged in the programme, is likely to imply a distinct pro-cyclical fiscal stance. As a high external account deficit will continue to be the major macro-economic imbalance in Estonia over the programme period, strict fiscal discipline as well as careful monitoring of credit growth are even more important to ensure a sustainable correction of this external imbalance.
- Council opinion on the updated Convergence Programme of Estonia, 2004–2008 (17 February 2005): The higher-than projected budget surplus in 2004 is in line with the recommendation to avoid pro-cyclical fiscal policies. Nevertheless, given that the external account deficit has most likely not narrowed significantly (if at all) in 2004, a rapid run-down of the budget surplus may

[6] See also Article IV of the IMF, Final Statement of Consultations – IMF on 22 July 2005 (http://www.eestipank.info/pub/et/majandus/IMF/_20050722.pdf?objId=652670) and *Estonia's external deficit: a sign of success or a problem?* – ECFIN Country Focus Volume 2, Issue 13, 7.07.2005 (http://europa.eu.int/comm/economy_finance/publications/country_focus/2005/countryfocus13_en.htm).

[7] According to IMF sustainable rate of current account deficit of a country such as Estonia is 6–7%.

provide insufficient support from the fiscal policy stance to the correction of the external imbalance.
- IMF's Concluding Statement of 2005 Article IV Consultation Mission (July 22, 2005): At a minimum, a fiscal surplus of at least the same size as that achieved in 2004 should be targeted in 2005, thereby assuring a neutral fiscal stance.

Estonia has acted accordingly – domestic demand has been restricted by the general government's surplus, which according to the recommendations has been considerably higher than planned. The Estonian general government's budget has been in surplus since 2001 and the Government will compile the budget at least balanced in the future as well. This year, a surplus amounting to 2.6% of GDP is expected (instead of latest official forecast of 0.3% of GDP). The next year's budget of the general government has been planned with a minor surplus, which may prove higher than planned by the support of favourable economic developments. Thus we have fulfilled recommendations concerning our fiscal policy. Estonia is one of the few EU member states to fulfil the requirement of the Stability and Growth Pact to achieve a near-balance or surplus budgetary position.

Measures directed to restricting excessive domestic demand so far:
- Since 2005, the Government reduced the maximum rate of housing loan interests, training costs and presents, donations and entry and membership fees of trade unions, deductible from income tax by 50% to 50,000 kroons a year. The effect of the measure is similar to increasing of interest rates, and it should help to restrict consumption and loan growth.
- At the end of 2004, the scope of people eligible to KredEx housing loan security was limited, and the upper loan security limit was reduced by a quarter, from 400,000 kroons to 300,000 kroons.[8]
- The Bank of Estonia has maintained the compulsory reserve requirement for commercial banks on the 13% level to ensure the existence of liquidity buffers, necessary in the rapid loan growth conditions, in banks. As a comparison: the compulsory reserve requirement in the euro system is 2%.
- In 2003 supply of money was restricted by reducing the Central Government's deposits in Estonian commercial banks by *ca* 1.5 bill.ion kroons (1.5% of GDP at that time).

In addition to specific measures, restriction of domestic demand is supported by general favouring of saving (e.g. in the form of implementing the pension reform) and development of export (for details see Estonian Action Plan for Growth and Jobs 2005–2007).

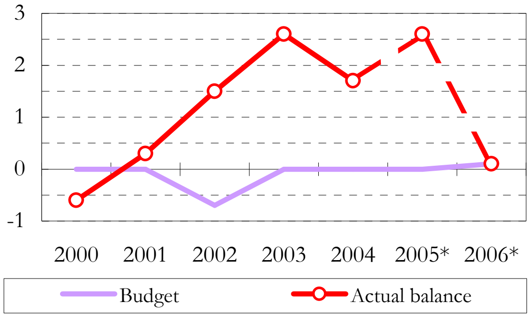
The Government and the Bank of Estonia are constantly monitoring the situation and following ensurance of macroeconomic stability. In the case of necessity, additional measures will be applied.

[8] Through KredEx, additional housing loan securities are offered to certain target groups (forced tenants, young families, yound specialists with higher education) to enable them to obtain housing loans with the lowest self-financing level (with 10% instead of the usual 1/3).

Figure 5

Planned and Actual Budget Position

(% of GDP)



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

3. FISCAL FRAMEWORK

3.1. Fiscal Policy Goals of General Government

3.1.1. Main Goals of Fiscal Policy

In its Convergence Programme of May 2004[9], the Government of the Republic established the following main goals of Estonian fiscal policy:

- Maintaining of the general government budget balance,
- Maintaining of stable tax burden,
- Cost-effectiveness in state administration and directing budget expenditures into economic development,
- Ensurance of long-term sustainability of public finance.

Keeping general government budget balanced in the medium-term period

The Government will continue its conservative fiscal policy. The medium-term objective (MTO) of the Government is to keep the budget balanced. This objective meets the requirements of the Maastricht Contract and the Stability and Growth Pact.

Balanced budget policy ensures favourable environment for economic development and contributes to maintaining economic growth, by stabilising inflation and enhancing consumers' and investors' sense of security. Setting of the nominal balance objective is reasoned for Estonia as there have been great structural changes in the economy, which have not enabled sufficiently reliable assessment of the economic cycle and the cyclic position of the budget.

The goal of the nearest years to come is to keep the general government budget balanced. The Government plans to continue with annual budget balancing due to continuing changes, e.g. globalisation of economy, in the economic environment. Such fiscal policy will ensure a low level of debt burden, which is one of the pre-requisites for long-term sustainability of the state finance.

Keeping tax burden stable

The Government's plan is to keep tax burden stable on the level of 2003, which was 32.9% of GDP. However, the tax burden will be higher in the next few years, caused by improvement in payment of taxes resulting from effectiveness of tax administrators' work and enhanced obedience of tax payers. Taxing will partly be re-oriented from taxing income to taxing use of natural resources and pollution of nature, maintaining, at the same time, the simplicity and uniformity of Estonian tax policy. Reduction of income tax, which will be carried out during the next four years, will reduce the tax burden of both enterprises and private persons, and the Government will apply income tax exemption minimum starting from the second child in a family.

Labour force is rather highly taxed in Estonia. Excessively high taxing inhibits motivation for working and, therefore, the Government intends to reduce taxing of labour force to liven up the economy. Behind the reduction of the labour force's tax burden is the wish to give a positive impulse to development of labour market and move also towards achieving employment goals of

[9] Similar targets were already set at the pre-accession economy programmes 2001–2003.

the Lisbon strategy. Estonia has already been able to fulfil the Lisbon strategy for 2010 concerning employment of the elderly, whereas women's employment is near the goal. The total employment is still lower at the moment. Considering expanding of the tax base and improved administrative capability (incl. decreased proportion of envelope wages), financing of tax changes is not a problem. It is also supported by the economic growth – state revenues will grow also with a lowered income tax.

Cost-effectiveness in state administration and directing budget expenditures into economic development

Reduction of labour force's tax burden, set as a goal by the Government, requires, in balanced budget conditions, *ceteris paribus* **cost saving**. For that purpose, the Government intends to reduce administrative costs of the ministries, improve budget check of state institutions, and elaborate uniform policy concerning administrative costs.

An important direction in fulfilling the goal are the Government's activities in elaborating and implementing bases for a result-based pre-calculation and accounting system. Result-based pre-calculation values results more and provides greater flexibility in budget use. One pre-condition for implementing the new system is formalisation of principles of strategic planning, which should ensure that state institutions plan their activities by considering the greatest possible benefit to the society always in the conditions of limited resources and that expenses made on the bases of development plans are cost-effective, purposeful, and with maximum effectiveness. On the level of institutions, use of strategic planning principles in planning the state development and its connecting to resources that can be used by the country create pre-requisites for improvement of the quality of the country's financial management, incl. pre-calculation.

To ensure cost-effectiveness in state administration, institutions' goals and activities and the necessary resources in the entire administrative organisation should be reviewed by taking into account also the subject of reducing administrative burden, which is a priority in the EU, accompanied by saving resources in the state sector in addition to lower burden of the private sector. One activity necessary here is providing conditions for rendering services for cooperation of the private and public sector or creation of pre-requisites for implementing the so-called PPP model.

The structure of expenditures must also be changed to direct more expenses into activities supporting economic development. In Estonia costs of research and development are small compared with the other EU member states, and they need to be increased (with the main stress on the private sector). It is also planned to direct more resources into implementation of active labour market policy. The Government intends to find opportunities to involve the private sector more into capital-intensive projects, by involving private capital for example in investments into research and development and the implementation process of structural means.

Maintaining long-term sustainability of public finances

Estonia's fiscal policy has been conservative so far but, in addition to that, the public finances must be strengthened in the coming period to cope with demographic trends (ageing of the population) to ensure sustainability of the state finance in the long run as well. For the purpose, a successful pension reform has been carried out, and it is also the conservative fiscal policy of today which helps strengthen the public finance system.

3.1.2. Budget Priorities of the Government for the Years 2006–2009

The general goal of the Government of the Republic is achieving sustainable, socially and regionally balanced economic development. The priorities necessary for achieving the general goal have been established in the State Budget Strategy for the years 2006–2009. The important priorities include maintaining economic environment favouring business activities, enhancing competitiveness of enterprises, developing of educational and cultural areas, development of the population, coping in life and health care, local development, foreign and defence policy, and governing.

Economic environment favouring business activities

In 2006–2009, the balance-oriented budget policy will be continued and, during the medium-term period, a surplus or balanced budget of the general government will be ensured to support economic growth and creation of new workplaces. The goal set is ensuring the compliance of Estonia with the Maastricht convergence criteria, necessary for the introduction of euro in 2007 and becoming a full member of the European Economic and Monetary Union.

The Government supports decreasing the labour force's tax burden to provide a positive impulse to development of the labour market and move also towards the EU Lisbon strategy goals. Beginning from the 1st of January 2006, basic allowance will be increased to 2,000 kroons and, by the beginning of 2009, the income tax rate will be reduced to 20%.

The Government supports taxing depending on the activities' impact to the environment. On the 7th of July 2005, The Government approved initial bases for an ecological tax reform, which establishes partial re-orientation of taxes from taxing income to taxing use of natural resources, polluting nature and consumption. Measures will be applied to diminish the administrative burden of enterprises.

Enhanced competitiveness of enterprises

Increase of capability concerning research and development is supported to improve Estonia's competitiveness in the European scientific and innovation space and foster spread of new technology in the economy. „An Activity Plan 2005–2007 for Estonian Economic Growth and Employment" was approved by the Government of the 13th of October 2005, which is the basis for implementing the Lisbon strategy in Estonia. The Government is also making preparations for introducing effective measures becoming available in the framework of the EU 2007–2013 financial perspective.

Costs of state-financed economic sphere will be increased from 5.2% of GDP in 2005 to 5.5 of GDP in 2006. The growth of economic sphere costs results from increased financing of road maintenance (348.9 million EEK, incl. financing of rural municipality and city roads, 148.0 million EEK) and increase of resources allocated to business companies with state share for development of the transport infrastructure (growth 327.0 million EEK mostly at the expense of foreign aid).

Development of the area of education and culture

The Government supports financing research and development to foster knowledge-based development. Financing of higher and vocational education, at least in the scope of the present state-commissioned education, will be continued. Beginning from 2006, the calculated national *per capita* money for vocational school students will be considerably increased, based on the development plan of the vocational education system, and investments to vocational education will be continued, considering regional balancing of the vocational education network.

To improve the quality of education, a pay and professional qualification system for favouring teachers' self-training will be elaborated and implemented in 2006. The national *per capita* money based financing system, which takes into account children's different capabilities and needs, will be improved. State support for acquisition of teaching aids and extracurricular education for primary and basic school pupils will be increased, and training of sufficient and qualified pedagogical personnel for teaching Estonian and subject teaching in the Estonian language in non-Estonian gymnasiums will be ensured. National investment help, based on development plans of local school networks, will be ensured. Cultural and sports activities of the youth, amateur and health sports will be supported and hobby and sports centres in all counties will be developed in cooperation with the private sector.

State-financed education costs will be increased from 4.0% of GDP in 2005 to 4.1% in 2006. The greatest effect will be that of increase of the base cost (207.8 million kroons or 23.5%), increase of state-commissioned higher education volume (141.0 million kroons), free school lunch and educational support (90.0 million kroons) received by local governments.

Development of population, people's coping in life and health care

To increase birth rate, on the 1st of January 2006, the basic allowance will be applied starting from the second child in a family. Population growth will be supported by extending the period of parental leave payment by 3 months. Application of additional measures for child raising following the ending of the parental leave payment period will be considered.

To improve the inhabitants' social coping, rise of average full retirement pension to 3,000 kroons a month by the 1st of April 2006 will be ensured. The 3-pillar structure of the pension system and indexing as the basis of future pension rises will be maintained, and disability pension, survivor's pension and public pension will be increased in the same tempo with the retirement pension.

To restrict spread of infectious diseases, drug abuse and AIDS prevention activities will be made more effective. To ensure coping with people's health problems and fast recovery, a programme for better financing and availability of health care will be elaborated. Possibilities for establishing patients' free movement principles within Estonia in the case of special medical aid will be analysed. The aim of the Government is transparency, controllability and comparability of similar treatment costs of medical institutions. Implementation of measures for ensuring long-term sustainability of health care financing will be continued.

State-financed social security costs will be enhanced from 10.4% of GDP in 2005 to 11.2% of GDP in 2006. The growth results mainly from increase of pensions financed from social security payment revenues (2002.6 million kroons), increased payments of the compulsory pension fund (328.4 million kroons), and extension of the period of parental leave payments by 3 months (191.1 million kroons). State-financed health care costs will be increased from 4.7% of GDP in 2005 to 5.1% of GDP in 2006. The biggest increase will be that of national medical security costs of the Estonian Health Insurance Fund (1,265.7 million kroons).

Local development

The key issue of Estonian regional development is strengthening of local governments, increase of their independence and revenue basis and making county-level cooperation more effective. The Government will improve availability of state services in all counties. The rate of personal income tax received by local governments will be increased from 11.6% to 11.8% of taxable income starting from 1 January 2006.

The Government continues to support voluntary uniting of local governments and state support of local investments. The budget equalisation fund will be increased at least in the same pace with the average growth pace of the state budget. Principles for renovation and maintenance of national roads passing towns will be fixed and the rate of fuel excise tax allocated to local governments for financing maintenance of local roads will be increased twice. Internal and external investments into water, waste and nature protection projects will also be increased, and the process of proceeding the projects will be simplified. To enable dwelling places for the inhabitants, supporting of municipal houses will continued and KredEx will receive resources allocated to it for solving problems of forced tenants.

The Government makes preparations for effective introduction of support designated for promoting life in rural areas, becoming available in the framework of the EU 2007–2013 financial perspective. Promotion of rural life will be financed in accordance with the European Union Common Agricultural Policy Implementation Act and the Rural Development and Agricultural Market Regulation Act.

From 2006, local governments will be finally transferred organisation of care for the disabled together with the resources for that. The Government's priority, primarily in the field of social care, is to assign functions from the state to local governments as they can best assess needs of the persons.

Foreign and defence policy

The Government will not change bases of foreign and security policy of the Republic of Estonia by updating, at the same time, the long-term development plan of foreign representations. The Government sets the goal to allocate up to 2% of GDP for defence costs in compliance with the NATO definition and meeting Estonia's specific needs. The Government will take the clear direction of allocating development aid to developing countries.

Governing

The Government acts on the basis of the principle that increase in the Government sector's operating costs will not exceed the level of the last years and the level of financing net operating costs will be retained.

3.2. General Government Budget Balance

3.2.1. Nominal Balance of General Government Budget

In 2004, the overall **surplus of the general government** amounted to 2.4 billion EEK, which totals to 1.7% of annual gross domestic product. The year 2004 was described by abrupt decrease of local governments deficit, to 0.2 billion EEK from 0.6 billion EEK the year before and decrease of the surplus of social security funds as well as that of general government.

The surplus of general government is mainly based on lower expenses as compared to the budget, the share of surplus income of revenues was smaller as compared to previous years. The state budget expenditures were lower than expected because of changes made to the State Budget Law, according to which up to three percent of determined expenditures can be handled as transferred costs and be used for the same purposes during the following accounting year. Such stipulation was passed to decrease expenditures made by ministries and constitutional institutions in the end of a year, to use all resources at their disposal. The balance of unused resources of state budget in the end of 2004 was 4 788.9 million EEK (3.4% of GDP), from which 2 739.6 EEK were transferred to the year 2005 (1.9% of GDP).

The surplus of government budget **in 2005,** based on the summer forecast of Ministry of Finance, was expected to be 392.7 million EEK (0.3% of GDP). The major contribution to the general government budget surplus was made by the forecasted surplus of 416.4 million EEK of Unemployment Insurance Fund. 296.3 million EEK of surplus was forecasted to the central government in spite of the 349.8 million EEK deficit of Pension Insurance Fund. Fiscal position was deteriorated by the activities of local governments with the deficit expected to be 350 million EEK.

Since the revenues received exceeded the expected level, the government decided to make a **supplementary budget** based on the summer forecast issued by the Ministry of Finance, which the Riigikogu passed on the 26th of October 2005. The supplementary budget increased this year's revenues by 2.16 billion EEK and expenditures by 1.89 billion EEK. When preparing the supplementary budget it was decided that not all of the supplementary income would be used and increase in running expenses would be avoided. The main objectives of the supplementary budget were increase of resources and investments mainly to construction of roads. Since the revenues received exceeded the expected level it was possible to cover the shortage of Health Insurance Fund and partly that of Pension Insurance Fund.

Within the last months more favourable economic developments than expected have appeared and arising from that higher revenues have been received, based on the results of the first three quarters it has also become apparent that less expenditures than planned shall be made this year by Unemployment Insurance Fund as well as central government, so based on the forecast of Ministry of Finance the general government actual surplus in **2005 shall reach 4.1 billiard EEK (2.6% of GDP)**. Only the local governments' financial position has deteriorated remarkably whose budget deficit can reach 500 million EEK. The above is caused by increase of expenditures before the local government elections in October.

According to the summer forecast the general government surplus for **2006** reaches 215.9 million EEK or 0.1% of GDP, at the same time the central government budget is in balance as expected in spite of the almost one billion EEK deficit of Pension Insurance Fund. Arising from favourable economic developments and successful tax administration higher surplus of general government than planned is already expected in 2005 but higher surplus than expected by the summer forecast is most likely also in 2006. As the evaluation regarding the surplus must be consistent with macro-economic forecast and consider relations between different industrial sectors, it will be published as the result of the following economic forecast.

Box 2. Cyclically adjusted and structural budget balance

The medium-term objective (MTO) of the government is to keep the general government budget in balance. One of the possibilities for supervising fulfilment of the above objective is to view nominal or actual budget balance over the medium-term period. At the same time the nominal budget balance does not take into account economy cyclicity, i.e. in case economic growth exceeds the potential level, tax revenues increase and social expenditures to be made by the state, mainly unemployment insurance, decrease. The situation will be opposite to the above in case economic growth is lower than the potential level – state tax revenues are lower and social expenditures higher. Cyclically-adjusted budget balance is used for evaluating government budget balance, from which have been removed fluctuations arising from economy cyclicity.

Cyclically-adjusted budget balance shows which the government revenues and expenditures would be if GDP would be in the potential level. The advantages of the above as compared to the cyclically non-adjusted balance are: possibility to analyse short-term budget position, possibility to plan and control medium-term budget and following of continuity and stability of the balance formation process. As a rule cyclic budget balance is reached as follows: 1) finding of potential GDP and output gap; 2) defining of sensitivity of government tax revenues and expenditures, i.e. in which way an economic cycle influences revenues and expenditures; 3) eliminating of the cyclic component from nominal balance. Cyclically adjusted primary budget balance is reached by adding government interest charges to the cyclically-adjusted budget balance.

In addition to the cyclically-adjusted budget balance structural budget balance is used, the latter is reached by removing from nominal budget balance besides the influence of the economic cycle also single and temporary factors. Temporary factors are measures having remarkable influence on budget that have only temporary and non-frequent influence on the cyclically adjusted budget balance (see ch 3.2.3). The indicator of structural balance is used when handling surplus adverse balance for evaluation whether a member state has fulfilled the recommendations presented by the Council of Ministers of EU, as it makes it easier to evaluate the budget position, as single or temporary factors can be used for "distorting" the budget balance. Besides the Stability and Growth Pact stipulates that the member states that have not reached medium-term objectives must annually improve their structural budget balance 0.5% from GDP.

Notions:

- Financial balance – divergence of budget revenues and expenditures.
- Primary balance – financial balance increased by interest payments.
- Cyclically-adjusted balance, CAB – any cyclic components have been removed from the nominal budget balance.
- Cyclically-adjusted primary balance, CAPB – primary balance, from which have been removed any cyclic components.
- Output gap – divergence of the actual and potential GDP at a certain time.
- Potential GDP – level of GDP, reachable by making the optimal use of existing/usable production input, without any additional price pressure.
- Structural budget balance – balance received by removing temporary and single measures from cyclically-adjusted budget balance.

3.2.2. Cyclical Balance of General Government Budget

Results of an analysis conducted by the Ministry of Finance using the production function method[10] indicate that Estonia's output gap, having been positive within the years 2000-2004, will be negative during the medium-term forecast period, and exceeds for less than percentage as the average the estimated GDP level within the years 2005–2009, being the highest in 2007[11]. The growth exceeding the estimated level within the years 2000–2004 was first and foremost caused by the strong internal demand, low interest rates favoured investments as well as consumption. At the same time the investments made within the above-mentioned period have increased the GDP potential. Relatively high structural unemployment and discrepancy between labour supply and actual demand makes it impossible to make the maximum use of the present labour potential, the latter together with deceleration in growth for internal demand serve as the major reasons of the negative gap of GDP within the medium-term period.

If the cyclical[12] position of Estonia's budget is evaluated based on the output gap, the results suggest that Estonian fiscal policy is counter-cyclical in the mid-term period. In the mid-term period, the government of the republic will continue its conservative fiscal policy and keep the general government budget in balance, as required by the Stability and Growth Pact, and arising from the slightly negative gap of GDP within the forecast period, the cyclically-adjusted budget position is positive. Within the last years Estonian fiscal policy has been pro as well as counter-cyclic. Under the conditions of positive gap of GDP within the years 2000-2004, we had cyclically-adjusted adverse budget in 2000–2002, the major reason for the above being remarkable gap of GDP and relatively low actual budget balance. The 2003–2004 showed cyclically-adjusted budget surplus, with the gap of GDP close to zero and rather high actual budget balance.

Table 7

Cyclical developments in 2004–2009
(% of GDP)

	2004	2005*	2006*	2007*	2008*	2009*
1. Real growth of GDP (%)	7.8	6.5	6.6	6.3	6.3	6.3
2. Net lending of general government	1.7	0.3	0.1	0.0	0.0	0.0
3. Interest expentiture	0.2	0.2	0.2	0.2	0.1	0.1
4. Potential GDP growth (%)	11.0	11.0	10.2	9.6	9.1	8.9
5. Output gap	0.3	-0.3	-0.9	-1.3	-1.1	-0.7
6. Cyclical budgetary component	0.3	-0.3	-0.8	-1.2	-1.0	-0.7
7. Cyclically-adjusted balance	1.4	0.6	0.9	1.2	1.0	0.7
8. Cyclically-adjusted primary balance	1.6	0.8	1.1	1.4	1.1	0.8

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

3.2.3. One-off Measures and Structural Balance of General Government Budget

One-off and temporary measures having remarkable influence on the balance are the measures that have only temporary and non-frequent influence on the cyclically-adjusted budget balance. Though the general principles have been defined based on which the influence of a measure is classified as temporary, each case is still observed separately, considering also the extent of a measure, as only

[10] The methodology for evaluation of output gap and cyclically adjusted budget position has been discussed in the Estonian Convergence Programme May 2004.
[11] The economic growth forecast issued by Ministry of Finance in summer 2005 has been used when evaluating the output gap.
[12] Evaluating the cyclical position the tax elasticities from the European Commission were used.

the measures remarkably influencing the government budget are handled. As temporary and one-off measures can be used for "distorting" the budget balance, the influence of such is removed from cyclically-adjusted budget balance and structural budget balance is received making better evaluation of budget position possible.

One-off measures characteristic to Estonia are presented in Table 8. In 2004 influence of such measures was -0.7% of GDP, in the years 2005–2006 the influence is respectively 0.1% and 0.4% of GDP. In Estonia the major one-off measures influencing the budget are selling of state property in extra amount and concerning VAT – deferment of moment of taxation.

According to the deferment of moment of taxation after accession to the EU in 2004, VAT for the goods imported to Estonia from other EU states is not paid when importing but the tax is declared on the VAT return of respective period. As the result of the change there was no change in the tax base or tax revenue but only the taxation moment was defered. With the change to the Value Added Tax Act introduced in 2005, there are specified the articles regulating deduction of VAT to be paid for the goods imported as input VAT, according the articles with the directives of EU.[13]

Regular income received from selling state property is based on the average sums received from selling state property in 2000-2004. According to the above the regular income is *ca* 200 million EEK per year. Removing the sum from 539 million EEK stipulated by the supplementary budget of 2005 and 989 million EEK planned for the supplementary budget of 2006, the amount of selling state budget in extra amount is received.

