Eesti Pank
Bank of Estonia

Report on the Adoption of the Euro

June 2008

CONTENTS

SUMMARY

With the "Report on the Adoption of the Euro" we wish to share with the public the information at the disposal of Eesti Pank about Estonia's readiness to change over to the single currency of the European Union – the euro – and also introduce the points of view of Eesti Pank. For this purpose, we started to publish a regular report on the adoption of the euro in 2007. This report is based on the assessments given by the European Central Bank and the European Commission in the Convergence Reports published in May 2008.

The introduction of the euro at the first opportunity has been and will remain the priority of Estonia's economic policy in the coming years. The changeover to the euro must be viewed as a natural development for Estonia, because the fundamentals of the Estonian economic policy are very similar to those of the euro area. Estonia is an EU Member State with a small open economy and a conservative fiscal policy. The principles of the currency board arrangement and the exchange rate of the Estonian kroon pegged to the euro, which will remain so until the adoption of the euro, form the basis of our monetary system. Estonia has been moving towards close integration into the euro area during the whole independence period. By joining the European Union Estonia also committed to adopting the euro. In 2006, the technical preparations carried out by Eesti Pank, in cooperation with government authorities and the private sector, reached the stage where all the activities not directly related to the adoption date were completed.

The European Commission and the European Central Bank regularly assess whether the EU countries that do not belong to the euro area meet the requirements for the introduction of the euro – the Maastricht criteria. The most recent regular Convergence Reports on non-euro area Member States were published on May 7 this year. The assessment showed that Estonia meets all the criteria for the launch of the euro except the criterion of price stability.

For an open economy like Estonia, which is rapidly catching up to the standard of living in the euro area, a slightly higher inflation rate compared to the euro area is natural and does not pose a threat to price stability. However, the low inflation rate prescribed by the current interpretation of the price stability criterion for the adoption of the euro will not be an easy target for Estonia. According to the spring 2008 forecast of Eesti Pank, it is unlikely that Estonia would be able to meet the Maastricht inflation criterion in 2009. Thus, the adoption of the euro will be postponed at least to 2011. According to the forecast, the inflation rate will decrease close the criterion at the end of 2010. Apart from that, in order to integrate into the euro area Estonia has to carry on fulfilling the criteria established for fiscal policy, exchange rate stability and low interest rate.

The Report also includes an Annex with an article by Velimir Bole, who describes the experience and economic developments of Slovenia, the first CEE member of the euro area, during its first year as a full member of the euro area. Bole analyses the structure of Slovenia's economic growth, developments in the labour market and competitiveness, determinants of price growth as well as changes in the balance of payments. The article concludes with an assessment to Slovenia's fiscal policy in the current period.

The introduction of the single currency of the European Union – the euro – is an obligation for all Member States of the European Union.[1] At present, 15 Member States of the European Union belong to the euro area.[2] Cyprus and Malta joined the euro area on January 1, 2008. The rest of EU countries are regularly assessed by the European Commission and the European Central Bank to determine whether they meet the requirements for the introduction of the euro – the Maastricht criteria. The assessment in May 2008 showed that Estonia meets all the criteria for the launch of the euro except the criterion of price stability. The Estonian Government and Eesti Pank have set the goal to adopt the euro at the first opportunity; that is, as soon as Estonia meets all the necessary conditions. According to the spring forecast of Eesti Pank, Estonia's inflation will decrease close to the price stability criterion by the end of 2010.

1.1. Conformity of the non-euro area EU Member States to the Maastricht criteria

The adoption of the single currency and the single monetary policy of the European Union require meeting certain economic and legal requirements. The specific prerequisites known as the Maastricht criteria are included in Article 121 of the Treaty on European Union and Protocol No 21 annexed to the Treaty. The objective of the Maastricht criteria is to ensure the smooth functioning of the European Monetary Union and a stable price level by means of a single monetary policy. These criteria require price stability and low interest rates, a stable exchange rate, and sound public finances. In addition, an appropriate legal framework is essential to designing and implementing the single monetary policy. The degree of fulfilment of the Maastricht criteria is assessed by the European Commission and the European Central Bank, who compile regular Convergence Reports.[3] These reports provide a basis for the European Commission to submit proposals to the ECOFIN and the European Council listing the Member States ready to launch the euro.

The European Central Bank and the European Commission published the latest regular Convergence Reports on the non-euro area Member States on May 7 this year. In addition to Estonia, the euro readiness of nine other countries was assessed this year: Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Bulgaria, Hungary, Romania and Sweden (see Table 1). Slovakia fulfilled all the Maastricht criteria in the period under analysis. Based on the Convergence Report prepared by the European Commission and the European Central Bank, the European Commission will propose to the Council of the European Union for Slovakia to adopt the euro in 2009. The EU Ministers of Finance (ECOFIN) will make their decision regarding the expansion of the euro area on July 8.

The assessment showed that Estonia meets all the criteria for the launch of the euro except the criterion of price stability. The following gives an overview of the steps Estonia has taken to meet the criteria.

[1] The exceptions are Denmark and the United Kingdom who, during the negotiations over the principles of establishing the monetary union (at the beginning of 1990s), were provided with an option of whether and when to change over to the euro. Those who joined later (incl. Finland and Sweden) were not given this option.
[2] The Member States of the European Union are divided into two groups based on their participation in the Economic and Monetary Union: full-fledged members of the Economic and Monetary Union (Member States that belong to the Eurosystem) and countries with derogation (Member States that do not belong to the Eurosystem).
[3] The Convergence Reports are available on the following websites:
European Commission: http://ec.europa.eu/economy_fi nance/publications/convergencereports_en.htm
European Central Bank: http://www.ecb.int/pub/convergence/html/index.en.html

Table 1. Readiness of EU countries to adopt the single monetary policy and the euro (May 2008)

	Price stability 3.2% (Apr'07–March'08)	Long-term interest rate (Apr'07–March'08)	Participation in ERM II (until 18/4/2008)	General government budget 2008 (up to -3% of GDP)	General government debt 2008 (60% of GDP or declining)	Legislative conformity
Estonia	8.3	–	Yes	0.4	3.4	Yes
Bulgaria	9.4	4.7	No	3.2	14.1	No
Czech Republic	4.4	4.5	No	-1.4	28.1	No
Latvia	12.3	5.4	Yes	-1.1	10.0	No
Lithuania	7.4	4.6	Yes	-1.7	17.2	Yes
Hungary	7.5	6.9	No	-4.0	66.5	No
Poland	3.2	5.7	No	-2.5	44.5	No
Romania	5.9	7.1	No	-2.9	13.6	No
Slovakia	2.2	4.5	Yes	-2.3	30.7	Yes
Sweden	2.0	4.2	No	2.7	35.5	No

Source: Convergence Reports of the European Commission and the European Central Banks (May 2008)

1.2. Price stability

According to the Treaty on European Union, a Member State's inflation rate must not exceed the average of the three best-performing Member States in terms of price stability by more than 1.5 percentage points.

In general, price stability refers to an inflation rate that does not affect people's decisions concerning production, consumption, investment and saving. The European Central Bank interprets the price stability of the euro area as the inflation rate close to but below 2% in the medium term. In rapidly developing economies a balanced inflation rate (i.e. not endangering price stability) can also be slightly higher in the medium term.

Compared to the reference value of the Maastricht criterion (2.5–3.2% in different years), Estonia's inflation has been higher in almost all the years. The relatively high inflation results from the present

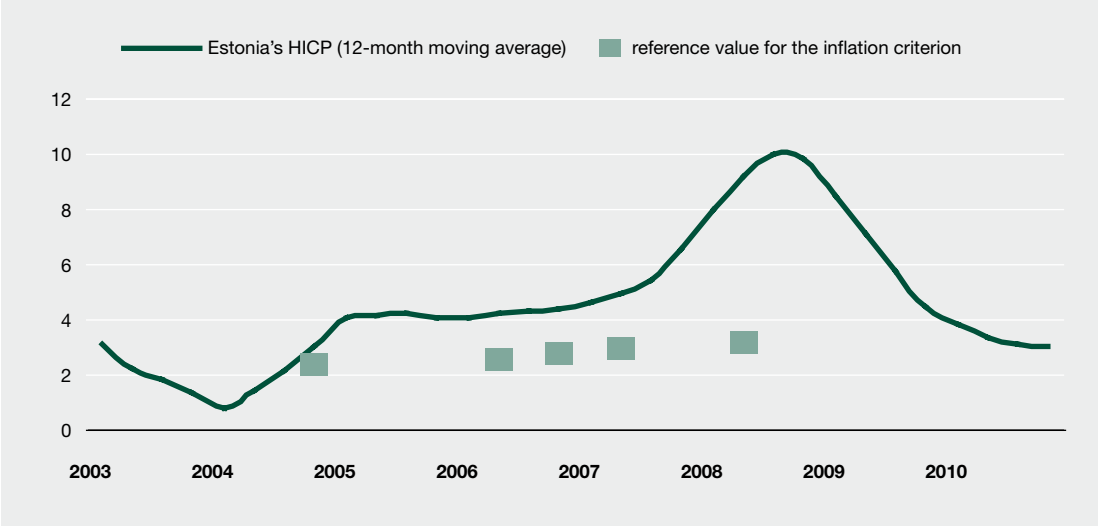

Figure 1. Meeting the inflation criterion (%)

Sources: Forecast of Eesti Pank (spring 2008), Eurostat, Convergence Report of the European Commission (May 2008)

development stage of our economy which is characterised by low prices in comparison with other EU countries, strong economic growth and structural changes related to the development. The convergence of the Estonian income and price levels towards the average of the European Union is accelerating the price increase in Estonia since in order to diminish the differences, incomes and prices as well as productivity must rise in Estonia somewhat faster than in the European Union on average.

The non-fulfilment of the Maastricht criteria does not mean that Estonia has substantial problems with ensuring price stability. For stable economic growth it is essential that prices rise in line with the growth in productivity. In this sense the Estonian price stability is not at risk in the coming years despite the temporary acceleration of inflation, but compliance with the inflation criterion still remains unlikely (see Figure 1).

Inflation may decrease close to the criterion at end-2010

According to spring 2008 forecast of Eesti Pank, it is unlikely that Estonia would be able to meet the Maastricht inflation criterion in 2009. The ongoing price rise in Estonia is significantly faster than long-term inflation, but this should be temporary. Inflation has been boosted by strong economic growth in recent years and external price pressures. Rapid wage growth brought about a rise in prices in 2007 and in addition, the prices of food and fuel in the global market picked up at the end of last year, which in turn boosted the price rise in Estonia. However, growth in the prices of foreign commodities, especially foodstuffs, has been stronger than expected, which is why overall inflation is slightly higher than expected. It should be kept in mind that these are one-off price hikes and their influence will start to subside in the middle of 2008.

According to Eesti Pank, in 2008–2010 inflation will primarily be influenced by a gradual decline of domestic pressures, administrative measures, volatile prices of food and commodities in the global market and the climbing energy price. Although the average inflation will be faster than in 2007, the first half of 2008 will witness the start of a longer-term downward trend in price growth. The cooling economy will foster the decrease of domestic price pressures. The forecast base scenario of Eesti Pank estimated the inflation for 2008 to be 9.8%, and 4.5% and 3% in the following two years. According to Eesti Pank, Estonia's inflation will decrease close to the Maastricht price stability criterion by the end of 2010. In order to fulfil the criterion it is essential to accurately time the implementation of administrative measures that influence prices.

1.3. Long-term interest rate

The long-term interest rate of a Member State must not exceed the average interest rate of the three best performing Member States in terms of price stability by more than 2 percentage points.

The long-term interest rate shows the expectations of market participants and the financial market's level of integration. Low interest rates (which comprise expectations of low inflation as well as low risk premiums) reflect market participants' understanding that the development of the economy will also remain stable in the future. According to the criterion, the interest rate on the long-term (10-year) government bonds denominated in the applicant country's currency must not exceed by more than 2 percentage points the average long-term interest rate of the three Member States with the lowest inflation rates.

The long-term interest rate has been relatively low in Estonia but the indicator is not directly comparable with the indicators of other Member States

because instead of the long-term government bonds denominated in kroons it is calculated on the basis of long-term kroon loans issued to the private sector.[4] Therefore, when assessing the interest rate criterion, the European Commission and the European Central Bank also take other factors into consideration.

According to the 2008 Convergence Report of the European Commission, the Estonian interest rate level and the low government debt level allow to conclude that Estonia is fulfilling the interest rate criterion. The European Central Bank also gave a positive assessment, based on a general analysis of the financial environment.

1.4. Stable exchange rate

The country must, for at least two years, participate in the currency exchange rate mechanism ERM II and keep the exchange rate of its currency stable against the euro (in particular without devaluation on its own initiative).

The smooth operation of the currency board since 1992 reflects the competitiveness and stability of our economy. Therefore, Estonia was one of the first Member States to join the exchange rate mechanism ERM II soon after accession to the European Union in 2004.

Both the European Commission and the European Central Bank have noted that the exchange rate of the Estonian kroon has not experienced any problems within the framework of the ERM II. In addition, Estonia has fulfilled its (unilateral) commitment to maintain the rate of the kroon against the euro within the zero per cent fluctuation band (see Figure 2).

1.5. Public finances

The general government deficit must be lower than 3% of GDP. Government debt must be less than 60% of GDP or approaching the required level at a satisfactory speed.

