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Institute of Macroeconomic Analysis and Development
Janez Šušteršič, director

Tel: (+386) 1 478 1012
Fax: (+386) 1 478 1070
E-mail: publicistika.umar@gov.si

Head of Project: Lejla Fajić
Editors in Chief: Boštjan Vasle, Alenka Kajzer

Translation: Tina Potrato
Language Editor: Murray Bales
Graphs: Marjeta Žigman
Tehnical Editor: Ema Bertina Kopitar

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This report was prepared by the IMAD team, with specific contributions provided by the external collaborators:

Chapter I: Current economic trends

Lejla Fajić (Editor in Chief), Jure Brložnik, Barbara Ferk, Marjan Hafner, Katarina Ivas, Rotija Kmet Zupančič, Jasna Kondža, Mojca Koprivnikar Šušteršič, Mateja Kovač, Saša Kovačič, Janez Kušar, Tomaž Kraigher, Jože Markič, Jure Povšnar, Miha Trošt, Ivanka Zakotnik, Eva Zver

Chapter II: Fiscal development and policy

Boštjan Vasle (Editor in Chief), Lidija Apohal Vučković, Jasna Kondža, Slaven Mićković, Marko Mršnik, Andreja Poje

Chapter III: Wages, productivity and competitiveness

Alenka Kajzer (Editor in Chief), Slavica Jurančič, Saša Kovačič, Tomaž Kraigher, Janez Šušteršič

Chapter IV: Assessment of macroeconomic scenario implementation of the Slovenia's development strategy

Marijana Bednaš (Editor in Chief), Tanja Čelebič, Barbara Ferk, Marjan Hafner, Marko Glažar, Katarina Ivas, Rotija Kmet Zupančič, Jasna Kondža, Mojca Koprivnikar Šušteršič, Mateja Kovač, Saša Kovačič, Janez Kušar, Tomaž Kraigher, Jože Markič, Jure Povšnar, Metka Stare, Branka Tavčar, Miha Trošt, Ivanka Zakotnik, Eva Zver

August 2007

Table of contents

IV. Ocena uresničevanja makroekonomskega scenarija

Fiscal Developments and Policy

Summary

Slovenia's entry to the Economic and Monetary Union changed the discretion of economic policy to respond to changes in the environment. The monetary policy in the Economic and Monetary Union (EMU) is centralised, while the decentralised fiscal policy is restricted by the provisions of the Stability and Growth Pact (SGP). Slovenia's monetary policy has been oriented towards ERM II entry and adoption of the euro for the past few years and has therefore already significantly depended on the decisions adopted in the euro area in this period. With the actual entry to the EMU and adoption of the euro at the beginning of 2007, however, Slovenia's monetary policy became subject to the common interest in the euro area. Country-specific shocks can no longer be cushioned by monetary policy measures. This role is now performed more by fiscal and incomes policies. At the same time, these two policies are becoming increasingly dependent on the decisions of other euro area or EU members.

The fiscal position of the European Union and the euro area has been improving over the past three years. Since 2003, when the nominal general government sector deficit reached its highest value after 1996 (3.0% of GDP in the euro area and 3.1% of GDP in the EU), the general government sector deficit has narrowed significantly. The narrowing of the nominal deficit has been consistent with the smaller structural deficit of the general government sector. The biggest improvements in the structural balance were recorded by countries whose nominal deficits were above the 3% reference value in 2003. The lowering of deficits and strong economic growth have benefited public debt, which declined in 2006 for the first time since 2002 to total 69.0% of GDP in the euro area and 61.7% of GDP in the EU. According to the European Commission's spring forecasts, the general government sector deficit will, given the expected favourable economic trends, continue to decrease in 2007 and 2008. Public debt will consequently also shrink in these years.

Slovenia's general government deficit has similarly been narrowing gradually ever since 2002, after the increase seen at the beginning of the decade. In 2000-2006, the total general government revenue as a share of GDP rose somewhat while the share of general government expenditure progressively declined. The highest increase (by 1.9% of GDP) in general government sector revenue was recorded in the share of current taxes on income and property. Meanwhile, the share of taxes on production and imports decreased by 0.7% of GDP while the share of revenue from social security contributions remained stable over the observed period. Within general government expenditure, the biggest decreases were recorded in capital transfers, property income payable, and social benefits, while the largest increase was observed in the relative share of other transfers.

In the last decade, Slovenia has recorded a structural deficit of the general government sector that in 2006 exceeded the actual deficit by 0.1 of a percentage point. According to forecasts, the structural deficit will continue to exceed the actual deficit in the next two years. Changes in the structural deficit compared to the changes in the output gap are an indication of the pro-

cyclical or counter-cyclical orientation of fiscal policy. The main task of fiscal policy in 2000-2006 was to keep the general government sector deficit below the Maastricht reference value in order to fulfil the criteria for adopting the euro. For this reason, fiscal policy was not always counter-cyclical. Since the entry to the EMU, the stabilising role of fiscal policy should be reflected in its counter-cyclical operation. However, forecasts by the Ministry of Finance show that fiscal policy will additionally reinforce cyclical swings of GDP growth in the next two years. This will be partly due to the fiscal policy framework, namely targeting the budget deficit, which does not support the counter-cyclical operation of fiscal policy.

The European Commission has published final data on the financial flows between Slovenia and the EU for 2004 and 2005. The data show that Slovenia was a net recipient of funds from the EU budget in 2004 and 2005. Slovenia's net position, which reached 0.4% of GDP in 2004, declined to 0.3% of GDP in 2005. Slovenia contributed 1.0% of its GDP to the EU budget and received funds in the amount of 1.3% of GDP from the EU. The European Commission's data on the financial flows between Slovenia and the EU for 2006 are not yet available. The available figures of the Ministry of Finance show that the structure of allocated funds and payments did not change significantly last year. Slovenia has been fairly successful in absorbing EU funds so far. However, there is still room for improvement in this area and the structure of funding should refocus on programmes with a stronger developmental potential.

General government debt has also been stable and has totalled around 28% of GDP since 2000. While the share of government debt guarantees has been rising steadily, the share of called guarantees has declined. General government sector debt has increased in nominal terms since 2000 but its share in GDP has remained stable. Projections show that it will total less than 28% at the end of the decade, the same as in 2000. Within the structure of debt, a relative increase since 2000 has been observed in the share of debt resulting from the budget deficit, while there has been a relative decrease in debt resulting from the rehabilitation of banks and companies. Although the debt level is fairly stable, simulations show its relatively high sensitivity to changes in economic growth and interest rates. The relative share of general government sector guarantees is still rising. In 2000-2006, it increased by 39% to total 10.4% of GDP in 2006. However, despite the growing relative share of government debt guarantees, the share of called guarantees is declining. In 2000-2006, it averaged 0.08% of GDP annually.

Population projections show that, assuming unchanged economic policies and parameters of the economic environment, the continuation of the current demographic trends would lead to an unsustainable share of public finances. The share of the population aged over 65 will increase by 2050; meanwhile the share of the population aged 15-64 will decrease. Simulations of long-term demographic changes show that, assuming unchanged parameters of the economic environment and economic policies, ageing-related government expenditure would rise significantly by 2050. In order to maintain sustainable public finances policy, adjustments and structural changes to the labour market, pension legislation and some other social protection systems should be adopted

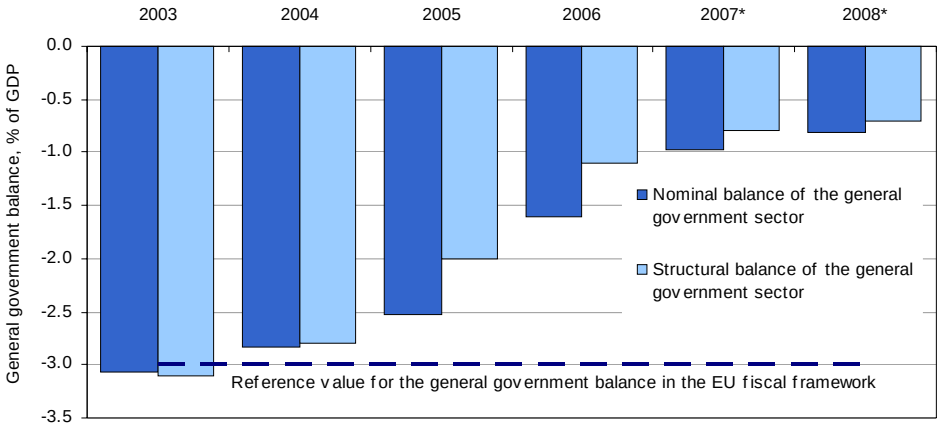
straight away. However, if no such changes are introduced the increased expenditure could be financed only by reducing other general government expenditure and increasing taxation.

Towards the end of 2005 the Government adopted a framework of reform measures to increase welfare in Slovenia that also includes adjustments to public finances. The main measures were the lowering and restructuring of general government expenditure, which are already partly included in the budget for 2007 and 2008. The system of social transfers indexation was changed and the conditions for entitlement to unemployment cash benefits and financial social assistance were tightened. Other measures are aimed at promoting activity and reducing the dependence of claimants on benefits.

1. Fiscal developments and policy in the European Union[1, 2]

Since 2003, when the nominal deficit of the general government sector reached its highest value after 1996 in both the euro area and the EU[3] (3.0% and 3.1%, respectively), the general government deficit has narrowed significantly. By 2006, the general government deficit halved to total 1.6% of GDP in the euro area and 1.7% of GDP in the EU. This narrowing reflected the accelerated economic growth and the concurrent improvement in the structural deficit of the general government sector,[4] particularly in countries that had previously had relatively high deficits.

Figure 1: **Nominal and structural balance of the general government sector in the euro area**



Source: Spring Economic Forecast 2007-2008, European Commission.
Note: * Forecast.

[1] Marko Mršnik, European Commission, Directorate General for Economic and Financial AffairsThe chapter reflects the author's personal views and not necessarily those of the Economic and Financial Affairs DG or those of the European Commission.

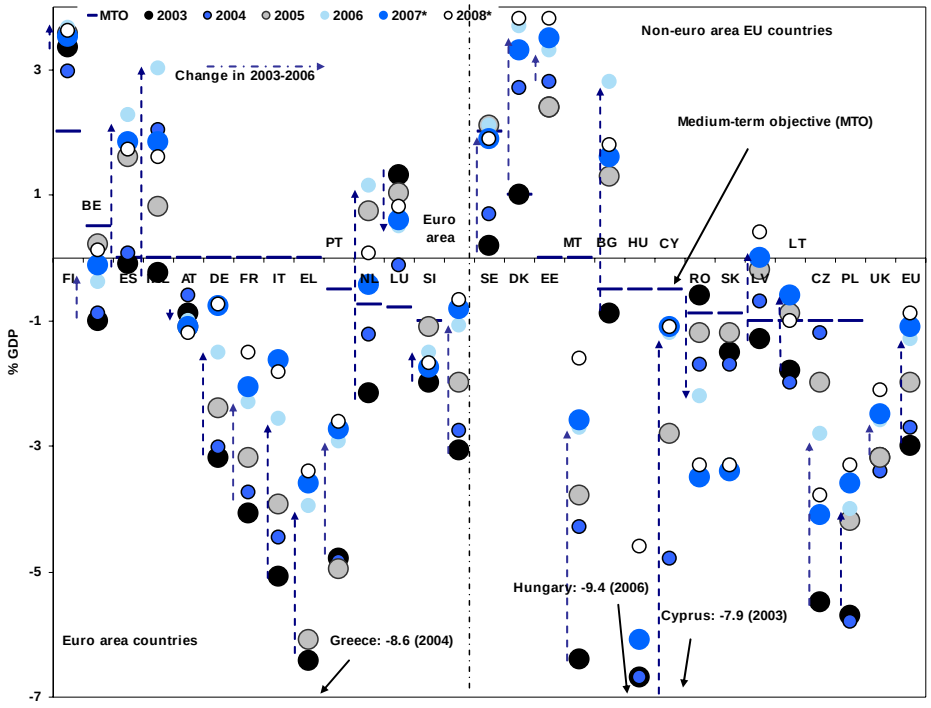
[2]The entire analysis, except where specifically indicated, is based on the national accounts methodology (ESA-95) The analysis of the general government sector's fiscal developments according to the ESA-95 methodology provides the broadest look at the economic role of general government as a whole. It is applied by the European Commission as well as some international institutions (OECD) to analyse fiscal trends. However, the general government flows in Slovenia that are used as the basis for the operation of fiscal policy instruments are planned and monitored according to the national methodology, which is based on the methodology of the International Monetary Fund (IMF). This methodology is based on the cash-flow principle and is currently also used as the basis for the presentation, execution, and planning of the revenues and expenditures of the state budget, local budgets, and both social insurance budgets.

[3] The calculation of the EU aggregate covers data for all 27 member states and was conducted for the entire period under observation to ensure the consistency of the analysis, although ten of the current member states joined the EU in 2004 and two joined in 2007. Similarly, the aggregate for the euro area includes data for all 13 member states for the whole period even though Slovenia entered the EMU in 2007.

[4] Consolidated balance of the general government sector, excluding the effects of the business cycle and the transitory effects of fiscal measures.

Both in the euro area and in the entire EU, the improvement in the nominal deficit has been fully consistent with the improvement in the structural deficit of the general government. Nevertheless, the estimates are still tentative. While this would indicate that the decrease in the nominal deficit of the general government sector has been entirely of a structural nature, the estimates of the general government sector's structural balance are relatively uncertain in the current phase of the business cycle due to the exceptionally high tax revenue. The tax burden, i.e. the share of all taxes relative to GDP in the current period, was higher in 2006 than in the latter part of the 1990s, when the large increase in consumption and in the value of assets contributed to high tax revenues. Bearing this in mind, and given that few countries adopted measures aimed at increasing revenues in 2006, it is likely that the estimated improvement in structural balances is, at least in part, transitory.

Figure 2: **Structural balance of the general government sector in EU member states**



Source: Spring Economic Forecast 2007-2008, European Commission.
Note: * Forecast.

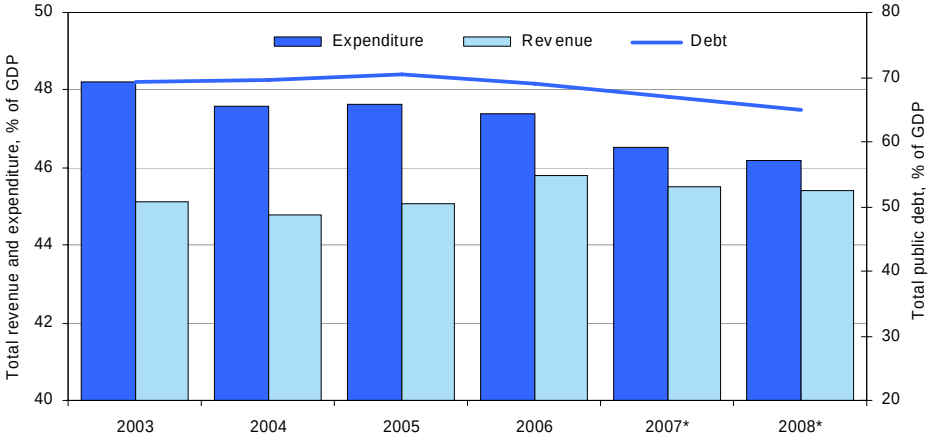
Within the euro area, the biggest improvements in the structural balance were recorded by countries whose nominal general government deficits were above the 3% reference value in 2003. In these countries, the improvement in the structural balances recorded from 2003 to 2006 ranged between 1.7 p.p. in Germany and 3.3 p.p. in the Netherlands. Another notable improvement was the significant increase in the structural general government surpluses of Ireland and Spain, two countries which, along with Luxembourg, the

Netherlands, and Finland, have already met their medium-term budgetary objectives in compliance with the Stability and Growth Pact.[5] Belgium and Slovenia also came very close to their medium-term objectives in 2005, but their structural balances deteriorated in 2006 despite strong economic growth. Among the countries from outside the euro area, the biggest reductions in structural deficits in 2003-2006 were recorded in Malta and Cyprus, in line with their plans to adopt the euro as early as possible, and in Bulgaria, which conducts a policy of a balanced general government balance, partly due to its currency board system. Bulgaria, Denmark, Estonia, Lithuania, and Sweden met their medium-term budgetary objectives in 2006.

The lowering of deficits and the swift economic growth had a favourable effect on the evolution of public debt in the euro area and the EU. In 2006, public debt declined for the first time since 2002, totalling 69.0% of GDP in the euro area and 61.7% of GDP in the EU. In general, none of the countries whose public debt was above the reference value of 60% of GDP in 2003 reduced their debt below this level in the observed period. At the country-specific level, it is worth mentioning that public debt in Italy and Greece still exceeds 100% of GDP. In Greece it even increased from 2003 to 2006 due to the relatively low economic growth and successive relatively high general government deficits. The reverse is true of Belgium, where public debt in 2001 still totalled 106% of GDP but shrank to 89.1% of GDP by 2006, largely because the country maintained a balanced general government sector balance. In countries with public debt below 60% of GDP, the share of debt in GDP fell further in 2003-2006. Outside the euro area, the relatively high GDP growth rates, coupled with declining interest rates, contributed to the curbing or even cutting of public debt, although the abovementioned current general government imbalances, especially in new member states, might have suggested otherwise.

[5] The revised Stability and Growth Pact implemented in 2005 changed the definition of medium-term budgetary objectives for member states. Medium-term objectives for member states are now differentiated and may diverge from the requirement of a close to balance or in surplus position based on the percentage of its debt and potential growth, provided that the country retains a sufficient safety margin lower than -3% of GDP reference value. Taking account of the effects of the business cycle and temporary measures, the country-specific medium-term budgetary objectives are specified within a range between -1% of GDP for countries with low debt/high potential growth and a balanced budgetary position, and a budget surplus for countries with high debt/low potential growth. For details, see: Council Regulation (EC) No. 1055/2005 of 27 June 2005 or Public Finance in EMU 2005, European Commission.

Figure 3: **Total general government revenue and expenditure and public debt in the euro area**



Source: Spring Economic Forecast 2007-2008, European Commission.
Note: * Forecast.

According to the spring forecasts of the European Commission, the general government deficits in the euro area and the EU will continue to narrow in 2007 and 2008. In the EU countries with excessive general government deficits, the deficit is projected to decline below the 3% reference value in Italy and Slovakia in 2007 while the Czech Republic is projected to exceed the reference value again. Deficits in Hungary, Poland, and Portugal are set to remain above 3% of GDP in 2007-2008. As regards structural balance, the Commission projects that among the euro area countries with relatively high structural deficits, the position will improve in Greece, France, and Portugal. Outside the euro area, however, structural balances are not projected to improve despite the favourable economic conditions; in some countries they will even deteriorate. Figure 3 shows that the improvement in the euro area's fiscal position was underpinned by the reduction of general government expenditure to GDP ratio in the analysed period, in addition to the strong growth of revenue ratio over the last few years. The projected improvement in the euro area's fiscal position in the next two years is largely based on the announced cuts in budgetary expenditure.

Based on the favourable economic trends and the expected improvement in the primary balance of the general government sector, public debt in the euro area is projected to decline from 69.0% of GDP in 2006 to 65.0% in 2008. In the entire EU, it is set to decrease from 61.7% of GDP to 58.3% of GDP in this period. In countries with high public debt, its share in GDP will shrink somewhat in Greece, Italy, and Belgium, but will nevertheless remain relatively high above the reference value of 60% of GDP. Beyond 2008, Italy is expected to be the only member state with public debt exceeding 100% of GDP, whereas Austria and Cyprus are the only member states projected to reduce their public debt below 60% of GDP by 2009.

2. Fiscal developments and policy in Slovenia

2.1. General government sector revenue, expenditure, and deficit

In 2000-2006, total general government revenue as a share of GDP rose while the share of general government expenditure progressively declined. The average increase in the total revenue of the general government sector was only slightly higher than the average GDP growth in the six-year period, while its level ranged between 44.3% and 45.5% of GDP. Total general government expenditure, which stood at 48.1% of GDP in 2000, rose slightly further in 2001, after which it declined gradually (except in 2003 when it stagnated) to total 46.2% of GDP in 2006.