Factors of minor importance are:
- nonrecurrent payment received from EU in 2004 after accession to EU;
- extraordinary dividends received from AS Eesti Energia;
- fines for excessive stock reserves in 2006 and any other fines arising from possible obligations of the state to EU.

Table 8

One-off measures and influence of the above in 2004–2006

Measure	**Year**	**Amount* *(mio EEK)***	**% of GDP**
Influence on revenues			
VAT – deferment of the moment of taxation due to accession to EU	2004	-1,200	-0.8
Lump-sum payment from EU budget	2004	274	0.2
Selling of public property in extra amount	2005	340	0.2
Changes in declaring VAT for imported goods	2005	-215	-0.1
Selling of public property in extra amount	2006	790	0.5
Extraordinary dividend payments from AS Eesti Energia	2006	200	0.1
Influence on expenditures			
Fines for excessive stock reserves and other fines	2006	250	0.1
TOTAL	2004	-926	**-0.7**
	2005	125	**0.1**
	2006	740	**0.4**

** – approximate estimation*
Source: Ministry of Finance of Estonia, Statistical Office of Estonia.

[13] As stipulated by the changes in law taxpayer is to deduct value added tax paid or to be paid for the goods imported, as input VAT from its taxable turnover with the VAT return of the month of importing the goods, not any more with the VAT return of the month VAT for imported goods is to be paid.

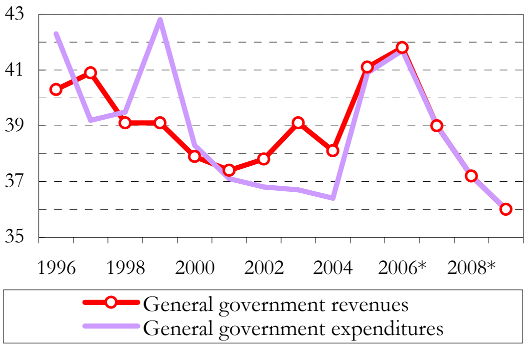
Structural budget balance is received by removing one-off and temporary measures from the cyclically-adjusted budget balance. Arising from rather high cyclical balance in 2004-2006 as well as relatively low amount of one-off measures, the structural balance is also positive within the mentioned period. As Estonia has neither nominal nor cyclically-adjusted adverse budget, one-off or temporary measures are not used for “distorting” budget balance in Estonia.

Figure 6

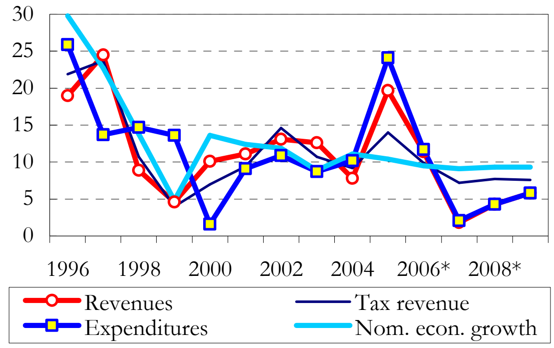
General Government Budget Balance (ESA 95)

(% of GDP)

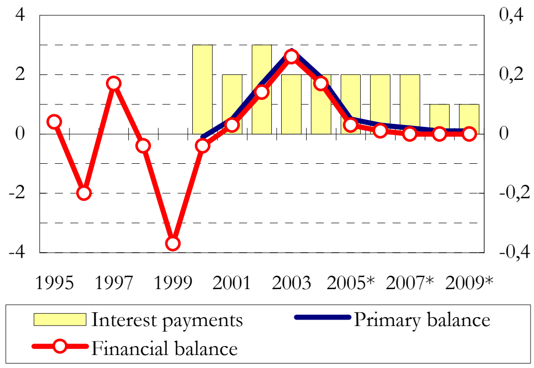
A. Revenues and expenditures



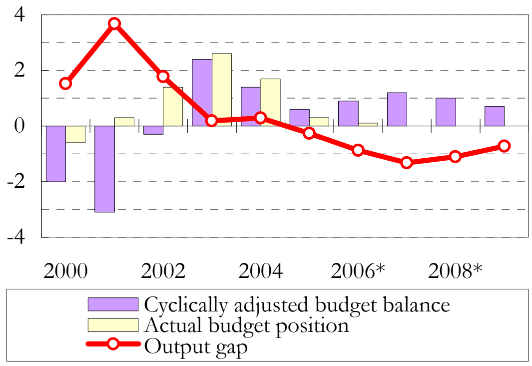
B. Growth of general government revenues and expenditures *(%)*



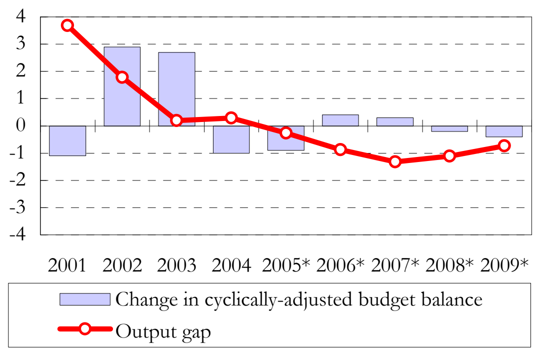
C. General government balance



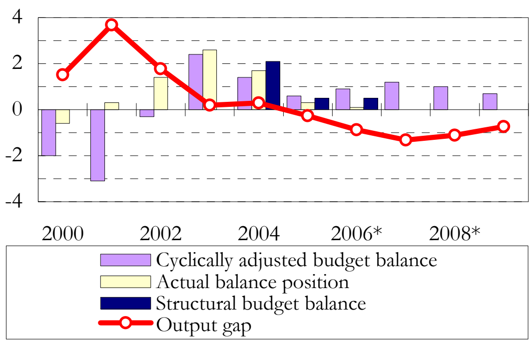
D. Cyclically-adjusted budget position



E. Change in cyclical budget position



F. Structural budget position

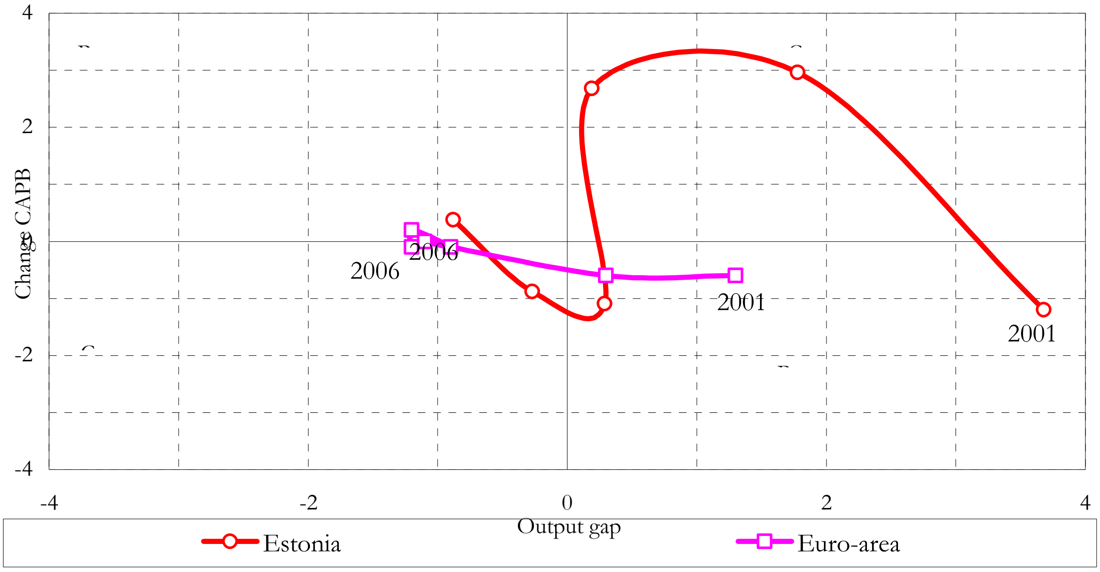


Sources: Ministry of Finance of Estonia, Statistical Office of Estonia.

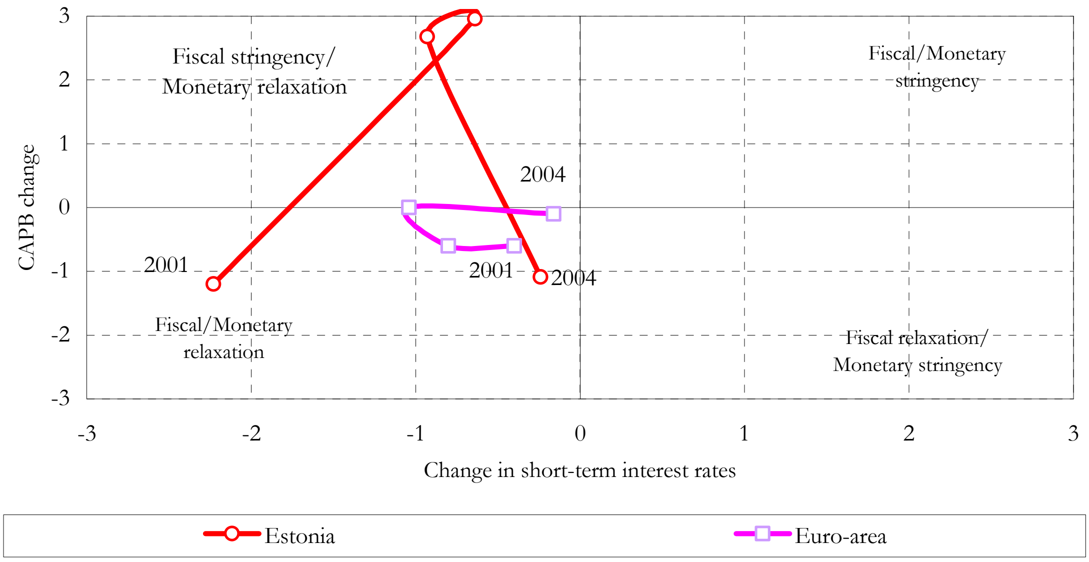
Figure 7

Fiscal and monetary policy of Estonia and euro area (% of GDP)

A. Fiscal stance and cyclical conditions of Estonia and euro area in 2001–2006



B. Policy mix of Estonia and euro area in 2001–2004



Sources: Ministry of Finance of Estonia, Eurostat, Public Finances in EMU 2005.

3.3. Roles and Budget Balances of Different Levels of Government

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

The financial position of central government is most closely related to economic cycle, mostly due to financing – as major share of central government revenues consists of taxes more sensitive to economic development. Therefore, central government has been the main cause for deficit during the economic recession cycle (for example in 1999), while recent years are characterised by surplus, due to better collection of taxes. The year 2004 was the fourth surplus year for the central government, and the surplus reached the level of 1.7% of GDP. Based on the latest data the surplus in 2005 is expected to reach the level of 2.6% of GDP (instead of the official forecast of 0.3% of GDP). **In the medium-term, the central government shall continue close-to-balance position, ensuring it based on the objective of maintaining general government budget balance.**

Pension insurance being part of the central government suffers from deficit this year and as forecasted also during next years. Under the terms of ageing population Estonia has almost passed pension reform and started three pillar system (compulsory state pension insurance, compulsory funded pension and additional private pension) to maintain sustainability of the state finance. State pension insurance fund receives 20/33% of the collected social tax, from which 4/33% is transferred to the funded pension system. To find additional resources for financing pension insurance (and also health insurance) the government goes back to the initial idea of pension reform according to which the minimum obligation of social tax is to be paid from the minimum of monthly salary. In 2006 the sum on which the minimum obligation is based shall be raised to 1,400 EEK per month and for 2009 stage by stage till the minimum of monthly salary.

Pension raise has been stipulated by the state pension insurance law, according to which for the 1st of April each year state pensions are adjusted with a coefficient being the arithmetic average of the annual growth of the consumer price index and the annual growth of the receipt of the share of pension insurance from social tax. In addition to the above there are extraordinary pension raises agreed by the coalition agreement. As from the 1st of July 2005 the average pension was raised to 2,726 EEK per month and as from the 1st of April 2006 the average pension shall be raised to *ca* 3,000 EEK per month.

Social security funds include the Health Insurance Fund and Unemployment Insurance Fund. Health Insurance Fund is a social insurance fund acting on the principles of solidarity and is financed by the collected social tax (13/33% from the base). As stipulated by the law of Health Insurance Fund it is obliged to have capital reserves and risk reserves. Capital reserves form at least 6%, risk reserves at least 2% of the budget. The budget position of health insurance has been stable, but considering the demographic situation in Estonia, additional measures are to be applied to guarantee long-term sustainability. The major principle is to maintain at least balanced financial position of state health insurance.

Financing of Health Insurance Fund can be improved increasing the tax base by raising the sum serving as the minimum social tax obligation. To maintain sustainability of the health insurance under the terms where the population is becoming older it has been considered to expand in the future the range of such persons for whom social tax is paid and it is tried to avoid increase of the share of the persons who are regarded as equal to the insured. At the present moment from the total amount of insured persons 47% are directly taxable and 50% are persons equal to those insured under the principle of solidarity, for whom social tax is not received. Health insurance expenditures made as monetary and non-monetary compensations are managed and optimised, maintaining the present level of expenditures and considering needs of the society. Decrease of the range of obligations of Health Insurance Fund is considered as a possible measure for saving. Promoting and favouring of healthy lifestyle as well as improving the health of population in general, the latter decreasing the number of persons requiring medical treatment, plays an important part in maintaining the long-term sustainability of Health Insurance Fund.

The main tasks of Unemployment Insurance Fund are payment of unemployment insurance premiums, insurance premiums in case of denouncement of collective agreements and insurance premiums in case of insolvency of an employer. Unemployment Insurance Fund receives resources from obligatory unemployment insurance payments of the insured, the rate of which as stipulated by the law on unemployment insurance can be 0.5–2% for the insured and 0.25–1% for the employer from gross earnings. In 2005 the employee pays 1% of unemployment insurance tax from the gross earnings and the employer 0.5%. Due to continuously increasing surplus the government lowered as from 2006 the tax rate – employee’s tax rate was lowered to 0.6% and employer’s to 0.3%. Capital reserves of Unemployment Insurance Fund form at least 10% of the resources of Unemployment Insurance Fund. Due to lower expenditures and higher receipt Unemployment Insurance Fund has had surplus each year and the accumulated reserves formed 1.3 billion kroons in the end of 2004.

From one hand, the level of expenditures of social security funds is determined by the volume of revenues collected, and from the other by legal reserve requirements of the funds. Based on the latter, the Health Insurance Fund has constantly been in surplus but as from the year 2005 the situation has changed remarkably and as predicted today the Health Insurance Fund shall suffer deficit at least within the period 2007-2009. The surplus of the Unemployment Insurance Fund is attributable to a low cost level, characteristic of the fund’s first years (Unemployment Insurance Fund was established in 2002) and the need to establish a sufficient reserve. In the future we can expect the decrease of surplus of Health Insurance Fund. According to the forecasts, social security funds will continue with a slight surplus (*ca* 0.2–0.3% of GDP per annum).

The main tasks of **local governments** include co-ordination of local life and the primary education system, as well as promotion of human activities through social benefits. The number of functions delegated to local governments by the central government has increased over the last several years. The latest expenditure item transferred to the budgets of local governments was the payment of teachers’ salaries since 2000. Since 2005 the resources for social care of disabled persons were transferred to the budgets of local governments and investments to be made from state budget in the field of education were added to the capitation tax of schools for general education.

Local government units have a constitutional right for independent budgeting, which implies that they have relative freedom to form budget income and expenditures. Using the possibilities granted by the law, local governments have had a deficit in their budgets, starting since independence with high inflation during the first few years. The share of budget revenues of Estonian local governments within the previous years has been approximately 9% of GDP and share of tax revenues approximately 4.4% of GDP, being the average as compared to other EU member states. At the same time the budget expenditures of local governments have remained in the level of approximately 9.5% of GDP within the last years.

In 2003, the deficit of local governments decreased by approximately 50% in comparison with the previous year, and the decrease continued in 2004. Besides that, the supplementary budget for 2004 contributed to improvement of the position, since local governments were thereby compensated the decrease in revenue base due to tax reform. In 2004 the deficit of local governments amounted to 0.2% of GDP, and it will remain at the level of approx. 0.1% of GDP during the medium-term period. On one hand, the deficit decrease is caused by establishment of the goal of achieving balanced budgets in the medium-term by local governments (mainly Tallinn), and on the other by reaching of the borrowing limits.

Limitations on debt obligations to local governments have been stipulated by the law on local goverment and town budget. The total amount of unpaid loans, capital rent payments and issued bonds and any other loan obligations must not exceed 60% from the budget revenues planned for current accounting year and the total amount of loans and loan interest to be paid, capital rent payments and interests, expenses related to redeeming of bonds and any other loan obligations must not exceed in none of the coming accounting years 20% from the budget revenues planned for an accounting year.

The central government's objective is to reach in the medium-term period decrease of the deficit of local governments consolidated budget, applying measures of financial discipline. The share of local governments in receiving personal income tax has been increased to strengthen their financial position. When the state started with lowering the income tax rate, the existing distribution basis of the income tax of a private person was changed – instead of 56% of the total receipt local governments' share was stipulated to form 11.2% from taxpayer's taxable income, i.e. the share received by the local governments does not decrease after lowering the income tax rate. Today the percentage has been increased to 11.6% and in the year 2006 it shall be raised to 11.8%. Planned legislative alterations have long-term influence on the deficit of local governments – act of financial management of a local government unit and act on insolvency of a local government unit are being prepared, both acts are to improve the financial discipline of local governments and to influence the local governments to prepare conservative budgets.

Table 9

General government budget balance 2003–2005

(mio EEK)

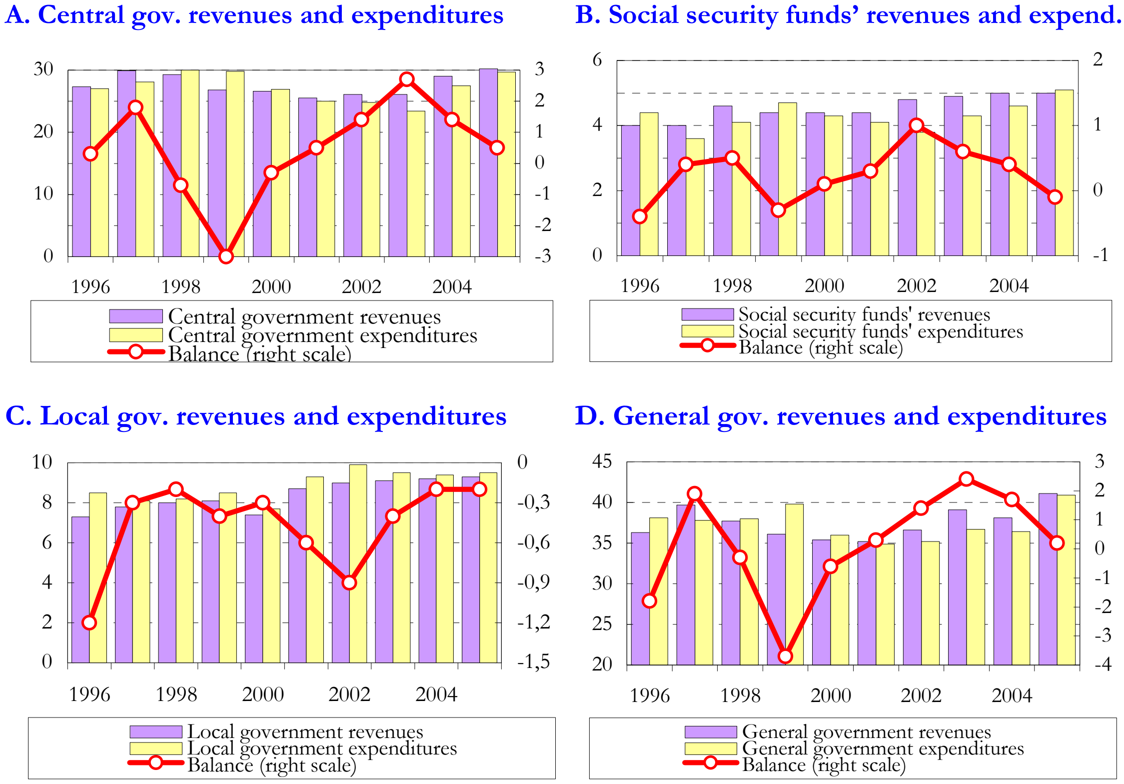
	2003	2004	2005 budget	2005 official forecast	2005 latest estimate
General gov. balance	**3,018.7**	**2,380.0**	**30.5**	**392.7**	**4,100**
Central government balance	3,039.0	1,936.0	30.5	296.3	4,000
incl. pension insurance	*277.9*	*-131.9*	*-680.8*	*-349.8*	
Social security funds	857.0	679.0	280.0	446.4	600
Local governments	-579.0	-235.0	-280.0	-350.0	-500

Source: Ministry of Finance.

Figure 8

General Government Fiscal Indicators (ESA 95)

(% of GDP)



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

3.4. Financing of General Government

3.4.1. Debt of General Government

The main goal of Estonian fiscal policy throughout the years of independency has been to keep a balanced budget of the general government in the medium-term, which has resulted in a low level of debt burden. General government debt amounted to 5.4% of GDP by the end of 2004. Estonian general government debt was 7.6 billion EEK at the end of 2004, out of which the local government debt amounted to 45.6%, having increased as from 2001 by 5.9 per centage points of GDP. The major cause of the above is the continuous deficit of local governments, as it is not possible any more to sell property to cover the deficit and therefore local governments have been borrowing. In 2004 the central government debt level remained in the same level as compared with the previous year as there is no need for loan money due to surplus.

Indebtedness to foreign creditors amounted to 46% from the total loan sum, forming 3.5 billion EEK as per end of the year, whereat the foreign debt of central government amounted to 3.2 billion EEK and that of the local governments 0.3 billion EEK. Local governments have actively involved foreign capital in the recent years and therefore the domestic debt of local governments reached 4.1 billion EEK in the end of 2004. Local governments' loan to domestic commercial banks forms the major share of loan instruments amounting to 2.3 billion EEK in the end of 2004.

Table 10

Change of general government debt burden in 2004

	31 December 2003		31 December 2004		Change
	million EEK	% of GDP	million EEK	% of GDP	%
General government	**7,570**	**5.9**	**7,627**	**5.4**	**0.7**
Domestic debt	3,738	2.9	4,108	2.9	9.9
Foreign debt	3,832	3.0	3,517	2.5	-8.2
Central government	**4,174**	**3.3**	**4,145**	**2.9**	**-0.7**
Domestic debt	767	0.6	922	0.7	20.2
Foreign debt	3,407	2.7	3,223	2.3	-5.4
Local governments	**3,396**	**2.7**	**3,480**	**2.5**	**2.5**
Domestic debt	2,971	2.3	3,186	2.3	7.2
Foreign debt	425	0.3	294	0.2	-30.8

Source: Ministry of Finance of Estonia.

The general government nominal debt has increased over the last couple of years despite budget surplus. The reason can mainly be found in the fact that central government has not used the surplus for prior repayment and decreasing of debt as, according to international standards, the debt burden is very low and advanced repayment of debt would not be useful for Estonia arising from agreements concluded. The surplus has instead been used to increase deposits and to establish reserves of liquid financial assets, above all bonds with low risk level.

Other general government stock-flow adjustments as compared to balance have been expansion of the share capital of Riigi Kinnisvara AS, including the major investment for renovation of schools. The share of privatisation revenues has been marginal within the last years.

In the next few years, general government debt burden will decrease even more, reaching the level 2.8% of GDP by the end of 2009. Here it is assumed that the repurchasing of (euro)bonds emitted by central government in the volume of 100 million euro will be financed from the available financial resources. The decrease will be mostly caused by preservation of general government budget balance, which means borrowing only the sums necessary for repayment of previous loans, leaving the reserves practically untouched. While the central government's debt burden is reduced due to budget planned with surplus, according to the forecast of the Ministry of Finance of Estonia the local governments continue with a deficit, and will continue to finance their deficit by loans. However, the threat on the overall financial position of general government to maintain a balanced budget will decrease, as several local governments approach the legally set borrowing limit, which prescribes a conservative fiscal policy, and thus a lower need for borrowing, as well as the income base of local governments will improve.

Table 11

General Government Debt Burden 2004–2009

(% of GDP)

	2004	2005*	2006*	2007*	2008*	2009*
1. Gross debt	**5.4**	**4.6**	**4.4**	**3.3**	**3.0**	**2.8**
2. Change in gross debt ratio	-0.5	-0.8	-0.2	-1.1	-0.3	0.2
Contribution to changse in gross debt						
3. Primary balance (-)	-1.9	-0.5	-0.3	-0.2	-0.1	-0.1
4. Interest expenditure	0.2	0.2	0.2	0.2	0.1	0.1
5. Stock-flow adjustment (SFA)	1.7	0.6	0.3	-0.8	0.0	0.0
6. Implicit interest rate on debt (%)	**4.6**	**3.7**	**4.3**	**4.5**	**3.0**	**3.3**

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

Box 3. Other general government stock-flow adjustments

Stock-flow adjustment is the index showing the difference of stocks of the previous and the current year and flow of the current year.