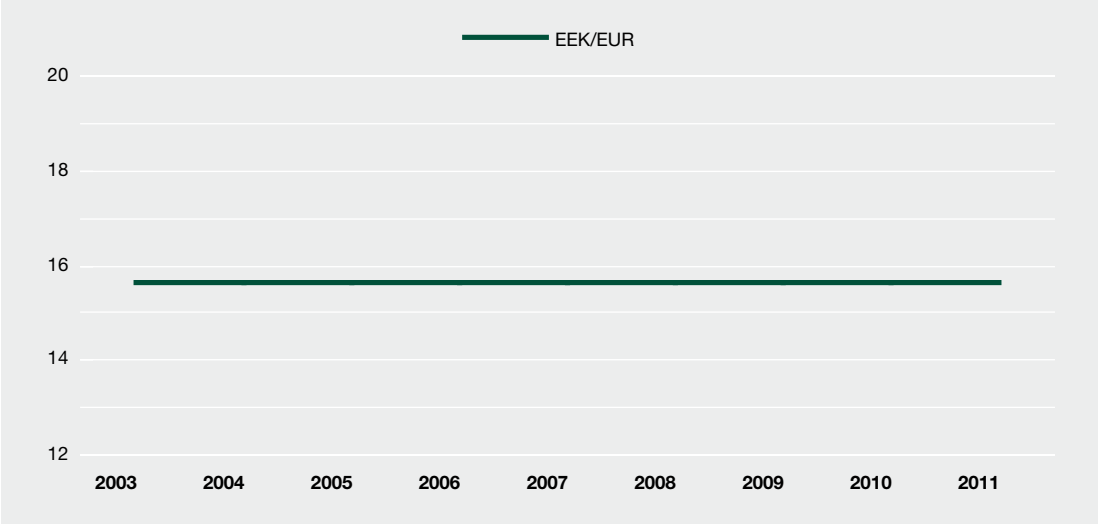

Figure 2. Exchange rate of the Estonian kroon and the euro

Source: Eesti Pank

[4] The long-term interest rate indicator for Estonia was developed in 2004 in cooperation between Eesti Pank, the European Commission and the European Central Bank. It is based on the interest rates of the kroon loans with the maturity of up to five years.

Owing to a relatively conservative fiscal policy, the state budget has been in balance or surplus in the years of rapid economic expansion (see Figure 3). Government debt (as a ratio to GDP) has been steadily decreasing as a result of repayments and strong economic growth, being the smallest among the EU Member States (see Figure 4). Thus, Estonia has been successful in fulfilling the criteria for public finances.

However, although Estonia is by far complying with the public finance criteria, it is of the utmost importance to continue following the present conservative fiscal policy principles in the future too, in order to maintain a stable economy and sustainable public finances. In the current adjustment phase and in the conditions of smaller budget revenues it is especially important to maintain the reliability of the economy.

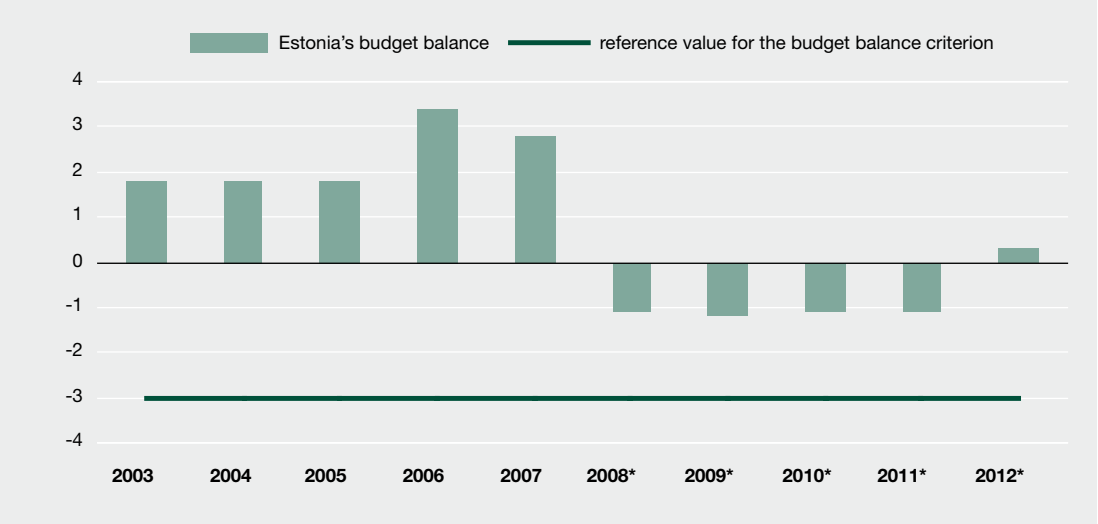

Figure 3. Estonia's budget balance and reference value for the budget balance criterion (% of GDP)

Source: Ministry of Finance forecast (spring 2008)

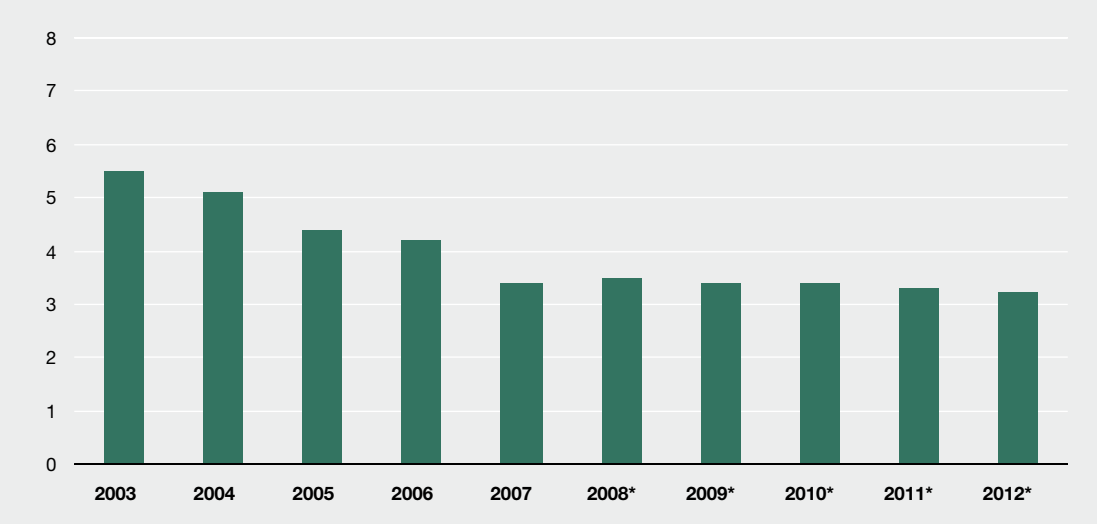

Figure 4. Estonia's general government debt (% of GDP)

Source: Ministry of Finance forecast (spring 2008)

1.6. Legal requirements for the adoption of the euro

First and foremost, an assessment is given of the compliance of the objectives of the central bank with those of the European Central Bank and of the independence of the central bank.

In 2006, the Eesti Pank Act was amended so as to remain in compliance with the Treaty on European Union and the Statute of the European System of Central Banks (ESCB). When the time for the changeover to the euro becomes more certain, the Act on the Introduction of the Euro needs to be adopted. In addition to the legislation mentioned above, it is necessary to change the Currency Law of the Republic of Estonia and the Law on the Security of the Estonian Kroon. These acts will be repealed with the Act on the Introduction of the Euro. The Act on the Introduction to the Euro has been approved by the relevant ministries but due to the postponement of the date for the changeover it was decided to temporarily suspend the proceedings on the draft act.

1.7. Timing of the adoption of the euro

Estonia's liberal and open economic policy as well as accession to the European Union has laid a good foundation for strong economic growth and for catching up with other EU Member States. The changeover to the euro must be viewed as a natural development for Estonia, because Estonia is a member of the European Union and the fundamentals of our economic policy are very similar to those of the euro area. The openness of the Estonian economy and the fixed exchange rate of the kroon force our enterprises to be competitive under very similar economic and political conditions as the present Member States of the euro area. This, in turn, supports the stability of the Estonian kroon's exchange rate and compliance with the respective criterion without any problems.

At the same time, the Estonian Government has pursued the balanced budget principle; therefore, Estonia meets the public finance criterion. The low long-term interest rate indicates that financial markets are internationally integrated and investors believe in the sustainability of the competitiveness of Estonia's economy and economic policy. If our economic policy makers and enterprises justify that belief, Estonia will not have any fundamental problems with fulfilling these criteria in the future either.

Meanwhile, the inflation criterion with its present interpretation remains a problem for a rapidly developing economy which is converging towards the average level of the wealthier countries of the euro area. On the one hand, economic openness enhances the growth opportunities of the Estonian economy, whereas on the other hand, the monetary and fiscal policy decreases the possibilities of influencing inflation in the short term. For an open economy such as Estonia has, the fixed exchange rate based on the currency board arrangement is optimal for anchoring inflation expectations and ensuring price stability. Owing to the fixed exchange rate the prices of our goods are under control, but the main determinant of inflation has been rapid wage growth which has boosted the prices of services. Our relatively higher inflation level, thus, shows that Estonia is catching up with advanced economies.

Besides the fixed exchange rate, conservative fiscal policy is a similarly effective tool for directing domestic demand in the short term. A balanced budget is necessary to contain inflation as well as support private investment, because Estonia's economy has maintained its credibility for investors and the rest of the world namely through fiscal surplus. Thus, a conservative economic and fiscal policy is essential to ensure the stability of Estonian economic development and the fulfilment of the Maastricht criteria.

The main obstacle in Estonia's way to joining the euro area has been the high inflation rate. In 2007, inflation picked up owing to domestic demand, administrative factors and external inflationary pressures; the price rise of food and fuel was especially rapid. This year, the inflationary pressures stemming from rapid wage growth are abating, but the harmonisation of tax rates with EU levels will boost price growth. As mentioned above, according to the spring 2008 forecast of Eesti Pank, it is unlikely that Estonia would be able to meet the Maastricht inflation criterion in 2009. Inflation is expected to peak in the first half of 2008. Although thereafter the inflation rate will decelerate, it will still exceed 4% in 2009, whereas the reference value will most probably be around 3%. According to Eesti Pank, Estonia's inflation will decrease close to the Maastricht inflation criterion by the end of 2010. However, it is obvious that the smooth decline of inflation depends directly on how labour productivity and wage growth will be brought in line. Although wage growth has slowed, it has considerably exceeded productivity growth in recent years. This tendency must change in order to guarantee economic competitiveness and the continuation of income growth. In order to fulfil the price stability criterion it is also essential to accurately time the adoption of administrative measures that influence prices.

Thus, it must be concluded that the adoption of the euro is not likely before 2011. Therefore, Eesti Pank and the Government have not set a new target date for the changeover to the euro. In any case, the exact date for changing over to the euro will be announced at least twelve months before the adoption of the single currency so that the state and the private sector could complete the necessary preparations.

Upon joining the European Union and the Exchange Rate Mechanism II (ERM II), the Estonian authorities set the goal to be technically ready for the adoption of the euro by mid-2006 and to introduce the euro on January 1, 2007. The assessment of the European Commission published in November 2006 on the technical readiness of the non-euro area EU Member States to adopt the euro was very positive for Estonia. Estonia had completed all the preparations not directly dependent on the date for the changeover to the euro.

The following gives an overview of the coordinated preparations of Estonian authorities to introduce the euro and the measures taken by Eesti Pank.

2.1. Preparations for the introduction of the euro in Estonia

Arrangements at the national level

To ensure a smooth changeover to the euro and coordinate necessary activities the Government decided at its cabinet meeting on December 9, 2004, to form the National Changeover Committee. The Committee is chaired by the Secretary General of the Ministry of Finance. The Committee also includes a Deputy Governor of Eesti Pank, the Secretary General of the Ministry of Justice, the Secretary General of the Ministry of Economic Affairs and Communications, the Secretary General of the Ministry of Internal Affairs, the Director for European Union Affairs at the State Chancellery, and an adviser to the Prime Minister. In addition to public sector experts, the private sector was also involved through the working groups of the Committee.

In order to prepare for the changeover to the euro, Estonia's National Changeover Plan was compiled, which includes guidelines for government authorities and information for the general public. The latest euro plan, version 6, was approved on November 29, 2007 and is available on the websites of the Ministry of Finance and Eesti Pank and on the euro web at www.euro.eesti.ee.

Preparations of Eesti Pank

The central bank started preparations for ensuring a smooth changeover to the euro in autumn 2003. Since joining the European Union in May 2004, Eesti Pank has been a member of the European System of Central Banks (ESCB). Preparations for joining the ERM II in June 2004 were equally important. For that purpose, Eesti Pank engaged in regular cooperation with the European Commission, the European Central Bank and other EU Member States.

In 2004, Eesti Pank started to draft the framework for changing over to the euro, taking into account the experience of other states and the specifics of Estonia. The principles developed by the bank formed the basis for the official plan for the changeover to the euro in the spring-summer of 2005. All major matters concerning the currency exchange were agreed upon with market participants by autumn 2006.

The objective of Eesti Pank was to be ready by the middle of 2006 in terms of the organisation's everyday operations and for the introduction of the euro area's single monetary policy. By now, the central bank has completed all preparations not directly dependent on the date for the adoption of the euro. The activities which can be commenced only after the European Commission has made its final decision on the accession to the euro area, such as minting Estonian euro coins, have been suspended.