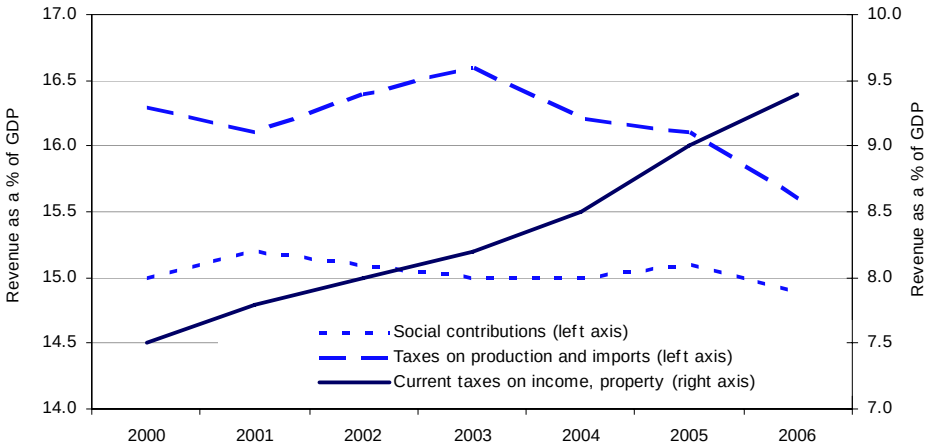
Table 1: **Revenue, expenditure, and net position of general government sector in Slovenia**

	2000	2001	2002	2003	2004	2005	2006	2000-2006
total revenue	44.3	44.8	45.5	45.3	45.1	45.5	44.8	0.5
total expenditure	48.1	48.9	48.0	48.0	47.4	47.0	46.2	-1.9
Net lending (+), net borrowing (-)	-3.8	-4.1	-2.5	-2.8	-2.3	-1.5	-1.4	-2.5

Source: Main Aggregates of the General Government, 2000-2006, SORS.

The highest increase in general government revenue was recorded in current taxes on income and property, whose share rose by 1.9% of GDP. Revenue from personal income tax was stable at 5.9% of GDP until 2004. The amended Personal Income Tax Act adopted in 2005, which broadened the taxable base, changed the tax rates and the tax relief system, resulted in an increase in the revenue from personal income tax by 0.1 p.p. of GDP in 2005 and by 0.2 p.p. of GDP in 2006. Meanwhile, revenue from corporate income tax rose from 1.2% of GDP in 2000 to 2.7% of GDP in 2006. Amendments to the Corporate Income Tax Act provided for changes in the taxable base; the tax relief system also underwent several changes and reductions while the statutory tax rate (25%) remained unchanged. According to the IMAD's estimate, the effective tax rate rose from an estimated 12.0% in 2000 to 19% in 2006. After Slovenia's entry to the EU in 2004, other current transfers that include European funds rose to 1.7% of GDP that year. In subsequent years, their level has stabilised at 1.4% of GDP.

Figure 4: **Changes in the main categories of general government revenue**



Source: Main Aggregates of the General Government, 2000-2006, SORS.

The share of taxes on production and imports in GDP declined by 0.7% of GDP in this period. Their gradual decrease was largely underpinned by the lowering of customs duties and the consequent decline in the revenue from this source following the abolition of the association and free-trade agreements upon Slovenia's entry to the EU. After value-added tax was raised in 2002, its share has stabilised at a level around 9% of GDP. The relative share of taxes on production and imports was also significantly dependent on the dynamics of revenue from the payroll tax, which rose substantially in the first few years of the analysed period due to the progressive tax scale but began to decline in 2005 with its phasing out. Several new environmental taxes were introduced between 2000 and 2006, which raised the share of taxes on production and imports by 0.3 p.p.

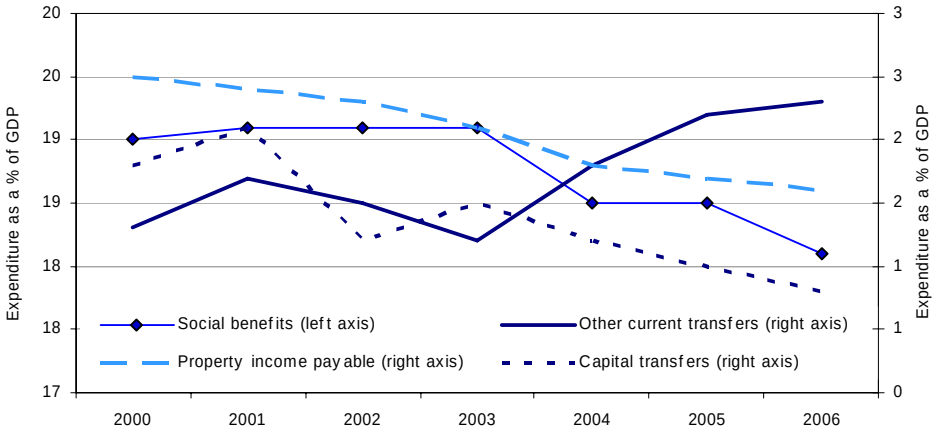
Revenue from social security contributions was stable in the analysed period. The relative share of revenue from social security contributions totalled around 15% of GDP from 2000 to 2006, exhibiting a slight declining trend. It was slightly higher in 2001 due to the faster growth of social security contributions from the self-employed, and in 2002, when the health insurance contribution rate was raised by 0.2 p.p.

Looking at general government expenditure, the main decreases in 2000-2006 were observed in capital transfers, property income payable[6], and social benefits. Expenditure on capital transfers as a share of GDP was higher particularly at the beginning of the analysed period, when it included, next to other investment support, all war compensations based on issued bonds, the debt takeover from Slovenian Railways, and expenditure on the payments of government guarantees on company loans falling due. Lower interest rates and lower inflation were the main factors of the gradual reduction in the share of expenditure on property income payable after 2000. The share of expenditure

[6] Property income payable mainly comprises payments of interest on outstanding debt.

on social benefits in cash and in kind decreased as well. With the phasing in of the pension reform, the share of expenditure on pensions has been declining by between 0.1 p.p. and 0.2 p.p. of GDP annually since 2000.

Figure 5: **Main changes in the categories of general government expenditure**

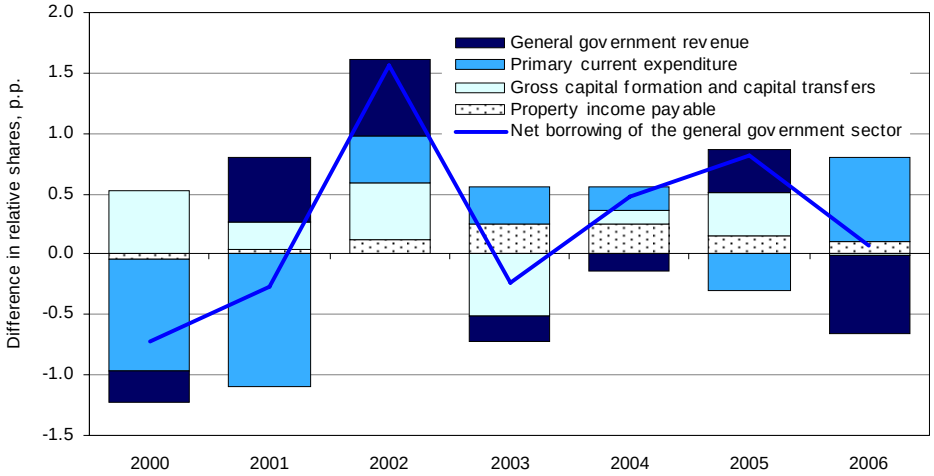


Source: Main Aggregates of the General Government, 2000-2006, SORS.

The largest increase, on the other hand, was observed in the share of current transfers. Since 2000, the share of expenditure on other transfers has risen by 1.0% of GDP, mainly due to the obligatory payments to the EU budget after the entry to the EU. The share of expenditure on gross capital formation increased by 0.4 p.p.; however, taking into account the decrease in the share of capital transfers (by 1.0 p.p.), publicly funded investment as a share of GDP in fact declined.

The deficit of the entire institutional general government sector as a share of GDP has been gradually narrowing ever since 2002, after the increase seen at the beginning of the decade. Amid the twice higher fluctuation of expenditure compared with revenue in 2000-2006, until 2001 the deficit rose mainly due to the rising primary expenditure while total general government expenditure grew faster than general government revenue. Both revenue and expenditure, however, grew faster than GDP and consequently their shares in GDP increased. In 2000 and 2001, the general government deficit exceeded the Maastricht convergence criterion, one of the conditions that Slovenia had to fulfil before entering the EMU. The general government balance improved considerably after 2003, and the growth of general government expenditure lagged behind GDP growth even more than did the growth of general government revenue. The lagging of general government aggregates behind economic growth was most pronounced in 2006, chiefly due to the strong GDP growth. Revenue rose by 0.5% of GDP between 2000 and 2006, while the narrowing of the deficit was underpinned by a decrease in expenditure by 1.9% of GDP.

Figure 6: **Contributions to changes in the general government deficit**



Source: Main Aggregates of the General Government, 2000-2006, SORS; calculations by IMAD.
Note: an increase in expenditure in the current year over the previous year is shown as a negative value since it contributes to a widening of the deficit in this period.

Throughout the observed period, the general government deficit was largely generated at the central government level. Central government deficit comprised approximately 90% of the total general government deficit throughout the period, except in 2005 when the debt of both social security funds (the pension and health funds) was taken over into the state budget, and the deficit of central government units consequently rose by 0.7% of GDP to total 2.3% of GDP. Following the balanced positions for 2000, 2001 and 2005, local government units generated a deficit totalling approximately 0.1% of GDP in 2006.

Table 2: **Deficits (net borrowing) of the general government sector by level (as a % of GDP)**

	2000	2001	2002	2003	2004	2005	2006
Deficit (net borrowing) of the general government sector	**-3.8**	**-4.1**	**-2.5**	**-2.8**	**-2.3**	**-1.5**	**-1.4**
Of which:							
Central government	-3.3	-3.8	-2.2	-2.6	-2.2	-2.3	-1.3
Local government	0.0	-0.1	-0.2	-0.1	0.0	0.0	-0.1
Social security funds	-0.5	-0.2	-0.1	-0.1	-0.1	0.8	0.0

Source: Main Aggregates of the General Government, 2000-2006, SORS.
Note: ESA-95 methodology.

The general government balance is highly sensitive to changes in interest rates and economic growth. Analyses show that even the relatively small changes in GDP growth or interest rates witnessed in the last few years could cause a divergence from the set targets regarding the general government deficit and debt in the medium-term period. Simulations have been made for the 2007-2013 period, assuming level changes in individual variables[7]. They

[7] The simulations assume that the values of variables will change each year of the analysed period by the same amount relative to their projected values from the IMAD Spring Forecast 2007.

show the changes in the balance expressed as a share of GDP. Already in the current year, 1.0 percentage point lower than projected GDP growth would cause the general government deficit to increase by 0.1 p.p. By the end of the period, assuming GDP growth 1.0 p.p. below the forecast each year, the deficit would be 5.9 p.p. higher. A 1.0 p.p. higher interest rate than currently assumed would cause the general government deficit to deteriorate by 0.3 p.p. in the current year and by 0.4 p.p. in seven years. In the case of a simultaneous decrease in GDP growth and an increase in the interest rate, the general government balance would be 6.4 p.p. lower in 2013 than is presently projected.

Table 3: **Sensitivity of the general government balance to changes in the interest rate and GDP growth**

Change in the general government balance, p.p. of GDP	2007	2008	2009	2010	2011	2012	2013
GDP growth 1 p.p. lower each year of the analysed period	-0.1	-1.1	-2.0	-3.0	-4.0	-4.9	-5.9
interest rate 1 p.p. higher each year of the analysed period	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4
GDP growth 1 p.p. lower and interest rate 1 p.p. higher each year of the analysed period	**-0.4**	**-1.4**	**-2.3**	**-3.4**	**-4.4**	**-5.4**	**-6.4**

Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.

2.2. Cyclical and structural developments of general government sector aggregates[8]

The evaluation of the fiscal policy orientation presented below is based on a breakdown of general government revenue, expenditure, and balance into their structural and cyclical components. The structural deficit, which is estimated using the production function method, shows what the fiscal balance would be like based solely on the operation of fiscal policy measures, i.e. excluding the impact of cyclical factors. The changes in the structural deficit across the years indicate the orientation of fiscal policy – a restrictive fiscal policy is evidenced by a narrowing of the structural deficit and vice versa.

Over the past decade, Slovenia has recorded a structural deficit, which has been decreasing gradually since 2000. The narrowing of the deficit as a share of GDP observed since 2002 has also been accompanied by a decrease in the structural deficit, which shows that the narrowing of the general government deficit as a share of GDP observed in the last few years has largely been underpinned by the structural adjustments made to public finances. The structural deficit reached its highest value in 2000, when it totalled 4.7% of

[8] The breakdown of the deficit into its cyclical and structural components is based on the estimated production function, potential growth, and elasticity of expenditure and revenue to changes in the business cycle. Although the estimate of the production function is methodologically incomplete, particularly as regards the estimate of the capital stock for which insufficient official data are available, and due to the dependence of results on cyclical trends in the economy, the method of determining potential GDP growth is more appropriate than methods based on estimated trends. Moreover, results obtained in this way are also comparable with the results estimated for other EU countries by the European Commission.

GDP. After that it has gradually narrowed but it still totalled 1.5% of GDP in 2006. The biggest (positive) contribution of cyclical trends to the fiscal balance was recorded in 2000, when it amounted to 0.8 p.p. In 2002-2005, the cyclical balance was negative.

In 2006, the structural deficit exceeded the actual deficit by 0.1 of a percentage point. Forecasts show that this trend will continue in 2007 and 2008. The structural deficit, after having reached its lowest level in the analysed period in 2005, rose by 0.2 p.p. of GDP in 2006 while the actual deficit narrowed. The structural deficit is also projected to increase in 2007, largely due to the funding of investment in railway infrastructure[9]. According to forecasts by the Ministry of Finance, the structural deficit should narrow to 1.0% of GDP in 2009, in line with the medium-term budgetary objective[10].

Table 4: **Actual, cyclical, and structural deficits of the general government sector, and output gap**

% of GDP	actual balance	cyclical balance	structural balance	change in structural balance
2000	-3.8	0.8	-4.7	
2001	-4.1	0.1	-4.2	0.5
2002	-2.5	-0.1	-2.5	1.7
2003	-2.8	-0.5	-2.3	0.2
2004	-2.3	-0.2	-2.1	0.2
2005	-1.5	-0.2	-1.3	0.8
2006	-1.4	0.0	-1.5	-0.2
2007*	*-1.5*	*0.3*	*-1.8*	*-0.3*
2008*	*-1.6*	*0.1*	*-1.7*	*0.1*
2009*	*-1.0*	*0.1*	*-1.0*	*0.7*

Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.
Note: the cyclically adjusted balance is calculated using the production function method. The changes in the structural balance show the fiscal impulse, i.e. the orientation of fiscal policy. Figures do not always add up due to rounding.
* Forecast.

A comparison between the dynamics of the structural deficit and output gap shows whether fiscal policy is pro-cyclically or counter-cyclically oriented. Changes in the structural balance in subsequent years indicate the orientation of fiscal policy, i.e. the fiscal impulse. If we compare the fiscal impulse with changes in the output gap[11] over the same period, which shows the changes in the business cycle, we can estimate the fiscal stance or, in other words, the cyclicality of fiscal policy. According to changes in the fiscal impulse, we can divide Figure 7 into four quadrants that determine the fiscal stance. Fiscal policy is counter-cyclical if the combination of both parameters lies in the first or the third quadrant. This means that fiscal policy is expansive if GDP growth falls below potential, and restrictive if GDP growth is above potential. The combination of both parameters in the second or fourth quadrants indicates a pro-cyclical fiscal policy. In that case, fiscal policy is restrictive in circumstances when GDP grows below potential, and expansive when GDP growth is above potential. A pro-cyclically-oriented fiscal policy does not

[9] Stability Programme 2006, Ministry of Finance.
[10] Public Finances in EMU 2005, European Commission.
[11] The output gap is estimated employing the methodology of the European Commission, which uses the production function method for its estimation.

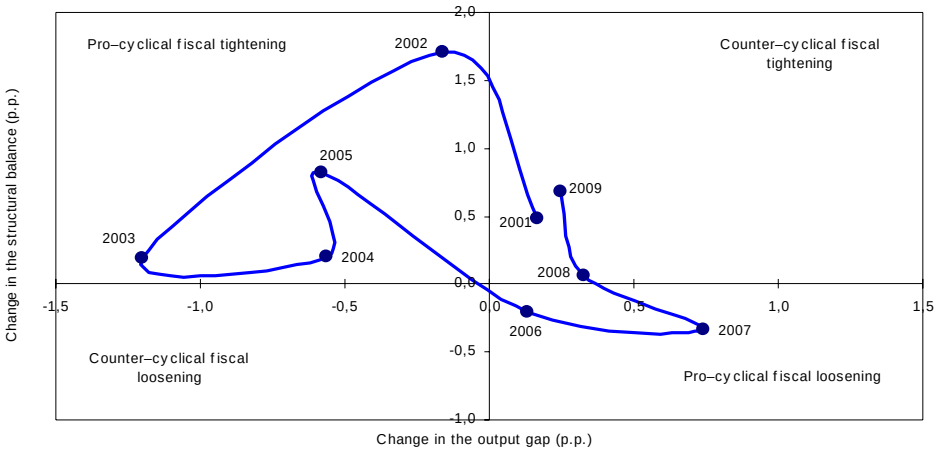
allow automatic stabilisers to operate. As a result, changes in expenditure, for example, follow the changes in GDP growth rather than evolving as planned. Therefore, if GDP growth is higher than projected, the cyclical revenue of the budget is used to service the cuts in taxes and the increase in expenditure rather than to reduce the deficit.

The main task of fiscal policy in 2000-2006 was to keep the general government deficit below the Maastricht reference value and thus fulfil the conditions for euro adoption. As evident from Figure 7, where the pro-cyclical orientation of fiscal policy is presented as the transition between the second and fourth quadrants, fiscal policy in this period was mostly restrictive yet pro-cyclical (except in 2001 and 2006, all points are concentrated in the second quadrant). The varying distance of points from the axes shows the intensity of the fiscal policy orientation. Fiscal policy also remained restrictively oriented in the years when actual GDP growth was below potential, and thus kept the general government deficit below the Maastricht reference value (providing for a sufficient safety margin) although it thereby additionally contributed to a slowdown in GDP growth. In 2006, the output gap widened; therefore, for fiscal policy to remain restrictive it would have to increase the fiscal impulse (the shift to quadrant I in Figure 7). However, calculations based on the currently available data show that the fiscal impulse decreased last year, which indicates a slight expansive orientation of fiscal policy that was also pro-cyclical at the same time.

Since Slovenia's entry to the EMU, fiscal policy should be counter-cyclical in order to operate in a stabilising way. Given the projected narrowing of the output gap, the Ministry of Finance expects that the structural deficit will increase in 2007, inter alia due to the reform of the tax system[12]. The structural deficit is set to narrow again in 2008 and 2009, indicating the counter-cyclical and restrictive orientation of fiscal policy, given the projected decrease in the output gap. In addition to evidencing the stabilising role of fiscal policy, such trends will also be consistent with the provisions of the Stability and Growth Pact, according to which the structural deficit should gradually narrow to less than 1.0% of GDP in 2009.

[12] The Government has continued to phase out the payroll tax in 2007, and the legislation regulating personal and corporate income taxes has been amended.

Figure 7: **Cyclical orientation of fiscal policy**



Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.
Note: the fiscal impulse is the difference between the structural deficits in the current and previous year. For example, a positive fiscal impulse indicates an increase in the structural deficit in the current year in comparison with the previous year.

The fiscal policy framework whereby the Government is targeting a certain level of budget deficit does not support its counter-cyclical operation. Aiming for a certain budget deficit level does not enable an automatic adjustment to changed macroeconomic circumstances. In circumstances where GDP growth is higher than projected or where the output gap is widening, the Government can attain its target deficit level by increasing the planned budgetary expenditure, which means that fiscal policy is operating pro-cyclically. Experience from the past also shows that if GDP growth is lower than forecast or if the output gap is narrowing it is possible to approach the budget deficit target by reducing expenditure, which is also a cyclical measure. Experience from some other countries (see Box 1) shows that the counter-cyclical operation of fiscal policy is easier to achieve when aiming directly for a certain level of general government expenditure.