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

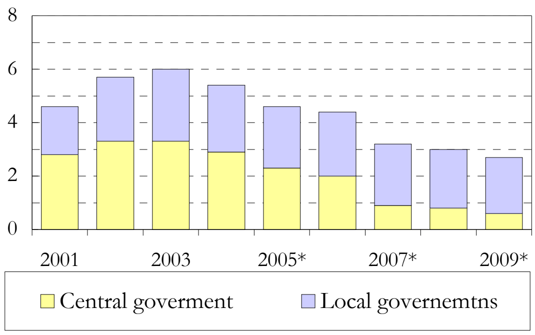
Positive (negative) SFA shows that besides deficit (surplus) debt is decreased (increased) also by other factors (financial interactions, reassessments, difference in cash and accrual method reporting).

In theory the change of debt should be almost the same as the deficit/surplus at least within the long-term period, but especially the last years have proved that correlation between the change of debt and deficit is not so obvious with a number of states. With Estonia SFA has been high especially within the last years, as the surplus has not been used for decreasing the debt but more for increasing the reserves. The same tendency is characteristic of Northern countries, that create reserves for social insurance preparing themselves for growth of expenses arising from ageing of population. Indirectly SFA shows that some countries can still have problems with budget statistics.

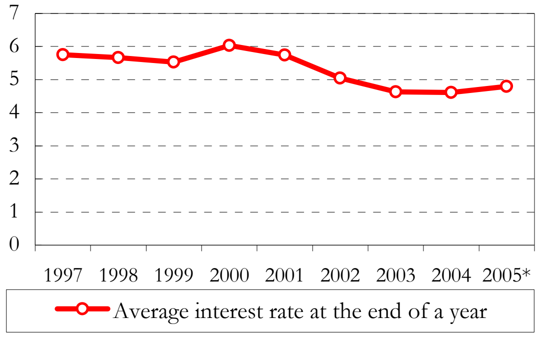
Figure 9

Debt burden development
(% of GDP)

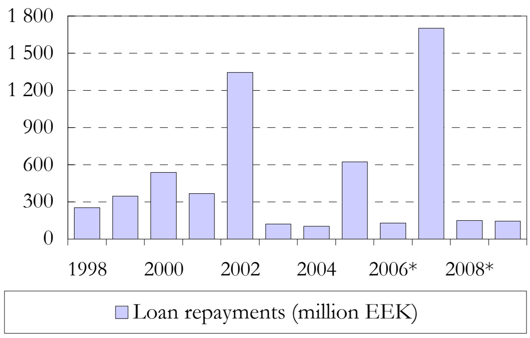
A. General government debt



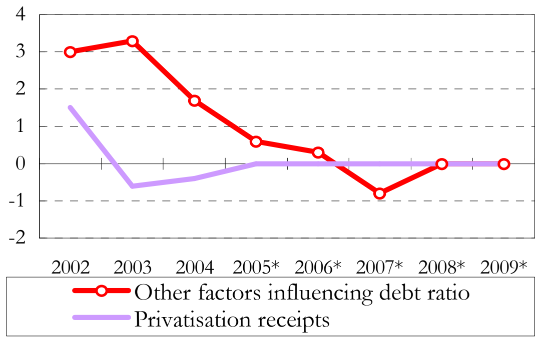
B. Average interest of the central gov.[14] debt



C. Repayment of central government loan



D. Factors decreasing general gov. debt



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

3.4.2. Financial Reserves of General Government

Due to considerable general government buget surplus in the recent years and, above all, in central government and social security funds, the growth of general government reserves has been remarkable. At the end of 2004, central government's financial reserves exceeded the central government debt more than threefold and reached the amount of 13.5 billion EEK or 9.5% of GDP. Major part of financial reserves – 9.4 billion EEK – has been invested into low risk bonds, 4,1 billion EEK is kept on different deposit and other accounts.

The objective of forming management strategy of financial reserves is to guarantee sufficient liquidity for servicing state budget as well as for timely fulfilment of state obligations. When creating the disposition strategy of equalisation reserve it is presumed that the reserve is only used for relieving socio-economic crises under the terms of economic growth and balanced budget.

Management of reserves includes a combination of passive investment strategy where an optimal standard portfolio has been prepared for each amount of resources and active investment process making use of the actual possibilities of the market, where the standard portfolio is deliberately discarded. Whereat the standard portfolios express investor's risk bearance and profitability expectations and must guarantee fulfilment of fundamental objectives of investing the resources -

[14] Central government without foundations and public-legal entities.

maintaining the value of the resources and sufficient liquidity within the investment period set and reaching of maximum profit within the risk limitations set. When administering the reserves currency, interest, liquidity and credit risk is managed.

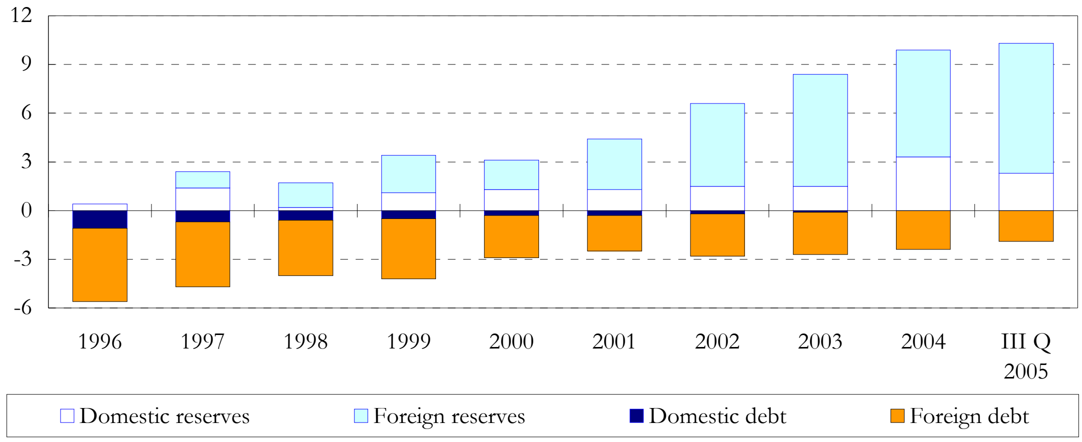
The current investment strategy of the Stabilisation Reserve Fund has been prepared considering the principle that would guarantee with 95% probability non-negative profitability of the reserve in three month perspective in any market situation. It has also been presumed that resources of the reserve can be fully used after three months. The above strategy was created in the I phase of rapid growth and starting of active management of the reserve and it is to be renewed within the coming years to reach higher productivity of resources by prolonging the investment period.

When investing the resources and reserves used for managing liquidity of the daily state budget, continuously high liquidity and short-term investing is maintained, in order to efficiently manage disparity that comes from different timing of revenue received and expenditures made. Seasonality arising from divergence of state budget revenues and expenditures has increased due to extensive application of the EU subsidiary schemes and a great number of financing transactions. For example within the years 2006-2009 subsidiary schemes of the EU are bridge-financed from the state budget prior to receipt of money from the grantor for approximately 2 billion EEK per annum.

Figure 10

Central Government Debt and Reserves at the End of the Period

(% of GDP)



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

4. SENSITIVITY ANALYSIS AND COMPARISON WITH THE PREVIOUS PROGRAMME

4.1. Alternative Scenarios and their Effect on Budget

Different risks arising from domestic as well as from foreign economy influence realisation of the base forecast. The major internal risk lies in continuous rapid growth of domestic demand, jeopardising improvement of the foreign balance and decreases development perspectives of Estonian economy in the long term. The present current account deficit of Estonia, rather high in international concept, has increased our vulnerability in case of unfavourable developments, making Estonian domestic demand dependent on the loan money received by making direct investments as well as due to the low interest rates in the euro area. Ending of such money flows results in arising of remarkable limitations when financing the domestic demand, slowing down perspectives for economic growth.

The unconsistent raise in salaries compared to raise of productivity as well as rapid growth of credit due to low interests can lead to acceleration of private consumption and decrease of competetive-ness of economy in foreign markets. In longer perspective it can lead to decline of economie's growth potential as well as to deterioration of foreign balance and decrease of economy's reliability. Credibility can also be debased by unexpected changes in Estonian economic policy.

Adjusting of the time-series of GDP in summer 2005 has changed the understanding of developments having taken place in Estonian economy within the last years as remarkably higher economic growth was shown. Accession to the EU has brought along considerable positive effects to Estonian economy. Distinguishing them as one-time or longer-lasting is not easy considering the short period passed from the accession.

Based on the data available in July-August, most of the economic analysts could not expect rapid growth to 9.9% in the second quarter of 2005. Acceleration of export growth in the situation where the input of foreign economy growth is marginal, indicates the following. On one hand the growth potential of Estonian economy has been clearly underestimated; on the other hand it is not clear for how long the positive effects accompanying accession to the EU will last. When preparing the base forecast by Ministry of Finance conservative scenario was considered, presuming that the positive effects accompanying accession to the EU will disappear in the middle of 2005. In the present risk scenario the situation is simulated where the above effects last longer, influencing also the long-term potential economic growth via using productive factors more effectively.

The major risks arising from foreign economy are those connected to the developments with world market oil prices. Rise in oil prices can slow down the perspectives of world economy, including that of the EU economy. For Estonia it would mean considerable decrease in export demand leading to deteroration of foreign balance and perspectives of economic development.

Most important for Estonia related to the developments with the crude oil price in the world market is its influence on our inflation as our objective is to introduce euro in January 2007. In case when the the Maastricht price stability criterion becomes impossible to meet due to acceleration of inflation and arising from the above introduction of euro shall be postponed for a period unknown, it shall have negative influence on reliability of Estonian economy as till now foreign investors as well as rating agencies have prepared the estimations considering early introduction of euro. At the present moment it can be said that the oil risk has for the most part been realised for Estonia being the major factor having accelerated inflation within the last months. Influence of oil price developments on the consumer price index in Estonia has more closely been viewed in the part describing oil risk scenario.

4.1.1. Oil and Export Risk Scenarios

Oil risk scenario

Geopolitical uncertainty with supply limits as well as the growing market demand have influenced the oil prices more than a year or two ago. Therefore the influence of crude oil prices on the development of world economy has remarkably increased.

The dynamics of oil prices within the last months has exceeded any expectations, setting sequential record levels. When preparing the forecast by Ministry of Finance world oil prices were approaching 60$/brl[15], at the same time the expectations enabled to presume that the prices would not exceed the level of 60$/brl and would remain between 50–60$/brl until 2007. The developments after publishing of the forecast showed that the level of 70$/brl was surmountable.

The importance of oil risk for Estonia is shown by the share of motor fuel in consumer basket exceeding by almost twice respective EU25 average, reaching 7%. Further rise in oil prices has been the major factor causing inaccuracy of inflation forecast.

When preparing the oil risk and its influences, Commission's autumn forecast has been considered. Direct influence on motor fuel as well as indirect on transport services and prices of other goods and services has been considered.

According to the risk scenario inflation accelerates by 0.4 % in 2005, whereat the highest influence shall be on the year 2006, when as forecasted by Ministry of Finance this summer oil world market prices would drop. The expectations have changed for the time of preparing Commission's autumn forecast and the average oil price per annum is expected to rise. The results show sensibility of Estonian inflation to foreign shocks, whereat acceleration of inflation does not lead to any remarkable second round effects in domestic economy, i.e. the shocks have just short-term influence.

Table 12

Oil risk scenario of 2005–2007

(per cent)

	2004	2005*	2006*	2007*	2008*	2009*
CPI forecast, summer 2005	3,0	3,6	2,6	2,6	2,8	2,8
Risk scenario	3,0	4,0	3,3	2,7	2,8	2,8
Difference	-	0,4	0,7	0,1	0,0	0,0
MF oil assumption (EIA, world spot, $/brl)	38,2	54,0	53,1	51,1	50,1	49,0
Commission's oil assumption (Brendt, level in $/brl)		55,0	61,4	60,5	-	-

Source: Ministry of Finance, European Commission.

[15] Brendt, future prices.

Export risk scenario

The real growth of export of Estonian goods and services in the first half of 2005 has been 2.4% faster than expected and the above under the terms of lower foreign demand as forecasted. So it can be said that the growth of export ability of Estonia has been remarkably higher than expected. All economic indicators promise rapid export growth also in 3rd quarter and thereafter – stability of industry, foreign trade monthly data, prompt estimation of balance of transactions, export index of industrial production, tax funds. Therefore the other risk scenario is the export shock, where the real growth of export exceeds in 2005 the growth forecasted in summer by 1.8%, decreasing thereafter stage by stage to 0.2% in the end of forecast period. More rapid export growth will lead to faster growth of import than expected, as more production inputs will be needed and due to more rapid growth of the revenue of companies and establishments, the domestic demand will also increase (demand for consumption and investments).

Estonian economic growth within the first half of 2005 was 1.6% higher than forecasted. Business activity remained high also in 3rd quarter. Therefore the total real growth of economy in 2005 should be higher than expected, and that because of faster growth of net export and domestic demand than forecasted. Within the medium-period the real growth of economy slows down, being on the average 0.6% higher than expected in the summer of 2005.

Against the higher economic growth than expected also personal incomes increased more than forecasted, the latter leading to rise in consumption activity. Growth of private consumption is to continue in the second half of the year, indicators of trade and consumers' confidence as well as monthly results of retail trade and selling of cars prove the above. Within the medium-term period decrease of growth speed of private consumption can be expected, the above is influenced by slowdown of the net income of population and higher loan burden.

With the growth of export, will also rise demand for capital as production input. Capital utilisation rate as well as creation of new capital entity will increase. Therefore, due to acceleration of export growth, rise in investment activity can be expected also within the medium-term period.

Due to the higher growth of GDP than expected, the developments in the labour market in the first half of 2005 were more favourable than expected. Based on the rapid growth of export within the short period it can be expected that employment rate will increase for more than 1% in 2005 and 2006. Rapid employment growth and applying of active labour market measures will lead to decrease of unemployment rate within the medium-term period sooner than expected.

More favourable developments in export sector enable higher increase of gross earnings for the account of increase of revenues. At the same time shortage of qualified employees as well as opening after accession to the EU of the labour markets with high salaries of the states of EU puts pressure on rapid growth of salaries. Based on the above scenario we expect in 2005 growth of real earnings up to 7.1% and within the medium-term period preservation of the above around 6%.

Table 13

Export risk scenarios of 2004–2009

(%)

	Risk scenario						Difference from base forecast					
	2004	2005	2006	2007	2008	2009	2004	2005	2006	2007	2008	2009
GDP real growth	7.8	8.3	7.1	7.0	6.9	6.8	-	1.8	0.5	0.7	0.6	0.5
Export real growth	16.0	17.2	14.5	11.5	11.1	10.6	-	1.8	1.2	1.0	0.7	0.2
Import real growth	14.6	13.5	12.7	10.1	10.0	9.6	-	0.9	0.8	0.6	0.5	0.1
Domestic demand real growth	5.1	6.8	6.4	6.1	6.0	5.9	-	0.5	0.3	0.4	0.3	0.3
Employment rate growth	0.2	1.4	1.1	0.9	0.7	0.5	-	0.8	0.4	0.1	0.1	0.1
Wage real growth	5.2	7.1	6.2	6.2	6.0	6.0	-	0.9	0.7	0.9	0.9	1.0
Current account (% of GDP)	-12.5	-8.5	-7.1	-5.7	-4.3	-2.8	-	1.9	2.5	2.9	3.1	3.1
Contribution to the growth of GDP												
Domestic demand (excl. inventories)	5.7	7.8	6.8	6.4	6.3	6.1	-	0.9	0.2	0.2	0.2	0.1
Change in inventories	-0.1	-0.4	0.1	0.1	0.1	0.1	-	-0.4	0.0	0.0	0.0	0.0
Balance of goods and services	-0.6	1.6	0.4	0.5	0.4	0.5	-	0.5	0.3	0.4	0.3	0.3

Source: Ministry of Finance, European Commission.

4.1.2. Influence of Applying Risk Scenarios on Budget

The following will show how the above macro-economic risk scenarios will influence the tax revenues of the budget. The influence on general government debt is not analysed as with the low debt level of Estonia the influence of small-scale macro-economic (including interest rates) changes is marginal.

The influence of oil price level being higher than expected on tax revenues cannot be uniquely evaluated. Though application of sensitivity analysis (see box 4) shows the influence of a percentage change of GDP on receipt of taxes and mathematically it is possible to calculate the possible influence, also economic theory must be considered when using the results. With the above scenario use of micro-economic approach is preferable.

In case of higher rise in oil price than expected the following scenarios are applicable:

- if consumption of fuel remains in the same level, with constant budget constraint expenses on fuel will increase and on other utility objects will decrease, as the result of which income of fuel excise will not change, increase of the VAT received from fuel consumption and decrease of VAT received from other utility objects will be balanced, so **state tax revenues remain unchanged** (I scenario).
- If consumption of fuel decreases, with constant budget constraint expenses on fuel and other utility objects remain in the same level, arising from the above income of **fuel excise will decrease** (II scenario).
- if consumption of fuel remains in the same level, but short-term budget constraint is increased by using savings or foreign financing, income of fuel excise will not change, but **more VAT is received** from consumption of fuel (III scenario).

According to the oil risk scenario the oil price in 2005 is 1.8% and in 2006 15.6% higher than expected. Based on the expected average annual price of fuel (gasoline) of 12.70 EEK, influence on turnover tax and fuel excise is found. So the tax revenues can either increase or decrease in 2005, depending on the scenario, respectively 15.7 million EEK or –18.2 million EEK. In 2006 and 2007 the influence on budget will increase.

Table 14

Influence of oil risk scenario on the general government tax revenues

(million EEK)

	2005*		2006*		2007*	
	base forecast	*difference*	*base forecast*	*difference*	*base forecast*	*difference*
II scenario						
Fuel excise	3,375.0	-18.2	3,660.0	-164.4	3,952.0	-202.9
III scenario						
VAT	13,738.0	15.7	15,050.0	139.2	16,390.0	165.3

Source:: Ministry of Finance of Estonia

With realisation of export risk scenario the main effect on budget will be change in tax revenues, proceeding from the new level of nominal GDP. All in all tax revenues should increase by 1,355.8 million (0.9% from GDP) in 2005 and by 358.6 million (0.2% of GDP) in 2006.

In absolute figures the growth of nominal GDP exceeding expectations by 2.9% most increases social security tax revenues, caused by rise in both wages and employment rate, which has a positive effect on tax base. Due to more favourable developments on labour market the unexpected growth in personal income results in more active consumption, which influences revenues of indirect taxes. In case of social security and indirect taxes the relatively strong impact results from relatively big percentage of these taxes in total revenues.

Table 15

Influence of export risk scenario on the general government tax revenues

(million EEK)

	2005*		2006*	
	base forecast	*export risk scenario*	*base forecast*	*export risk scenario*
GDP nominal growth, %	**10.4**	**13.3**	**9.5**	**10.2**
Taxes and social security payments	**51,077.5**	**1,355.8**	**56,084.5**	**358.6**
Personal income tax	9,525.0	224.6	10,295.0	58.6
Corporate income tax	2,605.0	105.8	2,805.0	27.5
Social security tax	18,000.0	401.5	20,070.0	108.1
Indirect taxes	20,947.5	623.9	22,914.5	164.4

Source: Ministry of Finance of Estonia.

Box 4. Methodology of Sensitivity Analysis

Sensitivity analysis is used for measuring the effect of GDP growth by 1% on tax revenues. One way of evaluation is, considering all taxes, to find the connections between GDP and analysed tax according to econometric rules. In Estonia the following formula is used for evaluation:

$$\ln(\text{tax revenue}) = a + b * \ln(\text{GDP}),$$

where b stands for tax flexibility, i.e. by how many % tax revenue changes when GDP grows by 1%. The data of 1996-2004 tax revenues have been used in calculations. The main problem is using so-called unclean time-series data, i.e. the effects of changes in tax code have not been eliminated. Therefore such data should be handled with certain caution, although the results are quite similar to tax elasticities calculated by OECD.

An alternative would be to use the methodology[1] suggested in a series of articles on tax elasticity research published by OECD in 2005, which is also used by the European Commission. According to this methodology first the connection is found between tax revenue and expected tax base (for example in case of social security tax the tax base is found on the ground of salary and amount of employment), next between tax base and GDP and by combining these two final tax elasticity is found. Compared to the aforementioned approach the advantage of this methodology in the meaning of economic theory is more rational connection between tax revenues and general economic situation, furthermore, tax elasticities between different countries found out with the help of integrated methodology are also observed. The results of the two methodologies are generally quite similar.

[1] – Girouard, N., André, C. Measuring cyclically-adjusted budget balances for OECD countries. Economics Department Workgin Papers, no 434. ECO/WKP(2005)21.

4.2. Comparison with the Forecast of the Previous Programme

The expectations of world economy, including the economy of the USA, are higher in 2005 compared to forecasts made a year ago. At the same time the growth cycle of economy in the European Union, the influence of which on Estonia is considerably bigger, has not been as gratifying as expected and therefore the growth forecasts of Estonia's export partners are more pessimistic than before. The slower economic growth in euro area also caused postponing base interest growth until 2006. The world market price of crude oil proved higher than expected, which will cause additional inflation pressures.

In June, 2005 the Statistical Office of Estonia released new data on Estonia's gross domestic product, which was changed in accordance with new methodology of national accounting in financial intermediation services indirectly measured (FISIM) calculations. In addition to this the Statistical Office adjusted GDP components and aggregate figures of 2003 on the ground of calculations based on the data of annual accounts. In connection with adjusting the basic data of GDP components the economic growth of Estonia turned out to be quicker than before. When according to old methodology the average GDP growth during the last ten years was 5.7%, then today it is 6.1% and during the last five years, accordingly 6.5% and 7.2%. As a result of the recalculations, in 2003 GDP growth increased up to 6.7% in real terms (when 2004 summer forecast was being compiled the real growth of economy in 2003 was 5.1%).

The growth of GDP in Estonia in 2004 turned out to be considerably quicker when compared with previous year's forecast, this was due to unexpextedly rapid growth seen in export, investments and general government. The increase in domestic demand proved slower than expected in 2004, this was due to drastic adjustment in private consumption figures by the Statistical Office in June 2005. The fact that the main trading partners have experienced smaller economic growth than forecasted has not hindered the development of Estonia's export and growth in export (and thanks to this also import) has been considerably quicker than predicted. The unexpectedly massive increase in import in 2004 resulted in bigger trade balance and also current account deficit.

The Ministry of Finance was expecting 5.9% and 6.0% real economic growth in 2005-2006 according to their 2004 summer forecast. According to forecasts made this summer the Ministry of Finance expected economic growth to accelerate up to 6.5% and 6.6%, guaranteed by rise in domestic demand and improvement in export perspective.

After adjusting the GDP time-series data in June this year it appeared that slowing-down of domestic demand mainly occurred already in 2004 in private consumption as well as investments, but according to 2004 summer forecast it should have happened in 2005. Therefore, taking into consideration the low level in 2004 we are expecting slower decrease in investment activity in 2005 and 2006, which is mainly due to moderate decrease in change in stocks as % of GDP. The growth of private consumption will accelerate in 2005 compared to 2004 and the figures will grow steadily also in 2006. Decline in current account deficit will continue during the forecasting period, admittedly from a higher level than calculated in summer 2004.

According to 2004 summer forecast the Ministry of Finance expected inflation in 2004 and 2005 to be respectively 3.3% and 3.2%. Due to more positive developments in 2004 actual inflation did not exceed 3%. At the same time inflation pressures have considerably increased in 2005, mainly due to developments in world market prices of crude oil and appreciation of dollar, which has not met the expectations and has forced to increase inflation forecast by 0.4 percentage point to 3.6%. In 2006 we still expect to see gradual decrease in inflation up to 2.6%, provided that the increase in oil prices slows down and no major administrative price pressures are added.

The increase in employment figures proved considerably smaller than expected in 2004, due to negative results in the second half of the year. In 2004 employment figures increased 0.2% instead of calculated 1.5%. Taking this into consideration the Ministry of Finance became more conservative forecasting increase in employment in 2005 and the following years, although according to summer forecast favourable developments are still expected in the labour market, both rise in employment level and decrease in inactivity. The rate of unemployment in 2004 was 9.7% as expected. Due to deceleration in growth of employment in the conclusion of 2004 the 2005 summer forecast was more pessimistic also about the speed of decrease in rate of unemployment during the following years. At the same time the results in the labour market during the first half of 2005, upturn of export and boom in implementation of active labour market measures does not give any reason for pessimism.

According to 2004 summer forecast the Ministry of Finance expected decrease in real growth of gross wage, which realized. The wage forecast was adjusted in summer 2005 in accordance with new GDP forecast, which expects relatively rapid growth in 2005-2006. The forecast of real wage growth in the next few years was increased by approximately two percentage points for 2005 and one percentage point for 2006. Shortage of qualified workforce and access to labour markets of European countries with highly-paid jobs after joining the EU has forced growth of wages to soar.