2.2. How does the changeover to the euro take place in Estonia?

- The euro will be introduced as account money / electronic money (e.g. accounts and deposits in commercial banks), and in accounting and contractual relations according to the "big bang" scenario on the so-called €-day[5]. This means that there will be no transitional period.
- A two-week period of dual circulation will start from the €-day, during which both kroon cash and euro cash are considered equal payment means. Both the euro and the kroon will be accepted at shops, although change will usually be given in euro. After the period of dual circulation the euro will become the sole legal tender in Estonia.
- In order to simplify the launch of the euro cash into circulation, the credit institutions will exchange kroons to euros at the central exchange rate established on the transition to the euro and without a service fee for a month before and six months after the €-day. Later on, they will continue providing the same service within a limited branch network for at least another six months. After the exchange of kroons to euros in credit institutions has ended, Eesti Pank will continue to exchange kroons to euros at the central exchange rate and without a service fee for an unlimited period of time.
- Six months before and after the €-day retailers will be required to display hand-written or printed prices at points of sale in both kroons and euros, converting the prices at the exchange rate established by the Council of the European Union, or in the event of non-availability of such a rate at the official exchange rate of Eesti Pank. Merchants who are already displaying prices in both kroons and euros must calculate prices from one currency to another on the basis of the official exchange rate of Eesti Pank since September 1, 2006.
- The Government will serve as an example to the private sector by rounding taxes and state fees down, i.e. for the benefit of the taxpayers, when calculating them from kroons into euros.
- The expenditure related to the changeover will be covered, in general, by the market participants themselves.

[5] The date for the transition to the euro.

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THE FIRST YEAR OF THE EURO: A REVIEW OF SLOVENIA'S ECONOMIC PERFORMANCE[1]

Velimir Bole[2]

Foreword

By entering the EU and ERM II in 2004, Slovenian economic performance crucial for adopting the euro was well under the control of policy makers. Actually, inflation, debt, interest rates and the deficit were already within the targeted ranges formally necessary to fulfil the Maastricht criteria.[3] Therefore, controlling the variability of the exchange rate within the predetermined bands was the only ability of policy makers (and the economy) which had to also be tested when Slovenia was in the ERM II.

During the process of adopting the euro, the most visible changes had already taken place in the preparatory-ERM II phase.

Entering the ERM II caused three important changes in the financial intermediation sector. Because the exchange rate was no longer used to close the uncovered interest parity, tolar interest rates started to converge (fall) towards foreign interest rates (adjusted for the risk premium) on otherwise equal instruments. That triggered a significant acceleration of credit and a curbing of deposits as households and non-financial corporations started to restructure their portfolios and activities. As a consequence, this considerably increased net portfolio outflows and the current account deficit; the gap was closed (financed) by a huge increase in net bank borrowing abroad.

In the real sector, two changes during the ERM II period are worth mentioning; the acceleration of economic activity and the reformation of the tax system. Economic activity was driven by export demand (growth of the EU and global economies) and domestic investments, with an important contribution made by government investments (particularly road construction). The reformation of the tax system resulted in a significant reduction in revenues from income and payroll taxes, and in a corresponding tax incentive for the household and business sectors. There was no visible deterioration in the trajectory of variables important for the Maastricht criteria during the ERM II period.

After adopting the euro, fiscal policy would also have to become 'responsible' for the stability of the economy. Therefore, its targets and implementation would have to be changed before entering the euro area, especially because of unfavorable initial fiscal conditions.[4] Nevertheless, no special measures were adopted to adjust fiscal policy to the new task. The only change in fiscal policy was the abovementioned tax cutting reform.

In January 2007, Slovenia entered the euro area. In the paper, an overview of the economic performance of the most important segments of the Slovenian economy is given for the first year of euro. Special attention is devoted to the possible effects (where visible) of the introduction of the euro.

1. Economic activity and structure of demand

GDP growth. A strong additional domestic demand impetus increased economic activity further in 2007 from an already high rate of growth in 2006. Figure 1 illustrates the year-over-year rates for Slovenia, the euro area and the EU.

It is evident that growth has accelerated practically unhindered since the middle of 2005. Economic activity also increased relative to the euro area and EU. Given such a relative increase in economic growth as that seen in 2007, per capita GDP in

[1] An updated and shortened version of the paper was presented in the January 2008 issue of Gospodarska Gibanja (in Slovene).
[2] Economic Institute EIPF. velimir.bole@eipf.si.
[3] See, for example, Bole and Mramor (2006).
[4] See Bole (2006).

Figure 1. Economic activity (GDP)

Note: yearly rates of growth
Source: Eurostat; own calculations

Slovenia (in terms of purchasing power) will catch up with the EU average in less than three years, and with the euro area average in just over six years.

Structure of final demand growth. While economic activity was very high in both 2006 and 2007, the structure of the demand growth driving the growth was very different. In 2006 the structure of demand growth in Slovenia was similar to that in the euro area, but in 2007 it was sharply at variance with it.

Figure 2 shows the relative year-over-year real growth in the components of final demand (relative to GDP growth) for Slovenia and the euro area.

Real export demand grew much faster than GDP in both years, but only took the leading role in 2006. Investment spending, which in 2006 grew at the same pace as GDP, accelerated very sharply in 2007, and began systematically outpacing GDP by more than 10 percentage points on an annual basis. Government measures gave an important contribution to the acceleration of investment spending.

Growth in both real household spending and government current spending (on goods and services) trailed GDP growth in 2006, but the gap widened in 2007. Over the year, the gap was 2.8 percentage points on an annual basis for household spending and 4.4 percentage points for current government spending. Growth in current government spending picked up notably in the second half of the year, but the gap by which it was outpaced by GDP growth remained large.

As a result of the rapid acceleration in investment in Slovenia, there was a sharp change in the structure of generating economic growth in 2007 in comparison with the euro area. In both the euro area and Slovenia export demand pulled economic activity, but less so than in 2006. The components of domestic demand acted as a brake on GDP growth in the euro area and Slovenia. Therefore, the modest relative growth in investment spending in the euro area (approximately 1.6 percentage points annually) and very large relative growth in Slovenia (almost 11 percentage points annually) was the key difference between the two in the nature of generating economic growth.

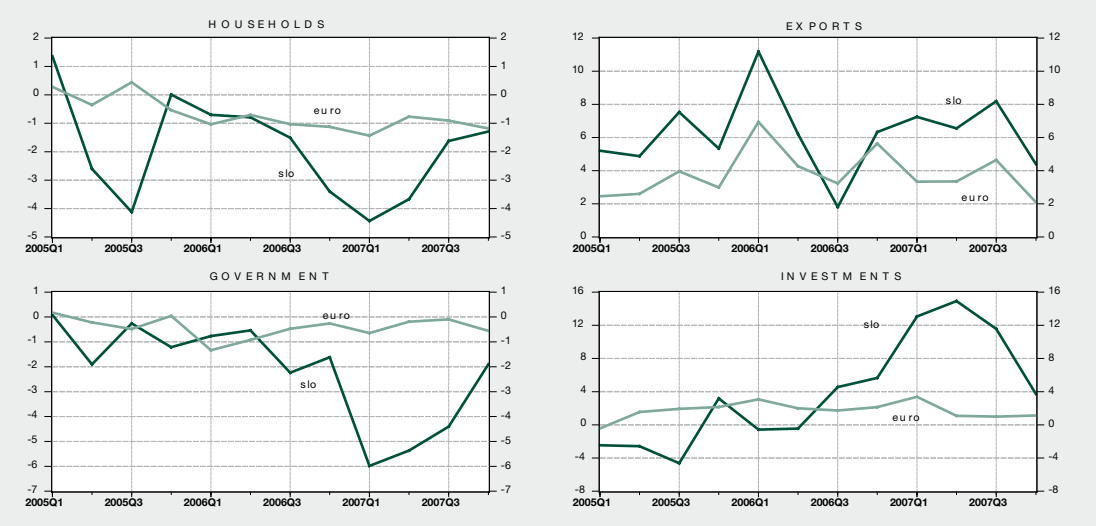

Figure 2. Structure of demand dynamics

Note: rates of growth relative to GDP growth rates
Source: Eurostat; own calculations

Sectoral growth. The major change in the structure of demand in 2007 naturally brought a significant change in growth in the different sectors of the economy. The changed structure of sectoral growth is illustrated in Table 1, which shows the real growth in value-added in 2005–2007.

It is evident that the rapid (absolute and relative) acceleration in investment spending, which began in the third quarter of 2006, further increased the already very rapid growth in value-added in the construction sector, so that it grew at an annual rate of almost 19% in 2007. The change in the structure of final demand also gave notable impetus to the trade sector and financial intermediation; in both, the rates of growth in 2007 were up almost one-quarter on 2006. In other sectors average growth in 2007 was equal to or less than that in 2006.

Transmission mechanism of final demand impetus (purchasing power flows). The question is raised about the transmission mechanism via which the changed final demand gave rise to the

Table 1. Value added by activities

	2005	2006	2007
Agriculture, hunting and forestry	-4.4	-3.8	-3.7
Fishing	20.4	1.5	-4.6
Mining and quarrying	0.4	7.5	-0.2
Manufacturing	3.6	8.5	8.3
Electricity, gas and water supply	5.7	5.7	3.5
Construction	4.9	15.2	18.7
Wholesale and retail trade, repair	4.5	6.1	7.6
Hotels and restaurants	1.2	2.9	2.4
Transport, storage and communication	6.1	9.4	6.2
Financial intermediation	10.5	9.8	12.1
Real estate, renting and business activities	3.5	3.7	3.7

Source: SURS (Statistical Office of the Republic of Slovenia); own calculations
Note: real growth rates

significant changes in the relative sectoral activities and consequent sectoral differences in price pressures. The most basic changes in purchasing power flows are illustrated in Figure 3, which shows the dynamic of turnover in the construction and trade sectors. Financial intermediation activity (particularly banking intermediation) is illustrated in a separate chapter.

The purchasing power flows (turnover) in construction are shown separately for the following categories: housing, non-residential buildings and civil engineering projects. The turnover in the trade sector is shown for six sub-categories: trade in food, beverages and tobacco; trade in cosmetics and pharmaceutical goods; trade in motor vehicles; the repair and maintenance of motor vehicles; trade in household equipment and building materials; and trade in clothing and footwear.

The dynamic in turnover in the construction sector indicates that demand began to accelerate after the first half of 2006 and peaked in the first quarter of 2007. A leading role was clearly played by the fuelling of the construction of non-residential buildings, and civil engineering projects in particular (a considerable increase in activity in building roads). In the period between the second quarter of 2006 and the third quarter of 2007, year-over-year growth in purchasing power flows into civil engineering projects constantly exceeded 20%, and averaged over 40% annually. Because civil engineering projects represent about half of all construction work, they alone brought about at least 19 percentage points to a 30% average growth in total construction turnover in the period 2006/III-2007/IV. As illustrated by Figure 3, the dynamic in purchasing power flows into the construction of non-residential buildings differed little from that of the turnover of civil engineering projects in terms of the timing of the acceleration and its intensity. Therefore, it only further strengthened the extremely high growth in nominal turnover in construction already generated by civil engineering projects in the period after the third quarter of 2006. It is evident that in 2007 investments initiated by the government contributed the lion's share of the rapid acceleration in construc-

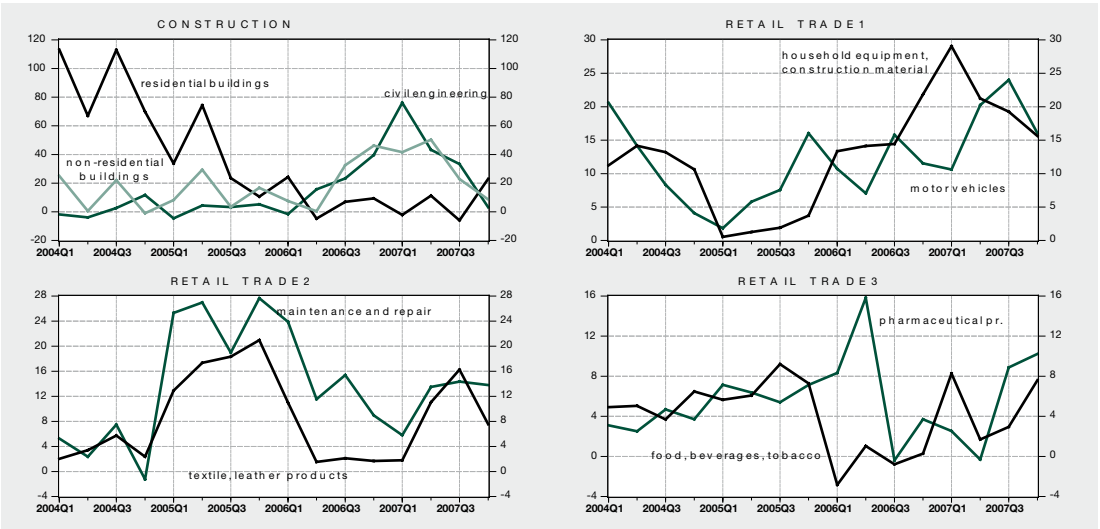

Figure 3. Purchasing power flows in construction and retail trade

Source: SURS (Statistical Office of the Republic of Slovenia); own calculations
Note: yearly rates of growth

tion work, as the increase in activity of Dars[5] (by 0.53 percentage points of GDP) together with the increase in investment expenditure (including investment transfers) by the government (by 0.35 percentage points of GDP) accounted for around 40% of the total increase in construction sector turnover (by 2.3 percentage points of GDP).[6]

Figure 3 does not confirm that the rapid growth in housing loans, which continued after the first quarter of 2006, would significantly contribute to an expansion in construction as year-over-year growth in nominal turnover in residential building has fluctuated significantly below 10%. Further evidence of the slowdown in the residential building construction market comes from the graph of house prices in Figure 4. It is not entirely clear which transactions and activities the large growth in housing loans actually fuelled during this period.