Box 1: **Fiscal rules on the expenditure side**

The basic framework for the operation of fiscal policy in the EU is determined by the Stability and Growth Pact (SGP). According to the SGP, the general government deficit of member states must not exceed 3% of GDP, while the ceiling for public debt is 60% of GDP. However, the European Commission allows the member states to additionally apply other fiscal rules or permanent constraints on fiscal policy, expressed in terms of a summary indicator of fiscal performance[13], that are aligned with this general framework.

Fiscal rules may contribute to the achievement of fiscal objectives at the national level. Over the past decade, countries have increasingly decided to introduce additional fiscal rules, mainly because their fiscal policies have exhibited a pro-cyclical stance or a deficit bias, or because they have not necessarily achieved the set objectives despite the constraints of the SGP. Most EU countries introduced additional fiscal rules regarding the budget balance, debt, expenditure, or revenue. The

[13] Kopits, G. and Symanski, S., 1998.

rules usually pertain to the central government level, although the number of rules applied on other government levels or the entire general government sector is rising as well.

Table 5: **Number of fiscal rules used in the EU countries**

Budget Balance Rules	Golden rules	Balanced budget rules	Nominal ceiling	Ceiling as a % of GDP	Rules in structural terms	Total
	5	7	4	1	3	20
Debt Rules	Debt ceiling in nominal terms	Debt ceiling as a % of GDP	Debt ceiling related to repayment capacity	Other		Total
	5	3	6	2		16
Expenditure Rules	Nominal expenditure ceiling	Real expenditure ceiling	Expenditure growth rate (nominal)	Expenditure growth rate (real)	Other	Total
	5	2	3	3	2	15
Revenue Rules	Tax burden as a % of GDP	Rile related to taxes	Allocation of extra revenues	Other		Total
	0	1	4	2		7

Source: Kopits, G. and Symanski, S., 1998.

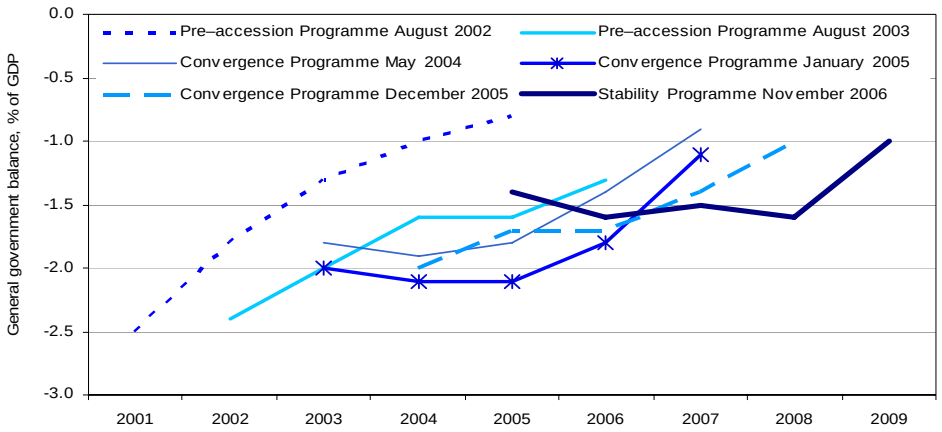
If the chosen objective of fiscal policy is to cut general government expenditure as a share of GDP, it is reasonable to apply a fiscal rule that directly limits expenditure. The SGP does not define whether the adjustment required to meet the deficit criterion should be made on the revenue or the expenditure side. The target deficit may therefore be achieved either by reducing expenditure or by increasing taxation. In addition, the evolution of revenue largely reflects the dynamics of budgetary inflows and GDP, whereas the evolution of expenditure is determined by the decisions of fiscal authorities. Therefore, in order for Slovenia to reduce general government expenditure while complying with the provisions of the SGP, it should be beneficial to define a fiscal rule that would correlate the changes in the share of expenditure with the changes in GDP growth.

The expenditure rule may contribute to the achievement of counter-cyclical and stabilising effects. Simulations[14] show that the application of an expenditure rule that would constrain the changes in expenditure by the changes in actual GDP growth relative to its potential growth would enable fiscal policy to operate counter-cyclically. At the same time, such a rule would allow the share of expenditure to decline to its target level in the initial period. Since the rule pertains to the aggregate level of expenditure, it enables individual groups of expenditure to evolve differently than total expenditure, which allows fiscal policy to pursue its developmental goals as well.

Moreover, a look at past trends shows that a target deficit at a level of around one percent of GDP is moving further and further away in time. In the analysed period, fiscal policy was only partly successful in achieving the planned budget deficit levels set as short-term targets. Although the deficit has been gradually narrowing since 2002, the target level of around one percent of GDP, as planned in the key documents of the Ministry of Finance[15], is moving further away from year to year.

[14] Coricelli, F., 2006.
[15] Pre-accession Programme, Convergence Programme, and Stability Programme, prepared by the Ministry of Finance in 2002-2006.

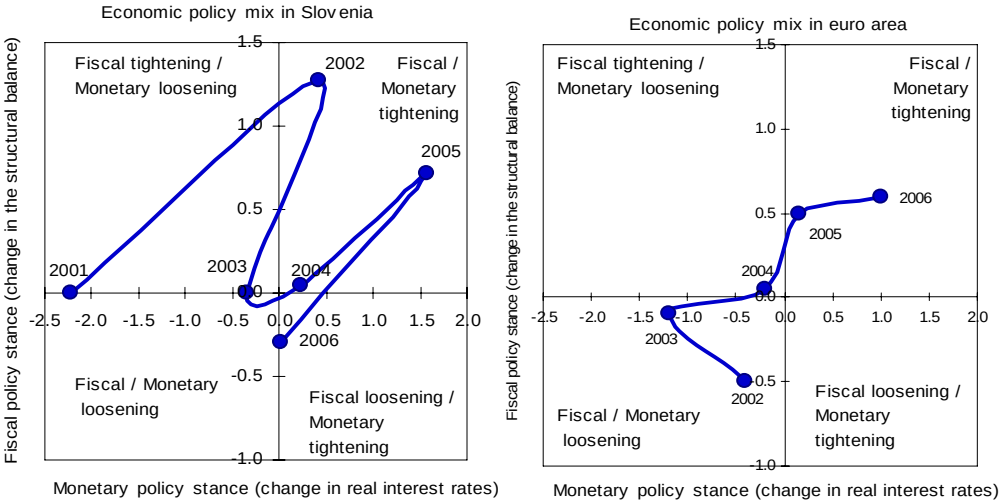
Figure 8: **The moving away of the fiscal policy target – 1% general government deficit**



Source: Ministry of Finance, 2002-2007.

The changes in fiscal and monetary policies in 2000-2006 were not always consistent. The orientation of monetary policy can be estimated on the basis of changes in real short-term interest rates. Figure 9 shows that the Bank of Slovenia changed the orientation of its policy several times in the observed period, but the orientations of the two policies were not always aligned. After both policies became tighter in 2004 and 2005, they both became somewhat loosened in 2006. A comparison with developments in the euro area shows that the responses of both policies in Slovenia in 2002-2006 were relatively stronger.

Figure 9: **The monetary-fiscal policy mix in Slovenia and the euro area**



Sources: Ministry of Finance, Bank of Slovenia, European Commission; calculations by IMAD.

2.3. Financial flows between Slovenia and the EU budget

The European Commission has published final data about the financial flows between Slovenia and the EU for 2004 and 2005. Data for 2006 will be available in September 2007. Data from the European Commission for 2004 and 2005 present all financial flows (state budget and funds allocated to other institutions) between Slovenia and the EU budget. For 2006 and the first six months of 2007, only the figures of the Ministry of Finance on the flows between the Slovenian and EU budgets are available[16].

Like in 2004, Slovenia was again a net recipient of EU funds[17] in 2005. In 2004, the allocated funds from the EU budget totalled 1.1% of GDP while Slovenia's payments to the EU budget totalled 0.7% of GDP. Slovenia's net position according to the accounting definition, reaching 0.4% of GDP in 2004, decreased to 0.3% of GDP in 2005. Slovenia contributed 1.0% of its GDP to the EU budget and received funds amounting to 1.3% of GDP from the EU budget. The difference between the flows in both years was also partly related to the fact that Slovenia became a contributor to the EU budget after its accession to the EU in May 2004.

The structure of financial flows between Slovenia and the EU has not changed significantly over the years. The funds allocated from the EU budget, particularly pre-accession funds which include the Instrument for Structural Policies for Pre-accession (ISPA), Assistance for Economic Restructuring in the Countries of Central and Eastern Europe (PHARE) and the Special Accession Programme for Agriculture and Rural Development (SAPARD), structural policy funds – notably the European Regional Development Fund (ERDF) and the European Social Fund (ESF), cohesion policy funds, internal policy funds, and funds of the common agricultural policy (CAP) intended for rural development can be included among the funds that have a direct impact on the long-term GDP growth potential. In 2005, Slovenia received 63.1% of the total allocated funds from these programmes, 3.3 p.p. more than in 2004[18].

The European Commission's complete data on the financial flows between Slovenia and the EU for 2006 are not yet available. According to data from the Ministry of Finance, which exclude funds paid directly to users and data on advance payments, Slovenia received EUR 350.1 m (1.2% of GDP) from the EU budget in 2006, which was 77.9% of the level planned in the adopted budget for 2006. Payments of Slovenia to the EU budget totalled EUR 287.9 m (1.0% of GDP), EUR 27.2 m less than planned in the budget for 2006. 69.7% of the total funds received and recorded by the Ministry of Finance can be classified as receipts that increase production potential; the main receipts within

[16] The two main differences between the data of the Ministry of Finance and the European Commission are: (i) data of the Ministry of Finance do not comprise the expenditure allocated directly to recipients in the Republic of Slovenia for internal policies based on a direct contract with the EC; and (ii) the advance payments from structural funds and funds for rural development, which are already included in the expenditure of the EU budget, do not become revenue of the Slovenian budget until the required conditions are fulfilled.

[17] Besides Slovenia, net recipients in 2005 included other new member states and Spain, Greece, Ireland, and Portugal.

[18] Allocation of 2005 Expenditure by Member State, 2005, pp. 72-73.

that were funds for rural development under the CAP (EUR 96.1 m), structural policy funds (EUR 87.3 m), pre-accession strategy funds (EUR 25.8 m), cohesion fund (EUR 21 m) and internal policies (EUR 20.5 m). Most pre-accession funds were allocated through the PHARE programme (72.2%); the ISPA programme provided 27.8% of funds. Most funds from the cohesion fund were granted for transport (92.6%); the rest was allocated for environmental projects. The internal policy funds were largely granted for the Schengen facility (89.7%). Other allocated funds (30.3% of all funds) recorded by the Ministry of Finance mostly comprised compensations (EUR 55.9 m). Slovenia received EUR 39.9 m under the heading of the CAP (excluding funds for rural development), 75,4% of which was granted for direct aid while the rest was provided for market support measures. The structure of payments to the EU budget in 2006 remained similar as in 2004 and 2005. Payments based on gross national income represented the largest share (63.1% of all payments), followed by VAT-based payments (16.6%), traditional own resources (12.2%), and payments for the UK rebate (8.1%). Based on the available data we expect that Slovenia will remain a net recipient in 2006.

Table 7: **Slovenia's net budgetary balance vis-à-vis the EU budget in 2004 and 2005**

Financial flows between Slovenia and the EU budget	EUR m		Structure	
	2004	2005	2004	2005
Funds received from the EU budget				
Agriculture	49.4	102.6	17.5	28.0
Structural actions	24.4	53.5	8.7	14.6
Structural funds	24.4	45.0	8.7	12.3
Cohesion fund	0.0	8.5	0.0	2.3
Internal policies	57.9	65.9	20.6	18.0
Administrative costs	5.6	6.8	2.0	1.9
Pre-accession strategy	39.1	43.6	13.9	11.9
Compensations	105.1	93.8	37.3	25.6
Total funds received from the EU budget	**281.5**	**366.2**	**100.0**	**100.0**
Payments to the EU budget				
VAT-based payments	25.1	44.0	14.7	16.0
Payments under the heading of the UK rebate	16.1	23.2	9.4	8.4
GNI based payments	116.9	179.5	68.6	65.3
Traditional own resources	12.3	28.2	7.2	10.3
Total payments to the EU budget	170.4	274.9	100.0	100.0
Net position – accounting definition*	**111.1**	**91.3**	-	-
Net position – based on the UK rebate**	**109.7**	**101.5**	-	-

Source of data: European Commission: Allocation of 2005 Expenditure by Member State, 2005.
Note: * The accounting definition is based on the calculation of the difference between what a country pays into the EU budget and what it receives from it. ** The net position calculated on the basis of the UK rebate takes into account cash-flow based data – current allocated expenditure (excluding administrative costs), while national payments are calculated on the basis of adjusted national contributions.

Similarly as in 2006, Slovenia was a net contributor in the first half of 2007 but is expected to retain the status of a net recipient in the year as a whole. According to the Ministry of Finance, Slovenia received EUR 145.4 m from the EU budget in the first six months of 2007. Most funds were drawn under the common agricultural policy (61.7% of total funds received), internal policies (20.3%), and structural policy (13.5%). The absorption of compensations has ceased in 2007. Payments to the EU budget in the first six months of 2007 amounted to EUR 160.5 m, equalling 50.6% of the level planned in the budget for 2007. GNI-based payments again represented the

biggest share (55.8%); the rest were payments from traditional own resources (21.6%), VAT (15.2%), and the UK rebate (7.4%).

In 2002 in Copenhagen, EUR 930 m was appropriated to Slovenia for 2004 and 2005 under the heading 'appropriations for commitments' and EUR 621.1 m under the heading 'appropriations for payments'.[19] The funds appropriated in Copenhagen, however, do not include funds under pre-accession strategy and administrative costs[20]. According to the Copenhagen package, excluding funds under these two headings, Slovenia's absorption capacity was 89% according to the 'appropriations for payments'. Comparing the allocated and appropriated funds under individual headings, Slovenia absorbed 99.7% of the appropriated funds for internal policies, 97.1% of funds for compensations, 78.8% of funds for agriculture, and 78.7% of funds for structural actions. Within structural actions, the absorption of funds totalled 84.1% for structural policy but only 51.3% for the cohesion fund. Absorption may be extended until 2008.

The funds appropriated in Copenhagen for 2006 totalled EUR 402.0 m under the heading 'appropriations for payments' and EUR 515.9 m under the heading 'appropriations for commitments'. These funds again exclude pre-accession strategy funds and administrative costs. According to the Ministry of Finance, they totalled EUR 350.1 m in 2006[21]. However, the final estimate of the absorption for that year is likely to be higher, since the figures of the Ministry of Finance were also lower than those of the European Commission in 2004 and 2005.

Slovenia has been fairly successful in absorbing EU funds but there is still room for improvement in this area. Slovenia has adopted several measures aimed at increasing its absorption capacity. These include an improvement of its administrative capacity, concentration of funds for the co-funding of operational EU programmes under a single budgetary item, staff education and training, specification of operational programmes and of the implementing structures for cohesion policy, and establishment of joint bodies.

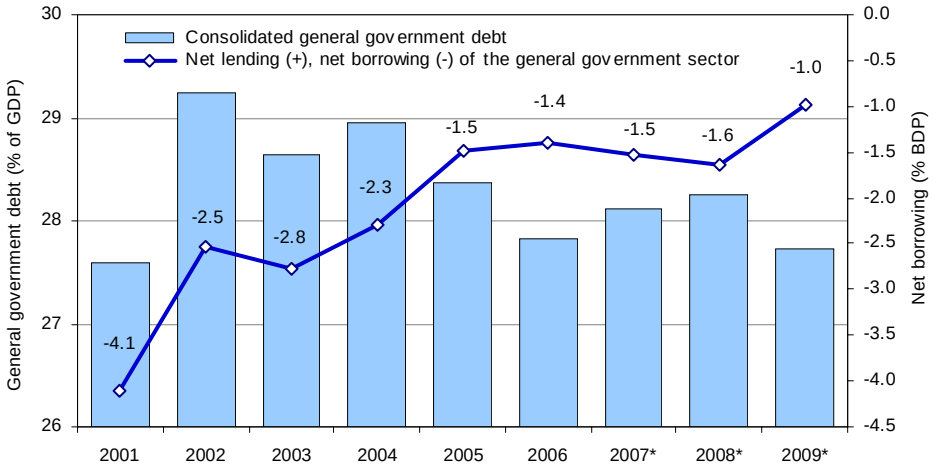
2.4. Debt and debt guarantees of the general government sector

General government debt has hovered at a level around 28% of GDP since 2000. General government sector debt has increased in nominal terms since 2000 but its share in GDP has remained stable. Projections show that it will total less than 28% at the end of the decade, the same as in 2000. In 2000-2006,

[19] The level of planned appropriations for payments is generally based on the expected average absorption of countries in the previous period. The calculation is prepared by the European Commission based on the experience with absorption of funds in the past and is the same for all countries.
[20] In the two years, Slovenia absorbed EUR 82.7 m of funds from the pre-accession strategy and EUR 12.4 m under administrative costs.
[21] Within that, EUR 25.8 m was allocated under the pre-accession strategy; data on administrative costs are not yet available.

central government debt accounted for over 97% of total general government debt, social security funds generated 1.5% of debt, while local government contributed 0.7% to the total debt. The shares of debt generated at the central and local government levels increased somewhat while the debt of social security funds decreased.

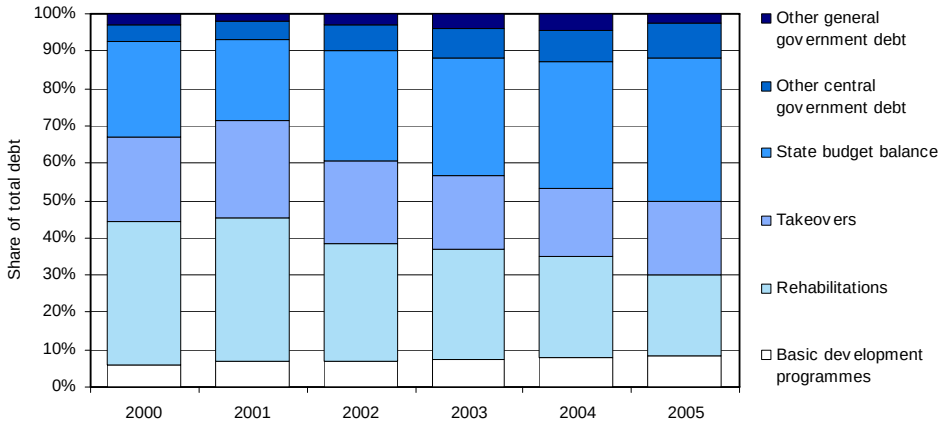
Figure 10: **General government debt as a share of GDP**



Source: Ministry of Finance, 2006.
Note: ESA-95 methodology, * forecast.

Within the structure of debt, a relative increase since 2000 has been observed particularly in the share of debt resulting from the state budget deficit, while there has been a relative decrease in the debt resulting from rehabilitations. In 2000-2005, the fastest increase on average (34.5%) was recorded in the share of debt resulting from the state budget deficit incurred in this period, and debt of other central government entities (28.8%) excluding the state budget; on the other hand, the share of debt resulting from the rehabilitation of the financial and real sectors decreased (-0.3%). The share of debt resulting from budget deficits incurred in this period consequently rose from 25.7% of GDP in 2000 to 38.4% of GDP in 2005; meanwhile, debt resulting from rehabilitations shrank from 38.4% of GDP in 2000 to 21.6% of GDP in 2005, but it is nevertheless still the second highest nominal item in the structure of debt, second to the debt resulting from state budget deficits.

Figure 11: **Structure of general government debt**



Source: Ministry of Finance, 2006; calculations by IMAD.
Note: ESA-95 methodology.