Table 16

Comparison with the Forecast of the Previous Convergence Programme

	2004	2005*	2006*	2007*	2008*	2009*
Real GDP growth (%)						
Previous update	5.6	5.9	6.0	6.0	6.0	-
Present update	7.8	6.5	6.6	6.3	6.3	6.3
Difference	2.2	0.6	0.6	0.3	0.3	-
General government budget balance (% of GDP)						
Previous update	1.0	0.0	0.0	0.0	0.0	-
Present update	1.7	0.3	0.1	0.0	0.0	0.0
Difference	0.7	0.3	0.1	0.0	0.0	-
General government debt (% of GDP)						
Previous update	4.8	4.6	4.3	3.1	2.9	-
Present update	5.4	4.6	4.4	3.3	3.0	2.8
Difference	0.6	0.0	0.1	0.2	0.1	-
Consumer price index (%)						
Previous update	3.3	3.2	2.5	2.8	2.8	-
Present update	3.0	3.6	2.6	2.6	2.8	2.8
Difference	-0.3	0.4	0.1	-0.2	0.0	-
Current account (% of GDP)						
Previous update	-10.8	-9.1	-7.7	-6.8	-5.6	-
Present update	-12.7	-10.4	-9.6	-8.6	-7.4	-6.0
Difference	-1.9	-1.4	-1.9	-1.8	-1.8	-

Source: Ministry of Finance of Estonia

5. IMPROVEMENT OF THE QUALITY OF PUBLIC FINANCES

5.1. Forecast of Public Finances up to 2009

2004 was the fourth consecutive year of budget surplus, which then reached the level of **1.7% of GDP.** Surplus grew mainly due to the fact that some expenditures were shifted into the next financial year, but also due to unexpectedly improved revenue collection. Among the most important factors behind improvement of the budget position are the economic developments favourable from the viewpoint of revenue collection, as well as improved administration of revenue collection. The medium-term objective is continual ensurance of the compliance with the main goal of the Stability and Growth Pact – sound budgetary position close to balance or in surplus. Maintaining the yearly budget balance also allows fulfilment of the goal of balanced budget over the economic cycle. The budget forecast provided in this Programme was the basis of the supplementary budget approved by Riigikogu on the 26th of October 2005, and also the basis of the draft state budget for 2006.

As the last months have seen more favourable economic developments than expected and consequently revenue collection has been more successful than forecasted, and obviously when summing up at the end of the year the expenditures planned by Unemployment Insurance Fund and central government will prove remarkably smaller, then according to the Ministry of Finance estimate the **actual surplus of government sector in 2005 will reach 4.1 billion EEK (2.6% of GDP)**. The bigger surplus is also in accordance with recommendations of IMF. IMF has pointed out that since 2003 the budget position has rapidly weakened and surplus decreased, and fiscal policy has become too expansive.

The deficit of local governments in 2005 will be larger than expected mainly due to local elections. The future decrease in deficit will be caused by improvement of fiscal discipline at local government level, as well as by the fact that the limits for borrowing stipulated by law shall soon be taking effect. The forecast also takes into account that legislative amendments are currently being prepared, and that the amendments should organise the budgeting principles of local governments. The planned amendments include mandatory preparation of a medium-term fiscal framework, establishment of limitations to annual deficit, and establishment of mandatory reserves.

Since the deficit of local governments is decreasing, the greatest challenge for the general government in the next few years will be covering of the pension insurance deficit. According to the forecast of pension insurance average pension will increase to the level of 3,000 kroons in 2006, which makes government budget expenditures grow by 1.6 billion kroons in 2006 and contributes to pension insurance deficit. Therefore the general government balance presumes that deficit is financed by curbing other central government expenditures. The peak of pension insurance deficit (0.7% of GDP) shall be in 2006–2007, after that the deficit will begin to decrease due to relatively conservative index. The gradual rise in social security tax minimum will also contribute to decrease of deficit.

The 2005 budget of Health Insurance Fund is in slight surplus (40 million EEK) due to unexpectedly improved social tax revenues, but it is calculated that the years 2006–2008 will see a deficit (less than 0.1% of GDP). According to the forecasts, 2005 surplus of Unemployment

Insurance Fund will be 561 million EEK. Unexpectedly big surplus has resulted from better tax collection and considerable reduction in expenditures. The main reason of the latter is decrease in unemployment and shorter average period of receiving social security benefits. Beginning from the year 2006 tax rates will be lowered, which will lead to diminishing the surplus of the Unemployment Insurance Fund.

Table 17

General government budget for 2004–2009

	2004	2004	2005*	2006*	2007*	2008*	2009*
	million EEK	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending by sub-sector							
1. General government	**2,380.0**	**1.7**	**0.3**	0.1	0.0	0.0	0.0
2. Central government	1,936.0	1.4	0.2	0.1	0.0	0.0	0.0
3. State government	-	-	-	-	-	-	-
4. Local government	-235.0	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
5. Social security funds	679.0	0.5	0.3	0.1	0.1	0.1	0.0
General government							
6. Total revenue	53,892.3	38.1	41.1	41.8	39.0	37.2	36.0
7. Total expenditure	51,512.3	36.4	40.9	41.7	39.0	37.2	36.0
8. Net lending/borrowing	2,380.0	1.7	0.3	0.1	0.0	0.0	0.0
9. Interest expenditure	348.1	0.2	0.2	0.2	0.2	0.1	0.1
9a. FISIM	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Primary balance	2,728.1	1.9	0.5	0.3	0.2	0.1	0.1
Selected components of revenues							
11. Total taxes	30,117.9	21.3	22.3	22.2	21.4	21.1	20.6
11a. Taxes on production and imports	18,078.1	12.8	14.5	14.5	14.4	14.1	14.1
11b. Taxes on income, wealth etc	12,037.8	8.5	7.8	7.7	7.0	7.0	6.6
11c. Capital taxes	2.0	0.0	0.0	0.0	0.0	0.0	0.0
12. Social contributions	15,812.9	11.2	11.3	11.4	11.5	11.4	11.3
13. Property income	1,579.2	1.1	1.2	1.2	1.1	1.1	1.1
14. Other	6,622.0	4.7	6.4	6.9	5.0	3.6	3.1
15. Total revenue	54,132.0	38.3	41.2	41.8	39.0	37.2	36.0
Tax burden	45,930.8	32.5	33.6	33.6	33.0	32.5	32.0
Selected components of expenditure							
16. Collective consumption	11,940.2	8.4	9.0	9.1	8.6	8.4	8.2
17. Total social transfers	29,016.0	20.5	23.7	24.0	23.0	22.3	22.0
17a. Social transfers in kind	14,929.9	10.6	11.4	11.9	11.1	10.8	10.7
17b. Social transfers other than in kind	14,086.1	10.0	12.3	12.1	11.8	11.5	11.3
18. Interest expenditure	348.1	0.2	0.2	0.2	0.2	0.1	0.1
19. Subsidies	2,065.6	1.5	1.6	1.6	1.4	1.3	1.3
20. Gross fixed capital formation	4,177.3	3.0	3.6	3.9	3.5	2.8	2.3
21. Other	3,965.1	2.8	2.8	2.8	2.5	2.1	2.1
22. Total expenditure	51,512.3	36.4	40.9	41.7	39.0	37.2	36.0
incl compensation of employees	14,519.0	10.3	10.1	10.1	10.0	9.6	9.4

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

5.2. General Government Revenues

5.2.1. Structure of General Government Revenues

In the years 2000-2004, the average ratio of general government revenues to GDP amounted to 38.0%. General government revenues in relation to GDP last exceeded 40% limit in 1997. In 2004 the ratio was 37.9%. There were two main reasons for general government revenues decrease in 2004: 1) rise in basic allowance, which reduced personal income tax revenue from 6.9% of GDP in 2003 to 6.7% of GDP in 2004; 2) due to deferment of the moment of taxation of VAT in connection with joining the European Union, there was a "gap" in 2004 receipt, which reduced the relative importance of VAT from 8.8% of GDP in 2003 to 8.0% in 2004. All in all the percentage of tax revenues decreased from 33,0% to 32.5% of GDP.

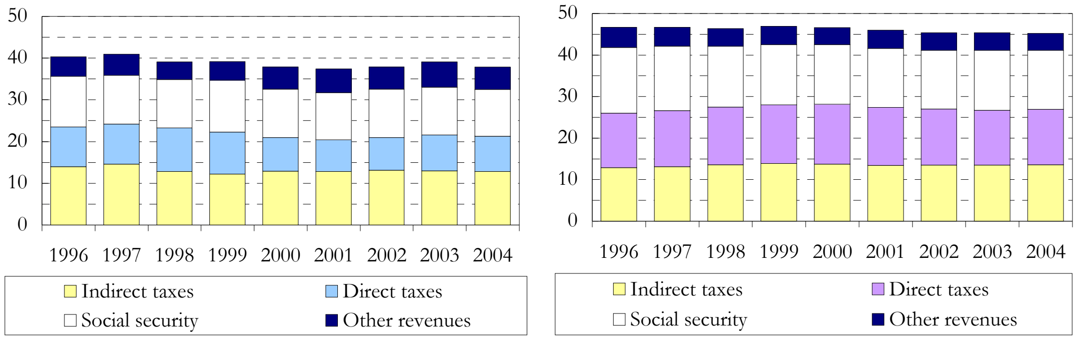
The division of revenues between taxable and non-tax was approximately 85.4% tax and 14.6% non-tax during the period of 2000–2004. The major government revenues (33.7% in 2004) are indirect taxes, including VAT, excise taxes, customs duties, gambling tax and most of the local taxes. Social security payments make up 29.5% and direct taxes 22.5% of general government revenues. The most important of the latter is personal income tax, followed by corporate income tax and heavy vehicle tax. Direct local taxes include motor vehicle, boat and stock-breeding taxes. In addition to tax revenues several non-tax revenues are also paid to the budget of the general government: state taxes, receipts from economic activities, proprietary income, receipts from disposal of state-owned assets, subsidies and other. In 2004 non-tax revenues covered 14.3% of general government revenues.

According to the forecasts of the Ministry of Finance of Estonia the general government revenues in 2005 will be 4.4 percentage points (pp) of GDP lower than EU-15 average. From 1996 to 2003 the relative importance of general government revenues decreased by 1.2pp of GDP. In EU-15 by 1.3pp of GDP during the same period. In Estonia during the period in question the most significant decrease was seen in the relative importance of indirect taxes – by 1.0pp of GDP, followed by direct taxes and social security taxes – respectively 0.9pp and 0.7pp of GDP. Resulting from growth of grants only the percentage of other revenues has increased – 0.7pp of GDP. In EU-15 the relative importance of social security taxes and other revenues has increased – respectively 1.4pp and 0.6pp of GDP and the relative importance of indirect taxes and direct taxes has decreased – respectively 0.6pp and 0.1pp of GDP.

Figure 11

General Government Revenues and their Structure
(% of GDP)

A. General government revenues in Estonia **B. General government revenues in EU15**



Sources: European Commission, Ministry of Finance of Estonia.

5.2.2. Future Developments in Tax Policies and Main Changes in Revenue Policies Influencing the Budget for 2006

The Government has set a goal of shifting tax burden from taxation of income to taxation of consumption, exploitation of natural resources and pollution of environment through partial rearrangement of taxes. At the same time the simplicity and transparency of the system will be maintained with as few exceptions and divergencies as possible. Since our tax system has provided for economic growth and allowed functioning of the state, there is no urgent need for radical reforming.

Reduction of labour taxation

During the last 10–15 years the whole world has seen the tax burden shift from capital to labour, causing growth in the price of labour as production input – thus hindering creation of new jobs. In order to reduce the tax burden of labour the Government will continually increase basic allowance and lower the tax rate of personal and corporate incomes. In 2006 the tax-free income will be 2,000 EEK per month. As for tax-free income in the long run, the aim is the equalization of tax-free income with subsistence wage. Increasing tax-free income enables to reduce the tax burden of low-income workers, which has up to now been higher than the average of the European Union. A possible mean of increasing the tax-free threshold is the evaluation and limitation of tax benefits. An integrated proportional income tax remains for both personal and corporate income receivers in accordance with developments in the world and on the basis of previous positive experience.

Higher taxation of consumption and environment exploitation

On the 7th of June 2005 the Government endorsed the basic principles of ecological tax reform. With rearranging the tax system the Government's aim is to value natural resources and environment. The basic principles of ecological tax reform do not include concrete proposals concerning the increase in tax rates but they describe possible measures. Considering the aforementioned principles certain measures will be worked out in order to achieve the goals of ecological tax reform.

In Estonia the main taxes deemed as environmental already exist. These are fuel excise, package excise, pollution taxes and those of environment exploitation, whereby for increasing the two latter a draft has been worked out and adopted by the government. As a part of ecological tax reform the current taxes and duties will be increased and new taxes and duties imposed. Heretofore untaxed cars are one of the potential targets of environment tax, thus in the long run the relative importance of transport taxes should grow. Measures taken during the implementation process of the ecological tax reform will not cause the growth of general tax burden.

Development of unitary principles of excise policy is within the jurisdiction of the European Union, but every member country is also given an opportunity to make certain choices. In addition to fiscal goal excise is used for controlling consumption of certain goods. With the help of excise the prices of goods are regulated in order to promote more economical consumption, reduce overuse of alcohol and restrain smoking.

Considering the rate of average wage growth and the fact that during the last few years the price of alcohol has risen less than prices of other consumer goods, the quicker than enacted rise in alcohol excise rates is reasonable. Alcohol excise will be increased by 10% in 2006 instead of 5%, but in order to diminish pressure on inflation in the first half of the year 2006, the rates will be increased starting from the 1st of July instead of formerly decided the 1st of January. In order to gain the desired effect of alcohol price policy on population's health, the rate of alcohol excise must be made dependent on inflation and changes in purchasing power of the population.

Considering the cost of smoking to the society and impact on people's health and the responsibility taken when joining the European Union to employ the minimum excise rate on cigarettes and smoking tobacco stated in EU directives at least by the year 2010, the excise of cigarettes and tobacco is gradually increased on the 1st of July every year. The excise of cigarettes shall be increased according to the stipulated graph, but with a year advance, which means that the rates to come into effect by the current law for the 1st of July 2007 will actually be applied on the 1st of July 2006 and the rates to come into effect on 1st July 2008 will be applied on the 1st of July 2007.

The aim of taxation of energy products is to influence the behaviour of consumers towards more economical and money-saving way. Therefore excise tax will be applied to energy products made from nonreproductible resources, so to increase the effectiveness of energy usage and promote development of renewable energy. Since excise is set per unit, then considering general economic growth and increasing purchasing power the relative importance of excise in fuel price will become smaller annually. According to the ecological tax reform the increase in fuel excise was planned in 2006, but resulting from sharp rise in fuel prices the increase in fuel excise has been put off. The minimum rates of fuel excise stipulated by the new European Energy Guidelines have to be enforced by the 1st of January 2010 at the latest.

In taxation of energy goods used for producing heat and electric energy the transient stages of achieving the minimum rates stated in the energy taxation directive and principles stipulated in the national long-term development plan should serve as a basis.

Reducing differences in taxation

Tax exemptions diverging from their original aim and thus unjustified shall be critically inspected and disclaimed. Each exemption shall be examined from the point of view of its proportionality with the desired final goal, expectations and needs of the society and also, if the exemption is the most appropriate mean of achieving the goal. If necessary, the exemptions shall be stipulated as terminal, which enables to analyse the effectiveness of the exemptions as means of achieving the goal, and on the basis of the analysis decide upon extending the operative period of exemptions.

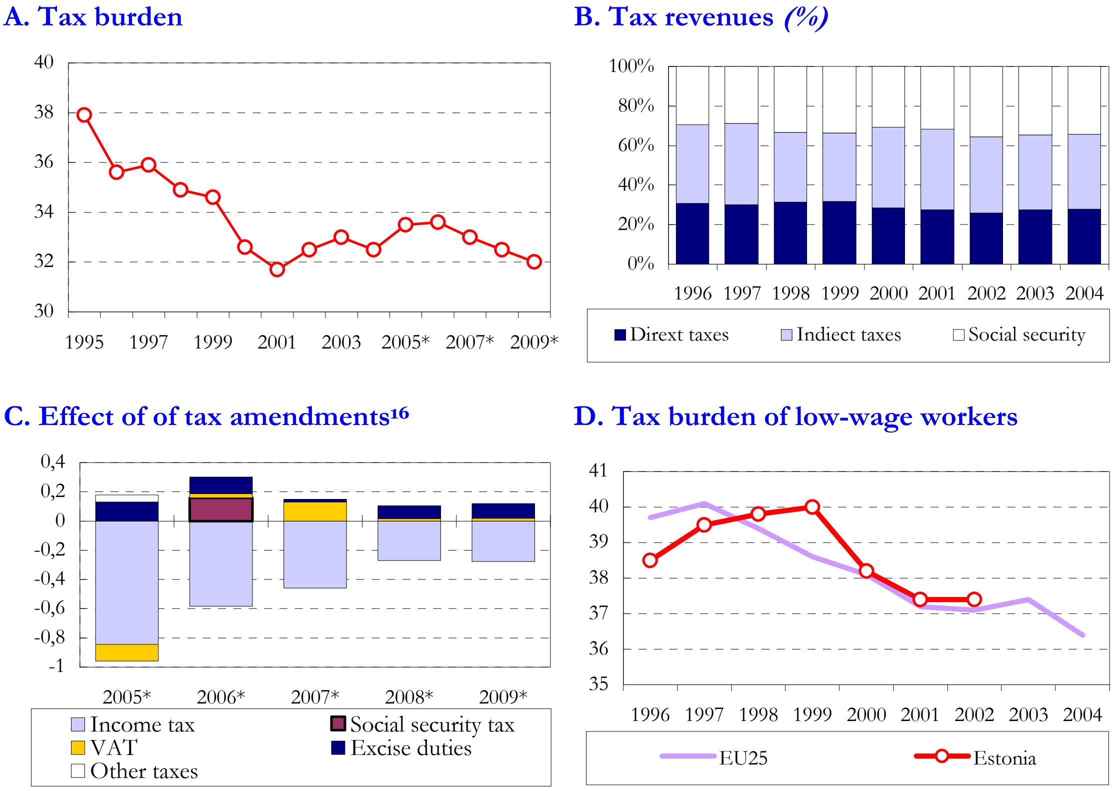
In addition to possible disclaiming of tax excemptions lowering of deduction limit stipulated in the income tax law should be considered from hitherto 50,000 EEK to a lower level. This would contribute to expanding the tax base and serve as an extra source of increasing tax-free threshold.

As far as VAT is concerned, the choices of taxation policy of Estonia are closely connected with current developments and trends in the European Union. In the EU the goal has been set to achieve reduction of administrative burden through harmonization and simplification of VAT system. Compared to other member states Estonia has few divergencies in VAT rates, which enables to preserve a considerably low standard tax rate (18%). In 2006–2009 no further reduced VAT rates will be set on any goods or services and already in 2006 and 2007 some current reduced rates will be annulled. In order to diminish the attractiveness of reduced VAT rates it is being calculated that the reduced VAT rate should be increased from 5% to 9% with a further intention to establish a single VAT rate for all goods and services. To mitigate the transitional period the application of reduced rate will be prolonged up to a fixed date if necessary.

Figure 12

Development of Tax Burden in Estonia

(% of GDP)



Sources: Ministry of Finance of Estonia, Eurostat.

Table 18

Main Tax Amendments in 2006 and their Effects

	2006 effect *% of GDP*	Enactment
Reduction of labour taxation:		
Reduction of income tax rate from 24% to 23%	-0.4	1 January 2006
Increase of basic allowance from 20,400 EEK to 24,000 EEK per year	-0.3	1 January 2006
Lowering of deduction limit from 100,000 EEK to 50,000 per year	+0.05	1 January 2005
Basic allowance starting from the second child (previously starting from the third child)	-0.2[17]	1 January 2006
Higher taxation of consumption and environment exploitation:		
Increase of the rate of excise duty on beer from 58 EEK to 64 EEK per one per cent of ethanol by volume per hectolitre	+0.03	1 July 2006
Increase of the rate of excise duty on fermented beverages or wine with an ethanol content of up to 6% by volume from 341 EEK to 376 EEK per hectolitre	+0.001	1 July 2006
Increase of the rate of excise duty on indirect product from 1 680 EEK to 1,852 EEK per hectolitre	+0.0003	1 July 2006

[16] The figure shows the influence of tax amendment only on the year it comes into force (becomes effective).
[17] Effect in 2007.

Increase of the rate of excise duty on other alcohol from 152 EEK to 168 EEK per one per cent of ethanol by volume per hectolitre	+0.03	1 July 2006
Increase of the rate of excise duty on cigarettes by 275 EEK/1,000 pc. + 26% to 360 EEK/1,000 pc. + 28%	+0.03	1 July 2006
Increase of the rate of excise duty on smoking and chewing tobacco from 240 EEK/kg to 280 EEK/kg	+0.001	1 July 2006
Increase of different environment taxes (pollution, specific usage of water, mining taxes etc)	+0.1	1 January 2006
Other:		
Increase of the basic sum of minimal duty of social tax from 700 EEK to 1,400 EEK	+0.2	1 January 2006

Source: Ministry of Finance of Estonia.

5.2.3. Simplification and Improvement of Tax Administration, Effectiveness of Tax Collection

In the recent years the increase in tax collection in Estonia has exceeded nominal growth of economy. To be more exact, starting from 2002 (2004 was an exception, since tax collection was significally reduced by unusually low VAT receipt resulting from deferment of the moment of taxation concurring with joining the European Union). Similar results are also expected in 2005 and 2006. It cannot be overlooked that the receipts of social tax and VAT were exceptionally good. The receipt of social tax should grow in proportion with wage fund growth, but as can be seen in figure 13E, the receipt of social tax has grown in the last two years (and will obviously grow this year) more quickly than wage fund. The growth of VAT receipt was in 2002 and 2003, and will also be in 2005, bigger than growth of final consumption (the exception of 2004 was explained above). The sizable growth of tax revenues, which cannot only be seen as a consequence of macroeconomic developments and the amendments to laws, but the effective job done by the assessor collecting taxes should also be referred to.

Improvement in tax submissiveness by means of tax administration and simplification

One of the aims of Estonian tax policy is to make the process of tax collection as simple and transparent as possible. One of the priorities is developing the e-Tax Board, which is functioning since the year 2000. While during the first three quarters of the year 2004, 60% of personal income tax returns, 64% of income tax and social tax returns of companies, and 74% of value added tax returns were submitted electronically, then during the first three quarters of the year 2005 the electronically submitted tax returns were 73.8%. 76.2% and 81.6% respectively.

The biggest percentage (88.5%) of electronically submitted tax returns was seen in excise tax returns. E-Tax Board enables considerable reduction of expenses of both entrepreneurs and the state, furthermore, it is an operative instrument of analysing tax collection and quick detecting of possible tax evasion.

Improvement in tax collection through reducing the percentage of pay-packets

Pay-packets are used by employers in order to economize on labour cost, in case of which taxes remain unpaid and competitive advantage gained. According to the Estonian Institute of Economic Research in 2004 on the average 14% of wage earners in Estonia received pay-packets. Within five years the percentage of pay-packet receivers has decreased by 5 percentage points. The percentage of pay-packet receivers in 2005 has not yet been estimated, but fairly good income tax and social tax collection this year is a clear sign of decrease in the relative importance of pay-packets. Collection of personal income tax into the general government budget has increased by 1.0% in summation of the first 10 months in spite of growth in tax-free threshold and reduction in tax rate, the collection of social security tax by 14.9%. As % of GDP the collection of social security tax has risen from year 2004 level of 9.1% to 9.5% in summation of the first 10 months, in spite of the fact that no amendments increasing collection of taxes have been introduced into the legislation. The presumable reasons of decrease in the percentage of pay-packets are the following:

- Free movement of labour, which forces Estonian entrepreneurs to pay legal wages, in order to avoid the situation where qualified labour moves abroad (especially in building sector);
- Increase in the number of loans taken by private persons (settlement loan) and introducing parental benefits, which encourage wage earners to show their wages as entirely legal;
- The coordinated activities of Tax and Customs Board in restraining illegal pay-packets. This year a work group was formed between different boards (Tax and Customs Board, Union of Estonian Towns, Union of Rural Communities, Estonian Health Insurance Fund, Office of Social Security, Board of Estonian Employers, Labour Market Board, Unemployment Insurance Fund, Labour Inspectorate, Estonian Trade Council), in order to fight against illegal pay-packets by increasing public awareness, legislational and supervisory activities. One example of certain undertakings was a memorandum sent to 1,001 business associations, where attention was drawn to the fact that the wages paid in those companies were considerably lower than the average of the corresponding branch of business (this year the aim was to influence wage groups 1,000-3,000 kroons and 3,000-5,000 kroons). 40% of receivers of the memorandum voluntarily corrected the data given in their tax returns. In addition to that 94 unnotified inspections were organized into the companies, as a result of which a total of 27 million kroons of additional taxes was imposed.