The other three graphs in Figure 3 show purchasing power flows into the trade sector, which also recorded a large increase in economic activity in 2007. As stated previously, the dynamic in turnover is illustrated for six sub-categories of trade. The dynamic in the demand for trade services varied greatly between the individual sub-categories. The major restructuring in final consumption in 2007 primarily brought impetus to the sale of building materials and household equipment, but also to the trade in motor vehicles. The dynamic in the turnover of the trade in building materials and household equipment peaked in the first quarter of 2007, when the year-over-year rate stood at over 28%. A comparison of the graphs for the construction sectors and the graph for trade in household essentials indicates that the high growth in housing loans in 2007 could fuel completion projects and the equipping of housing.

Purchasing power flows into trade in clothing and footwear and into the repair and maintenance of motor vehicles peaked in 2005 (after Slovenia joined the EU), and growth picked up only slightly in 2007 (to approximately 15% on an annual basis) from 2006.

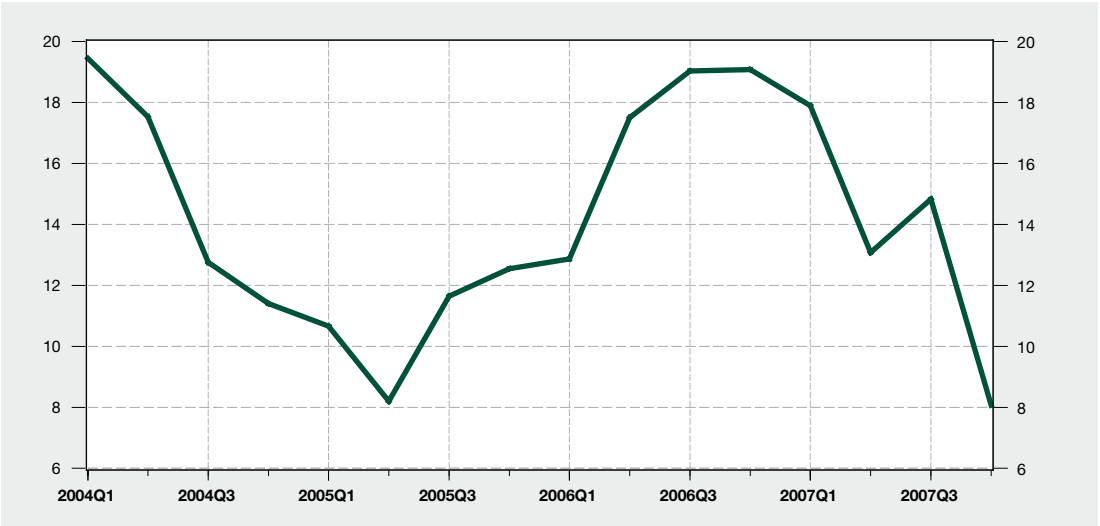

Figure 4. Prices of flats

Source: www.slonep.net; own calculations
Note: yearly growth rates

[5] Motorway company of the Republic of Slovenia. It is not included in the general government balance.
[6] See DARS, Ministry of Finance Bulletin and SURS (Statistical Office of the Republic of Slovenia).

The slowest purchasing power flows in 2007 were recorded in the trade sectors of cosmetics and pharmaceutical goods, as well as food, beverages and tobacco. Given the significant increase in year-over-year growth in prices of food (after the first quarter of 2007), turnover in the trade of food, beverages and tobacco grew very slowly; on average it increased (by 5%) significantly less than prices in the corresponding category of the cost of living; i.e., food and beverages (by 7.5%). These figures do not indicate the significant exercise of market power by companies in the production and/or distribution of food products. Besides, the highest year-over-year growth rate was attained in the first quarter (8%), when the external food price shock could not yet be felt. It was the result of the low basis of comparison; namely, the low turnover in the first quarter of 2006, as shown in Figure 3.

2. Employment and labour costs

Employment. It is important to the question of an overheating economy how the rapid acceleration in economic activity in 2006 and, particularly, in 2007 affected developments in the labour market. Especially important are changes in the labour market caused by the significant restructuring of demand triggered by the government through the large growth in investment expenditure channelled primarily into construction.

Figure 5 shows unemployment in Slovenia and the euro area after 2003. It shows overall unemployment and unemployment among three groups of qualifications: primary and lower secondary (ISCED levels 1 and 2), upper secondary (ISCED levels 3 and 4), and tertiary (ISCED levels 5 and 6).[7]

The increase in economic activity after the middle of 2006 brought about a significant reduction in unemployment in 2007, more so in Slovenia than in the euro area. In Slovenia unemployment had dropped to 4.7% by the end of 2007.

The decline in unemployment in the euro area was more equal over qualification groups than in Slovenia. In the euro area the largest fall in unemployment was recorded in the second group (upper-

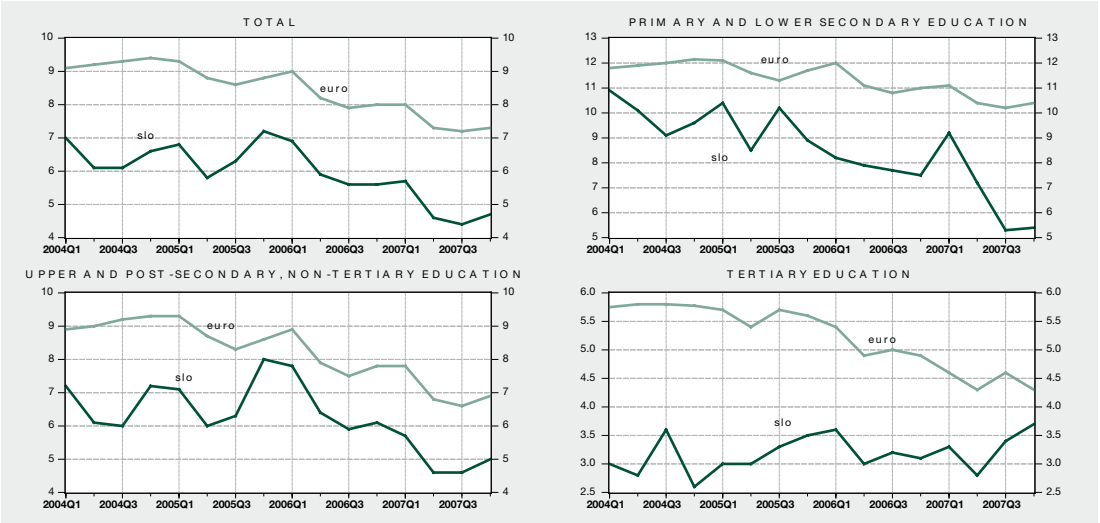

Figure 5. Unemployment

Source: Eurostat
Note: ISCED classification; in percentages of corresponding population segment

[7] The ILO definition of unemployment and employment is used.

secondary qualifications) and the smallest in the third group (tertiary qualifications). In Slovenia only the primary- and secondary-education groups recorded a fall in unemployment in 2007; between the first quarter of 2006 and the last quarter of 2007 unemployment fell by 1 and 1.5 percentage points, respectively. In the highest qualification group, the average unemployment rate in 2007 was roughly the same as in 2005 or 2006.

Because the unemployment rate among those with tertiary qualifications was not only constant, but also very low (it was thus merely frictional), it is one of the indicators of an overheating economy. The dynamic in employment in the same qualification group and the dynamic in costs shown below similarly indicate this.

Because of the high level of economic activity (and the corresponding low unemployment rates) in 2007, the dynamic in the labour market should additionally be illustrated by the employment rate. Namely, if economic activity is high, the employment rate could be a more sensitive indicator of developments in the labour market (especially of entry into and exit from the labour market) than the unemployment rate. Figure 6 illustrates the employment rates overall and among the three qualification groups for Slovenia and the euro area. The employment rates shown are those for the population aged between 15 and 74.

In 2006, the overall employment rate in Slovenia was already higher than in the euro area. It increased further by approximately 1 percentage point (0.3 percentages points more than in the euro area) in 2007. However, the increase in employment was, in absolute terms and relative to the euro area, mainly the result of an increase in employment in the lowest qualification groups of primary and lower secondary (ISCED levels 1 and 2), and, at best, stagnation in employment relative to the euro area in the higher groups (ISCED levels 3 to 6). Such a change in the structure of employment comes as no surprise bearing in mind that the activity of civil engineering projects and non-residential buildings were the main sources of additional economic activity in 2007.

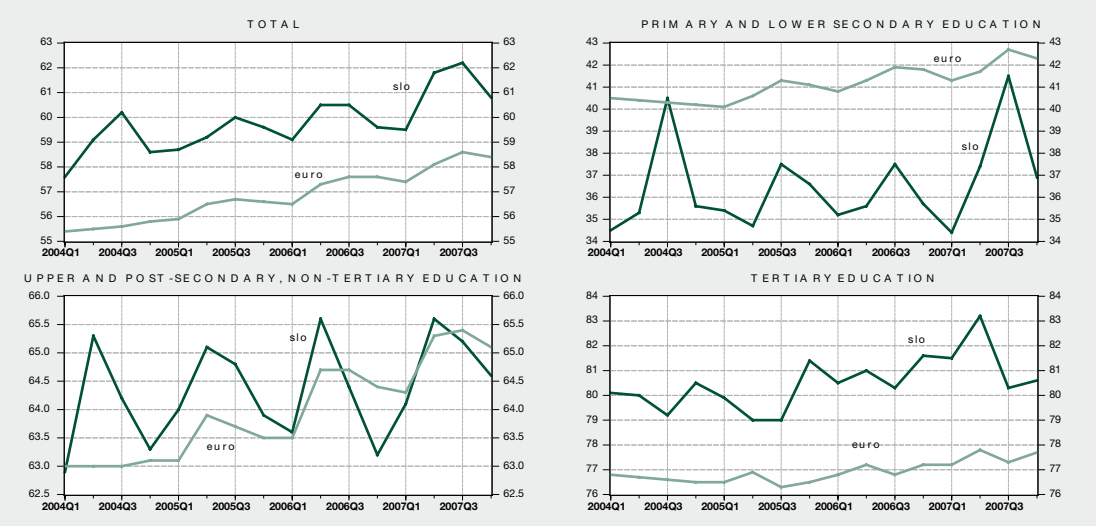

Figure 6. Rate of employment

Source: Eurostat
Note: ISCED classification; in percentages of corresponding population segments

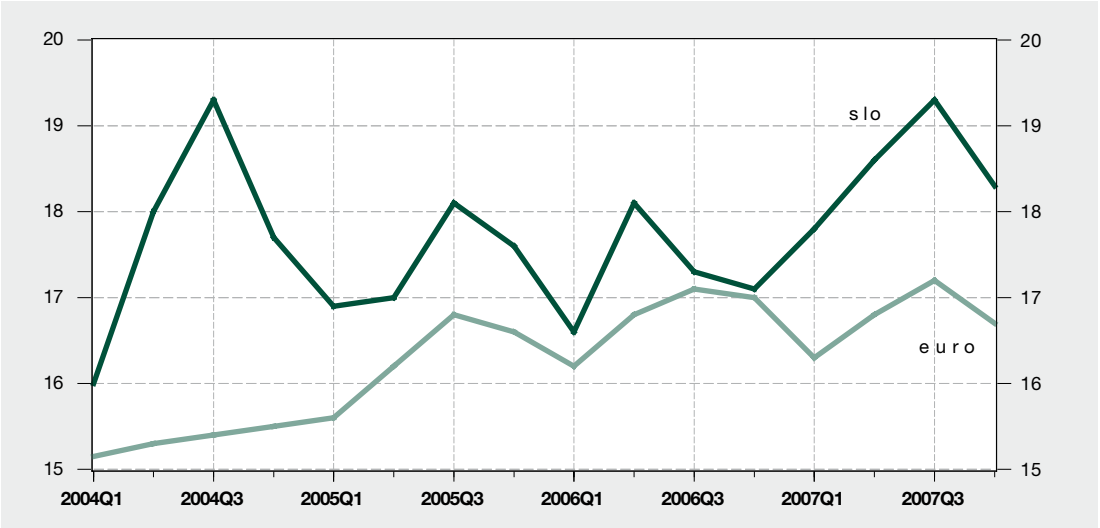

Figure 7. Temporary employed

Source: Eurostat
Note: in percentages

That the overheating of the economy increased in 2007 also indicates the amount of temporary employment in existence, which rose sharply in 2007. The proportion of those in temporary employment is shown in Figure 7.

Since joining the EU, temporary employment in Slovenia has generally been higher than in the euro area by 1 to 1.5 percentage points; the average proportion of temporary employment was 17%. In 2007 there was a sharp increase in temporary employment, both in absolute terms and relative to the euro area. It was approximately 1.2 percentage points higher in 2007 than in 2006, and the gap between Slovenia and the euro area increased by the same amount. Practically all the increase in temporary employment came from the groups with primary- and lower-secondary qualifications.

