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SUMMARY

Last year, the public finance deficit in the EU as a whole narrowed for the first time since the beginning of the crisis and debt growth eased. In most EU countries fiscal consolidation measures were focused on reducing expenditure, primarily by streamlining public sector operations, restricting hiring and intervening in wages and social transfers. In some countries, short-term measures were complemented with systemic changes geared towards long-term sustainability of public finances, particularly in the area of pensions. On the revenue side, several countries introduced changes to tax legislation, i.e. towards additional taxation of consumption and wealth and changes aimed at relieving the tax burden on the economy. After a significant acceleration in 2009, the growth of the general government debt in the EU and euro area as a whole slowed somewhat in 2010 and 2011, but was still much higher than before the crisis. In the whole period, the increased borrowing was, besides high primary deficits and growing expenditure on debt servicing, significantly affected by the financing of a number of anti-crisis measures that were focussed primarily on ensuring the stability of the financial system, in particular the increase of capital of financial entities.

Government bond yields in the most exposed euro area countries are still high and financial market conditions remain uncertain. Uncertainties about the resolution of the sovereign debt crisis in the euro area are reflected in higher costs of borrowing for almost all euro area countries, especially the most indebted, i.e. the most exposed, countries, including Slovenia. The yields, which declined temporarily mainly due to nonstandard measures of the ECB, which alleviated liquidity problems of the euro area banking system by means of longer-term refinancing operations, have been growing again since April. Regardless of great consolidation efforts planned in a number of euro area countries for this year and 2013, distrust of financial markets remains high under the strong impact of economic and political conditions, particularly in the most heavily indebted countries.

At the EU level, legislative documents were adopted last year to reinforce coordination of fiscal policies. Next year the so-called fiscal pact should enter into force for euro area countries, introducing a balanced budget rule; furthermore, permanent financial stability mechanisms were created. The new legislative package aimed at strengthening economic governance and coordination of fiscal policies introduces stricter financial supervision in the EU and determines the procedure of sanctions. A further step towards a closer coordination of fiscal policies is the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (i.e. fiscal pact) signed in January 2012, which introduces a balanced budget rule and is binding on euro area countries. The treaty is foreseen to enter into effect on 1 January 2013 and the contracting countries will have to transpose the balanced budget rule into national legal systems, i.e. constitutional or equivalent legislative documents, at the latest one year after the treaty will enter into force. To ensure long-term stability of the euro area, the governments also agreed to create more permanent financial stability mechanisms. A permanent rescue fund named the European Stability Mechanism (ESM) will enter into force in July 2012, and its lending capacity, together with that of the temporary fund (ESFS), which will run in parallel until the middle of 2013, will total EUR 940 bn. Against the background of government efforts for deficit reduction and closer coordination of fiscal policies, calls for initiatives that would boost growth and employment in line with the already adopted Europe 2020 strategy have been gaining momentum at the level of the EU.

Unlike in most EU countries, the general government deficit in Slovenia grew somewhat in 2011 and reached the highest level since 1995. After remaining at a relatively high level (around 6% of GDP) in 2009 and 2010, the deficit grew somewhat again last year and totalled 6.4% of GDP. In 2011, the deficit thus exceeded by 0.9 p.p. the deficit envisaged in last year's Stability Programme. The principal reason for the increase in deficit and the divergence from the consolidation targets was expenditure relating to equity injections and the takeover of debts from certain public companies (in the amount of 1.3% of GDP). The increase in the debt-to-GDP ratio was also affected by a decline in economic activity. Excluding expenditure on capital transfers, other expenditures together were even lower than foreseen in nominal terms, owing to a substantial decline in government investment and subsidies; expenditure on goods and services also shrank more than expected.

The general government debt is approaching 50% of GDP and is growing faster than the euro area average. The debt started to increase more rapidly in 2009, when it rose by as much as EUR 4.3 bn (or 13.4 p.p.) due to the borrowing related to deficit increase and due to the pre-financing of the borrowing requirement for 2010. In 2010 and 2011, the debt continued to grow. In 2011, the increase was also a result of the prefinancing of the borrowing requirement for 2012. At the end of 2011, Slovenia's general government debt was almost double the level in 2008. Although it is still much below the euro area average, it grew relatively faster in the past three years (by 25.7 p.p. of GDP; in the euro area by 20.0 p.p. of GDP), which is affecting the perception of Slovenia in international financial markets.

With modest consolidation efforts in previous years, achieving the fiscal goals will be even more challenging in the changed macroeconomic environment. Amid the tightened situation on financial markets, limited access of the

government to sources of finance and the deteriorated conditions and prospects in the domestic environment and abroad, the pace of consolidation will have to be faster. Another important reason for the more rapid consolidation is the provisions of the new EU fiscal framework and stricter sanctions for Member States. Since there was no progress in fiscal consolidation in Slovenia in the past two years, a relatively greater fiscal effort is now needed to bring the deficit below 3% of GDP in 2013. Given the commitments under the excessive deficit procedure, this is also necessary to increase the credibility of the country and improve the perception of financial markets, which would help Slovenia lower the borrowing costs and keep them on a sustainable track.

The Stability Programme – 2012 Update (PS 2012) anticipates that the excessive deficit will be corrected in 2013, in line with the recommendations of the Council in the excessive deficit procedure. After therevision of the state budget and enforcement of the amendments to the Public Finance Balance Act (ZUJF),[1] which also refer to other general government budgets and extra-budgetary users, the general government deficit is set to decline by 2.9 p.p. this year and total 3.5% of GDP. This year's stability programme projects that the deficit will decline below 3% of GDP in 2013 (2.5% of GDP). The fiscal consolidation strategy primarily relies on cutting general government expenditure, but it also foresees measures to improve the efficiency of collection and the quality of general government revenue, and introduces tax incentives for R&D and investment to simulate economic activity. By implementing the measures, the government is thus, consistent with the Council recommendations, planning to correct the excessive deficit by the end of 2013, and reduce the deficit to 0.4% of GDP and restore the structural balance of public finances by the end of the programming period.

The Stability Programme 2012 sets more ambitious goals for deficit reduction. For the first time, expenditure will also decline in nominal terms. Moreover, the expected reduction is mainly based on the already adopted and negotiated measures, which have greater credibility. This is a positive step and a shift from the previous approach that relied only on interventions in the flexible part of the budget, which required practically no legislative changes. Expenditure reduction, now supported by legislative changes, is based on three sets of measures: (i) rationalising public sector operations; (ii) limiting investments, subsidies and programmes; and (iii) adjusting labour market and social security policies. The rationalisation of the public sector involves organisational changes and interventions in the area of wages and other labour costs and employment. Reforms and modernisation of individual policies are meant to gradually lower expenditure on labour market, health care and social security policies. The fiscal effort is higher than planned in the Stability Programme 2011, and this year and in 2013 expenditure is also expected to decline in nominal terms. Taking into account both the adopted and planned measures, the decline will be mainly due to lower compensation of employees and lower expenditure on goods and services and social transfers. This year's stability programme also envisages measures that will affect tax revenue in the programming period, i.e. raising taxes or introducing new taxes, as well as measures to stimulate economic activity, such as lowering the corporate income tax burden and increasing tax relief for investment.

In the short-term, the adopted austerity measures are a crucial step in reducing the deficit below the upper ceiling of 3% of GDP. The adopted fiscal consolidation measures will make it possible for Slovenia to reach its commitments under the excessive deficit procedure and are therefore essential, although they are still mainly intervention measures in nature. Moreover, they do not always ensure equal conditions for all budget users, particularly as regards material costs and funds for investments. This means that they do not ensure a sustainable reduction of the public finance deficit, as they can lead to a deterioration of the quality of certain public services already in the medium term. The latter mainly holds true for measures in the areas of education, research and health care. Furthermore, employment policy measures are mainly focussed on restricting hiring, which can amid the anticipated pace of retiring and restrictive wage policy deteriorate the quality and efficiency of public services in the medium term. It should be noted that greater cuts will have a stronger negative impact on economic activity, particularly in the first years of the implementation of measures, which calls for a prudent combination of further economic policy measures. An increase or introduction of indirect taxes should also be considered in this context, as these taxes have relatively smaller adverse effects on economic growth. Besides by changing environmental taxes, general government revenue could also be increased by raising value added tax, a possibility which is otherwise foreseen in the ZUJF only for the case of a fiscal emergency. In this context, it is crucial to avoid a spillover of higher tax rates into the growth of wages and transfers through adjustment to inflation. The latter would lead to renewed growth in general government expenditure and would have a negative impact on the competitiveness and employment in the entire economy.

In the medium term, more far-reaching structural measures will be needed to achieve the sustainability of public finances. The solutions should involve a further rationalisation of public sector operations by structural measures for increasing efficiency and restructuring that will be geared towards the strengthening of the role of development expenditure in promoting competitiveness and ensuring long-term sustainability of social security systems. Another challenge is finding more permanent solutions in the area of recruitment in the public sector that would, by a combination of more accommodating employment and wage policies, create a stimulating environment for employees and improve

[1]The Public Finance Balance Act, which intervenes in more than 39 sectoral laws, was adopted by the National Assembly on 12 May 2012.

their efficiency. The foreseen reduction of investments, with a risk of further cuts, will also weigh on the economic recovery. It is therefore crucial to ensure the anticipated co-financing from EU funds by high-quality projects, and to strengthen public-private partnership as envisaged. As regards subsidies, subsidies for private companies are declining in particular, although the continuing subsidies granted for financing certain public companies are more problematic from the perspective of development. In the future, the granting of subsidies should be to a greater extent supported by a comprehensive industrial policy and a system for monitoring and assessing their effects. However, the implementation of changes in social protection systems (in particular pension reform) remains of crucial importance for the sustainability of public finances already in the medium term. The Stability Programme envisages that these reforms will be put in place already by the end of 2013, which is essential for achieving the set goals.

Preserving the general government debt at a sustainable level will be a key challenge for fiscal and other economic policies in the coming years. General government debt and the costs of its financing are growing. Expenditure on interest is thus, given Slovenia's obligations to correct the excessive deficit and stabilise public finances in the medium term, to a certain extent crowding out expenditure for other purposes. Risks for even faster debt growth also remain high. In the coming years, the level of general government debt may also be affected by other factors besides the need for financing the deficit and refinancing debt liabilities. Amid the growing debt problems in certain euro area countries, the increase in the yields of government bonds may spill over across the entire area, which would also raise the costs of Slovenia's borrowing. This could also be the case if Slovenia's credit rating fails to improve. However, if financial markets lose confidence in Slovenia's commitment to push through with the consolidation measures and the stabilisation of the financial sector, it will be even more difficult to secure funds for financing the deficit and refinancing debt liabilities. Moreover, more expensive borrowing would hurt the quality of public finances, as growing expenditure on interest would crowd out the more flexible expenditure, which could weaken the development role of public finances. Difficulties in accessing sources of finance would also affect private sector borrowing, which would in turn deteriorate Slovenia's competitiveness and its potential for future economic development.

Introduction

Altered macroeconomic conditions have only further enhanced the challenges facing economic policy makers in seeking to attain the planned consolidation objectives. EU public finances remain fraught and the deepening of the debt crisis is keeping yields on state bonds high, which calls for closer coordination of fiscal policies, especially among members of the euro area. In these conditions, Slovenia is trying to deal with the challenge of reducing the general government deficit to below 3% of GDP in 2013 in order to honour its commitments in the excessive deficit procedure and to regain access to financing on international markets. This year will mark the first after the start of the crisis in which a significant fiscal effort will be undertaken to realise the goals on measures that were negotiated and transposed into law, though there are persistent risks that may require additional expenditure-side measures. In the short term, the adopted austerity measures are an essential step in bringing the deficit below the ceiling, but over the medium term broader and more consistent solutions involving structural interventions will be needed, especially in the area of social security systems.

The fiscal chapter of this year's report focuses on analysis of the state of public finances and the assessment of the planned consolidation of public finances. The first sections present the developments in public finances in the EU and the budget aggregate trends in Slovenia, including an analysis of cyclical and structural factors, financial flows between Slovenia and the EU budget, public debt, and the long-term sustainability of public finances linked to the costs of population ageing. The report goes on to present a comparison of tax burdens in Slovenia and the EU and the structure of expenditure in Slovenia and the EU, while a special box is dedicated to the assessment of the efficiency and effectiveness of state aid in Slovenia. A special section is also dedicated to a model assessment of the efficiency of various combinations of economic policies for consolidation. This is followed by a section presenting a critical assessment of the consolidation of public finances in this year's Stability Programme. Finally, the report presents potential guidelines for promoting a sustainable consolidation of public finances while preserving and enhancing their development role.

1. Fiscal Development and Policy in the EU

After two years the general government deficits in the majority of countries dropped last year. Having averaged above 6% in the EU and the euro area in 2009 and 2010, the general government deficit dropped considerably last year, decreasing to 4.5% of GDP in the euro area and 4.1% of GDP in the EU. Based on assessments of cyclical and structural elements of the deficit, the European Commission (EC) concluded that last year's improvement of public finances was a result of structural factors. Almost all EU countries cut their deficits, Cyprus and Slovenia being the only exceptions. In its Spring Forecast 2012, the European Commission expects a further improvement of public finances this year and next in the euro area and the EU (3.2% and 3.6% of GDP, respectively, this year and next in the euro area; 2.9% and 3.3% of GDP this year and next, respectively, in the EU).

The consolidation measures in the majority of the Member States have been targeted at streamlining expenditure, but several countries also adopted revenue-side measures. In the majority of the Member States, measures were taken to cut general government expenditure, in particular with changes affecting the organisation of the public sector and social and pension transfers. Most Member States embarked on a streamlining of the public sector by freezing or reducing employment, while several also reduced public sector wages.[2] On the revenue side, many countries changed tax legislation with a view to increasing taxation on consumption[3] and property, and alleviating the burden on the economy. Short-term measures have been coupled with structural changes, as some Member States started carrying out pension reforms, which will have a long-term positive impact on their public finances.

The majority of EU countries are still formally subject to excessive deficit procedures. Following the severe deterioration of public finances, 23 EU countries are still formally subject to excessive deficit procedures over their breach of 3% of the GDP deficit ceiling, as defined in the Stability and Growth Pact. In 2011, 17 countries[4] were still non-compliant; the EC estimates twelve will still be in breach in 2012. For most Member States, including Slovenia, the EC set 2012 or 2013[5] as the deadline for

[2] For detailed overview of measures on employment and public sector wages in individual Member States, See IMAD Development Report 2012, Box 1, p.15.

[3] Thirteen Member States increased VAT rates (see also Section 7) and many also raised excise duties on tobacco and alcohol (e.g. Slovakia, France, Ireland, Romania, UK) while several introduced or increased the taxation of real estate (e.g. Austria, Slovakia, Cyprus, Italy).

[4] Some Member States had already reduced deficits to below 3% in 2011, but excessive deficit procedures have not yet been formally completed.

[5] 2014 for Greece and the United Kingdom, 2015 for Ireland and 2011 for Bulgaria, Malta and Finland.

Table 1: **Actual and cyclically adjusted general government balances in EU countries[6]**

	Actual balance (as a % of GDP)						Cyclically adjusted balance (as a % of GDP)					
	2007	**2008**	**2009**	**2010**	**2011**	**2012***	**2007**	**2008**	**2009**	**2010**	**2011**	**2012***
Belgium	-0,3	-1,0	-5,6	-3,8	-3,7	-3,0	-1,4	-1,9	-4,3	-3,2	-3,5	-2,2
Germany	0,2	-0,1	-3,2	-4,3	-1,0	-0,9	0,9	-1,1	-1,3	-3,5	-1,0	-0,4
Estonia	2,4	-2,9	-2,0	0,2	1,0	-2,4	-1,5	-4,6	1,0	2,6	1,5	-1,8
Ireland	0,1	-7,3	-14,0	-31,2	-13,1	-8,3	-1,5	-7,3	-11,7	-29,2	-12,0	-7,8
Greece	-6,5	-9,8	-15,6	-10,3	-9,1	-7,3	-8,0	-10,7	-15,0	-8,7	-5,4	-2,6
Spain	1,9	-4,5	-11,2	-9,3	-8,5	-6,4	1,2	-4,6	-9,3	-7,4	-6,9	-4,5
France	-2,7	-3,3	-7,5	-7,1	-5,2	-4,5	-4,1	-3,8	-6,2	-5,8	-4,1	-3,1
Italy	-1,6	-2,7	-5,4	-4,6	-3,9	-2,0	-3,0	-3,3	-3,3	-3,4	-2,9	-0,6
Cyprus	3,5	0,9	-6,1	-5,3	-6,3	-3,4	2,7	-0,2	-5,9	-5,0	-6,0	-2,7
Luxembourg	3,7	3,0	-0,8	-0,9	-0,6	-1,8	1,4	1,7	1,3	0,5	0,5	-0,6
Malta	-2,4	-4,6	-3,8	-3,7	-2,7	-2,6	-2,2	-5,1	-2,9	-3,2	-2,6	-2,5
Netherlands	0,2	0,5	-5,6	-5,1	-4,7	-4,4	-1,1	-0,7	-4,1	-4,0	-3,5	-2,4
Austria	-0,9	-0,9	-4,1	-4,5	-2,6	-3,0	-2,0	-1,8	-2,7	-3,6	-2,6	-2,7
Portugal	-3,1	-3,6	-10,2	-9,8	-4,2	-4,7	-3,5	-3,6	-8,9	-9,1	-3,0	-2,6
Slovenia	0,0	-1,9	-6,1	-6,0	-6,4	-4,3	-3,1	-5,1	-4,4	-4,5	-5,0	-2,2
Slovakia	-1,8	-2,1	-8,0	-7,7	-4,8	-4,7	-3,7	-4,2	-7,5	-7,4	-4,7	-4,3
Finland	5,3	4,3	-2,5	-2,5	-0,5	-0,7	2,8	2,7	0,7	-0,6	0,5	0,3
EMU-17	-0,7	-2,1	-6,4	-6,2	-4,1	-3,2	-1,9	-2,9	-4,6	-5,1	-3,3	-2,0
Bulgaria	1,2	1,7	-4,3	-3,1	-2,1	-1,9	-0,3	-0,2	-3,1	-1,6	-1,0	-0,7
Czech Republic	-0,7	-2,2	-5,8	-4,8	-3,1	-2,9	-3,1	-4,4	-5,2	-4,5	-2,8	-2,1
Denmark	4,8	3,2	-2,7	-2,5	-1,8	-4,1	2,7	2,4	0,6	0,1	0,2	-2,6
Latvia	-0,4	-4,2	-9,8	-8,2	-3,5	-2,1	-4,3	-6,5	-6,9	-5,6	-2,3	-1,2
Lithuania	-1,0	-3,3	-9,4	-7,2	-5,5	-3,2	-3,5	-5,3	-6,8	-5,0	-4,6	-2,6
Hungary	-5,1	-3,7	-4,6	-4,2	4,3	-2,5	-6,4	-4,8	-2,2	-2,4	5,3	-1,3
Poland	-1,9	-3,7	-7,4	-7,8	-5,1	-3,0	-2,8	-4,6	-7,1	-7,5	-5,0	-2,7
Romania	-2,9	-5,7	-9,0	-6,8	-5,2	-2,8	-5,3	-8,8	-9,1	-5,9	-4,4	-1,7
Sweden	3,6	2,2	-0,7	0,3	0,3	-0,3	1,7	1,8	2,5	1,1	0,0	0,3
UK	-2,7	-5,0	-11,5	-10,2	-8,3	-6,7	-4,2	-5,4	-9,6	-8,9	-6,9	-5,1
EU-27	-0,9	-2,4	-6,9	-6,5	-4,5	-3,6	-2,2	-3,2	-5,1	-5,4	-3,6	-2,4

Source: Eurostat, EC Spring Economic Forecast 2012.

Note: * EC forecast.

bringing their deficits back below the reference value. Countries subject to excessive deficit procedures have to provide regular progress reports to the EC on their measures to consolidate their public finances. In the event of unforeseen economic circumstances that significantly diverge from the estimate in the recommendation for the deadline may be extended. Closer coordination of fiscal policies in the EU tightened the surveillance correction of excessive deficit, of measures within the excessive deficit procedure, in particular in euro area countries. Countries that do not follow EU Council recommendations for the correction of the excessive deficit and adjustment to the medium-term fiscal objective may face sanctions under the new regulations and the fiscal compact treaty.

Having surged in 2009, general government debt growth generally slowed in the EU and the euro area last year and the year before that, but it will continue to grow this year and next according to EC estimates.

[6] The EC's estimate of the cyclically adjusted balance for Slovenia differs from IMAD estimates (see Section 2.1). The differences are expected, as the calculation depends on numerous assumptions and forecasts, mostly as a result of different estimates of the output gap (there are several differences in input data on the number of employees according to the statistics of national accounts due to a break in the series, and in the estimate of capital; the calculation is also affected by differences in GDP forecasts and components) and certain methodological differences (NAWRU calculation).

Table 2: **General government debt, as a % of GDP**

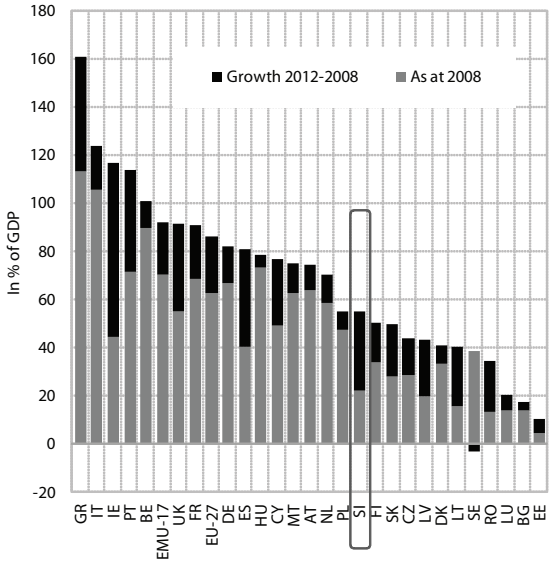
	2007	2008	2009	2010	2011	2012*
Belgium	84,1	89,3	95,8	96,0	98,0	100,5
Germany	65,2	66,7	74,4	83,0	81,2	82,2
Estonia	3,7	4,5	7,2	6,7	6,0	10,4
Ireland	24,8	44,2	65,1	92,5	108,2	116,6
Greece	107,4	113,0	129,4	145,0	165,3	160,6
Spain	36,2	40,2	53,9	61,2	68,5	80,9
France	64,2	68,2	79,2	82,3	85,8	90,5
Italy	103,1	105,7	116,0	118,6	120,1	123,5
Cyprus	58,8	48,9	58,5	61,5	71,6	76,5
Luxembourg	6,7	13,7	14,8	19,1	18,2	20,3
Malta	62,1	62,3	68,1	69,4	72,0	74,8
Netherlands	45,3	58,5	60,8	62,9	65,2	70,1
Austria	60,2	63,8	69,5	71,9	72,2	74,2
Portugal	68,3	71,6	83,1	93,3	107,8	113,9
Slovenia	23,1	21,9	35,3	38,8	47,6	54,7
Slovakia	29,6	27,9	35,6	41,1	43,3	49,7
Finland	35,2	33,9	43,5	48,4	48,6	50,5
EMU-17	66,3	70,1	79,9	85,6	88,0	91,8
Bulgaria	17,2	13,7	14,6	16,3	16,3	17,6
Czech Republic	27,9	28,7	34,4	38,1	41,2	43,9
Denmark	27,5	33,4	40,6	42,9	46,5	40,9
Latvia	9,0	19,8	36,7	44,7	42,6	43,5
Lithuania	16,8	15,5	29,4	38,0	38,5	40,4
Hungary	67,0	73,0	79,8	81,4	80,6	78,5
Poland	45,0	47,1	50,9	54,8	56,3	55,0
Romania	12,8	13,4	23,6	30,5	33,3	34,6
Sweden	40,2	38,8	42,6	39,4	38,4	35,6
UK	44,4	54,8	69,6	79,6	85,7	91,2
EU-27	59,0	62,5	74,8	80,2	83,0	86,2

Source: Eurostat, EC Spring Economic Forecast 2012.

Note: * EC forecast.

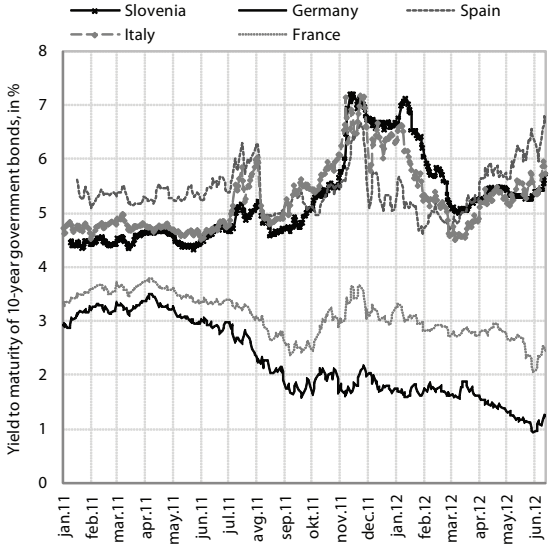
In the previous three years, general government debt as a share of GDP rose by 20.5 p.p. on average in the EU and 17.9 p.p. in the euro area; in 2011 and 2010, growth slowed down, but it was still substantially higher than in the period before the crisis. The EC estimates that increased borrowing over the entire period has been driven by high primary deficits and increased expenditure on interest, coupled with the financing of off-budget expenditure that the countries channelled (as part of stimulus measures) into securing the stability of the financial system, in particular the recapitalisation of financial firms. On top of the measures that directly increased debt, many Member States last year issued extensive guarantees in conformity with existing state aid rules, which has increased contingent liabilities that will be realised if the guarantees are called up. Ireland, Greece, Portugal and Spain saw the highest debt increase in the euro area (as a % of GDP), while four countries actually reduced debt (Latvia, Sweden, Hungary and Luxembourg). For this year, the EC forecast a renewed uptick in debt growth, in the euro area as well as in the EU. The trend will be driven in particular by stock-flow adjustment, which *inter alia* includes differences between cash based expenditure and expenditure according to the accrual principle, financial transactions and changes in value. Furthermore, debt growth will be driven to a greater extent than in previous years by growing interest expenditure; in accounting terms, debt will increase due to the projected contraction of GDP. For the first time since 2008, the average primary balance in the euro area will be balanced (surplus of 0.7% of GDP in the EU) and will not contribute to increasing debt this year.

Figure 1: **General government debt increase in EU countries, 2009–2012***



Source: Eurostat, EC Spring Economic Forecast 2012.
Note: * EC forecast.

Figure 2: **Yield to maturity of 10-year government bonds in selected countries, in %**



Source: Bloomberg.

Yields on the government bonds of the most high-risk euro area countries remain high and the situation on the financial markets uncertain. After a relatively calm period in the summer months of 2011 during which yields changed little, the situation on bond markets in Europe escalated in November. Uncertainty over the tackling of the debt crisis in the euro area, where Italy became the latest country to come under strong pressure from markets, raised the price of borrowing for virtually all euro area countries. In addition to Greece and Italy, which saw the yields on their bonds surge to record levels, yields also increased on other heretofore less-exposed countries, including Slovenia. Yields temporarily dropped in February and March, largely due to non-standard ECB long-term financing operations that mitigated the liquidity problems of the euro area banking system, but the yields on the bonds of some of the most exposed countries, in particular Spain, surged again in April. Despite strong consolidation efforts planned by many euro area countries for this year and next, the distrust of financial markets remains high due to the strong impact of economic and political circumstances, especially in the most indebted countries.

The new legislative package enhances the provisions of the Stability and Growth Pact on fiscal surveillance and by introducing sanctions against non-compliant countries. A new set of rules (the so-called "Six-Pack") strengthening economic governance and fiscal policy coordination in the EU entered into force in December 2011.[7] In fiscal policy, the new legislation expanded the provisions of the Stability and Growth Pact by strengthening fiscal surveillance and introducing sanctions against non-compliant countries that fail to follow the EU Council recommendation on the correction of the excess deficit and adjustments towards medium-term budgetary objectives.[8] Expenditure growth for countries not complying with medium-term budgetary objectives is limited (expenditure growth may not exceed the rate of medium-term economic growth). The new legislative package also lends greater weight to compliance with the provisions of the Stability and Growth Pact on general government debt (60% of GDP). The rules allow for the commencement of procedures against a member state that fails to reduce debt by a twentieth of the difference between actual and permitted debt over a three-year period, even if its deficit is below 3% of GDP. There are also more stringent requirements concerning Member States' budgetary frameworks. Budgeting must be underpinned by independent macroeconomic forecasts that the Commission will assess with in-depth country studies of the economic assumptions, comparisons with the forecasts of other institutions, and an estimate of the precision of past forecasts. In addition to enhancing fiscal policy coordination, the legislative package also introduces stronger surveillance of macroeconomic imbalances and allows for the launch of an excessive imbalance procedure in the event of excessive macroeconomic imbalances.

The legislative package introduces stricter fiscal surveillance of euro area countries and procedures for sanctions for non-compliance within excessive deficits or excessive macroeconomic imbalances procedures.

[7] It comprises five regulations and one directive.
[8] The medium-term objective (MTO) is the target budgetary balance that a Member State should achieve in order to secure the sustainability of public finances. It is defined as a structural deficit (actual deficit excluding the effects of the business cycle and one-off or temporary measures according to ESA-95 methodology).

The regulation on the effective enforcement of budgetary surveillance in the euro area stipulates that an interest-bearing deposit of 0.2% of GDP is imposed on a country that is close to an excessive deficit and deviates significantly from the medium-term budgetary objective. The deposit is released with the accrued interest if the situation giving rise to the obligation to lodge that deposit has come to an end. The reinforced preventive arm of the Stability and Growth Pact also introduces limitations on permitted annual expenditure growth as long a country is in the process of adjustment to its medium-term budgetary objective. The corrective arm of the Stability and Growth Pact also enhances surveillance and introduces stricter sanctions. If a country is already in excessive deficit procedure and a particularly grave non-compliance with the obligations and recommendations for corrective action is established, it faces sanctions in the form of a non-interest bearing deposit of 0.2% of GDP.[9] If the country does not take effective measures to correct the excessive deficit within the given term, it must pay a fine in the amount of 0.2% of GDP.[10] Non-compliance with the provision on general government debt carries a fine in the amount of 0.2% of GDP. Over-indebted countries subject to excessive deficit procedure have a three-year adjustment period, provided they nevertheless take appropriate corrective action to reduce the deficit in that period. Non-compliant countries subject to excessive macroeconomic imbalances procedure must lodge an interest-bearing deposit worth 0.1% of GDP, which turns into a fine in the event of long-term non-compliance. Tighter fiscal surveillance further includes a fine of 0.2% of GDP for misrepresenting statistical deficit and debt data (intentionally or by serious negligence). All decisions on sanctions are adopted by the Economic and Financial Affairs Council at the recommendation of the Commission with reverse qualified majority voting (the proposal is adopted unless a qualified majority of Member States vote against it). The total value of financial sanctions against a non-compliant Member State may not exceed 0.5% of GDP.

The next step towards even closer coordination of fiscal policy is the fiscal compact treaty, which introduces the balanced budget rule. The fiscal problems of the most indebted euro area countries and the possibility of a deepening of the debt crisis in the euro area called for closer coordination of fiscal policies and securing financial stability in the single currency area. To achieve this, in January 2012 EU countries (with the exception of the Czech Republic and the United Kingdom) signed the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (i.e. the fiscal compact) that is binding on euro area countries. Its purpose is to additionally enhance fiscal discipline in the euro area by instituting a balanced budget rule requiring that the structural deficit in normal circumstances may not exceed 0.5% of GDP,[11] while deviations trigger an automatic corrective mechanism that each Member State determines in accordance with the principles recommended by the Commission. In accordance with the fiscal compact, compliance with the rule at national level will be monitored by independent institutions. The treaty will enter into force when it is ratified by at least 12 euro area countries; the projected date of entry into force is 1 January 2013. The contracting parties must transpose the balanced budget rule into their national legal systems one year after the entry into force of the Treaty, either by amending their constitution or adopting a legislative instrument with equal force. Failing to do that, they face a fine of up to 0.1% of GDP.

In order to secure the long-term stability of the euro area, efforts to create more permanent financial stability mechanisms also continued this year. The permanent European bailout fund, ESM, which will replace the temporary EFSF facility, will become operational in July 2012. Access to ESM aid will be conditional on the implementation of policy measures based on a macroeconomic adjustment programme and a thorough analysis of the sustainability of treasury borrowing, to be carried out by the Commission and the IMF in liaison with the ECB. EU leaders have agreed that the EFSF will operate in parallel with the ESM until mid-2013 for countries that have received aid from it (Ireland, Portugal and Greece). The parallel operation of the EFSF and the ESM creates a total lending capacity of EUR 940 bn (740 bn until Ireland, Greece and Portugal are capable of repaying the aid). As a novelty, the ESM also allows for the involvement of the private sector. With consideration for the specific circumstances, recipient countries will have to provide an appropriate form of involvement by the private sector in conformity with IMF practice. Clauses on joint action by states and private lenders will thus be included in all new euro area treasury bonds with a maturity of over one year. In order for the ESM to be able to adopt the required decisions in all circumstances, the consensus rule has been replaced with a qualified majority of 85% of the votes if the Commission and the ECB decide that an urgent decision on financial aid is required due to risks to the financial and economic sustainability of the euro area. This change has yet to be confirmed by national parliaments.

Following renewed pressure by financial markets, in December 2011 the ECB implemented non-standard measures to bolster bank liquidity. The key measure was two auctions of long-term refinancing operation (LTRO) with three-year maturity, which were carried out in December 2011 and February this year. The funds on auction were unlimited and had an interest rate of 1.0%.

[9] For countries that had already lodged an interest bearing deposit within the preventive part of the Stability and Growth Pact, it turns into a non-interest bearing deposit within the excessive deficit procedure.

[10] For countries that have already lodged an interest bearing deposit, it turns into a fine.

[11] In countries whose deficits are significantly below 60% of GDP, the structural deficit can reach up to 1% of GDP.

A total of EUR 1 019 bn[12] was lent to 1 323 banks. The move was designed by the ECB to kick-start lending to businesses in the euro area and allow banks to refinance over a longer time horizon. The ECB also continued direct purchases of public and private debt, coupled with special sterilisation operations to mop up excess liquidity. ECB action reduced tensions on the financial markets, but despite the non-standard measures high overnight deposits with the ECB following the LTRO auctions suggest a high level of distrust on the interbank market. Crediting in the euro area is still severely constrained as banks further tightened lending conditions for companies and households in the first quarter of the year.

Initiatives aimed at promoting growth and employment have also been gaining ground at the EU level recently. Efforts to reduce deficits and achieve a closer coordination of fiscal policies are being complemented by EU-level initiatives for measures to kick-start growth and employment, which would be derived from adopted guidelines in the Europe 2020 strategy. Such measures are to be targeted primarily at strengthening the internal market, supporting SMEs (where the role of the European Investment Bank could be strengthened), reprogramming of EU structural funds with a view to make spending more conductive to growth, promoting employment and training, increasing investments in education and training (which would help create new jobs), and increasing energy efficiency.

[12] In the December 2011 auction, EUR 489 bn was approved for 523 banks; in the February 2012 auction, 800 banks received EUR 530 bn.

2. Budget aggregates of the general government sector (ESA-95) in 2011

The general government deficit[13] in Slovenia increased slightly in 2011 to 6.4% of GDP, its highest level since 1995. The budget deficit had swelled in 2009 (by 4.2 p.p. to 6.1% of GDP) as revenues fell in nominal terms (-3.4%) because of the crisis and expenditure kept rising (5.5%) due to the functioning of automatic stabilisers, implementation of parts of the 2008 wage reform, and the implementation of stimulus measures. As economic activity slumped by 8%, revenue actually rose by 0.8 p.p. in relative terms, but expenditure growth was significantly higher (5.1 p.p.). The deficit remained virtually level in 2010. Expenditure growth (2.3%) was lower than in the year before after the government intervened with a Supplementary Budget and adjusted expenditure to the lower revenue, but the slightly higher revenue growth (2.7%) failed to offset the deficit accumulated by then. In 2011, the general government deficit rose again, this time by 0.4 p.p. to 6.4% of GDP. Growth in budget revenues slowed (1.2%) due to the deteriorating macroeconomic situation, while expenditure growth accelerated again (2.3%) despite the government's austerity measures and the Supplementary Budget. Playing a major role in the rise in expenditure, one-off transactions (of EUR 459 m or 1.3% of GDP) rose sharply over the year before and, classified as current capital transfers, contributed to a rise in general government debt.[14]

Table 3: **General government revenue, expenditure and deficit, as a % of GDP**

	2005	2006	2007	2008	2009	2010	2011
Total general government revenue	43,8	43,2	42,5	42,4	43,2	44,2	44,5
Total general government expenditure	45,3	44,6	42,5	44,2	49,3	50,3	50,9
Net lending (+) / net borrowing (-)	**-1,5**	**-1,4**	**0,0**	**-1,9**	**-6,1**	**-6,0**	**-6,4**

Source: SORS, Main aggregates of the general government, April 2012; calculations by IMAD.

Table 4: **Growth in total general government revenue and the contributions of individual categories to growth, 2005–2011, in p.p.**

	2004	2005	2006	2007	2008	2009	2010	2011
Total revenue of the general government sector, increase in %	7,6	6,5	6,6	9,3	7,7	-3,4	2,7	1,2
Tax on production and imports, contribution in p.p.	2,0	1,7	1,5	2,8	1,4	-1,5	0,5	-0,3
Current taxes on income, property, etc., contribution in p.p.	2,0	2,3	2,6	2,5	1,0	-2,5	-0,2	0,1
Social contributions, contribution in p.p.	2,8	2,0	2,1	2,9	3,5	0,4	0,7	0,3
Other non-tax and transfer revenue, contribution in p.p.	0,8	0,4	0,4	1,1	1,8	0,1	1,7	1,2

Source: SORS, Main aggregates of the general government, April 2012; calculations by IMAD.

Table 5: **Growth in total general government revenue and the contributions of individual categories to growth, 2005–2011, in p.p.**

	2004	2005	2006	2007	2008	2009	2010	2011
Total general government expenditure, growth in %	6,6	4,7	6,4	6,1	12,3	5,5	2,3	2,0
Intermediate consumption expenditure, contribution in p.p.	0,6	1,0	1,2	0,0	2,1	0,3	0,7	-0,5
Compensation of employees, contribution in p.p.	1,7	1,3	1,3	1,2	3,2	1,7	0,6	0,2
Social benefits and aid, contribution in p.p.	2,8	2,0	2,2	1,8	3,9	2,7	1,7	1,5
Gross capital formation and capital transfers, contribution in p.p.	0,9	-0,4	1,7	2,6	2,2	-0,2	-0,8	0,4
Subsidies, contribution in p.p.	-0,3	-0,1	0,4	0,3	0,4	0,9	0,0	-0,5
Interest, contribution in p.p.	-0,3	-0,1	-0,1	0,0	-0,1	0,4	0,6	0,6
Other expenditure, contribution in p.p.	1,2	1,1	-0,3	0,1	0,7	-0,4	-0,4	0,2

Source: SORS, Main aggregates of the general government, April 2012; calculations by IMAD.

[13] ESA-95 methodology

[14] One-off transactions without which the deficit of the general government sector would amount to 5.7% of GDP in 2011 and 5.1% of GDP in 2011.

Table 6: **General government deficit (surplus) by levels, as a % of GDP**

	2005	2006	2007	2008	2009	2010	2011
General government deficit (-), surplus (+)	**-1,5**	**-1,4**	**0,0**	**-1,9**	**-6,1**	**-6,0**	**-6,4**
Central government	-2,2	-1,4	-0,1	-1,3	-5,1	-5,2	-6,4
Local government	0,0	-0,1	-0,1	-0,6	-0,6	-0,4	-0,1
Social security funds	0,7	0,1	0,2	0,0	-0,4	-0,4	0,1

Source: SORS, Main aggregates of the general government, April 2012; calculations by IMAD.

The revenue-to-GDP ratio rose by 0.3 p.p. in 2011 due to the rise in transfer revenue. Transfer revenue contributed to the continued growth in general government revenue in relative terms in 2011 (EU budget funds; 1.3 p.p.), as other revenue (non-tax, capital and donations) fell slightly; the effect of tax and social security receipts was neutral. There were subsequently no major changes in the revenue structure among the key tax categories. Staying in lock-step with the wage bill trend as contribution rates remained unchanged, revenue from social security contributions remained unchanged in relative terms over the year before (15.5% of GDP). The slowing economic activity and weak domestic consumption resulted in the share of taxes on production and imports dropping by 0.2 p.p. of GDP (to 14.1% of GDP). There was a more pronounced drop in nominal terms in value-added tax receipts, whereas excise revenue registered a smaller fall due to an increase in the volume of sales of excise product following a slight lowering in excise on energy products. Current income and property taxes remained level in relative terms (8.2% of GDP) after the completed assessment of personal income tax and corporate income tax following the release of business results.

Relative general government expenditure increased by 0.6 p.p. (to 50.9% of GDP) in 2011 due increased capital transfers, social benefits in cash and kind, and interest. The biggest relative growth in 2011 was registered in capital transfers due to the recapitalisation of NLB bank and other state companies, the assumption of liabilities held by rail operator Slovenske železnice and the debt of the public company building the Sava hydro power plants, and the payment of guarantees due. The share of social benefits in cash and kind grew by 0.6 p.p., predominantly due to a rise in the number of jobless and socially disadvantaged, since the adjustment of pensions and social transfers to inflation was limited with an emergency law to only a quarter of full indexation. The share of interest expenditure rose by 0.4 p.p. due to increased government borrowing and higher interest

Box 1: **General government revenue, expenditure and deficit at the local level**

The financial state of local governments[15] was relatively stable due to the specific structure of revenue and expenditure and the nature of financing (transfers from the national budget). The general government deficit at the local level amounted to EUR 29.1 m or 0.1% of GDP in 2011. The local government level had also reported a minimal deficit or a balanced budget in the 2000–2007 period. In 2008–2010 the deficit rose slightly (ranging from 0.4 to 0.6% of GDP) due to intensive investment activity by municipalities.[15]

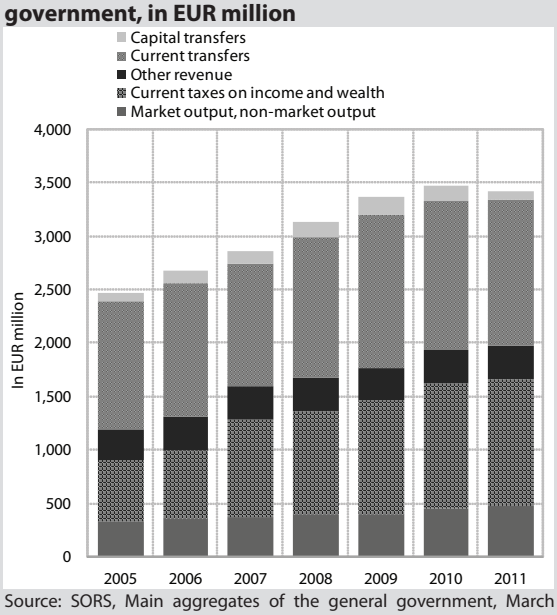
Table 7: **General government revenue, expenditure and deficit at the local level**

	2005	2006	2007	2008	2009	2010	2011
in EUR million							
Local government revenue	2.468,9	2.679,5	2.868,8	3.138,6	3.371,5	3.480,9	3.428,6
Local government expenditure	2.479,7	2.701,6	2.913,2	3.378,2	3.575,4	3.622,2	3.457,7
Net lending (+) / net borrowing (-)	-10,8	-22,0	-44,4	-239,5	-203,9	-141,3	-29,1
Local government borrowing	211,7	235,7	255,5	353,6	523,4	626,1	685,2
In % of GDP							
Local government revenue	8,6	8,6	8,3	8,4	9,5	9,8	9,6
Local government expenditure	8,6	8,7	8,4	9,1	10,1	10,2	9,7
Net lending (+) / net borrowing (-)	0,0	-0,1	-0,1	-0,6	-0,6	-0,4	-0,1
Local government borrowing	0,7	0,8	0,7	0,9	1,5	1,8	1,9

Source: SORS, Main aggregates of the general government, March 2012.