Improvement in tax collection through reducing the percentage of illegal market of excise products

According to Estonian Institute of Economic Research the relative importance of illegal alcohol market has fallen from 44% to 22.5% in the last five years. In the situation where alcohol excise and the prices of alcohol have not considerably increased, but at the same time the wages have increased by 64%, such developments are anticipated. United raids made by Tax and Customs Board and the Police into shops and possible production sites have also proved effective in reducing the illegal market. In addition to this, starting from the 1st of July 2006 strong alcohol will be marked with a certain tax stamp, in order to decrease the amount of illegal alcohol[18] sold in shops. However, marking alcohol will not reduce deliberate consumption of illegal alcohol.

Similarly to illegal alcohol the percentage of illegal cigarettes has also decreased by almost ten percentage points in the last five years, reaching 23.5% in 2003 according to the Estonian Institute of Economic Research. In the next years reducing the percentage of illegal market may gradually become more complicated because in accordance with the responsibility to achieve the excise rates established by the European Union by the year 2010 the excise rate of cigarettes is annually increased. Also, the consumption of cigarettes bought in Latvia may increase, because there the excise rates are increased more slowly, thus the cigarettes sold in Latvia are cheaper.

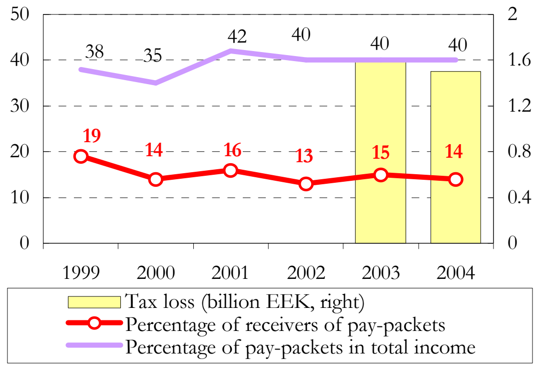
On fuel market the problematic issues are the fuel illegally exported from Russia and misuse of specially marked fuels. To solve the latter there is a plan to reduce the difference in excise rates of standard and marked fuels to make the usage of marked fuels less attractive. The first step has already been made – starting from the 1st of January 2005 the excise rates of marked fuels were increased and compared with 9 months in 2004 the consumption has decreased by 14.1% this year.

[18] Illegal alcohol here means alcohol produced in legal plants, but excise of which has not been paid.

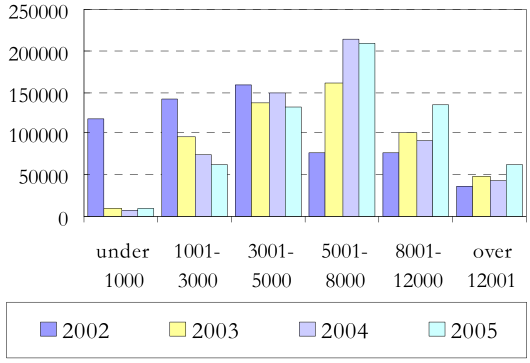
Figure 13

Developments of Tax Administration in Estonia

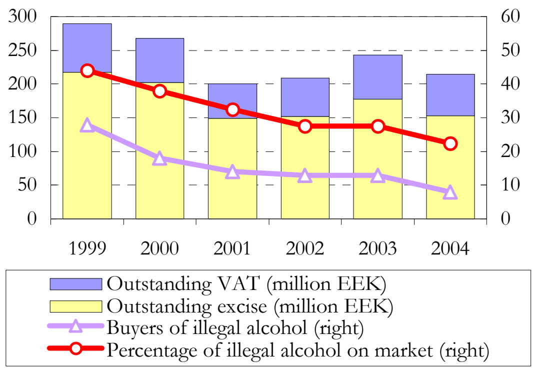
A. Percentage of pay-packets in economy



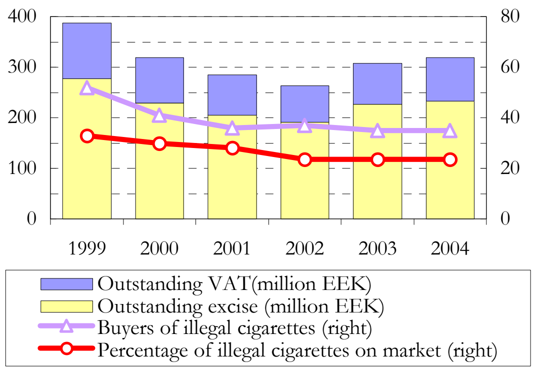
B. Different wage ranges of labour force



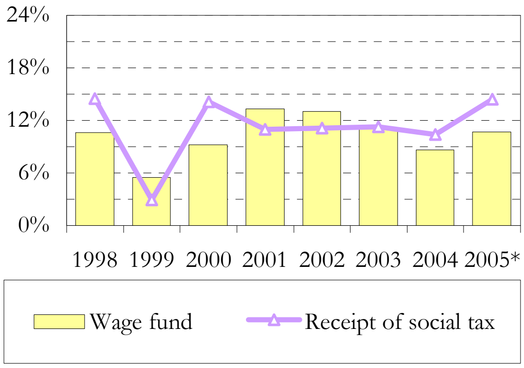
C. Percentage of illegal alcohol



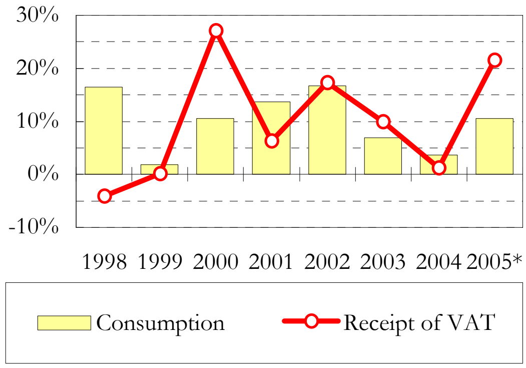
D. Percentage of illegal cigarettes



E. Social tax receipt compared to wage fund



F. VAT receipt compared to final consumption



Sources: :Estonian Institute of Economic Research. Conjuncture, Tax and Customs Office, Ministry of Finance.

5.3. Expenditures of General Government

5.3.1. Structure of Expenditures of General Government

The ratio of expenditures of the general government to GDP has levelled off lower than 40% since the year 2000 with a slight downward trend. The expenditures planned within the budget and supplementary budget of 2005 reach the level of 40.9% of GDP, actually the expenditures will prove considerably smaller in connection with unexpextedly small grants (and consequently smaller spending) and also due to the fact that some expenses can be postponed until next year. During the periods of fast economic development, the share of expenditures to GDP has been lower, while at lesser growth rates the ratio of expenditures and GDP has started to increase, meaning that the policy has been counter-cyclical. Inflow of foreign aid concurring with the process of joining the European Union has also contributed to increase in the expenditures.

Transfers to households through different social benefits, including benefits in kind and other than in kind, contribute the largest share (in 2004 over 50%) of expenditures of the general government. Pensions represent the largest group of expenditures, followed by medical treatment expenses, costs of health care procedures, sickness benefits paid by Health Insurance Fund, and compensations for medicines. Subsistence benefits and subsidies to disabled people also make up a considerable share.

The second largest share (in 2004 about 23%) of expenditures of the general government is public consumption. This includes the expenditures on consumption of general government, which cannot be seen as expenditures on individual consuming services. These include: administration and regulation of the society; organization of security and defence; maintenance of legislation and regulation; maintenance of the health care system of public sector; environment protection; scientific research and development and infrastructure and economic development. Public expenditures have continually decreased since the year 2000 – the percentage of GDP has decreased from 10.6% in 1999 to 8.4% in 2004. Compared with other member states the expenditures of Estonia on public consumption are on average level.

Expenditures made on investments and capital renovations and repairs contribute less than a tenth of expenditures of the general government. Compared to the respective European Union average, the share of capital expenditures is somewhat larger (in 2005 4.3% of GDP), but this is attributable to investment needs characterising a transition economy. Pre-accession funds of the EU have also played an important role here, since the co-financing expenditures have contributed notably to the volume of total expenditures.

Subsidies mean current unilateral payments, which general government or institutions of the EU make to the resident producer in order to influence their level of production, prices or compensate expences connected with production factors. In 2004 subsidies covered almost 4% of all expenditures, i.e. 1.5% of GDP.

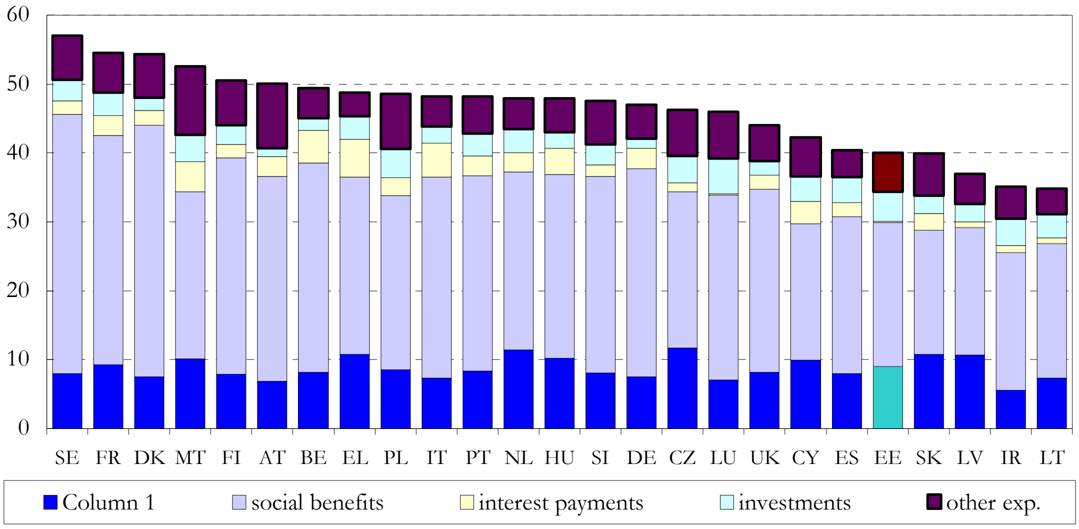
Due to a small loan burden the expenditures on interest payments form a very small part of the general government expenditures – in 2004 only 0.7% (0.2% of GDP). Compared with other member states the expenditures on interest payments are considerably lower than the average (2.5% of GDP).

Observing the expenditures by areas of activity, it can be seen that the expenditures on social protection have always had the biggest relative importance and it is estimated that they will also grow in the year 2006, mainly because of the increase of pensions on the 1st of April 2006. When in 2005 social protection expenditures are forecasted to be 11.1% of GDP, then in 2006 the share will be 11.7%. In most of the spheres the expenditures as percentage of GDP has remained on the more-or-less same level, but the expenditures on economy have substantially increased.

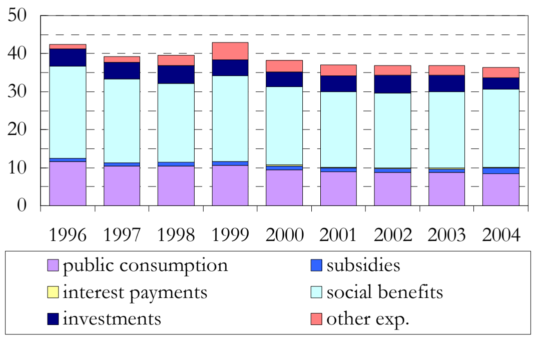
Figure 14

General Government Expenditure and it's Structure
(% of GDP)

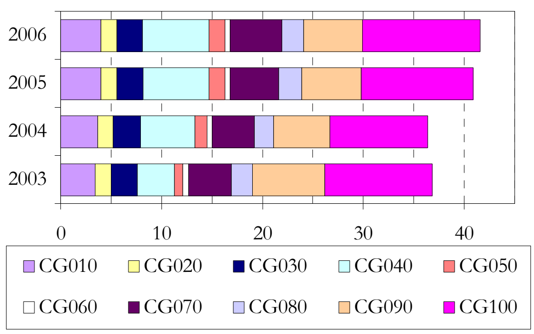
A. General government expenditure of Estonia compared with EU Member States, 2005



B. Expenditure by economic content in Estonia



C. Expenditure by function in Estonia[19]



Source: Ministry of Finance of Estonia, European Commission.

5.3.2. Main Changes in Expenditure Policies Influencing the Budget for 2006

Social protection

In 2006 the share of expenditures on social protection is almost 28% of the total expenditure. Compared with the year 2005 the growth (total of budget and supplementary budget) has been 18.6%. The growth of the expenditures of this sphere mainly results from the following activities:

- pensions (growth of expenditures 2 billion EEK, i.e. 20.5%). Since the 1st of April 2006 average monthly pension will increase up to 3,000 EEK;
- parental benefits (growth of expenditures 244 million EEK, i.e. 42.1%). The period of paying parental benefits will be extended by 3 months;

[19] 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.

- payments into obligatory savings pension fund (growth of expenditures 328 million EEK, i.e. 31.6%);
- monthly subsidies of disabled people (growth of expenditures 27 million EEK, i.e. 5.5%).

Health care

Expenditures on health care cover 12.2% of the total expenditure of the year 2006 (in 2005 the percentage was 11.8). Compared with 2005 the expenditures on health care increase by 1.4 billion EEK, i.e. 18.3%. The main activities in this sphere are: Health Insurance Fund budget, the expenditures of which were increased by 19% compared to the budget of 2005, ambulance, the expenditures of which grew by 13%, and assignments from ERDF for developing hospital network (foreign aid), the expenditures of which grew by 99.2%.

Economy

The expenditures of the area of activity called "economy" cover 15.9% of general government expenditures. Compared with the year 2005 these expenditures will grow by 14.9%. In absolute figures, most of all, by 348.9 million EEK., the expenditures will grow on maintenance of roads (growth 15.2%), substantial growth will also be seen in assignments to business associations with state partnership for developing infrastructure of transport (growth 327.0 million EEK, i.e. 126%).

Education

Expenditures concerning education cover 14.0% of the total expenditures, increasing by 11.7% compared with the year 2005. The expenditures of Estonia on education are relatively high compared to other member states (in 2002 5.7% of GDP in comparison with the EU average of 5.2%), and the aim is to maintain at least the same level. The priorities include financing vocational education (the expenditures on vocational education in 2006 will grow by 23.5% compared to the year 2005). At the same time the expenditures of Estonia on research and development (R&D) are low in comparison with the other member states. The Government has annually increased the percentage of expenditures on R&D. Proceeding from budget draft of 2006 R&D expenditures will grow 9.6% in comparison with the year 2005. An important part of the growth of expenditures on education is made up by school lunches, since the range of students getting it free will expand. The expenditures on school lunches will grow by 140.2 million EEK, i.e. 135.6% in comparison with the year 2005.

Housing and public services

Although expenditures in the area of housing and communal economy cover only 1.2% of the total expenditures, it cannot be overlooked that it is still an area of top priority – the growth of expenses in the year 2005 was 14.1%. The expenditures of this area are mainly increased by assignments to the Estonian Credit and Export Guarantee Foundation (KredEx) for reconstruction of apartment buildings and expanding the municipal tenement fund.

Table 19

General government expenditures by function (COFOG)

(% of GDP)

	COFOG code	2003	2004	2005	2006	2007	2008
1. General public services	1	3.4	3.7	4.0	4.0	3.8	3.6
2. Defence	2	1.6	1.5	1.6	1.6	1.5	1.4
3. Public order and safety	3	2.6	2.7	2.6	2.5	2.3	2.2
4. Economic affairs	4	3.7	5.4	6.5	6.6	6.2	5.9
5. Environmental protection	5	0.8	1.2	1.6	1.6	1.5	1.4
6. Housing and community amenities	6	0.6	0.5	0.5	0.5	0.5	0.5
7. Health	7	4.2	4.2	4.8	5.1	4.8	4.5
8. Recreation, culture and religion	8	2.1	1.9	2.3	2.2	2.1	2.0
9. Education	9	7.2	5.6	5.9	5.8	5.5	5.2
10. Social protection	10	10.6	9.7	11.1	11.7	10.9	10.4
11. Total expenditure	**TE**	**36.7**	**36.4**	**40.9**	**41.7**	**39.0**	**37.2**

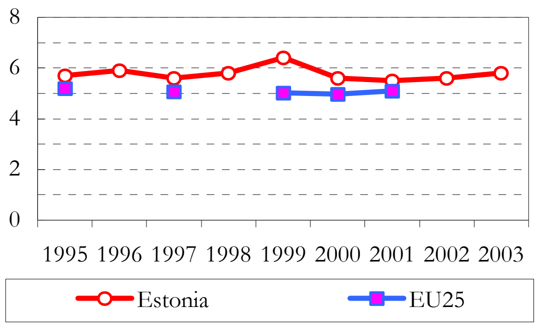
Sources: Statistical Office of Estonia, Eurostat.

Figure 15

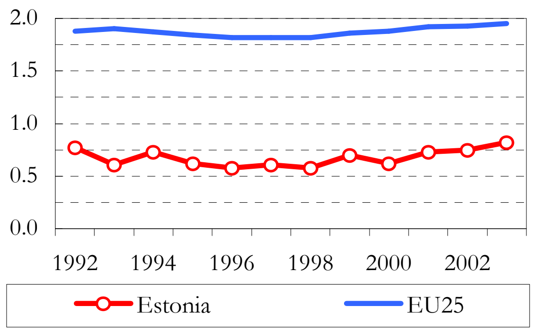
Government investments into physical and human capital

(% of GDP)

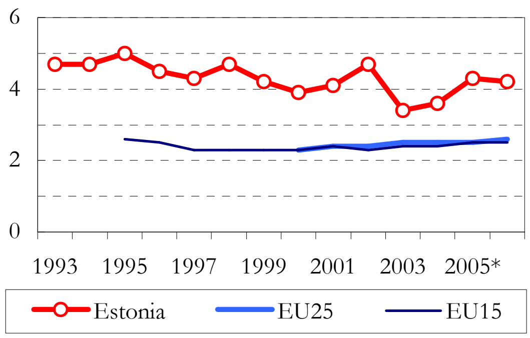
A. Public expenditure on education



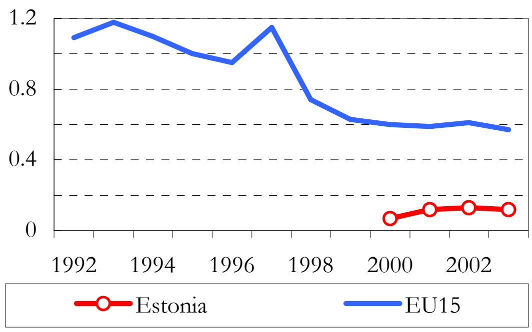
B. R&D expenditure



C. General gov. gross fixed capital formation



D. Total state aid



Sources: Statistical Office of Estonia, Eurostat.

6. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

The assumptions of the long-term forecast are based on the assumptions stipulated by the Ecomonic Policy Committee for all EU members on uniform terms, which largely coincide with the long-term forecasts of the Ministry of Finance of Estonia. The demographic trends and future forecasts have been more thoroughly described in Annex 4.

Table 20

Forecast of long-term sustainability 2005–2050
(per cent)

	2005	2010	2020	2030	2050
Total expenditure	**40.9**	**36.6**	**36.5**	**36.8**	**37.9**
Pensions	7.1	6.7	5.4	4.7	4.2
social security pension	7.1	6.7	5.4	4.7	4.2
old-age pension	6.2	5.8	4.6	4.1	3.7
other (disability, survivors)	1.0	1.0	0.7	0.6	0.5
occupational pensions (if in gen. gov. budget)	-	-	-	-	-
Health care	4.8	4.7	4.6	4.4	4.4
Long-term care *(previously part of health care expenditures)*	0.1	0.1	0.1	0.1	0.1
Interest expenditure	0.2	0.1	0.1	0.1	0.1
Total revenue	**41.2**	**36.6**	**36.5**	**36.8**	**37.9**
of which: interest revenues	1.3	1.3	1.5	2.2	3.4
of which: from pensions contributions	11.5	11.3	11.0	10.6	10.5
Pension reserve fund assets	0.5	0.0	3.4	14.2	42.5
of which: consolidated public pension fund assets (assets other than government liabilities)	0.5	0.0	3.4	14.2	42.5
Assumptions:					
Labour productivity growth	5.5	5.1	3.6	2.7	1.7
Real GDP growth	6.3	5.6	2.7	2.3	0.6
Participation rate males (aged 20-64)	83.9	85.3	87.4	87.6	85.8
Participation rate females (aged 20-64)	73.9	75.4	79.5	79.8	77.6
Total participation rates (aged 20-64)	78.7	80.1	83.3	83.6	81.7
Unemployment rate	8.9	7.8	7.0	7.0	7.0
Population aged 65+ over total population	10.9	16.7	18.7	21.2	25.7

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

Measures of guaranteeing long-term sustainability of pension insurance

In order to guarantee financial sustainability of the country in the situation of ageing population, Estonia has carried out a large scale pension reform and introduced three pillar (obligatory state pension insurance, mandatory funded pension and supplementary funded pension) system. In the course of the reform the rise of the retirement age and the gradual equalisation of retirement age of men and women were established. The retirement age of women will reach the uniform retirement age 63 years in 2016. The average age of leaving the labour market was 60.8 in 2003. Several special pensions (defence army, police, etc.), early-retirement pension, old-age pensions under favourable terms and superannuated pensions enable to retire before reaching the general retirement age. In 2004 42.1% of the people retiring left labour market before reaching the general retirement age. The payment system of special pensions, old-age pensions under favourable terms and super-annuated pensions are going to be reformed.

In order to find additional resources for financing state pension insurance (and also health insurance) the government will return to the original idea of the pension reform, according to which the minimal duty of social security tax must be fulfilled at the rate of minimum monthly wage. In 2006 the base sum of minimum duty will increase up to 1,400 kroons per month and gradually grow until it reaches the minimum monthly wage in 2009. The problem is, that the level of current duty does not give a person enough tenure of office and results in small pension in the future. In order to increase sustainability the employment rate must also grow – the more taxpayers, the more favourable ratio between taxpayers and dependants and better financing of pension insurance. "Loss of revenue" for the government by transferring the 4% of the social tax to the private funded second pillar ranges annually from 0,7% to 0,9% of the GDP in the period between 2006–2009.

Possible developments of pension insurance

The following are the 2 scenarios of developments of pension insurance (both consider the II pillar of pension insurance both on the side of incomes and expenses):

- **The first scenario** describes the situation where current situation continues to exist, i.e. the incomes of pension insurance are formed by social tax, but the expenses grow according to the pension index (calculated growth of average pension up to 3,000 kroons in 2006). This development is financially sustainable in 50-year perspective (in I pillar there was a new surplus in 2012 and the reserve which will be negative in the next few years will recover fully by the year 2019), however, it is not the best solution for the pensioners, as it does not guarantee adequate income in the meaning of pension in the long term perspective. The ratio of average wage and pension will decline from the 45.5% level of the year 2006 to 30% in 2050.
- **The second scenario** presumes that with the pension increased to 3,000 in 2006 the pension and average net wage ratio will remain at the same level (*ca* 44.5%). This scenario will mean that pension insurance will remain with deficit (0.5%–1.5% of GDP) through the whole period in question. It means that subject to conditions of demographic developments in Estonia the income provided by social tax will not enable to pay pensions so that the ratio of pensions and average wage would remain stable. Admittedly the necessary sum has to be saved from another source. The scenario refers to the fact that only in order to keep the ratio of pensions and average wage stable (on the assumption that other expenses will not be reduced to save for pensions) the pension reserve will in 50-year perspective be negative at about 55% of GDP.

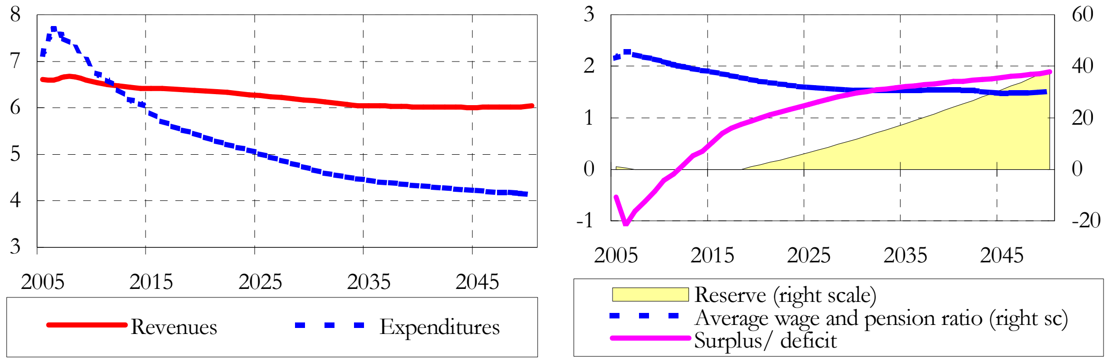
The pension system in its present structure is sustainable, i. e. no additional sums will be needed on the assumption of demographic developments. However, this framework will not guarantee adequate pensions for people who retire today and in the future. The rate of replacement (the ratio of average wage and pension) will worsen in comparison with the present situation. On the other hand, the seriousness of the effect of the expected demographic developments is also proved by the estimate that in order to keep the year 2006 replacement rate stabile for the next 45 years, will demand additional financial support in the range of 40% of GDP.