It should be noted that the high proportion of temporary employment (considerably higher than in the euro area) and the speed of the increase in temporary employment probably do not support the idea of significant inflexibility of the labour market in Slovenia, and certainly not in the lower-qualification segment.

Labour costs. For a small economy in the euro area, the gap between the growth of labour costs and the growth of productivity (both relative to the euro area) is a key indicator of the dynamic in competitiveness. In the short run, even only a dynamic of relative labour costs is enough to detect a deterioration in competitiveness, because faster economic growth (a tighter labour market) can cause an acceleration of relative labour costs.

Figure 8 shows the dynamic in overall (hourly) labour costs and, separately, the dynamic in labour costs in manufacturing, construction and market services. The year-over-year growth rates for Slovenia and the euro area are given.

The graph of total (hourly) labour costs shows that the dynamic of labour costs in Slovenia slowed in comparison with the euro area in the period before entering the EU. After the second quarter of 2005 it began to speed up again, while in the middle of

Figure 8. Labour costs

Note: yearly rates of growth
Source: Eurostat; own calculations

2005 the gap between Slovenia and the euro area in the growth in labour costs was just 0.5 percentage points. In 2006 and 2007, labour costs in Slovenia already outpaced those in the euro area by 4 and 3 percentage points annually, respectively.

Since Slovenia joined the EU, the dynamic in labour costs relative to the euro area has also varied greatly between sectors. The comparison of the relative dynamic in labour costs in the services sectors with that in manufacturing is particularly interesting. After 2005, when economic activity accelerated considerably, the gap relative to the euro area has increased sharply in services and construction, but has declined in tradable sectors, as shown in Figure 8. In 2007, average hourly labour costs in manufacturing grew by just 2 percentage points more than in the euro area, while the gap was 3.5 percentage points in the construction and service sectors.

It should be added that such a sequence in the dynamic of relative labour costs between services and manufacturing is the opposite of that expected if the existence of a Balassa-Samuelson effect is assumed.

Productivity. Because of the large fluctuation in hours worked, employment alone is not suitable for calculating (the change in) productivity; an assessment of hourly productivity is necessary. However, the necessary figures for 2007 are not yet available for the entire euro area and analysed sectors. Therefore, the relative dynamic in productivity in Slovenia is shown relative to Germany for all industrial sectors except construction; i.e., for sectors C, D and E. The first two graphs in Figure 9 show the dynamic in labour costs and the dynamic in hourly productivity in all industrial sectors except construction. Productivity is calculated from an index of output and work hours.

The comparison of the dynamic in labour costs between Slovenia and Germany for the industrial sectors (Figure 9) leads to the same conclusion as the comparison of the dynamic in labour costs between Slovenia and the euro area for manufacturing. After Slovenia joined the EU, there was no

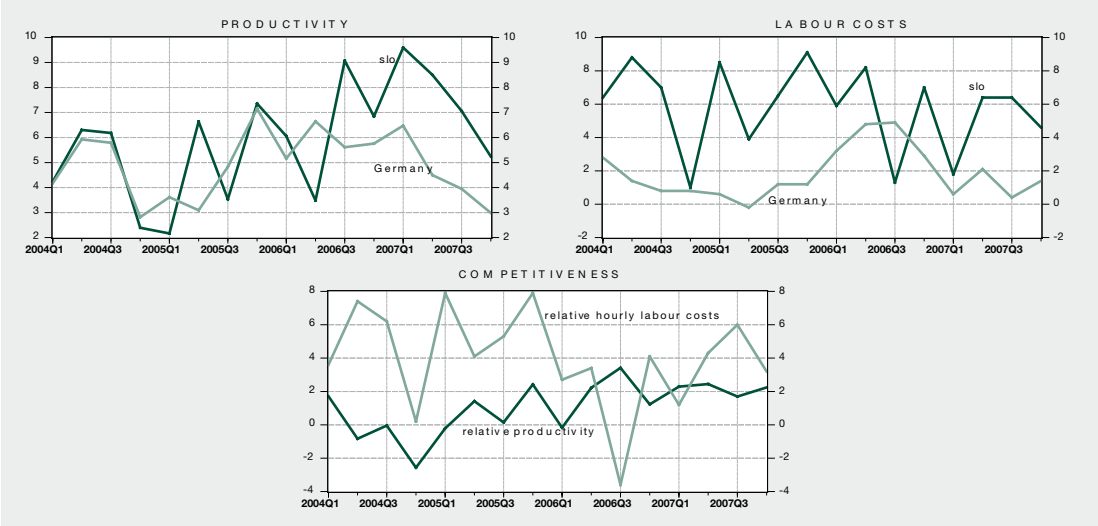

Figure 9. Competitiveness

Note: yearly rates of growth
Source: Eurostat; own calculations

deterioration in the relative dynamic in labour costs in the industrial sectors.

The first graph in Figure 9 shows that productivity in Slovenia has consistently increased faster than in Germany after entering EU. The best relative increase in productivity there was recorded in 2007 by 2.2 percentage points on an annual basis, with the lowest being 0.9 percentage points in 2005.

Competitiveness. The third graph in Figure 9 shows the sources of changes in competitiveness; it illustrates the difference between growth in labour costs and the difference between growth in productivity (both between Slovenia and Germany). The competitiveness of the industrial sectors in Slovenia obviously deteriorated over the entire period observed (compared with Germany), but the deterioration in the last two years (especially in 2006) was significantly less than in previous years; in 2007 the difference in growth in labour costs outpaced the difference in growth in productivity by less than 1.4 percentage points on an annual basis.

As stated earlier, labour costs in services (in contrast to manufacturing) began to increase faster after the middle of 2005 relative to labour costs in the euro area. In 2006 and 2007, labour costs in service sectors grew by approximately 4 percentage points faster in Slovenia than in the euro area, but only by approximately 2.2 percentage points more in manufacturing. Even assuming the same relative increase in productivity as in the industrial sectors, the significantly faster relative growth in labour costs in the service sectors of Slovenia would have to increase the shortfall in competitiveness behind the euro area significantly more than in manufacturing.

To corroborate the conclusion about the larger decline in competitiveness in the service sectors compared with the euro area or more precisely, to corroborate the assumption that the relative growth in productivity in the service sectors was at most equal to that in the industrial sectors (except construction), in Table 2 the growth rates of approximate productivity figures are given for services, construction and industry (except

Table 2. Productivity

	2006	2007
Total industry (excluding construction)		
Euro area	3.0	3.0
Slovenia	11.3	7.4
Construction		
Euro area	1.2	-0.8
Slovenia	17.6	14.1
Trade, repair of motor vehicles, motorcycles and household goods; hotels and restaurants; transport, storage and communication		
Euro area	0.4	0.5
Slovenia	5.3	3.6
Financial intermediation; real estate, renting and other business activities		
Euro area	-1.1	-0.5
Slovenia	1.7	0.1

Note: productivity is defined as a ratio of real value added and employment; rates of growth
Source: Eurostat; own estimates

construction). Because of a lack of data, approximate productivity is calculated as a ratio of real value-added and the number of people employed. Using the values in the table, it can be verified that the relative growth in productivity in Slovenia in 2006 and 2007 compared with the euro area was significantly larger in the industrial sectors than in the service sectors. Given the presented differences in the relative growth of productivity and labour costs, it can also be expected that the pressure on prices in the market services sectors has increased significantly more than in the industrial sectors since 2004.

3. Prices

Price growth. It was not only the extremely rapid economic growth that was a feature of 2007, but also a significant acceleration in inflation. Because of skyrocketing world commodity prices in the last two years, and the simultaneous high economic growth of the Slovenian economy, the question is raised of the factors of the acceleration in the cost of living, and not merely the size of the growth in prices.

Figure 10 shows year-over-year growth in the overall cost of living (headline inflation) and the dynamic in core inflation. As is customary, the basket for measuring core inflation does not include energy or seasonal food.

Headline inflation fluctuated close to 2.5% on an annual basis between the end of 2004 and the third quarter of 2006. The gap between the inflation rates in Slovenia and the euro area did not change during this time either. Growth in the cost of living began to pick up relative to the euro area in the final quarter of 2006; the sharp increase lasted until the end of 2007. The acceleration of core inflation relative to the euro area was similar. In the final quarter of 2007, year-over-year growth in core inflation was approximately 2.5 percentage points higher than in the euro area.

The graph also reveals that the acceleration of core inflation in Slovenia relative to the euro area has been present since the middle of 2005, when the year-over-year dynamic in core inflation reached its lowest value (of below 1% per year). The increase in core inflation over the last two and a half years was almost uniform. Core inflation rose by 0.4 percentage points on an annual basis every quarter. Therefore, the deterioration in the (endogenous) inflation dynamic, which became evident in 2007, was nothing new. However, as a

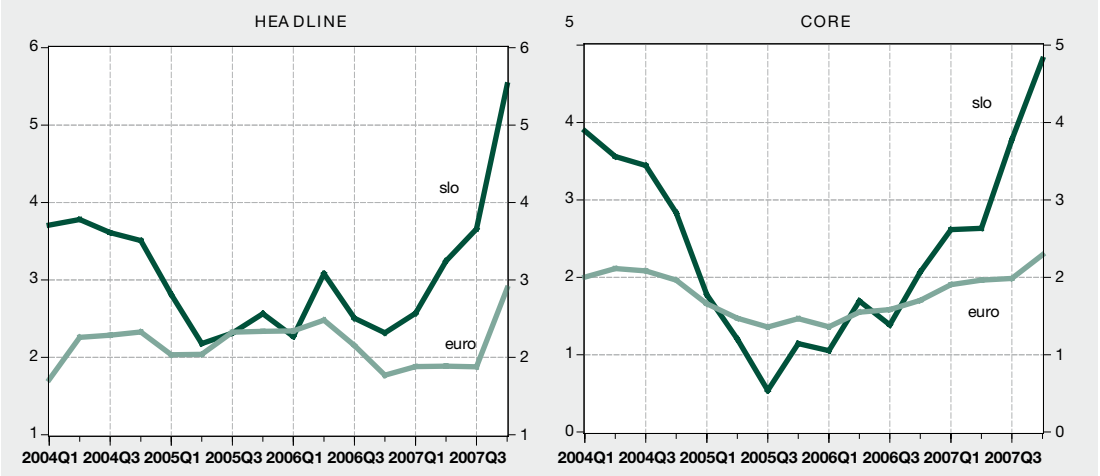

Figure 10. Cost of living

Source: Eurostat; own calculations
Note: yearly growth rates

result of the opposite movements in certain other items, it was not evident in headline inflation until the beginning of 2007.

Structure of price growth. To reveal possible reasons for the longer-term increase in core inflation seen since the middle of 2005, and to identify the factors that led to a sharp increase in inflation (headline inflation in particular) after the first quarter of 2007, in Figure 11 year-over-year price growth rates for certain key subgroups of the cost of living are presented. Because some groups of products were exposed to external shocks during the observed period both in Slovenia and in the euro area, the product categories have been designed to reveal the effects of the most important external shocks (food and energy). Therefore, a deviation from the dynamic in the euro

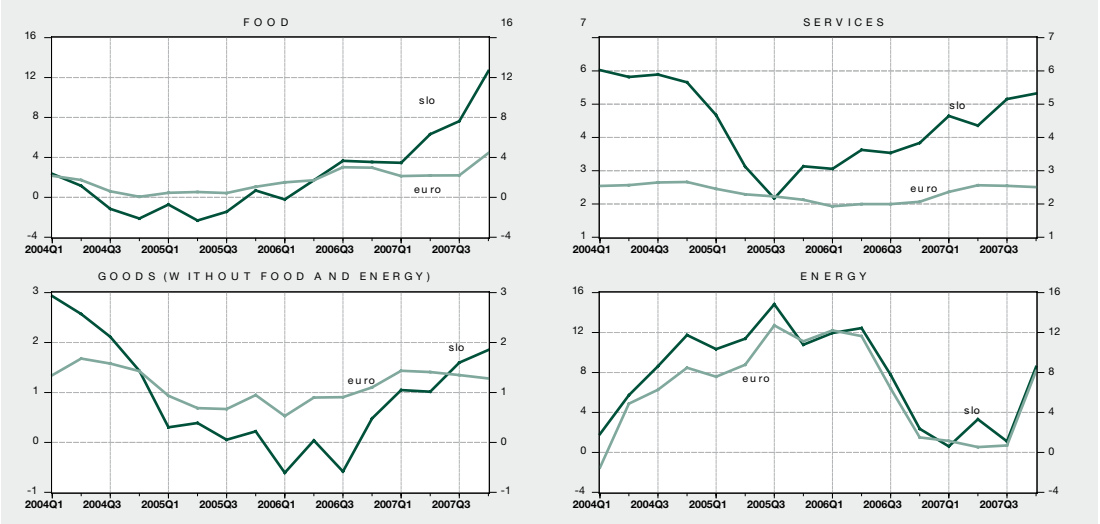

Figure 11. Structure of cost of living dynamics

Source: Eurostat; own calculations
Note: yearly growth rates

area, heuristically speaking, indicates the possible presence of endogenous causes of increased (decreased) inflation in prices in the corresponding category (neglecting, of course, all indirect effects). The dynamic in the prices of services, food, energy and goods other than food and energy is shown. All the graphs show the yearly growth rates of prices for Slovenia and the euro area.

The dynamic in energy prices in Slovenia has been very similar to that in the euro area since the middle of 2005. Only in the middle of 2007 did the corresponding dynamic in Slovenia increase briefly, probably as a result of the regulated rises in electricity prices. Year-over-year growth at the end of 2007 was again practically the same as that in the euro area.