[15] In addition to municipalities, the local government level includes institutes, agencies and funds established by municipalities.

Figure 3: **Revenue of the local level of general government, in EUR million**



Source: SORS, Main aggregates of the general government, March 2012.

The average growth in revenue at the local level (7.3%) exceeded the average revenue growth at the central level (6.1%) throughout the 2000–2011 period, owing to the structure of local government revenue and the specific means of financing. Around half of the revenue of the local government is generated by taxes and contributions (income tax on the basis of poll tax and the charge for the use of building land represent the bulk of the revenue), while the other half comes from current and capital transfers, mostly from the central government (balancing of local government budgets, EU funds; see figure above). In addition to current trends in tax and contribution receipts, local government revenue is, therefore, strongly affected by the statutory transfer of revenue from the central government based on the appropriate rate financing, which covers the full difference between municipalities' own revenue and appropriate financing for the tasks assumed by municipalities pursuant to the Financing of Municipalities Act.[16] The share of taxes and contributions in the structure of local government revenue rose slightly after 2006, when the share of income tax allocated to municipalities was increased with a tax reform; subsequently, the share of appropriate rate financing fell. Due to the increase in the share of income tax allocated to municipalities,[17] local government revenue continued to rise in 2009 even as central government revenue already fell significantly. Local government revenue continued to rise in the year thereafter, but at a much slower rate. Local government saw a 1.5% contraction in revenue in 2011, mostly due to lower current and capital transfers, whereas tax revenue rose slightly.

Investment activity was the key factor driving the expenditure dynamics at the local level in recent years. Local government expenditure grew rapidly until 2009, with investment expenditure contributing the bulk of this growth in particular after 2005; by 2009, the share of investment in total expenditure grew from 18.4% to over 25%. Investment growth was driven by the possibility of drawing European funds and changes in legislation (2006), which allowed municipalities to borrow more.[18] An important factor affecting the volume of investment at the local level has been the sheer number of municipalities[19] preparing their own projects. A significant share of the increase in general government expenditure at local level has been generated by the growing compensation of employees and the increase in funds for goods and services, which make up more than two-thirds of total local government expenditure. Expenditure in this segment has grown together with the creation of new municipalities. The large number of municipalities also caused a considerable fragmentation of expenditure, which can lower efficiency and effectiveness. Expenditure growth was quicker at the local level than at the central level until 2009, but after that growth in local government expenditure slowed and was even negative in 2011, solely due to a drop in investment activity (lower transfers from the budget, EU funds). The local level of government was not subject to the same degree of austerity as implemented at the central government level. The biggest factor in the increase in spending at the local level is the system of municipal financing, which by means of appropriate spending transfers (which factor in the level of development of a municipality and the possibility for borrowing) encourages spending and the creation of new municipalities.

Borrowing by municipalities, which is limited[20] by the Financing of Municipalities Act, increased significantly in the growth years. At the end of 2007, the relative indebtedness of municipalities stood at 0.7% of GDP, but due to greater investment activity it increased to 1.9% of GDP (EUR 685 million) by the end of 2011. Municipalities were encouraged to take on extra debt by the possibility of using European funds to co-finance investments, which led to greater indebtedness. The rise in the number of municipalities quickly translated into a rise in the number of indebted municipalities. In 2010, there were only 31 debt-free municipalities (Report on the indebtedness of municipalities and legal entities of the public sector at municipality level as at 31 December 2010).

[16] Financing of Municipalities Act, Official Gazette RS, No. 32/2006.
[17] The share of income tax allocated to municipalities stood at 35% in 2006, rising to 49% in 2009 and 55.6% in 2011.
[18] Financing of Municipalities Act, Official Gazette RS, No. 32/2006.
[19] Slovenia had 60 municipalities in 1991, 147 in 1995, 193 in 1998 and 211 in 2011.
[20] A municipality can assume total debt amounting to 20% of its total revenue from the balance of revenue and expenditure in the previous year, less received donations and transfers from the national budget for investments, under the condition that the annual principal and interest payments do not exceed 5% of realised revenue in the balance of revenue and expenditure less donations and transfers from the national budget for investment in the year preceding the debt.

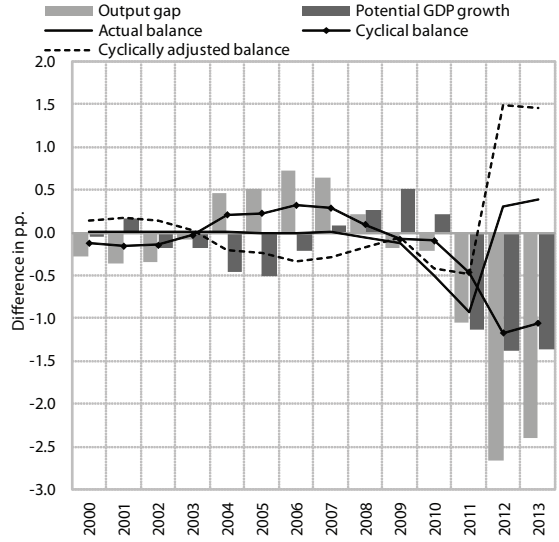
rates. Compensation of employees remained level on 2010 in relative terms (12.7% of GDP) owing to a restrictive wage policy and modest growth in the number of employees in the general government sector (0.4%). A contraction in budget expenditure was reflected mostly in the 0.7 p.p. drop in the share of gross capital formation and investment transfers, while the share of expenditure for subsidies fell by 0.3 p.p. of GDP due to the gradual winding down of stimulus measures. Austerity measures also resulted in a relative drop in government expenditure on intermediate consumption (by 0.3% of GDP).

The general government deficit was generated primarily at the central government level,[21] due in part to the budgetary financing of the pension fund deficit and the transfers from the central government to the local government (see Box 2). In 2011, the central government deficit stood at 6.4% of GDP, whereas that of the local government fell to 0.1% of GDP and social security funds registered a small surplus (0.1% of GDP). The central government also accounted for the bulk of the deficit increase in 2011 (1.2 p.p. of GDP), whereas the local government and social security funds reduced the general government deficit by 0.3 p.p. and 0.5 p.p. of GDP, respectively.

2.1 Cyclically adjusted and structural general government balance

The role of the structural balance as a tool for monitoring fiscal policies in the euro area is growing, but extreme caution is needed in interpreting its findings as the concept has not fully evolved methodologically. The structural deficit is a cyclically adjusted balance of public finances, which does not take into account one-off transactions (in line with ESA-95). The cyclically adjusted general government balance indicates the fiscal result that would be achieved merely with the effects of fiscal policy, i.e. without the effect of cyclical factors. Analysis of the cyclically adjusted balance provides an additional insight into the impact of past fiscal policy measures, which can contribute to *ex post* estimates of fiscal policy orientation and the determination of the causes of imbalances in the past. It is, therefore, a tool for assessing the orientation and appropriateness of fiscal policy. However, in analysing the cyclically adjusted balance, caution is advised in interpreting the fiscal position estimate and using it as a basis for economic policy in view of the volatility of estimates of potential growth and the output gap (see Figure 4). Changes in forecasts, methodological changes,[22] and revisions of GDP growth estimates affect estimates of the output gap, whereas *ex post* corrected estimates of the general government deficit change the actual balance (e.g. the year 2011). All of this can substantially alter the *ex post* assessment of the fiscal condition. This may lead to a situation where fiscal policy is assessed *ex post* as counter-cyclical, while a subsequent calculation for the same year shows it was actually cyclical. This is particularly problematic, since the structural deficit is defined as a mid-term fiscal objective in the Stability and Growth Pact. Moreover, the recent adoption of legislation and agreements on closer coordination of fiscal policies in the euro area has resulted in a strengthening of its role as a basis for managing and monitoring fiscal measures.

Figure 4: **Change in estimates of cyclical and cyclically adjusted balance in 2012 relative to 2011, in p.p.**



Source: SORS, Economic Issues 2010 (IMAD), Stability Programme 2012; IMAD calculations.

An increase in the estimate of the negative output gap translates into a smaller structural component of the deficit in relative terms for the current and the following year. Our most recent estimates of the output gap differ from last year's estimates mainly for this year and next. Due to lower forecasts for economic growth, which have been factored into the estimate of potential GDP growth, both years show a wider negative output gap given the lower potential growth. The wider output gap leads to a higher estimated cyclical deficit and subsequently a lower structural component of the deficit (a lower cyclically adjusted deficit in relative terms). Some corrections of the output gap estimates for the previous

[21] The central government accounted for more than 90% of the total in the 2000–2011 period.

[22] The output gap is measured using an altered methodology. Instead of the Hodrick-Prescott filter (see Economic Issues 2010), we used the bivariate Kalman filter to smooth out the total factor productivity. For a more detailed description of the methodology see F. D'Auria, Cécile Denis, K. Havik, K. Mc Morrow, C. Planas, R. Raciborski, W. Röger and A. Rossi: 'The production function methodology for calculating potential growth rates and output gaps', Economic Papers 420, July 2010, DG ECFIN.

Table 8: **Actual, cyclical and cyclically adjusted general government balance, as a % of GDP**

	Actual balance	Cyclical balance	Cyclically adjusted balance	Structural balance[1]	Change in cyclically adjusted balance[2]	Change in structural balance
	1	2	3 (= 1 - 2)			
2000	-3.7	0.4	-4.2	-4.2	-0.8	-0.8
2001	-4.0	0.2	-4.2	-4.2	0.0	0.0
2002	-2.4	0.6	-3.0	-3.0	1.2	1.2
2003	-2.7	0.4	-3.1	-3.1	-0.1	-0.1
2004	-2.3	0.7	-3.0	-3.0	0.1	0.1
2005	-1.5	1.0	-2.5	-2.5	0.5	0.5
2006	-1.4	1.9	-3.2	-3.2	-0.8	-0.8
2007	0.0	3.1	-3.1	-3.1	0.1	0.1
2008	-1.9	3.2	-5.1	-5.1	-2.0	-2.0
2009	-6.1	-1.1	-4.9	-4.9	0.2	0.2
2010	-6.0	-1.0	-5.0	-5.0	-0.1	-0.1
2011	-6.4	-1.2	-5.2	-3.9	-0.2	1.1
2012	-3.5	-1.7	-1.8	-1.8	3.4	2.1

Source: SI-Stat data portal – Economy – National accounts - Main aggregates of the general government (SORS), 2011 for actual balance; cyclical components calculated by IMAD.

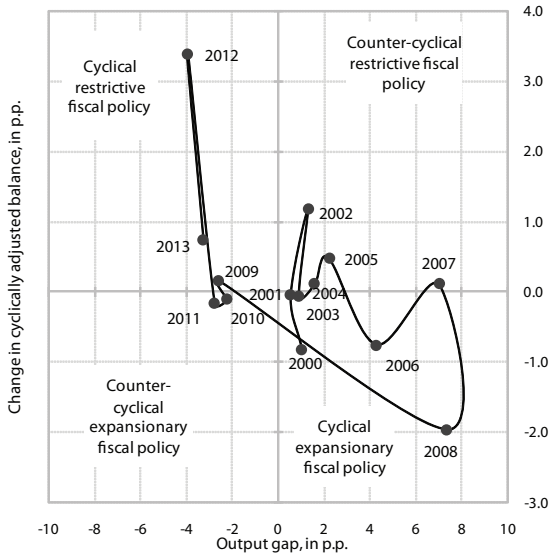
Notes: [1] Cyclically adjusted balance not including one-off transactions.
[2] A positive change represents an improvement in the balance. The figures do not necessarily add up fully due to rounding.

years, especially for the 2004–2007 period, were made as a result of certain methodological changes. As a result, the cyclically adjusted deficit for these years is slightly wider than previously estimated.

Despite the volatility of the structural balance estimates, calculations conducted in the past three years indicate that a significant worsening of the structural state of public finances occurred in 2008. According to our estimates, the structural deficit widened by 2 p.p. to 5.1% of GDP in 2008 and remained at this level for the following two years. As a result of the weakened economic conditions, the positive cyclical balance turned into a deficit (a deterioration of 4.3 p.p.) in 2009, which in turn led to a significant increase in the budget deficit that year. The cyclical and structural components of the balance remained level in 2010 due to the slow economic growth and negligible consolidation efforts, which were confined solely to capping wages and transfers with emergency measures. In 2011, the structural deficit, which excludes one-off transactions, fell by 1.1 p.p., whereas the cyclically adjusted balance, which includes all transactions, rose and remained the key factor of the imbalance of public finances for a third consecutive year. The presented calculations suggest that the functioning of fiscal policy in the year before the crisis was a major contributor to the dire state of public finances, while the financial and economic crisis only worsened the situation.

A comparison of the dynamics of the cyclically adjusted deficit and the output gap shows whether a fiscal policy is cyclical or counter-cyclical. A change in the cyclically adjusted balance in consecutive years indicates the orientation of fiscal policy, i.e. the fiscal impulse. By comparing the change in the cyclically adjusted balance and output gap between individual years, which indicates fluctuations in the economic cycle, it is possible to assess the orientation of fiscal policy, i.e. the fiscal position. A positive fiscal impulse, for example, means an increase in the cyclically adjusted deficit in the current year compared to the year before. The varying distances of individual points from the axes indicate the intensity of fiscal policy. In Figure 5, there are four distinct quadrants of changes in the fiscal impulse and output gap, which determines the fiscal position. Fiscal policy is counter-cyclical if the combination of both parameters lies in the first or third quadrant. This means that when economic growth falls below its potential, fiscal policy becomes expansionary; when actual growth exceeds potential GDP growth, it responds restrictively. Fiscal policy is cyclical if the combination of both parameters lies in the second or fourth quadrant. This means that when economic growth falls below its potential, fiscal policy becomes restrictive; when actual growth exceeds potential GDP growth, it responds in an expansionary fashion. A cyclical orientation means that fiscal policy does not allow for the functioning of automatic stabilisers, the result being that, for example, expenditure changes not as planned but in accordance with changes in economic growth. On the revenue side, this means that when economic growth is higher than initially planned, cyclical budget revenue is used to finance tax cuts and increased expenditure, not to curb the deficit.

Figure 5: **Cyclical orientation of fiscal policy**



Source: SI-Stat data portal – Economy – National accounts - Main aggregates of the general government (SORS), 2011 for actual balance; Spring Forecast 2011 (IMAD); cyclical components calculated by IMAD.

Much like last year's estimate, this year's calculations show that fiscal policy has been fairly neutral since 2009, following a cyclical orientation in the period preceding the crisis. A comparison of the dynamics of the cyclically adjusted balance and the output gap[23] shows that fiscal policy was clearly cyclical and expansionary in 2008. However, the economy and, by extension, public finances, had already started to deteriorate in the final months of 2008 as the economic and financial crisis escalated, whereas the output gap was unaffected at that point. The calculated fiscal position in 2008 does not take into account the fact that the revenue shortfall was caused by a slowdown in economic activity, which *per se* already amounts to counter-cyclical action. In addition to these effects, which are inherently more cyclical than structural, the structural component of the deficit was probably increased by measures adopted in 2007 and 2008. These include higher outlays on gross capital formation and social transfers,[24] and higher wages following the implementation of the new wage system in the public sector, which (coupled with more hiring) increased expenditure. In contrast, the tax changes that were put in place reduced budget revenue: the general personal income tax allowance was increased, whereas the payroll tax and corporate income tax rates were cut. In 2009, when the economy contracted sharply and the output gap was negative, fiscal policy was counter-cyclical as the structurally adjusted deficit remained high, but we estimate that it was not expansionary. The same holds true for 2010 and 2011. Despite reservations as to the calculations of changes in the structurally adjusted deficit, we estimate that fiscal policy (not having been expansionary in the past three years) is primarily a consequence of the fiscal limitations linked to the commitments Slovenia made as part of the excessive deficit procedure, and limited access to financing.

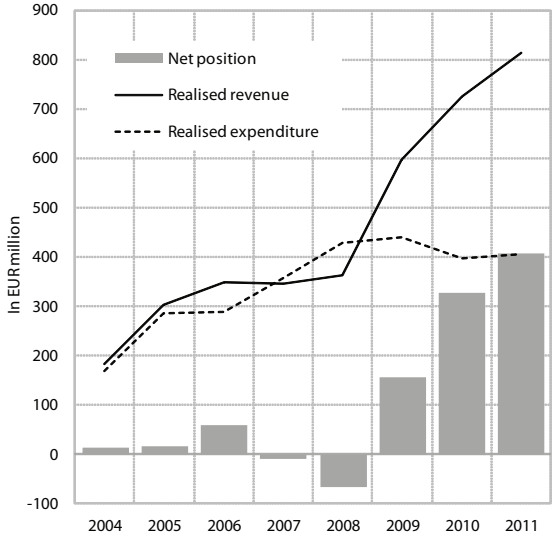
[23] The output gap is estimated based on a changed methodology in the production function. Instead of the Hodrick-Prescott filter (see Economic Issues 2010), we used the bivariate Kalman filter to smooth out the total factor productivity.

[24] Expenditure on social benefits and assistance to households increased substantially due to measures taken in May 2008 to alleviate the negative impact of high inflation on people's livelihood (subsidising of transport, food and rents, and new measures such as free meals for secondary school children and bigger preschool subsidies), which is probably also related to the election cycle (elections in the autumn of 2008).

3. Financial flows between Slovenia and the EU budget

In 2011, the net position of the Slovenian budget to the EU budget improved and revenue was the highest since 2004, when Slovenia became a recipient of EU budget funds. Revenue from the European budget stood at EUR 812.2 m in 2011 (Ministry of Finance). Planned revenue for 2011 was at EUR 854.2 m,[25] meaning that realisation of the annual plan stood at 95% (this compares to the EUR 1,037.9 m planned and EUR 723.3 m received in 2010). Expenditure from the national budget for the European budget amounted to EUR 405.1 m last year, resulting in a net position of the national budget to the EU budget of EUR 407 m, the highest figure since Slovenia joined the EU. Structural funds accounted for the majority of the funds received (EUR 516.8 m), two-thirds of which was from the European Fund for Regional Development (EUR 382 m) and a third from the European Social Fund (EUR 134 m). Realised revenues from structural funds stood at 102.8% of plans (revenues had been planned at EUR 502.9 m). Slovenia received EUR 220 m from the Common Agricultural and Fisheries Policy (98.3% of the planned revenue), while absorption was weakest from the Cohesion Fund (EUR 60.2 m or 58% of planned revenue). The latter was wholly used for environmental and transport infrastructure projects.

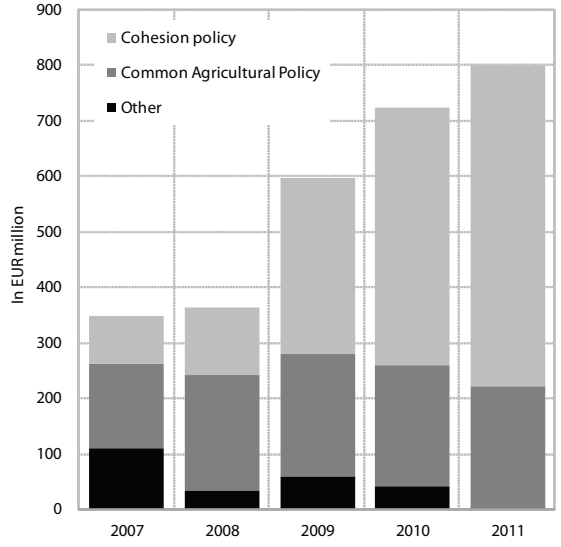
Figure 6: **Revenue and expenditure and Slovenia's net position to the EU budget**



Source: Source: Ministry of Finance.

In the second financial perspective, for the 2007–2013 period, cohesion policy funds accounted for the bulk of eligible and absorption in this area picked up in 2009. Slovenia has been approved EUR 5.8 bn from the EU budget as part of the 2007–2013 financial perspective. Grants worth EUR 4.2 bn were approved under cohesion policy funding,[26] including EUR 4.1 bn for the implementation of the three leading cohesion policy Operational Programmes (OPs): OP SRDP,[27] OP ETID[28] and OP HRD,[29] and EUR 104 m for European territorial cooperation. For implementation of the agricultural and fishery policy, Slovenia has been approved EUR 1.8 bn in Community grants. Cohesion policy funds, which were the main source of revenue from the EU budget, began to be absorbed at a faster pace in 2009 (in 2007 and 2008 funds from the first financial perspective accounted for the bulk of the absorption). The absorption of Community agricultural and fisheries policy funds, which has been fairly steady through the years, represents a smaller share of revenues. Until 2011, over 50% of all approved funds from this area had been absorbed. Revenue from other European policies was almost negligible (Figure 7).

Figure 7: **Structure of funds allocated from the EU budget to the state budget in the current financial period (2007–2011)**



Source: Ministry of Finance, IMAD calculations.

[25] Supplementary Budget for 2011 adopted in September 2011.

[26] In the new financial perspective (2007–2013), cohesion policy funds are drawn from structural funds (European Regional Development Fund and European Social Fund) and the Cohesion Fund.

[27] Operational Programme for Strengthening Regional Development Potentials.

[28] Operational Programme of Environmental and Transport Infrastructure Development.

[29] Operational Programme for Human Resource Development.

Table 9: **Planned and realised revenue and expenditure flows between the EU budget and the Slovenian budget, 2004–2011**

Year	Revenue			Expenditure			Net position
	Planned	Realised	Percentage of realisation	Planned	Realised	Percentage of realisation	
2004	335.3	183.8	54.8	187.9	170.0	90.2	13.8
2005	483.7	302.4	62.5	305.2	285.6	93.6	16.8
2006	449.6	348.4	77.5	315.0	287.9	91.4	60.5
2007	582.1	347.2	59.7	317.1	355.9	112.2	-8.7
2008	783.0	363.2	46.4	375.3	427.9	114.0	-64.7
2009	814.0	594.9	73.1	452.0	439.3	97.2	155.6
2010	1,037.8	723.2	69.7	412.8	396.8	96.1	326.4
2011	854.2	812.2	95.1	393.6	405.1	102.9	407.1

Source: Ministry of Finance.

Table 10: **Absorption of eligible cohesion policy funds for the 2007–2011 period (as at 31.12.2010)**

	in EUR million				% with regard to eligibility 2007-2011				% with regard to eligibility 2007-2013			
	OP ETID	OP SRDP	OP HRD	Total all OPs	OP ETID	OP SRDP	OP HRD	Total all OPs	OP ETID	OP SRDP	OP HRD	Total all OPs
Eligibility 2007–2013 (European funds)	1,577.1	1,768.2	755.7	4,101.0								
Eligibility 2007–2011	883.2	1,257.7	530.9	2,671.8								
Confirmed instruments	897.1	1,770.8	653.4	3,321.3	101.6	140.8	123.1	124.3	56.9	100.1	86.5	81.0
Confirmed operations	830.3	1,430.0	593.6	2,853.9	94.0	113.7	111.8	106.8	52.6	80.9	78.5	69.6
Signed contracts	465.5	1,371.3	592.2	2,429.0	52.7	109.0	111.5	29.5	29.5	77.6	78.4	59.2
Executed payments	299.4	970.7	301.5	1,571.6	33.9	77.2	56.8	58.8	19.0	54.9	39.9	38.3
Submitted expense claims	279.8	823.5	255.7	1,359.0	31.7	65.5	48.2	50.9	17.7	46.6	33.8	33.1
Certified expense claims	275.5	775.4	235.2	1,286.1	31.2	61.7	44.3	48.1	17.5	43.9	31.1	31.4

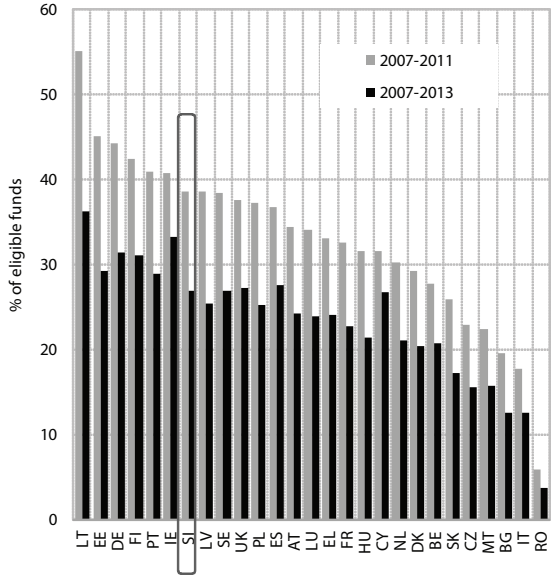
Source: Ministry of Economic Development and Technology.

Until 2011, Slovenia had absorbed around a third of all eligible Cohesion Policy funds, whereby (much as in other countries) the amount of funds it received was affected heavily by the worsening of economic conditions after 2008. Slovenia received EUR 1,286.1 m from the EU budget for implementation of cohesion policy in the 2007-2011 period. This represents just under half of all eligible funds[30] for the period (EUR 2.671.8 m) and a third of all eligible funds for the whole financial perspective (EUR 4,101 m). The dynamics of absorption by OPs varied. This was closely linked to the financial situation of the beneficiaries, which has mostly worsened since the onset of the economic crisis (problems beneficiaries face in securing own funds and liquidity problems of contractors working on large development and infrastructure projects), and poor or slow preparation of project and investment documentation, which affected the effectiveness of tendering. The largest share of cohesion funds (EUR 775.4 m) in the period in question was received for OP SRDP projects. The figure represents

[30] Cohesion funds are distributed by eligibility year for the entire second financial perspective

62% of eligible funds for 2007–2011 and 44% of eligible funds for the entire financial perspective. In the same period, OP HRD projects brought in EUR 235.2 m in EU grants, which makes for just over 44% of the eligible funding for 2007–2011 and 31.1% of the eligible funding for the 2007–2013 period. Absorption was the worst in the development of environmental and transport infrastructure (OP ETID), where the Slovenian budget received EUR 275.5 m by the end of 2011, which represents a third of the eligible funds for the 2007–2011 period and less than a fifth of all eligible funds for the duration of the second financial perspective. Due to the poor absorption in OP ETID, a part of the funds (EUR 58.5 m) was reallocated from transport infrastructure to OP SRDP (competitiveness and research excellence), while another portion was shifted within OP SRDP from priority projects which are unlikely to be completed by the end of the financial period (construction of the second rail track on the Koper-Divača line) to contingency projects whose implementation is more probable. In terms of the dynamics of the absorption of cohesion funds, the shifting of funding from priority to contingency projects makes sense, although from a strategic point of view such a move also increases the risks for the implementation of the projects and pushes them further down the line. Despite the relatively insufficient absorption of cohesion funds, last year Slovenia ranked seventh among all Member States according to European Commission data (as at 1 December 2011) in terms of the pace of absorption of cohesion funds based on eligibility for 2007–2011, and ninth based on eligibility for 2007–2013. The data suggest that the worsening of the economic conditions in 2008 significantly hampered the implementation of cohesion policy in the EU as a whole.

Figure 8: **Absorption of cohesion funds by EU Member States as a share of eligible funds for 2007–2011 and 2007–2013 (as at 1 December 2011)**



Source: European Commission - Budget.

4. General government debt

Slovenia's general government debt as a share of GDP was growing faster than the euro area average in the past three years. It stood at EUR 16.9 bn or 47.6% of GDP[31] at the end of 2011, which represents an increase of EUR 3.2 bn or 8.8 p.p. on the year before. While the debt was well below the euro area average, it grew at a much faster pace in the past three years (by 25.7 p.p. of GDP, compared to 20 p.p. of GDP in the euro area[32]). There was a pronounced uptick in debt growth in 2009, when Slovenia took on EUR 4.3 bn in new debt, which translated into growth of 13.4 p.p. (the seventh-highest relative increase among EU members). This was due to a rise in the deficit and the pre-financing of the deficit for the subsequent year. Debt continued to grow in the following two years (by a combined EUR 4.5 bn), bringing the total debt in 2011 to more than twice its value in 2008. The bulk of the debt is that of the central government (96% of the general government debt at the end of 2011), whereas the share of the unconsolidated debt at local level grew by 1 p.p. in the 2008–2011 period.

The rapid growth in debt and the large amount of guarantees raise the risk that debt will exceed the ceiling set by the Stability and Growth Pact. The brisk growth in debt increases the risk that a renewed economic crisis could tip it over 60% of GDP,[33] whereby state guarantees are an important risk factor. In the 2009–2011 period, there was a significant rise in publicly guaranteed debt. Guaranteed debt amounted to EUR 6.9 bn or 19.6% of GDP[34] at the end of 2011. Contributing to a significant rise in 2009 was the EUR 2 bn in guarantees provided by the state to domestic banks for use in borrowing operations. Government measures to mitigate the effect of the crisis and dysfunction of the euro area interbank market are, therefore, associated with over a quarter of the total publicly guaranteed debt. The amount of guarantees called up increased slightly in 2011 but it remains low (EUR 20.8 m at the end of 2011). Nevertheless, the scope and the estimate of the probability of guarantees being called up can affect how a country is perceived by financial markets, and make borrowing more expensive by widening spreads.

Much as in previous years, Slovenia borrowed by issuing long-term bonds on the euro market in early 2011 as well as with shorter-term treasury bills on the domestic market at the end of last year and in the first five months of this year. In the first quarter of 2011, tapping into what were still relatively favourable conditions on the euro area market, Slovenia issued a 10-year and a 15-year bond (of EUR 1.5 bn each at coupon interest rates of 4.375% and 4.431% respectively). The spread of the Slovenian 10-year bonds on the German benchmark bond stood at around 120 basis points at the time. In the autumn months, the costs of government borrowing increased significantly, which was partly caused by the general deterioration of conditions on financial markets and the subsequent drop in trust in the majority of the euro area members, and partly by factors specific to Slovenia. By the end of January 2012, all three leading rating agencies had

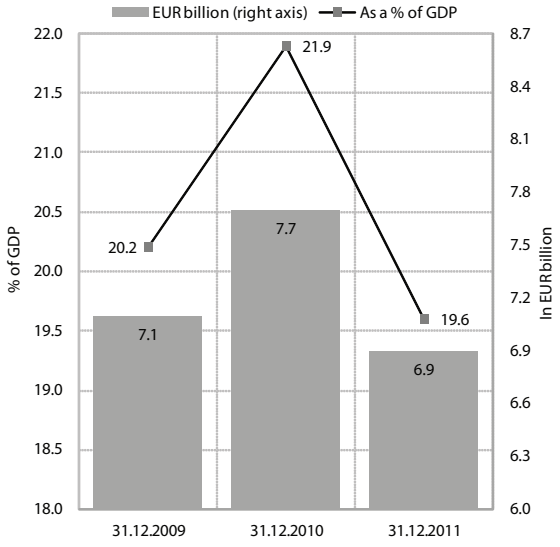
Table 11: **Consolidated general government debt by sub-sectors, Slovenia, 2007–2011**

		2007	2008	2009	2010	2011
	In EUR million					
1	**Total general government, in EUR m**	**7,981**	**8,180**	**12,450**	**13,737**	**16,954**
1.1	Central government	7,904	8,092	12,110	13,204	16,347
1.2	Local government	256	354	523	626	685
1.3	Social security funds	3	3	3	52	52
1.4	Consolidated debt among sub-sectors	-182	-268	-187	-146	-130
	As a % of GDP					
1	**Total general government, as a % of GDP**	**23.1**	**21.9**	**35.3**	**38.8**	**47.6**
1.1	Central government	22.9	21.7	34.3	37.3	45.9
1.2	Local government	0.7	0.9	1.5	1.8	1.9
1.3	Social security funds	0.0	0.0	0.0	0.1	0.1
1.4	Consolidated debt among sub-sectors	-0.5	-0.7	-0.5	-0.4	-0.4

Source: Main aggregates of the general government (SORS).
Note: Data on debt is consolidated (reduced by amounts due among general government units).

[31] Report on the deficit and debt of general government – March 2012.
[32] See also Section 1.
[33] Ceiling set down by the Stability and Growth Pact.
[34] Publicly guaranteed debt increased significantly in 2009 (by EUR 2.4 bn, mostly owing to EUR 2 bn in guarantees the government issued domestic banks for obtaining financing). At the end of 2009, the publicly guaranteed debt amount to EUR 7.1 bn, rising to EUR 7.7 bn in 2010. Last year's fall of EUR 0.8 bn in publicly guaranteed debt was caused by a drop in the guarantees provided to domestic financial institutions.

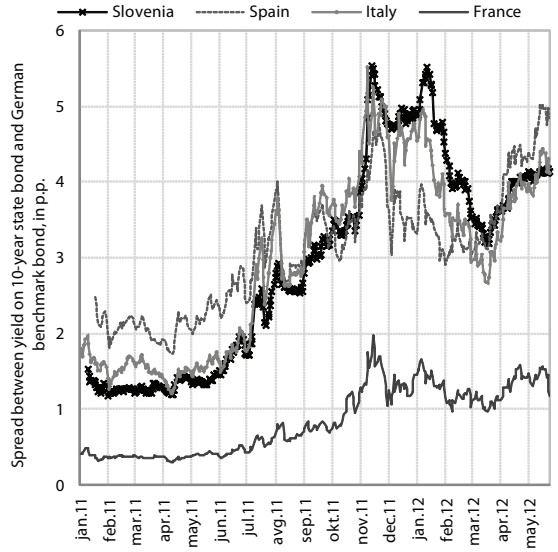
Figure 9: **Publicly guaranteed debt in Slovenia (as a % of GDP and in EUR bn)**



Source: Ministry of Finance.

downgraded the credit rating of Slovenia's sovereign. In addition to the growing uncertainty in the euro area as a whole, the rating agencies cited deterioration and risk factors in Slovenia, especially the poor state of Slovenia's banking system,[35] the protracted consolidation of public finances, and a deterioration in competitiveness linked to the sluggish implementation of structural reforms. The yield on 10-year Slovenian bonds surpassed 7% for a brief period in November and the spread on the German benchmark bond hit its highest point to date (600 basis points). In these conditions, the government completed a EUR 907 m issue of an 18-month treasury bill whose proceeds were for the most part set aside for financing the bulk of the EUR 1.27 bn in state debt principal due this year. The available data show that domestic banks were strongly represented among the investors in the issue. The yield on Slovenian bonds persists at relatively high levels of above 5% (the easing after December 2011 was brought about mostly by the beneficial effects of the non-standard measures undertaken by the ECB[36] for most euro area government bonds), which, together with the acute situation in financial markets, continues to hamper government financing (financing of the deficit of the general government sector and the payment of the principal on state debt). For this reason, the government turned to financing with treasury bills, issuing bills with maturities of three, six and 12 months, with a combined value of EUR 961 m. The persistently high yields on Slovenian bonds mean that the cost of new borrowing for Slovenia on the euro area market are higher than for last year's bond issues in spite of the fact that the need for financing (expressed as a share of GDP) has not surpassed that of last year.

Figure 10: **Spread of 10-year government bonds on the German benchmark bond**



Source: Bloomberg, IMAD calculations.

[35] See the chapter Impact of the economic crisis on the credit market in Slovenia.

[36] In December 2011, the ECB took a decision on two operations of long-term refinancing with maturity of 36 months, which gave banks in the euro area access to additional liquidity, thereby contributing to better financing conditions.

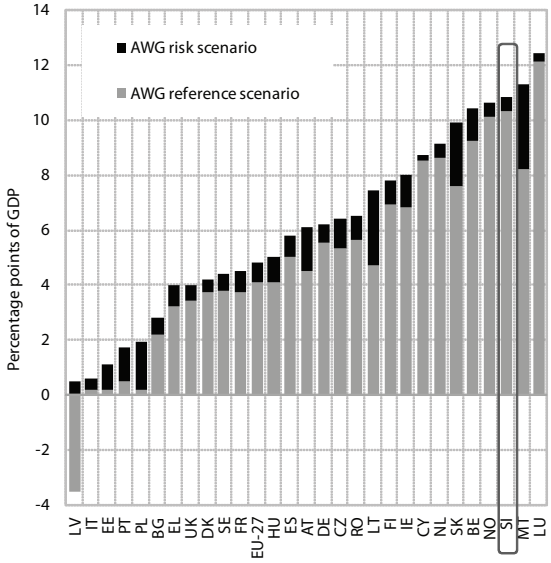
5. Long-term sustainability of public finances – projections of age-related expenditure

In the long term, sustainability of public finances will depend on the structural balance between revenue and expenditure and a relatively stable macroeconomic environment free of excess imbalances. Given the existing structural weaknesses of the Slovenian economy, especially competitiveness and the relatively underdeveloped financial system, and the changes in the demographic structure of the population, it will be impossible to achieve a balancing of public finances in the coming years in the absence of adjustments.

Long term sustainability of public finances will be significantly affected by age-related expenditure; demographic changes therefore hold the key to the long-term state of public finances. In May 2012, the European Commission released updated long-term age-related expenditure projections for the 2010–2060 period,[37] covering public expenditure on pensions, health, long-term care, education and unemployment benefits.[38] The projections are based on the new demographic projections by Eurostat (EUROPOP2010, April 2011), common long-term macroeconomic assumptions, and the assumption of "no-policy change" (given the legislation and reforms adopted until December 2011). The EUROPOP2010 projections show that the population in Slovenia is ageing faster than in the EU as a whole, which translates into an even bigger challenge for the country in introducing changes in the social security system that would guarantee the long-term sustainability of public finances. Nevertheless, the demographic trends are somewhat less adverse than those reported in the previous demographic projections (EUROPOP2008). While no longer in decline, Slovenia's population is stable at the current level (2.1 m inhabitants).[39] Considering the assumptions and the subsequent increase in the old-age and total dependency ratio,[40] there will be a large increase in demand for pensions and health and long-term services for the elderly population, which, coupled with the drop in the share of the working population, will result in problems in securing public funding.

The effect of ageing on the long-term sustainability of public finances in Slovenia is extremely strong and significantly higher than in the EU on average. In 2010, strictly-age-related public expenditure[41] averaged 25% of GDP in the EU, a figure expected to rise under the AWG reference scenario[42] to 25.2% of

Figure 11: **Increase in strictly-age-related* public expenditure applying AWG reference and AWG risk scenarios for the EU-27, 2010–2060, in p.p. of GDP**



Source: Bloomberg, IMAD calculations.

[37] The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States (2010–2060) http://ec.europa.eu/economy_finance/publications/european_economy/2012/2012-ageing-report_en.htm

[38] DG ECFIN prepared the projections for health, long-term care, education and unemployment benefits for all countries, whereas the Member States prepared the pension projections due to the differences between the pension systems. The methodology and assumptions of long-term projections AWG 2012 are detailed in the report 'The 2012 AWG Report: Underlying Assumption and Projection Methodologies', European Economy 4/2011. European Commission. http://ec.europa.eu/economy_finance/publications/european_economy/2011/pdf/ee-2011-4_en.pdf; the whole report containing updated projections is available in the publication.

[39] The main reason is a higher projection for net migration, which is forecast to gradually fall from an estimated 11 000 persons in 2010 to 4 000 persons per year by 2060. But net migration is the least reliable long-term assumption in demographic projections. The other key demographic assumptions for Slovenia are an increase in the fertility rate (from 1.54 in 2010 to 1.65 in 2060) and higher life expectancy (rising from 75.8 years (2010) to 84.0 years (2060) for men and from 82.3 to 88.8 years for women).

[40] The old-age dependency ratio increases from 23.7 to 57.5, while the total dependency ratio rises from 44.0 to 82.4.

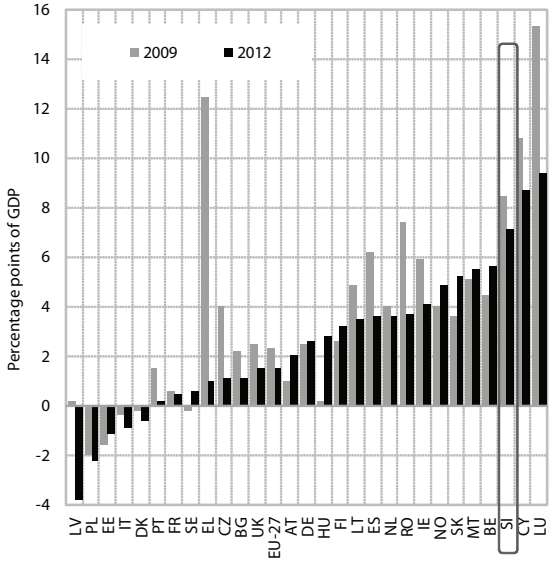
[41] In the most recent AWG projections, strictly-age-related expenditure includes pension benefits, health, long-term care and education (unemployment benefits are excluded), while age-related expenditure includes the above listed categories of expenditure and unemployment benefits.

[42] The AWG reference scenario foremost takes into account increase in expenditure due to population ageing, whereas the AWG risk scenario also includes non-demographic factors (technological development, medical inflation, growth of wages and employment in the sector) for health and long-term care. The AWG reference scenario is used generally in fiscal policy, including in determining medium-term fiscal objectives (MTO). The purpose of the AWG risk scenario is to highlight the need for structural reforms in the area of public financing of health and long-term care.

GDP by 2020 and to 29.1% of GDP (by 4.1 p.p.) by 2060. The projected increase is somewhat lower than in the 2009 projection (4.7 p.p.), a result of moderately more favourable demographic projections and the pension reform measures implemented in a number of countries (France, Greece, Italy, the Czech Republic and Spain). Figure 11 shows that Slovenia continues to rank among the countries with the most pressing situation in terms of the long-term sustainability of public finances: under the AWG reference scenario strictly age-related public expenditure would rise from 23.5% of GDP in 2010 to 25.2% in 2020 and as high as 33.8% of GDP in 2060 (only Luxembourg is projected to see more rapid growth). According to the AWG risk scenario, the increase would be as high as 10.8 p.p. (only Luxembourg and Malta would see a faster increase).

Slovenia stands out among EU countries primarily in terms of the rapid growth in pension expenditure.[43] If current Slovenian pension legislation (ZPIZ-1) and the demographic assumptions in the projection are used, Slovenia's public expenditure for pensions is set to rise by 7.1 p.p. of GDP in the 2010–2060 period, whereas the contributions for the pension fund are estimated to rise by just 0.4 p.p. of GDP (from 9.2% of GDP in 2010 to 9.6% in 2060) in the same period. This compares to the average increase in EU pension expenditure as a share of GDP of only 1.5 p.p. (to 12.9% of GDP) in the same period, though there are major differences among the countries (Figure X3). Luxembourg and Cyprus are the only countries projected to see an even bigger rise in pension expenditure by 2060. The main cause of the unsustainable growth in pension expenditure in Slovenia is the high total dependency ratio,[44] which indicates a need to extend the statutory retirement age in a new pension system. The increase until 2024 is dampened somewhat by the effects of a drop in the basis for calculating pensions (from 85% of earnings in 2000 to 72.5% of earnings in 2024). The projections also point to a drop in the income replacement ratio[45] from the current level of 59% to 53.7% in 2024 (and thereafter), and a drop in the support ratio[46] from 1.5 to less than 1 by 2050 (after 2050 there will be more than one pensioner for every contributor). The growth in the average expenditure on pensions in the EU is also somewhat lower than in the projections from 2009, but this is related primarily to the reforms of pensions systems that have already been implemented. Additionally, the baseline levels for pension expenditure in relative terms are significantly higher due to the crisis.