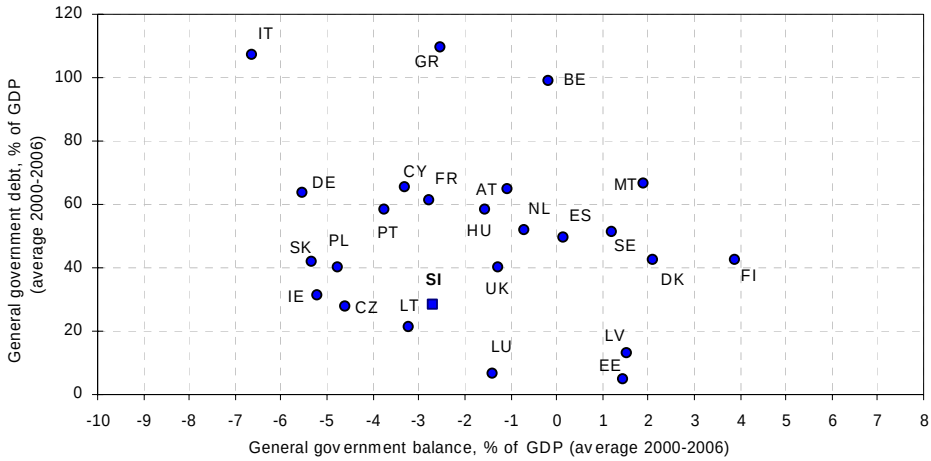
Countries with higher budget deficits also tend to have higher debt. Comparisons of the OECD[22] countries in 2000-2005 show that countries with higher budget deficits also recorded higher relative debt. Slovenia compares to the middle group of the OECD countries that have moderate deficits and moderate debt levels.

The correlation is also based on interest payments on accumulated debt, which have, however, decreased in Slovenia in the last few years due to debt restructuring. The correlation between debt and the budget deficit can be partly explained by the higher costs of debt servicing, which puts pressure on general government deficit. Slovenia has restructured its debt over the last few years and thereby reduced the effective interest rate[23] of debt from 6.7% in 2000 to 4.9% in 2006. Consequently, it has also reduced the budgetary funds required to service the debt.

If interest rates in the euro area continued to rise, the burden of debt repayment would increase. Simulations of the responsiveness of debt to changes in interest rates show that in the event that the interest rate were raised by 1.0 p.p. general government debt would increase by 0.3% of GDP in the first year. If the interest rate were raised by 1.0 p.p. in each of the following years, debt would increase by 1.6% of GDP in seven years relative to the current projection.

[22] Economic Survey of the Euro Area, 2007, OECD.
[23] On the payments of interest in the current year as a share of debt stock at the end of the previous year.

Figure 12: **Correlation between general government debts and deficits**



Source: Economic Survey of the Euro Area, OECD; Ministry of Finance.

The debt service burden would also increase if GDP growth decelerated. According to simulations, 1.0 p.p. lower GDP growth would push up general government debt by 0.1% of GDP in the current year and by as much as 19.1% by 2013 if GDP growth were 1.0 p.p. below the forecast also in the following years.

Table 7: **Responsiveness of general government debt to changes in the interest rate and GDP growth**

Change in the general government debt, p.p. of GDP	2007	2008	2009	2010	2011	2012	2013
GDP growth 1 p.p. lower each year of the analysed period	0.1	1.2	3.2	6.0	9.7	14.0	19.1
interest rate 1 p.p. higher each year of the analysed period	0.3	0.5	0.8	1.1	1.3	1.6	1.9
GDP growth 1 p.p. lower and interest rate 1 p.p. higher each year of the analysed period	**0.4**	**1.8**	**4.0**	**7.1**	**11.1**	**15.8**	**21.3**

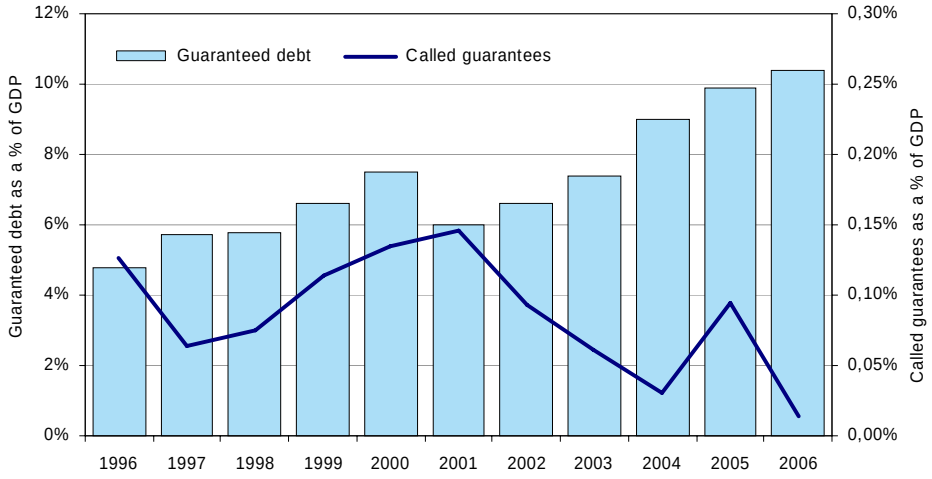
Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.

The relative share of government debt guarantees has continued to increase since 2000. The share of government debt guarantees rose by 39% in 2000-2006 to total 10.4% of GDP in 2006. At the end of 2006, most guarantees were granted to companies in the following industries: construction (57.6% of all government guarantees), financial intermediation (22.6%), and transport, storage, and communications (9.9%). Guarantees from the first group were mostly provided for loans intended for the construction of the motorway network, while others were largely given to banks for loans taken out abroad.

However, despite the rising relative share of government debt guarantees, the share of called guarantees is declining. In 2000-2006, the share of called guarantees averaged 0.08% of GDP annually. In 2006, it was just 0.01% of GDP or EUR 4.2 m. Given the structure of guarantees and the cash flows generated by the funded projects, the share of called guarantees is not expected

to increase in the next few years, especially not to the extent which could undermine fiscal stability.

Figure 13: **Granted and called guarantees**



Source: Ministry of Finance, 2006.
Note: Guarantees are presented according to the GFS methodology because data based on the ESA-95 methodology do not include data on debt for government guarantees.

3. Long-term sustainability of public finances

Population projections[24] indicate that the current demographic trends will continue. The share of the population aged over 65 will increase by 2050; meanwhile the share of the population aged 15-64 will decrease. Most EU countries are facing the prospect of rising percentages of older people in their total populations in the coming decades along with the challenges posed by such trends to the sustainability of public finances. The European Commission[25] includes Slovenia among the countries with the highest risk of an escalation of general government expenditure related to demographic changes. According to the baseline scenario of demographic projections[26], the old-age dependency ratio (the number of old people relative to the number of people of working age) in Slovenia is set to grow from 21.7% in 2005 to 55.6% in 2050.

Based on a simulation[27] of the effects of long-term projections we can infer which public finance implications may be expected if the economic parameters and policies remain unchanged. Long-term simulations of fiscal sustainability assume that the current trends and policies will not change until the end of the analysed period. For Slovenia, the underlying no-change assumptions include demographic trends, catching up with the more developed EU countries and the related decline in GDP growth, no-change in labour market developments, and public finance flows unrelated to ageing[28].

[24] The impact of ageing on public expenditures: projections for the EU-25 Member States on pension, health care, long-term care, education, and unemployment transfers (2004-2050), Special Report No.1/2006. European Commission.

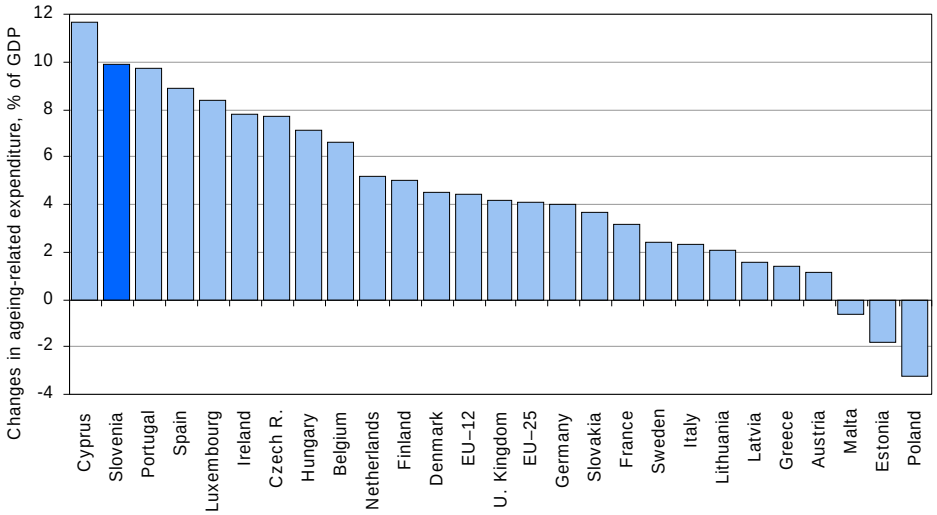
[25] The Long-term Sustainability of Public Finances in the EU, European Economy, No. 4/2006. European Commission.

[26] For the purpose of population ageing analyses, the Eurostat prepares three variants of population-ageing projections: low, baseline, and high. They differ in terms of the assumptions applied; the biggest differences are caused by the projected migration levels of the population.

[27] Ministry of Finance, 2007.

[28] In interpreting the results of the model we should take into account the fact that the model is based on highly rigid assumptions, which are therefore also commonly subject to criticism. For example, the Economic Policy Committee at the Council of the EU, in its document REP/53/103 (2007), calls attention to a number of shortcomings in the simulations that may lead to misleading or incorrect conclusions. In this chapter, the simulations are therefore used merely to help illustrate the issue of demographic changes.

Figure 14: **Expected changes in general government expenditure by 2050 related to population ageing, assuming no changes in economic parameters and policies**



Source: The long-term sustainability of public finances in the European Union, 2006, European Commission.

Estimates of the impact of ageing on public finances show that, with the projected demographic trends and assuming the no-policy change scenario, ageing-related general government expenditure would escalate by 2050, leading to an unsustainable level of public finances. Expenditure as a share of GDP would increase as a result of the rising expenditure on ageing on one hand and the smaller chances of GDP growth due to the decrease in the number and percentage of the working-age population on the other. According to the projections, ageing-related general government expenditure would increase by 9.7% of GDP while debt would rise to 190% of GDP.[29] Most of the increase in expenditure (7.3 p.p. of the share of GDP) would result from higher expenditure on pensions; health expenditure would increase by 1.6 p.p. and expenditure on long-term care would go up by 1.2 p.p. On the other hand, expenditure on education would decrease (by 0.4 p.p. of the share of GDP), as would unemployment benefits (by 0.1 p.p.). Assuming that the tax burden on the economy did not increase, the rising general government deficit caused by such an increase in expenditure would result in a widening of general government debt from the 28.1% recorded at the end of 2006 to 190% of GDP by the end of 2050. As evident from Figure 14, only Cyprus would undergo an even greater increase in ageing-related expenditure than Slovenia in this period on the assumption of an unchanged economic environment and policies. Compared with the EU average, the increase in expenditure in Slovenia would be 2.5-fold.

[29] The increase in the level of public debt is lower than the projection of the European Commission, which expects Slovenia's public debt to grow to 274% of GDP. This difference is largely due to the different initial levels of pensions as a share of GDP in the two simulations. In this analysis, the share of pensions in GDP is based on actual data for 2005, whereas the European Commission (The long-term sustainability of public finances in the European Union, 2006) used the estimated relative share of pensions for 2005.

If the current trends were to continue, expenditure on pensions, which comprises the largest share of ageing-related expenditure, would increase due to four key changes. The European Commission estimates[30] that pension expenditure in Slovenia, which totalled 11.0% of GDP in 2005 (gross level), would rise to 18.3% of GDP by 2050. The key underlying factors of such a high increase in pension expenditure, assuming the no-change scenario for the parameters of the system, would include: (i) a deterioration of the ratio between the old and the working-age populations (old-age dependency ratio), which would contribute 11.0 p.p. to the increase in pension expenditure expressed as a share of GDP; (ii) an improvement in the ratio between the employed and the working-age population (aged 15-64), i.e. an increase in the activity rate by 0.9 p.p. that would contribute to a decrease in pension expenditure by 0.9 p.p.; (iii) an improvement in the ratio between retired people and the population aged over 65, i.e. a decrease in the retirement rate that would contribute to a decrease in pension expenditure as a share of GDP by a projected 2.9 p.p.; and (iv) a change in the ratio between the average pension and GDP per employee, i.e. a reduction of benefits that would contribute to a decrease in pension expenditure as a share of GDP by 0.8 p.p.

Table 8: **Breakdown of the change in pension expenditure (in % from 2005 to 2050)**

	Gross pensions		Change in gross pensions due to the change:				
	initial stock, % of GDP in 2005	change in %, 2005-2050	dependency ratios	activity rates	retirement rates	benefit rates	residual
			pop (65+)/ pop (15–64)	employed / pop (15–64)	Retired/ pop (65+)	Average pension/ GDP per empl.	
Belgium	10.4	49.7	61.6	-8.2	-2.4	-8.1	6.9
Denmark	9.6	33.3	65.1	-3.7	-24.1	-4.6	0.6
Germany	11.1	17.4	65.8	-10.3	-5.6	-29.6	-2.8
Greece	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	8.7	81.4	105.0	-19.7	-17.5	-1.3	14.9
France	12.8	15.4	63.6	-7.0	-12.9	-25.7	-2.7
Ireland	4.6	141.9	107.0	-9.9	-20.7	19.5	46.0
Italy	14.3	2.8	78.5	-13.8	-21.4	-35.3	-5.1
Luxembourg	10.0	73.7	56.3	-31.1	16.2	16.8	15.6
Netherlands	7.4	51.4	71.9	-2.1	-19.3	-4.3	5.1
Austria	13.2	-7.5	84.5	-10.1	-43.3	-32.3	-6.4
Portugal	11.5	80.3	88.5	-0.9	-3.9	-20.1	16.6
Finland	10.4	32.0	72.9	-7.7	-25.2	-6.0	-1.9
Sweden	10.4	8.5	45.6	-6.2	-2.0	-26.7	-2.2
UK	6.7	28.3	64.2	-1.8	n.a.	n.a.	n.a.
Cyprus	7.0	183.5	94.4	-16.2	12.4	19.8	73.0
Czech Rep.	8.5	65.9	109.3	-3.6	-36.8	-9.1	6.1
Estonia	7.1	-41.4	60.3	-7.7	-26.8	-73.1	5.8
Hungary	10.7	60.1	79.4	-10.3	-33.4	16.3	8.1
Lithuania	6.7	28.5	72.1	-16.0	-27.3	0.1	-0.4
Latvia	6.4	-13.4	62.7	-11.1	-20.6	-40.7	-3.7
Malta	7.5	-6.4	80.8	-13.6	-10.5	-53.6	-9.5
Poland	13.7	-41.7	108.3	-26.7	-54.5	-68.0	-0.8
Slovakia	7.4	20.3	122.0	-19.0	-34.0	-40.6	-8.2
Slovenia	**11.0**	**66.2**	**99.7**	**-8.5**	**-26.8**	**-7.5**	**9.3**
EU-25	**10.6**	**20.9**	**76.1**	**-10.7**	**-20.2**	**-22.7**	**-1.9**

Source: Salomäki, A. Public pension expenditure in the EPC and the European Commission projections: An analysis of the projection results, 2006.

[30] Salomäki, A. (2006).

Using a generational accounts model[31], the Ministry of Finance has estimated the S1 and S2 coefficients, which measure the level of the permanent budget adjustment that ensures the long-term sustainability of public finances. The permanent budget adjustment ensures: (i) the achievement of the Maastricht debt criterion (60% of GDP) in 2050 (indicator S1); and (ii) compliance with the intertemporal budget constraint (IBC) over an unlimited time horizon (indicator S2)[32]. The values of S1 and S2 can thus be interpreted as the increase in the primary balance required to maintain fiscal sustainability in the long term if policies or other economic parameters remain unchanged. In the case of basic activity rates[33], the value of S1 is 2.24, which means that the primary balance would have to be 2.24 p.p. higher every year until 2050 in order for Slovenia not to exceed the Maastricht debt criterion in 2050 (60% of GDP). The value of S2 totals 6.28, indicating that the primary balance would have to be 6.28 p.p. higher every year until 2050 for Slovenia to also comply with the intertemporal budget constraint.

Table 9: **Expected primary balance in the no-policy-change scenario and the primary balance required to maintain the intertemporal budget constraint in the no-policy-change scenario**

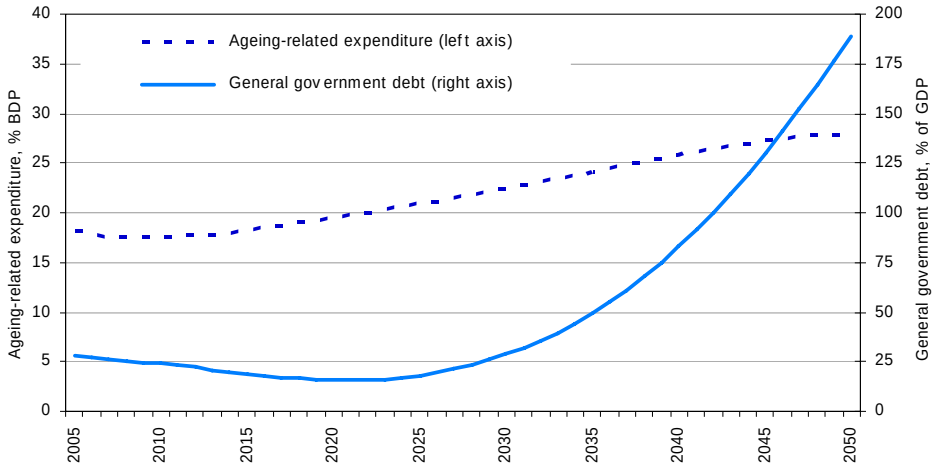
Selected period	Projected average primary balance in the selected period, % of GDP	Required average primary balance in the selected period, % of GDP
2010-2014	0.88	7.16
2010-2019	0.86	7.14
2010-2050	-3.18	3.10

Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.

The simulations show that the projected demographic changes in the no-policy-change scenario would jeopardise the long-term sustainability of public finances. Table 9 presents the estimated primary balance that would enable public finances to remain sustainable over the next five, ten, and forty years. The second column shows the average primary balance that would be achieved in the selected period if economic policies remained unchanged. The figures show that Slovenia would maintain a primary surplus until 2020 even if economic policies remained unchanged. However, the fiscal stance would deteriorate sharply after 2020, leading to a 3.2% average primary general government deficit. The third column shows the primary balance required to maintain long-term fiscal sustainability in a selected period in a no-policy change scenario. Estimates indicate that if policies remain unchanged, the achieved primary balance will fail to ensure compliance with the intertemporal budget constraint, i.e. ensure fiscal sustainability over an unlimited period, as early as in 2010-2014.

[31] Ministry of Finance, 2007.
[32] The S1 and S2 indicators display similar shortcomings as the entire simulations of demographic changes. Therefore, they are used in this analysis merely as indicators quantifying changes that would occur assuming unchanged economic environment and policies.
[33] The basic activity rates (baseline scenario) are based on the same assumptions as those used by the European Commission in its projections. However, due to differences in other assumptions used in the calculations, the S1 and S2 indicators may differ from the calculations published by the European Commission.

Figure 15: **Evolution of debt and ageing-related general government expenditure**



Source: Mićković, S.: Ocena fiskalnega položaja v Sloveniji (Assessment of the fiscal stance in Slovenia), 2007.

In order to maintain the long-term sustainability of public finances, Slovenia needs to adjust its pension system or adequately reduce its other general government expenditure. Besides higher pension expenditure, the projected demographic changes would also cause an increase in other public expenditure, especially on health and long-term care. This will call for additional measures, particularly the adjustment of the pension indexation system to the long-term possibilities of pension funding. Not only due to pension funding but also in view of the projected labour market situation, it will be necessary to achieve significantly higher employment rates also for people who are old enough to be eligible for early retirement. Slovenia will also have to increase the participation of people in voluntary pension insurance schemes and ensure higher supplementary insurance premiums, which would, at least to some extent, curb the increase in the share of pensions or, in other words, the decrease in their value relative to wages. Early changes in the regulation of pensions would reduce the costs of the required adjustments. A further argument for immediate action is that the burden of these adjustments would be shared by several generations. On the other hand, a decrease in the pressure of demographic changes on the fiscal stance can also be supported by economic policy measures regarding employment and productivity. Without such measures, the burden of higher expenditure would have to be compensated for by other general government expenditure cuts.