The prices of goods other than energy and food generally grew more slowly in Slovenia than in the euro area after 2004. In the second half of 2006, the gap began to narrow, and after the first quarter of 2007, the growth in prices of goods other than energy and food in Slovenia began to outpace the growth in the corresponding prices in the euro area; in the final quarter the gap was approximately 0.5 percentage points higher on an annual basis.

The next graph in Figure 11 shows year-over-year growth in the price of services. Since 2005 the growth in the price of services in Slovenia has systematically outpaced that in the euro area. The gap between yearly growth rates had reached approximately 2.8 percentage points on an annual basis by the end of 2007. The timing of the acceleration in the price of services matches the timing of the acceleration in core inflation, the timing of the acceleration in labour costs in the service sectors, and the timing of the acceleration in economic activity (all relative to the euro area). It is worth comparing the graphs of core inflation in Figure 10, the graph of services prices in Figure 11 and the graph of labour costs in the service sectors in Figure 8.

The graph of growth in food prices shows that for a while food prices grew nearly at the same rate as in the euro area until the beginning of 2007, but afterwards began to pick up pace, recording a particularly sharp growth spurt in the last two quarters of 2007. Food prices in the euro area only began to pick up at the beginning of the final quarter of last year.

Structure of price acceleration (comparison with the euro area). The product categories shown have different weights in the cost of living basket, and it is therefore necessary to take the structure of the basket into account to properly assess their contribution to the gap between headline inflation in Slovenia and in the euro area. Figure 12 shows the size of the contributions made to the year-over-year dynamic in the cost of living relative to the euro area by individual product categories. In other words, Figure 12 shows how much each product category contributes to the gap between growth rates in the cost of living in Slovenia and that in the euro area.

The first graph in Figure 12 shows that the entire deterioration in the relative dynamic in prices in Slovenia relative to the euro area was caused by two product categories: food and services. While the contribution made by services rose from approximately 0.5 percentage points (on average in 2006) to approximately 0.8 percentage points (on average in 2007), the contribution made by food prices rose from practically zero in 2006 to 0.6 percentage points on average in 2007. In the final quarter the contribution made by food and services to the relative deterioration in the cost of living in Slovenia compared with the euro area was the same, at approximately 1 percentage point each.

The prices of energy and goods other than energy and food had a negligible effect on the increase in inflation in Slovenia on average in 2007, relative to the euro area.

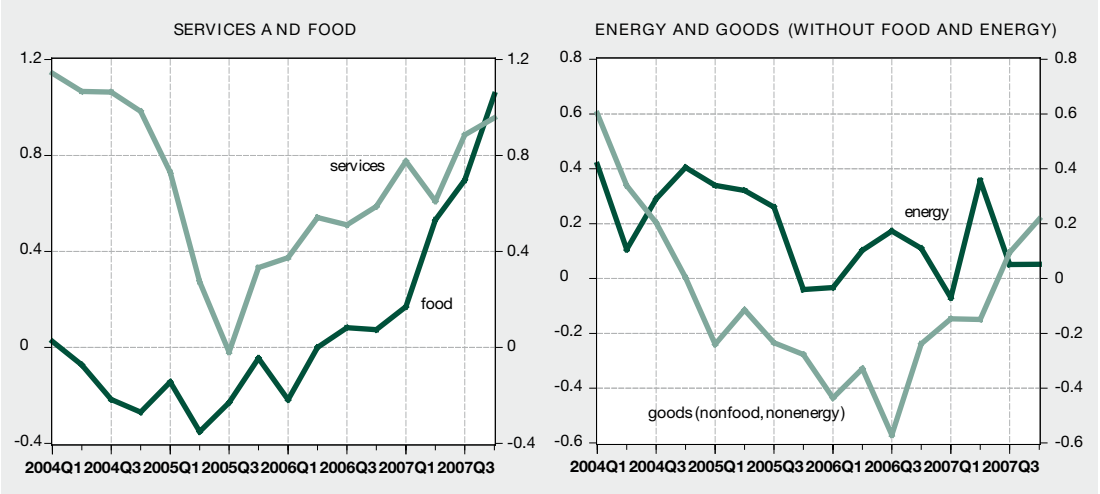

Figure 12. Price dynamics in Slovenia relative to euro area

Source: Eurostat; own calculations
Note: yearly growth rates

The empirical evidence presented documents that the increase in relative growth in the price of services, particularly in 2007, was most probably caused primarily by the faster growth in labour costs as very rapid economic growth in 2006 and even more so in 2007 increased the tightness of the labour market, and this was facilitated by the relatively less-competitive market structure in the service sectors.[8]

The increase in relative food prices is examined in more detail below.

Mechanism of the relative increase in food prices. There was a significant increase in the global prices of food commodities in late 2006 and in 2007. The scale and timing of the shock is illustrated in Figure 13, which gives the year-over-year rates of growth in global commodities prices (in the euro index).

While metals had entirely slowed by 2007 after growing rapidly in 2005 and 2006, and oil again rose sharply in the second half of the year, food commodities prices only began to accelerate in late 2006, recording yearly growth rates of more than 20% in 2007.

Given that the increases in global commodities prices for food producers and distributors were the same in Slovenia and the euro area, the question is raised of what caused the differences in the year-over-year rates of growth in retail food prices between the two, which reached approximately 8 percentage points in the last quarter of 2007.

Let us examine the possible phases in the process of increasing food prices in 2007.

The rise in commodities prices made food producers' import prices more expensive. The size of the increases in import prices of food is shown in Figure 14. The figure shows the level of import prices of food producers, relative to the initial period of the first quarter of 2006, for Slovenia and the euro area.

Import prices in the food production sector in

[8] For example, a comparison of the competitive market structure in the service and non-tradable sectors with that in the tradable sector, and the corresponding impact on the mechanism of price growth in Slovenia, is given in Bole and Mramor (2006).

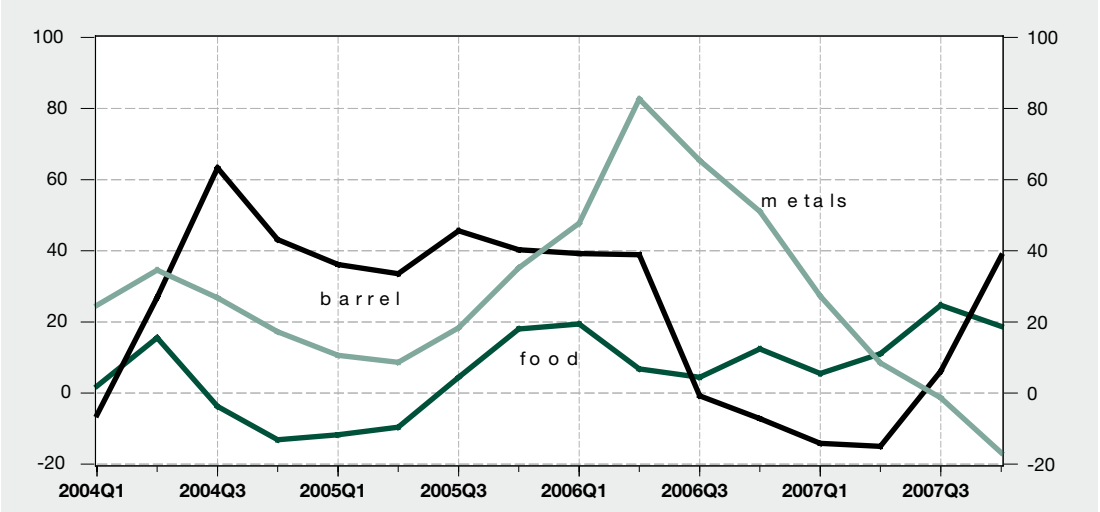

Figure 13. Commodities

Source: Economist; own calculations
Note: euro index; yearly growth rates

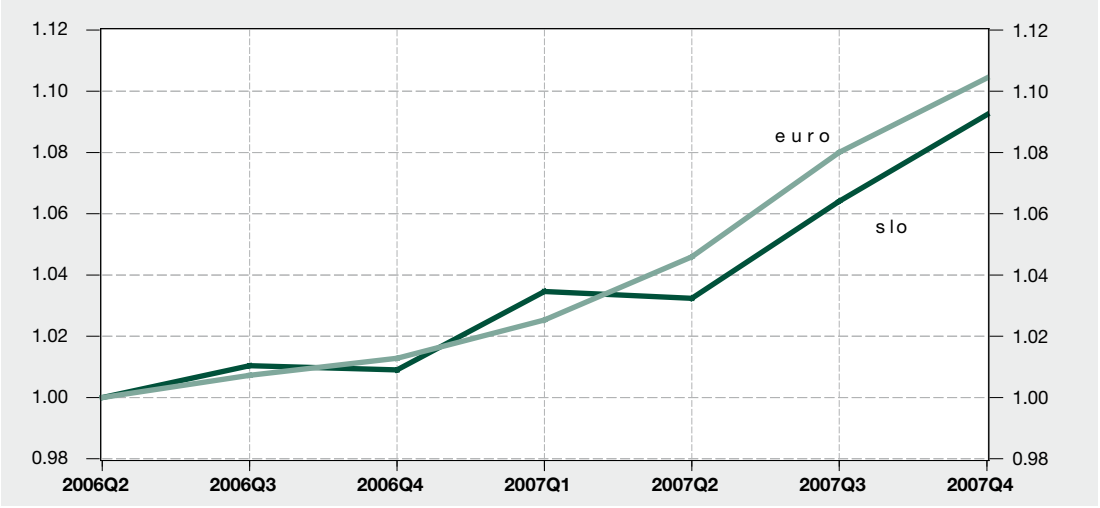

Figure 14. Import prices of food

Source: Eurostat; own calculations
Note: level 2006q1=1

Slovenia increased at the same pace as those in the euro area, albeit shifted by one quarter (the coincidence of growth is so systematic that the shift could only be the result of different timing in price-taking). In the last quarter of 2007 import food prices were already 8.3% (9% in the euro area) higher than in the same quarter of 2006. Some components recorded significantly larger and earlier growth.[9]

Producers in both Slovenia and the euro area passed off the increase in the import prices of food

[9] For example, in Slovenia the import prices of cereals and cereal products were already 10% higher in the third quarter of 2006 than a year earlier, while by the third quarter of 2007 the yearly growth rates of the import prices of cereals and cereal products was over 24%.

commodities through to the prices of their products, as revealed by the dynamic of producer prices of food in the domestic market shown in Figure 15. On average in 2007 food producers increased their prices in the domestic market by 5.6% compared with the same period in 2006, the same as food producers in the euro area (5.5%), and slightly less than the rise in import prices of food commodities and final food products (6.4%), as evidenced by the graph in Figure 14. In the second half of 2007, the difference in the acceleration of producer prices of food in Slovenia relative to the euro area was again similar to the difference in the acceleration of import prices. The yearly growth rates of producer prices of food in the fourth quarter of 2007 was 9.4%, while it was 8.1% in the euro area.

There remains the question of what happened to the prices of food in the final phase (on the way to retail trade). The retail prices of food, beverages and tobacco in the final quarter of 2007 were 12.6% (4.5% in the euro area) higher than those in the final quarter of 2006 (see Figure 11). Therefore, the increase in retail prices was around 3.5 percentage points higher than the increase in producer and import prices of food. It could have occurred as a result of an unchanged (percentage) margin used for food (food producer prices) as it passed on to the distribution phase (trade sector); i.e., without any collusion on the part of retailers. Given that, as stated previously, turnover in food retail recorded an average yearly growth of 5.1% in nominal terms in 2007 (sales were down in real terms), the hypothetical unreduced (i.e., nominally higher) margins used by retailers would probably have proven unsustainable in the longer term in the context of tight nominal consumption.

Further evidence of the relatively low possibility of exercising market power in retail trade comes from the values of price cost margin. In the trade sector, price cost margins are significantly larger than in the manufacturing and overall tradable sectors, but at the same time are also significantly lower than price cost margins in other service sectors.[10] In Slovenia, price cost margins no longer deviate significantly from the values seen in the most developed European countries (see Table 3).

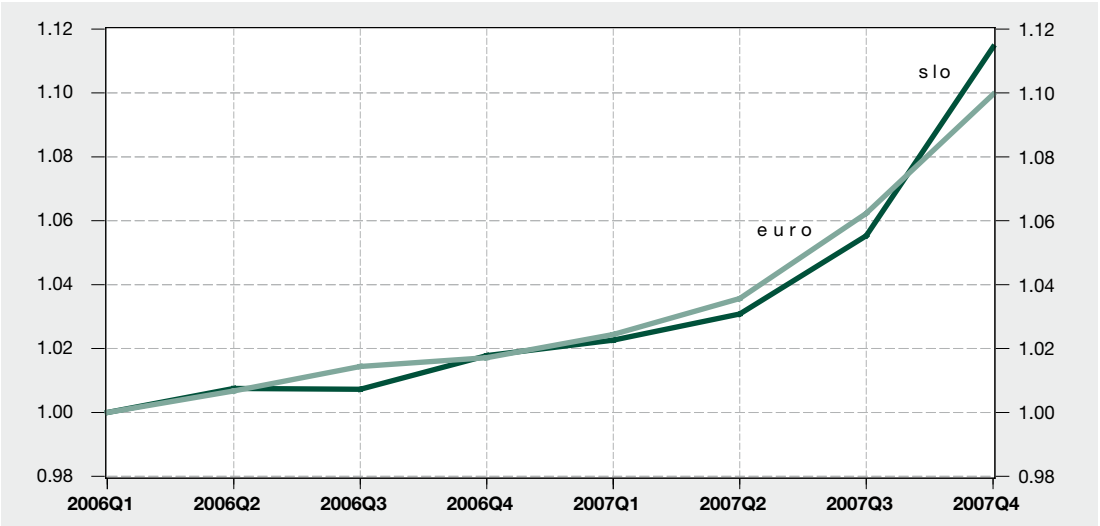

Figure 15. Producer prices of food (for domestic market)

Source: Eurostat; own caluclations
Note: level, 2006q1=1

[10] For example, see Bole and Mramor (2006).