Figure 12: **Comparison of increase in pension expenditure for the period 2010–2060 in percentage points of GDP according to AWG long-term projections from 2009 and 2012**



Source: European Commission, Economic Policy Committee (The 2012 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2010–2060).

Table 12: **Long-term projections of strictly-age-related public expenditure for Slovenia and comparison with the EU (AWG reference scenario), 2010–2060**

	As a % of GDP							Change in p.p. of GDP			
	2010	2015	2020	2030	2040	2050	2060	2010-2020		2010-2060	
								SI	EU27	SI	EU27
Total	**23,5**	**24,4**	**25,2**	**26,8**	**29,8**	**32,9**	**33,8**	**1,7**	**0,2**	**10,3**	**4,1**
Pensions	11,2	11,8	12,2	13,3	15,8	17,9	18,3	1	-0,1	7,1	1,5
Health*	6,1	6,3	6,4	6,8	7	7,2	7,2	0,3	0,3	1,1	1,1
Long-term care**	1,4	1,6	1,7	1,9	2,4	2,8	3	0,3	0,2	1,6	1,5
Education***	4,7	4,7	4,9	4,8	4,6	5	5,2	0,2	-0,3	0,5	-0,1

Source: European Commission, Economic Policy Committee (The 2012 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2010–2060).

Note: * Using SHA methodology but not including long-term health care expenditure; ** disability cash benefits are added to the public expenditure on long-term care (0.9% of GDP in 2009); *** using UOE methodology but not including expenditure on pre-school education.

[43] Ministry of Finance: Country Fiche on Pension Projections for Slovenia, January 2012.

[44] The share of the population under 15 and over 64 compared to the population aged 15 to 64. The ratio in Slovenia is projected to increase from 44% in 2010 to 82% in 2060.

[45] The income replacement ratio is calculated as the first pension received by an individual meeting the retirement conditions without deductions divided by the base used to calculate the pension.

[46] The number of persons contributing to the pension fund divided by the number of pensioners.

The rise in health expenditure is driven more by non-demographic factors than by population ageing, but in Slovenia in the past the effects of non-demographic drivers were significantly below the EU average. The European Commission estimates[47] suggest that population ageing added just over 10% to the growth in public health expenditure in the past 50 years, whereas GDP growth per capita added 60%, and the remaining 25% is attributed to non-demographic drivers such as the introduction of new (expensive) technologies, institutional changes in health systems (e.g. the expansion of obligatory health insurance), the increase in employment and wages in the health sector, as well as medical inflation. The coefficient of income elasticity of public health expenditure influenced also by non-demographic effects stood at between 1.3–1.5[48] on average in EU countries, while the figure for Slovenia ranged from only 0.8 to 1.0 in the 1995–2008 period. The smaller impact of non-demographic factors is partly linked to successful management of public health expenditure (especially escalation of wages and prices of medical products). However, this may also point to a slow take-up of new technologies, inferior equipment and backlogs in the capacity of the public health system.

The projected increase in public health expenditure does not deviate from the EU average. Under the AWG reference scenario, which assumes that health expenditures are driven by a combination of the effect of population ageing, moderate impact of growth in GDP per capita (income elasticity of 1.1[49]) and the assumption that half of the future gains in life expectancy are spend in good health, public health expenditure in Slovenia is expected to grow by 1.1 p.p., from 6.1% of GDP in 2010 to 7.2% of GDP in 2060.[50] This increase is equal to the average estimated increase in public health expenditure in the EU, where the baseline value in 2010 was already 7.1% of GDP and expenditure is set to rise to 8.3% of GDP by 2060. Under the AWG risk scenario, which (using past trends) assumes a greater effect of non-demographic factors (initially an income elasticity of 1.3, which gradually falls to 1 in 2060), public health expenditure in Slovenia would climb by 0.5 p.p. (to 6.6% of GDP) by 2020, and 1.7 p.p. (to 7.8% of GDP) by 2060. Even under this scenario, the increase in Slovenia would be similar to the average increase in the EU.

Public expenditure on long-term care[51] will more than double by 2060 as a result of population ageing alone. The projections factor in changes in the demographic structure and the share of population dependent on others for assistance, as well as various assumptions on the transition from informal to formal care, changes in the ratio between institutional care and home care, and an increase in expenditure per beneficiary of long-term care. Under the AWG reference scenario, which takes into account only the effect of population ageing and assumes that half of the future gains in life expectancy are spent in good health with no need for assistance, public expenditure on long-term care in the EU rises from an average of 1.8% of GDP in 2010 to 3.4% of GDP in 2060 (by 1.5 p.p.). Notable differences exist among countries, which are a result of differences in the systems of providing and financing long-term care services (larger increases are expected in countries with more developed systems of long-term care, which is why expenditure is projected to rise by more than 2.5 p.p. in Belgium, Denmark, Netherlands, Finland and Sweden). In Slovenia, the increase is on par with the EU average, as expenditure is projected to rise from 1.4% of GDP in 2010 to 3.0% of GDP in 2060 (by 1.6 p.p.). Under different scenarios that also include other factors, the projected increase in Slovenia ranges from 1.4 to 4.2 p.p. of GDP. This would mean expenditure increasing to between 2.8% and 5.6% of GDP.

The growth in public expenditure on education[52] is expected to exceed the EU average. The expenditure is influenced heavily by demographic developments (i.e. the size of cohorts enrolled in different levels of education) as well as other factors: the expected duration of mandatory education, the participation rate, wages in the education sector, average class size and the ratio of students to teachers. Under the AWG reference scenario, which only takes into account demographic changes, the share of public expenditure on education in Slovenia is projected to rise by 0.5 p.p. of GDP in the 2010-2060 period. The biggest increase will be in primary education (followed by upper secondary education; tertiary education will only see a modest increase). This trend runs contrary to that projected for the EU, where the share of expenditure on education is expected to fall slightly by 2060 (by 0.1 p.p. to 4.5% of GDP). Under the EU 2020 scenario, which takes into account the implementation of the EU 2020

[47] Alternative scenarios for assessing the impact of non-demographic factors on health care expenditure, DG ECFIN/C2 (2011) 720472.

[48] The calculation for the average in the EU uses data for 22 countries over different periods given the availability of data over time. The longest period is 1961–2009 (data covering the years around 1970–2008 are used for DK, DE, LU, NL, PT; data for 1990–2008 are used for CZ, FR, GR, HU, IT; and data for 1995–2008 are used for EE, SK, SI; the time frame for the other countries is not specified).

[49] The income elasticity is gradually dropping from 1.1 at the outset of the projection to 1.0 by 2060, which means that we are assuming that the effect of non-demographic factors eases gradually.

[50] The reference year for the projection is the state of public health expenditure for 2009 using the methodology of the System of Health Accounts (SHA), which amounted to 6.8% of GDP (this includes expenditure on obligatory social health insurance and expenditure of the state and local budgets for health, including investment); these data are additionally cleansed of public expenditure on long-term care (0.7% of GDP), since these are included in the projections of long-term care expenditure.

[51] The System of Health Accounts (SHA) is the methodology used, whereby all public health and social expenditure on long-term care (together 0.9% of GDP in 2009) is included; however, for AWG projections, benefits for age and dependency under the ESPROSS methodology (primarily disability benefits) are subsequently added, which is why the reference value for Slovenia in 2009 was 1.43% of GDP.

[52] Expenditure on education includes expenditure on primary, secondary and tertiary education, but it does not include pre-school education.

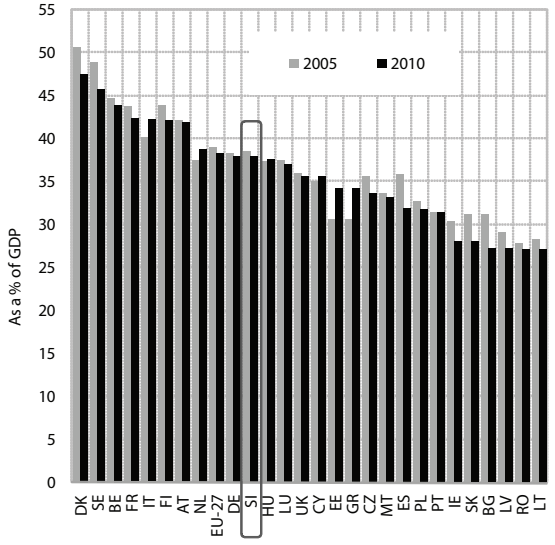
strategy,[53] public expenditure on education as a share of GDP is expected to rise by 0.7 p.p. in Slovenia (mostly for tertiary education, followed by upper secondary education and primary education). The average increase in the EU under this scenario would be 0.2 p.p.

[53] The share of young dropouts is expected to drop to below 10% by 2020, the share of people aged 30–34 with tertiary education is to stand at a minimum of at least 40% by 2020. The share of young dropouts in Slovenia stood at 5.2% in 2010, whereas the share of people aged 30–34 with tertiary education stood at 33.2% in 2009–2010 (average value for the two years).

6. Comparison of the tax burden on labour, consumption and capital in Slovenia and the EU

The total burden of taxes and contributions in Slovenia, measured as a share of GDP, has hovered around 38% of GDP in the past ten years and is slightly below the EU average. Taxes and social security contributions represented 86.5% of total general government revenue in recent years (the remainder came from other revenue: non-tax and capital revenue, donations, participation in profit),[54] with the share being slightly below the EU average (about 89%). The total burden of taxes and contributions, measured as a share of GDP, was 38% in Slovenia in 2010,[55] below the EU (38.4%) and the euro area (38.9%) average. There are significant differences between EU countries in terms of the burden of taxes, as the difference between the highest (Denmark; 47.6%) and the lowest (Lithuania, 27.1%) burden was over 20 p.p. of GDP.

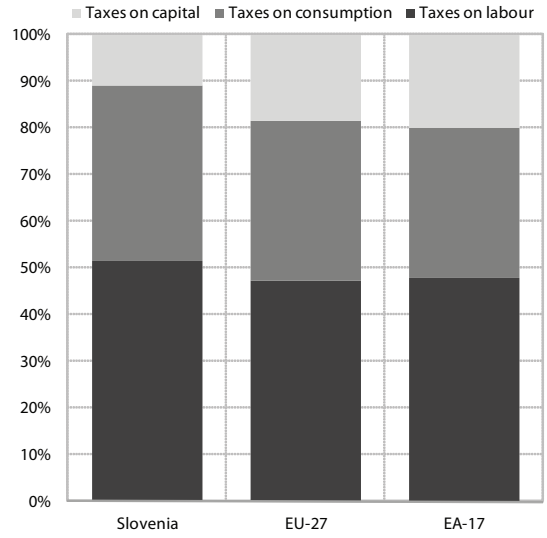
Figure 13: **Burden of taxes and social security contributions in EU countries, as a % of GDP**



Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

The economic structure of taxes varies significantly between the Member States depending on their tax systems. Slovenia has a higher share of taxes on labour in the economic structure of total taxes, whereas the share of taxes on capital is below the EU average in relative terms. In terms of taxes on consumption (37.5%), Slovenia is in the upper third of EU countries, and in terms of taxes on labour (51.8%) in the upper half. In contrast, the share of taxes on capital (11.1%) is among the lowest in the EU, indicating that taxation of capital in Slovenia is very low given the below-average total burden of taxes and contributions relative to the EU average.

Figure 14: **Economic structure of taxes, 2010**



Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

6.1 Taxes on labour[56]

The share of taxes on labour has been dropping in Slovenia in recent years, but it still exceeds a half of the total taxes and contributions. Social security contributions account for about 70% of taxes on labour, personal income tax on wages and salaries for just over a quarter, while the rest are other taxes on labour. The share of taxes on labour in total taxes and contributions dropped significantly after 2006 with the phasing out of the payroll tax and the personal income tax reform. Having temporarily risen in 2008, it has been declining in recent years due to the decline in the number of wage earners as well as higher tax allowances. We estimate it reached 51% in 2011. Social security contributions have been levied at unchanged contribution rates since 2002, which is why their movement was in lockstep with the change in the contribution base and fairly stable until 2009, whereupon it started dropping, due to the lower growth of the wage bill and, to a lesser extent, the increasingly rampant non-payment, avoidance and deferral of payment of contributions. Despite modest growth, contributions rose as a share of GDP in recent years, notably due to the decline in GDP in 2009 and 2011.

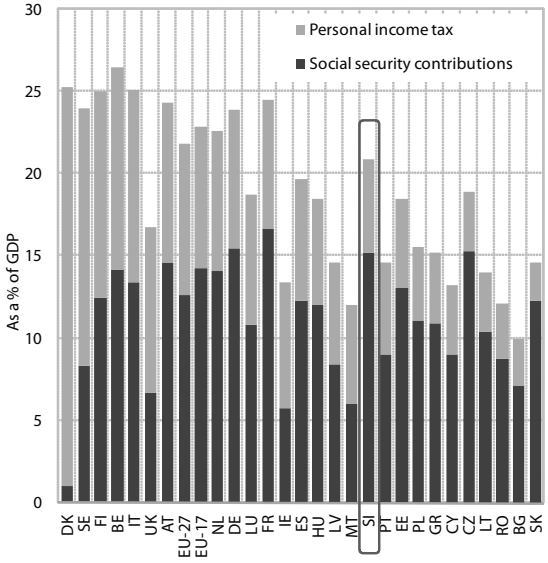
[54] Until 2008, the share was fairly stable, but in the recent years it dropped as taxes and contributions contracted as a result of the economic crisis, whereas transfers and other revenue rose.

[55] 2010 is the last year for which comparable data for EU Member States are available.

[56] Taxes on labour include all taxes directly tied to wages and payable by workers (employees) and employers, including mandatory social security contributions.

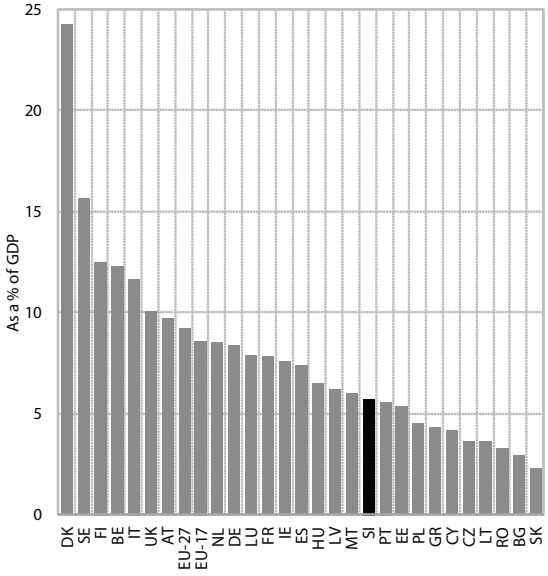
Slovenia has a higher burden of social security contributions and a lower burden of personal income tax, in relative terms, compared to the EU average. The burden of social security contributions, at 15.2% of GDP in 2010, was above the EU average (EU: 12.6% of GDP, euro area: 14.3% of GDP). The differences between the countries are attributable largely to the differences in social insurance systems. The share of personal income tax revenue was 5.7% of GDP in 2010, well below the European average (EU: 9.2% of GDP, euro area: 8.8% of GDP). The share dropped considerably following the tax reform of 2006 and 2007, when the tax brackets changed, the top marginal tax rate was cut and tax relief increased.

Figure 15: **Social security contributions and personal income tax as a share of GDP, EU countries, 2010**



Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

Figure 16: **Personal income tax as a share of GDP in the EU, 2010**

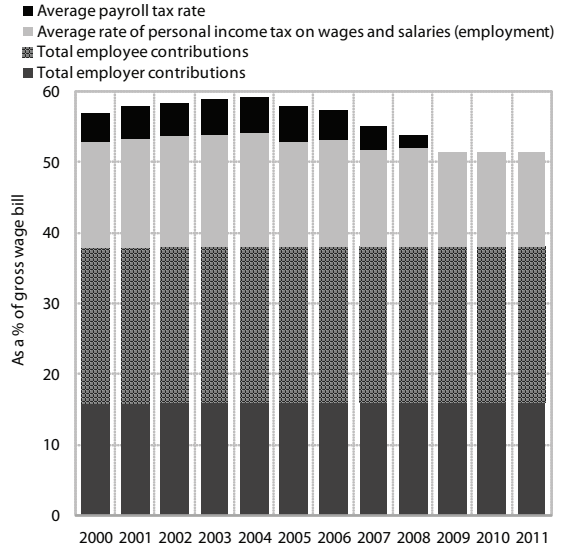


Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

The majority of Member States tax the income of physical persons with progressive tax rates, but some use flat rate systems (Estonia, Latvia, Lithuania, Slovakia, Bulgaria, Romania, the Czech Republic, Hungary). Slovenia has progressive taxation with three tax brackets and a top marginal tax rate of 41% for the majority of income of physical persons except capital gains. Since 2006, capital gains have been subject to a dual personal income tax system, where all capital gains are taxed at a lower, flat rate. We estimate that this has led to an increase in the payment of a part of wages in various forms of capital gains, which has reduced general government revenue in relative terms.

There are also significant differences between the countries in the threshold for the bracket with top personal income tax rate. Sweden (56.6%) and Denmark (55.4%) apply the highest marginal top rate among the countries with progressive taxation; in other Member States, the top rate is between 42% and 53%. Over the long term, the top income tax rate has been dropping in European countries, but it started rising at the start of the economic crisis (it rose in eleven countries after 2009) due to the need to consolidate public finances and increase redistribution. With the tax reform of 2007, Slovenia cut the top rate to 41% from 50%. Pursuant to the Act on the Consolidation of Public Finances, the heretofore relatively low threshold of the top income tax bracket will rise to EUR 18 534; in 2013 and 2014 the top marginal rate will once again rise to 50%, applicable to annual income of over EUR 69 313.

Figure 17: **Fiscal burden of taxes and contributions as a % of the gross wage bill**



Source: MF, Bulletin of Public Finance, calculations by IMAD.

Table 13: **Top statutory marginal tax rate on personal income in the EU, 2004, 2007, 2012**

	2004	2007	2012
Belgium	progressive rate up to 53.7%	progressive rate up to 53.7%	progressive rate up to 53.7%
Czech Republic	progressive rate up to 32%	progressive rate up to 53.7%	15%
Denmark	progressive rate up to 59%	progressive rate up to 59%	progressive rate up to 55.4%
Germany	progressive rate up to 42% and 5.5% contribution	progressive rate up to 42% and 5.5% contribution	progressive rate up to 42% and 5.5% contribution
Estonia	flat rate of 26%	flat rate of 22%	flat rate of 21%
Greece	progressive rate up to 40%	progressive rate up to 40%	progressive rate up to 49%
Spain	progressive rate up to 45%	progressive rate up to 43%	progressive rate up to 52%
France	progressive rate up to 53.4%	progressive rate up to 45.8%	progressive rate up to 46.8%
Ireland	progressive rate up to 42%	progressive rate up to 41%	progressive rate up to 41%
Italy	progressive rate up to 46.1%	progressive rate up to 44.9%	progressive rate up to 47.3%
Cyprus	progressive rate up to 30%	progressive rate up to 30%	progressive rate up to 38.5%
Latvia	flat rate of 25%	flat rate of 25%	flat rate of 25%
Lithuania	flat rate of 33%	flat rate of 27%	flat rate of 15%
Luxembourg	progressive rate 39%	progressive rate 39%	progressive rate 42.1%
Hungary	progressive rate up to 38%	progressive rate up to 40%	flat rate of 16%
Malta	progressive rate up to 35%	progressive rate up to 35%	progressive rate up to 35%
Netherlands	progressive rate up to 52%	progressive rate up to 52%	progressive rate up to 35%
Austria	progressive rate up to 50%	progressive rate up to 50%	progressive rate up to 50%
Poland	progressive rate up to 40%	progressive rate up to 40%	progressive rate up to 32%
Portugal	progressive rate up to 40%	progressive rate up to 42%	progressive rate up to 49%
Slovenia	progressive rate up to 50%	progressive rate up to 41%	progressive rate up to 41%
Slovakia	flat rate of 19%	flat rate of 19%	flat rate of 19%
Finland	progressive rate up to 52.1%	progressive rate up to 50.5%	progressive rate up to 49.2%
Sweden	progressive rate 53–58%	progressive rate 53–58% (56.6%)	progressive rate 53–58% (56.6%)
United Kingdom	progressive rate up to 40%	progressive rate up to 40%	progressive rate up to 50%
Bulgaria	29%	24%	10 %
Romania	40%	16%	16 %

Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

6.2 Taxes on consumption

The value added tax (VAT) and excise duties represent the bulk of taxes on consumption (over 90%), with minor, predominantly environmental duties, accounting for the rest. The share of taxes on consumption[57] in the economic structure of taxes has been quite stable in the last ten-year period, hovering around 37%. The value added tax was introduced in Slovenia in 1999 and VAT rates have remained unchanged[58] since 2002; since its introduction, the VAT has accounted for about 8.3% of GDP. Owing to intentional or unintentional mistakes in VAT payments, the actually paid VAT is lower than the theoretically calculated tax;[59] in 2008[60] the difference was 6.5% or just over EUR 200 million (compared to only 2.6% in 2002). A portion of VAT (between 0.7% and 0.9% of charged VAT; written-off, contested and doubtful claims) is unrecoverable. *Excise* policy has pursued a gradual alignment of excise duties on tobacco and tobacco products with the provisions of the European directive; excise duties on alcohol increased marginally in this

[57] Taxes on consumption are defined as taxes on transactions between economic operators and end consumers that are payable regardless of whether or not the taxpayer derived income from them. According to ESA-95 classification, taxes on consumption under the existing tax system in Slovenia include value added tax, import duties, customs duties, other import taxes, excise duties, agricultural import duties, customs charges and excise charges, tax on motor vehicles, gambling tax, tax on insurance services, and public utilities and environmental charges.

[58] With the general VAT rate (20%) and the reduced rate (8.5%), the average VAT burden in Slovenia is estimated at 15.8% for 2010.

[59] Theoretical VAT is the calculated value of VAT that would be received in the accounting period if all economic operators were to charge and pay VAT in accordance with the applicable legislation.

[60] Latest SORS data.

Table 14: **Value added tax rates in EU countries, 2008 and 2012**

	Standard rate		Reduced rate	
as a % of the base	**2008**	**2012**	**2008**	**2012**
Belgium	21%	21%	6% and 12%	6% and 12%
Bulgaria	20%	20%	7%	9%
Czech Republic	19%	20%	9%	9%
Denmark	25%	25%		
Germany	19%	19%	7%	7%
Estonia	18%	20%	5%	9%
Ireland	21%	23%	13.5% and 4.8%	13.5% and 4.8%
Greece	19%	23%	9% and 4.5%	6.5% and 13%
Spain	16%	18%	7% and 4%	8% and 4%
France	19.6%	19.6%	5.5% and 2.1%	5.5%, 7%, 2.1%
Italy	20%	21%	10% and 4%	10% and 4%
Cyprus	15%	17%	5% and 8%	5% and 8%
Latvia	18%	22%	5%	12%
Lithuania	18%	21%	5% and 9%	5% and 9%
Luxembourg	15%	15%	6%, 12%, 3%	6%, 12%, 3%
Hungary	20%	27%	5%	5% and 18%
Malta	18%	18%	5%	5% and 7%
Netherlands	19%	19%	6%	6%
Austria	20%	20%	10%	10%
Poland	22%	23%	7% and 3%	5% and 8%
Portugal	20%	23%	5% and 12%	6% and 13%
Romania	19%	24%	9%	5% and 9%
Slovenia	**20%**	**20%**	**8.5%**	**8.5%**
Slovakia	19%	20%	10%	10%
Finland	22%	23%	8% and 17%	9% and 13%
Sweden	25%	25%	6% and 12%	6% and 12%
United Kingdom	17.5%	20%	5%	5%
EU-27	19.4%	21.0%		

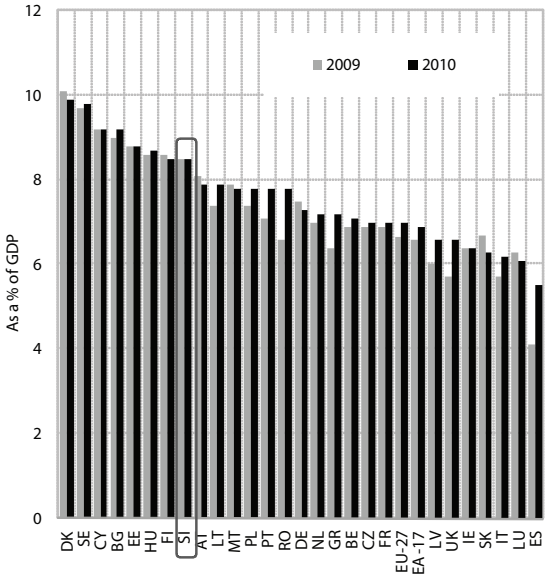
Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

period as well. In the field of energy taxes, excise policy until 2008 focused on cushioning the impact of swings in global oil prices on domestic inflation; in 2009 and 2010, excise increased, largely to mitigate the decline in budget revenue.[61] With the decline in volume sales of excisable products in 2010, excise duties on energy products were reduced last year and the volumes of sold excisable products rebounded. Given the lower nominal GDP, in recent years excise policy has contributed to an increase in excise duties as a share of GDP, from about 3.2% in the pre-crisis period to 4.2% in the 2009–2011 period.

Taxes on consumption as a share of GDP exceed the EU average and their share is above-average in the structure of total taxes and contributions. The burden of taxes on consumption was at 14.2% of GDP in 2010, compared to the EU average of 11.0% of GDP. Their share in the structure of total taxes and contributions was above average as well (SI: 37.5%, EU: 34.4%, euro area: 32.3%), which is partly a result of the relatively low taxation of capital in Slovenia. The share has been increasing in recent years, but that is also the case in Europe on average, as many Member States significantly increased VAT rates (five in 2009, eight in 2010, five in 2011 and three in 2012) as well as excise rates. All Member States bar Denmark levy the standard VAT rate as well as the reduced rate for special types of consumption.

[61] Excise duty on electricity was introduced in 2007, but it is very low.

Figure 18: **Value added tax as a share of GDP, EU countries, 2009 and 2010**



Source: Eurostat, Taxation trends in the European Union, 2012 Edition.

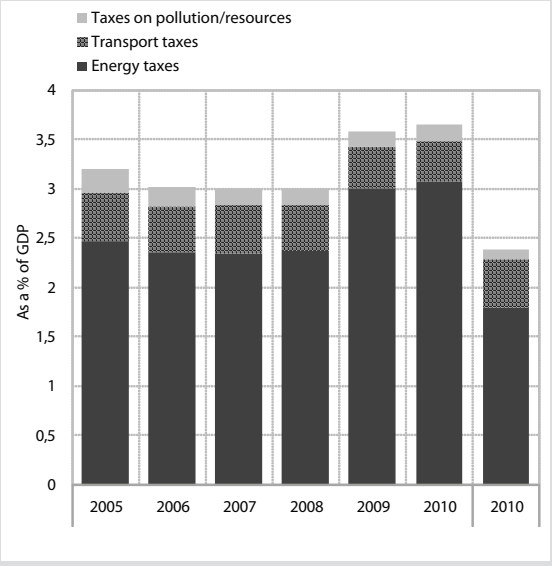
Box 2: **Environmental taxes**

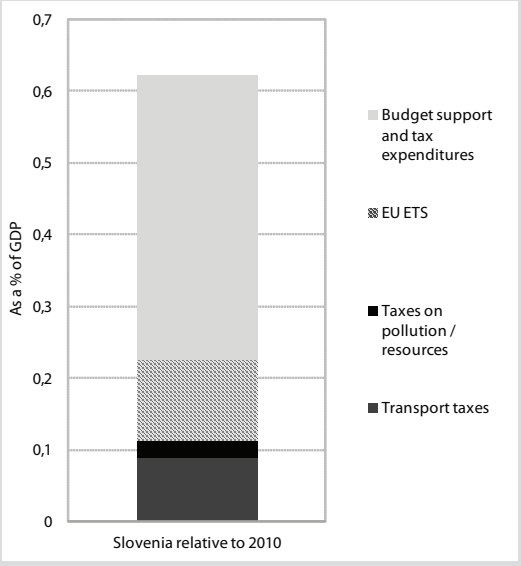
Slovenia is above the EU average in terms of the share of revenue from environmental taxes, but a positive contribution to fiscal consolidation is still possible in individual areas. Environmental taxes are among the taxes with the least harmful impact on economic growth[62] and are, therefore, natural candidates if the need for fiscal consolidation requires raising taxes.[63] The scope for increasing environmental taxes (or reducing environmentally inefficient tax expenditures) is biggest in the refund of excise duties for certain use of fuel, in revenues from EU ETS auctioning, and in taxes on transport. In 2010, EUR 1.3 billion or 3.6% of GDP was collected from environmental taxes in Slovenia. This is significantly above the EU average (2.4% of GDP) and the difference can be explained with higher revenue from energy taxes.

Higher revenue from energy taxes in relative terms (Slovenia: 3.1% of GDP; EU: 1.8%) are the consequence of higher energy use, in particular in road transport,[64] whereas the tax rates (and prices) of the most commonly used energy products (e.g. fuel and electricity) are still below the EU average. Revenue from excise duties on motor fuels accounted for the bulk of energy taxes (about 90%), having increased by almost 20% annually in the period 2000–2010. The trend was largely driven by the high consumption of diesel, which was highest[65] in 2004 and 2008, i.e. following the last two rounds of EU enlargement, which increased foreign goods trade through Slovenia; the same is expected when Croatia joins the EU next year. Furthermore, the growth in fuel sales was driven by lower fuel prices compared to neighbouring countries.[66] Given the relatively high current oil prices on world markets, the scope for further increases of motor fuel excise duties is limited. Moreover, purchasing power-adjusted excise payable by individuals is close to the EU average and significant increases would exert additional pressure on households' purchasing power. There is greater scope in excise refunds for agricultural and forestry machinery, industrial machinery etc., and in the refund of excise on commercial diesel, which was introduced in 2009 to mitigate the effects of the economic crisis, and

[62] See for example OECD: Fiscal consolidation: How much, how fast and by what means?, 2012, and European Commission: Monitoring tax revenues and tax reforms in EU Member States 2010, 2010.
[63] The stimulus measures of some Member States included increased environment taxes and elimination of environmentally damaging budget expenditure
[64] In Slovenia, the contribution of fuel use in road transport to total energy use is among the highest in the EU. Additionally, motor fuels are typically taxed more than other energy products.
[65] In these years, fuel use grew at the fastest pace, but the revenue growth was slower due to lower excise duties.
[66] Changes in the ratio between the fuel price in Slovenia and the weighed fuel prices in neighbouring countries have a statistically significant effect on demand for motor fuels in Slovenia (see Development Report 2012, p. 80).

Figure 19: **Environmental taxes (left), possible increases thereof and reduction of expenditure associated with fossil fuels* (right)**





Source: SORS, Eurostat, internal MF data.
Notes: * does not include changes in production and consumption patterns as a result of changes in taxation ** reduction in expenditure is shown as increase in revenue.

reduced the effective taxation of fuels in road goods transport. These incentives totalled EUR 78.4 m[67] in 2010, EUR 140.5 m together with other budgetary support and tax expenditures for fossil fuels. Such tax treatment in fuels is not justified from the environmental perspective,[68] while better integration of environmental criteria in determining the tax rates would also be sensible for other energy products[69] (this is also envisaged in the proposed revision of the Energy Taxation Directive at the EU level). Inappropriate tax signals and the continued increase in energy use contribute to Slovenia's moving away from the commitments until 2020 regarding greenhouse gas emissions and the share of renewable energy sources.

Revenue from transport taxes and taxes on pollution and the use of natural resources has dropped since the beginning of the economic crisis (2008). Revenue from taxes on transport, i.e. taxes on the ownership and usage of vehicles, is relatively low in Slovenia (0.41% of GDP; EU: 0.50% of GDP). Considering the size of the road haulage sector and the number of cars, this probably means that the tax burden is lower compared to other EU countries. This year's Stability Programme envisages the introduction of an additional tax on motor vehicles and higher revenue from annual charges for the use of vehicles in road transport. Nevertheless, we estimate that revenue from transport taxes relative to GDP will remain flat over 2010 and well below its level in 2008.[70] The erosion of tax revenue may be linked to the efficiency of the environmental tax, i.e. the contraction of the tax base, which increases pressure on the environment. Furthermore, environmental taxes are typically not ad valorem taxes, hence their tendency to drop in real terms unless the tax rates are occasionally adjusted. This also applies to the majority of taxes on pollution and the use of natural resources. Increases of these charges, most of which are appropriated, are not planned for the time being. Provided that the scope of pollution and the use of natural resources remain at the same level, tax revenue relative to GDP and the real tax rate will decline in the coming years. This also applies to municipal landfill taxes, which are among the lowest in the EU. Even though taxes on pollution and resources are a relatively modest source of general government revenue, in Slovenia as well as in the majority of EU countries, the adjustment of the tax rates or expansion of the number of taxes would be sensible in terms of encouraging re-use and rationalising the use of resources, i.e. promoting the resource efficiency of the economy, one of the leading initiatives of Europe 2020.

[67] The introduction of a CO2 charge planned last year would have had a similar impact than abolishing or reducing the excise refund, but (judging by the Stability Programme – Update 2012) it is not expected to be implemented this year either. A CO2 charge would compensate for a part of the excise duty but refunds for commercial use of fuel would not be possible.
[68] Similar from the fiscal perspective (see Development Report 2012, p. 80).
[69] The environmental imbalance between tax rates on energy products and the negative effects on the environment has also been highlighted by the OECD. 70
[70] The 2009 tax on new motor vehicles resulted in positive changes towards including environmental criteria in setting tax rates, but the revenue from this source dropped by nearly a half.

There is also scope for adjusting environmentally harmful subsidies as a means of furthering the consolidation of public finances. A review of the eligibility of environmentally harmful subsidies (including the above-mentioned fossil-fuel subsidies) would make sense from the environmental and fiscal point of view. Potential increases in tax rates would also be in conformity with the recommendations of the OECD's environmental review in transport taxes and some taxes on pollution and the use of natural resources. Were revenue from these taxes to increase to the EU average, we estimate this would generate EUR 30–50 million in additional budget revenue. As of 2013, additional revenue of at least EUR 40 million annually[71] is expected from the EU ETS auctioning. A green fiscal reform that would appropriately adjust environmental taxes and environmentally harmful subsidies would have a positive contribution to the meeting of environmental goals, and in the short term to fiscal consolidation. Over a longer time horizon, pursuing the recommended fiscal neutrality of green fiscal reform could disburden labour costs, thereby contributing to the meeting of other goals of the Europe 2020 strategy (e.g. increasing the employment rate to over 75%).

[71] The climate strategy posits revenue of EUR 40–160 m annually, but the lower estimate is more realistic given the low current carbon prices.

6.3 Taxes on capital

The share of taxes on capital[72] in the economic structure of taxes, which is very low in Slovenia, has fluctuated over the recent years. Corporate income tax accounts for the bulk of taxes on capital, with the remainder dispersed among a significant number of less revenue-intensive taxes on capital and property. Corporate income tax represented just over 60% of taxes on capital prior to the tax reform, whereupon its share dropped to just over a half.[73] Tax reliefs also increased after 2007, several changes to personal income taxation were instituted and the macroeconomic environment deteriorated as well. In 2011, corporate income tax accounted for 1.9% of GDP, well below 3.2% of GDP in 2007. In the EU-27 corporate income tax averaged 2.4% of GDP in 2010, and in the euro area 2.2% of GDP. In the economic structure of taxes, the share of taxes on capital is below the European average. In 2010, it accounted for 11.1% of total taxes and contributions, compared to the EU average of 18.4% and the euro area average of 19.9% (it was lower only in Estonia, Latvia and Lithuania). We estimate that the share dropped to about 10% in 2011.

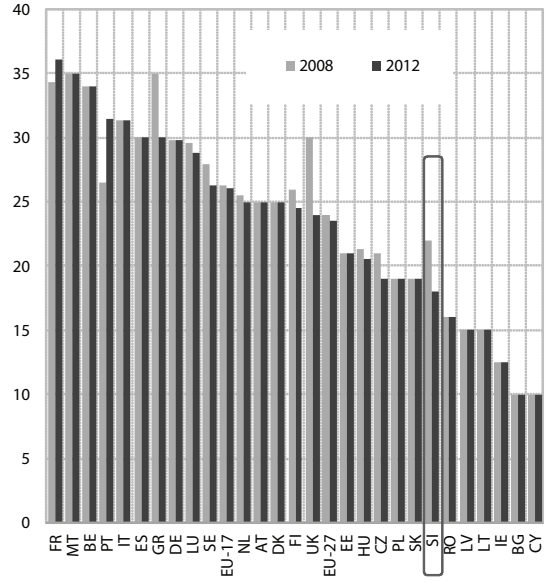
The trend of cutting corporate income tax rates was present in other European countries after 2000, but it largely stopped after 2008. Central and Eastern European countries cut the tax rates first, but they were subsequently followed by other EU countries. In the EU, the average corporate income tax rate dropped from 27.0% in 2004 to 23.1% in 2011 (29.6% and 25.3% on average in the euro area, respectively). After 2008, the cutting of the tax rates stopped, but in order to mitigate the impact of the economic crisis governments introduced tax reliefs while simultaneously expanding the tax base by limiting deductible expenses.

[72] Taxes on capital includes taxes payable on capital and corporate income (corporate income tax), the portion of personal income tax derived from households' capital (annuities, dividends, other income on property), capital gains taxes, property taxes (buildings, second homes, boats), tax on inheritance and gifts, tax on real estate transactions, compensation for the use of building land, etc.

[73] The tax reform of 2007 gradually reduced corporate income tax from 25% to 20% by 2010.

Among European countries, Slovenia stands out in particular with its low corporate income tax rate. The statutory tax rate was 20% in 2011, compared to the EU average of 23.1% and the euro area average of 25.3%. Taking into account the tax reliefs, the effective corporate income tax was even lower, about 15% in 2011, according to preliminary estimates. Pursuant to amendments to the corporate income tax act, the statutory rate will be cut to 18% in 2012 and gradually drop to 15% in the subsequent years even as tax reliefs increase. Compared to the current rates in the EU, only six EU countries will have lower rates than Slovenia in 2012 and only Ireland, Bulgaria and Cyprus after 2015. Due to tax reliefs, the effective corporate income tax rate will be even lower and among the lowest in the EU.

Figure 20: **Statutory corporate income tax rates in the EU, 2008, 2012**

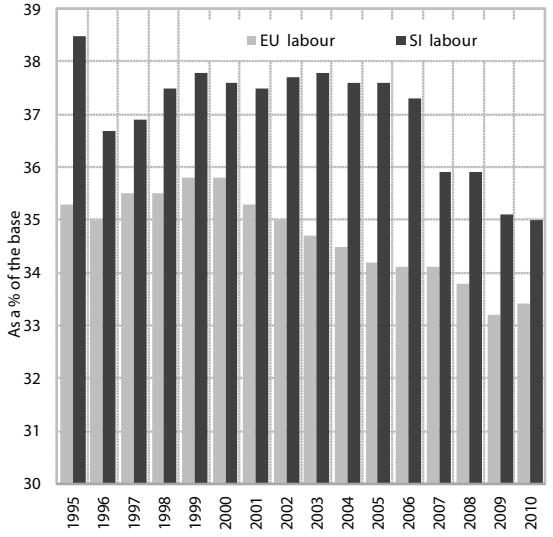


Source: Eurostat, EC Taxation trends in the European Union, 2012 Edition.

6.4 Implicit tax rates

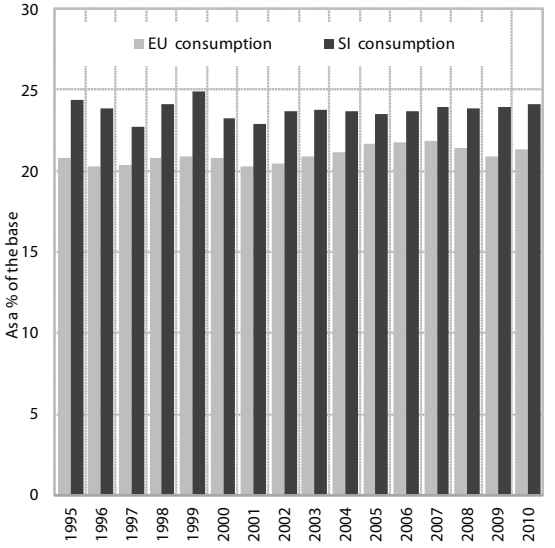
Calculation and comparison of implicit tax rates[74] shows that in 2010 labour and consumption were taxed above the average and capital below the average. *The implicit tax rate on consumption* was 24.1% in 2010 compared to the EU average of 21.3%. It rose by 0.1 p.p. over the year before in Slovenia and 0.4 p.p. on average in the EU, which we attribute mostly to rising VAT rates. Only seven Member States, mostly Nordic countries, had higher implicit rates than Slovenia. The *calculated implicit tax rate on labour* was 35.0% in 2010, above the EU average of 33.4% in particular due to high social security contributions. It dropped by 0.1 p.p. in Slovenia and rose by 0.2 p.p. on average in the EU. Ten Member States had higher rates than Slovenia. The *implicit tax rate on capital* is estimated at 22.5% for 2010, below the EU-25[75] average of 23.3%. The highest implicit tax rate for Slovenia and the EU average was calculated in 2007, whereupon it dropped, faster in the EU on average than in Slovenia. Eleven countries had lower rates than Slovenia, including Baltic countries as well as the Czech Republic, Hungary, the Netherlands, Poland and Slovakia.

Figure 21: **Implicit tax rates on labour, in % of the base**



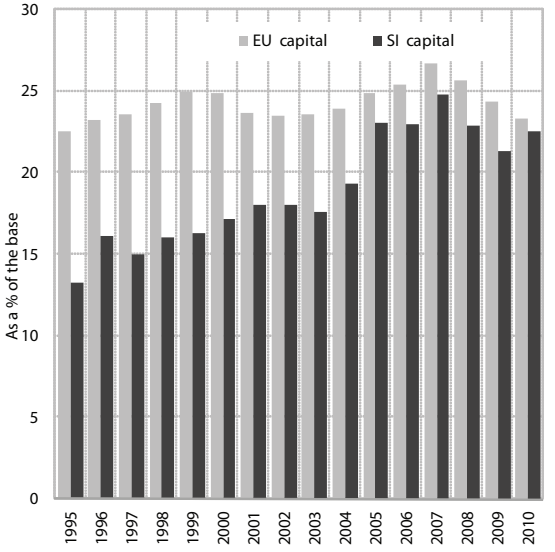
Source: Eurostat, EC Taxation trends in the European Union, 2012 Edition.

Figure 22: **Implicit tax rates on consumption, in % of the base**



Source: Eurostat, EC Taxation trends in the European Union, 2012 Edition.

Figure 23: **Implicit tax rates on capital, in % of the base**



Source: Eurostat, EC Taxation trends in the European Union, 2012 Edition.

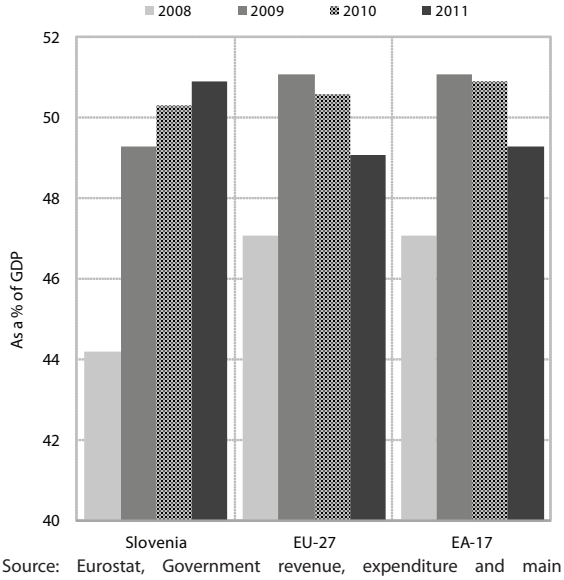
[74] The implicit tax rate on consumption is defined as the ratio between taxes on consumption and final household consumption expenditure on the territory of the country according to the methodology of national accounts. The implicit tax rate on labour is calculated as the ratio between taxes on labour and the wage bill according to the methodology of national accounts, increased by the payroll tax. The implicit tax rate on capital is defined as the ratio between taxes on capital and aggregate income on capital and savings.