4. Structural changes in the area of public finances

At the end of 2005, the Government adopted a framework of reform measures[34] that included the reduction and restructuring of general government expenditure. The two key measures in the area of public finances were: (i) cutting general government expenditure as a share of GDP by 2.0 p.p. by 2008 and by a further 2.0 p.p. by 2012; and (ii) restructuring general government expenditure in such a way as to enable the implementation of the tax reform and a redirection of a major proportion of expenditure towards education and R&D. These changes should be accompanied by streamlining and rationalisation of the budgetary procedure.

The adopted budgets for 2007 and 2008 provide for the key reform objectives. According to the current domestic and external macroeconomic projections, general government expenditure as a share of GDP is set to decline by 1.6 p.p. by the end of 2008 while the share of expenditure appropriated for R&D is being increased. The main measures aimed at cutting general government expenditure include its rationalisation with an emphasis on better management of material expenditure and social transfers (transfers to individuals and households). The rationalisation of material costs will include changes in procurement procedures and their centralisation, while social transfers will undergo changes in indexation and entitlement criteria.

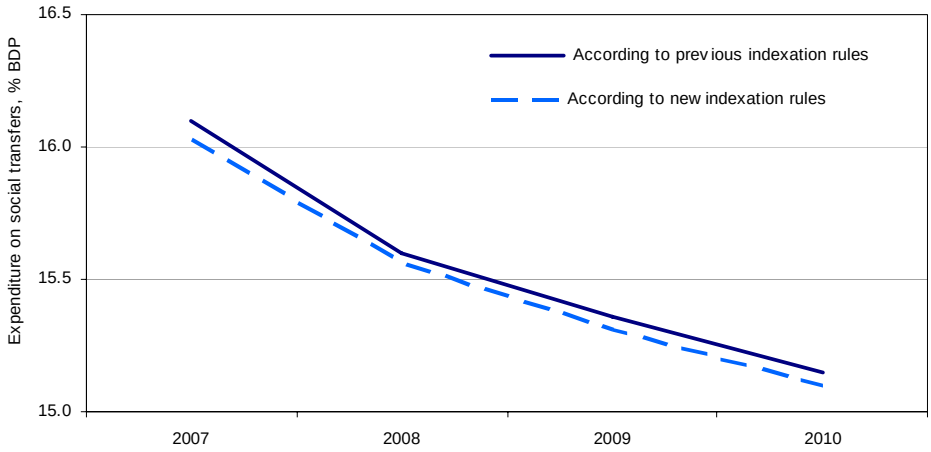
The adopted measures pertain to the system of indexing social transfers[35] and the tightening of entitlement criteria for unemployment benefits and financial social assistance. The previous system of social transfer indexation, which was based on several indexation rules that applied in different periods, has been replaced by a single system. Social transfers are now indexed once a year, in January, to the consumer price rise recorded in the period from January to December of the previous year in comparison with the same period of the year before that. Only pensions are excluded from the new system and continue to be indexed to wages. This system of pension indexation was introduced in 2005.

A set of measures is aimed at promoting activity and reducing the dependence of citizens on government benefits. The main changes are the tightening of entitlement criteria for claimants of unemployment benefits and financial social assistance, and extending the system of employment incentives for low employability groups. The number of recipients of financial social assistance has been declining since the middle of 2006. In January-April 2007, their number was 17% lower than in the same period of 2006 and 11% lower than in 2006 on average. This decline is in large part due to the fact that this transfer has been withheld in an increasing number of cases due to claimants' culpability (mostly unwillingness to work or to participate in other types of activity).

[34] Framework of Economic and Social Reforms to Increase Welfare in Slovenia, adopted in November 2005.
[35] The term refers to transfers to individuals and households financed by public funds.

The issue of the pension indexation rule remains open. The current rule, which pursues equal growth of wages and pensions, will add to the pressure on public finance sustainability in circumstances where wage growth is increasingly converging with productivity growth. Therefore, it would make sense to elaborate the current rule by incorporating a stronger correlation between the indexation rate (which is used for both the payments of pensions and the formation of the pension base) and the economic performance and long-term possibilities of pension funding.

Figure 16: **Projected decrease in expenditure on social transfers**



Source: Ministry of Finance, 2007.

The financial effect of the adopted measures will increase cumulatively in the years ahead. The savings in total public funds resulting from the changes to the indexation system will total 0.07% of GDP in 2007. Due to a special transitional clause that applies in 2007, the projected savings in 2007 will be higher than in the following years. The estimated savings for the coming years total 0.04% of GDP for 2008, 0.05% of GDP for 2009, and 0.05% of GDP for 2010. In 2006, Slovenia spent EUR 4,887 m or 16.44% of its GDP on social transfers. Taking into account the effect of the already adopted measures on the level of transfers and the estimated dynamics of the number of claimants (disregarding the effect of the measures currently being prepared), expenditure on social transfers as a share of GDP is projected to decrease in the coming years, from an estimated 16.03% in 2007 to 15.10% of GDP in 2010. In 2006-2010, social transfers expenditure as a share of GDP is set to decline by over one percentage point.

In addition to the financial effect, the adopted measures also have a significant impact on the incentives for work. The adopted measures in the area of social transfer indexation will widen the gap between the growth of wages and social transfers, which will increase the relative returns on labour and thus stimulate people's willingness to work. These changes also enable greater transparency of public finance management.

The changes in the tax wedge are also aimed at promoting employment and boosting competitiveness. The payroll tax is being phased out; the gradual abolition of this tax (by reducing its rate gradually from 2006 to 2009) was enacted after the raising of the minimum taxable income (in September 2004). As a result, the revenue from this tax will decrease by approximately 0.4% of GDP in 2007, while the average burden of this tax on the gross wage bill will be cut from 4.2% in 2006 to an estimated 3.4% in 2007. The tax wedge is being further reduced by the Personal Income Tax Act enforced in 2007. According to the estimates, revenue from personal income tax will shrink by between 7% and 8% in 2007 while its share in GDP will decline by around 0.7 p.p. The tax reduction has been achieved by lowering the marginal tax rates and reducing the number of tax brackets. The lowest tax rate (16%) has remained unchanged, the highest tax rate (50%) has been abolished, while the two middle tax rates (33% and 37%) have been merged into one lower rate (27%). On the other hand, no major changes have been made to the definition of the taxable base. The general tax relief has been raised, the relief for various expenses and purchases of homes has been abolished, while the relief for the disabled and seniors, self-employed artists, self-employed journalists, student work, and voluntary supplementary pension insurance have been retained. The system of claiming and granting relief for family dependents also remains largely unchanged.

The nominal tax rate of the corporate income tax is also being progressively reduced while the general investment relief has been redirected towards promoting investment in research and development. Due to the payment and deduction method of this tax, the effect of the estimated 0.4% of GDP lower revenue will not be seen until 2008 when the tax assessment is to be conducted on the basis of business results for 2007. The general corporate tax rate will be reduced gradually over the next few years; in 2007 from the current 25% to 23%, and then by one percentage point every year to the final 20% in 2010. The new law also alters the tax relief system. It provides 20% relief for investment in internal R&D activities and the purchase of R&D services. Additional relief is now also foreseen for the less developed areas of the country. The general investment relief, which totalled 20% in 2006, has been abolished.

On the other hand, changes in property taxes will boost general government revenue. Taxes on inheritance and gifts were previously regulated by the Civil Tax Act. The new Inheritance and Gift Taxation Act extends the range of taxable persons from natural persons to include some legal entities governed by private law (societies, foundations, funds, institutions, private institutes, and economic interest associations). Further, the inheritance tax rates for certain orders of inheritance have been raised. This law also newly defines the real-estate tax base as 80% of the generalised market value determined on the basis of a regulation on mass revaluation (in the period until this regulation is adopted a transitional period applies). Slovenia has also adopted the Act on the Taxation of Water Vessels, which similarly extends the range of taxable persons.

5. Key findings and recommendations

Slovenia's entry to the Economic and Monetary Union necessitated changes in the area of macroeconomic policies. The stabilising role of macroeconomic policies prior to entering the EMU enabled Slovenia to fulfil the nominal convergence criteria. Upon joining the EMU, monetary policy became subject to the common interest of the euro area countries, while its stabilising role in cushioning country-specific shocks has been taken over by fiscal and incomes policies.

The analysis shows that general government fiscal flows in 2000-2006 were relatively favourable. In this period, the total general government revenue as a share of GDP rose somewhat while the share of general government expenditure progressively declined. The keeping of general government deficit below 3.0% of GDP and thus complying with the Maastricht criterion was underpinned by the gradual lowering of the structural deficit that was also followed by a narrowing of the actual deficit, even though this meant that fiscal policy was mostly not counter-cyclical during this period. As the general government deficit narrowed the general government debt remained stable, having totalled around 28% of GDP since 2000. Within the structure of debt, there was an increase in the share of total debt arising from the budget deficit; meanwhile the share of debt resulting from the rehabilitation of banks and companies decreased. While the share of government debt guarantees rose steadily to reach 10.4% of GDP in 2006, the share of called guarantees declined, averaging 0.08% of GDP annually in 2000-2006.

In the years ahead, fiscal policy should act counter-cyclically. If economic growth is higher than projected during preparation of the budget, these extra funds should not be used for an additional increase in budget expenditure or tax cuts. Conversely, in circumstances of slower economic growth budget expenditure should not be reduced or the tax burden raised any more than planned during the preparation of the budget. The success of such policy will depend on the chosen method of conducting fiscal policy and its room for manoeuvre within the chosen framework. The targeting of the general government deficit level was successful in circumstances when the stabilising role of fiscal policy ensured that the deficit remained below the Maastricht reference value. To ensure the counter-cyclical operation of fiscal policy, however, the Government should consider to directly control general government expenditure. Moreover, the targeting of the deficit proved to be an elusive goal, since the planned level of the deficit targeted in the medium-term period each year moved another year ahead. It would therefore be more efficient to determine a relative level of general government expenditure as the direct objective of fiscal policy. At the same time, the slow lowering of the general government deficit and the persistence of a relatively high structural deficit even in times of economic expansion show that fiscal policy is not sufficiently flexible, therefore it should be given more room for manoeuvre. Moreover, simulations suggest that even the changes in GDP growth and interest rates already witnessed in the past could cause the general government deficit to rise above 3%. In such a case Slovenia would breach the Stability and Growth Pact, and its general government debt could consequently also exceed

the Maastricht reference value. Fiscal policy can be made more flexible particularly by further reducing and restructuring general government expenditure. Measures presented in the Framework of Economic and Social Reforms to Increase Welfare in Slovenia foresee a gradual decrease in general government expenditure, which will allow fiscal policy more leeway to operate.

Facing the expected demographic changes poses the main medium-term challenge to the long-term sustainability of public finances. Simulations show that Slovenia is one of the most vulnerable EU countries regarding the potential effects of the expected demographic changes on public finances. If the parameters of the economic system and economic policies remained unchanged, the ageing-related expenditure would rise by approximately two-thirds by 2050. Tackling the issue of the demographic transition thus remains the chief medium-term challenge of economic policies that calls for adjustments in the area of pensions and related systems that go beyond public finances. The proposed measures are aimed at encouraging people to stay active longer and ensuring such pension indexation that will safeguard the social status of recipients while exerting no additional burden on general government expenditure.

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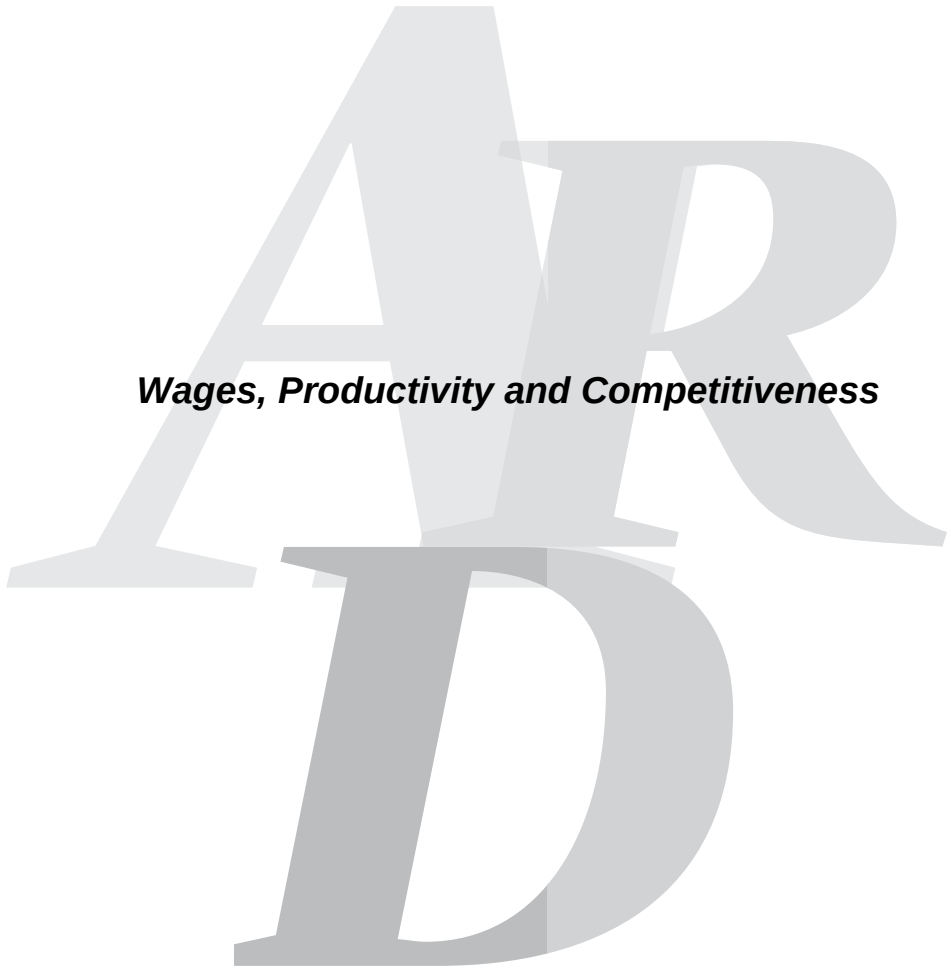


Wages, Productivity and Competitiveness

Summary

Upon Slovenia's entry to the EMU, wage policy became even more important than previously because Slovenia lost its national monetary policy. Since having joined the EMU, Slovenia has no longer been able to improve its export competitiveness by depreciating the tolar. The main mechanisms for adjusting the economy in response to potential shocks have included the labour market and the flexibility of wages. At the EU level, the integrated policy guideline aims at consistent growth of nominal labour costs and the trend in labour productivity over the medium term. Due to these changed circumstances we have decided to analyse the evolution of wages, labour productivity, and competitiveness in the last ten years from several different angles, and to assess the strengths and weaknesses of the wage policy applied thus far. A re-examination of these developments has helped us to formulate proposals for future wage policy-making.

In economic policy, the wage/productivity ratio is significant in several respects and can also be analysed from several different aspects. This ratio is important in at least four respects: (i) cost competitiveness; (ii) price stability; (iii) employment and investment; and (iv) profit and wage shares. However, the analysis of this ratio is also affected by methodological problems of measuring labour productivity and the effects of various wage deflators. These problems are best tackled by the comparison between the evolution of nominal gross wages per employee and of nominal productivity.

Over the last decade, wage policy in Slovenia aimed to keep the growth of real gross wages below productivity growth. Analyses monitored the ratio between the growth of real gross wages deflated by the CPI and the growth of productivity measured by real GDP growth per employee based on the national accounts statistics. In 1996-2006, this guideline was largely fulfilled (except in 2001). The wage adjustment mechanisms applied were mainly explicitly tied to price rises, while they were not explicitly tied to productivity growth. The frequency of wage adjustments declined. However, wage increases were not fully indexed to the inflation rate in this period, which contributed to the lowering of inflation. In 2001, the social partners agreed to index wages to the projected inflation rate. Over the last decade, wage policy supported the main goals of economic policy, i.e. to cut inflation and to raise export competitiveness and employment.

Several labour cost indicators are used to determine trends in macroeconomic developments. The most commonly used indicator in Slovenia is the monthly figure for the average gross wage per employee, which is, however, insufficient to measure cost competitiveness. Cost competitiveness is more often measured by unit labour costs, expressing the ratio between the cost of employees on one hand and the value produced by employees, i.e. productivity, on the other. This analysis mainly focuses on two indicators of cost competitiveness, i.e. real unit labour costs and the real effective exchange rate.

Like in most other EU countries, real unit labour costs declined in Slovenia over the last ten years. After the rapid decline in the second half of the 1990s, the falling of real unit labour costs slowed down considerably in Slovenia, partly due to deteriorated terms of trade. The drop in real unit labour costs in Slovenia was largely underpinned by developments in industry. Only Poland, Ireland and

Estonia recorded higher average annual drops of unit labour costs than Slovenia in this period, which indicates that Slovenia's cost competitiveness within the EU improved considerably. On the other hand, significant increases in real unit labour costs were only recorded in Portugal and the Czech Republic in this period. Slovenia's wage policy contributed to the increase in the country's competitiveness.

Although real unit labour costs dropped sharply in Slovenia over the past decade, the ratio between labour costs and gross domestic product in the Slovenian economy was still well above the euro area average in 2006 (71.8% over 63.9%). This divergence is largely attributable to: (i) the specific Slovenian agricultural sector with a high share of small farms and a relatively high share of the self-employed; (ii) the different structure of the Slovenian economy in comparison with the average structure in the euro area; and (iii) the higher labour taxation in Slovenia. If we exclude the agricultural sector the difference in the achieved ratios halves. Even so, however, Slovenia still belongs among countries with high ratios between labour costs and gross domestic product. In comparing the structure of value added of the Slovenian economy and the average structure of the euro area we see that Slovenia has a notably smaller share of value added produced by financial intermediation, real estate, and business services. In these sectors, the ratios between labour costs and gross value added are relatively lower. On the other hand, Slovenia has a much higher share of industry with an above-average share of labour-intensive industries, which raises the ratios between labour costs and gross value added in the Slovenian economy. In 2004, taxes and contributions on labour in Slovenia accounted for 54.4% of the total taxes, 3.8 p.p. more than in the EU-25 on average.

Between 1996-2002 the real effective exchange rate indicated an improvement in Slovenia's cost competitiveness. The real effective exchange rate deflated by unit labour costs shows the competitiveness of the domestic economy in comparison with its main trading partners. In 1996-2002, the improvement in the cost competitiveness was underpinned by the higher growth of Slovenian productivity and the nominal depreciation of the national currency. Subsequently, the growth of relative unit labour costs eased off, following the moderation in nominal depreciation. As the tolar's exchange rate remained stable against the euro, the increase in the relative compensation per employee came very close to the growth of relative productivity in 2005, which meant that Slovenia's cost competitiveness was maintained.

Since having adopted the euro, Slovenia has conducted as much as 60% of its external trade in the national currency. Consequently, the significance of the effect of wage and productivity developments on the Slovenian economy's cost competitiveness has increased. If wages grow faster than productivity in comparison with Slovenia's euro area trading partners, Slovenia's cost competitiveness deteriorates. Conversely, lower growth of Slovenian relative wages compared to relative productivity growth leads to its improvement.

Given the development level and structure of the Slovenian economy, the raising of competitiveness should remain an important guideline in the formulation of wage policy. The share of labour costs in the value added of the Slovenian economy is still relatively high despite its ten-year decline. Labour

costs are an important factor of cost competitiveness, but other determinants also affect economic competitiveness. We refer mainly to the policies that may contribute to a higher increase in value added. These especially include the measures and policies that would stimulate R&D and innovation potential and boost the development of entrepreneurship by speeding up the restructuring of the economy towards higher value added and faster productivity growth. Along with these measures, the lowering of the tax burden on labour should continue. In addition to moderate wage growth, tax measures can significantly help to reduce the real compensation of employees.