Figure 16

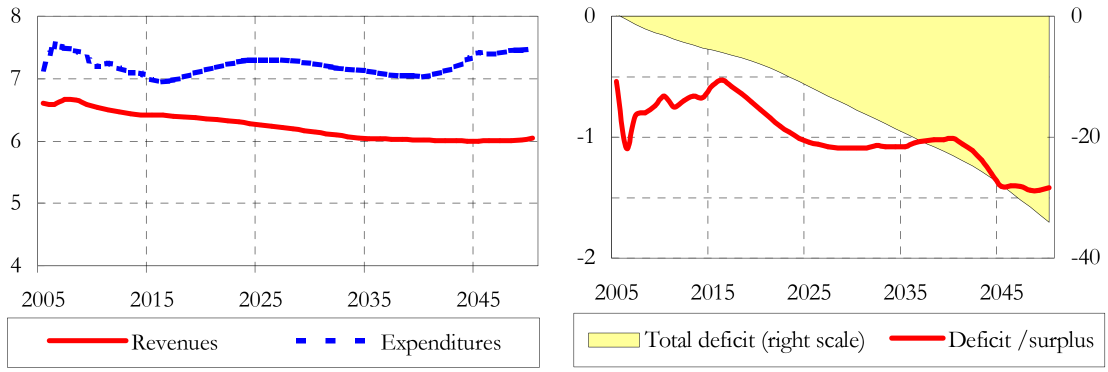
Financial indicators of pension insurance

(% of GDP)

A. Scenario of continuation of current policy (pension increase based on index)



B. Wage and pension ratio of 2006 shall remain



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

7. INSTITUTIONAL FUNCTIONS

7.1. Budget Process Development

The Ministry of Finance is preparing a **budgeting system** for the years to come, as well as a conception of the lines of reporting development and the implementation plan. In order to support the budgeting process, an **IT environment** is currently being recreated, which would include the functionality of a communication environment for the Ministry of Finance and other ministries and allow analysis of budget applications.

In addition to the development of the state budget establishment process, formalisation of **strategic planning** takes place on the national level; this is the prerequisite to integration of policy formulation, planning, budgeting, cost accounting, and accounting. Strategic planning should become the main component of the planning of the activities of state authorities, but it should also develop into an instrument promoting the quality of state financial management, incl. budgeting process development. By association of activities with specific goals and measurement of performance, prerequisites are created for ensuring more efficient operation of state authorities and improvement of the quality of public services. A functional strategic planning system provides the possibilities for effective financing of the medium-term priorities established by the Government from the state budget, allows making of better strategic choices between the possibilities for assignment of the ever limited resources and improvement of the quality of public services.

Integration of foreign aid planning with the entire medium-term establishment of the state budget is undoubtedly one of the most important development activities of the years 2005 and 2006. Planning of the structural aid to be received from the European Union in 2007-2013 takes place within the framework of the composition of a **State Budget Strategy 2007–2010** – i.e. all revenues and expenditures in the state budget are planned together. This allows ensuring that the co-financing required for the use of structural aid is indeed available and that the additionality requirements are met, as well as that both EU aid and national budget means are applied in the most appropriate and complementary manner. This allows improvement of the efficiency of state budget expenditures. Integration of the two processes that were so far implemented separately also rationalizes the annual budget establishment process – budgeting in general will become more transparent, understandable and simple, and the activity-based nature of the entire state budget is developed further.

7.2. Budgetary Rules

7.2.1. Legislation in Force

- No act of the Republic of Estonia stipulates that the budget of **the general government budget and the central government budget** must be balanced; so far, budget balance has merely been an objective of coalition agreements and strategic development plans. The rule is therefore a "soft" one, but all of the governments have followed it.

- The Constitution of the Republic of Estonia stipulates that if a proposed amendment to the **state budget** or to its draft has the effect of decreasing estimated revenue, or increasing expenditure or reallocating expenditure, the proponent of the amendment shall append financial calculations to the proposed amendment which demonstrate the sources of revenue necessary to cover the expenditure. Also, the Riigikogu may not eliminate or reduce expenditure in the state budget or in its draft which is prescribed by other laws.

- The **Estonian Health Insurance Fund Act** stipulates that the budget of the health insurance fund shall set out the balance of the revenue and expenditure of the health insurance fund for one financial year. Requirements have been established concerning the legal reserve and risk reserve. The legal reserve of the health insurance fund is the reserve formed of the budget funds of the health insurance fund for the reduction of the risk which macro-economic changes may cause to the health insurance system. The legal reserve amounts to 6 per cent of the budget. Each year, at least one-fiftieth of the total budget of the health insurance fund and revenue from the social tax revenue prescribed for the payment of health insurance benefits which is higher than prescribed in the state budget is transferred to the legal reserve, until the amount of the legal reserve provided by this Act is reached or restored. The legal reserve may only be used as an exception by an order of the Government of the Republic on the proposal of the Minister of Social Affairs. Prior to submitting a proposal to the Government of the Republic, the Minister of Social Affairs must hear the opinion of the supervisory board of the health insurance fund.

  The risk reserve of the health insurance fund is the reserve formed from the budgetary funds of the health insurance fund in order to minimise the risks arising for the health insurance system from the obligations assumed. The size of the risk reserve is 2 per cent of the health insurance budget of the health insurance fund and it may be used upon a decision of the supervisory board of the health insurance fund.

- The legal reserve requirement has also been established for the **unemployment insurance fund**, for the reduction of the risk which macro-economic changes may cause to the unemployment insurance system. The legal reserve must amount to at least 10 per cent of the assets of the unemployment insurance fund. The legal reserve may only be used as an exception by a resolution of the supervisory board of the unemployment insurance fund if the assets of the trust fund of the unemployment insurance fund are insufficient. Before adopting the corresponding resolution, the supervisory board shall make a proposal to the Government of the Republic through the Minister of Social Affairs for increasing the rate of unemployment insurance premium to the level which ensures the receipt of funds which are sufficient in order to fulfil the objectives of the unemployment insurance fund.

- Each year, the **State Budget Act** establishes limits for the balances of budgetary loans and cash loans (to be paid back during the year), size of cash reserve fund, balance of the loans granted by the Government of the Republic for performance of public duties, volume of bridge financing, etc. In the draft State Budget Act for the year 2006, the limits are as follows:
  - ✓ Size of the cash reserve fund is 1,500 million kroons, of which the means of the state pension insurance amount to 250 million kroons.
  - ✓ The maximum allowed balance of the financing of expenditures exceeding state budget revenues received is 2,500 million kroons.
  - ✓ The maximum allowed volume of foreign aid bridge financing is 2,000 million kroons.
  - ✓ The maximum allowed budgetary loan balance is 3,500 million kroons and maximum allowed cash loan balance 2,500 million kroons.
  - ✓ The maximum allowed balance of the loans granted by the Government of the Republic for performance of public duties is 1,000 million kroons.

- **Local Governments and Town Budgets Act** establishes loan limit and loan handling volume limit for local governments. A local government or a town may take loans or financial leases or issue securities which certify obligations and assume other debt obligations on the following conditions:

- ✓ the total amount of all unrepaid loans, unpaid financial lease payments, issued debt instruments and other debt obligations together with the loan or financial lease to be taken, the debt instruments to be issued and other financial obligations may not exceed 60 per cent of proposed budget revenue for that budgetary year, from which allocations from the state budget, intended for a specific purpose, have been deducted;
- ✓ the total amount of repayable loans, loan interest, financial lease payments, financial lease interest payments, expenditure for redemption of debt instruments maynot exceed, in any coming budgetary year, 20 per cent of the proposed budget revenue for the budgetary year during which the loans or financial leases are taken and debt instruments are issued, and allocations from the state budget, intended for a specific purpose, have been deducted from the proposed budget revenue;
- ✓ loans and financial leases may be taken and debt instruments issued to carry out investments prescribed in the rural municipality or city development plan.

7.2.2. Financial Management and Insolvency of Local Governments

- In order to establish measures ensuring financial discipline and govern resolution of local government insolvency, two acts are currently under development – **Local Government Financial Management Act** (LGFMA) and **Local Government Insolvency Act** (LGIA). By the first of these Acts, it is intended to establish a financial management model for local governments, which specifies limits for maximum budget deficit and maximum net debt burden. According to the draft Act, during a five-year period, the sum of the budget deficits of a local government shall not exceed 5 % of the total sum of net proceeds of the same period. By the end of a year, the net debt burden of a local government shall not exceed 50 % of the net proceeds of the same year.

  If the established limits are exceeded, the local government is declared a local government in difficult financial situation. According to the draft Act, the proceedings associated with the declaration involve supervision by the Ministry of Finance over financial activities of the local government; the proceedings shall commence with approval of a plan for coping with the difficult financial situation and end with application of measures ensuring financial discipline by the local government or declaration of the local government insolvent in compliance with the Local Government Insolvency Act.

  According to the draft Act, the possible sanctions include reduction or suspension of the sums transferred from the compensation fund or state taxes collected. The sums received on account of such compensation fund and state tax reductions and the related fines will be included in state budget revenues – a local government insolvency reserve will be created from the sums, which is used in case of local government insolvency. A local government is considered insolvent if it cannot apply the limits established for maximum budget deficit or maximum net debt burden, or is unable to settle a claim of a creditor.

- Encouraged by fast growth of financial markets, local governments use various financial instruments for the financing of large-scale investment projects increasingly more boldly. Co-operation projects between the public sector and the private sector are also being applied for making of the necessary investments, by which the local governments accept no direct obligations influencing the balance, but the obligations exert influence on future budgets through e.g. lease payments. If the financial risks should increase, the insolvency proceedings established by the new act would be of preventive character; the proceedings would force the local governments to evaluate the risks of planned projects and the financial capability required for their implementation more substantially. In order to ensure greater flexibility upon financing of projects on the local government level, the draft LGFMA is directed towards cancellation of direct prohibitions (prohibition to grant and secure loans, prohibition to pledge immovables, etc.), since supervision over compliance with such prohibitions has proved to be complicated. Instead of direct limits, it is reasonable to apply a specific procedure for resolution of the financial difficulties of certain local governments of concern.

The draft Local Government Insolvency Act foresees establishment of rules of procedure for rehabilitation of the insolvent local government's economy and restoration of solvency. The state's interest is to ensure provision of public services to the population and fulfilment of obligations taken by local governments, irrespective of the possible inadequate management of local governments by the (elected) officials. Until now, there has been no legal framework for resolution of local government insolvency and financial difficulties, which has lead to random solutions, and since it has been impossible to interfere with the activities of local governments, the problems causing the financial difficulties have basically remained unsolved.

The draft Act also foresees responsibility of local government body members for the causing of insolvency and violations at the time of insolvency proceedings.

ANNEXES

Annex 1. Main Economic Indicators of Estonia in 1998–2004

Table 21

Gross Domestic Product in 1998–2004

	1998	1998	1999	2000	2001	2002	2003	2004
	mln EEK	*%*	*%*	*%*	*%*	*%*	*%*	*%*
1. Real GDP	85 906.4	4.4	0.3	7.9	6.5	7.2	6.7	7.8
2. Nominal GDP	78 027.6	13.8	4.8	13.6	12.4	11.9	8.9	11.1
Sources of growth								
3. Private consumption expenditure(incl. non-profit institutions) 1)	49 730.3	5.3	-2.3	8.8	6.5	10.7	7.6	4.4
4. Government consumption expenditure	17 899.1	1.7	3.9	1	1.6	6.2	5.9	6.9
5. Gross fixed capital formation	24 642.6	14	-15.6	14.3	13	17.2	8.5	6.0
6. Change in inventories (% of GDP)		0.4	0.2	2.2	2.3	3.3	3.4	3.1
7. Export of goods and services	63 463.1	12	0.8	28.4	-0.2	0.8	5.8	16.0
8. Import of goods and services	70 530.6	12.6	-5.4	28.1	2.1	3.8	10.6	14.6
Contribution to GDP growth 2)								
9. Domestic demand (excl. inventories)		7.1	-5.0	8.6	7.4	11.9	8.1	5.7
10. Change in inventories		-2.2	-0.2	2.2	0.2	1.2	0.3	-0.1
11. External balance of goods and services		-1.3	5.0	-0.7	-2.1	-2.6	-4.6	-0.6
Growth of value added								
12. Primary sector		0.2	-3.3	-1.5	-5.9	-0.5	-3.2	1.6
13. Industry		1.9	-3.7	13.8	8.6	12.8	10.3	8.6
14. Construction		18.3	-7.8	13.8	4.5	20.5	6.3	10.5
15. Other services		4.9	2.7	6.4	6.8	4.5	6.0	7.2

1) The private consumption data for 2004 was corrected on 28 September 2005, for which reason the private consumption values for 2004 differ from those provided in Chapter 2.2.1.
2) 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: Ministry of Finance of Estonia, Statistical Office of Estonia.

Table 22

Prices in 1998–2004

(per cent)

	1998	1999	2000	2001	2002	2003	2004
1. GDP deflator	8.9	4.5	5.4	5.6	4.4	2.1	3.1
2. Private consumption deflator	8.4	6.2	2.6	6.1	3.2	0.7	2.6
3. Harmonized index of consumer prices	8.8	3.1	3.9	5.7	3.6	1.4	3.0
3a. Consumer price index	8.2	3.3	4.0	5.8	3.6	1.3	3.0
4. Government consumption expenditure deflator	7.6	3.5	1.4	5.8	4.6	3.8	2.0
5. Investment deflator	7.9	2.6	2.8	4.8	1.8	1.0	3.1
6. Export deflator	4.2	-0.1	8.3	7.0	-1.8	3.0	1.0
7. Import deflator	2.1	0.0	6.2	4.6	0.4	-1.0	2.0

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

Table 23

Labour market in 1998–2004

	1998	1998 %	1999 %	2000 %	2001 %	2002 %	2003 %	2004 %
1. Employment, persons	606.5 [1)]	-1.8	-4.5	-1.2	0.9	1.4	1.5	0.2
2. Unemployment rate[20]		9.8	12.2	13.6	12.6	10.3	10.0	9.7
3. Labour productivity, persons		6.3	5.0	9.1	5.5	5.8	5.1	7.6
4. Compensation of employees	37,520.4 [2)]	12.1	9.7	6.6	9.6	11.9	10.9	10.1

[1)]Thousand people
[2)]Mln EEK
Sources: Ministry of Finance of Estonia, Statistical Office of Estonia.

Table 24

Balance of payments in 1998–2004

(% of GDP)

	1998	1999	2000	2001	2002	2003	2004
1. Net lending/borrowing vis-à-vis the rest of the world	-8.6	-4.4	-5.2	-5.6	-9.9	-11.6	-11.9
1a. Current account	-8.7	-4.4	-5.5	-5.6	-10.2	-12.1	-12.7
2. Balance of goods and services	-9.8	-4.6	-3.8	-3.5	-7.1	-7.6	-7.8
3. Balance of primary incomes and transfers	1.2	0.2	-1.6	-2.2	-3.0	-4.5	-4.9
4. Capital account	0.0	0.0	0.3	0.1	0.3	0.5	0.7

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

[20] ILO definition, 15-74 years old.

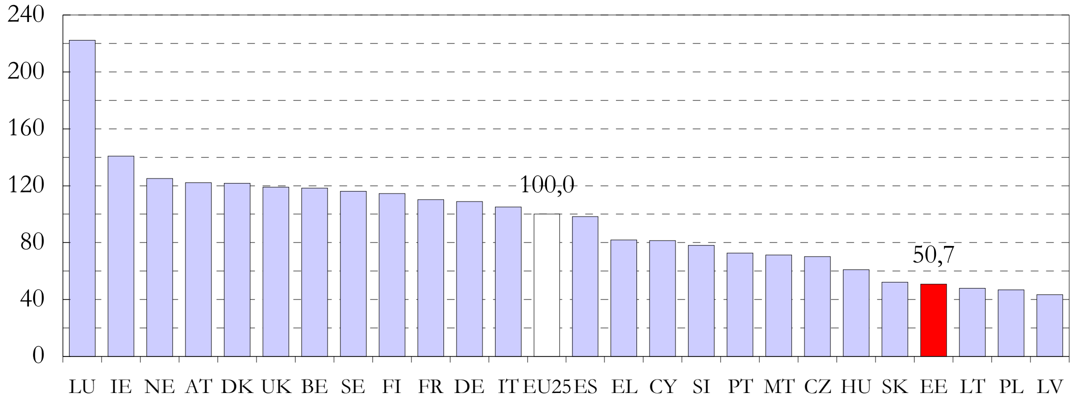
Annex 2. Comparison of Estonia with Other EU Member States

Figure 17

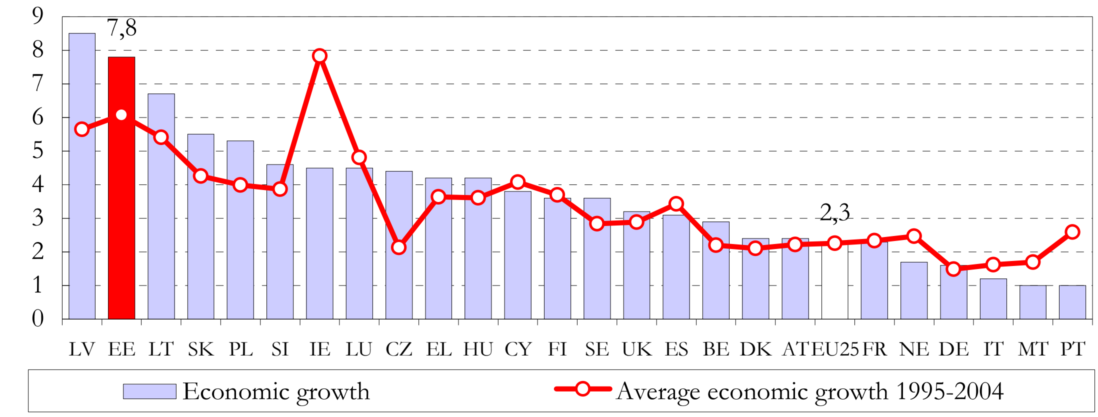
Main macroeconomic indicators

(per cent)

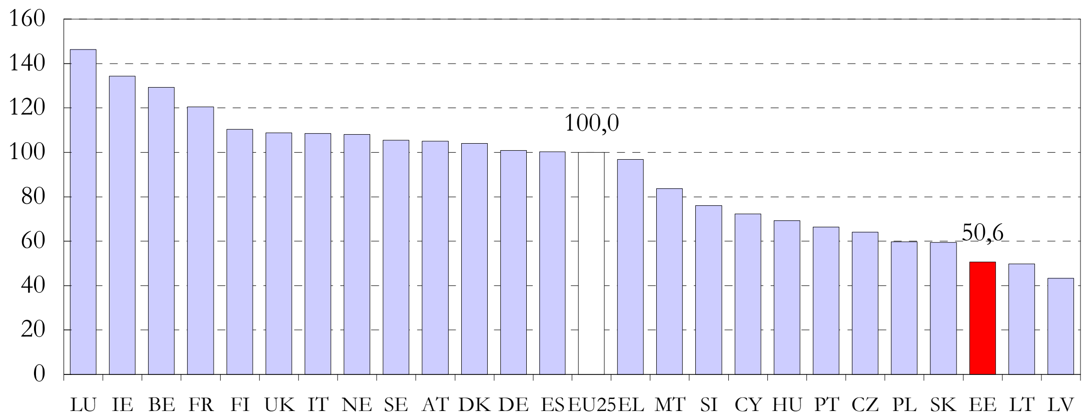
A. GDP per capita in purchasing power parities in 2004 (EU25=100)



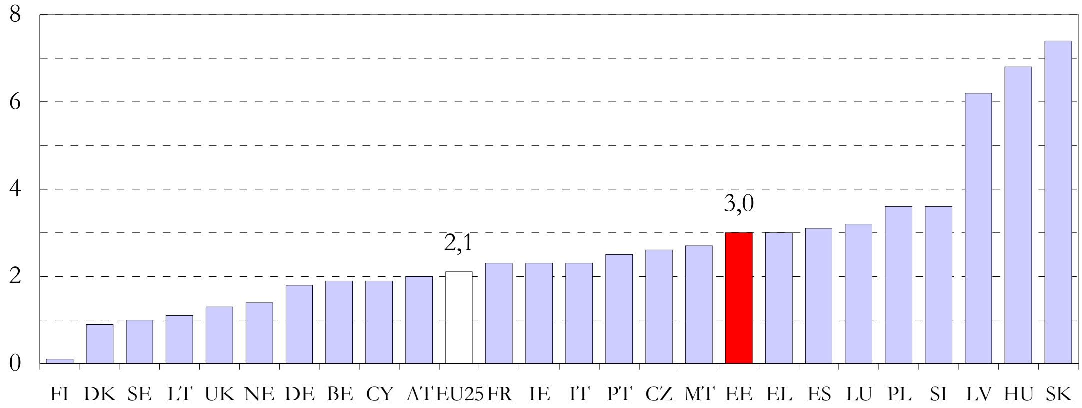
B. Economic growth in 2004



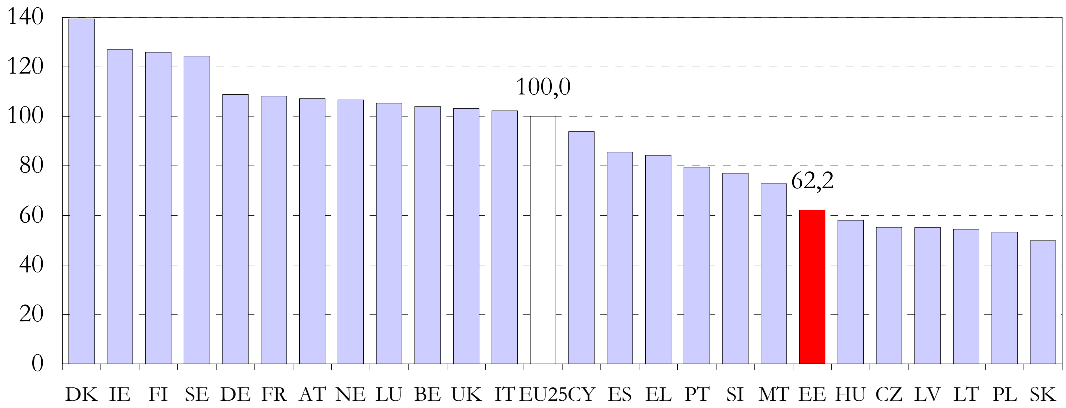
C. Labour productivity – GDP in purchasing power parities per person employed in 2004 (EU25=100)



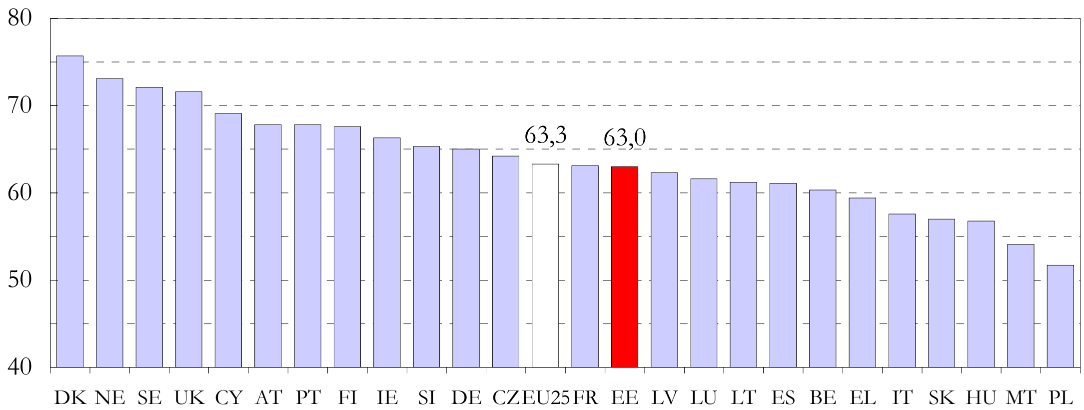
D. Harmonized index of consumer prices in 2004



E. Comparative price level to EL25 average in 2003 (EU25=100)



F. Employment rate (15–64 years old) in 2004



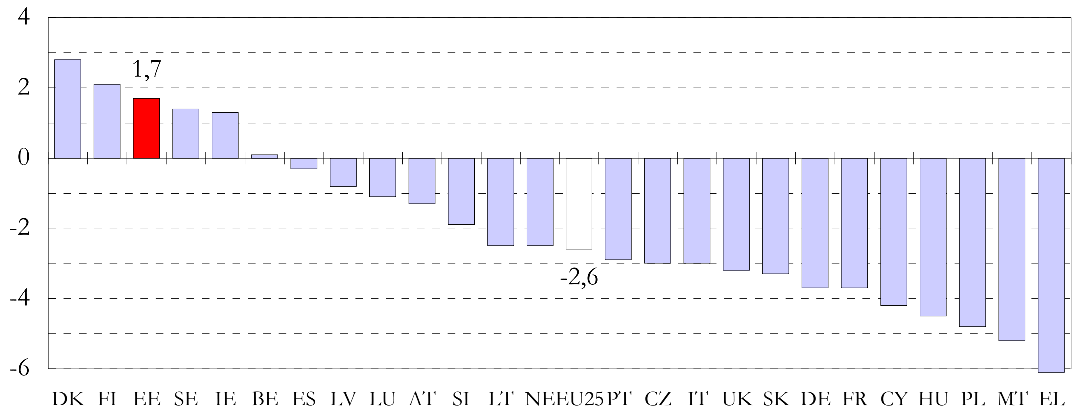
Sources: Eurostat, Statistical Office of Estonia, Ministry of Finance of Estonia.