[75] EU-27 data not available.

7. Comparison of expenditure by economic structure in Slovenia and the EU

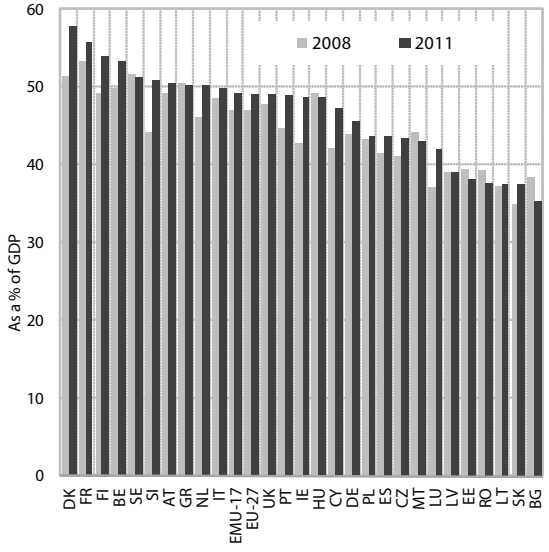
The majority of European countries had already begun consolidating their public finances in 2011 and reduced general government expenditure in relative terms, but in Slovenia expenditure increased. In 2011, as many as 23 countries reduced general government expenditures, only Belgium, Cyprus, Slovenia and Denmark increased them. *In Slovenia expenditure widened by 5.1 p.p. of GDP compared to the average EU and euro area increases of 0.4 p.p. of GDP.* At 50.9% of GDP, general government expenditure was above the EU average (49.1% of GDP) in 2011, with one-off transactions (0.9 p.p.) a key cause of the increase. The share of expenditure had already increased in 2010 (by 1.0 p.p.) and 2011 (by 0.6 p.p.), whereas the EU average dropped, by 0.5 p.p. in 2010 and a further 1.5 p.p. in 2011. Slovenia placed sixth among Member States in terms of general government expenditure, as only Denmark, France, Finland, Belgium and Sweden had higher expenditure in relative terms.

Figure 24: **General government expenditure as a % of GDP**



Source: Eurostat, Government revenue, expenditure and main aggregates, May 2012.

Figure 25: **General government expenditure as a % of GDP**



Source: Eurostat, Government revenue, expenditure and main aggregates, May 2012.

Table 15: **Economic structure of general government expenditure, 2011**

	Slovenia		EU-27		EA-17	
	As a % of GDP	Structure	As a % of GDP	Structure	As a % of GDP	Structure
Total general government expenditure	**50.9**	**100.0**	**49.1**	**100.0**	**49.4**	**100.0**
Intermediate consumption	6.5	12.9	6.7	13.6	5.5	11.1
Compensation of employees	12.7	25.0	10.8	22.0	10.6	21.5
Social benefits and benefits in cash and kind	20.1	39.6	21.3	43.4	23.1	46.8
Gross capital formation	3.6	7.1	2.5	5.1	2.3	4.7
Capital transfers	2.0	3.9	1.1	2.2	1.1	2.2
Subsidies	1.9	3.8	1.2	2.4	1.3	2.6
Property income, payable	2.0	3.8	2.9	5.9	3.0	6.1
Other expenditure	2.0	3.9	2.6	5.3	2.5	5.1

Vir: Eurostat, Government revenue, expenditure and main aggregates, May 2012.

Box 3: **Efficiency of state aid and de minimis aid in mitigating the consequences of the economic crisis in 2009 and 2010**

State interventions targeted at mitigating the impact of the economic crisis led to a surge in the amount of state aid and small-scale (de minimis)[76] aid in 2009 and 2010. Having risen by EUR 336.9 m, state aid and de minimis aid almost doubled between 2008 and 2009. The following year state aid dropped by 23.9%, but it still remained well above the level of 2008. The reduction stems from the phasing out of aid allocated for mitigation of the impact of the economic crisis, but other types of aid, in particular sectoral aid, increased. De minimis aid dropped by EUR 24.2 m. According to EC data for 2010 (State Aid Scoreboard, 2011), average state aid in the EU (excluding aid for the mitigation of the economic crisis and rail transport aid) was just over half that in Slovenia. Only Hungary and Malta recorded higher aid in relative terms, while Finland was on par with Slovenia. However, the amount of aid earmarked for the financial sector for the mitigation of the impact of the financial crisis in the 2008–2010 period was well below the EU average (Commission staff working paper, Autumn 2010 update, 2011).

The economic crisis was targeted with aid under a special scheme and increased aid for several horizontal goals. A quarter of a billion euros in state aid was allocated in 2009–2010 under a special scheme called aid to remedy a serious disturbance in the economy. The scheme combines three measures: a guarantee scheme for credit institutions, a guarantee scheme for companies, and a limited measure to complete development and investment projects and promote redeployment and self-employment. Under the first two measures, aid was granted in the form of guarantees[77] and under the third measures with grants; 88% of the state aid was allocated to the financial and insurance sector, i.e. four banks.

As part of efforts to mitigate the consequences of the economic crisis, state and de minimis aid for R&D, employment, SMEs and training increased significantly. In 2009 and 2010, EUR 311.2 m was allocated for these functions. In the selection of the functions, the state pursued efficiency and effectiveness of aid allocation. Increased state aid for employment was targeted primarily at job preservation in a bid to prevent a surge in unemployment, whereas de minimis aid supported in particular self-employment. In addition to manufacturing, significant portions of aid were allocated to professional, scientific and technical activities; information and communication; and wholesale and retail trade, and repair of motor vehicles. In manufacturing, the aid for research and development was largely targeted at high- and medium-high-technology industries; aid for SMEs, training and in particular employment supported mostly medium- and low-technology industries. Global empirical research suggests that the most effective aid is for R&D and training (due to its spillover effects), and aid to SMEs (promoting the most dynamic segment of the economy).

Special research using econometric methods[78] showed that the stimulus measures adopted in Slovenia in 2009–2010 did not achieve the desired effects (Burger et al., 2012). On average, the recipients of stimulus measures were above-average sized, productive and export-oriented companies, which managed to retain relative advantages against average competitors in their industry in the crisis years. The only exception was sales and value added per employee, where the relative advantage of aid recipients decreased compared to the average in the industry. The matching method showed that the effect of aid on total revenue of the beneficiaries was insignificant in the first year, negative in the second year and positive thereafter. The cumulative effect on sales was insignificant, whereas the initial chain effects and the final cumulative effects on the average euro of aid were negative. Two years following the drawing of aid, the recipients managed to increase exports more than the non-beneficiaries in the control group and significantly increased export intensity compared to the non-beneficiaries. The effect of aid on value added was insignificant, except cumulatively after two years, when the beneficiaries recorded a higher cumulative decrease in value added relative to the pre-crisis period than comparable control companies that did not receive aid. The average effect on employment and the effect on employment per euro of aid were negative in the majority of the cases. From the beginning of the crisis and until two years after the phasing of aid, the beneficiaries reduced employment by 3.6 employees more

[76] Member States may allocate small-scale de minimis aid quickly, without the need for notification with the European Commission. The rule is based on the assumption that the bulk of small-scale aid does not affect trade and competition between Member States. De minimis aid is capped at EUR 200 000 per company over a rolling three-year period.

[77] For guarantees the element state aid is considered to account for 10% of the transferred value. For example, banks received EUR 2.2 bn in guarantees, which translates into EUR 220 m in state aid.

[78] In the empirical part, we used a variety of quantitative methods ranging from standard descriptive statistics to non-parametric matching methods and parametric methods of dynamic panel regression, which is used to test theories of company growth. Different versions of the matching method were used to study the effect of aid on net sales revenue, value added, the number of employees, value of exports, export intensity, average wage per employee, value added per employee, and the capital intensity of production. The matching methods were combined with the difference-in-difference method, which the researchers used to estimate the difference in temporal (annual and cumulative) differences of the studied indicators between aid beneficiaries and similar companies in a control group that did not receive aid.

than control non-beneficiaries. Aid had the biggest and most convincing effect on average wages in the beneficiaries, where significantly higher annual and cumulative growth compared to non-beneficiaries was recorded in the majority of specifications. The cumulative effect was about 100 euros in higher monthly expenses on wages of employees two years following the receipt of aid compared to the pre-crisis period. The effect on productivity was less unequivocal. In the first year of the crisis it was significantly negative, after which it turned positive; the cumulative average effect and the effect per euro of aid is thus significantly positive. The beneficiaries thus reduced employment more intensively than non-beneficiaries, thereby increasing productivity per employee and, along with direct incentives, managed to increase average wages by more than non-beneficiaries. Analysis of the effect of aid received during the crisis on sales, employment and gross investment with the dynamic panel regression method showed a negative effect of aid on employment growth and sales at the level of annual data; at the level of quarterly survey data and on a smaller sample of companies, the aid for the mitigation of the impact of the economic crisis did not show a statistically significant effect on sales and gross investment. Company size, export orientation, imports, capital intensity and innovation cooperation with external actors affected growth in turnover in the majority of specifications. Direct outward foreign investment, the number of export markets, the number of import markets and the number of investment markets also had a positive effect on the indicators. It turned out that the level of internationalisation, inward as well as outward, has a positive effect on companies' resilience during the economic crisis.

Research conducted in 2008 and 2010 produced similar findings, but this has not led to progress in the system for the distribution of state aid and de minimis aid. The first analysis, which looked at the efficiency and effectiveness of state aid in terms of competitiveness in the 1998-2006 period, pinpointed several weaknesses in how the programmes of state aid were conceived and aid allocated to beneficiaries, undermining the effect of the aid on value added, employment, exports and other performance indicators. For the beneficiaries, state aid did not represent an additional resource for structural reform and technological restructuring; it merely replaced their own sources of financing (Rojec et al., 2008). The second analysis, looking into the efficiency and effectiveness of state aid on market competition in the 1998-2008 period, demonstrated that the combined effect of state aid on the level of competition was neutral, but it also showed that the effect on allocation efficiency of the Slovenian economy was neutral as well, which is negative in that the state aid policy failed to realise its economic stimulus potential (Rojec et al., 2010). A special analysis of the implementation of the entrepreneurship and competitiveness policy in 2004–2009, meanwhile, highlighted the complexity of administrative procedures in the allocation of aid, which resulted in high costs for the granter and the beneficiary, and weaknesses in the institutional environment (legal, economic and political institutions), all of which also undermines the efficiency and effectiveness of state and aid allocated under the de minimis rule (Jaklič, 2012).

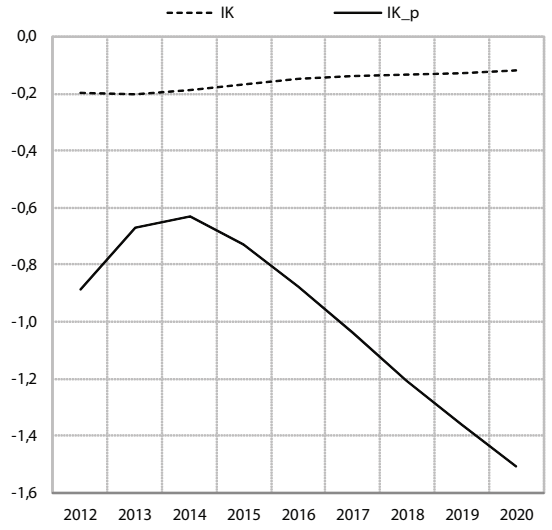
8. Model estimate of the effects of measures for the consolidation of public finances

Under the current economic conditions of weak economic activity, one of the key challenges of fiscal policy in Slovenia is to frame an economic policy mix that will provide consolidation while minimising the negative effects of the measures on economic growth. In Slovenia, fiscal consolidation is being carried out in an environment of sluggish or negative growth, which is a consequence of modest foreign demand, low crediting activity, deleveraging by banks and companies, and a weak labour market. At the same time, the euro area debt crisis has severely worsened the borrowing conditions on international financial markets, as increased risk has thinned the ranks of prospective investors in government bonds and raised yields (IMF, 2002). All of this is making it difficult for Slovenia to finance its debt, additionally heightening the need for reducing the general government deficit. In such conditions, one of the key challenges of fiscal policy in Slovenia has been to frame an economic policy mix that will provide consolidation while minimising the negative effects of the measures on economic growth. When growth is sluggish or negative, cutting the deficit with measures that have a very strong negative effect on growth can slow down consolidation due to declining revenue. Consequently, debt increases faster, nominally as well as relative to GDP.

In this section, we present a model-based estimate of the potential effects of different combinations of consolidation policies on economic activity in Slovenia. The effects are estimated with an extensive dynamic stochastic general equilibrium model (DSGEM QUEST III),[79] calibrated to the Slovenian economy. The model simulations are based on various combinations of temporary (one-year) and permanent changes in fiscal policy that would reduce the general government deficit by 1% of GDP per year over four years. We estimated the fiscal multipliers for *ex ante* measures in indirect taxes, government expenditure, budget transfers and investment, taking into account the findings of several studies (e.g. OECD, 2012). The estimates were based on the following assumptions: the ECB benchmark rate remains low in the medium term but does not drop below 0% (zero lower bound), which affects the multipliers of taxes and government expenditure and their effect on economic activity; the government does not target a specific deficit level, i.e. the model's fiscal rule that automatically adjusts taxes with regard to the difference between the actual and target deficit is excluded (see Roget et al., 2011 and OECD, 2012).

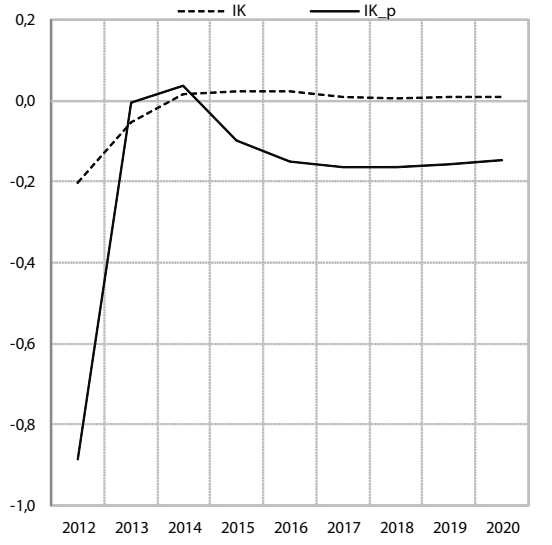
The estimates of the effects of various economic policy mixes were benchmarked and compared to a scenario in which public finances are not consolidated. For this scenario, we estimated the temporary and permanent increases in the cost of capital (i.e. costs of government borrowing), which would also affect private sector

Figure 26: **Impact of 1 p.p. increase in costs of capital on GDP level, temporary (IK) and permanent (IK-p) increase**



Source: IMAD estimate; Note: IK - temporary increase in the cost of capital; IK-p - permanent increase in the cost of capital.

Figure 27: **Impact of 1 p.p. increase in costs of capital on GDP growth, temporary (IK) and permanent (IK-p) increase**



Source: IMAD estimate; Note: IK - temporary increase in the cost of capital; IK-p - permanent increase in the cost of capital.

[79] The Quest model with endogenous technological changes was calibrate for EU Member States by D'Auria et al. (2009) based on the model from Roeger et al. (2008). It is also used by the Directorate General for Economic and Financial Affairs (DG ECFIN).

borrowing. The simulation took into account empirical research that shows that worse country ratings increase borrowing costs for the entire economy, and that the correlation between government and private sector borrowing costs is typically stronger during a crisis (Corsetti et al., 2012). For the absence of consolidation, the simulation assumes an increase in government borrowing costs by 100 basis points (b.p.) every year, which is fully carried over to the private sector. The effect of temporary (one-year) and permanent increases in borrowing costs on GDP and GDP growth is shown in Figures 26 and 27. In the event of a permanent increase in borrowing costs, the effect on the level of GDP is higher, whereas the effect on GDP growth is permanent.

Expenditure-side consolidation measures have bigger multiplier effects on economic growth. The estimates of multipliers for the first year of implementation of temporary and permanent measures are shown in Table 16. We estimated the effects of *ex ante* reduction of general government expenditure in government expenditure consumption (wages and expenditure on goods and services), transfers, capital formation, and increase in revenue given a 1 p.p. increase in VAT. A key assumption of the model for the increase of VAT is that the effect of the VAT increase, which provisionally increases inflation, does not spill over into higher wages and transfers through indexation. The calculations show that the multiplier effects are higher in the case of expenditure cuts than in revenue increases, which applies to temporary as well as permanent measures. The temporary effect of government consumption and capital formation cuts are similar for the first year. In capital formation, the multiplier effects on growth are higher in the event of a permanent decrease.

Table 16: **Multipliers of consolidation measures in the amount of 1% of GDP for year one**

	General government expenditure			General government revenue
	Government consumption (compensation of employees and expenditure on goods and services)	Social transfers	Capital formation	VAT
Temporary measures	-0.44	-0.36	-0.50	-0.29
Permanent measures	-0.45	-0.40	-0.78	-0.26

Source: IMAD estimates.

Table 17: **Multipliers of temporary measures in the amount of 1% of GDP for year one**

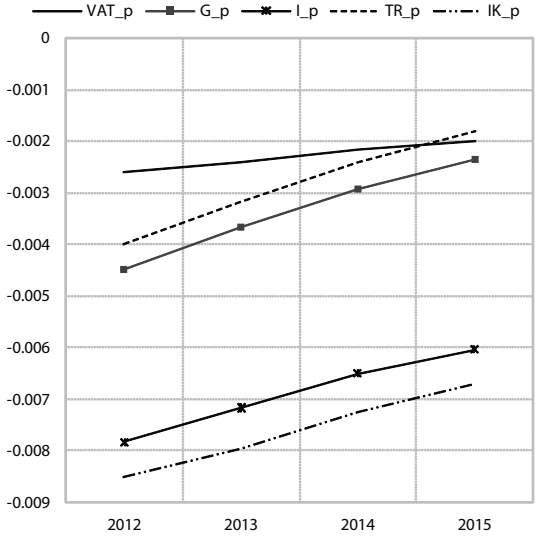
	Government consumption	Transfers	Indirect taxes	Differences	
	1	2	3	4=1-2	5=1-3
Australia	-0.82	-0.27	-0.25	-0.55	-0.57
Austria	-0.53	-0.17	-0.09	-0.36	-0.44
Belgium	-0.17	-0.04	-0.05	-0.13	-0.12
Canada	-0.53	-0.16	-0.05	-0.37	-0.48
Denmark	-0.53	-0.1	-0.06	-0.43	-0.47
Finland	-0.64	-0.14	-0.09	-0.5	-0.55
France	-0.65	-0.32	-0.09	-0.33	-0.56
Germany	-0.48	-0.29	-0.09	-0.19	-0.39
Greece	-1.07	-0.44	-0.22	-0.63	-0.85
Ireland	-0.33	-0.09	-0.07	-0.24	-0.26
Italy	-0.62	-0.17	-0.07	-0.45	-0.55
Japan	-1.27	-0.65	-0.34	-0.62	-0.93
Netherlands	-0.53	-0.19	-0.07	-0.34	-0.46
Portugal	-0.68	-0.15	-0.08	-0.53	-0.6
Sweden	-0.39	-0.14	-0.06	-0.25	-0.33
Spain	-0.71	-0.15	-0.17	-0.56	-0.54
United Kingdom	-0.74	-0.22	-0.16	-0.52	-0.58
US	-1.12	-0.35	-0.35	-0.77	-0.77

Source: Barrel et al., 2012.

According to Barrel, Holland and Hurst (2012), despite differences in the size of multiplier effects among countries, the effects are highest in relative terms in the case of government consumption (capital formation is not included in the comparisons); this also applies to Slovenia. We compared out estimates of temporary measures for the first year with estimates conducted by Barrel et al. (2012) with regard to the effects of consolidation assuming a reduction of government consumption and social transfers and an increase in direct taxes (Slovenia was not included in the analysis). These estimates were made using similar assumptions on the zero lower bound interest rate and the switch-off of the fiscal rule. While there are significant differences between the countries in the size of the estimated multipliers, in all countries the multipliers are highest in the case of government consumption (capital formation is excluded) and in all countries the effects are lowest in indirect taxes. Estimates on the size and rank of multipliers are similar in other studies (Roger et al., 2010, Coenen, 2010, Baunsgaard et al., 2012). A comparison between OECD estimates and our estimates for Slovenia (Tables 16 and 17) shows that the multipliers for government consumption and transfers in the case of Slovenia are lower than the OECD average, whereas the multiplier for indirect taxes is higher.

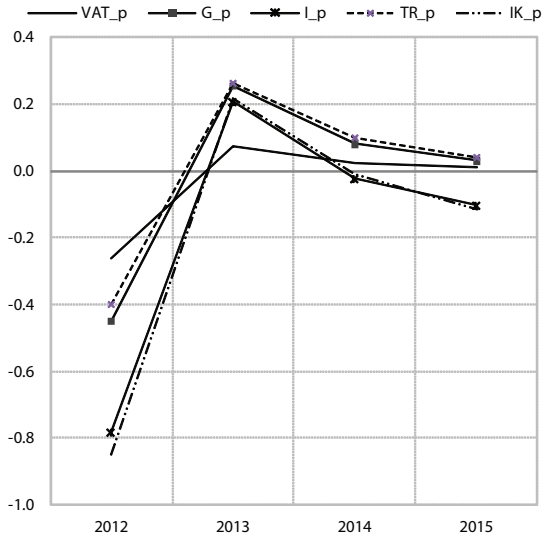
Non-consolidation produces the biggest negative effect on economic activity. As the first assessment of the effects on the economy of consolidation and no-consolidation policies, we compare the effects of alternative permanent consolidation measures with the effects of a permanent increase in borrowing costs by 100 b.p., which would occur in the absence of consolidation measures. The simulation shows that the costs of non-consolidation are higher than the costs of any of the selected deficit cutting measures, as the negative effect

Figure 28: **Permanent shock (effect on level of GDP)**



Source: IMAD estimate; Note: IK – cost of capital; G – government consumption; I - capital formation; TR – social transfers.

Figure 29: **Permanent shock (effect on GDP growth)**



Source: IMAD estimate; Note: IK – cost of capital; G – government consumption; I - capital formation; TR – social transfers.

of the increased cost of capital on the level of GDP is highest (Figure 28) and becomes permanent and affects the GDP growth rate (Figure 29).

Additional assessments of different mixes of economic policies for the consolidation of public finances and their effect on economic growth were made and compared with the non-consolidation scenario again. In the estimation of multipliers of permanent policy changes, we took into account the state of public finances at the end of 2011 and assumed a deadline for reducing the deficit below 3% by 2013 and a medium-term balancing of public finances, which requires reducing the structural deficit by at least 0.5% of GDP per year after 2013. The general government deficit was at 6.4% of GDP in 2011, of which 1.3% of GDP was a consequence of one-off transactions (made in 2011). The baseline deficit which needs to be reduced until 2013 is thus about 5% of GDP. Taking into account Slovenia's international commitments (i.e. Stability and Growth Pact), an average annual deficit reduction of 1% of GDP was assumed (if access to financing sources deteriorated, the actual consolidation would have to be faster).

The comparison includes the following simulations:

i. Four-year permanent reduction of government consumption by 1% of GDP each year;
ii. Four-year permanent reduction of social transfers to liquidity constrained households of 1% p.p. of GDP each year;[80]
iii. Three-year permanent reduction of capital formation by 1% p.p. of GDP each year;[81]

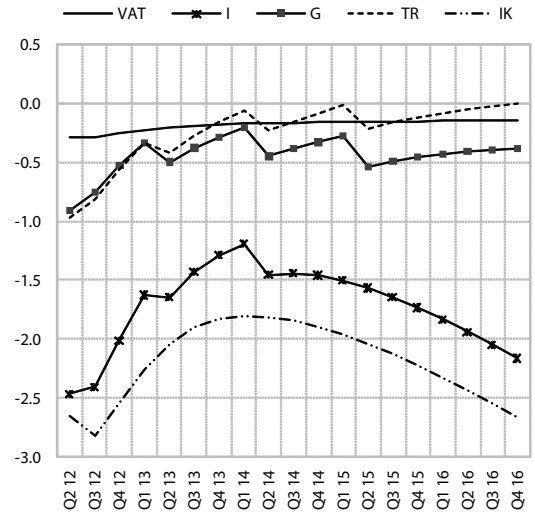
[80] This would reduce the amount of social benefits in cash and kind from 20.1% of GDP in 2011 to 16.1% of GDP in 2015, a similar level as in 2007.
[81] The baseline level of gross capital formation is 3.7% of GDP. This means that reduction of 1 p.p. per year is only possible in three consecutive years.

iv. One-off permanent increase in VAT rate by 2 p.p., which increases general government revenue by 1% p.p. of GDP;
v. A no-fiscal-consolidation scenario consisting of a three-year increase in the cost of capital by 100 b.p. each year.

Any combination of consolidation measures produces better results on economic activity than non-consolidation. Figures 30 and 31 show that the non-consolidation scenario (IK), which involves a permanent increase in borrowing costs for the state and the private sector, has the biggest negative effect on economic activity. These negative effects surpass the negative effects of the combination of measures including reduced government consumption, transfers and increases in the VAT rate. This shows that in the event of a high risk of increased borrowing costs (e.g. rating downgrade), consolidation is urgent and any mix of consolidation measures is better than non-consolidation.

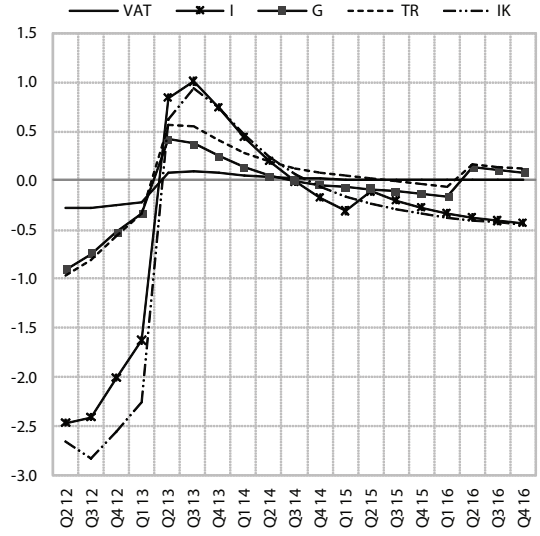
To reduce the deficit it is urgent to reduce expenditure. An increase in the VAT rate could have an adverse impact (in the case of a spill-over to wage and social transfers); only if there is no indexation, this would be a supporting measure that would mitigate the negative impact on economic activity. A comparison of different mixes of consolidation measures under the given assumptions shows that over the medium term an increase in the VAT rate carries the lowest costs of consolidation in relative terms, but only if the temporarily higher inflation does not spill over into wages and transfers. In this case, the cumulative GDP drop is lowest (Figure 32) and the deficit reduction more permanent, which reduces the need for further expenditure cuts that have a more adverse effect on economic activity. However, if indexation of wages and transfers does occur, the effects of consolidation are lower due to expenditure increases, whereas the negative effects on labour costs across the entire economy surge, undermining competitiveness and exports, and reducing employment. The increase in the VAT rate (assuming an absence of a spillover into wages and transfers) must, however, be combined with other measures, as it does not close the deficit. In order to eliminate the deficit, then, it is paramount to cut expenditure, while the increase in VAT is an auxiliary measure that reduces the cost of consolidation in relative terms. A permanent reduction of capital formation has the biggest negative effect on economic activity, as its scope becomes so small after five or six years that it does not even suffice for covering depreciation. In order to mitigate the negative effect on economic activity, therefore, the reduction of investment needs to be replaced by other sources (EU funds, private-public partnership). Reductions of spending on government consumption and transfers have similar effects on economic activity in the first two years (Figure 32), whereupon the effect of reduced government consumption begins to strengthen and grows to double that of the effect of the reduction of transfers after five years.

Figure 30: **Permanent shock (effect on level of GDP)**



Source: IMAD estimate; Note: IK – cost of capital; G – government consumption; I - capital formation; TR – social transfers.

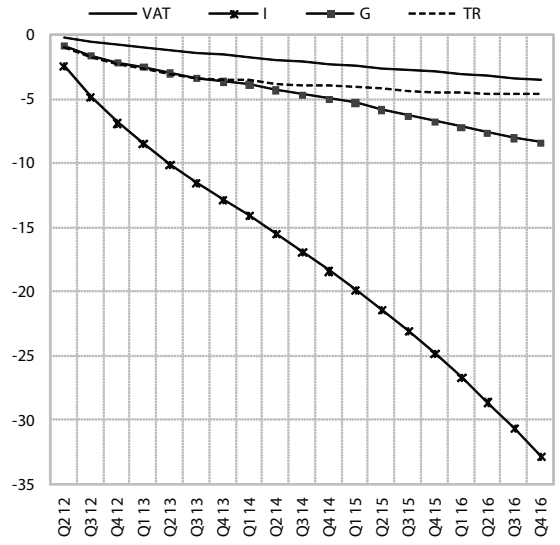
Figure 31: **Permanent shock (effect on GDP growth)**



Source: IMAD estimate; Note: IK – cost of capital; G – government consumption; I - capital formation; TR – social transfers.

In order to minimise the negative effects of the combination of consolidation measures, it makes sense, notwithstanding the pace of consolidation, to combine expenditure cuts with an increase in indirect taxes. It is, however, necessary to take into account the position of the economy in the business cycle. This is highlighted by Baum et al. (2012), who found that the effect of fiscal policy consolidation measures is different depending on where in the business cycle the economy is. According to the study, the multipliers of consolidation measures in both segments (expenditure and revenue) are higher during a contraction of economic activity than when the economy is recovering.

Figure 32: **Accumulated loss of GDP (p.p.)**



Source: IMAD estimate; Note: G – government consumption; I - capital formation; TR – social transfers.

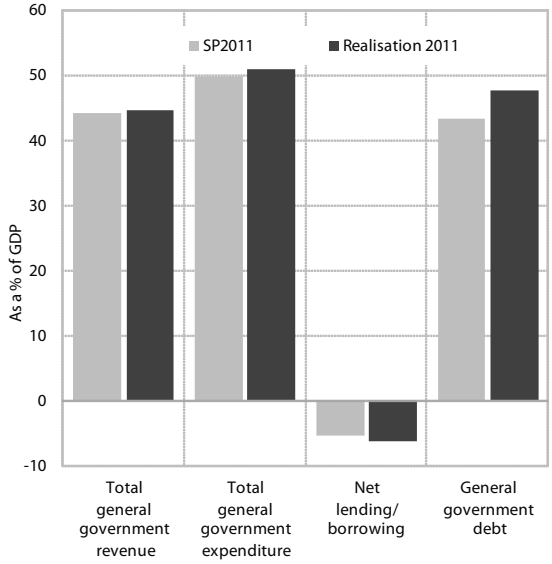
9. Consolidation of public finances – estimate and challenges

9.1 Excessive deficit procedure

In December 2009, the European Commission launched an excessive deficit procedure against Slovenia, setting 2013 as the deadline for correcting the deficit. In the October 2009 regular General Government Debt and Deficit Report, Slovenia estimated the general government deficit at 5.9%; in November 2009, the European Commission initiated (pursuant to the EC Treaty) an excessive deficit procedure against Slovenia, which is detailed in the revised Stability and Growth Pact of 2005[82]. Based on an assessment of the public finances and the factors for the occurrence of the excessive deficit (EC),[83] the EU Council adopted recommendations and set 2013 as the deadline for correction, warning that the wiggle room of Slovenia's fiscal policy is additionally limited due to the challenges of the long-term sustainability of public finances and contingent liabilities stemming from state guarantees. It recommended that over the 2010–2013 period, Slovenia ensure an average annual structural budgetary adjustment of 0.75% of GDP and specify measures necessary to correct the excessive deficit. The recommendations stressed that fiscal consolidation must ensure permanent improvement of public finances and the quality thereof, and enhance potential GDP growth. In view of the higher-than-budgeted expenditure in the 2006–2008 period and the reliance on expenditure restraint in the proposed 2010 and 2011 budgets, the EC highlighted that Slovenia needs to improve the enforceable nature of its multi-year budget plans, and to improve public spending efficiency and effectiveness to make room for enhanced expenditure on research, innovation and human capital formation. At the same time, it needs to raise the participation rates of youth and the elderly, and to improve the functioning of the labour market.

The Stability Programme – Update 2011 (SP2011) of April 2011 lays out measures to correct the excessive deficit in accordance with EC recommendations. Much like the previous programme, it highlights that reducing the deficit below 3% of GDP by 2013 (in line with EU Council recommendations) and balancing the structural deficit (as a medium-term objective in accordance with the provisions of the preventive part of the Stability and Growth Pact) will be underpinned primarily by expenditure cuts and improvements in the efficiency and effectiveness of expenditure without increasing the total tax burden. The strategy of fiscal consolidation in last year's programme was based on measures to improve the collection efficiency and the quality of general government revenue, and measures to restrain the nominal level of compensation of employees in the public sector, rationalise social transfers, keep the nominal level of pensions unchanged, and strengthen the long-term sustainability of public finances with the implementation of a pension reform. In the event of a rejection at a referendum (which in fact happened), other indirect measures were to be taken to restrain pension expenditure. For 2011, it was pointed out that the one-off effect of recapitalising the biggest Slovenian bank would keep the deficit level comparable to 2010 (5.5% according to the SP2011 estimate). A key element of fiscal consolidation that was expected to buttress economic recovery was maximising the absorption of EU funds for the financing of investments, a plan already set out in SP2009. As the baseline of fiscal planning, the government adopted a fiscal rule setting a framework for the gradual reduction of expenditure.

Figure 33: **Realisation of general government debt and deficit in 2011 compared to SP2011 forecasts**



Source: SORS, Stability Programme – Update 2011.

[82] Article 104(3) of the EC Treaty stipulates that whenever a Member State's general government deficit exceeds 3% of the GDP reference value, the EC must prepare a report on the existence of an excessive deficit for the council, which takes a decision on the matter. When the council establishes than an excessive deficit does exist, it addresses the recommendations put forward by the EC to the affected member state in accordance with Article 104(7) of the EC Treaty. The council recommendation sets a deadline of no more than six months for the adoption of effective measures by the affected Member State. It also determines a deadline for bringing the situation to an end.

[83] The estimate includes all factors affecting the realisation of fiscal policy goals: general government debt and deficit at the start of excessive deficit procedure; indicators of external balance; contingent liabilities of the state associated with issued guarantees, in particular for measures to stabilise the financial sector during crisis; interest rates and yield spread on government bonds; medium-term changes in ageing-related general government expenditure.

Box 4: **Opinion and recommendation of the EU Council based on the Stability Programme – 2011 Update**[84]

The Council's opinion on the Slovenian Stability Programme for the 2011–2014 period (12 July 2011), which is based on the EC estimate, states that further consolidation to correct the excessive deficit by 2013 and achieve the medium-term objective are key challenges for Slovenia. Although the medium-term objective is set at a more ambitious level than in the previous programme, it does not appear to ensure sufficiently rapid progress towards the long-term sustainability of public finances. The average annual change in structural balance over the period 2010–2013, as calculated by the EC, is planned to be around 0.5 p.p. of GDP, but this is below the level recommended by the Council in the excessive deficit procedure. In last year's opinion, the EC estimates that the macroeconomic scenario on which the programme budget forecasts are based is feasible in the short term but ambitious towards the end of the programming period. It further says that the programme does not state measures to restrain expenditure beyond 2011 and that, much as in previous years, further expenditure savings mainly affect only the public sector wage bill, social transfers (including pensions) and public investment. Beyond 2011, there are, therefore, risks to the deficit and debt targets, as the programme does not specify sustainable measures to contain expenditure. The EC further warns that additional financial rescue operations affecting deficit and debt cannot be excluded. Based on these estimates, the EC is of the opinion that the credibility of the medium-term consolidation strategy would be enhanced by adopting more structural expenditure-containing measures — as opposed to the temporary interventions that have characterised recent consolidation efforts — and by a more binding medium-term budgetary framework. As for the adoption of an expenditure rule, it notes that the key provisions thereof remain to be worked out. Moreover, it estimates that the comparatively low spending efficiency (for example in health care and education) implies that Slovenia may have additional scope for expenditure-based consolidation without compromising the quality of public services. As for the announced initiatives to rationalise public services and transfers, and introduce a unified public procurement system, it says the details of some of these are lacking.

Based on this estimate of the Stability Programme 2011, and taking into account the recommendation at the launch of the excessive deficit procedure in December 2009, the Council recommends that Slovenia take action within the 2011–2012 period to firstly achieve the 2011 deficit target, underpin the 2012 deficit target with concrete measures and implement the necessary consolidation rigorously, standing ready to adopt additional measures to prevent possible slippages. It should underpin this required adjustment towards the medium-term objective with additional measures to ensure the average annual fiscal effort in line with the Council recommendations (0.75 p.p. per year). For this purpose, it should use structural measures to contain expenditure, to address identified inefficiencies, and to implement a more binding medium-term budgetary framework. The second recommendation is to take the required steps to ensure the long-term sustainability of the pension system, while preserving the adequacy of pensions. It should increase the employment rate of older workers through later retirement, and by further developing active labour market policies and lifelong learning measures.

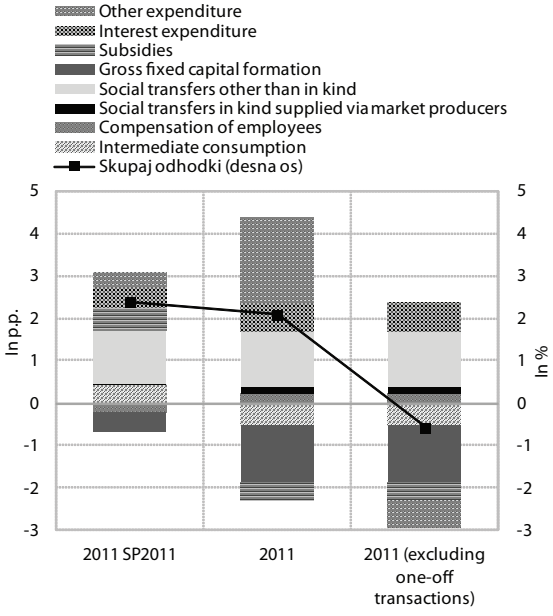
[84] Official Journal of the European Union, C 217/1; 12.7.2011.

In 2011, the realised general government deficit and debt were higher than projected in SP2011 and higher than in the notification of September 2011. The general government deficit was EUR 273 m or 0.9 p.p. of GDP higher than projected in last year's Stability Programme, and it exceeded the SORS autumn estimate in the excessive deficit procedure by the same amount (see Table 18). Higher outlays for recapitalisation and the assumption of certain liabilities by state-owned companies were the main reasons for the higher deficit. The expenditure increase due to bank recapitalisation is (in methodological terms) a one-off event than will not permanently increase general government expenditure (although it will increase interest expenditure). However, the increase was higher than planned in the previous Stability Programme, hence its key role in the deviation from the consolidation objectives despite higher savings on the majority of general government expenditure. Excluding expenditure on capital transfers, other expenditure was lower than planned in nominal terms, chiefly as a result of a significant drop in gross fixed capital formation (instead of growing 5.2% in nominal terms, it contracted by 15.6%) and subsidies (a drop of 10.6% instead of a 12% increase); the contraction of expenditure on goods and services was also higher than planned.[84] Excluding one-off transactions, expenditure dropped in nominal terms last year, even though the compensation of employees and interest expenditure slightly exceeded the projections in last year's Stability Programme. The decline in economic activity (-0.2% instead of the planned 1.8% growth) also contributed to the wider deficit as a share of GDP, as GDP was EUR 1.1 bn lower than planned (see chapter 9.2.1). In the September notification, the estimated GDP for 2011 was already significantly lower, but the deficit estimate nevertheless

[84] Given that GDP contracted in 2011, expenditure on gross capital formation (3.6% of GDP) and subsidies (1.9% of GDP) were only 0.1 p.p. below the planned level.

remained unchanged (5.5% of GDP). The estimate underestimated accounting corrections of revenue and expenditure and the deficits of other general government units, which accounted for about a half of the higher deficit. Lower GDP also resulted in higher relative general government debt (contributing about 1 p.p. of GDP), but in substantive terms debt was higher than planned in last year's Stability Programme, mostly on account of the inclusion of debt stemming from EFSF guarantees, the assumption of debt, and the coverage of losses of state-owned companies, and additional borrowing for the pre-financing of principal payments in the subsequent budget years (see Section 4).

Figure 34: **Nominal expenditure growth (in %) and contribution by category (in p.p.)**



Source: SORS, Main aggregates of the general government, April 2012, Stability Programme – Update 2011.

9.2 Assessment of the consolidation of public finances in the Stability Programme – Update 2012

9.2.1 Macroeconomic assumptions in the consolidation of public finances

The economic growth forecast for the entire programming period until 2015 is significantly lower than in the previous Stability Programme, the key reasons being the adverse domestic economic conditions (more limited access to financing, deterioration of conditions on the labour market, rising payment defaults), which consequently held back capital formation and private consumption. International conditions are also less favourable than anticipated last year.

GDP at the end of 2011 was EUR 1.1 bn below the forecast in last year's Stability Programme, which was partly a result of the worsening economic conditions in the domestic environment and partly of the downward revision made by SORS in the annual publication of national accounts for 2010 (EUR 700 m). The lower GDP in the reference year and weaker outlook for the coming years means that GDP in 2014 is expected to be EUR 4.2 bn lower than forecast in last year's Stability Programme.

Table 18: **Comparison of notifications in the excessive deficit procedure, September 2011 and March 2012**

	September 2011		March 2011	
	2010	**2011**	**2010**	**2011**
Deficit by cash flow	-1,898.7	-1,629.3	-1,898.7	-1,562.4
Corrections for financial transactions	-103.4	4.8	-103.4	5.1
Accounting corrections	162.9	75.6	146.4	-112.3
Revenue	266.6	213.1	253.4	-1.0
Expenditure	-103.7	-137.6	-107.0	-111.4
Deficit/surplus of other general government units	-165.2	-4.9	-165.2	-143.0
Other corrections	-67.0	-437.9	-106.2	-476.5
General government deficit	**-2,071.4**	**-1,991.7**	**-2,127.1**	**-2,289.1**
GDP	35,415.8	35,923.6	35,415.8	35,638.6
Deficit as a share of GDP, in %	-5.8	-5.5	-6.0	-6.4

Source: SORS, Main Aggregates of the General Government, April 2012.

Table 19: **Changes in macroeconomic assumptions for the consolidation of public finances in SP2009, SP2011 and SP2012**

	2009	2010	2011	2012	2013	2014	2015
GDP in EUR bn (SP2011)	35.4	36.1	36.7	38.5	40.3	42.3	
GDP in EUR bn (SP2012)	35.3	35.4	35.6	35.6	36.6	38.1	39.6
Difference SP2012–SP2011 (in EUR bn)	-0.1	-0.7	-1.1	-2.9	-3.7	-4.2	
Nominal GDP growth, in % (SP2011)	-5.1	1.9	1.9	4.8	4.6	5.0	
Nominal GDP growth, in % (SP2012)	-5.3	0.3	0.6	0.0	2.7	4.0	4.1
Difference SP2012–SP2011, in p.p.	-0.2	-1.6	-1.3	-4.8	-1.9	-1.0	
Real GDP growth, in % (SP2011)	-8.1	1.2	1.8	2.2	2.3	2.8	
Real GDP growth, in % (SP2012)	-8.0	1.4	-0.2	-0.9	1.2	2.2	2.2
Difference SP2012–SP2011, in p.p.	0.1	0.2	-2.0	-3.1	-1.1	-0.6	

Source: SORS (SP2011 for 2009 and 2010, SP2012 for 2009-2011); Stability Programme – Update 2011, Stability Programme – Update 2012, Spring forecast of economic trends 2011, IMAD; Spring forecast of economic trends 2012, IMAD.