Tabel 3. Price cost margin

	Manufacturing of food, beverages and tobacco (DA15)	Sale, maintanance and repair of motor vehicles (G50)	Wholesale and commission trade, except motor vehicles (G51)	Retail trade, except motor vehicles; repair of household goods (G52)
Germany	0.084	0.22	0.24	0.18
Holland	0.11	0.23	0.26	0.23
Finland	0.04	0.27	0.23	0.23
Norway	0.08	0.18	0.21	0.08
France	0.12	0.26	0.18	0.27
Slovenia	0.11	0.25	0.23	0.23

Source: Eurostat; own calculations

An alternative factor of the large difference between producer (and import) prices and retail prices of food in Slovenia relative to the euro area in 2007 could also be the stronger position of considerably larger retail trade chains in the euro area (also relative to Slovenia) in the buyers' market. Such a stronger position could reduce the increase in food commodities prices and food producer prices on the way into retail prices in the euro area relative to Slovenia, because contracts are agreed upon for longer terms in the euro area. This hypothesis could be supported by the figures on food inflation in 2008. Should it prove accurate, the relative dynamic in food prices in Slovenia compared with the euro area will decline.

4. Money

Credits and deposits. In 2007, developments in the banking sector differed significantly from those in the previous year. The basic features of the change are illustrated in Figure 16, which shows the yearly dynamic in deposits and credits for non-financial corporations and households in Slovenia (only residents are included). The year-over-year dynamic in deposits and credits for the non-financial sector in the euro area are shown on a separate graph.

The already very rapid growth in total credit in 2006 accelerated considerably in 2007; the yearly

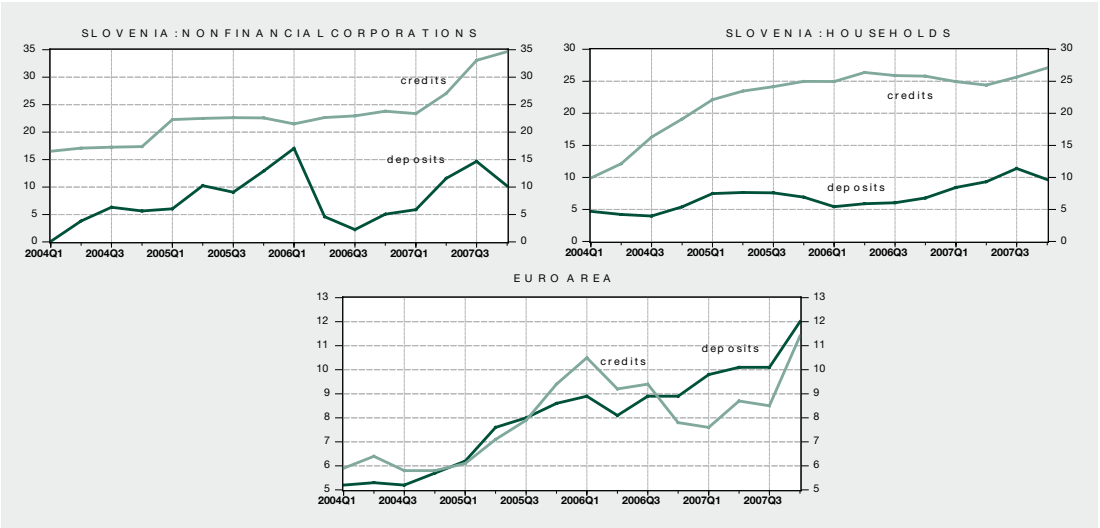

Figure 16. Credits and deposits of residents

Source: Bank of Slovenia Bulletin; Eurostat; own calculations
Note: consolidated items for euro area; yearly growth rates

growth rates exceeding 30% in the second half of the year. Although economic growth in Slovenia was approximately double that in the euro area, credit growth after the second quarter of 2007 was more than three times higher. Irrespective of the uncertainty in foreign financial markets caused by the sub-prime credit market crisis in the USA, credit growth in Slovenia and the euro area picked up further towards the end of 2007.

A surge of activity in banking (financial) intermediation in 2007 also documents the increase of the real value-added growth rate by one quarter in the financial intermediation sector (see Table 1).

While household credit grew at practically the same rates as in previous years, corporate lending accelerated very sharply after the first quarter of 2007. As will be documented below, the acceleration probably resulted from the huge inflow of loanable funds into the banking system when the government repaid domestic debt by issuing new Eurobonds.

The growth in deposits began to increase after the end of 2006, for both household and corporate deposits. However, the rates of growth were significantly lower (less than half) than credit growth. Deposits grew at about the same annual rate of 9% to 10% in Slovenia and the euro area. Developments in foreign financial markets triggered by the subprime credit market crisis and the corresponding increase in uncertainty brought about a decline in the growth of deposits in Slovenia, both household and corporate. No such slowdown in deposit growth was seen in the euro area.

Net financial position. Because the gap between the growth rates of credit and deposits increased considerably in 2007, it is no surprise that the banking system's net financial position against residents in the household and non-financial corporate sectors deteriorated further; the net financial position (difference between deposits and credits) is shown in Figure 17, separately for the household and corporate sectors, as a proportion of annual GDP.

The decline in the banking system's net financial position in the last two years has been huge. Since the first quarter of 2006, its net financial position has declined by approximately 6.5% of GDP

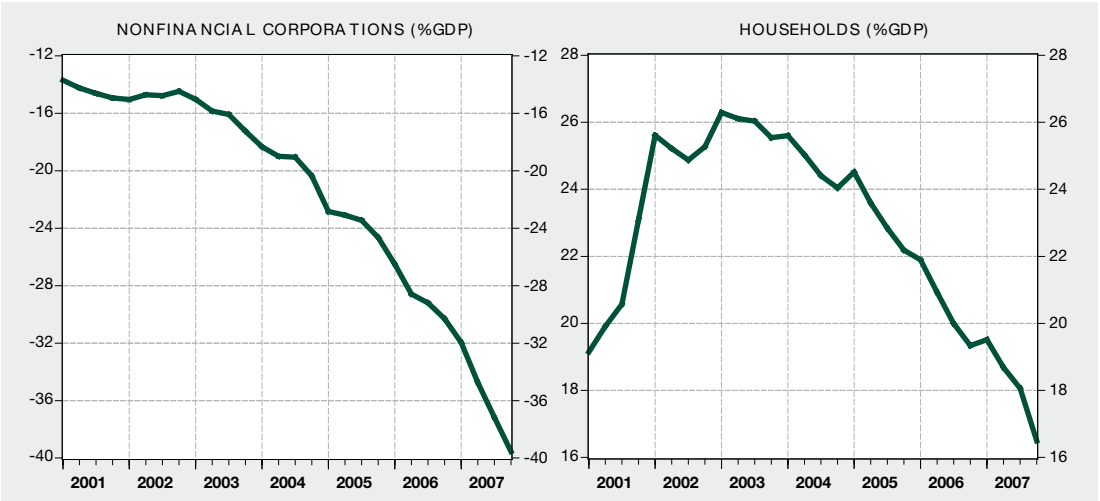

Figure 17. Net resident financial position

Source: Bank of Slovenia Bulletin; own calculations
Note: in percentages of four quarters moving average GDP

against households, and by 8% of GDP against the corporate sector, making a total decline of 14.5% of GDP. The overall (negative) financial position against households and non-financial corporations was more than 18% of GDP (in absolute value) at the end of 2007. Therefore, in the last two years (and especially in 2007), residents have considerably increased the net demand of banks for foreign lending.

Such a rapid decline in banks' net financial position against residents in the household and corporate sectors was driven (as in 2005 and 2006) by large net outflows of capital to the rest of the world, primarily via net portfolio outflows, and notably in 2007, via a significant widening of the current account deficit.

5. Balance of payments

Current account and net financial outflows. The balance of payments trends in 2007 differed significantly from those in 2006 in terms of dynamic and structure. Figure 18 shows the net flows with the rest of the world through the key types of transactions: portfolio investments, FDI, trade credits, current account transactions and loans. The flows are shown as percentages of (quarterly) GDP.

Net portfolio investments and the current account deficit brought about the lion's share of net financial outflows. The further increase in economic activity, which was driven by explosive growth in investment demand, caused a sharp widening of the current account deficit in 2007 (-4.9% of GDP). It is worth mentioning that such an increase in the current account deficit (from -2.8% GDP to -4.9% GDP) is further evidence of the overheating of the economy in 2007. The net financial outflows through net portfolio investments also increased further in 2007; they reached 6.9% of GDP for the entire year.

Net financial flows through commercial credit and FDI fluctuated close to a balanced position in 2007 (as in 2006).

Financing financial outflows and current account. The final graph in Figure 18 shows the key component of the financing of the described net financial outflows via portfolio investments, commercial credits, FDI and the current account.

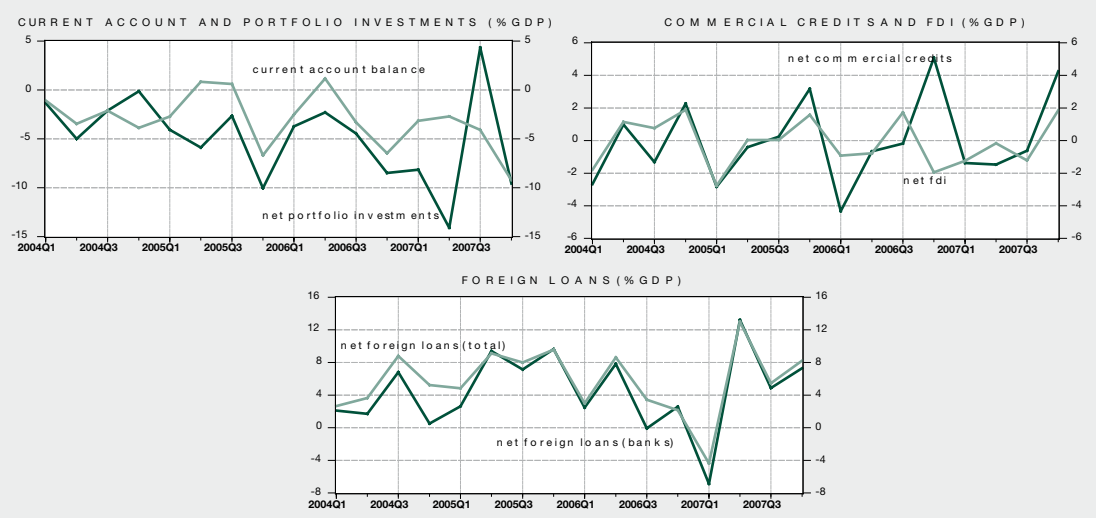

Figure 18. Balance of payments components

Source: Bank of Slovenia Bulletin; own calculations
Note: in percentages of quarterly GDP

The net inflows through foreign loans of all entities in the economy and the net inflows through foreign loans of the banking system alone are shown. The remaining balance of payments items (e.g., the change in foreign exchange reserves, errors and omissions, etc.), which balance the net financial flows shown, are not given in Figure 18.

Net financial inflows through foreign loans also strengthened in 2007, with the exception of the first quarter, which differed primarily because of the unfinished restructuring of bank portfolios during the changeover to the euro. As shown by Figure 18, again in 2007 the increase in net total foreign borrowing came practically as a result of the increase in net borrowing of the banking sector alone. By increasing net foreign borrowing, the banking system closed the swelling gap in their balance sheets (open financial position) which was driven by a much larger increase in credits than in deposits.

The contamination of the bank lending portfolio with capital market risks generated by the aforementioned process has been unfolding in substantively the same manner since 2005. However, it should be noted that because of investments in equity instruments (which are also often used as collateral in banks), the risk transparency of such bank credit instruments is no larger than the risk transparency of the structured instruments that increased the problems and uncertainty in foreign financial markets after August 2007.

6. Government sector

What should be taken into account in assessing fiscal sector performance in 2007? Acting within the euro area required fiscal policy to make major changes in both its targets and its implementation compared to previous years. After entering the euro area, "domestic" responsibility for price stability was, in principle, entirely transferred to fiscal policy. Therefore, the criteria of a healthy fiscal policy would have had to be notably different (and significantly stricter) from those when the Bank of Slovenia had been still acting in the tolar currency area.