Wage policy formulation in the coming years should be based on the EU's integrated economic policy guideline according to which medium-term wage rises should be consistent with the price stability goal and the trend in productivity, taking into account the specific conditions of the Slovenian economy, the international context, and methodological particularities. Therefore, it would be reasonable to determine the ratio between wage growth and productivity growth on the basis of nominal growth rates. The projected inflation rate assumed in wage formation should take into account the ECB's inflation goal and the dynamics of wages and productivity in other euro area countries.

The general rule regarding the ratio between the growth of wages and productivity should be used mainly as a guideline and a benchmark of the adequacy of wage developments. Wage adjustment mechanisms should not be tied directly to productivity growth. The automatic indexation of wages to productivity would limit the possibilities of pay rises based on individual work performance. In a period of declining economic growth, the adjustment of wages to previous growth of (higher) productivity would result in lower competitiveness. Moreover, the indexation of wages to general productivity could create excessive cost pressures on companies and industries. Wage formation should therefore take sector- and company-specific circumstances into account.

1. Introduction

Since Slovenia joined the Economic and Monetary Union and thus gave up its national monetary policy, wage policy has become an even more important element of macroeconomic policy. Adjustment mechanisms applicable in the case of asymmetric shocks in EMU member countries have become especially critical. In such circumstances the markets of production factors, notably the labour market, serve as important adjustment mechanisms. Within labour market flexibility wage flexibility is regarded as the key determinant.[1]

Due to the changed circumstances, we have decided to examine the wage policy applied thus far and assess the need for changes in this area. Over the last ten years, the aim of Slovenia's wage policy was to make real gross wages rise at a slower rate than productivity. This guideline contributed to the lowering of inflation and the increase in export competitiveness. However, as Slovenia joined the EU and the EMU the situation regarding economic policies changed. The EU's Integrated Guidelines for Growth and Jobs include a guideline that recommends consistent growth of nominal labour costs and the trend in productivity over the medium term. Since having joined the EMU, Slovenia can no longer improve its export competitiveness by way of its national monetary policy. Due to the new circumstances we have decided to make a more detailed analysis of the guidelines regarding developments in labour costs in the EU and the role of wage flexibility, and to take a look at the past developments in wages and productivity, also from other angles than before. Below we first present the role of wage flexibility in the EMU, the guidelines in the area of wage policies in the EU, and the agreements between the social partners on the wage policy in Slovenia in the last ten years. In economic policy, the wage/productivity ratio affects the growth of employment and investment. It is therefore presented from several different viewpoints. Further, we discuss the problems related to measuring labour productivity. By questioning the relevance of the indicators used to measure developments in labour costs we also examine the impact of labour costs on the competitiveness of Slovenian exporters in foreign markets. To this end, we present the dynamics and state of selected indicators of international competitiveness in Slovenia over the last ten years. We conclude by assessing the wage policy applied thus far and attempt to formulate recommendations for future wage policy-making.

[1] According to Mundell's theory of optimum currency areas, the flexibility of nominal wages is a perfect substitute for the nominal flexibility of currencies. Mundell proposes labour mobility as a second substitute.

2. The role of wage flexibility and wage policy orientations

At the macroeconomic level, various types of wage flexibility are an important instrument for counteracting shocks to the economy. The three most common types of wage flexibility usually mentioned are: (i) the responsiveness of wages to changes in price levels (inflation), i.e. the nominal flexibility of wages; (ii) the responsiveness of wages to the unemployment rate, which measures how fast an imbalance in the labour market is redressed, i.e. the real flexibility of wages; and (iii) the responsiveness of wages to the structure of supply and demand, i.e. the relative flexibility of wages, which depends on geographical and sectoral mobility and the imbalances in occupational labour markets.

The absence of a national monetary policy is believed to have an effect on the formation of wages. Erlandsson (2002, p. 2) emphasises two such effects. He maintains that: (i) wage restraints will decrease since higher wages will no longer "automatically" lead to a tighter monetary policy; and (ii) that the elasticity of labour demand will increase, since there are no longer any national monetary policy instruments to compensate for national fluctuations in productivity. The latter is supposed to act as an incentive to lower wages or make them more flexible. These two effects are supposed to work in opposite directions.[2] The entry to the EMU can therefore also enhance upward pressures on wages and hence on the unemployment rate.

2.1. Wage policy guidelines in the EU

Wage policy orientations at the EU level are presented in the Integrated Guidelines for Growth and Jobs, adopted in 2005. Guideline No. 4 recommends that the member states should encourage the right framework conditions for wage bargaining systems to promote nominal wage and labour cost developments consistent with price stability and the trend in productivity over the medium term, taking into account differences across skills and local labour market conditions. Guideline No. 22 similarly recommends that member states should ensure such evolution of labour costs and of the wage formation system that stimulates employment.

In order to ensure a non-inflationary policy in the EMU countries, member states should keep their nominal wage growth within a range between the ECB's inflation goal (around 2% annually) and country-specific productivity growth over the medium term. Based on this normative formula for wage growth, Fritsche et al. (2004) assessed the wage policies in the EMU countries and the capacity of four EMU economies to respond to shocks.[3] Adherence to the normative wage formula is supposed to ensure the process of economic convergence in the EMU. However, the wage formation systems in the EMU that are critical for the economies to counteract shocks are not suited to the application of the normative wage formula.

[2] The result of their action has not been empirically tested thus far.
[3] The study includes Germany, Spain, France, and the Netherlands.

2.2. Wage policy in Slovenia in the last ten years

With the transition to a market economy, Slovenia set up an institutional system of wage bargaining (a system of collective agreements) and established the Economic and Social Council of the Republic of Slovenia (ESS). The ESS was established in 1994 and is composed of representatives of trade unions, employers, and the Government. It is the central institution of social dialogue. The tripartite talks within the ESS have resulted in a macroeconomic wage policy framework.

In Slovenia, wage policy has been an important segment of the negotiations between the social partners. Over the last decade, the social partners have generally implicitly or explicitly agreed that real wage growth should lag behind productivity growth, measured by the real GDP growth per employee according to the System of National Accounts (SNA). Below we first present the wage policy agreements and continue by analysing the relationship between the dynamics of wages and productivity in the last ten years in Slovenia (Chapter 3.2).

2.2.1. Overview of wage policy agreements

Over the last decade, wage policy in Slovenia supported the main goals of economic policy (lowering of inflation, increasing export competitiveness and employment). The main guideline for bargaining wage adjustment agreements was that wage policy should, on one hand, support economic policy goals aimed at stable macroeconomic trends, and regulate the social position of workers through the institution of the minimum wage on the other.

Wage adjustment mechanisms were not explicitly tied to production growth. The agreements did not explicitly determine that wages should be adjusted by a certain percentage of productivity growth or that wage growth should lag behind productivity growth. The mechanisms for general wage adjustments were tied solely to inflation, since they took into account the fact that individual wages were being raised additionally for other reasons. The general guideline regarding the relationship between real wage growth and productivity growth (a lag by one percentage point) was first explicitly stated in the Social Agreement concluded in 2003. This wage policy was aimed at providing a boost to investment activity and creating new jobs to raise employment. A detailed description of the wage adjustment mechanisms applied in the last ten years is presented in the Annex to this chapter.

The concluded wage policy agreements have defined the adjustment of starting-level wages. However, in practice there is a divergence between the growth of the starting-level wages and of the actually disbursed wages (Table 1). The divergence in the growth of actual and starting-level wages occurs because wage growth does not only depend on adjustment mechanisms but also on payments based on promotions, individual performance, company performance, sectoral and company agreements, and individual work contracts.

Table 1: **Real growth of the average gross wage per employee and starting-level wages in the private and public sectors, in %**

	Gross wage per employee			Starting-level gross wages		Difference between the growth of actual and starting-level wages, in p.p.	
	Total	Private sector	Public sector	Private sector	Public sector	Private sector	Public sector
1995	5.1	3.7	8.2	2.2	2.2	1.5	6.0
1996	5.1	4.0	6.8	-0.7	1.0	4.7	5.8
1997	2.4	1.5	3.8	-3.3	-2.0	4.8	5.8
1998	1.6	2.2	-0.2	-2.4	-2.8	4.6	2.6
1999	3.3	3.2	3.7	0.4	0.8	2.8	2.9
2000	1.6	1.3	2.1	-0.3	-2.9	1.6	5.0
2001	3.2	2.3	5.1	0.0	-1.8*	2.3	6.9
2002	2.0	2.3	1.1	-0.2	-3.8	2.5	4.9
2003	1.8	2.1	1.0	0.1	-0.6	2.0	1.6
2004	2.0	3.1	-0.8	0.8	-2.0	2.3	1.2
2005	2.2	2.8	0.9	0.0	-0.7	2.8	1.6
2006	2.2	2.8	1.0	-1.2	-2.0	4.0	3.0

Source: SORS, Official Gazette of the Republic of Slovenia; calculations by IMAD.
Note: *The August 2.6% increase in the public sector was disbursed in the form of supplements. Therefore, the rise was observed in the disbursed rather than the starting-level wages.

In 1995-2000, wage policy contributed significantly to the lowering of inflation since wage rises were not fully indexed to inflation. The frequency of annual adjustments declined in this period (following the slowdown in inflation). In 1995 and 1996, the adjustment was carried out quarterly. In 1995, 80% of inflation was taken into account. Subsequently, the corresponding figure was around 85% of the actual inflation. As annual inflation dipped from a two-digit to a one-digit rate, the adjustments for 1997 and 1998 were already made only once a year and equalled 85% of the actual consumer price rise. Inflation rose in 1999 and 2000 due to the introduction of value-added tax (from 6.5% in 1998 to 9% in 2000, year on year). Wages were consequently raised twice a year, taking into account 85% of actual inflation.

In 2001-2006, the gap between wage growth and productivity growth narrowed. As shown by the analysis in the following chapter, the difference between real wage growth and productivity growth stabilised at a level between one and two percentage points in this period. The only exception was 2001, when wages rose more than productivity due to the high increase in public sector wages. At the same time, a comparison of the nominal trends in wages and productivity shows that the difference between the two has almost disappeared in recent years. The percentage of annual inflation taken into account in the adjustment mechanism also rose in this period, especially in the private sector. In 2001, the social partners agreed to change the system by tying wages to the projected consumer price increases rather than past inflation rates. The mechanism also incorporated a safeguard clause for the event of higher or lower actual inflation than projected.

3. Wages and productivity

The wage/productivity ratio is one of the key issues of economic policy. It is important in at least four respects: (i) cost competitiveness; (ii) price stability; (iii) employment and investment; and (iv) profit and wages shares. From the point of view of economic theory, it seems that the general guideline of consistent growth of wages and productivity provides a satisfactory answer to all these aspects: (i) it ensures the maintenance of cost competitiveness[4] by preventing the rising of unit labour costs; (ii) since unit labour costs are not rising, wage growth creates no cost pressures on price rises (inflation); (iii) if employment increases while output remains unchanged, productivity growth decreases; the principle of consistent growth of wages and productivity therefore means that wages should be adequately adjusted to decisions regarding employment; investments are financed from the retained past and expected future returns on capital; and (iv) consistent growth of wages and productivity ensures that the share of wages in value added and hence the existing ratios of profits to wages remain stable. However, the application of this general principle to the conduct of wage policy should take a number of other factors and constraints into consideration. The international aspect, i.e. the relative dynamics of wages and productivity in competitive countries, is particularly relevant for the small economy. Other factors to be considered include those that affect either the evolution of value added (international terms of trade, intermediate consumption, the structure of the economy, business cycle) or the evolution of the total labour costs (labour costs not included in the salary, taxation of labour, economic structure). Labour cost developments in an international comparison are presented in Chapter 4.

The wage/productivity ratio can be analysed from various angles. Although the concept of measuring productivity is seemingly simple and clear, it is characterised by a number of methodological problems which are presented below. This chapter also presents the wage/productivity ratio in the last ten years in Slovenia from the point of view of various productivity measures and wage deflators.

3.1. The problem of measuring labour productivity

Productivity is commonly defined as the ratio of output to a volume of input use. The concrete application of this general rule depends on the selected purpose of measuring productivity and on the availability of data. A number of productivity measures are described in the economic literature and used in practice, since the output and the inputs can be measured in many different ways. There is a general distinction between single-factor and multi-factor productivity, depending on the input used. The former includes labour productivity and capital productivity, while the latter usually refers to the capital-labour multi factor productivity and to the KLEMS[5] productivity. In principle, output should be evaluated on the basis of gross output. At the level of industries or companies, it

[4] Assuming equal evolution of wages and productivity in other countries.
[5] It measures the joint productivity of the factors of capital (K), labour (L), energy (E), and raw materials, material, and intermediate goods (M).

is also evaluated on the basis of value added, while at the national level it is most commonly measured on the basis of GDP for practical reasons of data availability and comparability.

Labour productivity is a partial measure of the productive capacity of employees and the intensity of their work. Changes in labour productivity reflect the total effect of changes in the quality of labour and the efficiency and intensity of its use, along with changes in a series of other factors such as capital, intermediate consumption, technology, organisation, capacity utilisation, economy of scale, etc. Labour input is usually measured by: (i) total employment, which includes wage recipients and self-employed workers, including unpaid family workers; (ii) full-time equivalent employment; and (iii) the number of actual hours worked.

For the purposes of wage policy, productivity is usually measured by the increase in value added per unit of labour input, measured by actual hours worked. The reason is that value added is an easily comprehensible and comparable category. Further, the number of actual hours worked is the most appropriate measure of labour input. Nevertheless, the caveat remains in place that value added per labour input similarly does not only measure the input of labour but is the result of the joint effect of all production factors, both material and non-material (Measuring Productivity – OECD Manual, 2001). At the national level, gross domestic product, i.e. value added corrected by indirect taxes and subsidies, is the commonly used measure of productivity.

Currently in Slovenia labour productivity cannot be calculated on the basis of hours worked and it therefore uses other measures. The SORS is currently still developing the statistical sources for the calculation of actual hours worked. We will therefore use data on the number of employed persons instead, which is also a common practice in some other countries. Among the many different statistics on employment available in Slovenia, the most adequate figures are employment based on the national accounts statistics and the number of persons in employment according to the Labour Force Survey (LFS). Since the first figure in principle expresses full-time equivalent employment,[6] the difference between the two should reflect the movements of the average number of hours worked by an employed person in a given period of time. Survey-based employment figures are also relevant because they are used as the basis for the calculation of employment rates and as the benchmark for assessing the achievement of the Lisbon Strategy goals.

Table 2: **Annual growth rates of real labour productivity (in %) according to different employment statistics**

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GDP/employee according to SNA	5.9	6.9	4.1	3.9	3.3	2.2	3.8	3.1	3.9	3.7	4.0
GDP/person in employment according to LFS	4.2	1.6	4.4	7.2	2.4	1.0	4.1	4.1	-0.7	3.4	3.9

Source: National Accounts; Labour Force Survey Results; SI-Stat data portal; calculations by IMAD.

[6] The actual estimated employment based on the SORS' national accounts statistics is merely approaching this principle due to methodological constraints.

The divergence in the evolution of the differently measured productivities can be partly explained by the differences in measuring labour input. Except in 1998-1999 and 2002-2003, the productivity growth that uses survey-based employment as a measure of labour input was slower than the productivity growth based on employment according to the national accounts statistics. The main reason for the divergence between the two statistics is the very broad definition of an employed person according to the Labour Force Survey. According to this definition, any person who performed at least one hour of work for payment in the reference week or who performs work for the family welfare as an unpaid family worker qualifies as a person in employment. As a result, the average working time of these people can vary significantly from year to year. In addition, the average number of hours worked may also be changed by overtime work performed in a given year by people who are otherwise employed full time.

Below we present the wage/productivity ratio in Slovenia. We first discuss this ratio from the point of view of the hitherto used measures of the dynamics of wages and productivity. We then proceed to analyse it from the viewpoints of other measures of productivity and growth deflators of the average gross wage per employee.

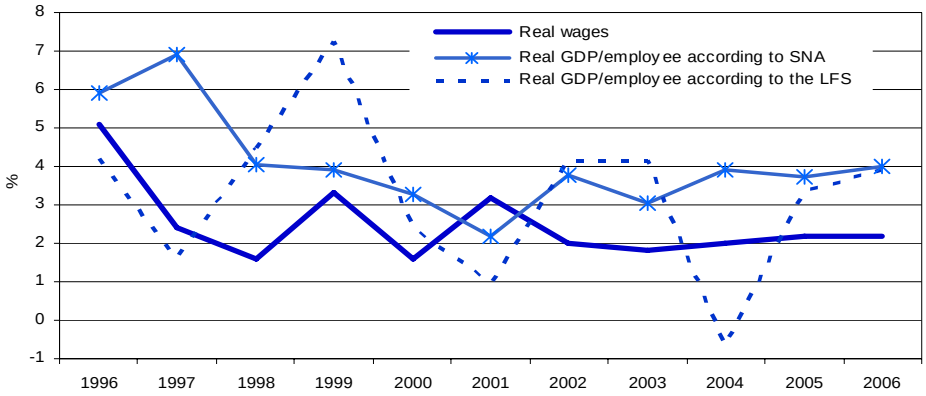
3.2. Dynamics of wages and productivity

Over the past decade, the ratio between the dynamics of wages and productivity was an important measure of evaluating wage policy in Slovenia. Social partners mainly monitored the ratio between the evolution of the real average gross wage per employee deflated by the consumer price index and labour productivity measured by GDP per employee according to the national accounts statistics. This relation is described in detail below.

The real growth of the average gross wage per employee, deflated by the consumer price index, for the most part lagged behind productivity growth over the last ten years. This lagging was supported by the agreed wage adjustment mechanisms described in Chapter 2.1.1. At the national level, wages only rose faster than productivity in 2001 due to exceptional wage increases in the public sector that year (Figure 1 and Table 3).

In 1996-2000, the lagging of wage growth behind productivity growth was underpinned by the slower wage growth in the private sector. The real gross wage per employee rose at an average annual rate of 2.8% in this period and lagged two percentage points behind productivity growth. Except in 1998, the lagging in the public sector was slower than in the private sector. The faster growth of wages in the public sector in this period mainly reflected the process of introducing supplements in several collective agreements.

Figure 1: **Annual growth rates of average real gross wages and productivity in 1996-2006**



Source: National Accounts; Labour Force Survey Results; SI-Stat data portal; calculations by IMAD.

The growth of the real gross wage per employee also lagged behind the growth of labour productivity in 2001-2006, except in 2001. In 2001, wages rose faster than productivity due to the rapid growth of wages in the public sector resulting from the concentration of the disbursement of supplements in various collective agreements. From 2001 onwards, the lagging of wage growth behind productivity growth was smaller than in 1996-2000 on average. The 2001-2006 period was characterised by the modest growth of real gross wages per employee in the public sector (average annual growth was 0.6%) due to the adjustment mechanism, and by the prevention of wage growth in individual sectoral collective agreements.

Table 3: **Real growth of labour productivity and gross wages per employee, total and by sector, and divergence in their growth in 1996-2006**

	Real growth of GDP per employee – labour productivity	Real growth of the gross wage per employee			Difference between the growth of productivity and wages, in p.p.		
		Total	Private sector*	Public sector**			
	(1)	(2)	(3)	(4)	(1)-(2)	(1)-(3)	(1)-(4)
1996	5.9	5.1	4.0	6.8	0.8	1.9	-0.9
1997	6.9	2.4	1.5	3.8	4.5	5.4	3.1
1998	4.1	1.6	2.2	-0.2	2.5	1.9	4.3
1999	3.9	3.3	3.2	3.7	0.6	0.7	0.2
2000	3.3	1.6	1.3	2.1	1.7	2.0	1.2
1996-2000	4.8	2.8	2.4	3.2	2.0	2.4	1.6
2001	2.2	3.2	2.3	5.1	-1.0	-0.1	-2.9
2002	3.8	2.0	2.3	1.1	1.8	1.5	2.7
2003	3.1	1.8	2.1	1.0	1.3	1.0	2.1
2004	3.9	2.0	3.1	-0.8	1.9	0.8	4.7
2005	3.7	2.2	2.8	0.9	1.5	0.9	2.8
2006	4.0	2.2	2.8	1.0	1.8	1.2	3.0
2001-2006	3.5	2.2	2.6	1.4	1.2	0.9	2.1
1996-2006	4.1	2.5	2.5	2.3	1.6	1.6	1.8

Source: SORS; calculations by IMAD.
Notes: *The calculation of the gross wage per employee for the private sector is the sum of activities A to K according to the Standard Classification of Activities (SCA). ** The calculation of the gross wage per employee for the public sector is the sum of activities L to O according to the SCA.