9.2.2 Assessment of the Stability Programme – Update 2012

The altered macroeconomic conditions have only further enhanced the challenge facing economic policy makers in seeking to achieve fiscal objectives. The difficult conditions on financial markets and limited government access to sources of financing, coupled with deteriorating conditions and the weak outlook in the domestic and broader macroeconomic environment, call for a more rapid pace of consolidation. The second key reason for accelerating consolidation is the amended European fiscal framework, which presents euro area countries with more demanding medium-term fiscal objectives, tightens control, and introduces stiffer sanctions for infringements of the supplemented Stability and Growth Pact (see Chapter 1). In such conditions, the key challenge of fiscal policy is to implement the set consolidation objectives. In addition to being required by the commitments given as part of the excessive deficit procedure, this is also necessary as a means of improving the country's credibility and its perception by financial markets, which would help lower borrowing costs or at least keep them at a sustainable level. The fiscal effort required to cut the deficit below 3% of GDP in 2013 is that much greater, since Slovenia made no progress in the consolidation of public finances in the past two years. Furthermore, deeper cuts come with greater negative effects on economic growth, in particular in the short-term, which can in turn influence credit ratings and therefore requires a prudent combination of economic policy measures.

The Stability Programme – Update 2012 (SP2012) assumes that the excessive deficit will be corrected in 2013, as recommended by the EU Council within the excessive deficit procedure. The Supplementary Budget (adopted in May 2012) and the changes instituted by the Act on the Balancing of Public Finances (ZUJF),[85] which also affect other public funds and non-budget users, will bring down the general government deficit by about EUR 1 bn or 2.9 p.p. (over 2011) to 3.5% of GDP. In line with the Stability Programme projections, the deficit is to fall below 3% of GDP (2.5% of GDP) in 2013. The consolidation strategy is underpinned by expenditure cuts, but it also includes measures for improving the efficiency and quality of revenue collection, and introduces tax credits for R&D and investment to enhance economic growth. By carrying out the planned measures, the government plans to correct the excessive deficit in 2013 in line with EU Council recommendations, which is to be followed by an additional 2.1 p.p. (to 0.4% of GDP) lowering of the deficit through the end of the programming period and eventually a structurally balanced budget. After an initial rise, general government revenue as a share of GDP will drop by 1 p.p. to 43.7% of GDP until the end of the programming period. General government expenditure as a share of GDP is set to fall by 4.1 p.p., from 48.2% of GDP in 2012 to 44.1% of GDP in 2015.

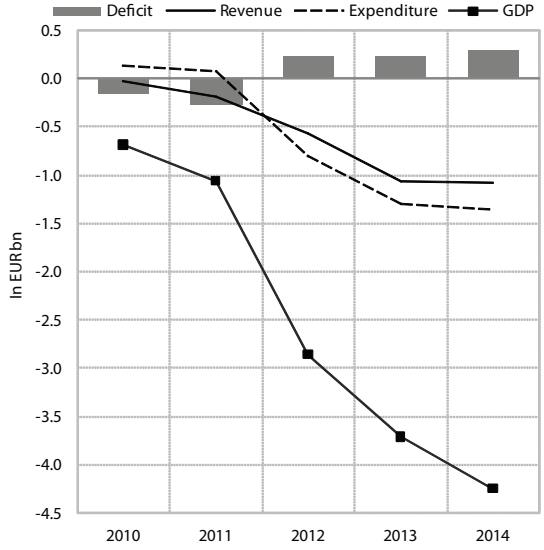
The SP2012 is more ambitious in its plans to reduce the deficit and the outlined measures are for the most part underpinned by adopted legislation, lending them greater credibility. The general government deficit is

[85] The act on the amendments and supplements to acts for the balancing of public finances amending more than 29 laws was passed in the National Assembly on 12 May 2012.

projected to be 0.4 p.p. of GDP below the estimate in last year's stability programme in 2012 and 2013, and 0.5 p.p. lower in 2014. In nominal terms, the planned deficits for the 2012–2014 period are on average lower by about EUR 250 m. For the current year, SP2012 factors in the expenditure cuts implemented with the Supplementary Budget for 2012 with which the government cut nominal expenditure below the level of the previous year for the first time ever. Not only did it cut into flexible expenditure, the cuts are also largely based on legislative changes and negotiated (Agreement on wage measures, allowances and other benefits in the public sector for the balancing of public finances, 1 June 2020 to 1 January 2014, and ZUJF), which is an important positive step forward compared to consolidation efforts in the previous years. Nevertheless, the cuts in some segments are still linear and fail to sufficiently implement a structural approach to streamlining expenditure.

The Stability Programme for this year assumes that tax revenue will be affected in the programming period by changes adopted in 2011, cuts in corporate income tax and investment breaks, as well as tax hikes and the introduction of new taxes. In the area of indirect taxes, two amendments to the VAT act were already

Figure 35: **Difference in projections in SP2012 and SP2011 for key aggregates of the general government and GDP; (in EUR bn)**



Source: Stability Programme – Update 2011, Stability Programme – Update 2012.

Table 20: **Comparison of revenue, expenditure and deficit in the Stability Programme – Update 2011 and Update 2012 (as a % of GDP)**

	Realisation		Forecast								
			SP2011 Update (April 2011)				SP2012 Update (April 2012)				
	2009	2010	2011	2012	2013	2014	2011	2012	2013	2014	2015
General government revenue	**43.1**	**43.4**	**44.2**	**43.5**	**43.0**	**42.3**	**44.5**	**44.7**	**44.1**	**43.8**	**43.7**
Taxes on production and imports	14.1	14.0	14.2	14.0	13.9	13.6	14.1	14.3	14.4	14.6	14.7
Current taxes on income, property	8.3	8.1	8.1	8.0	8.0	7.9	8.2	8.0	7.6	7.5	7.4
Social security contributions	15.2	15.2	15.1	14.9	14.7	14.6	15.5	15.4	15.1	15.0	15.0
Other revenue	5.5	6.1	6.8	6.5	6.4	6.2	6.7	7.0	7.0	6.7	6.6
Tax burden	**37.6**	**37.4**	**37.4**	**37.0**	**36.6**	**36.1**	**37.8**	**37.8**	**37.3**	**37.1**	**37.2**
General government expenditure	**49.0**	**49.0**	**49.7**	**47.4**	**45.9**	**44.3**	**50.9**	**48.2**	**46.7**	**45.3**	**44.1**
Intermediate consumption expenditure	6.5	6.5	6.5	6.3	6.0	5.8	6.5	6.2	6.0	5.6	5.3
Compensation of employees	12.4	12.4	12.0	11.5	11.0	10.5	12.7	12.1	11.5	11.3	11.1
Social benefits and aid	18.7	19.1	19.4	18.5	18.4	18.3	20.1	19.8	19.3	18.7	18.3
Total gross fixed capital formation	4.6	4.3	3.7	3.6	3.7	3.2	3.6	3.2	3.2	3.1	3.1
Subsidies, expenditure	1.8	2.1	2.0	1.4	1.2	1.1	1.9	1.6	1.3	1.4	1.3
Expenditure on property	1.3	1.6	1.8	2.0	1.9	1.8	2.0	2.5	2.6	2.5	2.5
Other expenditure	3.6	3.1	4.3	4.1	3.7	3.6	4.0	2.8	2.7	2.6	2.6
Net lending/borrowing	**-6.0**	**-5.6**	**-5.5**	**-3.9**	**-2.9**	**-2.0**	**-6.4**	**-3.5**	**-2.5**	**-1.5**	**-0.4**

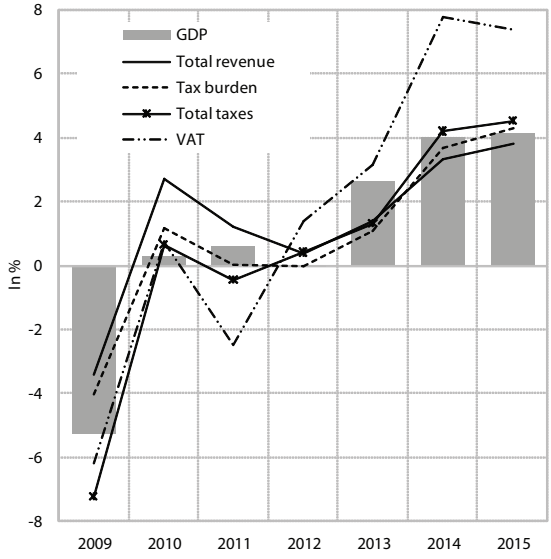
Source: SORS; Basic Aggregates for General Government Sector, April 2012, Stability Programme – Update 2011, Stability Programme – Update 2012.

implemented last year, reducing red tape and changing the procedure that taxpayers use to register their claims in receivership and administration procedures. A bank asset tax act also came into force last year. In the area of excise duties, the government pursued a policy of gradual escalation of excise on cigarettes and a flexible excise policy on fuel that takes into account global oil price trends. In 2012, the following tax breaks were introduced with the ZUJF: (i) increase in tax credits for investments in R&D to 100%, which included the scrapping of a complicated administrative solution of special tax credits for investment in R&D in underdeveloped regions; (ii) increase in the general tax credit for investment to 40% of the total investment. Moreover, the nominal corporate income tax rate will be cut stepwise (from 20% to 18% in 2012, dropping by one percentage point per year thereafter to 15% in 2015). As a means of increasing revenue, the Stability Programme also assumes an increase in tax rates (for income tax on capital gains and tax on capital gains from derivatives) and the introduction of new taxes (on boats, motor vehicles, profits on changes of land use, and a crisis tax on real estate). The Stability Programme puts the financial effects of these increases at around EUR 40 m annually. In case the general government deficit exceeds 3% of GDP in 2013 (or 2014), ZUJF includes the possibility of an increase in the VAT rate in 2014 (or 2015) by up to 3 p.p. based on a government decree. The government also plans increases in certain types of revenue with the expansion of the taxable base. A part of the extra revenue will be generated with a better system of tax collection and other measures to crack down on the informal economy.

This year's Stability Programme assumes that total general government revenue will be higher in relative terms than the projections in SP2011. After an initial rise, revenue is to drop by 1 p.p. by the end of the programming period to 43.7% of GDP. Despite the planned tax credits, which are expected to reduce revenue by 0.2 p.p. of GDP, projections for relative revenue in this year's Stability Programme exceed those in PS 2011 by 1.1–1.5 p.p. This translates into a 0.7-1.0 p.p. increase in the tax burden; the share of taxes on income and property will fall somewhat due to changes in the corporate income tax, whereas the share of tax on production in imports (excise, VAT) will rise marginally. The growth in VAT receipts strongly surpasses the projected GDP in the final stage of the programming period, which is partially attributed to changes in the structure of GDP growth on account of stronger domestic consumption. In addition to a higher tax burden, the projections also assume higher revenue from other sources (capital, non-tax, EU funds), which are expected to grow by 0.5% of GDP each year, compared to last year's Stability Programme.

Expenditure cuts underpinned by legislative changes are three-pronged. The cuts are based on three segments: (i) rationalisation of the operations of the public sector; (ii) capping of investments, subsidies and programmes; and (iii) adjustment of labour market and social security policies. Compensation of employees will be 1.6 p.p. of GDP lower and social benefits 1.8 p.p. of GDP lower by 2015 compared to 2011. The measures aimed at rationalising public sector expenditure will reduce intermediate consumption expenditure by 0.3 p.p. in 2012 and by a further 0.9 p.p. by 2015 (to 5.3% of GDP). Subsidies and investments will also be cut by the end of the programming period (by 0.6 and 0.5 p.p. of GDP respectively compared to 2011).

Figure 36: **Projected nominal growth in GDP by individual revenue categories in SP2012, in %**



Source: Stability Programme – Update 2012.

The streamlining of the public sector involves organisational changes and tackles wages and other labour costs as well as hiring. The first segment of the austerity package is divided into three sections. The first includes organisational measures, such as lowering of material costs, more efficient management, a reduction in travel expenses, costs of IT services, *per diem* expenditure, bonuses and allowances for work abroad, and limiting the length of holiday leave. The second section covers adjustments in the operations of the public sector. Hiring is limited and will only be possible on the basis of government approval or for stand-ins for emergency tasks. The total number of employees will also be affected by the termination of employment contracts for those meeting retirement conditions for a full pension (with the possibility of exceptions in agreement with the hiring authority). In education and pre-school education, SP2012 assumes changes of standards and norms, but these were subsequently withdrawn from the ZUJF and are still subject to negotiations with the public sector trade unions. Moreover, funding for political parties will be cut, municipality financing costs lowered, and the accumulated surpluses of public institutes in education and research will be factored into their financing. The

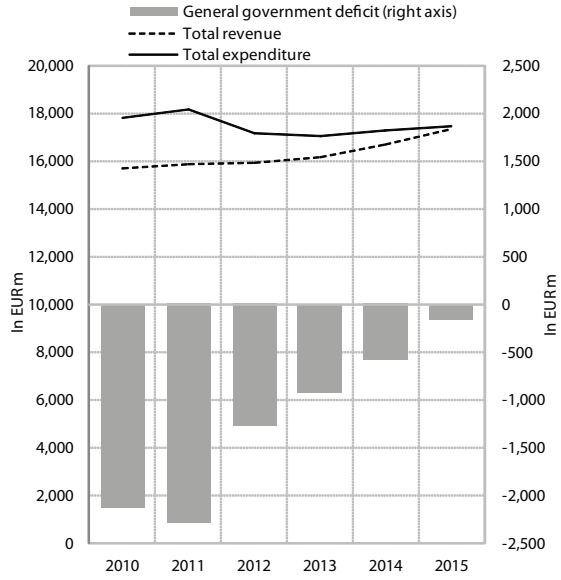
third section covers adjustments to public sector wages. The measures include an 8% pay cut, although this is offset somewhat by the effect of the implementation of the final two rounds of a previously deferred elimination of wage disparities. Holiday allowance for public sector employees will also be cut.

Efforts to cut the deficit also include further cuts in funding for investments and subsidies. The second segment of the austerity package curbs investments, subsidies and programmes. This will result in cuts in the financing of programme in infrastructure and housing policy, and greater absorption and better efficiency of structural and cohesion funding. The government is also planning measures for promoting private investment and public-private partnerships. The austerity plan includes the closing of diplomatic and consular missions, a cut in the number of public tenders for international development cooperation, and cuts in public services. Subsidies are being cut for public and especially for private companies.

Reforms and the modernisation of certain policies are expected to gradually lead to a reduction in expenditure for policies related to the labour market, health care and social security. The third segment of the austerity package covers measures for reducing budget expenditure by means of restructuring programmes and policies, largely in accordance with the measures in the ZUJF. Reforms and the modernisation of certain policies are expected to gradually lead to a reduction in expenditure for policies related to the labour market, health care and social security. The measures include shorter and lower unemployment benefits, lower parental benefits for child care, selective cuts in child benefits, the limiting of subsidies for school meals to only the socially disadvantaged and the elimination of subsidised food for university students during the summer break, cuts in holiday benefits for pensioners, the lowering of pensions that are not based on contributions, increases in license fees for student work, lowering of sickness benefits covered by the public health insurance, the elimination of sickness benefits for the unemployed, and a cut in the share of health services covered from mandatory health insurance. To achieve these expenditure goals in 2014 and 2015, the SP2012 also assumes pension and health care reforms will be carried out.

Expenditure cuts in relative terms are more pronounced in this year's Stability Programme, but expenditure will also fall in nominal terms this year and next. According to this year's programme, general government expenditure expressed in relative terms will fall by 4.1 p.p. in the programming period, from 48.2% of GDP in 2012 to 44.1% of GDP in 2015. This represents a faster consolidation of expenditure compared to last year's programme, although higher spending in 2011 and a lower outlook for GDP growth will result in expenditure in 2014 being 1 p.p. higher (at 45.3% of GDP). Unlike last year's Stability Programme, this year's programme assumes cuts in general government expenditure in nominal terms, which is most pronounced in 2012, when expenditure will fall by EUR 840 m over 2011 and by EUR 900 m over the plans in SP2011. Even excluding one-off transactions worth EUR 459 m from year's expenditure, this still represents a cut in nominal expenditure over 2011.

Figure 37: **Projections for general government revenue, expenditure and deficit in SP2012, in EUR m**



Source: SORS; Stability Programme – Update 2011.

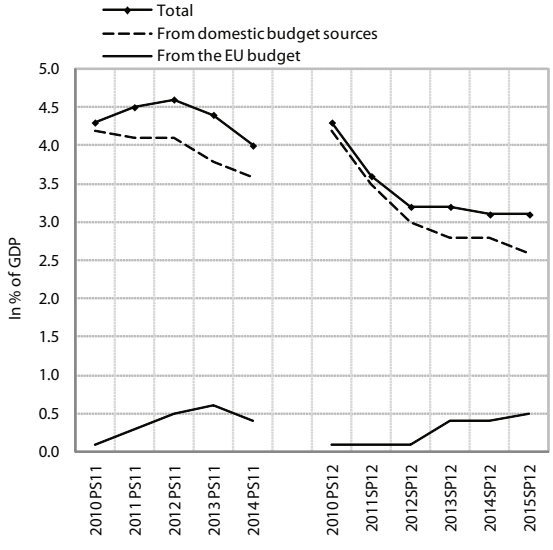
Coupled with the crowding-out effect caused by higher interest expenditure, the planned expenditure cuts in individual segments will change the structure of general government expenditure. The expenditure measures, which cover rationalisation of the operations of the public sector, capping of investments and subsidies, and adjustments of labour market, health care and social security policies, will over the programming period lower all groups of expenditure (measured as a % of GDP). Given the expected scope and the terms of government borrowing on international financial markets, the relative expenditure for interest, on which austerity does not have a direct effect, will remain at roughly this year's level for the duration of the programming period.

Taking into account the adopted and planned measures, the biggest cuts in relative expenditure will be achieved with reductions in the compensation of employees, expenditure on goods and services, and social transfers; the fiscal effort is greater compared to SP2011. Much like last year, the structure of the expenditure cuts is based on curbing public sector wages, social transfers and intermediate consumption expenditure (see Table 18). An important difference compared to last year's Stability Programme is that this year's measures are

much more precisely defined and are based on adopted legislation, which together with the agreement reached with the majority of public sector trade unions, gives them greater credibility. Despite similar or even higher relative share of this expenditure (relative to GDP) at the end of the programming period compared to last year's Stability Programme, the fiscal effort (considering the higher baseline values and lower GDP) is greater. The Stability Programme for this year assumes deeper cuts to social transfers for the 2011–2014 period (by 0.3 p.p. of GDP). Given the higher-than-planned figures registered in 2011 (20.1% of GDP instead of 19.4%; they also rose in nominal terms), their share in relative terms in 2014 is higher than planned last year. The cuts in the compensation of employees expressed as a share of GDP are projected at a similar scope than in SP2011, although the baseline value from 2011 is significantly higher than planned (especially when expressed as a share of GDP, but it was higher also in nominal terms). The contraction of intermediate consumption expenditure, which fell significantly last year, will be more pronounced than assumed in last year's Stability Programme; by the end of the programming period, it will have dropped to 5.3% of GDP.

Following last year's extensive cuts in expenditure on investment and subsidies, primarily for the private sector, the trend is expected to continue. The pace of the reduction in expenditure on investment is unchanged in this year's Stability Programme over last year's document, whereby expenditure in nominal terms in 2014 will be EUR 180 m lower than planned last year due to the large cut achieved last year. The cuts in subsidies are smaller than in last year's programme: by the end of the programming period, subsidies should not fall below the average level in the EU[86] although they will be at their lowest point in Slovenia since 1995.[87] According to the Supplementary Budget for 2012, subsidies will be cut in particular for private companies and entrepreneurs.[88]

Figure 38: **Total gross fixed capital formation in SP2011 and SP2012, as a % of GDP**



Source: SORS; Stability Programme – Update 2011.

The consolidation assumed in SP2012 will lead to a structural balance by the end of the programming period. The cyclically adjusted general government deficit, which at 5.1% of GDP remained high last year due to one-off transactions of 1.3% of GDP (recapitalisation, assumption of debt of companies) will fall this year (to 1.8% of GDP). The structural balance, which excludes the effect of recapitalisation and other capital transfers, fell by 1.2 p.p. of GDP already last year, partly as a result of a smaller deficit without one-off transactions and partly due to the increase in negative cyclical effects on the deficit (see chapter 2.1). SP2012 projects that the reduction in the cyclically adjusted and structural balance will gradually continue until the end of the programming period, when it is to stand at 0.1% of GDP.

The medium-term fiscal objective is more ambitious in this year's Stability Programme than last year. Under the projections in this year's Stability Programme the structural deficit should fall by approximately one percentage point on average per year in the 2010–2013 period, which is in line with recommendations of the EU Council for correcting the excessive deficit. The bulk of the fiscal effort will be carried out in 2012. The greater negative cyclical component due to a worsening in economic conditions had already contributed significantly to the reduction in the structural deficit last year and will have the same effect this year.

General government debt and the costs of the financing thereof are higher in this year's Stability Programme than projected for the entire programming period in last year's programme. The Stability Programme for this year assumes that debt will peak in 2013 (53.1% of GDP) before gradually starting to decline. The primary general government balance, which is projected to be positive as early as in 2013 and improve every year thereafter (0.1% of GDP in 2013 rising to 2.1% of GDP in 2015), will contribute to debt reduction. Nevertheless, the high cost of interest and the high implicit interest rates will keep debt above 50% at the end of the programming period. The significantly higher debt in 2014 compared to projections in SP2011 (6.6 p.p. of GDP) is primarily a result of the lower nominal rate of GDP. According to projections in SP2012, interest expenditure will rise to 2.5% of GDP and, after a temporary increase next year, remain at this level until the end of the programming period. This is partly due to the difficult financing

[86] Data for 2009–2010 period; prior to that the average was 0.2 p.p. of GDP lower.

[87] Official statistical data are available as of this year; until now the lowest level of subsidies in Slovenia stood at 1.6% of GDP in the 2005–2008 period.

[88] These subsidies are to be reduced by EUR 68.4 m.

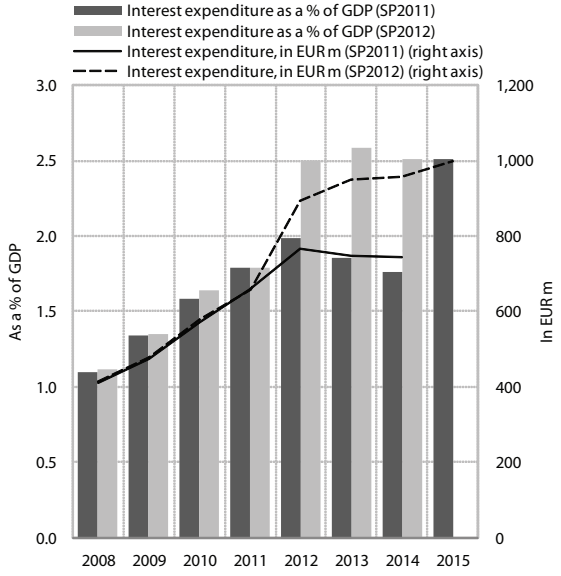
Table 21: **General government debt and interest expenditure in the Stability Programme – Update 2011 and 2012 (as a % of GDP)**

	Realisation		SP Update 2011 (April 2011)				SP Update 2012 (April 2012)				
	2009	2010	2011	2012	2013	2014	2011	2012	2013	2014	2015
General government debt	**35.2**	**38.0**	**43.3**	**45.3**	**46.2**	**46.0**	**47.6**	**51.9**	**53.1**	**52.6**	**50.9**
Interest expenditure	1.3	1.6	1.8	2.0	1.9	1.8	2.0	2.5	2.6	2.5	2.5

Source: SORS; Basic aggregates of the general government, April 2012, Stability Programme – Update 2011, Stability Programme – Update 2012.

conditions and higher debt, and partly a result of last year's undervalued projection of interest expenditure (see Economic Issues 2011). Expenditure on interest as a share of total general government sector expenditure should, in contrast to last year's projections, increase and by the end of 2014 stand 0.5 p.p. higher than projected last year.

Figure 39: **Interest expenditure, comparison of Stability Programme - Updates 2011 and 2012 (in EUR m and as a % of GDP)**



Source: Stability Programme – Update 2011, Stability Programme – Update 2012.

The budgetary framework in the Stability Programme assumes that a fiscal rule will be introduced in line with the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union. The fiscal rule should take effect in 2015 (see Section 1). Last year's budgetary framework was made taking into account a fiscal rule with which the government set a ceiling for budget expenditure for the current year and the next three years.[89] This year's Stability Programme assumes changes to Article 148 of the Constitution stipulating that revenue and expenditure of budgets of the general government must be balanced or in surplus. Where a deficit is generated, it must be covered with the surplus from other years. The proposed amendment also determines exemptions for dealing with large natural disasters and other extraordinary circumstances. In these cases, budgets may be in deficit under the condition that this is approved by the National Assembly with a two-thirds majority. There would be a transitional period so that the provisions enter into force in the budgeting for 2015. More detailed implementation guidelines for the fiscal rule will be determined in a law that the National Assembly must adopt with a two-thirds majority. The bill sets down that a balanced budget must be achieved by way of capping expenditure at the level of planned revenue, multiplied by a ratio of the trend and forecasted GDP growth.

[89] In line with the Decree on development planning documents and procedures for drafting the national budget, Official Gazette RS, No. 54/2010 (more in Economic issues, Fiscal trends and policies, Chapter 7.2).

10. Fiscal policy challenges in the process of consolidation

For 2012, the biggest fiscal effort is planned in the process of consolidation of public finances: for the first time expenditure will decrease in nominal terms, a contraction largely based on adopted and negotiated measures, which lends them greater credibility. SP2012 projects a reduction of the general government deficit below 3% of GDP in 2013 and a gradual transition towards structural balance thereafter. The biggest fiscal effort is planned for 2012, when the deficit is to drop to 3.5% of GDP from 6.4% of GDP last year (5.1% excluding one-off transactions). Nominal revenue will drop for the first time ever. The reduction is based on measures largely stemming from adopted legislation, which lends them greater credibility. This is a positive step and a departure from the heretofore-dominant approach of reducing the deficit merely with interventions in the flexible part of the budget, which does not typically require legislative changes. Still, in certain segments this year's expenditure cuts are the result of emergency measures, not structural, whereas budget users do not always have the same conditions, in particular with regard to material costs and investment funds. Such measures do not guarantee a sustainable deficit reduction, as they can lead to deterioration of the quality of public services in some segments in the medium term, in particular in education, research and health. Similarly, employment policy measures are largely targeted at restricting new hiring, which can lead to a medium-term deterioration of the quality and efficiency of public sector services given the projected pace of retirement and the restrictive wage policy. However, deeper expenditure cuts have a bigger negative impact on economic activity, in particular in the first years of implementation, which calls for a prudent combination of further economic policy measures.

In the short term, the adopted austerity measures are a necessary step towards reducing the deficit below the 3% of GDP ceiling, but over the medium term more decisive action will be required. The findings of various analyses of the effects of consolidation measures do not provide an unequivocal estimate as to the optimal combination of economic policies that would reduce the deficit to a sustainable level while having a relatively modest adverse effect on economic activity. However, many recent analyses suggest that expenditure-side measures produce stronger results.[90] This applies in particular when spending is held back or cut with structural changes, less so when investments and subsidies are curbed or in the event of emergency measures that are typically unsustainable in the long term and cause imbalances (IMF 2011) that eventually need to be addressed. Considering the structure of public finances and the limited scope for a systemic increase in revenue, we estimate that these findings largely apply to Slovenia. From that perspective, this year's consolidation measures are, to a much larger extent than the measures in last year's Stability Programme, a short-term step in the right direction: they are based on better defined and largely agreed and adopted measures. After a two-year standstill in the consolidation of public finances, and given the limited government access to sources of financing on international market, this combination of economic policies is instrumental in the short term in reducing the deficit below the permitted level of 3% of GDP and honouring the commitments that Slovenia made in the framework of the excessive deficit procedure. In the medium term, however, farther-reaching structural measures are required. A broader and consistent solution must include further streamlining of the public sector with structural measures for improving efficiency, and restructuring geared towards strengthening the role of development expenditure, promoting competitiveness and maintaining the long-term sustainability of social protection systems. The framing of more lasting solutions for employment in the public sector that would combine a more flexible employment and wage policy to create a more stimulating environment for employees and improve their efficiency, also remains a challenge. The planned reduction in investments will also slow down the economic recovery, with the added risk of further cuts in this segment. It is, therefore, vital to design high-quality projects in order to secure the planned scope of EU co-financing, and to implement the planned strengthening of public-private partnerships. In the subsidies policy, subsidies for private companies in particular are being cut even though subsidies allocated for on-going financing of individual public enterprises are more problematic from the developmental perspective. The reduction in the scope of subsidies as set down in the Stability Programme is sensible, but it needs to be underpinned to a greater degree with a comprehensive industrial policy and a system for the monitoring and evaluation of the effectiveness of subsidies. Even in the medium term, the sustainability of public finances hinges on the implementation of changes in social protection systems, in particular pension reform. These changes are planned until the end of 2013 in the Stability Programme, and it is crucial to actually implement them in order to secure a credible implementation of the objectives. Despite the urgent and positive consolidation efforts based on legislation, the achievement of the objectives risks crowding out more flexible expenditure, which also has an important developmental role.

On the revenue side, the scope for additional tax increases is limited. Given some of the tax changes implemented with the Act on the Balancing of Public Finances, revenue in the Stability Programme projections will largely follow the trends of the main macroeconomic

[90] IMF, 2010; EC, 1997, Alesina, Perotti, 1996, Alesina, Ardagna, 1998, McDermott, Wescott, 1996

aggregates, but downside risks to realisation increase towards the end of the programming period. The realisation of the relatively high non-tax revenue is also uncertain. All of this can affect the planned pace of consolidation and heighten the necessity of taking additional measures in order to continue the plotted path of consolidation. Taking additionally into account the effects of consolidation measures on economic growth (see Section 8), it may make sense to consider introducing or raising indirect taxes which have a relatively smaller negative impact on economic growth. In addition to changes in environmental taxes, there is scope to increase budget revenue with value added tax, but the Act on the Balancing of Public Finances contains this possibility only as a measure of last resort. Such a solution would also go further in neutralising the shortfall of tax revenue resulting from tax cuts, but it is instrumental than any increase in the VAT rate does not spill over into adjustment of wages and transfers with inflation. The spillover effect would lead to a renewed increase in expenditure, and it would have a negative impact on competitiveness and employment throughout the economy. A deterioration of the macroeconomic environment, which would have a negative effect on the planned budget revenue, is an additional element of risk on the revenue side.

Preserving the general government debt at a sustainable level will be a key challenge for fiscal and other economic policies in the coming years. In this year's Stability Programme, general government debt and the costs of the financing thereof are higher than planned through the entire programming period last year. Interest expenditure, which has been rising faster than projected last year, will remain at 2.5% of GDP until the end of the programming period after a transitional increase next year, a consequence of difficult financing conditions and higher debt. Interest expenditure as a share of total general government expenditure will continue to increase. The high financing costs thus preclude a faster cutting of the deficit; given Slovenia's commitment to correct the excessive deficit and balance its public finances in the medium term, the crowding out of other expenditure is already escalating. The high level of interest expenditure feeds back into general government debt. According to this year's Stability Programme, debt as a share of GDP will peak in 2013 (53.1% of GDP) and inch lower thereafter (due to the positive primary balance), but it will remain above 50% of GDP. In addition to the financing of the deficit and refinancing of debt, the level of general government debt in the coming years will be affected by other factors, which can grow stronger if certain risks are realised. Given the growing debt problems of certain euro area countries, bond yields may rise in a spillover effect throughout the euro area that will affect the cost of borrowing for Slovenia. This is a possibility even if Slovenia's credit rating remains unchanged. However, if there is an erosion of financial markets' confidence in the country's commitment to push through with the consolidation measures, it will be more difficult to secure financing for deficit borrowing and the refinancing of debt liabilities. Moreover, more expensive borrowing would undermine the quality of public finances, as growing expenditure on interest would crowd out the more flexible development expenditure, which could weaken the development role of public finances. Limited government access to financing sources also affects the borrowing conditions of the private sector, which has a further negative impact on competitiveness and the potential for economic growth.

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II.
Labour Market Movements

SUMMARY

The labour market in the EU is still marked by the economic crisis. In 2009, the decline in economic activity in the EU triggered the process of labour market adjustment to lower economic activity, which still continues. In 2008–2011, the average employment rate in the EU declined by 1.5 p.p. (to 64.3%), while the unemployment rate rose to 9.6%, which is 2.8 p.p. more than in 2008. In 2009, most countries reinforced the implementation of active labour market measures, but in 2010, some of them already reduced expenditure on these measures. The modest demand for labour force in 2010 and 2011 resulted in an increase in the long-term employment rate, which averaged 4.1% in the EU in 2011 (1.4 p.p. more than in 2008). As was the case in previous recessions, the employment rate of young and low-skilled people dropped the most. As a result of a substantial decline of activity in the construction sector, in 2008–2011, the employment rate of men dropped more than that of women. A special feature of the current recession is an increase in the employment rate of older people, which rose by 1.8 p.p., on average, in the EU in 2008–2011.

The decline in activity also continues to affect the labour market conditions in Slovenia. In 2008–2011, the employment rate (15–64 years) dropped by 4.2 p.p. (to 64.4%), while the unemployment rate rose to 8.2%, which is a 3.8 p.p. increase over 2008. In the private sector the number of employed persons declined by 8.8%, as enterprises were adjusting to lower economic activity by cutting jobs. Employment dropped most notably in construction and manufacturing, which was reflected in an above-average decline in the employment rate of young and low-skilled people and men. In public service activities the number of employed persons grew despite the crisis, as a result of badly thought-out linear restrictions on hiring, which have not been realised due to the growing needs for certain public services (preschool services, old people's homes, health care services). The Public Finance Balance Act passed in the middle of 2012 otherwise includes restrictions on hiring, but the number of employees in public service activities increased significantly already in the first months of 2012.

The persistently low employment rate of older people (55–64 years), which has been a problem in Slovenia for years, declined further in 2008–2011. In 2011, the employment rate of older people (55–64 years), which has been one of the lowest in the EU for a number of years, was lower than in 2008 (despite the increase in 2009). The considerable decline in 2011 could be linked to a large increase in the number of older unemployed people at the end of 2010 (which was likely attributable to changes in labour market regulation and the anticipated pension reform) and a decline of informal employment in this population group. To increase the employment rate of older people, Slovenia should adopt the pension reform as soon as possible, which would also improve the long-term sustainability of its public finances. The immediate formulation and adoption of the pension reform should be accompanied by a strategy for active ageing that should, besides the strategy for promoting healthy living and lifelong learning, also include measures for adapting work places to the needs of the older population.

The structural imbalances in Slovenia increased despite the stronger implementation of the labour market policy in 2009 and 2010. In 2009, the government responded to deteriorating labour market conditions by two intervention laws intended to preserve jobs, and by stronger implementation of active employment policy schemes (AEP), which were strengthened further in 2010 and then reduced substantially already the following year. The increase in the structural imbalances on the labour market is evident from the long-term unemployment rate, which nearly doubled in 2008–2011, and the increase in the ratio of unemployed per job vacancy. Long-term unemployed and low-skilled persons were not sufficiently included in active employment policy schemes, according to our estimate. Furthermore, cutting expenditure for active labour market measures as early as in 2011 was also inappropriate from the aspect of reducing imbalances. In the future, AEP programmes should be more focused on reducing structural imbalances. Education and training programmes should be adjusted to the needs of employers and it would be necessary to establish appropriate systems for monitoring and forecasting labour market, which could also be used in designing AEP programmes and education policies. The latter could also contribute to easier transition of young people from school to the labour market and improve their situation on the labour market, which deteriorated at an above-average rate during the crisis.

The labour market situation of young people in Slovenia worsened considerably in 2008–2011. It is significantly affected by a high rate of participation of young people in education and a high number of persons who combine study and employment. The employment rate of young people aged 15–24 declined by 6.9 p.p. in 2008–2011; in the age group of 25–29 by 8.1 p.p., which is much more than in other age groups. Employment prospects of young people with a tertiary education declined in particular, which is shown by the largest increase (relatively) in the number of registered unemployed young people with a tertiary education and an increase in the share of those aged 25–29 who are neither in employment nor in education or training. The high participation of young people in education (much higher than the EU average) decreases the employment rate of this population group, but at the same time Slovenia belongs in the group of countries with a large share of young people who combine education and employment. A significant share of youth employment in Slovenia is attributable to student work, which is very attractive for employers because of simple

recruitment procedures and cost effectiveness. For a number of years Slovenia has thus stood out in the proportion of temporary employment in total employment of young people, which is the largest in the EU. Strong labour market segmentation has remained the main problem of Slovenia's labour market during the crisis and results from systemic labour market regulation. Given the significant share of temporary jobs among the young, their employment rate dropped substantially. In Slovenia, youth employment faces similar obstacles as in other countries, which arise from both supply of and demand for work.

In our view, the most important obstacles to youth employment in Slovenia are: disparity between the supply and demand, relatively strong protection of regular employment and relatively high labour costs. The troubles in youth employment in Slovenia are largely attributable to imbalances between supply and demand that are related to the structure of enrolment in education programmes and insufficient influence of employers on the content of these programmes. Imbalances, which are an issue both in young people with upper secondary education and in those with completed tertiary education, should be dealt with by adjusting education and training systems to the needs of the labour market. Given the high prevalence of student work, which is attractive for employers due to simpler procedures and lower costs, we can conclude that the employment prospects of young people are also diminished by strong protection of regular employment and relatively strong taxation of labour/high labour costs (including work-related reimbursements).

Due to the limited flexibility of wages and higher minimum wage, there has been practically no labour market adjustment through labour costs, which is reflected in a loss of cost competitiveness. The flexibility of private sector wages is mainly limited to payments for overtime work, extraordinary payments that depend on company performance and wage indexation to the growth of prices and productivity. The growth of the average gross wage in 2008–2011 was strongly marked by the economic crisis, the increase in the minimum wage, the new system of public sector wages and austerity measures of the government. Owing to the latter, the rises in the average gross wage per employee in 2010 and 2011 resulted only from private sector activities. After the slowdown in response to the contraction of activity in 2009 (a decline in the number of overtime hours worked and a reduction of working time), in the last two years wage growth in the private sector was (under the conditions of low economic activity and changed employment structure) mainly due to the increase in the minimum wage. In public service activities, the introduction of the new wage system coincided with the beginning of the crisis and translated into a strong growth of the average gross wage in 2008 and 2009. Because of a number of austerity measures passed in the period since 2009 in response to the general economic and public finance situation, the growth of the average gross wage in public sector services nearly came to a halt in the last two years. In public service activities, particularly the freeze on all motivational components of he wage system (regular performance bonuses, promotions) remains problematic, as it impacts work motivation of all employees, especially younger people. Finding proper solutions and drafting a more stable wage policy that will enhance the motivation of employees in public sector activities therefore remains a challenge. Wage growth deteriorated the competitiveness of the economy, as unit labour costs increased by 9.1% in 2008–2010. The deterioration of cost competitiveness was also due to the less favourable growth of unit labour costs than in the EU.

The main challenges of economic policy on the labour market are to increase employment and design a comprehensive labour market reform aimed at reducing segmentation. The decline in the employment rate in 2008–2011 pushed Slovenia further away from the targeted 75% employment rate (in the age group 20–64) in 2020 (the EU 2020 target). In 2011 this rate was 68.4 %. To reach this target, Slovenia should form a set of measures aimed at increasing employment, and ensure greater compatibility of the labour market policy and other policies that could affect labour market conditions. To reduce segmentation by age, which arises from systemic labour market regulation, steps should be taken to (i) reduce asymmetries in rights guaranteed under permanent and temporary contracts and (ii) reform student work. The increase in concession fees introduced by the Public Finance Balance Act will otherwise increase the costs of student work, but will not have any effect on other reasons for its attractiveness for employers. However, young people will still not be included in social security systems, which would be advisable. While with student work students/pupils should gain valuable experience, which would have a positive effect on their career paths and the transition from education to employment, analysis of student work (which accounts for a large share of youth employment) shows that students mainly perform physical and other non-demanding types of work. This is another problem worth considering in designing labour market reform. As isolated and partial remedies will not resolve the difficulties on the labour market, a consensus should be reached on the continuation and content of further labour market reforms and measures needed to address the key issues on the labour market. The amendments to the Employment Act, which are underway, should focus on flexicurity and constitute an integral part of a comprehensive labour market reform.

Introduction

The situation in the labour market continues to be affected by the economic crisis. The decline of economic activity in 2009 triggered the process of labour market adjustment. Analysis of EU wage dynamics during the economic crisis revealed that the labour market did adjust to the crisis, yet insufficiently to prevent an increase in unit labour costs (Arpaia, A., and Curci, N., 2010).[1].A similar situation was found in Slovenia, which even recorded the highest increase in unit labour costs in the EU. The adjustments mainly involved reducing the number of hours worked and the number of persons in employment. In 2009 and 2010, the majority of EU countries intensified the implementation of labour market policy measures, and increased the level of funding. Nevertheless, in the EU as a whole, the number of persons in employment declined by 2% in 2008–2011, and the employment rate dropped to 64.3% (1.5 p.p. less than in 2008). In 2011, the unemployment rate grew to 9.6% (a 2.8 p.p. increase over 2008). In Slovenia, the employment rate (15–64 age group) fell to 64.4% in 2008–2011, a 4.2 p.p. drop over the year 2008, while the unemployment rate increased to 8.2% (a 3.8 p.p. rise over 2008). Similarly to previous recessions, the labour market situation deteriorated noticeably for the young and for the low-skilled. Due to a sharp decline in construction activity, the drop in the employment rate was bigger for men than for women.

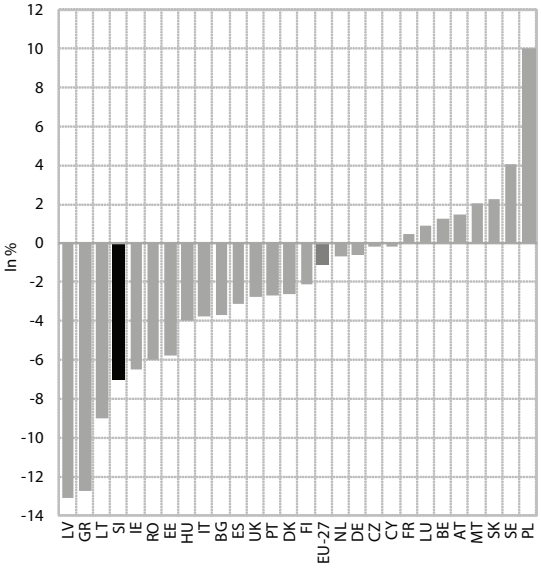
This chapter presents an analysis of labour market developments during the economic crisis, and the response of the Slovenian government with its labour market policy. The analysis is presented in three sub-chapters. The first shows the impact of the economic crisis and labour-market policy in the EU. The second sub-chapter deals in detail with the labour market movements during the economic crisis in Slovenia; special emphasis is placed on analysing the position of young people in the labour market and the factors impacting it (enrolment in education, obstacles to and initiatives for hiring young workers). The third sub-chapter presents wage movements and wage policy in private and public sector activities; it highlights the challenges for wage policy and labour cost management in the public sector as well as an estimate of the impact of the minimum wage on employment. The concluding sub-chapter aims at highlighting the key challenges for labour market policy.