Figure 18

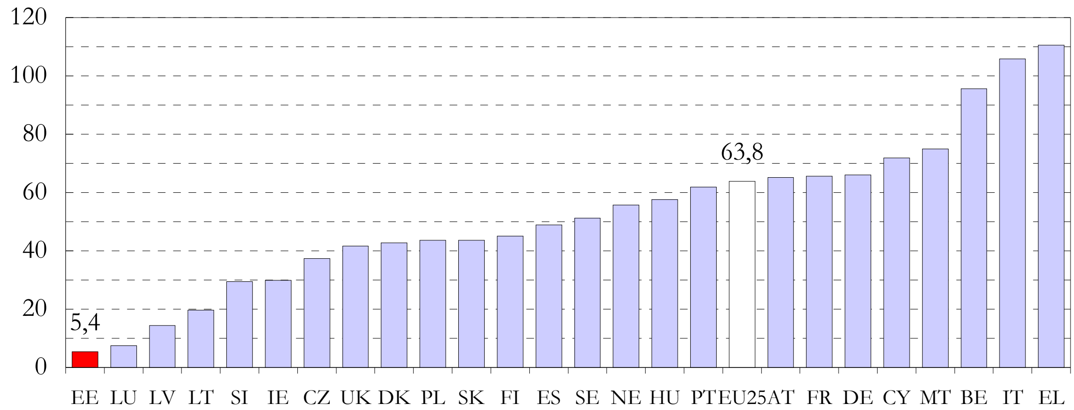
General government fiscal position

(% of GDP)

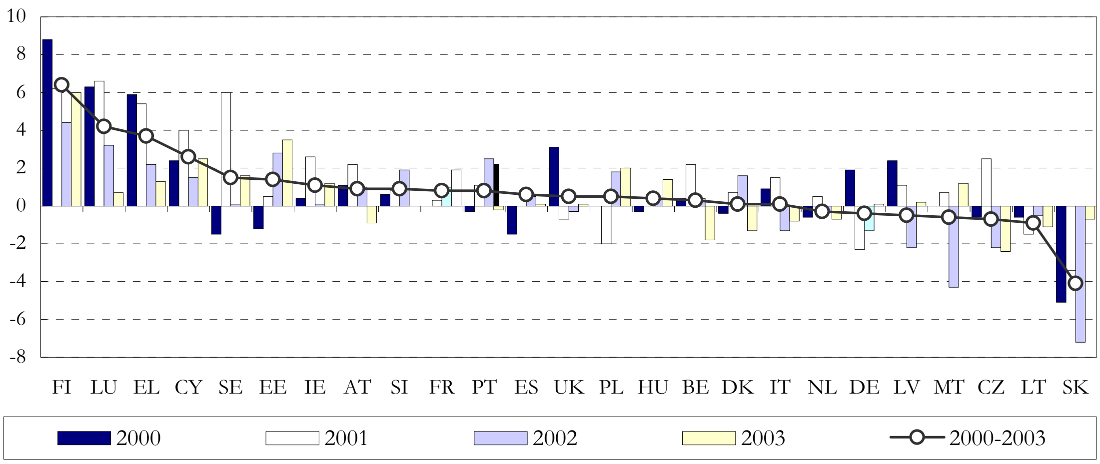
A. General government budget balance in 2004



B. General government debt in 2004



C. EU25 Stock-flow adjustments in 2000–2003



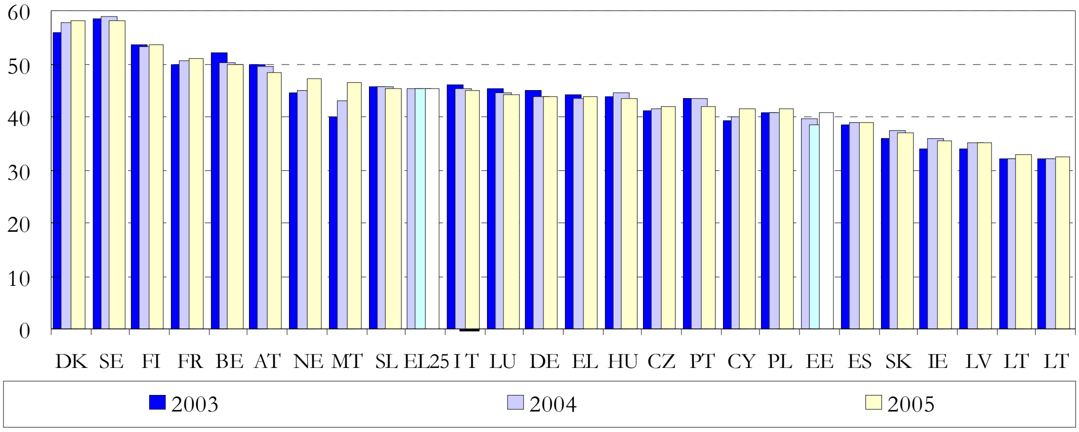
Sources: Ministry of Finance of Estonia, Bank of Estonia, Statistical Office of Estonia.

Figure 19

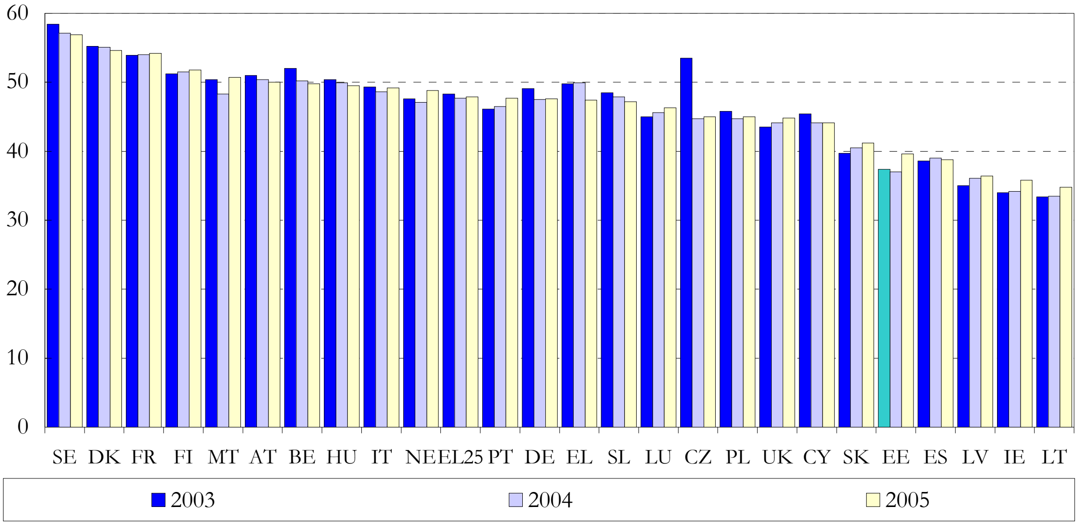
General government revenue and expenditure

(% of GDP)

A. Estonian general gov. revenue compared to other EU member states in 2003–2005



B. Estonian general gov. expenditure compared to other EU member states in 2003–2005



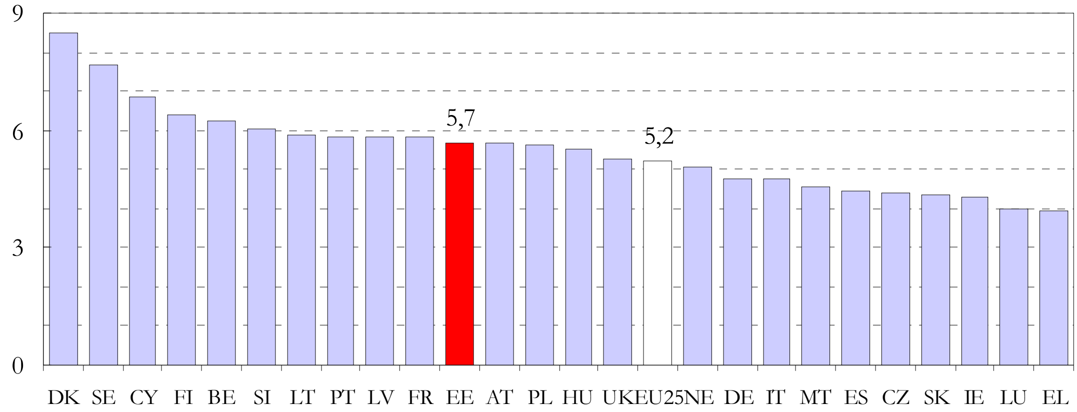
Sources: Eurostat, Estonian Ministry of Finance.

Figure 20

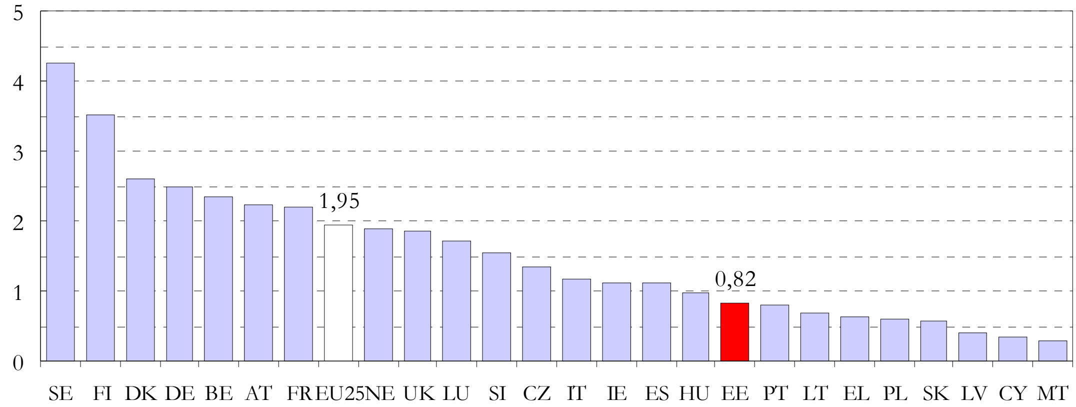
Government investments into physical and human capital

(% of GDP)

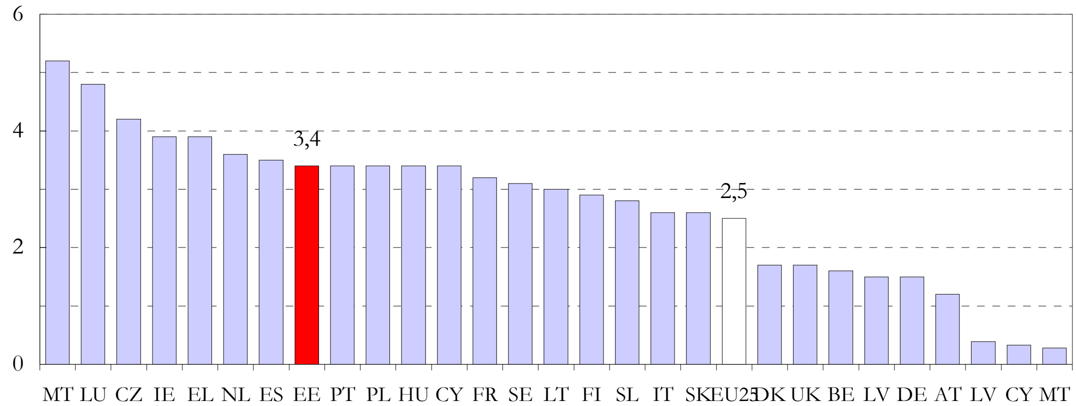
A. Public expenditure on education in 2002



B. R&D expenditure in 2003



C. General governemnt gross fixed capital formation in 2003



Sources: Eurostat, Estonian Ministry of Finance.

Annex 3. Inflation Developments in Estonia in the Context of Fulfilment of the Maastricht Price Stability Criterion

1. Maastricht inflation criterion

A precondition for introduction of euro is the compliance of the respective member state with the convergence criteria provided for in the Treaty. One of these – the price stability criterion – stipulates that the member state must have achieved a high level of price stability. Price stability ensures stable and low interest rates, thereby supporting economic growth and creation of employment. Inflation similar to that of the euro area core states also ensures compliance of the general monetary policy with economic development of the state.

The Maastricht price stability criterion is the only criterion with which fulfilment Estonia currently has problems. **The rise in Estonian consumer prices significantly exceeds the respective euro area indicator** – in October, the average rise in prices during the last 12 months was 4.3%, while the reference value was 2.4%. Estonia's core inflation, however, is similar to that of the euro area. Of the euro area member states, 6 (i.e. one half) complied with the price stability criterion, and in one of the EU member states the inflation was higher than in Estonia.

Taking into account the conditions existing in Estonia, it is very difficult to control the inflation, due to absence of independent monetary policy. In addition to this, "targeting" of the price stability reference value is difficult due to its nature, since unlike e.g. the budget deficit and government dept criteria, the reference value of the inflation criterion is a "moving target", i.e. it changes in time (see Box 5). It is therefore necessary to take into account the various inflation developments in different member states caused by very diverse reasons. In the last years, there have been numerous cases where the inflation in some member states is temporarily at a very low level due to administrative adjustment of price changes. Furthermore, the technical differences influencing calculation of the consumer price index must be taken into account (see Box 6).

Convergence criteria-based assessment of the development of the 3 states that have expressed their will to introduce euro on the 1st of January 2007 (Estonia, Lithuania and Slovenia) is likely to take place in the second half of the year 2006. If the rules are meant to be followed strictly, the assessment cannot take place earlier, since in the case of mentioned countries the mandatory 2-year membership in the exchange rate mechanism ERM II will be completed on the 28th of June 2006.

Box 5: Legal framework of price stability criterion

According to Article 121 of the Treaty Establishing the European Community, a member state willing to join the euro area must achieve a high level of price stability by the moment of assessment, which means a rate of inflation close to that of, at most, the three best performing Member States in terms of price stability.

Protocol No. 21 on the convergence criteria annexed to the Maastricht Treaty defines the criterion in more detail: a Member State must have a price performance that is sustainable and an average rate of inflation, observed over a period of one year before the examination, that does not exceed by more than 1 1/2 percentage points that of, at most, the three best performing Member States in terms of price stability. Inflation shall be measured by means of the consumer price index on a comparable basis, taking into account differences in national definitions.

The latter means that the reference value of the price stability criterion shall be assessed based on the harmonized index of consumer prices, HICP. The HICP is developed by Eurostat, in order to acquire consumer price indexes that would allow making of state-level comparisons. In contrast to the consumer price index of which weighting system complies with the average expenditure structure of

Estonian population, the HICP takes into account the expenses incurred on the territory of Estonia, i.e. the private consumption expenditures of non-residents.

2. Inflation developments in Estonia

There are several explanations to the rapid price increase in Estonia, caused by the demand as well as by supply. Total effect of several factors caused the increase of inflation after Estonia acceded with the EU. Harmonized consumer price index in Estonia increased from 1% to 4% and it has stayed on that level. Among biggest inflation factors are clearly transport, housing, foodproducts, alcohol and tobacco. After the EU accession prices increased mainly because of the administrative price changes – increase in excise duty rates on fuel and alcohol, customs duties, price increase owing to the implementation of common agricultural policy (especially price of sugar). Major factor in the price increase in transport during the present year has been increase in the price of crude oil on the global market. In addition housing expenses increased due to to the price increase of electricity that took place on the 1st of March 2005.

In countries with lower living standard (Estonian GDP per capita is reportedly only slightly over half of the EU average) households spend higher share of their income to food, transport and housing. For this reasons these chapters have very high influence over the fluctuation of overall price level. The structure of consumption basket is influenced by the general living standard of the country as well as by different consumption habits. In countries with lower living standard the share of the so-called essential expenditures (e.g. food) is bigger and the share of less essential expenditures (leisure time, eating out, hotels) smaller.

Major inflation factor at present is the **price increase of crude oil** on the global market. Price increase of transport services, including fuel, plays significantly bigger role in Estonia than in euro area for two reasons:
1. The price of fuel has increased in Estonia considerably faster than in euro area. In addition to oil price increase on the global market also increase in fuel excise duty rates 18–64% on the 1st of January 2005[21] added to an overall price increase. In comparison to the euro area the share of excise duty in price of fuels in Estonia is smaller, which makes price of fuel more vulnerable to changes in prices of crude oil.
2. Fuel has a bigger influence on the headline CPI composition in Estonia as fuels hold a bigger share in consumer basket in Estonia than in euro area. In Estonia and also in other Central- and East-European countries the consumer baskets hold higher share of fuels than older member states of the EU – since new members are poorer countries with lower income, but global market prices for fuel are generally the same for all countries. In addition to that also northerly colder climate in Estonia brings about the bigger use of fuels. In the basket of harmonized consumer price index of Estonia the share of motor fuel is 6.4%, whereas in EU the average is 3.8% and e.g. in Finland the respective figure is 4.5% and in Italy merely 2.7%. Estonia's 6.4% is one of the highest in EU.

Energy intensity of Estonian economy is one of the biggest in EU; according to the data of 2003 it was approximately 6 times bigger than the average[22] in EU. This is caused on one side by the structure of economy, which uses much energy consuming production technologies. At the same time oil shale power industry has a big role and it is significantly cheaper compared with the imported energy sources. On the other side local climate is colder than the EU average, this

[21] Leaded petrol excise rate increase from 5,280 kroons per 1,000 litres to 6,600 kroons. Kerosene excise rate increase from 3,840 kroons per 1,000 litres to 4,730 kroons. Diesel oil for special purposes and light fuel oil excise rate increase from 420 kroons per 1,000 litres to 690 kroons. Heavy fuel oil excise rate increase from 200 kroons per 1,000 kg to 235 kroons. The influence of these excise rate increases into CPI is nevertheless marginal.

[22] Gross inland consumption of energy divided by GDP (at constant prices, kilogram of oil equivalent per 1000 €) was during 2003 EU average 209 kgoe/1,000€, in Estonia 1,208 kgoe/1,000€.

alongside with the fact that houses do not comply to modern building standards brings about bigger energy consumption. In comparison of countries, those with the lower GDP level have a significantly higher energy intensity per GDP unit than that of the countries with higher GDP level. Increase in GDP brings along increase in energy usage efficiency and increases also the in?dependence of economy on energy.

Whereas the so called direct effect (increase of consumer prices as the result of increase in price of fuels in the consumer basket) is bigger in Estonia than in other countries, then analysts estimate[23] that the so-called second round effects (higher consumer prices brings higher inflation expectancy, which through wage formation increases price level) are relatively small in Estonia, owing to the bigger flexibility of Estonian labour market.

Second major factor for our high inflation is increase in administratively regulated prices. Previously mentioned **rapid price increase in services connected to housing** has been brought along by:

- Increase in the price of electricity by 13.3% since March 2005.
- Refuse collection service has become rapidly more expensive since January 2005.
- Constant price increase of solid fuel (wood, turf etc) since the beginning of 2004, whereas price increase has become continuously bigger, reaching in September 2005 even to 41.2% as compared to the same period previous year. Price increase has been caused by restrictions in supply and by an increased demand for alternative energy sources owing to the price increase of oil products, electricity and shale oil.

Also **prices of alcoholic beverages and tobacco products** have increased, basically due to the increase of excise rates.[24]

Table 25

Influence of Administrative Price Growth on Inflation 2005–2006

(per cent)

Administrative actions	Enforcement	Price increase (%)	Effect on CPI	
			2005	2006
Change in tax policies				
Increase of excise duty on motor fuel	01.05.2004	10.0	0.24	–
Increase of excise duty on diesel oil for special purposes	01.01.2005	5.0	0.01	–
Increase of excise duty on tobacco	01.07 (2005–2007)	7.5–15	0.20	0.28
Increase of excise duty on alcohol by 5%	01.01.2005	3.0	0.11	–
Increase of excise duty on alcohol by 10%	01.07.2006	6.0	–	0.11
Other administrative price changes				
Water supply	01.01–30.06.2005	8.3	0.051	0.0005
Sewerage	01.01–30.06.2005	6.9	0.045	0.001
Refuse collection	01.01–30.06.2005	19.2	0.051	0.006
Electricity	01.03.2005	13.3	0.36	0.07
Electricity	01.03.2006	0	–	0
Price increase of water and sewerage in Tallinn	01.01.2006	9.6	–	0.04
Gas	01.01.2006	10.0	–	0.06
Price increase of distance heating due to the price increase of shale oil purchase price	November 2005-January 2006	50%	0.02	0.23
Total			**1.09**	**0.80**

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

[23] IMF. 2005 Article IV Report. *Selected Issues.*

[24] On the 1st of January 2005 the excise duty rate on most types of alcohol was increased approximately by 5%. On the 1st of July 2005 excise duty rate on cigarettes was increased by 240 kroons per 1,000 cigarettes + 25% up to 275 kroons per 1,000 cigarettes + 26%.

To sum up the previous we can say that Estonia's rapid price increase is a result of:

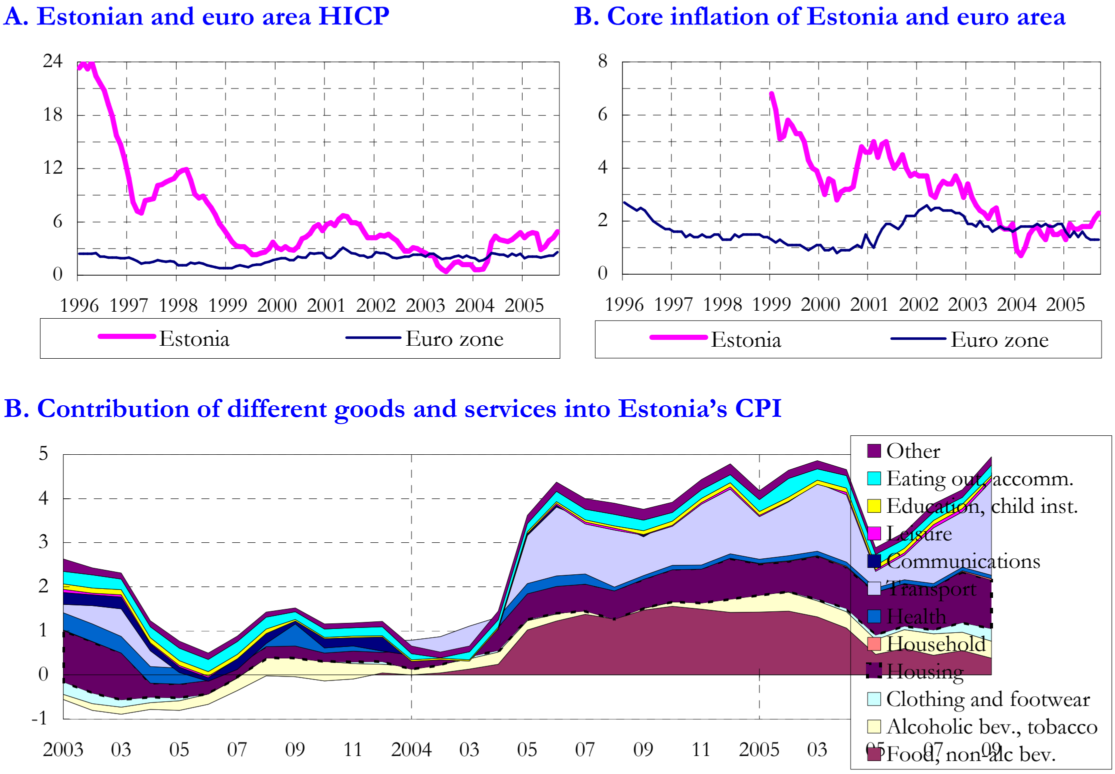
1. a considerable increase in price of fuel on the global market,
2. administrative measures – increase of excise duties, increase in price of electricity, increase in price of refuse collection, increase in price of heat energy.

This shows that Estonia does not have a substantial inflation problem – high value of headline inflation is caused by individual factors, the influence of some should disperse during next year. Core inflation of Estonia is low and according to the estimations of the IMF the risk of second round effects of oil price increase is low. The present inflation level causes pressure neither to our competitiveness nor to our Monetary Committee System.