The wage/productivity ratio may vary depending on the different productivity measures as well as the use of different wage deflators. We proceed to analyse the wage/productivity ratio from the viewpoint of other wage deflators and productivity measures.

The deflation of wages by CPI is relevant when estimating the purchasing power of wages, but it is less relevant for economic competitiveness. The use of different deflators for the deflation of output and wages can distort the wage/productivity ratio. Thus far, the consumer price index has been used as the common wage deflator. The CPI is useful for evaluating the dynamics of the purchasing power of wages, with the caveat that real net wages should be used in the analysis. However, from the viewpoint of competitiveness, the GDP deflator[7] and the producer price index[8] are more relevant.

The problem of different deflators can be avoided by using nominal deflators. In this case, we compare the movements of the nominal average gross wage per employee with those of nominal productivity. Such a comparison shows that the growth of the average gross wage exceeded the growth of productivity not only in 2001 but also in 2000, whereas in 2005 it was roughly even with productivity growth (Figure 2 and Table 4).

Table 4: **Growth of nominal labour productivity and nominal gross wages per employee, total and by sector, in %**

	Nominal growth of labour productivity	Nominal growth of the gross wage per employee		
		Total	Private sector	Public sector
1996	17.6	15.3	14.1	17.2
1997	15.9	11.7	10.7	13.2
1998	11.2	9.6	10.3	7.7
1999	10.5	9.6	9.5	10.1
2000	8.9	10.6	10.3	11.2
1995–2000	12.8	11.4	11.0	11.8
2001	11.1	11.9	10.9	13.9
2002	11.9	9.7	10.0	8.7
2003	9.0	7.5	7.8	6.7
2004	7.3	5.7	6.8	2.8
2005	5.2	4.8	5.4	3.4
2006	6.4	4.8	5.4	3.5
2000–2006	8.5	7.4	7.7	6.4
1995–2006	10.4	9.2	9.2	8.9

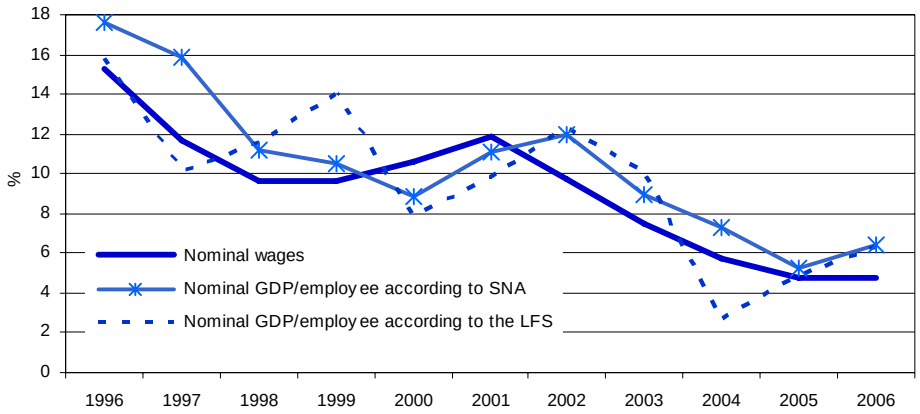
Source: SORS; calculations by IMAD.
Note: Labour productivity is measured by the nominal growth of GDP per employee according to the Statistics of National Accounts (SNA).

The wage/productivity ratio can also be influenced by the various measures of productivity. The ratio between wage growth and the various productivity measures proves to be most problematic if the labour input is measured by the number of persons in employment according to the LFS (Figures 1 and 2). However, this measure is irrelevant for wage policy-making in Slovenia due to the high proportion of informal work and other methodological reasons that

[7] Wage growth deflated by the GDP deflator exceeded productivity growth in 2000 and 2001.
[8] In the last decade, the producer price index diverged sharply from movements of the GDP deflator and the CPI in 1999 and 2003 due to the dynamics of the prices of raw materials. As a result, wages deflated by the producer price index rose faster than productivity in those two years.

strongly affect the fluctuations in productivity measured in this way (also see Chapter 3.1).

Figure 2: **Annual nominal growth rates of the average gross wage per employee and nominal labour productivity**



Source: National Accounts; Labour Force Survey Results, Wages and Labour Costs, SI-Stat data portal; calculations by IMAD.

The competitiveness of an economy in foreign markets also depends on the trends in labour costs and productivity in other countries. In the next chapter we therefore present the indicators of labour costs and productivity and their evolution in the period 1996-2006.

4. Labour costs and competitiveness

4.1. Available labour cost indicators in Slovenia and the EU

Several labour cost indicators are used in Slovenia and the EU to evaluate trends in macroeconomic developments. The appropriateness of the use of a given indicator depends on the purpose of the analysis and the relevance of timeliness, data coverage, the level of harmonisation with the EU statistics, and the availability of a detailed breakdown. In this chapter we present the available labour cost indicators and assess their usefulness.

The quarterly figure on labour costs per actual hour worked (the labour cost index) is harmonised at the EU level but it still has some methodological flaws. The national statistical offices in the EU conduct a labour cost survey every four years.[9] These quadrennial surveys are the basis for the quarterly estimates of labour costs per actual hour worked. In Slovenia there is no special quarterly statistical survey to evaluate labour costs. The existing statistical sources are used instead: the figure from the Monthly Report on Earnings (SORS) is used to evaluate the dynamics of gross wages, while the figure on the payments of general government revenue (Public Payments Administration) and the figures from the Labour Force Survey and the Labour Costs Survey (SORS) are used to evaluate employers' social security contributions and the payroll tax. The main problem regarding this indicator is the estimate of the actual hours worked, for which the SORS is still developing the appropriate methodology. Another consideration is that this indicator follows payments on a monthly basis, which means that more than three payments may be covered in a given quarter. Therefore, this indicator is mainly used to determine the ratio of the cost of wages to other labour costs (especially employers' social security contributions; in Slovenia also the payroll tax), which allows countries to monitor the results of their labour market reforms.

The gross wage per employee, which is based on national statistics, is the most common indicator used to monitor wage developments. The indicator is not harmonised at the EU level and therefore reflects country-specific situation. It is typically available with a short time-lag. In Slovenia, it is similarly used to monitor wage developments and the effects of wage policy. The figure on the payments of the monthly gross wage per employee covers almost all wage recipients in Slovenia. It allows a detailed breakdown by SCA levels down to the 4-digit level, which makes it possible to calculate the gross wage per employee for the private and the public sectors and for individual production and service groups. The time series is available for a period of 16 years. For a more detailed analysis, data on employees by level of gross earnings are available once a year, which allows the calculation of wage distribution indicators. In addition, statistical breakdowns of gross earnings by gender and professional qualifications as well as by SCA activity are also available once a year. Since net figures are also available, it is possible to assess the effects of the changes in taxation.

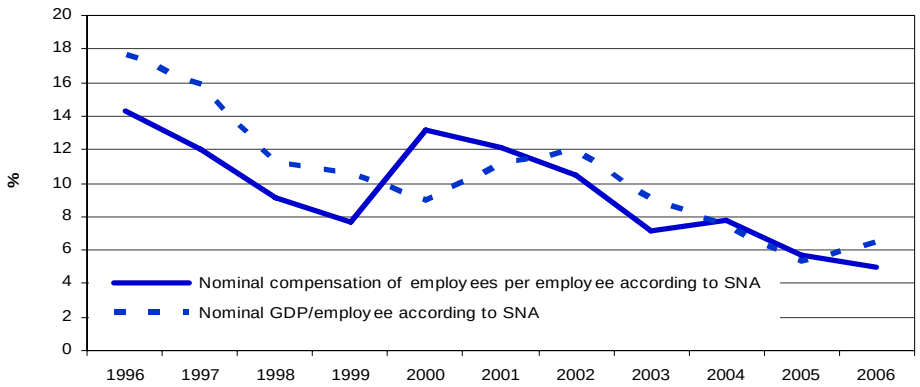
Some EU countries and the ECB use negotiated gross wages as the indicator to

[9] For Slovenia, the survey was first conducted in 2000 and subsequently in 2004. Data from both surveys cannot be compared due to methodological changes. The largest methodological change was the transfer of sickness benefits from employers' social security contribution to gross earnings.

monitor wage developments. The indicator is not harmonised at the EU level. It is mostly used to evaluate the 'wage drift', i.e. the difference between the negotiated and actual growth of the gross wage per employee. The wage drift for Slovenia can be assessed on the basis of Table 1, presented in Chapter 2.2.1.

The indicator 'compensation of employees per employee' is based on national accounts data and is methodologically harmonised at the EU level. It also allows a breakdown by activity according to the standard classification of activities. The main problems of this indicator are the frequent data revisions and the availability of data for its calculations, which are available only at the annual level. For these reasons, the indicator is not suitable to monitor wage policy but it is useful to compare the movements of labour costs relative to the dynamics of labour productivity (Figure 3) and for the calculation of unit labour costs.

Figure 3: **Evolution of the nominal compensation of employees per employee and nominal productivity in Slovenia, 1996-2006**



Source: National Accounts, SI-Stat data portal; calculations by IMAD.

The ratio between the growth of productivity and the growth of the compensation of employees per employee is relevant in view of economic competitiveness. Over the past decade, the nominal growth of the compensation of employees per employee was considerably faster than nominal productivity growth in 2000 and 2001, and somewhat faster than nominal productivity growth in 2004 and 2005. Next, we proceed to present the indicators of cost competitiveness and their evolution in 1996-2006.

4.2. Unit labour costs and competitiveness

Unit labour costs are one of the indicators of cost competitiveness. They show the relationship between the labour costs on one hand and the value produced by person employed, i.e. productivity, on the other. At the same time, they are an indicator of the distribution of income between labour and capital and hence an indicator of profitability. Cost competitiveness is commonly analysed on the basis of real unit labour costs and real effective exchange rates deflated by relative unit labour costs.

The Eurostat defines real unit labour costs as the ratio of the nominal compensation of employees per employee to the nominal gross domestic product per employment.[10] Real unit labour costs are a structural indicator since they measure changes in the compensation of employees as a share of GDP. They are referred to as *real* unit labour costs because they are equivalent to the nominal unit labour costs[11] deflated by the implicit GDP deflator. Expressed as a percentage of gross domestic product,[12] they are often referred to simply as 'wage shares' as a non-technical term. For purposes of greater clarity, we will hereinafter use the term 'the ratio of labour costs to GDP' instead.

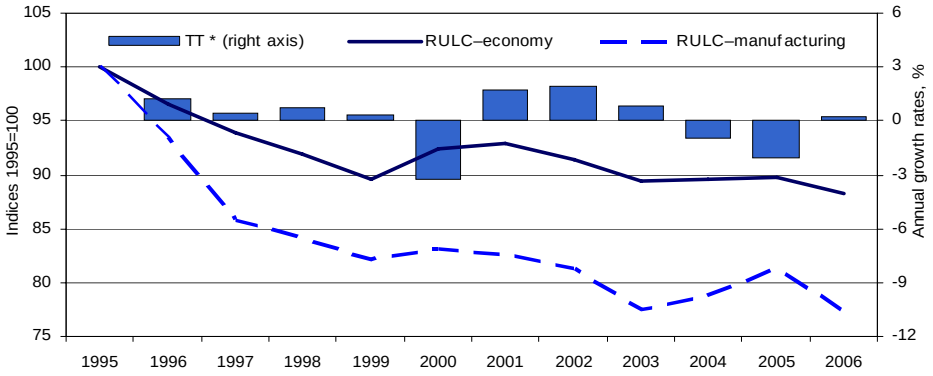
The real effective exchange rate deflated by unit labour costs shows the cost competitiveness of the domestic economy in comparison with its main trading partners. It is an indicator of international cost competitiveness. Apart from domestic and foreign costs and productivity, this indicator is also determined by the dynamics of the nominal exchange rate. Therefore, the domestic nominal unit labour cost index divided by the foreign unit labour cost index is further divided by the nominal exchange rate index.

4.2.1. Real unit labour costs

As in most EU-25 countries, real unit labour costs declined in Slovenia in 1996-2006. The decline was faster in the second half of the 1990s; in 2000 and subsequent years it slowed down considerably, partly due to the deteriorated terms of trade (Figure 4). Particularly in 2000, but also in 2004 and 2005, the lower growth of export than import prices translated into lower nominal GDP growth on one hand and higher growth of the cost of intermediate consumption on the other. As a result, real unit labour costs rose somewhat more appreciably in 2000 but only slightly in 2004 and 2005. This led to a lower profitability. The terms of trade in manufacturing, the most export-oriented sector, tightened even more than in the total economy in those years. In the other years of this period, the effects of the improved terms of trade on the dynamics of real unit labour costs were just the opposite. The drop in real unit labour costs was somewhat more pronounced, and the profitability of the economy was consequently higher.

[10] In market prices.
[11] Nominal unit labour costs are defined as the ratio of the nominal compensation of employees per employee to the real gross domestic product per employment.
[12] In factor prices.

Figure 4: **Real unit labour costs (RULC) and the terms of trade in goods and services (TT)**



Source: National Accounts, SI-Stat data portal; calculations by IMAD.

Being small the Slovenian economy is more open to changes in terms of trade, and therefore relatively more vulnerable than bigger economies. Changes in the terms of trade affect the GDP deflator, i.e. the difference between the nominal and the real GDP growth rates. In circumstances of deteriorated terms of trade, the cost competitiveness of the economy may deteriorate despite restrictive wage policy. Conversely, in circumstances of improved terms of trade, a less restrictive wage policy does not necessarily lead to a deterioration of the economy's cost competitiveness.

Table 5: **Real unit labour costs by sectors of the Slovenian economy**

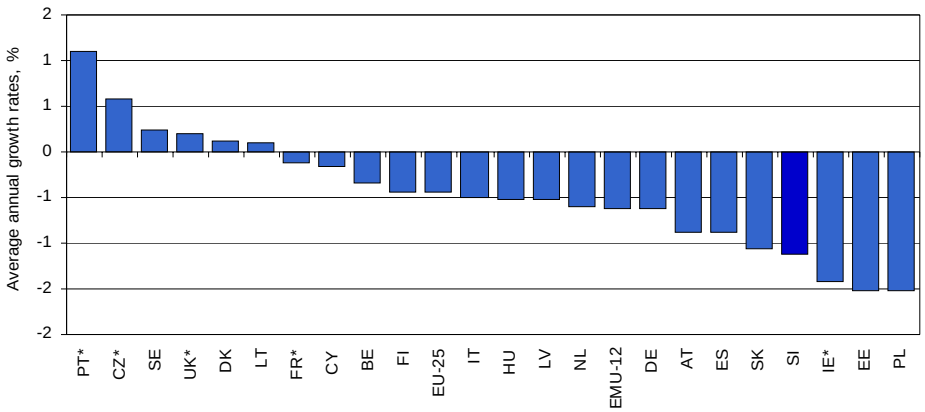
Sector		**Growth rate in 1996–2005, in %**
Total	Total economy	-12.4
Total less A, B	Total economy excluding agriculture	-9.7
A, B	Agriculture, hunting and fishing	-16.1
C, D, E	Industry, excluding construction	-20.1
D	Manufacturing	-18.6
F	Construction	-5.2
G, H, I	Trade, transport and communication services	-12.7
J, K	Financial services and business activities	14.9
J	Financial intermediation	31.0
K	Real estate, renting and business activities	11.5
L to P	Other services	-4.7

Source: National Accounts, Eurostat; National Accounts, SI-Stat data portal; calculations by IMAD.

The decline in the real unit labour costs of the total economy observed in 1996-2005 mainly reflected the drop in the real unit labour costs in industry (Table 5). Trade, transport and communication services also contributed considerably to the decline, whereas the decreases in construction and other services were much smaller. On the other hand, real unit labour costs in financial services and business activities increased, which had a negative effect on the cost competitiveness of the Slovenian economy.

The wage policy and competitiveness of the Slovenian economy are also affected by the trends in real unit labour costs in other countries. Data for 1996-2006 show that real unit labour costs fell in most member states as well as in the EU-25 and euro area on average.

Figure 5: **Real unit labour costs in the EU countries in 1996-2006**



Source: National Accounts, Eurostat; calculations by IMAD.
Note: *Data for the period 1996-2005.

Only Poland, Ireland, and Estonia recorded higher average decreases than Slovenia (Figure 5 and Table 6), which shows that Slovenia's cost competitiveness in the EU has improved considerably. Given the trends in other countries, the Slovenian wage policy was appropriate and supported the objective of increasing the competitiveness of the economy.

Table 6: **Components of real unit labour costs (in current EUR)**

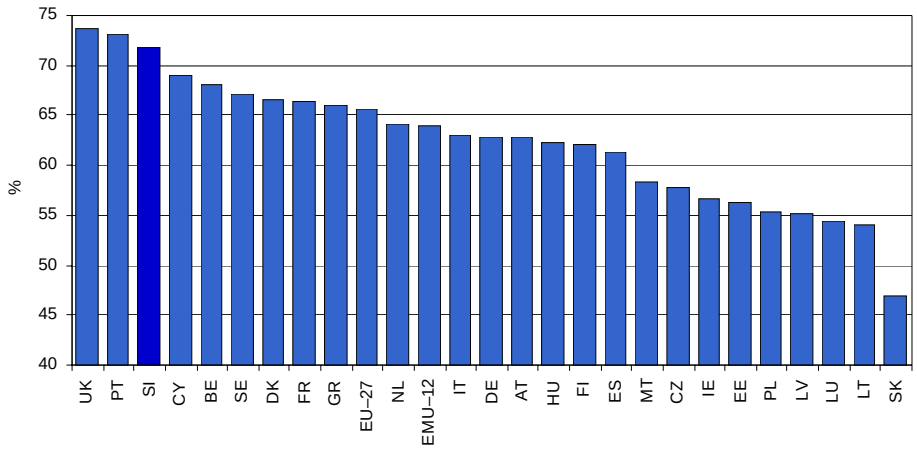
	Average annual growth rates in 1996-2006, in %	
	Labour productivity	Compensation of employees per employee
EU-25	3.6	3.1
EMU-12	2.6	2.0
Belgium	2.5	2.2
Czech Republic	9.6	10.2
Denmark	3.6	3.7
Germany	1.3	0.7
Estonia	14.9	13.0
Ireland	7.3	6.0
Spain	3.5	2.6
France	2.6	2.5
Italy	3.9	3.4
Cyprus	4.6	4.4
Latvia	13.3	12.8
Lithuania	15.6	15.8
Hungary	8.5	8.0
Netherlands	3.2	2.6
Austria	2.5	1.6
Poland	9.2	7.7
Portugal	4.1	5.3
Slovenia	6.1	4.9
Slovakia	10.2	9.1
Finland	3.2	2.8
Sweden	3.8	4.1
United Kingdom	6.4	6.6

Source: National Accounts, Eurostat; calculations by IMAD.

4.2.1.1. Ratios of labour costs to gross domestic product / gross value added (wage shares)

Despite the considerable decrease in the real unit labour costs seen over the past decade, the ratio of labour costs to GDP in the Slovenian economy in 2006 (71.8%) was still much higher than the average share of the euro area (63.9%). Among the EU-25 member states, only the UK (73.7%) and Portugal (73.1%) had higher labour cost to GDP ratios than Slovenia in 2006[13].