[1] Possibilities for adjusting the already negotiated wages are limited (variable wage components), and the measures promoting shorter working hours kept employers from dismissing workforce (decline in productivity).

1. The EU labour market and labour market policy in the 2008–2011 period

In 2011, economic activity in the majority of EU states was still below the pre-crisis (2008) level, which continues to affect the labour market situation. In the second half of 2008, recession broke out in the EU, hitting the bottom in 2009 when economic activity in most of the advanced countries shrank considerably. In 2009, GDP in the EU dropped by 4.2%. In the same year, the sharpest decline in economic activity was recorded in the Baltic States (Latvia: 18%, Lithuania: 14.7%, and Estonia: 13.9%) followed by Finland and Slovenia with GDP declining about 8%. In 2010 and 2011, most of the EU states recorded a modest GDP growth, still not fully offsetting the impact of the decline in economic activity. The economic crisis therefore continues to affect the labour market situation in the EU.

Figure 1: **Real GDP change in the 2008–2011 period, in %**

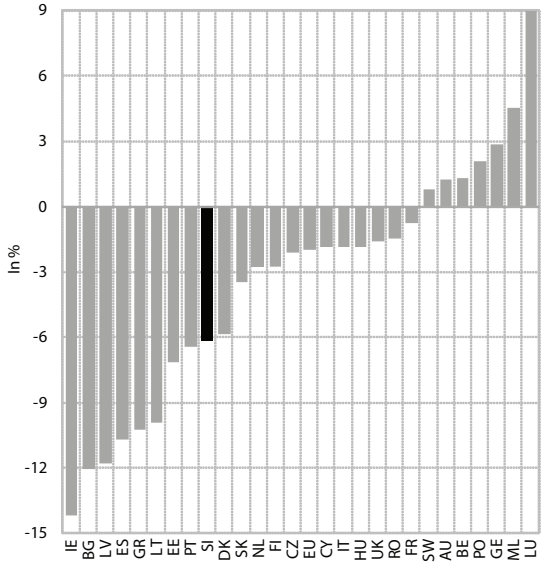


Source: Eurostat; calculations by IMAD.

The decline of economic activity caused a contraction in employment, which was more severe for men than for women. The labour market responded to the decline in economic activity in 2009 by adjusting employment, which continued into 2010. Even though the number of employed persons in the EU increased by an average of 0.3% in 2011, it was still 2.0% below that in 2008. The highest drop in the number of persons in employment in 2008–2011 was seen in Ireland where economic activity declined considerably and labour market flexibility facilitated a rapid adjustment to lower activity (see Figure 2). The number of employed men in the EU saw

a greater drop than the number of employed women,[2] which can be attributed to reduced construction activity in many EU countries. In the 2008–2011 period, the male employment rate (15–64 age group) in the EU thus fell by an average of 2.6 p.p., and the female employment rate by 0.4 p.p. Considering the level of education, the highest reduction in the employment rate in the EU was observed in the low-skilled population.[3]

Figure 2: **Changes in the number of persons in employment, 2008–2011 (in %)**



Source: Eurostat; calculations by IMAD.

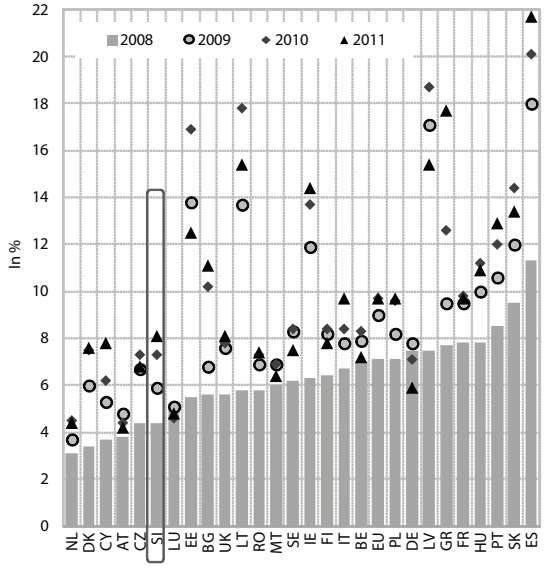
In parallel to the shrinking employment, unemployment started to increase in 2009. In the second half of 2009, the unemployment rate in the EU started to rise, averaging 9% in the year as a whole. Due to the delayed impact of the crisis on the labour market, and because of the slow economic recovery, unemployment continued to grow in both 2010 and 2011, when it reached 9.7% (a 2.6 p.p. rise over 2008). As a result of the economic recovery, the increasing unemployment rate came to a halt in 2011 in a number of countries, and already dropped in some. The unemployment rate increased most notably in Latvia, Greece and Spain[4] where it was the highest in 2008–2011 (see Figure 3). In other Baltic states and Ireland, which also recorded the largest declines in economic activity, the unemployment rate more than doubled. In Germany, on the other hand, in 2010 the unemployment rate was already slightly lower than in 2008, which was a result of the recovery of the economy and labour market policy.

[2] In the 2008–2011 period, the average reduction in the number of persons in employment in the EU was 3.3% for men and 0.4% for women.

[3] At the EU average level, the employment rate for low-skilled population in 2011 was 3.3 p.p. below 2008, for people with secondary education it lagged behind the 2008 level by 2.1 p.p., and for those with tertiary education by 1.7 p.p.

[4] In the above states, the unemployment rate in 2011 is about 10 p.p. higher than the unemployment rate in 2008.

Figure 3: **Unemployment rates in the EU, 2008–2011**



Source: Eurostat.

In the 2008–2011 period, the increase in the youth unemployment rate in the EU was higher than in other age groups. Table 1 shows that the increase in the unemployment rate in the 2008–2011 period was higher for younger age groups than for other age groups. In the 2008–2011 period, the ratio of the youth unemployment rate to the total unemployment rate was higher than before the crisis.[5] In the EU, an increase in the youth (15–24 age group) unemployment rate by an average of 0.4 p.p. was also recorded in 2011, when the rising unemployment rate had already come to a halt for other age groups. In Greece and Spain, it exceeded 50% at the beginning of 2012. The International Labour Organisation has indicated that there is a risk of having a permanently affected generation of young people who entered the labour market in the period of the economic crisis.

The negative impact of the crisis on the young population is also reflected in a higher decrease in the employment rate for younger age groups. On average, the employment rate in the EU in the 15–64 age group fell to 64.3 % (by 1.5 p.p.) in the 2008–2011 period. For the 15–24 age group, it fell by 3.8 p.p. (to 33.6%), while for the 25–54 age group, the employment rate in 2011 was lower by 1.9 p.p. The above-average negative impact of all the recent recessions on the young is mainly due to the high prevalence of temporary employment for this age group. The increase in the employment rate of older workers aged 55–64, averaging 1.8 p.p. in the EU in 2008–2011, is a typical feature of the present recession and was not characteristic of the previous crises (OECD, Employment Outlook 2010).

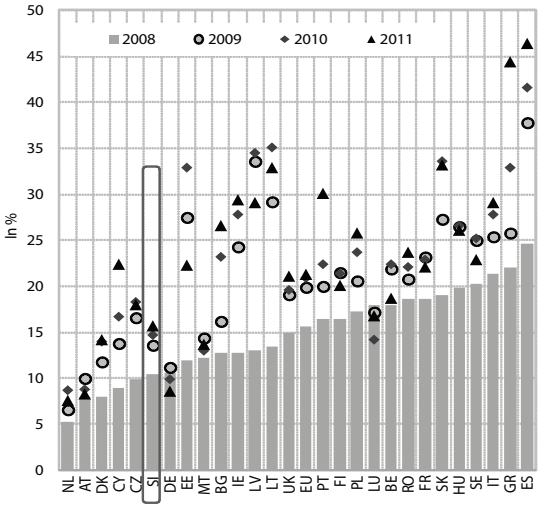
[5] In the 2008–2011 period, the ratio amounted to 2.22, whereas in the pre-crisis period, it was 2.11.

Table 1: **Unemployment rates in the EU, by age group (in %)**

	15–24 years	25–29 years	25–49 years	50–74 years	15–74 years
2005	18.5	11.1	8.1	6.6	*9.0*
2006	17.1	9.9	7.4	6.1	*8.2*
2007	15.5	8.7	6.4	5.2	*7.1*
2008	15.6	8.6	6.3	5.0	*7.0*
2009	19.9	11.5	8.2	6.1	*8.9*
2010	20.9	12.6	8.9	6.6	*9.6*
2011	21.3	12.6	9.0	6.6	*9.6*
Difference 2011–2008, in p.p.	5.7	4.0	2.7	1.6	*2.6*

Source: Eurostat.

Figure 4: **Youth unemployment rate (15–24 years) in the EU, in the 2008–2011 period (in %)**

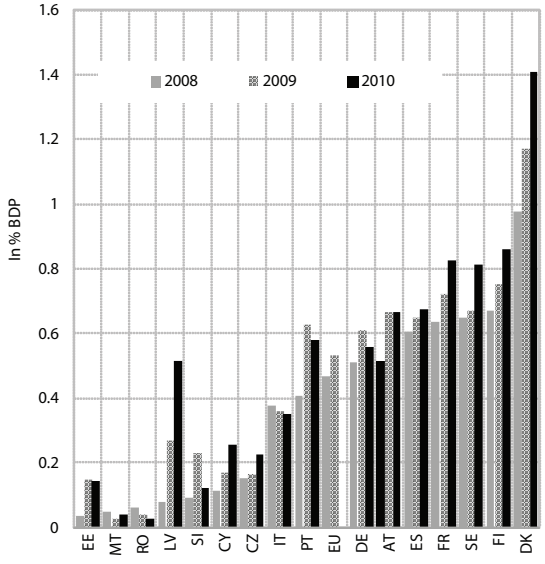


Source: Eurostat.

In the 2008–2011 period, structural imbalances increased in the EU. In 2011, the long-term unemployment rate in the EU amounted to 4.1%, a 1.4 p.p. rise over 2008. Given that after the second quarter of 2009 the inflow into unemployment no longer increased, the continuation of high unemployment and its persistence can mainly be accounted for by modest hiring / modest outflows from unemployment. The mismatch between labour market demand and supply increased in the euro area, amid growing numbers of the unemployed, despite a relatively constant number of job vacancies (EC, 2011). This increased the duration of unemployment, which in turn decreases human capital and reduces opportunities for a substantial reduction of unemployment in the short term.

In 2009, most EU countries raised expenditure on active interventions in the labour market,[6] while in 2010, expenditure cutting could already be observed in some of them. In the EU, spending on active interventions rose by 8.6%, on average, in nominal terms in 2009. The highest increase was observed in Estonia (393%). Relative to the country's GDP, however, the level of spending on active interventions in the labour market continues to be among the lowest in the EU (see Figure 5). In 2010 (the latest available data), certain countries already cut this type of spending. In all countries, however, it is still above the pre-crisis level. According to a survey of measures adopted by 79 OECD countries to prevent layoffs (Cazes et al. 2009), the most commonly used intervention in high-income countries was training for both the unemployed and those threatened by layoffs.[7] In terms of income protection provided by passive labour market policies, 17 high-income countries have made changes

Figure 5: **Expenditures on active labour market policy in some of the EU countries* (% of GDP)**



Source: Eurostat.
Note:* Countries for which the 2010 figures were published in mid-May 2012.

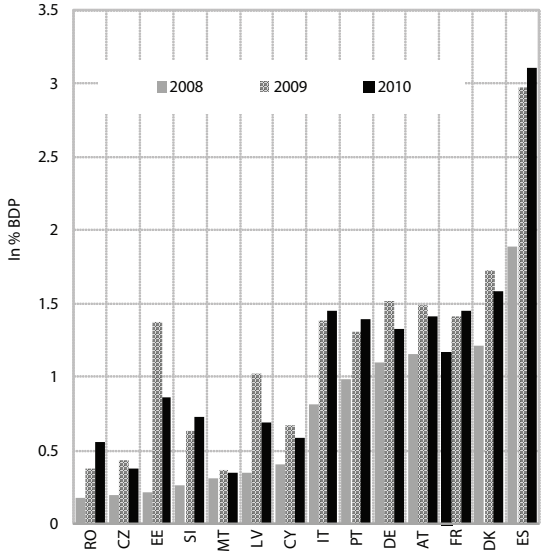
[6] According to the Eurostat methodology, active labour market measures include the following activities: education and training, job rotation and sharing, employment incentives, supported employment and rehabilitation, direct job creation, and start-up incentives.

[7] The measure was implemented by 27 countries.

to unemployment benefit schemes (usually extensions of coverage and broader eligibility criteria). Several EU countries decided to subsidise shorter working hours in order to help preserve jobs.

The crisis also strongly increased expenditure on support policies (passive labour market policy). Increasing unemployment resulted in a rising number of persons eligible for unemployment benefits. Certain countries expanded access to unemployment benefits. On average, expenditure on passive labour market policy rose by 37.2% in the EU in 2009. The highest nominal increase in this expenditure in 2009 was recorded in the Baltic states,[8] whereas relative to GDP, this expenditure was highest in Spain, which also has the highest unemployment rate.

Figure 6: **Expenditure on passive labour market policy in some of the EU countries,* 2008–2010 (% of GDP)**



Source: Eurostat.
Note:* Countries for which the 2010 figures were published in early May 2012.

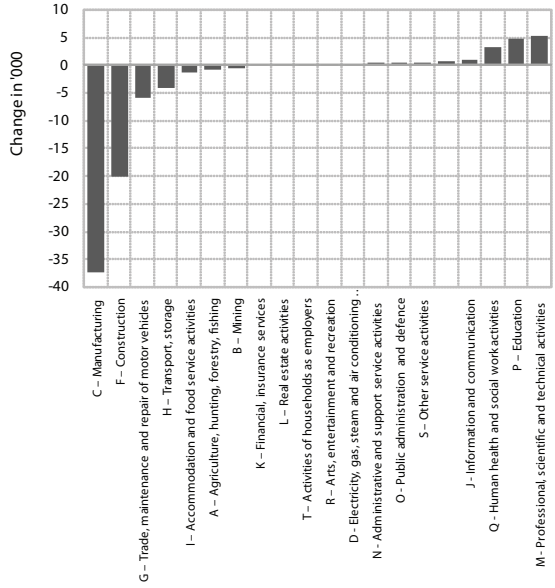
[8] According to Eurostat, expenditure on passive labour market policy in Estonia increased by 454%, in Latvia by 327% and in Lithuania by 227%.

2. Labour market and labour market policy in Slovenia in the 2008–2011 period

The labour market in Slovenia adjusted to the crisis mainly through employment cuts. The possible responses of the labour market to the crisis include (i) labour cost flexibility; (ii) labour mobility, including geographic mobility and intersectoral mobility; and (iii) adjusting the quantity of work through changes in the number of employees or the number of hours worked. In Slovenia, the labour market mainly responded by reducing the number of employees, and partly by wage adjustments. Given lower demand, the companies first curbed overtime, whereas in 2009 they also opted for shorter working hours, the measure encouraged and supported by the Partial Subsidising of Full-Time Work Act, which to a certain extent caused labour hoarding. Flexibility of wages in the private sector was largely limited to overtime payments, extraordinary payments dependent on companies' business performance, and wage adjustments to price and productivity growth. All three elements brought about a slowdown in wage growth, whereas the wages in companies with shorter working hours typically dropped. Consequently, the growth of the average gross wage in the private sector slowed down markedly in 2009. In 2010, the process of price adjustment was interrupted by the adoption of the minimum wage increase, whereas in 2011, the growth reached the lowest level in the previous twenty years (see section 2.3). Due to limited possibilities with regard to wage flexibility and minimum wage increases, wage adjustment was not sufficient to prevent the substantial increase in unit labour costs in the 2008–2011 period. Similarly to other countries, job opportunities in Slovenia shrank for young people, a group particularly exposed to temporary employment. A separate section is therefore dedicated to the position of young people in the labour market and to the factors affecting it.

Adjustments to the lower level of economic activity through employment cuts were mainly made by private sector companies. In the 2008–2011 period, the highest drop in the number of persons in employment was observed in construction (22.9%) and manufacturing (16.9%). In private sector activities, the number of persons in employment over this period thus dropped by 8.8%, while in public services it grew by 5%. To curb employment in the public sector, the Public Finance Balance Act adopted this year allows hiring employees solely on the basis of an approval, and stipulates the termination of employment contracts for the public officials who have completed full pensionable service and are eligible for retirement. This could contribute to reducing the already low employment rate of the older people (see Figure 9).

Figure 7: **Changes in the number of persons in employment in the 2008–2011 period, by activity**



Source: SORS, calculations by IMAD.

2.1. Impact of the crisis on the labour market in Slovenia

Declining economic activity in Slovenia in the 2008–2011 period resulted in increased unemployment. In Slovenia, economic activity declined in 2009 (by 8%, measured by GDP); in 2010 and in the first half of 2011, economic activity gradually recovered, increasing by 1.4% in 2010. In 2011, it dropped again, by 0.2%. In 2010 and 2011, economic activity continued to decline mainly in the construction sector. The decline in economic activity observed in 2009 triggered the process of adjustments to the labour market, leading to a fall in employment and an increase in unemployment. In the 2008–2011 period, the unemployment rate according to the Labour Force Survey (LFS) rose by 3.8 p.p., reaching 8.2% in 2011. A sharp decline in construction activity constitutes an important reason for a stronger increase in the male unemployment rate compared to the female unemployment rate in the 2008–2011 period.[9] An above-average rise was recorded in the unemployment rate of the young population (for more information, see section 2.2). At the end of December 2011, the number of registered unemployed was 90% higher than that in September 2008 when it had reached an all-time low. In the period between the last quarter of 2008 and the last quarter of 2011, the number of unemployed according

[9] In the 2008–2011 period, the female unemployment rate rose by 3.1 p.p. (to 7.9% in 2011), and the male unemployment rate by 4.2 p.p. (to 8.2% in 2011).

Table 2: **Unemployment rates by age group, in %**

	15–24 years	25–49 years	50–74 years	15–74 years
2000	16.4	5.6	6.5[u]	6.9
2001	15.7	4.7	3.8[u]	5.7
2002	14.8	5.1	3.9[u]	6
2003	15.3	5.9	3.9[u]	6.5
2004	14	5.3	4.2[u]	6
2005	15.9	5.8	3.9[u]	6.5
2006	13.9	5.5	3.5[u]	6
2007	10.1	4.4	3.7[u]	4.9
2008	10.4	3.8	3.3[u]	4.4
2009	13.6	5.5	3.9[u]	5.9
2010	14.7	7.3	4.4	7.3
2011	15.7	7.8	6.5	8.2

Source: Eurostat, [u]-non-reliable data.

Table 3: **Employment rates by age group, in %**

	15-24 years	25-54 years	55-64 years	15-64 years	20-64 years
2000	31.2	82.6	22.3	62.7	68.5
2001	30.3	83.8	23.4	63.6	69.4
2002	31.1	84.1	25.9	64.3	70.0
2003	28.6	82.6	22.7	62.5	68.1
2004	33.8	84.0	30.1	65.6	71.0
2005	34.1	83.8	30.7	66.0	7.1
2006	35.0	84.2	32.6	66.6	71.5
2007	37.6	85.3	33.5	67.8	72.4
2008	38.4	86.8	32.8	68.6	73.0
2009	35.3	84.8	35.6	67.5	71.9
2010	34.1	83.7	35.0	66.2	70.3
2011	31.5	83.1	31.2	64.4	68.4

Source: Eurostat.

to the LFS almost doubled, which was also reflected in a 3.8 p.p. increase in the unemployment rate.

The crisis brought about a sharp decline in employment for low-skilled workers. The decline in economic activity observed in 2009 caused a delayed drop in the employment rate. In the 15–64 age group, the employment rate in 2010 was 2.4 p.p. lower than in 2008. In the 2008–2011 period, the employment rate dropped sharply mainly for the low-skilled population, amounting to 35.3% in 2011 (a 7.6 p.p. drop over 2008). A sharp drop was also recorded in the employment rate of medium-skilled workers (5.6 p.p.), but a significantly lower decline for the population with higher education (2 p.p.).

In the 2008–2011 period, male employment decreased more than female employment. Similarly to the EU, the number of men in employment in Slovenia in the 2008–2011 period decreased more than the number of women. According to the Labour Force Survey, the number of women in employment in 2011 was 5.2% lower than in 2008, whereas the number of men in employment was 7% behind the 2008 figure.[10] In 2011, the male employment rate in the 15–64 age group amounted to 67.7%, a 5 p.p. drop over 2008. For women, the employment rate in the same age group amounted to 60.8% in 2011 (a 3.4 p.p. decrease over 2008). The strong activity decline in construction is an important reason for a greater reduction in the male employment rate compared to the female employment rate in the 2008–2011.

[10] In the EU, the number of men in employment dropped by 3.3% and the number of women by 0.3%.

In the 2009–2011 period, structural imbalances in the labour market increased. In 2011, the long-term unemployment rate in Slovenia amounted to 3.6%, almost doubling compared to 2008. Furthermore, the very long-term unemployment rate rose, amounting to 1.7% in 2011 (a 0.7 p.p. increase over 2008). At the end of 2011, the number of registered long-term unemployed[11] was 84.2% higher than at the end of 2008, whereas their share in the total number of unemployed rose by 3.8 p.p., reaching 50.2% at the end of 2011. At the end of December 2011, the number of unemployed persons aged 50 and over, the age group who often find it harder to get employment, rose by 75% compared to December 2008. The increased structural imbalances are also reflected in the Beveridge curve movements (see Box 1).

In Slovenia, the issue of low employment rate for older workers has persisted for quite some time. For several years, Slovenia has had one of the lowest employment rates for older workers (aged 55–64). Despite the increase recorded in 2009 and 2010 (see Table 3), it still remained one of the lowest in the EU. In 2011, it dropped to 31.2%, which is 1.6 p.p. less than in 2008. The sharp decline (3.8 p.p.) observed in 2011 could be attributed to the strong increase in the number of unemployed older workers at the end of 2010, which is probably related to the changes in the labour market regulations, to the envisaged pension system reform, and to the decline in informal employment of older people. The low level results from early withdrawal from the labour market (retirement) and from structural unemployment more frequently affecting older workers. Furthermore, the low level adversely impacts long-term sustainability of public finances (see the 'Fiscal Developments and Policy' chapter). In order to increase the employment rate for older workers, pension system reform should be adopted as soon as possible. The drafting of the pension system reform and its early adoption should be accompanied by an active ageing strategy. The active-ageing strategy measures should also include adjustments of the workplace to the needs of the older workers. According to the preliminary results of the 5th European Survey on Working Conditions,[12] only about 25% of the respondents in Slovenia believe that at the age of 60 they will be able to perform the work they are performing at present (Parent–Thirion, A. 2010).[13]

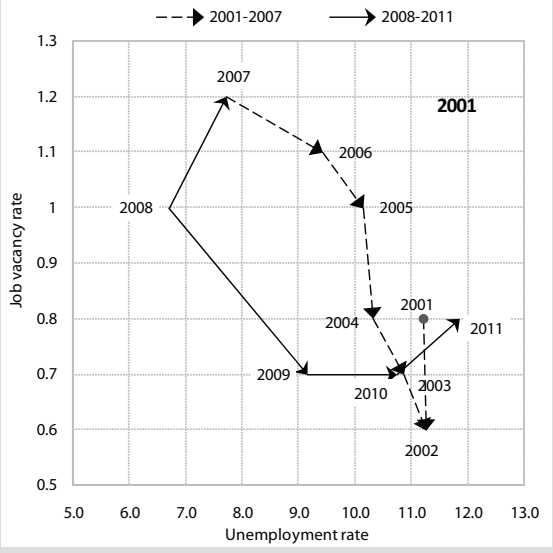
In Slovenia, labour market segmentation is a significant issue. The share of temporary employment in total employment (age group 15–64) has been above the EU average since 2002. Particularly worth noting is the highest share of temporary employment among

Box 1: **Beveridge curve**

A Beveridge curve is a graphical representation of the relationship between the unemployment and the job vacancy rates. Typically, the curve is hyperbolic-shaped and slopes downwards, its movements reflecting structural shifts in the labour market. When the curve is moving downwards, this indicates efficiency in filling job vacancies with unemployed individuals, whereas an upward movement reflects structural problems in the labour market with an increasing number of the unemployed not filling the rising number of job vacancies. Inefficiency in filling job vacancies may result from a mismatch between the skills the companies demand and the skills the unemployed have.

In the 2008–2011 period, the Beveridge curve suggests an increasing labour market mismatch. Figure 8 shows a rising job vacancy rate and a declining unemployment rate recorded in the 2001–2007 period. This shifted the Beveridge curve towards the origin, which reflects a reduction in structural imbalances in the labour market. In the 2008–2011 period, the job vacancy rate dropped, and the unemployment rate increased, which shifted the Beveridge curve downward and further to the right, away from the origin. This movement of the curve shows an increasing mismatch between companies' demand for specific skills and the skills the unemployed have.

Figure 8: **Beveridge curve in the 2001–2011 period**



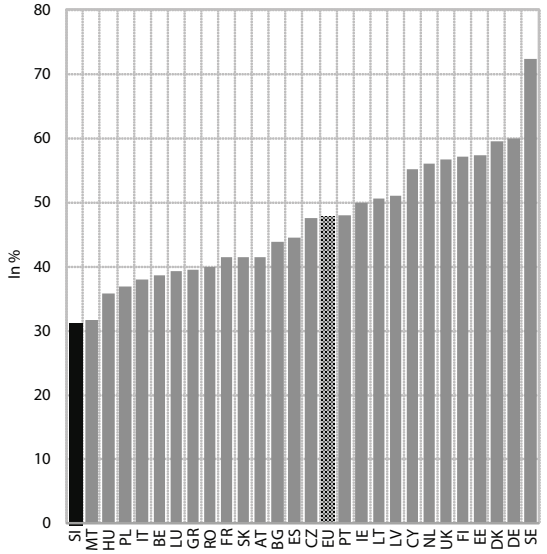
Source: SORS.

[11] The long-term unemployed are those who have been unemployed for a year and longer.

[12] Preliminary results of the 5th European Survey on Working Conditions carried out by the European Foundation for the Improvement of Living and Working Conditions.

[13] In the EU, these employees account for about 60%.

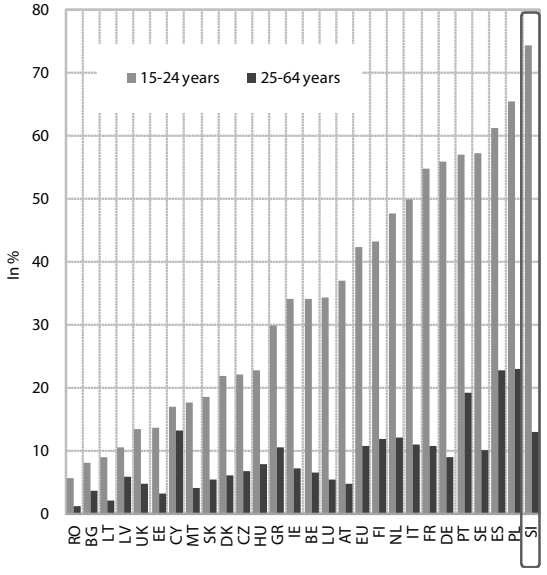
Figure 9: **Employment rates of older workers (aged 55–64) in the EU in 2011**



Source: Eurostat.

young workers (aged 15–24). In 2000, the share of temporary employment in total employment in the 15–64 age group amounted to 12.8% (EU: 13.6%), whereas in 2011, it amounted to as much as 18% (EU: 14 %). The strongly above-average share of the young in temporary employment in Slovenia is related to the existence of student work, which employers, in order to be able to promptly respond to labour demand, find attractive both in terms of taxation and hiring procedures (for more information see section 2.2.3).

Figure 10: **The share of temporary employment in total employment in the 15–24 and 25–64 age groups**



Source: Eurostat.

2.2. Young people in the labour market in Slovenia

In Slovenia, the situation of young people in the labour market is strongly impacted by the high participation of the young in education, and by the frequent combining of school and employment. In 2009, the participation of people aged 15–19 in secondary education was the highest in the EU, exceeding the EU average (Slovenia: 77.7 %; EU: 58.6 %). The participation of the young (20–24 years) in tertiary education was also high in Slovenia; in 2009 (the latest available international data), it was the highest in the EU (for more information see section 2.2.1). OECD experts point out that youth employment should be analysed taking into account the differences between the countries in terms of participation in education and opportunities to combine schooling with part-time work. Based on an analysis of the average age of school-leavers and the share of students aged 15–29 who are working, OECD countries are divided into four groups: Slovenia belongs to the group of countries[14] with above-average school-leaving age and more than 33% of students working (OECD, 2010, p. 55). In Slovenia, the high share of students in employment is largely due to students working through student employment services. Particularly in the 25–29 age group, however, the share of young people who are neither employed nor participating in education or training has been rising (NEET indicator).

The situation of young people in the labour market is also affected by demographic trends. Despite the steady growth of the population (until 2009, mainly due to an increased level of net migration, and since 2006, also as a result of the return to a positive natural increase), the young population in Slovenia has been declining for over a decade. This can be attributed to a steadily declining number of births in the 1980–2003 period (with the exception of 2000), whereas the resumed growth of the number of births recorded since 2004 will contribute to an increase of the young population only after the year 2020. In 2011, the young population in Slovenia, aged 15–29, amounted to 375 365, an almost 14% drop from the year 2000, whereas their share in total population shrank by over 3 p.p. According to the EUROPOP 2010 population projection,[15] the proportion of young people is projected to decline further. Compared to 2011, the share of the young is assumed to drop by 16% (i.e. about 60 000 persons). More than 34 000 of them will be aged 15–24, and more than 25 000 will be 25–29 years old. The young population aged 15–24 years is therefore assumed to account for less than one tenth, and the 25–29 age group for 5.6% of total population. In addition

[14] In addition to Slovenia, Finland, Denmark, Norway and the Netherlands also belong to this group.

[15] The EUROPOP2010 population projections for the period until 2060 were published by Eurostat in mid 2011. The baseline value taken into account in the projections is the population status as at 1 January 2010 (hence the name).

Table 4: **Young and working-age population, Slovenia, 2000–2020**

	Number			Share		
	2000	2011	2020	2000	2011	2020
Young aged 15–24	292,101	229,830	195,709	14.7	11.2	9.1
Young aged 25–29	143,700	145,535	119,982	7.2	7.1	5.6
Young TOTAL	435,801	375,365	315,691	21.9	18.3	14.7
Working-age population (aged 15–64)	1,391,981	1,420,392	1,393,402	70.0	69.3	65.0
Population	2,046,976	2,050,189	2,142,217	100.0	100.0	100.0

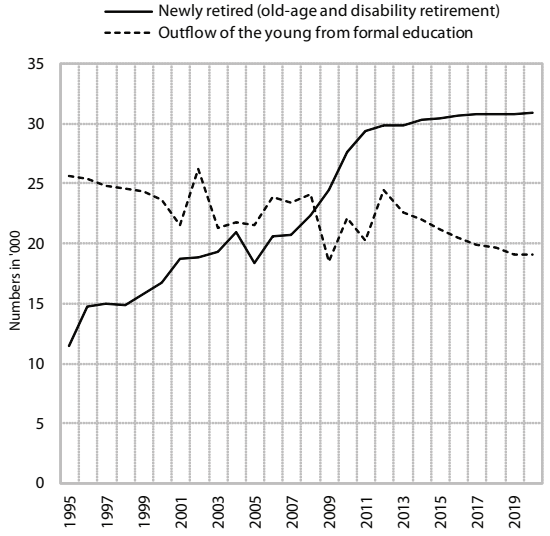
Source: SORS, 2020. Eurostat; calculations by IMAD.

to continuous increases in life expectancy, continuous increases in the number and share of the older people have also been observed. According to the EUROPOP 2010 population projection, however, the share of the working-age population (20–64 years), maintaining since 2005 a level slightly above 64% (mainly due to strong net migration of the working-age population in the 2005-2009 period), is projected to drop to slightly over 60% by 2020, despite the projection assumptions of relatively high net migration that are not likely to be realised.

According to OECD experts, the relative scarcity of labour over the long run should in theory favour stronger labour market outcomes for the smaller cohorts of young entrants in the labour market. Even though it is not common for the young to fill the positions vacated by retiring employees, retirement can to a certain extent impact the demand for young entrants. In the past, the number of young people in Slovenia who entered the labour market after completing regular education exceeded the number of newly retired employees leaving the labour market. Since 2008, however, the outflow of older people (newly retired) from the labour market exceeds the inflow of the young.[16] In the next few years, a similar situation will be observed: young generations entering the labour market will diminish steadily, whereas the retiring generations will remain equally numerous.

In the 2000–2008 period, the youth employment rate (15–24 age group) in Slovenia grew rapidly but dropped significantly due to the economic crisis. In the 2000–2008 period, the youth employment rate

Figure 11: **Outflow of the young from schools, and the newly retired (old-age and disability retirement) in the 2000–2010 period, and projection for the period up until 2020**



Source: Estimate and projection by the IMAD based on the figures from the SORS and HII, and the EUROPOP2010 population projections.

(15–24 age group) increased by 7.2 p.p.,[17] whereas in the 2008–2011 period, it dropped by 6.9 p.p. In Slovenia, the youth (15–24 age group) employment rate had been lagging behind the EU average until 2004, which can be attributed to the above-average level of participation of young people in education (see Section 2.2.1). In the 2005–2008 period, however, the youth employment rate grew rapidly as a result of an increasing volume of student jobs and recruitment of the young in the fast-growing construction sector (Figure 12), and exceeded the EU average. The rising volume of student jobs in the 2000–2008 period contributed significantly to the outstanding share of temporary employment in the young population.[18] In Slovenia, the share of temporary employment in the 15–24 age group has been the highest of the EU countries for quite a few years (see Figure 10). In addition to student work, attractive to employers

[16] A sharp decline in the outflow of the young from regular schooling in 2009 can be attributed to the tendency to postpone the entry of the young population into the labour market which was further strengthened by the crisis. In the same year, a relatively higher number of primary school leavers enrolled in secondary schools, and an increased number of secondary school leavers enrolled in full-time studies. The increased enrollment will be reflected in an increased outflow of university and secondary school graduates in five-years' time. The resumed rise in the outflow from schools observed after the year 2009 is mainly due to a rise in the number of university graduates resulting from increased enrollment in full-time studies recorded in the previous years. A similar situation could be observed in 2002 when the number of regular graduates rose significantly.

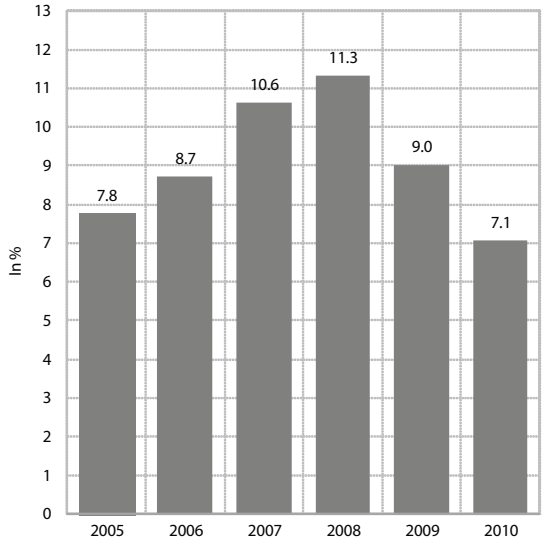
[17] According to Eurostat.

[18] In 2008, the share of temporary employment in the 15–24 age group amounted to 69.8% (a 26.6 p.p. rise over 2000), and had reached 74.5% by 2011.

both in terms of taxation and hiring procedures, the strong segmentation of the labour market is also due to a considerable difference in employment protection between fixed-term and permanent employment contracts. In the 2000–2011 period, the employment rate of the 25–29 age group underwent considerably fewer changes than that of the 15–24 age group, which can be attributed to the fact that student jobs are of lower significance for employment of this age group. During the crisis, the employment rate of the young population (aged 15–24 and 25–29) in Slovenia recorded a stronger decrease than the EU average.

The above-average drop in the youth employment in the 2008–2011 period was impacted by a high level of exposure of the young population to temporary employment. In the 2008–2011 period, the employment rate of the people aged 15–24 dropped by 6.9 p.p., and in the 25–29 age group, it fell by 5.9 p.p. (see Table 6). The strong decrease in the volume of student work, a high share of temporary employment (including student jobs) among the young, and a high share of young people employed in construction and manufacturing, the sectors most affected by the crisis, are the major causes

Figure 12: **The share of young people (aged 15–24) in employment in the total number of employed persons in the construction sector**



Source: Estimate and projection by the IMAD based on the figures from the SORS and HII, and the EUROPOP2010 population projections.

Table 5: **Employment of young people aged 15–24 in the 2002-2011 period, in thousands**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of persons in employment	88	83	94	91	91	96	98	87	88	*73.5*
Employees	80	77	83	79	81	86	87.8	75.6	68.6	*62.3*
Persons in temporary employment	44	42	54	50	52	58	61.3	50.3	47.8	*45.1*
Student work	15	17	25	24	27	32	36	32	38	*28.5*
Share of student work in total employment, in %	17.0	20.5	26.6	26.4	29.7	33.3	36.7	36.8	43.2	*38.8*

Source: SORS, Labour Force Survey.

Table 6: **Employment rates by age and education group in Slovenia (in %)**

	TOTAL		Low education		Secondary education		Higher education	
	15–24 years	25–29 years	15–24	25–29	15–24	25–29	15–24	25–29
2000	31.2	81	10.8	65.9	48.5	81.3	73.0u	88.8
2001	30.3	82.3	11.3	72.3	46.2	81.9	64.5u	89.5
2002	31.1	82	9.3	68.5	47.2	82.6	61.0u	86.7
2003	28.6	78.7	7.7	67.6	43.4	78.2	69.6u	84.3
2004	33.8	80.6	13.2	62.4	50.2	80.4	68.4u	86.9
2005	34.1	79.8	14.0	62	48.1	78.8	68.1u	87.1
2006	35.0	77.5	14.9	60.4	48.9	76.4	69.0u	84.6
2007	37.6	80.6	16.4	62.2	51.2	80.3	79.4u	84.8
2008	38.4	82.9	17.9	63.3	51.3	82.3	68.6u	87.4
2009	35.3	77.6	16.4	56.1	47.3	76.4	71.8u	84.9
2010	34.1	75.7	17.1	54.8	45.4	75.4	60.0u	81.4
2011	31.5	74.8	13.3	61.3	43.5	73.2	53.9u	81

Source: Eurostat; Note: u-unreliable data.

of the above-average decline in youth employment. In 2011, the volume of student work was 20.8% smaller than in 2008, whereas the number of all the young people in temporary employment declined by 26.4%. In terms of the achieved level of education, the employment rate of people with secondary education recorded a sharp decline in the 2008–2011 period in the 15–24 and 25–29 age groups.

During the crisis, the highest drop in the youth (25–29 age group) employment rate was observed in those with secondary education. The achieved level of education typically improves employment opportunities, which is reflected in the fact that the employment rates for people with higher levels of education are higher than those for persons with lower ones. This applies both to the population as a whole and to younger age groups. While in the 2008–2011 period, the highest drop in the employment rate of the 25–64 age group was observed in the low-skilled population, the strongest decrease in the 25–29 age group was recorded for those with secondary education.

In the young generation, men were affected by the crisis slightly more than women, whereas the male employment rate remained above the level of the female employment. In the 2008–2011 period, the employment rate in both age groups (15–24 and 25–29) dropped more significantly for men than for women.[19] As in the total population, the stronger decrease in the employment rate for young men can be attributed to the strong drop in activity and employment in the activities predominantly employing male workforce (e.g. construction and manufacturing). The smaller gender gap in the first age group is probably due to the fact that the drop in the student work volume affected both men and women alike.

Following an extended period of declining youth unemployment rate, the crisis resulted in a strong increase in the youth unemployment rate. The unemployment rate (according to the Labour Force Survey) in the young population for the 15–24 age group in the 2000–2007 period fell to 10.1 % in 2007 (6.3 p.p. below the level of 2000). Due to the economic growth slowdown in 2008 and the fall in 2009, it started to rise, and increased by 5.6 p.p. in the 2007–2011 period, amounting to 15.7% in 2011. Despite the increase, the youth unemployment rate is still lower than the EU average (21.3%). In the second age group of the young population (25–29 years), however, it rose by 7.7 p.p., amounting to 14.2% in 2011, which is above the EU average (12.6%).

During the crisis, the relatively highest increase was recorded for those registered unemployed young people who have higher education. In the period between December 2008 and December 2011, the number of registered young unemployed people aged 15–29 rose by 48.9%. In the same period, the number of registered young people with higher education increased by 112%, with secondary education by 38.4%, and with low education by 43%. The high increase in the number of young unemployed individuals with higher education was due to lower demand for a qualified workforce, a significant increase in the number of university graduates in the 2008–2010 period and the labour market mismatch (for more information see section 2.2.3).

Table 7: **Employment rates by age group and gender**

	15–24 years		25–29 years	
	Women	**Men**	**Women**	**Men**
2000	27.4	34.7	81	80.9
2001	26.4	34.1	77.9	86.3
2002	27.2	34.8	78	85.9
2003	23.6	33.3	75.8	81.5
2004	29.1	38.3	76.9	84
2005	29.8	38.1	77.2	82.2
2006	30.3	39.2	72.3	82.8
2007	31.4	43.2	75.3	85.8
2008	33.2	43	78.8	86.7
2009	31	39.1	73.6	81.5
2010	30	37.6	73.1	78.3
2011	26.9	35.7	72.4	77.2

Source: Eurostat.

[19] In the 2008–2011 period, it diminished by 6.3 p.p. in the 15–24 age group for women, and by 7.3 p.p. for men, whereas in the 25–29 age group, it fell by 6.4 p.p. for women, and 9.5 p.p. for men.

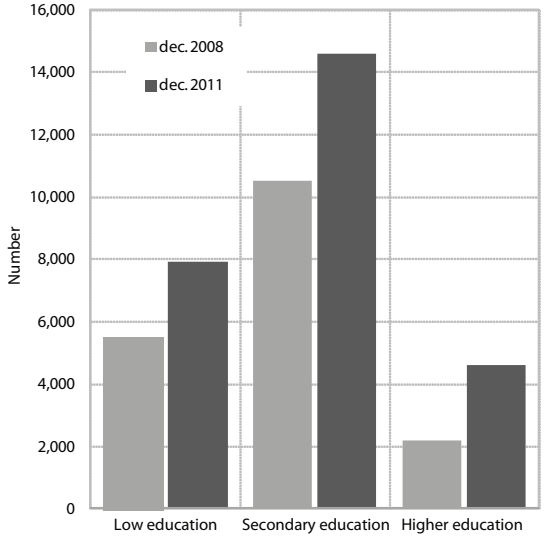
Table 8: **Unemployment rate for the 15–24 and 25–29 age groups by gender (according to LFS)**

	15–24			25–29		
	Total	**Men**	**Women**	**Total**	**Men**	**Women**
2000	16.4	14.8[u]	18.5[u]	7.5	7.3[u]	7.8[u]
2001	15.7	15.0[u]	16.6[u]	6.2	5.3[u]	7.1[u]
2002	14.8	13.5[u]	16.7[u]	6.6	4.5[u]	8.9[u]
2003	15.3	13.1[u]	18.4[u]	10	8.7[u]	11.6[u]
2004	14.0	11.2[u]	17.7[u]	8.6	7.0[u]	10.4[u]
2005	15.9	14.5[u]	17.8[u]	9.3	8.3[u]	10.5[u]
2006	13.9	11.6[u]	16.8[u]	10.4	7.5[u]	13.5[u]
2007	10.1	9.4[u]	11.2[u]	8.1	5.4[u]	11.2[u]
2008	10.4	9.9[u]	11.3[u]	6.5	4.8[u]	8.5[u]
2009	13.6	13.8[u]	13.4[u]	10.1	8.9[u]	11.3[u]
2010	14.7	15.2[u]	13.8[u]	13.0	12.8[u]	13.3[u]
2011	15.7	15.0[u]	16.8[u]	14.2	13.0[u]	15.4[u]

Source: Labour Force Survey, Eurostat.