Three important groups of factors did not permit policy makers in Slovenia to enjoy a comfortable position even in the short run. By 2007, after entering the euro area, external formal constraints on fiscal policy makers increased significantly. For example, the requirements for the cyclical adjusted fiscal stance are not merely matters of principle, but are formally defined in the Excessive Deficit Procedure. Necessary (pending) institutional changes caused by the integration of the Slovene economy into the EU (e.g., entrance into the Schengen zone, acceleration of the building of the transportation network, etc.) exerted additional pressure on fiscal policy, and so did the effects of a standstill in the process of improving the fiscal stance caused by the policy measures (tax reform) in the 2006. Therefore, the improvement of the general government's fiscal stance in 2007 would have had to be much larger than on average in the euro area, even without the necessary fiscal curbing of inflation deterioration.[11]

Dynamics of basic aggregates. The high economic growth in 2007 could lead to a sharp increase in certain general government revenues, but the government considerably mitigated the potential growth of these revenues through the decisions it had already taken in 2004 and 2006. In 2004 there were changes (cuts) in investment incentives in corporate income tax, while in 2006 there were significant cuts in the burden imposed by two types of taxes: payroll and personal income taxes.

[11] See Bole (2006).

The effects of high economic growth on government expenditure are generally smaller and primarily constitute a reduction in transfers to households. However, in Slovenia, in 2007, there was a significant reduction on the expenditure side (in terms of GDP) as a combined result of ex ante nominally fixed expenditures of the government and unexpectedly high inflation and economic activity.

To reveal the scale of the adjustment in fiscal stance to cyclical fluctuations, a comparison of the fiscal stance in Slovenia, the euro area and the EU are given in Table 4. The Table shows the general government revenue and expenditure, as well as the general government's overall and primary deficit as a percentage of GDP.

The Table shows a slow but steady decline in general government expenditure in Slovenia after 2003 and a slow increase in general government revenue until 2005, followed by a significantly sharper decline in revenue until the end of the observed period.

General government expenditure in the euro area fell more slowly than in Slovenia, but revenues were up over the same period. It is thus evident that the fiscal stance in the euro area displayed a trend of gradual improvement over the period observed, as clearly shown by the deficit figures in Table 4. The dynamic in the general government sector in Slovenia in the period analysed also improved, but notably more slowly than in the euro area. Despite the significant increase in economic growth in Slovenia in 2006 and 2007 relative to the euro area, the improvement of the public finance position in the euro area in the same period was significantly larger than in Slovenia. Overall deficit and primary deficit improved, by 0.5 and 1 percentages of GDP less than in euro area, respectively.

Table 4. General government fiscal stance

	2004	2005	2006	2007
General government revenue				
European Union	43.9	44.4	44.9	44.9
Euro area	44.6	44.9	45.5	45.7
Slovenia	44.2	44.5	44.1	43.2
General government expenditure				
European Union	46.8	46.9	46.3	45.8
Euro area	47.6	47.4	46.8	46.3
Slovenia	46.5	46.0	45.3	43.3
General government balance				
European Union	-2.8	-2.5	-1.4	-0.9
Euro area	-2.9	-2.5	-1.3	-0.6
Slovenia	-2.3	-1.5	-1.2	-0.1
Primary balance				
European Union	0.0	0.3	1.2	1.8
Euro area	0.2	0.4	1.6	2.3
Slovenia	-0.5	0.1	0.2	1.2

Source: Eurostat
Note: in % GDP

[12] Besides, in fiscal stance improvement in 2007 there were some significant but one time gains (for example, the introduction of IFRS increased revenues in 2007 by approximately 0.2% of GDP) and deferred payments (for example, blocking government obligation from the so-called »petrol tolar« program decreased government spending by 0.5% GDP). See Bole (2008).

The key reason for the deterioration in the fiscal stance in Slovenia relative to the euro area was the dynamic in general government revenues, as the dynamic in general government expenditure was satisfactory,[13] differing little from that of the euro area. The changes in tax legislation in the last two years, which did not track the predetermined reduction in government spending (the legislative changes were not adjusted to the effective cut in spending) or the autonomous changes in tax effectiveness, were the main reason for the relative deterioration in the fiscal stance in Slovenia. At least the timing of the tax reform would have had to have been adjusted to the phase of the economic activity cycle. The wrong timing of the tax reform actually resulted in a tax incentive of over 1.5% of GDP at the time when the economy was already overheated and growing at the highest rate in its (short) history!

Changes in the structure of general government revenue. For an insight into the reasons for the slow improvement in fiscal stance in 2007 (and 2006), the dynamic in individual components of general government revenue is of great relevance. The basic revenue components are given in Table 5.

The effects of the tax reform in 2004 and especially 2006 are clearly visible in Table 5, but the table also reveals some notable surprises of key importance to the public finance results in 2006 and 2007.

As previously stated, the significant leap in corporate income tax in 2006 was probably the result of the reduction in tax investment incentives in 2004 and the increase in GDP growth, but also partly (on a one-off basis) of the release of bank provisions as a result of the changeover to the IFRS.

The phased reduction in payroll tax (to be completed next year), which was launched in 2006, was probably a factor in the decline in the corresponding items in 2006 and 2007. Similarly, the decline in personal income tax was probably the result of the tax changes made in autumn 2006.

The decline in the tax yield from VAT after entering the EU was expected, but in 2007 it was surprisingly large. It is likely that the significant change in the composition of final demand in 2007 contributed to the larger than expected decline, as did differences in the deflators of individual components of final demand, as a result of the significant increase in inflation limited to only some groups of product. The same is true of social security contributions.

Effects of other fiscal policy measures. Fiscal policy can also have a significant impact on fiscal stance using measures and instruments that do

Table 5. Tax revenues

	2005	2006	2007
Individual taxes on income and profit	5.8	5.9	5.4
Corporate taxes on income and profit	2.1	3.1	3.3
Social security contributions	14.1	13.9	13.7
Payroll tax	1.8	1.5	1.2
Value added tax	9.0	8.9	8.6
Excises	3.4	3.1	3.5

Source: Ministry of Finance Bulletin; own calculations
Note: in % GDP

[13] However, it has to be taken into account that the main government push towards investments actually went through an increase in spending on Dars (Motorway company of the Republic of Slovenia) by 38% (0.4%GDP), which is formally not part of the general government. See www.dars.si.

not directly influence general government revenue and expenditure. Through such unorthodox measures fiscal policy can "shift" obligations and funds over time or between sectors (between the public and private sectors).[14] It can also influence fiscal stance through the management of public debt and volume of guaranties or restructuring its assets.

Let us examine the public debt management measures by which the government exerted a significant impact on the growth of financial (particularly banking) intermediation in 2007.

Figure 19 shows the effects of restructuring the public debt in 2007. The yearly (quarter to quarter) increments of government domestic and foreign debt and total bank credits to non-financial corporations and households are given in percentages of GDP.

At the beginning of 2007 there were large shifts in the structure of government debt and assets. The following large transactions were of key importance. The government issued Eurobonds and so increased its foreign debt by 2.8% of GDP in the first quarter, while in the second quarter it redeemed domestic debt by 3% of GDP and sold its assets (equity holdings) in the amount of 0.4% of GDP. At a time of very high economic growth, extremely high growth in investments and a correspondingly high growth in banking credits (by 25% yearly), these government transactions increased available loanable funds in banks by at least 2.6% of GDP.

Figure 19 illustrates the substitution of foreign debt for domestic debt (the issuance of Eurobonds and redemption of domestic debt), and the effects of the significant increase in available loanable funds on the growth in bank lending. The graph in Figure 19 shows that after the first quarter of 2007, when the repayment of government debt increased available loanable funds in banks, bank credits swelled by approximately 3.3% of

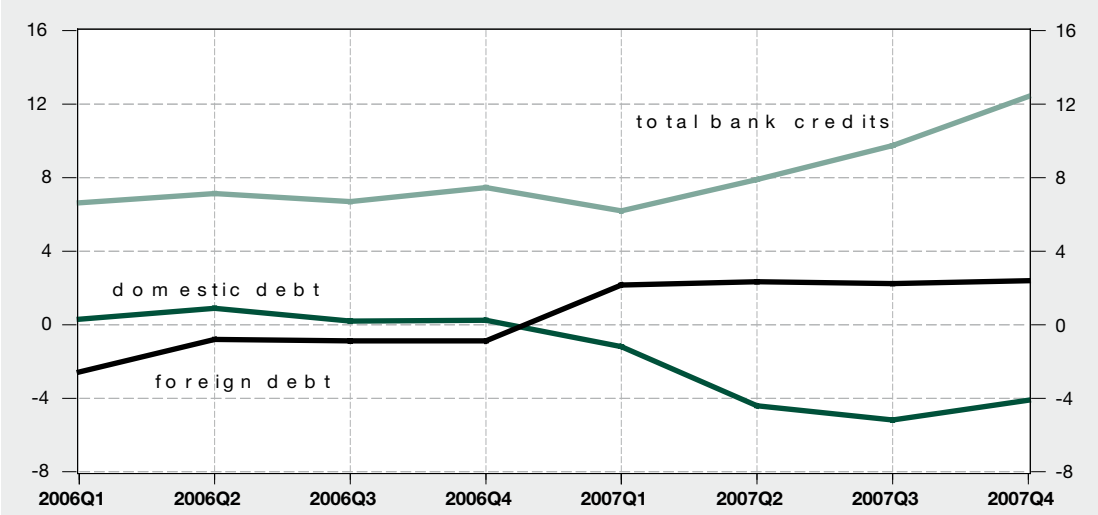

Figure 19. General government debt and bank credits

Source: Ministry of Finance Bulletin; Bank of Slovenia Bulletin; own calculations
Note: yearly increments in % GDP

[14] In 2007, examples of such unorthodox measures were deferred payments to Dars (according to the »petrol tolar« program), and one-time goverment revenue generated by the introduction of IFRS in the banking sector. Both measures brought about a significant but temporary improvement in fiscal stance in 2006 and 2007. See Bole (2008).

GDP. The government's "contribution" could have accounted for approximately 22% (12 percentage points on an annual basis) of the increase in bank lending since December 2006.[15] It should be noted that the stock exchange also rose sharply after the second quarter of 2007 (traded volume increased by half).

By giving guarantees to public sector enterprises, the government also facilitated additional demand for lending and increased investments not included in the general government expenditures. The government provided a guarantee for the credit of 2.5% of GDP to Dars (Motorway Company of the Republic of Slovenia) in 2007, by which it financed an increase in investments by 38% (0.4% of GDP).

7. Main findings

Economic activity in 2006 and 2007 was very high. The structure of the demand driving growth in 2007 was significantly different compared to 2006 and the euro area. The modest relative growth in investment in the euro area and enormous growth in Slovenia in 2007 was the key difference between the former and the latter.

The increased economic activity brought a notable decline in unemployment in 2007, more so in Slovenia than in the euro area. The increase in employment in Slovenia, both absolute and relative, was solely the result of an increase in employment among those with the lowest qualifications (primary and lower secondary) and in temporary employment.

The growth in labour costs in Slovenia outpaced corresponding growth in the euro area by 3 percentage points in 2007. The labour costs growth gap in the services sectors relative to the euro area widened sharply, but narrowed in the tradable sectors.

The competitiveness of tradable sectors in Slovenia deteriorated compared with Germany in 2007, albeit notably more slowly than in previous years. The relative dynamic in competitiveness in the market services sectors deteriorated much faster.

Headline inflation accelerated considerably in 2007. There was an increase in inflation relative to the euro area in 2007 in two product categories: services and food. The cost of services has been outpacing that in the euro area for two-and-a-half years, while food prices began to do so only after the first quarter of 2007. In the final quarter of 2007, the contribution to inflation deterioration in Slovenia compared to the euro area of both categories was equal. Empirical evidence does not show any significant contribution of the euro's introduction to the acceleration of inflation.

Since the second quarter of 2005, the acceleration in the cost of services has been driven by the strong relative growth in labour costs, caused by the high economic growth (tight labour market), and facilitated by the less competitive market structure in the services sectors. The acceleration in food prices has probably been driven mainly by rigid (percentage) margins in the retail trade. At weak nominal spending, such unreduced margins will probably not be sustainable in the longer run.

Real value added in the financial intermediation sector accelerated considerably in 2007. The rapid credit growth picked up pace even more; the year-over-year rates exceeded 30% after the second quarter. Growth in deposits began to increase after the end of 2006. However, the rates of growth were significantly lower than those of credit growth. Such difference in the dynamics of credits and

[15] Bank of Slovenia Bulletin

deposits caused a further decline in the banking system's net financial position against residents in the household and corporate sectors. It declined by 12% of GDP after the last quarter of 2006.

The further increase in economic growth, which was driven by explosive growth in investment demand, brought a sharp widening of the current account deficit in 2007 (to 4.9% of GDP). The net financial outflows through portfolio investments strengthened further, while the net flows through trade credits and FDI continued to be close to zero. The large financial net inflows through bank borrowing were the only items that remained to close the balance.

Except for a one-time change in the financial flows through foreign loans because of the unfinished restructuring of the bank portfolios, entering the euro area did not have visible effects on the foreign financial flows.

Entering the euro area should have been a much more important change for fiscal policy than for enterprises and households. The new goals of the government's fiscal policy (stabilisation and growth) and unfavourable initial conditions needed drastic changes in their stances from the very beginning, but the fiscal policy hasn't even achieved an increase in restrictiveness similar to the euro area average.

The key reason for the deterioration of the fiscal stance in Slovenia relative to the euro area was the dynamic in general government revenues (caused by tax reform). Fiscal policy also significantly influenced economic performance by restructuring public debt, increasing guaranties and using unorthodox measures.

In a period of already high economic activity and galloping credit growth, the government gave a large but untimely tax incentive to the economy, stimulated the acceleration of investments (particularly in civil engineering) and significantly increased available loanable funds in the banking system.

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