Figure 6: **Rations of labour costs to GDP in factor prices ('wage shares') in 2006**

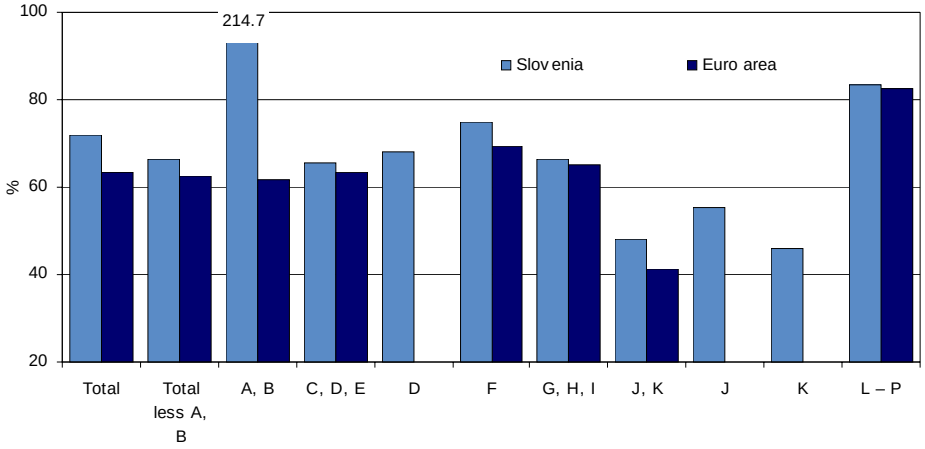


Source: Statistical Annex of European Economy, European Commission.

The divergences from the euro area average were largely caused by the specificity of the Slovenian agricultural sector.[14] If we exclude the agricultural sector, the differences in the achieved ratios in comparison with the euro area more than halve (the ratio for the Slovenian economy is 66.4%, for the euro area 62.7%; Figure 7). Nevertheless, among the 20 EU countries for which data are available, only Belgium and Sweden had higher labour cost to GDP ratios than Slovenia in the economy excluding the agricultural sector in 2005.[15] Looking at other sectors, the Slovenian industry, trade, transport and communication services and other services came fairly close to the euro area average according to the achieved ratios in 2005. However, a considerable divergence from the euro area average was still observed in the construction sector and even more in the financial services and business activities sector.

[13] According to European Commission estimates, Statistical Annex of European Economy (Spring 2007).
[14] With a high number of small farms and a much greater share of the self-employed.
[15] Data for the UK and Portugal are unavailable.

Figure 7: **Ratios of labour costs to gross value added ('wage shares') in the Slovenian economy and the euro area (12) by sector in 2005**



Source: National Accounts, Eurostat; National Accounts, SI-Stat data portal; calculations by IMAD.

The divergences are partly attributable to the different structure of the Slovenian economy compared with the average structure in the euro area. Slovenia notably has a smaller share of gross value added of the financial services and business activities sector in the gross value added of the total economy (11.2% over 15% in 2005). Moreover, the ratios of labour costs to gross value added are relatively lower in this sector, regardless of the already mentioned considerable divergence from the euro area. The share of trade, transport and communication services is similarly relatively lower (21.7% over 24.9%). On the other hand, the Slovenian economy has a much higher share of industry (28.4% over 17.7%) characterised by a large proportion of labour-intensive industries, which is, however, raising the ratios of labour costs to gross value added in the Slovenian economy.

The divergence from the euro area average is also linked to the higher tax wedge in Slovenia. Slovenia has an above-average ratio of taxes and contributions on labour to the total taxes and contributions. In 2004 (the latest available internationally comparable data) it totalled 54.4%, which is 3.8 p.p. above the EU-25 average (50.6%). Only Sweden, Germany, and Austria recorded even higher tax shares. On the other hand, the share of taxes on capital in Slovenia is low (10.6% in 2004), totalling only a good half of the average percentage recorded in the EU-25 (19.8%). Only Estonia had lower taxes on capital, Latvia and Lithuania had roughly the same shares as Slovenia, while Sweden, Germany, Finland, and Austria have only slightly higher taxes on capital than Slovenia. The calculation and comparison of implicit tax rates also shows that the tax burden on labour in Slovenia is above the average. In 2004, the implicit tax rate on labour in Slovenia was 37.8%, 1.9 p.p. more than the EU-25 average (35.9%). Ten member states had higher implicit tax rates (for more details see Development Report 2007).[16]

[16] Although labour taxation in Slovenia started to decrease gradually in 2004, a similar process has also taken place in other countries for which data for the period since 2004 are still unavailable. It is therefore still too early to assess the recent situation.

4.2.2. Real effective exchange rate

In 1996-2002, the improvement in Slovenia's cost competitiveness in comparison with its main trading partners was underpinned by the higher growth of Slovenia's productivity and the nominal depreciation of the Slovenian currency. The increase in Slovenian relative compensation of employees per employee, i.e. Slovenian compensation per employee in comparison with the trading partners, adjusted for exchange rate movements, was approximately three-quarters lower in this period.

Table 7: **Real effective exchange rate against 17 trading partners*; deflator: unit labour costs (ULC); annual growth rates in %**

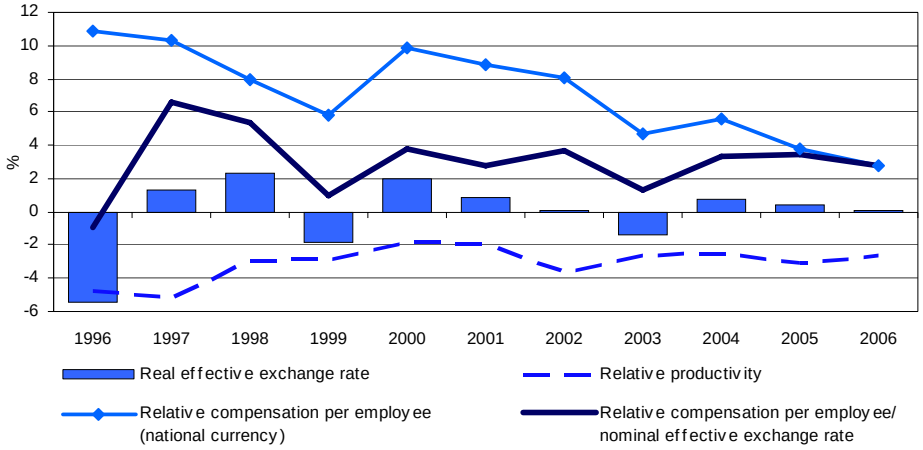
	1996-2000	2001	2002	2003	2004	2005	2006 estimate
Nominal effective exchange rate	-6.1	-5.7	-3.6	-0.5	-1.3	-0.7	0.2
Real effective exchange rate, ULC deflator – economy and components							
Real effective exchange rate	-2.0	-0.3	0.7	1.5	1.6	-0.2	-0.1
Relative unit labour costs in national currency**	4.4	5.8	4.5	1.9	3.0	0.6	-0.2
Relative compensation per employee in national currency***	7.7	7.5	7.6	4.0	4.9	3.2	2.2
Relative labour productivity****	3.2	1.6	3.1	2.1	1.9	2.6	2.4
Real effective exchange rate, ULC deflator – manufacturing and components							
Real effective exchange rate	-3.4	-1.6	-2.4	0.0	2.9	1.9	-1.7
Relative unit labour costs in national currency	2.8	4.4	1.3	0.5	4.3	2.7	-1.8

Source: BS; Main Economic Indicators, OECD; National Accounts, Eurostat; National Accounts, SI-Stat data portal; calculations by IMAD.

Notes: 'Relative' means 'in comparison with trading partners'. *Austria, Belgium, Germany, Italy, France, Netherlands, Spain, UK, Denmark, Sweden, Czech Republic, Hungary, Poland, Slovakia, USA, Switzerland, Japan. ***Nominal compensation of employees per employee relative to gross domestic product (value added) per employee. ***Nominal compensation of employees per employee. ****Real GDP per employee.

Following the slowdown in the nominal depreciation of the tolar against the euro on one hand and of inflation on the other, the growth of relative unit labour costs in the national currency also gradually eased off. As the tolar's exchange rate remained stable against the euro ever since entering the ERM II, the growth of the relative compensation per employee came very close to the growth of relative productivity in 2005 (at the aggregate level), whereas it is estimated to have lagged slightly behind it in 2006. Consequently, the cost competitiveness of the Slovenian economy in comparison with the main trading partners also remained stable. In 2005 and 2006, the tolar's real effective exchange rate measured by relative unit labour costs depreciated slightly against the 17 main trading partners (Table 7) and appreciated slightly against the main trading partners in the euro area (Figure 8).

Figure 8: **Real effective exchange rate against 7 euro trading partners*; deflator: ULC of the economy and components; annual growth rates in %**



Source: BS; National Accounts, Eurostat; National Accounts, SI-Stat data portal; calculations by IMAD.
Note: A decrease indicates improved competitiveness and vice versa. *Austria, Belgium, Germany, Italy, France, Netherlands, Spain.

Since having adopted the euro, Slovenia has conducted as much as 60% of its external trade in national currency. If wages grow faster than productivity in comparison with Slovenia's trading partners within the euro area, Slovenia's cost competitiveness deteriorates. Conversely, lower growth of Slovenian relative wages compared with relative productivity growth leads to its improvement. The euro fluctuates in international markets, and Slovenia's cost competitiveness against its trading partners outside euro area deteriorates in the event of the euro's nominal appreciation while it improves in the event of euro's depreciation.

5. Conclusion and recommendations

Wage policy in the past decade followed the guideline that real wage growth should lag behind productivity growth. Over the last ten years, real wage growth mostly lagged behind the growth of productivity measured by real GDP growth per employee according to the SNA. However, the gap has narrowed somewhat in recent years. The wage policy pursued in the past decade thus contributed to the lowering of inflation and an improvement of the Slovenian economy's competitiveness.

It is sensible that wage policy-making in the coming years should be based on the EU's integrated economic policy guideline. However, its application should also take into consideration the specific situation in the Slovenian economy, the international context, and methodological particularities. The general guideline, according to which wage growth should be consistent with the price stability goal and the trend in productivity over the medium term, is an appropriate basis for wage policy-making in the future. That said, its application should also take into account the following specific aspects:

- *The ratio between the growth of wages and productivity must be evaluated on the basis of nominal growth rates.* The analysis shows that measuring the nominal movements of wages and productivity is reasonable for two reasons: (i) to avoid the problem of using different deflators for the growth of wages and output, which distorts the actual ratio between the dynamics of productivity and wages; and (ii) to take account of all the changes in the terms of trade that affect the distribution of income between labour and capital and cost competitiveness. This means that the formulation and monitoring of wage policy must take into consideration nominal wage growth and the increase in the productivity trend, measured by nominal GDP growth per employee according to the national accounts statistics.

- *The application of price stability principles means that the inflationary goal of the European Central Bank must be taken into account as the projected inflation rate in wage policy-making.* Indexing wages to past inflation or to short-term price developments may cause one-off inflationary impulses to turn into a more persistent divergence of inflation from the equilibrium level. This may reduce competitiveness and therefore call for a more substantial downward adjustment of wages in the subsequent period in order to re-establish competitiveness. Since inflation in the medium term largely depends on monetary categories and monetary policy, and since monetary policy in the euro area aims at achieving the target 2% inflation, this is also the most probable assumption regarding the projected inflation in the coming years. This also means that the nominal growth of the trend in productivity should be calculated on the basis of the 2% target inflation in order to avoid the pitfall of indexing wages directly to short-term inflation swings through the calculated higher nominal productivity growth. Since the equilibrium inflation in the Slovenian economy is somewhat higher (estimated at around 2.5%) than in the euro area due to higher economic growth, it would be reasonable to carry out the changeover to the application of the ECB's inflationary goal gradually, over a period of several years.

- *Wage policy-making should also take the developments in other euro area countries into consideration.* Since the adoption of the euro, the growth of relative wages and relative labour productivity, i.e. Slovenian wages and productivity relative to those of its main trading partners, has become even more relevant for the cost competitiveness of the Slovenian economy. Since having joined the euro area, Slovenia has conducted as much as 60% of its external trade in the national currency. It would therefore be advisable to also take into account the past and projected wage and productivity movements in other euro area countries when conducting wage policy.

- *In view of the development level and structure of the Slovenian economy, the raising of competitiveness should remain an important guideline in wage policy-making.* The analysis of cost competitiveness indicators, which still shows a high share of labour costs in value added despite their ten-year decline (see Chapter 4.2.1.1.), and the analysis of the ratio between the movements of the compensation of employees per employee and of productivity in other EU countries (see Table 6) indicate that the guideline regarding the consistent growth of wages and productivity should be applied gradually over a period of several years.

- *In addition to wage policy, competitiveness can be significantly improved by measures aimed at raising value added and reducing other labour costs.* Although labour costs are an important factor of cost competitiveness, several other determinants also affect economic competitiveness. We refer mainly to the policies that may contribute to a faster increase in value added. These especially include the measures and policies that would stimulate R&D and innovation potential and boost the development of entrepreneurship by speeding up the restructuring of the economy towards higher value added and faster productivity growth. Along with these measures, the lowering of the tax wedge on labour should continue as well. In addition to moderate wage growth, tax measures can significantly help to reduce the real labour costs per employee.

It is sensible to use the general rule regarding the ratio between the growth of wages and productivity mainly as a guideline and a benchmark of the adequacy of wage developments rather than incorporating it directly into the wage adjustment mechanism. The automatic indexation of wages to productivity at the level of the total economy would limit the room for pay rises based on individual work performance or, if the difference between the negotiated and actual wages remained the same, would cause total wages to rise above productivity growth. In a period of declining economic growth, the adjustment of wages to previous growth of (higher) productivity would result in lower competitiveness. The adjustment of all earnings to general productivity would also cause excessive cost pressures on those enterprises or sectors that do not achieve average productivity growth. Therefore, the actual wage formation must also take into account the specific situation in individual sectors and companies which differ considerably both in terms of their past developments and structure and in terms of their projected productivity growth. In other words, the manner and extent to which productivity growth should be taken into account in wage formation should be agreed in a decentralised way rather than by means of a general adjustment formula.

Appendix: A more detailed overview of wage agreements concluded in Slovenia between 1996 and 2006

The first social agreement was concluded in 1995. It was agreed that the gross wage per employee should retain its real level from the previous year, assuming a 3%-4% increase in labour productivity.[17] The minimum wage was instituted to guarantee the minimum payment for work. Its amount was determined at a level of at least 40% of the average gross wage. In order to achieve these goals and ensure macroeconomic stability, wages were not fully indexed to inflation. The adjustment mechanism in both sectors provided for a quarterly adjustment based on previous actual consumer price rises. However, only around 85% of the price rise was taken into account (the percentages varied depending on the inflation rate). 1996 saw the adoption of a second social agreement, which did not significantly change the wage adjustment mechanism.

In 1997, wage policy was defined in the Act Regulating the Minimum Wage and the Method of Wages Adjustment, initially for two years. As inflation declined, the quarterly wage adjustments were replaced by annual adjustments. In January 1997 and 1998, gross wages in the public and private sectors were adjusted by 85% of the actual consumer price rise in the previous year.

The wage policy agreement for 1999-2001 defined a similar adjustment mechanism. It provided for a wage adjustment by 85% of the actual consumer price rise in the previous year in January. An extra adjustment was carried out in the middle of 1999 due to the introduction of VAT.[18] Wages were also additionally adjusted in the middle of 2000 in accordance with the safeguard clause incorporated in the adjustment mechanism for the event of high inflation. The agreement did not apply in 2001 due to changes in the adjustment mechanism.

2001 saw the gradual changeover to the adjustment of wages to projected inflation and the introduction of different wage adjustment mechanisms for the private and public sectors. Biannual adjustments were preserved in the adjustment mechanism up to and including 2003. In 2001, pursuant to the Wage Adjustment Agreement for the Public Sector, the adjustment mechanism accounted for 90% of the projected consumer price rise for the current year. The adjustments were made in January and August.[19] The August adjustment was disbursed selectively in order to reduce the wage disparities in the public sector. It was determined in sectoral collective agreements in the form of supplements, which did not affect the level of starting-level wages. The social partners for the private sector also agreed on a slightly different adjustment mechanism in 2001. In 2001, wages were adjusted by 92.5% of the inflation achieved in the first half of the year (backward-looking indexation) in accordance with the Wage Policy

[17] The specific adjustment mechanism was agreed in the Agreement on Wages and Other Remuneration in the Market Sector, which applied to the private sector.
[18] The agreement also determined the payment of a supplement for lower wages, but no contributions were paid for it because it was not part of the salary. The disbursement of this supplement was abolished at the end of 1999.
[19] In the case of inflation being higher or lower than projected, the difference would be covered in January's wages of the following year.

Agreement for 1999-2001. The agreed wage adjustment for January 2002 was 2.7%, which accounted for 90% of the inflation projected in the second half of 2001. This was the beginning of the changeover to a forward-looking wage adjustment mechanism based on projected inflation. The agreed mechanism was initially more favourable for the private than for the public sector. Even if the increase in the public sector's base wages for the second (August) adjustment were taken into account, such an 'amended' adjustment mechanism would still be more favourable for the private sector. For the first time, the mechanism also incorporated a safeguard clause for higher than projected inflation, which was also retained in all the subsequent adjustment mechanisms negotiated by the social partners.

The differences in the adjustment mechanisms for the private and public sectors continued in 2002 and 2003. The Annex to the Collective Agreement for the Public Sector defined an adjustment mechanism that accounted for approximately 90% of the estimated consumer price rise. The adjustment was agreed to be carried out twice a year, in January and August. The August 2.4% adjustment for 2003 was not carried out; instead, it was channelled to the collective supplementary pension insurance of public sector employees. In the private sector, the Wage Policy Agreement for 2002-2004 provided for an adjustment mechanism that also specified two adjustments a year (in January and August), taking into account the estimated consumer price rises for 2002 and 2003. For these two years, the agreed mechanism was again more favourable for the private sector.

2003 saw the adoption of the Social Agreement for 2003-2005. In the area of wages, it was agreed that the wage adjustment mechanism should also take into account the estimated consumer price rise for the EU and the EUR/SIT exchange rate, in addition to the estimated consumer price rise for Slovenia. The social partners also explicitly included the guideline that wage growth should lag behind productivity growth.

The adjustment mechanisms for 2004 and 2005 for both the private and public sectors maintained the guideline from the Social Agreement for 2003-2005 and retained annual wage adjustments. In the private sector, the adopted Private Sector Wage Policy Agreement for 2004-2005 provided for an adjustment by a uniform amount in August. The purpose of the uniform adjustment in amount was to reduce the range between the highest and lowest gross wages defined in collective agreements, and to ensure that all workers received this supplement. In these two years, the adjustment mechanism was more favourable in the private than in the public sector. The Agreement on the Level and Adjustment of Base Wages and the Amount of Holiday Allowances for 2004-2005, adopted in the public sector, already anticipated that the Collective Agreement for the Public Sector, together with all sectoral collective agreements and other regulations required for wages to start being disbursed according to the Salary System in the Public Sector Act, would also be adopted in 2004. While starting-level wages were adjusted previously, the new Agreement, pursuant to the law, determined the adjustment of base wages. The adjustment mechanism determined a splitting of the adjustment percentage into two parts; the first half was to be earmarked for the general wage adjustment while the other half would be set aside for the elimination of wage disparities in the public sector. The general wage adjustment

was carried out in July. The amended Salary System in the Public Sector Act for 2004-2005 also provided for a slightly higher percentage of the general wage adjustment (taking into account 87% of inflation in 2004 and 87% of inflation in 2005) and a correspondingly lower percentage for the elimination of wage disparities in the public sector. In this period, wages were not paid in accordance with the new wage system yet, and wage disparities could therefore not be redressed on a continuous basis. The release of funds set aside for the elimination of wage disparities in the public sector will be enabled when salaries are disbursed in accordance with the Salary System in the Public Sector Act.

The adjustment mechanism for 2006, set out in the Act Amending the Salary System in the Public Sector Act, determined a 2.35% adjustment of public sector wages in July. The actual adjustment in July totalled 1.35%, while the remaining fraction of the adjustment percentage was set aside for the elimination of wage disparities.

In the private sector, the adjustment mechanism for 2006 and 2007 was defined in the Collective Agreement on the Wage Adjustment Mechanism, Reimbursement of Work-Related Costs, and Holiday Allowances. According to this mechanism, wages are adjusted by 2% in August in both years. While the collective agreement applies to all workers in the private sector, employers and employees could also negotiate a higher adjustment percentage in sectoral agreements.

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