Note: [u]-unreliable data.

Figure 13: **The number of registered unemployed aged up to 29 years, by education level, at year end 2008 and 2011**



Source: ESS.

The economic crisis has also extended the time the young spend in unemployment. The smaller number of job vacancies[20] related to layoffs and the practice of not extending fixed-term employment contracts, predominantly observed among young people,[21] were reflected in an increase in the duration of unemployment. In the 15–29 age group, the average duration of unemployment in 2011 was 2 months and 4 days longer than that in 2009. In 2011, young workers with a low level of education were unemployed for 1 year and 25 days, on average, which already means exposure to long-term unemployment.

Table 9: **The average duration of unemployment in the 15–29 age group, by education group.**

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Total	11m29d	12m22d	12m6d	10m25d	8m3d	9m8d	10m7d
- Low education	14m10d	15m29d	16m5d	14m10d	10m9d	11m24d	12m25d
- Secondary education	11m3d	11m23d	11m1d	9m22d	7m10d	8m15d	9m14d
- Higher education	8m16d	8m25d	8m21d	7m26d	6m7d	7m4d	8m5d

Source: ESS; calculations by IMAD.

[20] In the 2008–2011 period, the number of job vacancies dropped by 22.3%.

[21] In 2011, the share of temporary employment in total employment for the young population (15–24 years) amounted to 74.5% (Eurostat).

2.2.1. Participation of young people in education in the 2000–2010 period

The number of young people enrolled in upper secondary education dropped considerably in the 2000–2010 period due to demographic reasons; nevertheless, participation remains very high. The participation in upper secondary education of young people aged 15-19 in Slovenia was the highest among the EU countries and exceeded the EU average by 19.1 p. p. in 2009 (Slovenia: 77.7%; EU: 58.6%). Although inclusion slightly increased in the 2000–2009 period, the demographic situation (decreasing generations enrolled in upper secondary education) caused the number of young people enrolled in upper secondary education to strongly drop in the 2000/2001–2010/2011 period (by 21.5%).[22]

In the 2000–2010 period, the number of young people enrolled in upper secondary schools fell in all programmes except in vocational and matura courses. The number of enrolled pupils dropped the most in two-year lower and three-year secondary vocational programmes (see Table 10). A decline in the number of young people in vocational programmes caused problems on the labour market, as the potential workforce with this type of education has been lacking. Furthermore, in the 2000/2001–2010/2011 period, the number of pupils enrolled in the vocational-technical programmes that allow the young people who have with finished 3-year vocational school to continue education at the tertiary level plunged. The number of young people enrolled in four- and five-year technical and other professional programmes as well as gymnasiums also decreased, but to a much lesser extent than in vocational schools. However, the number of pupils enrolled in *matura* courses surged. These developments led to a changed structure of the pupils enrolled by types of programmes. The share of pupils enrolled in lower and medium vocational programmes notably shrank (from 27.7% in 2000/2001 to 15.5% in 2010/2011), whilst the share of pupils enrolled in gymnasiums and four- and five-year technical and other professional programmes significantly increased.[23] A drop in the share of pupils enrolled in lower and middle vocational programmes that do not permit the direct continuation of education at the tertiary level is also related to the low status of occupations with this type of education[24].

A drop in enrolment in vocational and technical and other professional schools is problematic from the point of view of the demand on the labour market and youth employment. The results of the survey conducted by the Employment Service of Slovenia (ESS) among the employers show that employers have difficulties in finding workforce with certain profiles of vocational education.[25] A similar picture is obtained from the

Table 10: **Enrolment of young people in upper secondary schools, by type of educational programme, 2000–2010**

	Number	Growth in number, in %	Difference in number	Structure of young people in secondary schools, in %	
	2010	2000–2010	2000–2010	2000	2010
Total	82,267	-21.5	-22,573	100.0	100.0
2-year and 3-year lower and middle vocational programmes	12,775	-56	-16,288	27.7	15.5
4-year and 5-year technical and other professional programmes	30,715	-8.7	-2,909	32.1	37.3
Gymnasium	32,432	-4.4	-1,485	32.4	39.4
3+2 and differential programmes (vocational technical education programmes)	4,839	-37.7	-2,924	7.4	5.9
Vocational course	429	351.6	334	0.1	0.5
Matura course	1,077	184.9	699	0.4	1.3

Source: SORS; calculations IMAD.

Note: *Data for the beginning of school year.

[22] According to the data for the beginning of the year, it stood at 82 267 in the 2010/2011 school year.

[23] The percentage of pupils enrolled in gymnasiums in 2010/2011 stood at 39.4%, up by 7.1 p. p. from 2000/2001. The percentage of pupils enrolled in 4- and 5-year technical and other professional programmes stood at 39.4% in 2010/2011, up by 5.3 p. p. from 2000/2001.

[24] This was also shown by the results of the research Special Eurobarometer Attitudes towards vocational education and training (2011).

[25] According to the LPZAP Employment Forecast Survey for 2011 (ESS), employers find it the most difficult to employ cooks, waiters, welders, locksmiths, bricklayers and stonemasons, carpenters and joiners, etc.

Table 11: **Students enrolled in tertiary education, by fields of education[1], 2000–2010**

	Number	Growth in number, in %	Difference in number	Structure of enrolled, in %	
	2010	2000–2010	2000–2010	2000	2010
Total	107,134	17.1	15,640	100.0	100.0
Education	8,234	-12.9	-1,221	10.3	7.7
Humanities and arts	9,078	44.2	2,782	6.9	8.5
Social sciences, business and law	37,134	-5.5	-2,169	43.0	34.7
Science, mathematics and computing	7,530	64.1	2,942	5.0	7.0
Engineering, manufacturing and construction	20,915	30.5	4,889	17.5	19.5
Agriculture and veterinary	3,435	22.4	628	3.1	3.2
Health and welfare	10,664	74.1	4,540	6.7	10.0
Services	10,144	47.1	3,249	7.5	9.5

Source: SORS; calculations IMAD.

Note: 1International Standard Classification of Education ISCED 97 and Eurostat manual (Fields of Education and Training Manual, 1999).

ESS data on the number of registered vacancies and unemployed persons for certain profiles of vocational education.[26] A drop in the number of enrolled pupils in upper secondary technical and other professional education is therefore problematic, as there are many vacancies for some profiles, but the number of unemployed per a vacancy is small (e.g. mechanical engineering technician, electronics engineering technician, electrical engineering technician, computer technician, healthe technician). Also problematic is a drop in the enrolment in secondary schools, in particular in engineering, manufacturing technology and building, as employers have difficulties in finding workforce for many education profiles,[27] and also the number of unemployed youth with such education is only modest (mechanical technicians[28]).

Furthermore, the number of enrolled and participation of young people in tertiary education surged in the 2000–2010 period. In the 2010/2011 school year, 47.6% of people aged 20–24 participated in tertiary education; participation thus soared by 12.9 p. p. compared to 2000/2001. In the 2008–2010 period, participation remained at approximately the same level. In 2009 (the latest available international data), it was the highest among the EU countries and exceeded the EU average (Slovenia: 47.7%; EU: 29.3%). In the 2010/2011 school year, 107 134 students were enrolled, their number increasing by 17% from 2000/2001.

As for the demand on the labour market, a rise in the share of enrolled in the fields of health and welfare, and in the field of science, mathematics and computing has been positive, as well as a rise in the field of engineering, manufacturing and construction, although these education profiles are still lacking. In 2010/2011, social sciences, business and law had the largest share in the structure of enrolment (2010/2011: 34.7%), although it notably shrank compared to 2000/2001 (by 8.3 p. p.). Furthermore, the share of students enrolled in the field of education narrowed. In these fields, the number of enrolled also dropped, whilst it increased in other fields (see Table 11). The number of students enrolled surged the most in health and welfare (by 74.1%), which is related to the establishment of new higher education institutions[29] in the field of health after 2000. In addition, the number of vacancies for medical doctors and graduate nurses was high in 2011,[30] whereas the number of unemployed was only modest, which indicates great demand for graduates with these education profiles. In the 2000–2010 period, the number of students enrolled in engineering, manufacturing and construction also rose, as did the number of enrolled in science, mathematics and computing. Higher enrolment in these two fields is also a result of the policy in this area. The rise could have been nevertheless even higher, as the demand for graduates in these fields (mechanical engineering, electrical engineering, computing and informatics) was still high and the number unemployed per vacancy was still low in 2011.

[26] In 2011, the Employment Service of Slovenia registered 2 457 vacancies for cooks, 2 745 for waiters, 2 989 for welders, 4 225 for locksmiths, 1 122 for joiners, 4 918 for bricklayers and stonemasons, and 2 772 for carpenters. The number of unemployed per vacancy was 0.5 for a cook, 0.4 for a waiter, 0.0 for a welder, 0.3 for a locksmith, 0.9 for a joiner, 0.2 for a bricklayer and stonemason, and 0.2 for a carpenter.

[27] Mechanical technician, cook, bricklayer and stonemason, auto-mechanic, joiner, metal moulder, tool-maker and carpenter (Results of the LPZAP Employment Forecast Survey for 2011, 2011).

[28] The intentions of elementary school pupils for secondary school enrolment in the 2012/2013 school year.

[29] Medical Faculty in Maribor (established in 2003, first students were enrolled in the 2004/2005 academic year) and higher professional school/nursing faculty.

[30] The data of the Employment Service of Slovenia (for the period from 1 January to 31 December 2011).

2.2.2.1. Projections of young people's participation in education by 2020

The number of children finishing elementary school will only start rising after 2018. As a result of a long-term decline in the number of births in the 1980–2003 period, the number of children enrolled in elementary schools in Slovenia has been constantly on the decline (also in the times of the transition to the nine-year elementary school in 1999–2003). Consequently, the number of children finishing elementary school has also been down every year (around 95% of the demographic generation). This number will continue to decline (with the exception of 2015 due to a rise in the number of births in 2000) by 2018, whereas a revived birth-rate and a growing number of births recorded since 2004 will only affect the number of children with finished elementary school after 2019.[31]

Along with the decline in the number of children finishing elementary school, the number of upper secondary school pupils and full-time students will also be down. The number of pupils enrolled in upper secondary schools has been on the decline since 1999, while the number of pupils successfully finishing various levels of upper secondary education has been down since 2002. The share of young people who successfully finished at least one level of upper secondary education after elementary school reached 90% in 2002 and has been only slowly rising since then.[32] Therefore, the number of pupils enrolled in upper secondary schools as well as the number of young people successfully completing these schools is expected to further decline due to demographic reasons (according to our projection, the former by 2020 and the latter by 2023). In 2011, the number of full-time students also started to decline, and is expected to go further down by the middle of the next decade. Moreover, the number of full-time graduates is expected to start shrinking shortly, although the share of full-time students successfully graduating after having completed upper secondary school is expected to rise slightly according to our projections.[33]

The size of generations of young people coming out of the education system in the next years (by 2020) will thus slowly shrink. It will decrease from the current 23 thousand to a mere 19 thousand in 2020. In the 2012–2020 period, around 185 thousand young people are expected to come out of the education system, of which almost a half with completed high education and a third with completed upper secondary education.

[31] A rise in the number of births since 2004 led to a resumed growth in schoolchildren generation in 2012 and thereby also to a rise in the number of schoolchildren generation and pupils enrolled in elementary school. According to population projection, the shrinking generation of women in fertility period will result in a new decline in births, despite still slightly higher projection of total birth rate; however, this will only lead to a decreasing volume of schoolchildren generation and the number of pupils enrolled in elementary schools after 2020. The projections of the number of pupils enrolled in elementary school and of the number of children successfully finishing elementary school are thus based on their average proportions to school-aged generation (around 97%) recorded so far, and on proportions to generation which attained 15 years of age in the calendar year when finishing elementary school (around 95%). (For more on the assumptions and methodology of projections see the Annex of this chapter.)

[32] The projection presumes that this share should increase to 91% by 2020. The share of the generation which fails to finish at least one level of upper secondary school should thus decline to 9% (from around 11% in 2000–2003 or from around 15% and more in the period before 1999).

[33] According to the projection, the share of generation with finished gymnasium, technical or other secondary professional school which graduated at a post-secondary vocational level of full-time tertiary education is expected to remain at the current level of around 5%, and the share of graduates at the higher education level of full-time study is expected to rise from the present almost 60% to 65%.

Table 12: **Participation of children, young people and students in education in the 2000–2010 period and projections by 2020**

	Average 2000–2004	Average 2005–2009	2010	2015	2020
SCHOOL CHILDREN, aged 6–14, 1.1. ('000)	**189.1**	**172.9**	**166.5**	**175.9**	**197.9**
- in elementary schools	181.7	167.4	161.6	170.5	191.9
As a % of schoolchildren generation	96.1	96.8	97.1	96.9	97.0
YOUTH IN UPPER SECONDARY SCHOOLS, 1.1. ('000)	**100.7**	**92.3**	**82.2**	**74.3**	**73.9**
As a % of generation aged 15–18:	95.4	99.5	99.2	98.0	98.8
- in lower vocational programmes ('000)	2.7	1.5	1.0	1.0	1.0
- in middle vocational schools and vocational course	23.1	15.6	12.0	10.9	11.0
- in technical and other professional secondary schools	32.3	31.0	30.0	26.4	26.1
- in gymnasiums and matura course	35.3	37.9	34.4	32.4	32.3
- in vocational technical programmes	7.3	6.3	4.8	3.6	3.5
STUDENTS, 1.1. ('000)	**96.1**	**114.6**	**114.9**	**112.1**	**109.0**
- as a % of population aged 20–29	32.2	39.7	40.8	44.1	49.2
- full-time students up to 3rd grade ('000)	**61.3**	**73.4**	**79.2**	**67.9**	**63.0**
- as a % of generation aged 19–23	41.6	55.2	62.2	62.7	63.4
- post-secondary vocational level ('000)	2.5	5.4	7.5	3.5	2.7
- 1st and 2nd Bologna cycle professional higher (former) and academic higher (former) education ('000)	58.8	67.9	71.7	64.4	60.2
- part-time students up to 3rd Bologna cycle ('000)	**29.9**	**34.0**	**28.2**	**28.4**	**26.3**
- as a % of population aged 25–64 with attained upper secondary education	8.5	9.2	7.1	7.4	7.4
- post-secondary vocational education ('000)	4.4	9.7	9.1	8.7	7.9
- 1st and 2nd Bologna cycle, professional higher (former) and academic higher (former) education ('000)	25.5	24.3	19.1	19.7	18.3
- 3rd Bologna cycle students and former programmes (doctorate and masters ('000)	**4.9**	**7.2**	**7.5**	**15.7**	**19.7**

Source: SORS data and own projections based on Europop 2010 population projection.

Table 13: **Young people finishing schooling and outflow of young people from schooling in the 2000–2010 period, and projection to 2020** (in '000)

	Total 2001–2005	Total 2006–2010	Total 2011–2015	Total 2016–2020	Total 2012–2020
FINISHED SCHOOLING: YOUNG PEOPLE					
Finished elementary school and school with adapted programme	**115.9**	**96.8**	**89.3**	**89.0**	**159.9**
Not finished elementary school or school with special curriculum	6.0	5.0	5.0	4.7	8.7
Finished upper secondary school	**121.8**	**110.1**	**91.8**	**86.6**	**159.5**
- lower vocational programme	4.1	2.4	2.0	1.8	3.3
- middle vocational school and vocational course	30.9	21.4	16.6	15.8	29.0
- passed final examination	33.9	32.4	28.0	26.2	48.4
- passed matura exam	41.5	45.2	39.2	37.2	68.4
- passed differential final exam	13.2	10.1	6.7	6.2	11.4
Full-time graduates up to 3rd grade	**39.3**	**48.3**	**58.3**	**51.0**	**97.3**
- post-secondary vocational level ('000)	2.4	4.0	4.1	3.6	6.8
- 1st and 2nd Bologna cycle, professional higher (former) and academic higher (former) programmes	36.9	44.3	54.3	47.4	90.6
Part-time graduates up to 3rd grade	**24.6**	**31.6**	**33.1**	**31.0**	**57.5**
- post-secondary vocational level ('000)	6.4	12.0	12.9	11.8	22.0
- 1st and 2nd Bologna cycle, professional higher (former) and academic higher (former) programmes)	18.1	19.6	20.2	19.3	35.4
Finished 3rd Bologna cycle and former programmes (doctorate and masters)	**7.0**	**8.9**	**16.8**	**27.4**	**42.1**
OUTFLOW OF YOUNG PEOPLE FROM REGULAR SCHOOLING	**112.6**	**113.0**	**111.8**	**96.9**	**184.5**
Education structure (in %)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
- no education	5.3	4.4	4.5	4.9	4.7
- finished elementary school	11.8	12.6	8.5	9.2	8.9
- lower vocational education	3.6	2.1	1.8	1.8	1.8
- finished middle vocational education	16.1	12.6	9.3	10.1	9.7
- finished professional or general secondary school	28.2	25.5	23.8	21.4	22.1
- finished post-secondary vocational education	2.2	3.6	3.6	3.7	3.7
- finished higher education	32.8	39.2	48.6	48.9	49.1
Number of years of schooling	**12.4**	**12.9**	**13.4**	**13.4**	**13.4**

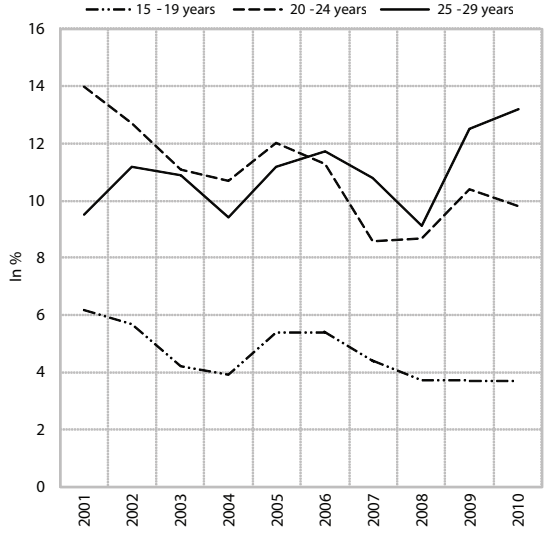
Source: Own estimate and projection on the basis of SORS data and Europop 2010 population projections.

2.2.2. Non-activity and early school leaving among young people

Participation in education and attained formal education affect the position of young people on the labour market. As shown in chapter 2.2.1, in Slovenia there is high participation of young people in education, but there are also some young people who do not opt for entering the labour market or they drop out of school. Young people who drop out of education and have at their most finished elementary school, are most often exposed to unemployment and consequently to social exclusion and at-risk-of-poverty rate (EC; 2011). It is therefore important to monitor also the share of young people not in employment, education or training (NEET indicator), as well as the share of school leavers.[34]

In the 2008–2010 period, the share of young people not in employment, and not in any education and training in Slovenia strongly rose in the age group 25-29, whereas it remained low in younger age groups. The share of young people not in employment, and not in any education and training (NEET indicator) has been relatively low in Slovenia in young age groups (15–19 years and 20–24 years). In the 15–19 age group, it stood at 3.7% in 2010, which was considerably less than on average in the EU (7.0%); in the 20–24 age group, it was 9.8%, which was also lower than the EU average (18.0%). Both shares are related to high participation of young people aged 15–19 in upper secondary school education and of young people aged 20–24 in tertiary education.

Figure 14: **The share of young people not in employment, and not in any education and training by age groups**



Source: Eurostat.

[34] The share of early school leavers indicator measures the percentage of the population aged 18–24 with at most lower secondary education and not in further education and training.

The share of young people not in employment, and not in any education and training in the age group 25–29 is, however, higher than in younger age groups: in 2010 it was 13.2% (EU average 19.7%). In the 2008–2010 period, the share in this age group rose by 4.1 p. p. A higher share in the 25–29 age group than in the 20–24 age group[35] points to the problems faced by young graduates when entering the labour market. In the 15–19 age group, the share remained almost unchanged thanks to high participation in upper secondary school education and the high share of young people who postpone their entry to the labour market by enrolling in tertiary education.

The share of early school leavers has been low in Slovenia and has not increased during the crisis. Thanks to the high participation of young people in education and the high rates of youth finishing upper secondary school education, the share of early school leavers is low. In 2010, it stood at 5.2% and was considerably lower than the EU average (15.2%). Given the high participation of young people in education, it also remained at approximately the same level during the crisis. However, great differences exist in terms of gender, with a much lower share of early school leavers for women (3.3%) than for men (6.9%). In Slovenia, a programme called Project Learning for Young Adults (PUM) proved to be an efficient measure of encouraging early school leavers to continue education.[36]

2.2.3. Barriers to and incentives for youth employment

According to the OECD study, the two major barriers to youth employment on the side of labour supply are early school leaving and the lack of skills relevant for the labour market. As for the labour supply, early school leaving, the lack of adequate knowledge and skills that young people acquire during their education, and the lack of work experience are the most often cited barriers to employment. A comprehensive OECD study on youth employment (OECD 2010) underlines the importance of quality education and training for a smoother transition from education to employment and the relevance of knowledge and skills being adapted to the needs of the labour market. Therefore, the national policies should be oriented to (i) reducing early school-leaving, (ii) promoting combinations of training and work, (iii) offering every young person a second chance to obtain qualification (OECD, 2010).

[35] The share of young people not in employment, and not in any education and training in the age group 20–24 rose by 1.1 p. p., as this group records high participation in tertiary education.

[36] The PUM programme is a programme of non-formal education intended for young people aged 15–25 who are unemployed, are not included in formal education and have not attained vocational education. It was launched with the aim of helping young people without education, occupation or employment to overcome social exclusion and encouraging them to continue schooling or, if this is not possible, to obtain skills facilitating them their path to employment.

On the side of labour demand, the study reports of three major barriers to or opportunities for youth employment. The first barrier according to the OECD study is the structure of economy, which to a large extent predetermines the possibilities for youth employment, as certain economic activities tend to employ mostly young workers. A greater proportion of young workers in an activity that is hit harder by the crisis could thus lead to an above-average deterioration of the position of young people on the labour market. The second barrier is wages and labour costs; numerous countries solve this problem by special regulations on the setting of wages for young people, whereby they facilitate the entry of young people to the labour market. Numerous international empirical studies reveal that a too high level of minimum wage could negatively affect youth employment, especially if combined with high non-wage labour costs. To address this problem, almost a half of the countries with a statutorily set minimum wage introduced a lower minimum wage for young people (sub-minimum wage). Moreover, to encourage youth employment, they opt for reducing social contributions for employing young people and minimum wage recipients. The third factor mentioned in the study is employment protection. It entails in the first place a set of regulations on firing and hiring of the regularly employed and on the use of temporary employment. The rigidity of regulations on employment protection, which the OECD measures with its employment protection legislation index, generally encourages the use of temporary employment, which is particularly common in the case of youth.

We estimate that in Slovenia the barriers to employment also exist on both the supply and demand sides. Unlike in many other European countries, the problems in Slovenia do not predominantly stem from early school leaving, as the share of early school leavers in Slovenia is relatively low.[37] (Nevertheless, successful programmes providing young people with a second chance to obtain education should not be neglected.) In Slovenia, the problems of youth employment are largely caused by the discrepancy between the supply and demand related to the structure of enrolment of young people to education programmes, as well as an insufficient influence of employers on the substance of programmes. This discrepancy exists for young people with completed upper secondary as well as tertiary education. It should be addressed by adapting the education and training system to a greater extent to the needs of the labour market. As Slovenia is also one of the EU countries with an above-average age of students at graduation and with more than a third of students combining school and work (the analysis of the student work (Šušteršič et al., 2010) showed that student work mostly entails physical and less-demanding jobs) it would be sensible to relate student work more to gaining experience that would positively affect the future careers of young people with completed tertiary education. On the demand side, the employment opportunities of young people in Slovenia are diminished by a relatively strong employment protection and relatively high tax burden on labour, i.e. high labour costs. These barriers to youth employment that are (in our assessment) also relevant for Slovenia will therefore be examined in greater detail in the following sections.

In Slovenia, the discrepancy of the structure of graduates in tertiary education by fields of education with the needs on the labour market and a huge rise in the number of graduates in the 2008-2011 period aggravated the problems of employment of young graduates. In the 2000-2011 period, the developments in the number of graduates by fields of education were unfavourable for the employment of young graduates. According to the results of the survey among the employers conducted by the National Employment Service in 2011,[38] employers have difficulties in hiring certain profiles of tertiary education graduates, in particular in the fields of science, mathematics and computing, engineering, manufacturing and construction[39] and health. Similarly, the data of the National Employment Service on the number of vacancies and the number of unemployed by education profiles reveal that for certain profiles in these fields of education the number of vacancies is high, but the number of unemployed is relatively low. On the contrary, the number of unemployed in various profiles in humanities, social sciences, business and law considerably exceeds the number of vacancies. The discrepancy between the number of vacancies and of unemployed in certain profiles also stems from rather unfavourable developments in the number of graduates by fields of employment. In the 2008–2010 period, the number of graduates of tertiary education (aged up to 29) surged by 24.9%. At the same time, the crisis in 2009 led to a strong drop in the vacancies requiring tertiary education.[40]

The discrepancy between supply and demand also exists at the level of upper secondary and vocational education. The declining number of young people enrolled in vocational schools, technical and other professional schools has been unfavourable in terms of employment possibilities. There is a discrepancy in the enrolment of young people in upper secondary school by types of education programmes (a too low enrolment in vocational programmes) with the needs on the labour market, which aggravates the transition of young people to employment. The second problem is related to the number of young people enrolled in some fields of education and within these in various profiles of vocational and professional education, which

[37] In 2010, it was 5.2% in Slovenia and 15.2% on average in the EU.

[38] LPZAP Survey (Employment Forecast for 2011).

[39] According to the results of the LPZAP survey, employers have difficulties in finding graduates in mechanical engineering, computing and informatics, electro-engineering and construction.

[40] According to the ESS, the number of vacancies for tertiary education graduates dropped by 20.7% in 2009; despite an increase in 2011, it was still lower by 13.7% than in 2008.

Table 14: **The number of vacancies and unemployed by the attained level of education**

	Number of vacancies[1]			Number of unemployed[2]		
	2000	2008	2011	2000	2008	2011
Total	155,503	240,532	194,468	104,583	66,239	112,754
Primary	48,280	73,583	56,752	49,386	26,945	39,911
Lower and middle vocational	55,151	85,267	71,229	28,145	15,949	28,173
Upper secondary technical and other profess. and general	27,599	45,031	33,798	22,389	16,895	29,736
Tertiary	24,473	36,074	31,126	4,663	6,435	14,708
Unknown profile	-	577	1,563	-	15	226

Source: Employment Service of Slovenia.

Note: [1] Data on the number of vacancies in the period 1.1.–31.12. [2] Data on the number of unemployed at the end of the period.

is not in accord with the needs on the labour market. Thus, the number enrolled in some programmes would need to be higher (e.g. engineering, manufacturing and construction, health), and enrolment in certain programmes in the field of social science, business and law (e.g. economic technician, sales representative) should be lower. However, the number of offered seats for these profiles in upper secondary vocational and professional schools was the highest of all programmes in 2012/2013. The number of young unemployed people with these two education profiles was the highest of all vocational and professional education profiles.[41]

Many countries solve the problems stemming from the discrepancy between the demand and supply by strengthening vocational and educational youth counselling and by launching special youth employment programmes. Austria has enhanced its vocational and educational counselling services. Young people who finished or are about to finish schooling are first offered counselling on the decisions about their professional career by the Employment Service. Those who are interested in apprenticeship after completing schooling are registered as apprenticeship seekers or the service provides them immediate apprenticeship in an organisation where a post is available.[42] In Denmark, social partners also take part in the formation of vocational education, both in general decision-making and in every-day functioning of the vocational education system. In the Netherlands, young people aged 18-27 who have not yet finished upper secondary school are required to do it or to obtain employment; otherwise they could be fined or are withdrawn a part of social assistance. Many countries encourage the transition of young graduates from schooling to employment by employment promotion programmes, employment subsidies and by on-the-job training programmes, where young people apply the acquired knowledge to actual problems in companies under the supervision of a tutor. Such programmes were introduced and have proved to be successful for example in Cyprus and Estonia. In Ireland, young people can gain work experience by a programme of practical work in companies in the public and private sectors. In Great Britain, the government subsidises apprenticeship at the employers in selected economic activities.

Employment is also affected by employment protection, which has been relatively strong in Slovenia. To be able to make international comparisons of labour market regulation, OECD experts developed an 'employment protection legislation index' (OECD,1999).[43] Bassanini and Duval (2004) estimated that a decline in the OECD employment protection index by two standard deviations could be associated on average with a four percentage point rise of youth employment. In terms of this index, Slovenia belongs to the countries with less flexible labour legislation; with the index value of 2.76, it is ranked 16th out of 21 EU Member States, which are also OECD members. The total value of the index for Slovenia is comparable with the values for Belgium, Italy, Germany and Norway. Most countries have a slightly more flexible regulation than Slovenia. In particular, employment protection of workers with regular contracts against individual dismissal is less flexible in Slovenia; based on

[41] At the end of 2011, economic technicians (2 348) prevailed among the young people with upper secondary technical and other professional education registered at the Employment Service of Slovenia, in addition to gymnasium graduates; and salesmen (1 241) prevailed among the young people with middle vocational education.

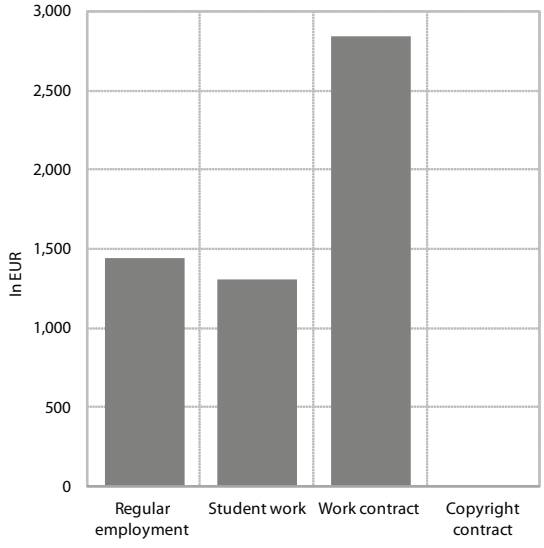
[42] Guaranteed apprenticeship should contribute to a better integration of young people into the primary labour market, and companies can benefit from subsidies for offering apprenticeship positions.

[43] The index comprises a description of 22 basic parameters of labour market regulation, which could be grouped into three index areas: (i) protection of workers with regular contracts from individual dismissal; (ii) regulation of temporary forms of employment, and (iii) additional administrative requirements and costs involved in collective dismissal. Index values range from 0 to 6, with higher values denoting a more rigid regulation and stronger employment protection.

a more detailed analysis of index sub-components in this area, it could be established that Slovenia has a more rigid system particularly as regards: (i) dismissal procedures, (ii) possibilities of reinstatement into previous job following unfair dismissal and (iii) definitions of unfair dismissal. A detailed comparison of terms of notice and severance pays shows that Slovenia does not deviate from other countries in terms of the length of notice period, but deviates slightly in terms of the level of severance pay for employed with longer job tenure. As Slovenia has more rigid protection of permanent employment, this no doubt contributes to a higher incidence of temporary forms of employment, in particular among young people (see chapter 2.2).

In addition to protection of employment, relatively high labour costs in Slovenia probably also diminish possibilities for youth employment. As mentioned before, student work is one of the reasons for the high occurrence of temporary employment of young people in Slovenia, as it is more attractive for employers in terms of procedures as well as costs (lower taxation). In addition to great flexibility in hiring students and lower tax burden compared to regular employment, student work is additionally attractive because there is no prescribed minimum payment as in the case of regular employment (minimum wage); moreover, employers have no obligations in terms of reimbursement of costs related to work (meals, travel expenses, holiday pay, etc.). As Figure 15 shows, employer's tax obligations on a minimum wage income for a student work were lower by around 10% than that on regular employment of a minimum wage worker in 2011. As student work represents a large part of youth employment, it could be concluded that a combination of a relatively strong protection of employment and lower labour costs of student work (lower taxation (so far), no obligations in terms of non-wage labour costs) diminish the interest of employers in hiring on regular terms young people with generally no work experience. Raising the concession fee for student work introduced by the Public Finance Balance Act[44] will make student work less attractive in terms of costs, but will not solve other reasons making it attractive for employers. Furthermore, it will not enable young people to become included as early as possible in the social insurance systems (in our estimate, the introduction of social security contributions would be a more appropriate solution than increasing concession fees). Age segmentation thus remains one of major unsolved problems on the labour market.

Figure 15: **Tax obligations of employers per minimum wage income level by various forms of contracts, in 2011**



Source: Ministry of Finance, Ministry of Labour, Family and Social Affairs, calculations IMAD.

In the short term, the problems of youth unemployment in Slovenia could be alleviated by strengthening active employment policy programmes, thus enabling young people to gain experience, and in the long term by introducing a system of monitoring and projecting the needs for vocational profiles. Some OECD countries[45] prepare projections of employment changes by occupation for the next five- to ten-year period on a regular basis. Although these are usually aggregate projections, they are often used for the preparation of more detailed short-term strategies for reducing shortage of workers in certain vocations. The preparation of both aggregate projections and more detailed strategies for abolishing structural imbalances on the labour market are cases of good practice that could also be introduced in Slovenia. Structural imbalances on the labour market are one of the major barriers to youth employment in Slovenia. There is a very high youth inclusion in tertiary education. As the unemployment of persons with tertiary education has been rising, any further increase in the inclusion of young people in tertiary education is not sensible. In our estimation, a part of the problems of youth employment is also related to their high level of education. With the inclusion in tertiary education, young people postpone their entry to the labour market and thus increase their individual profitability of education, whilst there is a shortage of certain vocations. In the short term, the active employment policy should enable young people to take part in education and training programmes, thus providing them with the knowledge required by enterprises. The programmes of job-rotation and on-the-job training should be strengthened, and employment subsidies should also be used for younger population. To reduce the age segmentation stemming from labour market regulation, Slovenia should (i) narrow the huge difference in the rights stemming from fixed-term and permanent employment, and (ii) change the regulation on student work.

[44] According to the act, the concession fee is raised to 23% (from 12%).
[45] Australia, Canada, Korea and the USA.

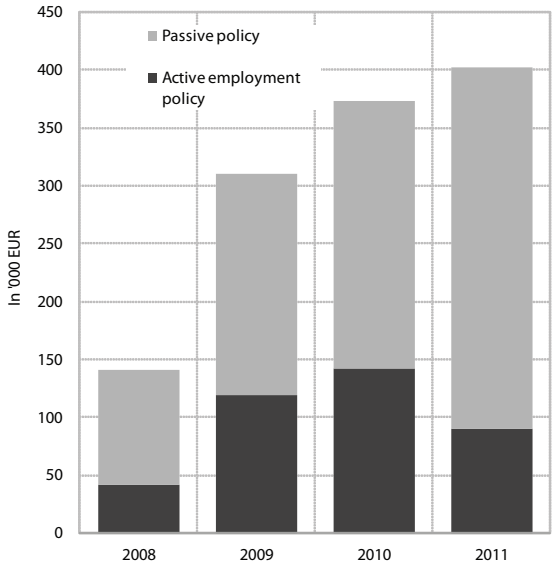
2.3. Labour market policy in Slovenia

The government responded to deteriorating situation on the labour market with two intervention acts aimed at preserving jobs and by enhancing active employment policy (AEP) programmes. In 2009, two intervention acts were adopted aimed at preserving jobs, which eased the drop in employment in Slovenia: the Subsidising of Full-Time Work Act[46] in January 2009, and the Partial Reimbursement of Payment Compensation Act at the end of May 2009, regulating a partial reimbursement of payment compensation to the employees on temporary layoff ('waiting at home').[47] Participation in the two schemes was the highest in the middle of 2009, when around 4.8% of all persons in employment were included according to the statistical register (see Economic Issues 2011). The number of persons included in the AEP programmes also surged in 2009 and 2010.[48]

Enhanced implementation of the AEP programmes and intervention acts boosted expenditures on active policy in 2009 and 2010. The expenditures on AEP programmes more than doubled in 2009, largely as a consequence of the two intervention acts aimed at preserving jobs,[49] and they further rose in 2010 (by 19.4% compared to 2009). In 2009 and 2010, the proportion of expenditures for active policy in total labour market policy expenditures surged (to around 38%). In view of the efforts for elimination of labour market imbalances, a higher share of expenditures for active measures than passive support was the right path.

Although expenditures for labour market policy further increased in 2011, the expenditures for active employment policy plunged. According to the Employment Service data, expenditures for labour market policy rose by 7.6% in 2011 compared to 2010, with expenditures for active employment policy plunging by 36.7%, and expenditures for passive policy surging by 35.1%. The rising of the latter expenditures is a consequence of a higher number of recipients of unemployment benefits and higher benefit accrual rates set out in the new Labour Market Regulation Act which entered into force in 2011. Thus, the proportion of active policy expenditures in total expenditures declined to 22.5% in 2011. In view of eliminating the rising labour market mismatch, a drop in the expenditures for active programmes is inappropriate and could in the long run contribute to persistently high rates of unemployment.

Figure 16: **Expenditures for labour market policy in Slovenia, 2008–2011**



Source: Employment Service of Slovenia, annual reports for 2008, 2009, 2010 and 2011.

Inclusion of unemployed persons in AEP programmes slumped in 2011. After the inclusion of unemployed persons in the AEP programmes had been boosted in 2009 and 2010, it slumped in 2011. The number of persons taking part in these programmes was down by 46.3%, most of all in the programmes aimed at increasing social inclusion and programmes of training and education. In view of the efforts for reducing structural imbalances, this is inappropriate.

2011 saw a steep decline in the share of long-term and older unemployed persons taking part in the programmes, which is problematic in view of abolishing structural problems. To be able to analyse the size and target orientation of the AEP programmes, we calculate the proportion of the number of persons from a selected group of the unemployed included in AEP in the total number of unemployed of this group; this is called the rate of inclusion, and it serves as an approximate indicator of inclusion of a selected group. Based on these indicators, it could be concluded that the participation of unemployed persons was not sufficiently oriented to solving structural imbalances, but the policy of including recipients of unemployment benefits was at the forefront. The rate of inclusion of long-term unemployed, those above 50 years of age, and unskilled unemployed dropped substantially in 2011, even to the levels lower than recorded in 2008. It would be

[46] Under this act, enterprises were eligible to a subsidy of EUR 60–120 per month for each employee included in the short-time working scheme (shortening of working time by 4–8 hours).

[47] Under this act, an employer was allowed to place a maximum of 50% of workers on a temporary layoff. The employer paid wage compensation to workers in the amount of 85% of their average wage in the previous three months. The state reimbursed to the employer 50% of this compensation. Workers on temporary layoff had a right and obligation to spend 20% of their time on training. Training programmes must be provided by the employer, but are co-financed by the state in the amount of EUR 500 per employee.

[48] The number of persons participating in the AEP programmes surged by 77% in 2009 compared to 2008, and by a further 38% in 2010.

[49] Around EUR 32 million were spent on both schemes aimed at preserving jobs in 2009.

Table 15: **Number and rate of inclusion of selected groups of unemployed persons**

Year	Unemployed persons	First-time job-seekers	Long-term unemployed	Unskilled unemployed	Above 50 years of age
Number of unemployed persons included in AEP programmes					
2008	27,593	4,712	4,121	4,464	3,201
2009	49,275	6,099	4,316	8,719	4,654
2010	68,827	7,898	8,116	10,341	5,555
2011	36,940	5,889	5,389	6,754	4,617
Rate of inclusion of unemployed persons in AEP programmes (in %)					
2008	43.6	44.1	12.7	17.6	14.6
2009	57.1	49.5	13.7	25.6	17.8
2010	68.5	54.4	19	27.6	17.7
2011	33.4	40.9	10.7	17.1	11.8

Source: ESS, own calculations.

reasonable to increase the inclusion of these groups and thereby raise their employability and social inclusion. Public works as one of the suitable forms of activation of these groups should be strengthened. According to an empirical evaluation of the measure 'training and educating employees', the inclusion of the employed in training and education programmes reduces the risk of a losing a job by around 10% (Volčjak, Kavkler, 2012). However, these programmes should be adapted to the needs of the employers. The systems of monitoring and forecasting demand for labour should be established at the level of the state, which could contribute to the formation of suitable AEP programmes and education policy.

2.4. Wage movements and policy

In the previous three years, growth in wages was strongly affected by the economic crisis, a rise in minimum wage, a reformed system of wages in the public sector, and the government's austerity measures. Consequently, a rise in the average gross wage per employee in 2010 (by 3.9% in nominal terms) and 2011 (2.0%) stemmed solely from the private sector activities (Table 5). After a slowdown in growth in response to the crisis in 2009[50], in the last two years growth in wages in the private sector was in the conditions of low economic activity and a changed structure of employment[51] primarily underpinned by the rise in minimum wage.[52] The meagre rise in economic activity and enterprises' efforts for preserving their competitive positions could not contribute to any significant rise in wages, nor could the growing unemployment and relatively low inflation exert any additional pressures on growth. In the public service activities, growth in wages was halted completely in the last two years because of the austerity measures that have been gradually implemented since 2009 due to the general economic and public-finance situation. Unlike in the private sector, where cuts in employment were one of the first reactions to the crisis, and together with a slower growth in wages substantially reduced growth in the total wage bill in this sector, employment in public sector was not brought to a halt, but only decelerated (Figure 21).

Growth in wages contributed to deteriorated competitiveness of the economy in the period 2008–2010; as its pressures only eased in 2011, the competitive position of the economy has not yet markedly improved. The entire three-year period 2008-2010 was marked by rising real unit labour costs; overall, they were up by 9.1%. The cost competitiveness further deteriorated due to the fact that the movement of unit labour costs in the entire three year period in Slovenia was also much less favourable than in the EU, where the costs rose cumulatively by 2.2%. Except in 2009 when a slump in productivity stemming from shrinking economic activity was the main factor of deterioration, especially as it was not followed by sufficient adjustment of the number of employment,[53] the other two years (2008 and 2010) were

[50] Private sector activities responded to the crisis already at the end of 2008 (by reducing the volume of overtime work, shortening working hours and lower extraordinary payments), and further in 2009.

[51] It was caused by layoffs of workers in the lowest income brackets, which statistically raised the average wage level. In our estimations, 0.9 p. p. of the growth of the average wage in private sector activities in 2009 and further 0.5 p. p. and 0.2 p. p. in the following two years stemmed from this effect.

[52] In our estimations, it contributed around 3 p. p. to a rise in gross wage in the private sector in 2010 (5.1%). In 2011, being only gradual, the rise in minimum wage had a smaller effect (as estimated by less than 1 p. p.).

[53] In particular as a result of the intervention acts aimed at preserving jobs and partly because of the usual deferral in the adjustment of employment.