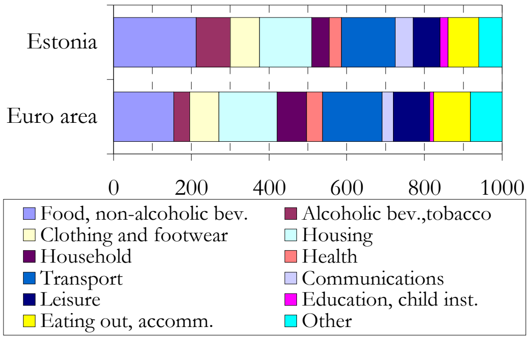
Open economy makes our inflation vulnerable to foreign price changes and thus also rather volatile. Therefore it is important to ensure that our economic policy decisions would not intensify these developments – it is important to control administrative price increases and avoid the implementation of expansive fiscal policy, which would bring along additional price pressures. It was therefore that the government decided to postpone the planned increase of excise duty rates of alcohol and special purpose fuel. At the same time we do not plan making so-called one-off deals in order to artificially suppress inflation.

Figure 21

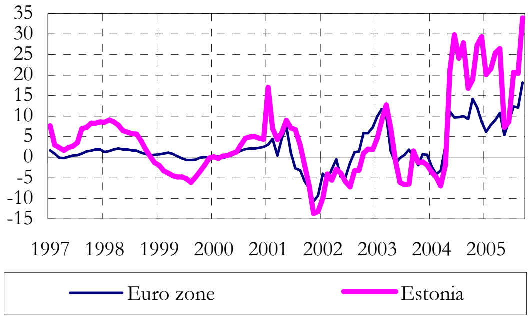
Inflation Developments in Estonia
(per cent)



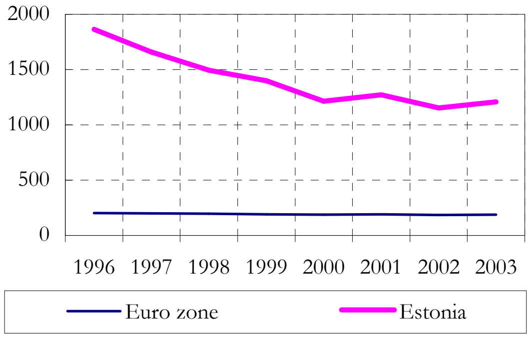
C. Consumer basket in 2005



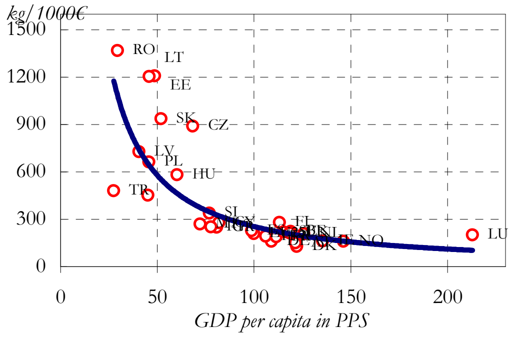
D. Fuel price increase



E. Energy intensity of the economy (kg[25]/1000€)



F. GDP versus energy intensity (2003)



Sources: Statistical Office of Estonia, Eurostat.

3. Inflation developments of euro area

During the last year and a half the euro area has had relatively volatile inflation developments, influenced by several factors. Although core inflation has been decreasing, other factors keep price increase relatively rapid, including price increase of energy, which contributed to headline inflation more than by 1%, largely caused by increase in price of oil. Also changes in tax policy have had a significant impact on inflation. Inflation in euro area countries has during the last year and a half remained within 0.4–4.7%. At the same time the variation of inflation rates has increased as compared to the beginning of 2004.

Targeting the reference value of price stability criterion is complicated as it depends on the inflation of each single country. During the last years the impact of administrative price increases has grown and this may in some cases result in low inflation (or even deflation).

Evaluation of inflation criterion uses the 12 months average inflation data of the three EU member states with lowest inflation. Countries that have a negative 12-month average inflation have not been included among the best performers in a sense of price stability (e.g. in Convergence Reports of 2004), while at the same time 0.1% inflation is considered to be price stability. The price stability goal by European Central Bank is according to the decision[26] of the Council of European Central Bank dated on the 8th of May 2003 defined quantitatively as price increase below 2%, but close to that. Therefore a question may rise if inflation effectively zero constitutes price stability? We may presume that a very low inflation is not fully consistent with the goal of price stability of euro area, since a so-called natural inflation that supports economic growth would rather be close to 2%.

[25] Equivalent to oil

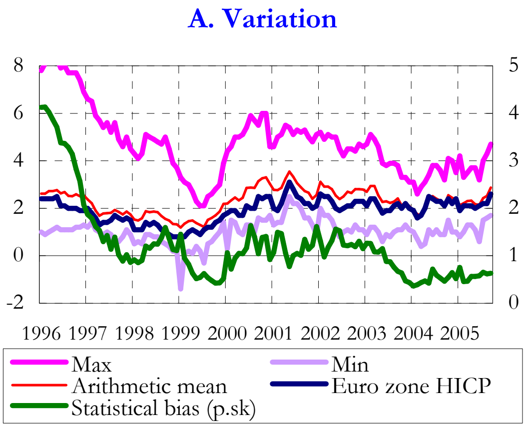
[26] The ECB's monetary policy strategy. ECB Press Release, 8 May 2003. http://www.ecb.int/press/pr/date/2003/html/pr030508_2.en.html.

Therefore it is doubtful if using the 12 months average inflation rate of the EU member states with very low inflation as basis for reference value of price stability is really justified.

Figure 22

Inflation Developments of euro area

(per cent)



Source: Eurostat.

Table 26

Calculation of Reference Value of Price Stability Criterion in Convergence Reports

	1. Member state	2. Member state	3. Member state	Excluded	Reference value
1996	Finland 0.9%	Netherlands 1.2%	Germany 1.3%	–	2.6%
1998	Austria 1.0%	Finland 1.2%	Ireland 1.2%	–	2.7%
2000	Sweden 0.8%	Austria 0.9%	France 0.9%	–	2.4%
2002	Great Britain 1.4%	France 2.0%	Luxemburg 2.1%	–	3.3%
2004	Finland 0.4%	Denmark 1.0%	Sweden 1.3%	Lithuania -0.2%	2.4%

Source: Convergence Reports.

Box 6: Geometric average versus arithmetic average method in calculation of CPI

Estonia and other new member states use mostly arithmetic average to calculate Consumer Price Index, while older member states use mostly geometric average. Hereby a short summary on the nature of discussion on "arithmetic versus geometric average" ; based on global experience we try to make an evaluation on the effect on us of using a formula more unfavourable to us in the context of price stability criterion.

Differences between arithmetic and geometric average method

On accounting inflation indexes for the aggregation of price observations generally arithmetic or geometric average method is used. In 1990-ies in several European countries as well as in USA the methodology of CPI calculation was changed and geometrical average method was adopted. Geometric average method was preferred for the reason that it enables to adjust the price index shift resulting from the replacement of goods in between as well as within categories of goods. Geometric average method is less sensitive to extreme values and is therefore relatively well suited for heterogeneous consumption expenditure goods. Mathematically the relationship between arithmetic average and geometric average method is as follows:

1) if the variation of basic price is bigger than the variation of current prices, then the geometric average method gives bigger change of price level than the arithmetic average method;
2) if the variation of basic price is smaller than the variation of current prices then the then the geometric average method gives smaller change of price level than the arithmetic average method;
3) if the variation of basic price equals to the variation of current prices, then the geometric average method gives the same result as the arithmetic average method;

USA labour statistics office found that the geometric average method helps to correct the so-called "replacement shift". Geometrical average method reflects in a better way the behaviour of a consumer when consumers replace in their expenditures to more expensive goods or sorts of goods of the product group with a cheaper alternative to some extent, when relative prices change. The effect of price increase for households in case of the replacement of goods is smaller than with calculations that does not take into account the possibility of the replacement of goods.

Legislation of HICP accounting and its implementation in EU member states

EU Commission has published on December 2001 *Compendium of HICP reference documents* on accounting, regulations and directions on HICP methods[27]. The use of arithmetic and geometric average in case of HICP accounting methods has been dealt in the context of the so-called "**elementary aggregates**". Elementary aggregates are defined as consuming expenditures that are reflected on the most detailed HICP aggregating level. Most member states define elementary - aggregates on regional level. Price information is being collected on all or selected regions and it is used thereafter whether according to geometrical or arithmetical average accounting into respective elementary aggregates (e.g. in 2001 in Finland they used altogether 6 elementary aggregates for butter including 27 price observations to each elementary aggregate). Thereafter indexes are grouped into expenditure groups on state level. There are no determined methods in aggregating elementary aggregates into state level components (e.g. by using arithmetic or geometric average).

As of September 1996 the regulation of European Commission took effect[28], according to which it is allowed to use only arithmetic or geometric average methods or methods that give similar results for accounting HICP elementary aggregates. Before accession, eight EU member states did not comply with the requirements and were forced to work out and implement new methods, and decided in favour of geometrical average. When accounting HICP elementary aggregates as of 2001

[27] European Commission. Compendium of HICP reference documents (2/2001/B/5).
[28] Commission Regulation (EC) No 1749/96.

only geometrical average method was used by 7 EU member states, only arithmetic average method by 4 member states and 4 member states used the combination of both methods.

Effect of the change of methods to the annual growth of HICP has been estimated to constitute 0.06 pp (Italia) up to 0.65 pp (United Kingdom), average effect will remain on the level of 0.1 pp. Here we should consider that none of the eight member states that changed the methods of HICP accounting, used previously an arithmetic average complying to the requirements of European Commission, i.e. **the comparison of the change of methods does not constitute the derogation of the sue of arithmetic and geometric average method.** As a way of comparison: in USA the effect of starting to use the geometric average at the end of 1990-ies was evaluated to be 0.2pp a year, but even that evaluation does not reflect the total effect of the shift of price index from arithmetic average to geometric average, for geometric average was implemented only to certain goods, which altogether constituted 61% of consuming expenditures. The most clear cut consumer price index variation effects, resulting only from the geometric and arithmetic average methods, have been accounted on the basis of price data of the United Kingdom: in 2002 the effect was evaluated to be 0.4 percentage point.

Variation of methods when accounting HICP in Estonia

Statistical Office of Estonia uses for accounting HICP elementary aggregates as well as in further aggregating the arithmetic average method. Statistical Office forwards to the Europe Commission the components HICP which Eurostat aggregates

Effect of transfer from arithmetic to geometric average when weighing together the price observations on the level of elementary aggregates **is not known**. The estimates of other countries to changes of methods cannot be taken as direct basis to the effect of statistic change in Estonia, because these countries did not use arithmetic average method before going over to geometric average changes, as we had in Estonia. The effect of method change estimation of other countries includes also the effect of other changes, not only the transfer from arithmetic to geometric average methods. Most probably in case of Estonia the effect of transfer from arithmetic average to geometric average would influence HICP annual growth by *ca* 0.2...0.4pp[29].

[29] According to the estimations by Bank of Estonia.

Annex 4. Ageing of the Population: Consequences for Estonia

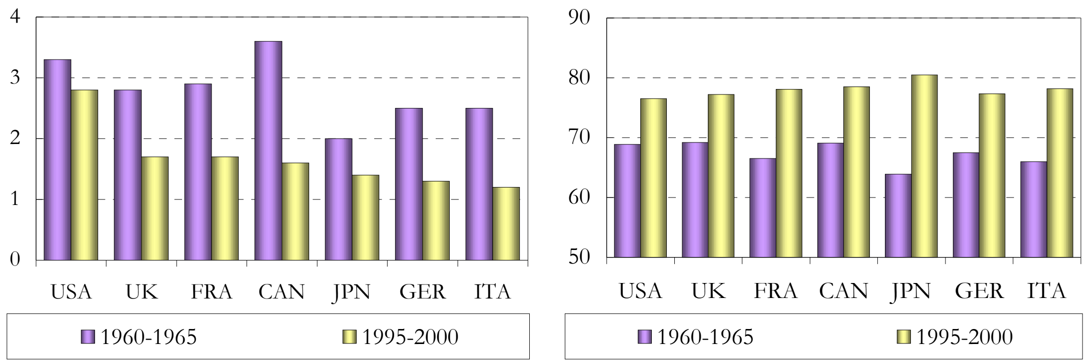
1. Global trends of population ageing

Ageing is global phenomenon. Median age of world population (age that has equal number of younger and older people) is as of today 27 years; by 2050 this figure has risen to be 37 years. In addition contrasts between countries will further increase from the level of today – this day so-called welfare countries will age fastest and in Europe the median age will in most countries exceed 50 year level by 2050 (2000: 38 years), being e.g. in Germany 53 years and in Italy 57 years. First time in the history of mankind we are facing such drastic demographic developments, as structure and age distribution of population has been a relatively constant figure for centuries. Now all this is irreversibly changing. **Average life expectancy will increase more during the next 50 years than it did during previous 5 000 years.** Also a geopolitical situation is changing. Among the dozen most populated countries by 2050 there will be only one developed country (USA), while in 1950 there was 6 developed countries.

Figure 23

Demographic trends in developed countries

A. Birth rate(number of children per woman) **B. Average life expectancy at birth**



Source: Centre for Strategic and International Studies.

Population of Europe has been constantly decreasing since 1996, for the very reason that natural growth of population has changed to be negative. The share of people living in Europe into the world population will according to the UN population forecasts constitute 7% in 2050, while it as lately as 1950 constituted 22%. Main reason for the fall is the fact that birth rate in Europe is already today below the figure required for the reproduction of population.

Alongside with the change in the total number of population there will be a significant change in trends of distribution of age in population in connection with the prolonged expected life expectancy. Alongside with the growth of average life expectancy the number of retired people will increase and also time spent in retirement will be longer. Nearest decades in Europe will be characterised as the retirement period of the after war "baby boom" generation. **Global trends indicate that number of children per woman is decreasing in a hundred year perspective (1950 to 2050) from five children to two, while the average life expectancy will increase from 48 to 74.** Ratio between employees and dependants will deteriorate, thus the pressure on social insurance systems will be enormous. In addition to retirement systems the pressure will fall on health related sectors, as health expenses for elderly people are significantly bigger than to younger people.

Challenges brought by ageing of population can be seen as redistribution of welfare between generations. In future people who are economically active have more “mouths to feed” and we have to find ways to divide the resulting welfare loss between generations. This disparity is partially being relieved by the pension insurance reforms of *pay-as-you-go* systems (based on the idea that people who work today pay retirement money for today’s retired people, e.g. Estonian pension insurance system I pillar), into pension insurance systems with which people actively participating in working life today save for their personal retirement age, relieving this way the pressure on state retirement insurance systems and on future taxpayers.

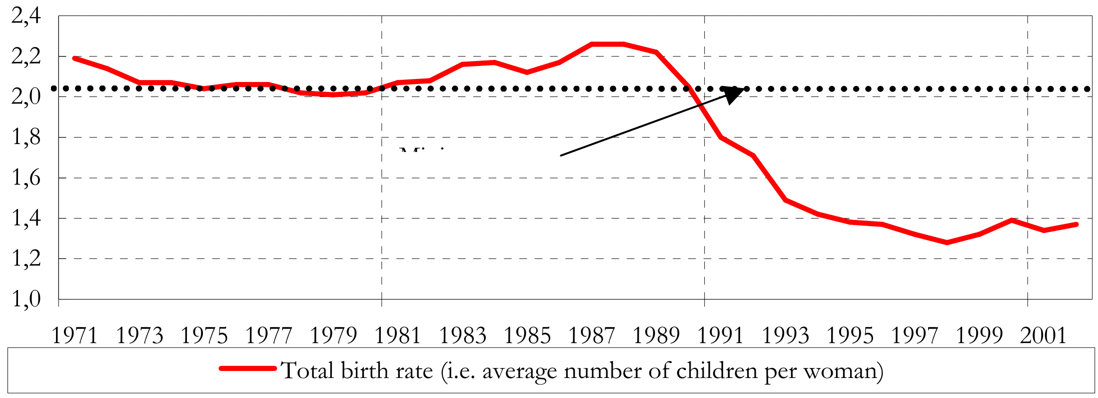
Proceeding from the previous information it is obvious that the welfare of today cannot be granted for much longer – on one side the demand is increasing (number of people consuming social welfare is increasing owing to the deterioration of ratio between population in working age and dependants) and the options for the state are decreasing (number of taxpayers is decreasing). Hypothesis that governments will not change its present expenditure policy and will finance the deficit with loans as far as demographic trends turn, is not a solution as projections indicate that loan will increase above “threshold of pain”, i.e. to the level which is not sustainable. This kind of development would bring along the downward correction of the ratings of the countries (a possibility several times indicated by rating agencies), thus further loan taking would become even more expensive for these countries and would take them into a situation where paybacks and interest financing would not be possible in any other way than only by taking new loans or carrying out a sharp tax increase. If we add to this a slowdown of the speed of the economic growth resulted by decrease of population in general and particularly population in working age, then it becomes obvious that there is no way we can preserve the present level of welfare in so many countries.

2. Demographic trends in Estonia

Estonia together with its Baltic neighbours has the lowest average life expectancy among EU member states, both by men and by women. As cynical as it may seem – the effect of that to the budget position is positive as compared with other EU member states, since expenditures made to older generation in Estonia are significantly less as compared to other age segments. Empirical studies reveal that usually not more than 60% of the government’s social expenditures have been allocated to people above the age of 65, at the same time the percentage of these people remains below 20% of the population. Estonia seems to be, considering low general government debt, annual budget balancing and also a successful pension reform, to be in relatively good position to manage expenditures connected to ageing. Not all by far has been done to soften the risks of demographic changes. Budget position seems financially sustainable on the background of today’s decisions, but this may not grant acceptable pensions nor health expenditures in longer perspective.

Figure 24

Birth rate



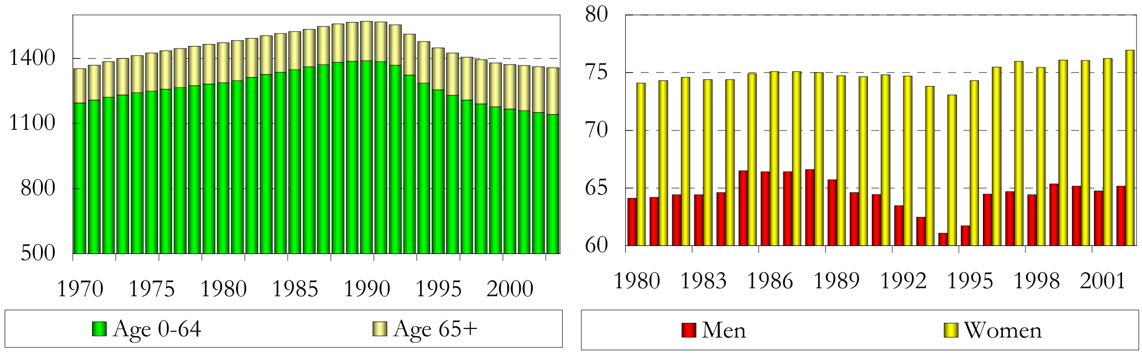
Source: Statistical Office of Estonia.

In Estonia population has been decreasing constantly since the beginning of 1990-s. While up to now one of the reasons behind that trend has been migration, during resent years also age structure of population has been clearly changing. Also population's ageing trend may be considered to start from gaining re-independence time, when the number of people at the age of 65 and above constantly increased and births sharply decreased. After the "singing revolution" years the birth rate has fallen below the population recovery level. Decrease in the number of children and increase in life expectance have increased the ratio of elderly people in population. In 1990 the ratio of people older than 65 among the population was 11.5%, today it is 16.2%. This trend is expected to continue and by 2050 this ratio should be 27% of the population.

Figure 25

Demographic trends in Estonia until 2004

A. Population of Estonia (thousands) **B. Average life expectancy at birth (years)**



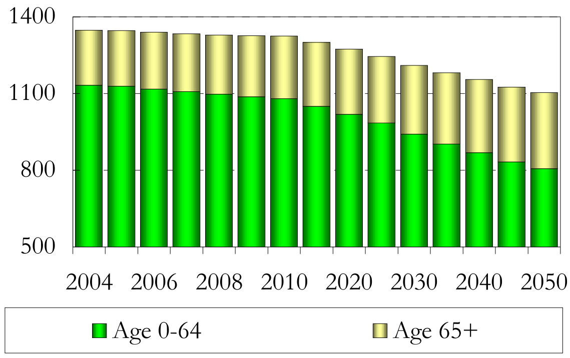
Source: Statistical Office of Estonia.

Population in Estonia is going to decrease according to the estimations (by European Commission as well as by Ministry of Finance) in 50-year perspective *ca* 17–18%. Estimations presume that the birth rate will increase as compared today but not enough to guarantee the required 2.1 children per woman that would grant the survival of the nation. In 2050 the total birth coefficient will be 1.6 (2000: 1,39). Also the ratio between working people and retired people will deteriorate. Owing to the previously mentioned low birth rate and sharp increase in average life expectancy as compared to recent periods. Average life expectancy for men born in 2050 will be approximately 10 years longer than of those who are born today, women live on average 7 years longer than is expected today.

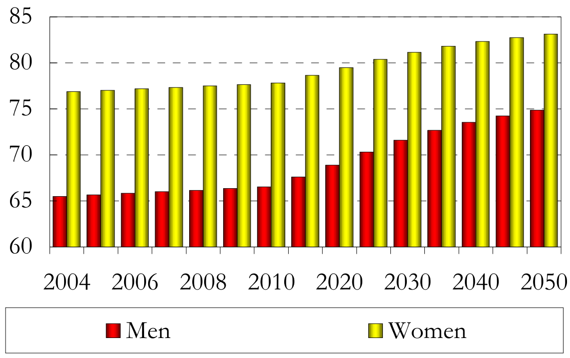
Figure 26

Forecast for Demographic Trends in Estonia

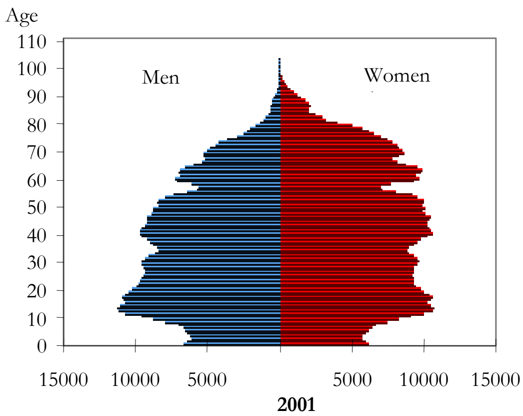
A. Population of Estonia (thousands)



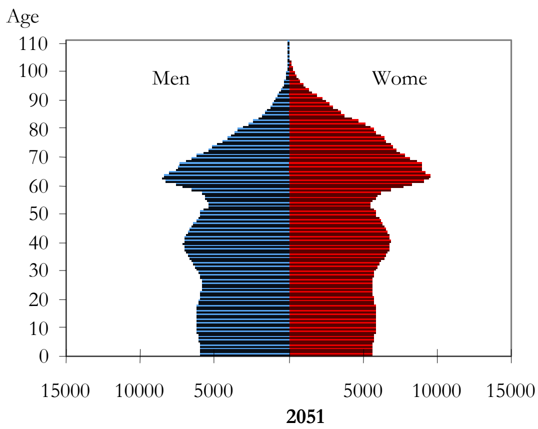
B. Average life expectancy at birth (years)



C. Age distribution of population in 2001



D. Age distribution of population in 2051



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

These trends result in the change of ratio between working people and retired people (relationship of retirement system). In 1992 Estonia had 2 working people for each retired person. Today this ratio has decreased to 1.8. According to estimations in 2050 there will be 1.27 working people per each retired person.

3. Possibilities to reduce the economic effect of ageing

What are the possibilities to reduce the economic effect of ageing?

1. **Increase the supply of labour force:**
   a) **More effective use of resources available.** Engaging unemployed people in working age through reducing unemployment, increasing employment, especially among women. Pursuant to demographic trends there will be more people leaving labour market than those entering it in near future, thus this goal may seem easy. But at the same time

businesses may reduce investment or overall production when they believe they cannot replace retiered people, and the demand may decrease as population decreases;

b) **More work.** Main options here are the increasing of working hours and thus shortening of recreation time, and also more efficient use of the potential of older generation. Since in future people live longer and also the healthy period of life is going to be longer, thus we have to find possibilities to increase the employment of older generation;

c) **Involving additional resources.** There is an option to increase birth rate via active family policy or create conditions for including migrant workers. Population ageing may create very sharp contrasts between regions and thereby it may be that we are underestimating the importance of work force mobility and migrant workers in evaluations today.

2. **Increase productivity.** More effective work would partially help to compensate for decrease in the number of workers. For governments there is an opportunity to reform tax system that restrains enterprises (if they have that kind tax system), reducing administrative burden, supporting enhanced economy and removing restrictions from the movement of capital. Bigger productivity means bigger GDP in future, which in its turn means more possibilities in distribution – on the level of state as well as on individual level. On the other hand this cannot be a main solution as pensions are in most countries via indexing connected to wage increase. Thus the wage increase brings along bigger expenditures.

3. **Increase savings.** According to economic theory people try to divide consuming equally over lifespan, to avoid sharp changes in life standards that may take place, e.g. when they retire. Future state has reduced possibilities to guarantee required social welfare and methods should be created to increase savings when people still work. Reforming pension systems financed by present working generation (*pay-as-you-go*) helps to increase saving.