Table 16: **Growth in gross wage per employee, 2000–2011**

Year	Nominal growth in gross wage per employee, in %			Real growth in gross wage per employee, in %		
	Total	Private sector activities	Public service activities	Total	Private sector activities	Public service activities
2000	10.6	10.3	11.2	1.6	1.3	2.1
2001	11.9	10.9	13.9	3.2	2.3	5.1
2002	9.7	10.0	8.7	2.0	2.3	1.1
2003	7.5	7.7	6.7	1.8	2.0	1.0
2004	5.7	6.8	2.8	2.0	3.1	-0.8
2005	4.8	5.4	3.4	2.2	2.8	0.9
2006	4.8	5.4	3.5	2.2	2.8	1.0
2007	5.9	6.9	4.1	2.2	3.2	0.4
2008	8.3	7.8	9.7	2.5	2.0	3.8
2009	3.4	1.8	6.7	2.5	1.0	5.8
2010	3.9	5.1	-0.1	2.1	3.2	-1.8
2011	2.0	2.6	0.0	0.2	0.8	-1.8

Source: SORS, calculations IMAD.

Note: Calculation of gross wage per employee in private sector activities comprised the activities A–K (SCA 2002) by 2008 (inclusive) and the activities A–N; R–S (SCA 2008) since 2009. Calculation of gross wage per employee in public service activities comprised activities L–O by 2008 (inclusive) (SCA 2002), and activities O–Q since 2009 (SCA 2008).

mainly under the pressure of increasing labour costs.[54] In 2011, further rising of productivity[55] and a slowdown in wage growth led to a drop in unit labour costs (by 0.4%), the first after three years of a constant rise, but their level still strongly exceeded the level in 2007 (by around 8%).[56]

2.4.1. Wage movements in private sector activities

If we disregard the rise in minimum wage and changes in the structure of employment, wage growth in private sector activities slowed down markedly during the crisis; in 2011, it was even the lowest in the last 20 years. Average gross wage in the private sector in 2011 (2.6%) rose much less than in 2010 (5.1%), when a new Minimum Wage Act[57] entered into force and most employers immediately adapted wages to the statutorily set level; partly, the rise also stemmed from changes in the structure of employment and a slight rise in overtime and extraordinary payments and payments in arrears.[58] As a consequence of a rise in minimum wage, the growth in wages in the 2010–2011 period was much higher than in 2009, when it actually slowed down markedly in all activities, on average to a mere 1.8% (from 7.8% in 2008). Enterprises immediately responded to the crisis by reducing the volume of overtime work and shortening working hours, which was later also followed by dismissals and wage adjustments, more markedly and rapidly in industry[59] than in market services.[60] As of early 2010, wage growth recovered in all activities of the sector, although with different intensity. Given the rise in minimum wage, it strengthened more rapidly in industry, also because of a low reference base (Figure 12). Financial-insurance activities and manufacturing, where wage growth slowed down the most markedly in response to the crisis,[61] recorded very diverse wage rises after three years. The average gross wage in manufacturing in 2011 was higher by 15.8%,[62] compared to the period before the

[54] In 2008, the rise in labour costs mostly stemmed from the adjustment of wages with high past inflation and economic activity and from elimination of a part of wage disparities in the public sector. In 2010, growth in wages especially in the private sector was underpinned by a rise in minimum wage.

[55] Unlike in the EU, rising productivity in 2010 and 2011 largely stemmed from cuts in employment, whereas the economic growth in Slovenia was weaker than in the EU.

[56] See IMAD's Development Report 2012, chapter 1.2.

[57] In March 2010 when the act entered into force, the level of minimum wage surged by 22.9%.

[58] A rise in the minimum wage contributed around 3 p. p., changes in the structure of employment around 0.5 p. p., overtime payments 0.2 p. p., and extraordinary payments and payments in arrears further 0.3 p. p.

[59] Industry includes manufacturing, construction, mining, electricity supply and water supply.

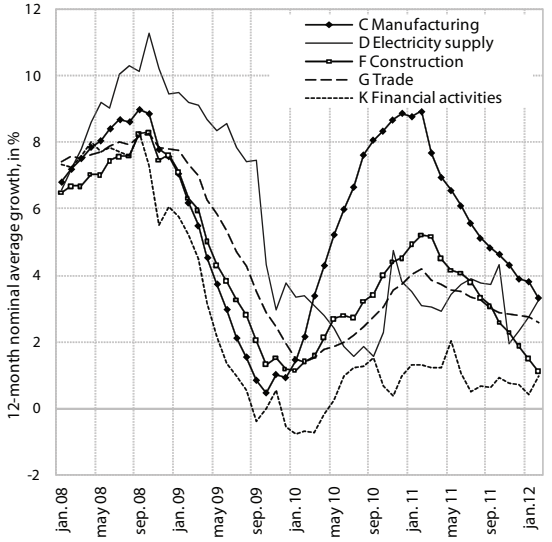
[60] These include trade, accommodation and food service activities, transport and storage, real estate activities, information and communication, financial and insurance activities, professional, scientific and technical activities, cultural-recreation and other service activities.

[61] In addition to construction, accommodation and food services.

[62] In addition to the rise in minimum wage, an above-average rise also stemmed from strengthened volume of industrial production and labour productivity, changes in the structure of employment and low reference base, as in 2009 wage growth in this activity was close to stagnation.

breakout of the crisis[63], whereas in the financial-insurance activities only by 0.5%. Stagnation of wages in this activity largely stemmed from substantially lower extraordinary payments, which during the crisis dropped the most in this activity.[64]

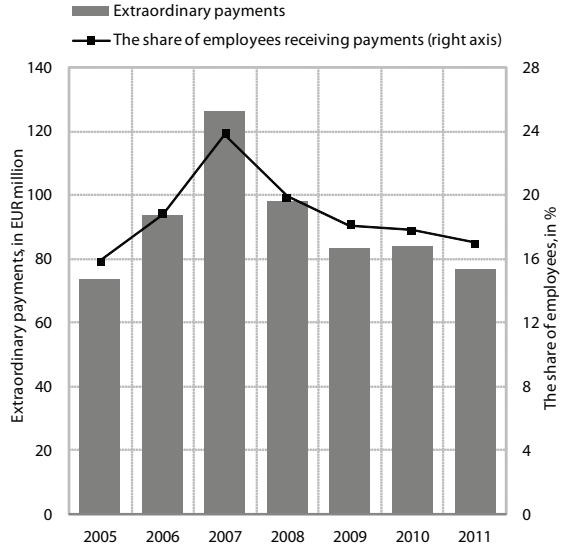
Figure 17: **Growth in average gross wage per employee in selected private sector activities**



Source: SORS.

Extraordinary payments, which reflect good business results of companies and function as wage incentives for employees, decreased during the crisis. At the end of 2011,[65] they were the lowest in the last six years. In private sector activities, EUR 75 million of extraordinary payments were paid out in 2011, which was by one-tenth less than in 2010 and by almost 40% less than in pre-crisis 2007 (Figure 17). Compared to 2010, both the share of employed receiving extraordinary payments and the average amount of payment were lower in most activities. Despite this decline, the share of employed receiving extraordinary payments remained the highest in the activities with the highest average wage and at the same time with a high share of state ownership; i.e. in electricity and gas supply, mining, water supply and financial and insurance activities. Although the proportion of extraordinary payment recipients in 2011 dropped the most in electricity supply, an above average proportion (61.5%) still received an extraordinary payment in the gross amount higher than EUR 1 000. In all other activities, the average payment was lower and in most of them, it was also down from the year before. In the context of austerity measures, the Government adopted recommendations in 2010 (for the 2011–2012 period)[66] that payments related to business results should not be paid in public corporations and those in direct majority ownership of the state. However, these recommendations were not compulsory and were therefore insufficient. Establishing more efficient mechanisms that will assure consistency of wages and bonuses with business results in these companies is one of the challenges of the efficient management of state-owned companies.

Figure 18: **Extraordinary payments, private sector activities, November 2005–November 2011**



Source: SORS, calculations IMAD.

Reducing the volume of overtime work was one of the first responses of enterprises to the economic crisis and also one of the reasons for a slowdown in wage growth; it bottomed out in early 2009 when it started to slowly increase again but has not yet reached the pre-crisis level. On average in 2009, the number of paid hours of overtime work in the private sector activities plunged,[67] whilst it picked up again in the two years that followed[68] to reach 64% of the level recorded in the pre-crisis 2008.The volume of overtime work shrank in all activities,[69] most of all in manufacturing, financial-insurance activities, and accommodation and food services. In 2011, for the second year in a row, it rose again only in three activities (most notably in manufacturing). Since the outbreak of the crisis, it has been constantly decreasing in six activities, most of all in construction where the volume dived to less than 40% of the level recorded in 2008. In

[63] Average in 2011 compared to the 2nd quarter of 2008.

[64] The amount of extraordinary payments in this activity is still among the highest, but it almost halved compared to 2007 and therefore also the total bill of extraordinary payments dropped the most significantly in this activity (from EUR 24.6 million in 2007 to EUR 7.2 million).

65 Extraordinary payments in November, which represent around 80% of total payments at the end of the year.

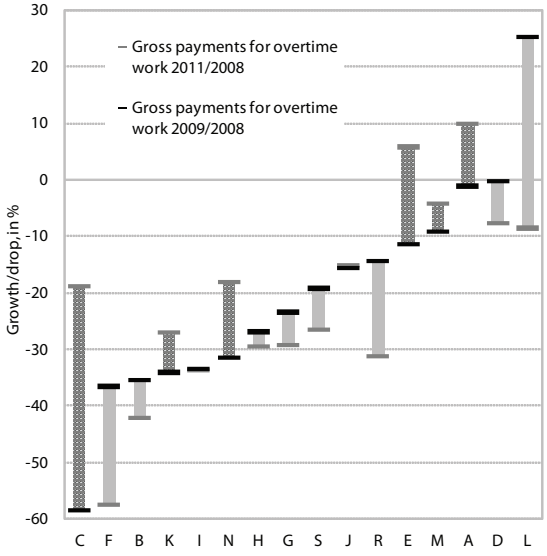
[66] The recommendations of the Government of the RS of 22 July 2010 to the management boards and supervisory boards or boards of directors of companies on wage and other personal income restrictions for employees in public corporations and companies performing general public services in direct majority ownership of the state or local communities, their subsidiaries (daughter enterprises) and any further subsidiaries thereof.

[67] By 44% compared to the previous year.

[68] By 14.8% and 0.9% respectively.

[69] Except for the real estate activities.

Figure 19: **Payments for overtime work in crisis years, private sector activities**



Source: SORS, calculations IMAD.

line with the movements in the volume of overtime work, the payments for overtime work also bottomed out in the first quarter of 2009 when they started to slowly rise again. Since the crisis began, payments for overtime work plunged the most in construction, accommodation and food services, and mining (Figure 14). In manufacturing, where both the volume and payments for overtime work dropped the most and the fastest owing to the crisis, they have been slowly but steadily rising since mid-2009. In 2011, they reached 69.7% and 81.2% of the respective levels recorded in 2008.

As of January 2012, the measure of gradually rising[70] minimum wage expired; in the previous two years it significantly fuelled growth in wages in the private sector activities and led to concentration of wages at the bottom end of the wage scale, as well as contributing to deteriorating competitiveness of the economy and loss of jobs. In 2011, the rise in minimum wage (5.7%) was smaller than the year before (14.6%), when in March a new Minimum Wage Act entered into force. Similar to the average in the period after 2000, last year growth in minimum wage exceeded the growth in the average wage per employee, which was only modest owing to contracting economy and the austerity measures in the public sector. In turn, the ratio of the average minimum gross wage to the average gross wage further rose in 2011 (in our calculations by 1.7 p. p. to 47.1%). The number of minimum wage recipients[71] and their share in the total number of persons in employment further picked up in 2011 (7.1%) compared to 2010 (6.2%), and it more than doubled from 2009 (3%). A rise in minimum wage and a relatively rapid transition of majority of employers to the statutorily set level[72] resulted in the concentration of employees at the bottom-end of the wage scale, as there was no parallel rise in basic and starting wages according to the collective agreements. Moreover, the rise in minimum wage also contributed to a worsening of competitiveness,[73] in particular in the enterprises that employ low-skilled workers and manufacture products with low value added. The formation of an array of measures encouraging structural changes toward higher value-added production and enabling a different distribution and levels of wages is therefore an important economic policy challenge.

[70] Owing to a high rise in minimum gross wage set out in the act, transitional provisions to the act allowed for a gradual transition to the statutorily set level of gross wage in the period by the end of 2011. The possibility of a gradual adjustment of the level of minimum wage was offered to all employers in the event that the payment of the minimum wage at the statutorily set level could inflict high losses and threaten the existence of a company or would lead to termination of employment contracts on business grounds with a larger number of workers.

[71] In 2011 on average, 43 565 persons (2010, 38 588, 2009 19 047). Most of them work in manufacturing (30.2%), trade (16.1%) and other service activities (13.5%). In the latter, almost 30% of the employed persons receive minimum wage, whilst in accommodation and food services, other activities and construction, the share of minimum wage recipients ranges from 10% to 20%.

[72] Immediately in March 2010, around 60% of minimum wage recipients received the maximum level of wages, with this share rising to 80% on average in 2011. As there was a possibility of different levels of minimum wages, AJPES collected data based on three brackets: in 2010 the level of wage in the lowest bracket was up to EUR 654, the middle bracket from EUR 655 to 685, and the highest bracket from EUR 686 to 734. After the adjustment in 2011, only two brackets remained, up to EUR 698, and from EUR 699 to 748.

[73] See chapter 3.1.

Box 2: **Effects of the rise in minimum wage in 2010 on the loss of jobs – Updated estimation of the labour demand function and estimation of the effects of the rise in minimum wage and labour costs on employment**

Economic theory recognises four groups of effects of minimum wage (Lemos, 2004, p. 4): on wages (its rise reduces inequality in wage distribution), on profits (its rise reduces company's profits), on prices (its rise is transformed to higher prices) and on employment (its rise increases unemployment). The effects of the latter are presented hereafter.

The estimation of the consequences of the rise in minimum wage was made on the basis of the estimations of short-term and long-term elasticities of employment with regard to labour costs and under the assumptions that the distribution of employment had not changed significantly in the period from 2009 to March 2010 when the rise in minimum wage was enacted, and that there was an immediate rise of minimum wage to the statutory level (EUR 734). The analysis was based on the database on companies in Slovenia[1] excluding the companies with insufficient or inadequate data and companies with fewer than six employees.

The estimated dynamic labour demand function, which is derived from the Hamermesh model of dynamic labour demand, reveals the capacities and possibilities of employers to rapidly adapt the level of employment in a company and the key factors behind their decisions (labour costs, revenues from sales, cost of equity, etc.). In the estimate, we applied the Generalised Method of Moments (GMM) and the Blundell-Bond estimator:

$$\ln EMP_{i,t} = \sum_{j=1}^{n} \alpha_j EMP_{i,t-j} + \sum_{j=1}^{n} \beta_j \ln LCEMP_{i,t-j} + \sum_{j=1}^{n} \gamma_j \ln S_{i,t-j} + \sum_{j=1}^{n} \lambda_j (\ln LCEMP_{i,t-j} \times D_{i,t-j}) +$$
$$\sum_{j=1}^{n} \eta_j (\ln S_{i,t-j} \times D_{i,t-j}) + \sum_{j=1}^{n} \delta_j \ln R_{i,t-j} + \pi D_{i,t} + u_i + \sigma_t + \varepsilon_{i,t},$$
$$i = 1, ..., N ; t = 1, ..., T_i$$

where i denotes a company, t denotes a year. EMP denotes average nnumber of employed based on working hours in the accounting period, $LCEMP$ is a real compensation of employees (gross gross wage), S is real net revenues from sales, R is real cost of equity, D is a dummy variable for the size of a company, esport, profits, regions, activities and cycle.

Table 16 presents estimations of dynamic labour demand function for the entire economy for the 1995–2010 period. Estimates are comparable with estimations for the 1995–2007 period and with the estimations of dynamic labour demand functions for selected European countries[2] by Checchi, Navaretti and Turrini (2003).

The two main variables determining labour demand are: labour cost (w) and revenues from sales (s). Table16 presents coefficients of short-term and long-term elasticity of employment with regard to these two variables. With a view to estimating the effect of the rise in minimum wage, we were more interested in the coefficients of short-term and long-term elasticity of employment with regard to labour cost.

Table 17: **Estimations of dynamic labour demand function for the entire economy, with the number of employed logarithm being a dependent variable**

	l(t-1)	l(t-2)	w(t)	w(t-1)	d-r w	s(t)	s(t-1)	d-r s
coefficient	0.95***	-0.06***	-0.58***	0.43***	-1.42***	0.63***	-0.53***	0.93***
std. error	(0.03)	(0.01)	(0.10)	(0.10)	(0.30)	(0.03)	(0.04)	(0.09)
	No. of observation units=83.217		**N=**12.179	**Sargan** χ^2 **(87)=** 103,709		**P=**0,1069	**M1=**-17,02	**M2=**1,19

Note: WC-robust two-stage estimator. All variables are in logarithms. Regression includes time dummy variables. Robust standard errors in brackets. *** denotes statistically significant coefficients at one per cent rate of risk. Constant is not reported.

Legend: l–employment (number of employed with regard to working hours), w – labour costs, s-revenues from sales, d–r w – long-term labour costs, d–r s – long-term revenues from sales, P - probability. Labour costs and sales are deflated by producer prices index.

Short-term elasticity of employment with regard to labour costs is -0.58 %, meaning that if labour costs rise by 1%, employment on average drops by 0.58%. Long-term elasticity or value to which the values of short-term elasticities converge is -1.42%, meaning that in the long-term companies respond to a 1% rise in labour costs on average by 1.42% cut in employment. Estimated elasticities are in line with the estimations in other countries.

Box 2: **Effects of the rise in minimum wage in 2010 on the loss of jobs – Updated estimation of the labour demand function and estimation of the effects of the rise in minimum wage and labour costs on employment** *(cont.)*

Short-term elasticity of employment with regard to revenues from sales is positive and significant and tells us that a rise in revenues by 1% resulted in an increased employment on average by 0.63% in the observed period. Long-term elasticity is also positive and significant, and amounts to 0.93%.

Taking into account the estimated elasticity of employment with regard to labour costs and under the assumption of unchanged distribution of employment and an immediate rise of minimum wage to the statutory level, gross wage rose by 25% for around one-third of new minimum wage recipients and by 13.4% and 3.8% respectively for the other two-thirds of recipients.

In our estimation, the rise in minimum wage resulted in a drop in the number of employment in the short term by around 7 thousand persons (depending on the salary brackets; by 14.5%, 7.8% and 2.2% respectively). In the long run, employment could drop in individual salary brackets by 35.5%, 19% in 5.4% or in total by 17 679 persons, according to the results of econometric analysis (Table 17). Moreover, adjustments in the economy may in the long term probably lead to further losses of jobs[3], which, however, was not included in this analysis.

Table 18: **Estimation of consequences of the rise in minimum wage (MW) on total economy**

Salary bracket, in EUR	Share of MW recipients – structure (in %)	% rise in MW to EUR 734	MW recipients	Drop in employment owing to rise in MW (in %) –short-term	Drop in the number of employment – short-term	Drop in employment owing to rise in MW (in %) –long-term	Drop in the number of employment – long-term
560-614	4.9	25.0	29,232	14.5	4,239	35.5	10,377
615–678	5.1	13.4	30,425	7.8	2,365	19.0	5,789
679–734	4.7	3.8	28,039	2.2	618	5.4	1,513
TOTAL			87,696		7,222		17,679

Source: SORS, calculations IMAD.

According to these estimations, which are based on the actual situation in the economy after enforcement of the intervention measure of raising the minimum wage by 22.9% in March 2010 (to EUR 734.15; estimated elasticities of employment with regard to labour costs by 2010 and distribution of wages in 2009), around 2 000 more employed persons are expected to lose their jobs in the short run and 500 more persons than projected in previous estimations in the long run.[4]

[1] Sole proprietors and cooperatives are not included.
[2] See IMAD Working Paper: U. Lušina, A. Brezigar-Masten: Labour market flexibility in Slovenia and labour demand in Slovene companies, 3/2011. Checchi, Navaretti and Turrini (2003) compared the estimations of dynamic labour demand function for eleven European countries in the period 1993-2000. The values of short-term coefficients of labour cost elasticity in selected countries ranged from -0.31 to -1.06, and long-term ones from -0.53 to -5.77. The values of short-term coefficients of equity elasticity (sales) range in the interval from 0.20 to 0.68, and long-term ones in the interval from 0.44 to 4.01.
[3] For details see IMAD Working Paper: U. Lušina, A. Brezigar-Masten: Labour market flexibility in Slovenia and labour demand in Slovene companies, 3/2011 (pp. 64–65) and IMAD Working Paper: A. Brezigar-Masten et al: Estimation of consequences of the rise in minimum wage in Slovenia, 3/2010.
[4] Because of bankruptcies of companies that will not be able to raise the value added and today employ predominantly low-skilled labour; because of the use of short-term reserves; because of additional pressures on other wages.

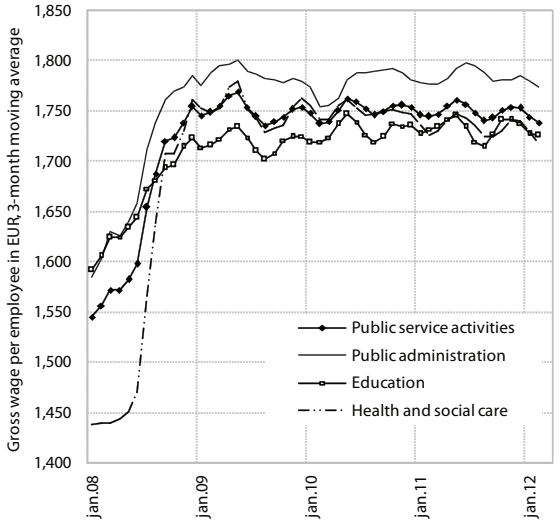
2.4.2. Wage movements in public service activities

In the previous three years, movements of wages in public service activities were marked by a reformed wage system and intervention austerity measures, which have been continuously adopted and amended since 2009 to tackle the economic and public finance situation in Slovenia. After a high growth in wages in 2008 (9.7%), underpinned by a wage reform that had been planned for years and whose aim was to eliminate wage disparities among the individual public sector occupation groups, the outset of the crisis urged the adoption of measures that resulted in a slight slowdown in growth in wages in public service activities in 2009[74] (6.7%), and a halt in 2010 and 2011 (-0.1%, 0.0%, in nominal terms). The rise in gross wage per employee recorded thus

[74] Had these measures not been adopted, growth in 2009 and 2010 would run at around 10% (see IMAD, Economic Issues 2010, chapter 2.5.2.).

far[75] compared with the period immediately before the introduction of the new wage system varied across the activities (Figure 15), depending on the disparities that were being eliminated by the new wage system. The rise was the highest in health and social care (19.6%), followed by public administration activities (8.8%) and education (6.1%). As a result of lower payments for overtime work (duty-period pay), the average wage in health declined (in 2010 as well), whilst it slightly increased in the other two activities, as basic wages were up (most probably as a consequence of promoting public servants to more demanding positions).

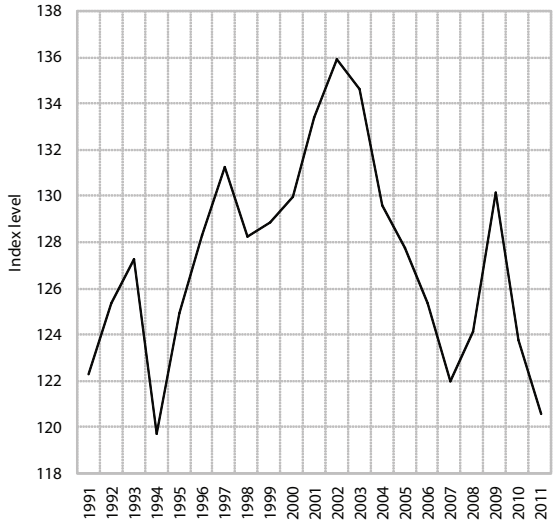
Figure 20: **Gross wage per employee in public service activities, in EUR, 2008–2012**



Source: SORS, calculations IMAD.

After three agreements[76] reached between the government and the public sector trade unions in the 2009–2011 period, a new agreement was concluded this May on the measures in the area of wages; together with the Public Finance Balance Act, it supports the enactment of the 2012 revised budget. The latest agreement[77] sets out an even more restrictive public sector wage policy for this and next year. This year, the remaining two quarters of the elimination of wage disparities are foreseen to be disbursed as of 1 June, but at the same time basic salaries will go down by 8% for all public servants. Total net effect (saving) of both measures is estimated at 3% of total annual public servants wage bill. Moreover, the nominal growth in gross wage in public service activities will, in our estimate, be by around 2 p. p. lower than it would have been without the measures. Furthermore, the secured level of salaries will be abolished and some other remunerations and compensations to public servants which are not part of wages will go down (selective disbursement of holiday pay, reimbursement for transportation to and from work, reimbursement of meals during work, jubilee awards, severance pay at retirement, daily allowances for business trips abroad and at home, payments for working abroad, kilometre allowance for the use of private car for business purposes, etc.). Next year (in June), the payment of the remaining deferred promotions to a salary rank (in 2011 and 2012) and promotions to a salary bracket in 2012 are foreseen, whereas the regular performance-related bonuses will be further suspended and bonuses to civil servants due to increased workload further restricted by the end of 2013. It has also been agreed that in the same period wages will not be adjusted with the rise in prices.

Figure 21: **Public - to private-sector gross wage ratios *, in %, 1991–2011, private sector activities =100**



Source: SORS, calculations IMAD.
Note: *until 2008 inclusive, public service activities comprised activities L-O, and private sector all other activities (A-K), SCA 2002. Since 2009, public service activities incorporate activities O-Q, and private sector all other activities (A-N; R-S), according to SCA 2008. Source: SORS, calculations IMAD.

In the last two years, the public-to-private-sector gross wage ratio notably declined, and in view of the forecast wage intervention in the public sector it will be further down this year. The ratio of public sector activities gross wage to private sector activities gross wage always reflects wage movements in both groups of activities.

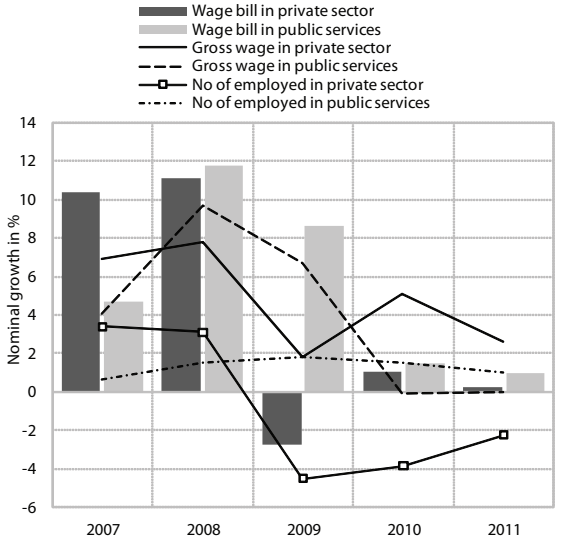
[75] The average in 2011 compared to the second quarter of 2008.

[76] In the 2009–2011 period, the government and social partners signed three agreements which were realised by annexes to the Collective Agreement for the Public Sector and by three intervention acts (the last one resulting from the agreement between social partners and parliamentary parties). On this basis, the payment of the third and fourth quarters of the funds aimed at eliminating wage disparities was postponed (to the period when economic growth exceeds 2.5%), in 2011 all promotions to higher salary brackets were frozen, the mechanism of adjustment of wages with inflation was toughened, holiday pay remained at the 2008 level, payments of regular performance-related bonuses were suspended, and the amount of funds for bonuses due to increased workload were limited. The measures were in effect by the end of June 2012 and will in some cases last to the end of 2012.

[77] Agreement on the measures in the area of wages, remunerations and other benefits in the public sector for balancing public finances in the period from 1 June 2012 to 1 January 2014 (OG RS No. 38/12) together with the Annex 5 to the Collective Agreement for the Public Sector (OG RS, No. 40/12).

Thus, a reduction in the ratio in 2010 stemmed not only from the austerity measures taken in relation to public-sector wages but also from a higher growth in private sector wages resulting from a rise in minimum wage and changes in the structure of employment. The 2011 ratio (20.6% higher average wage in the public than in the private sector activities, Figure 16) will further narrow this year as a result of even stricter measures in relation to public sector wages, so that the gross wage in public service activities is expected to be around 15% higher than that in private sector activities. Strong oscillations in this ratio have been present for the last 20 years, also owing to systemic changes of public sector wage regulation. In 1996, an act regulating wage relationships in the public sector was adopted aiming at unification of wages; after that, certain wage supplements were introduced, which again pushed up the ratio (1998–2002). The Public-Sector Salary System Act was adopted in 2001, which was followed by a period of stabilising ratio up to 2008, when public sector wages actually started to be paid according to this act. The ratio has further stabilised since 2009 due to crisis-related measures.

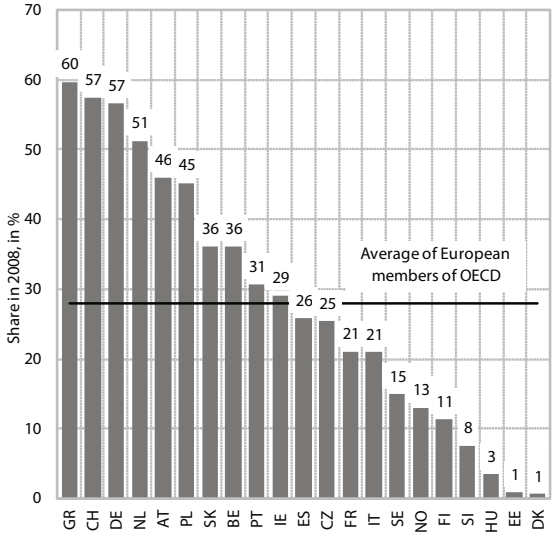
Figure 22: **Growth in gross wage, number of employed and wage bill in private and public service activities, in %**



Source: SORS, calculations IMAD.
Note: Delimitation to private sector and public service activities is (for the sake of easier and more consistent comparison of growth in wages and labour productivity) adapted to the SORS delimitation of activities upon the quarterly release of gross domestic product. Public services include activities O-Q, and private sector all other activities (A-N, R-S).

For the fourth year in a row, measures aimed at public finance consolidation have been predominantly focused on limiting growth in public sector wages; employment restrictions, which could also importantly affect the level of labour costs in the public sector, have been, however, inefficient. The efficiency of measures related to the total wage bill (Figure 17) not only depends on the movements of the average gross wage per employee, but also on the number of employees. Employment growth in public service activities has not slowed down as projected, as the number of employees[78] was 4.4% higher in 2011 than in 2008 (in activities of the private sector, it was down by 10.3% in the same period). Growth in employment has mainly been a consequence of imprudent linear restrictions of employment, which were not realised owing to the rising needs for some public services (kindergartens, care homes for the elderly, health services). The mere freezing of some elements in the public-sector wage system and the thus far inefficient employment restriction measures cannot ensure the long-term sustainability of expenditures on public-sector wages within the framework of public-finance consolidation, and cannot adequately restrain wage expenditures in the long run. Freezing of all the stimulating elements of the wage system (performance-related bonuses, promotion) that act as a motivation to employees, and in particular to young ones, is thus seen as particularly problematic. It would therefore be necessary to find solutions leading to a more stable and motivation-oriented wage policy. Above all, it will be necessary to restrict more selectively and ambitiously employment at the contractors that form part of the central government sector (or finance these services from private sources). Where possible and where demographic changes do not necessarily urge new employments, only partial substitution of the public servants leaving employment should be allowed, as many EU countries have already done during the crisis.[79] Last but not least, the issue of the structure of employment in public services will need to be tackled, as in Slovenia there is a much larger share of contractors belonging to the central government sector than in other EU countries on average, and there are much fewer private contractors (Figure 22).[80]

Figure 23: **The share of employed at private contractors of public service activities (O–Q)**



Source: Eurostat, OECD, calculations IMAD.

[78] Employed persons who received wages at legal entities (source SORS, ZAP/M form).
[79] See IMAD, Development Report 2012, pp. 18–19.
[80] See more in IMAD, Development Report 2012, pp. 66–67.

3. Challenges

In view of the increasing structural problems on the labour market, which may lead to high unemployment, the formation of a policy mix aimed at boosting employment is one of the major challenges of the economic policy. In the conditions of modest economic growth and a lack of change in labour market regulation and improvement in coordination of the policies affecting the labour market, increasing structural problems of the labour market could lead to stagnation in employment and persistent high unemployment in the coming years. As the employment rate dropped in the 2008–2011 period, Slovenia fell significantly behind the employment rate of 75% (of the 20–64 age group) targeted for 2020 (the EU 2020 target). In order to reach this target, Slovenia should adopt a set of measures aimed at boosting employment and ensure greater consistency of individual policies, including those that are not just labour market policies. Thus far, Slovenia has not yet managed to implement the reforms on the labour market towards introducing the concept of flexicurity. Although a new Labour Regulation Act introduced certain changes leading to greater income security during the period of unemployment, there were no changes in terms of greater flexibility. Merely isolated, partial corrections of individual problems will not lead to the solution of the labour market problems. A social consensus will need to be reached on the continuation and the substance of labour-market reforms, and the measures will need to be designed to address the key labour-market problems.

High labour-market segmentation is an important labour market policy challenge. In Slovenia, temporary employment is more widespread than on average in the EU, which is a consequence of the higher security of permanent employment provided by labour legislation. Particularly rigid is the regulation on the employment protection of workers with regular contracts as regards: (i) notification procedures, (ii) possibilities of reinstatement into previous job following unfair dismissal and (iii) definitions of unfair dismissal. The occurrence of temporary employment among young people strongly diverges from the average, which is largely a consequence of student work. In order to diminish age segmentation stemming from labour market regulation (i) the major difference in the rights deriving from fixed-term and permanent employment relationships should be reduced, and (ii) student work should be regulated in a different manner. Raising the concession fee for student work introduced by the Public Finance Balance Act[81] will make student work less attractive in terms of costs, but will not solve other reasons making it attractive for employers. Furthermore, it will not enable young people to become included as early as possible in the social insurance systems. As the analysis of the student work (Šušteršič et al., 2010) showed that it mostly entails physical and less demanding jobs, it would be sensible to relate student work more to gaining experience that would positively affect the future careers of students/pupils and thereby ease the transition from education to employment.

Reducing the mismatch between the demand and supply on the labour market resulting from the structure of enrolment of young people in the tertiary and upper secondary school programmes is another challenge. The discrepancies in the structure of the tertiary education graduates by fields of education with the labour market demand, together with a surge in the number of graduates in the 2008–2011 period aggravated the problems of young graduates with finding employment. Such a discrepancy also exists at the level of upper secondary school and vocational education. We are also often faced with excessive supply of graduates in certain programmes and at the same time the lack of workforce in certain vocations. Therefore, ensuring a proper balance between promoting inclusion in vocational and tertiary education, and encouraging inclusion in the programmes where there is a lack of workforce poses a challenge. In order to reduce structural imbalances in the short term, the role of the AEP programmes in the area of education and training should be strengthened with a view to making them more in line with the demand of enterprises; moreover, a system of monitoring and forecasting the needs of employers in terms of knowledge and skills should be established.

The formation of a comprehensive labour market reform in Slovenia remains a major challenge. In the last few years, changes in the labour market regulation in Slovenia have only been partial, and several opportunities have been missed for the package adoption of reforms, which could have alleviated agreement between the social partners (Economic Issues 2011). New changes of the Employment Relationship Act have been in the pipeline, which should lead towards greater flexicurity and form part of an integral labour market reform; above all, they should contribute to reducing the segmentation of the labour market.

[81] According to the act, the concession fee is raised to 23% (from 12%).

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Annex

Assumptions and methodological explanations to the projection of youth participation in education by 2020

Methodologically, the projection of youth participation in education is founded on the projection of transition coefficients, i.e. the probability of transition from selected completed lower levels to higher levels of education. For young people in upper secondary schools for former periods these probabilities are estimated by comparing the data on the number of pupils finishing certain levels of upper secondary education with the number of pupils who completed elementary school the relevant number of years ago; for full-time students, it is estimated by comparing the number of full-time graduates with the number of pupils who completed four or five-year upper secondary education a relevant number of years ago.[82] Projections of part-time and post-graduate study are related to the education structure of population according to the Labour Force Survey.[83] The projection takes into account significant trends or reasonable averages of the past years or the targets set forth in various documents if they exist. Estimated probabilities of transition for the period 2000–2010 and projection by 2020 are presented in Table P1.

The probability that a generation will complete higher levels of education is rising, which is also taken into account in the projection. According to the above estimations, around 95% of the generation finishes elementary school, including schools with special curriculum. Of this, around 90% (or around 85% of demographic generation) finishes at least one level of upper secondary education. In the 1995–2005 period, the share of generation within this percentage which finished gymnasium or technical and other professional education was rising relatively fast (in recent years it stabilised at around 78% of the generation with completed elementary school), whereas the share of the generation with completed lower or middle vocational school was declining. In the same period, the number of tertiary education graduates soared to almost 65% of the generation which completed *matura* (final examination) by 2010. The projection presumes that:

- The share of generation completing lower vocational programme will further slightly decline (from current 2.4% of the generation with completed elementary school). The share of the generation that will complete middle vocational education (in the past at around 30% of the generation with completed elementary school, but down to solid 17% by 2010) is expected to remain at approximately the same level, given the shortage of some occupations with this type of education on the labour market. Also the share of generation that (after completing elementary school) passed final examination is expected to remain roughly the same (at around 30%) and the share of generation that passes the *matura* examination is expected to further slightly rise from the current 40% (both shares recorded a slightly upward trend in the past).
- A part of the generation after completing upper secondary school continues schooling at the upper secondary level to complete vocational or *matura* course or vocational technical education. Around 0.6% of the generation with finished elementary school completes a vocational course after a general or professional upper secondary school, which was also included in the projection. The share of the generation that completes a *matura* course has been slowly declining. The projection foresees a further decline by one-fifth compared with 2010 to 0.6% of the generation with completed elementary school. The projection also takes into account that around 40% of the generation which completes middle vocational education additionally completes a two-year vocational technical education.
- The share of generation with completed gymnasium, technical or other upper professional school that graduates at a post-secondary vocational level of full-time study in tertiary education is expected to remain at around 5%, and the share which graduates at a higher level of full-time study is expected to increase from current almost 60% to 65%.
- In the projection of part-time and post-graduate students, which is tied to the education structure of adult population, the level of probability recorded on average in the last five years is preserved, only the probability of successfully completed post-graduate study has increased in view of the current trend of increasing enrolment to this type of study.

[82] e.g. the number of pupils who completed lower vocational programme is compared with the number of pupils who completed elementary school two years ago, the number of pupils who completed secondary vocational school with the number of pupils who completed elementary school three years ago, the number of pupils who completed general, professional and technical secondary schools with the number of pupils who completed elementary school four years ago and the number of pupils who completed vocational or *matura* course or the programme of vocational technical education with the number of pupils who completed elementary school five years ago. The number of full-time graduates of higher grades is compared with the number of pupils who completed 4-5 year upper secondary education three years ago and the number of full-time graduates of high education with the number of pupils who finished 4-5 year upper secondary education five years ago (owing to too short series of data, high education graduates were not differentiated in terms of cycles of Bologna study.) The probability that a demographic generation does not finish elementary school was estimated by comparing the data on the number of pupils who finished elementary school with the number of population who attained 15 years of age in the same calendar year.

[83] Part-time graduates are compared with the number of population aged 25-64 with completed four- or five-year upper secondary school, persons who completed post-graduate study are compared with the number of population aged 25-64 with high education.

Table P1: **Probability of transition of selected levels of completed education: estimate for the period 2000–2010 and projection by 2020**

	2000-2004	2005-2009	2010	2015	2020
Probability that schoolchildren generation					
- finishes elementary school	**94.5**	**95.4**	**94.3**	**94.9**	**95.0**
Of which elementary school with special curriculum	1.7	1.3	1.1	1.2	1.2
- drops out of schooling without finishing elementary school	**5.5**	**4.6**	**5.7**	**5.1**	**5.0**
Probability that generation which finished elementary school					
- finishes at least one level of upper secondary school education for young people	**88.0**	**88.9**	**89.6**	**90.8**	**91.0**
Of which: - lower vocational programme	3.8	2.4	2.4	2.1	2.0
- middle vocational school	26.4	20.5	17.3	17.5	17.5
- passes final examination	26.7	28.7	30.3	30.0	30.0
- finishes gymnasium	31.2	37.3	39.6	41.2	41.5
- completes vocational or matura course	**1.3**	**2.1**	**1.5**	**1.3**	**1.2**
- finishes vocational technical education programme	**10.3**	**9.5**	**7.7**	**7.0**	**7.0**
- drops out of schooling without finishing upper secondary school	10.3	9.2	10.4	9.2	9.0
Probability that generation which finished 4–5 year upper secondary school:					
- graduates in full-time study at post-secondary vocational education	**3.6**	**4.1**	**5.1**	**5.0**	**5.0**
- graduates in full-time study at higher education*)	**48.6**	**48.5**	**59.2**	**64.2**	**64.9**
- drops out of schooling without graduating in full-time study	**44.5**	**48.4**	**35.6**	**30.7**	**30.1**
Probability (in %) that adult person (aged 25–64)					
- with finished 4–5 year secondary school graduates at higher education of part-time study	**0.3**	**0.6**	**0.7**	**0.6**	**0.6**
- with finished 4–5 year secondary school graduates at high grade of part-time study *)	**1.0**	**1.1**	**1.0**	**1.0**	**1.0**
- with high education passes masters or doctoral degree	**1.2**	**1.1**	**0.8**	**1.8**	**2.1**

Source: Own estimation and projection on the basis of SORS data.
Note: * Including masters degree at the 2nd cycle of Bologna study.

Also the projection of participation of young people and adults in upper secondary and tertiary education is based on generation coefficients. For the past period, they are estimated by comparing the data on the number of pupils in upper secondary schools for young people with the sum of the number of pupils who finished elementary school in a number of years that the schooling in an individual level of upper secondary education usually takes; the number of full-time students is compared with the number of pupils who finished four- or five-year upper secondary education in the relevant number of past years. Projection is calculated on the basis of ratios between the probability that the generation will be enrolled in selected types of education and the probability that it will successfully finish education. Usually, these ratios are higher than 1 because of students repeating the period of study, swapping schools, postponing the completion of schooling and/or dropping out. With the reversed ratio, we obtain a rough estimate of the successfulness of enrolment of generations in individual levels of education. This estimation is presented in Table P2. The projection mainly took into account the average ratio in the last few years, which we only slightly improved in vocational and maturity course, and more significantly in the successfulness of post-secondary vocational education.

Table P2: **Probability of successfully finishing individual levels of education* : estimate for the period 2000–2010 and projection by 2020**

	2000-2004	2005-2009	2010	2015	2020
Generacija, ki je končala NPP v % od vpisane generacije	66.2	66.7	92.0	75.0	75.0
Generacija, ki je končala SPŠ v % od vpisane generacije	83.2	86.0	84.1	85.0	85.0
Gen., ki je opravila zaključni izpit v % od gen.,vpisane v strokovne in tehnične .SŠ	80.1	79.9	78.0	80.0	80.0
Gen., ki je opravila maturo v % od gen.,vpisane v gimnazije	86.8	87.5	91.6	90.5	90.5
Gen., ki je opravila poklicni tečaj, v % od vpisane generacije	53.7	44.1	49.1	51.9	52.4
Gen., ki je opravila maturitetni tečaj, v % od vpisane generacije	37.5	32.7	17.2	26.6	28.6
Gen., ki je končala PTI v % od vpisane generacije	71.3	69.6	67.4	70.0	70.0
Gen.,ki je redno diplomirala na višji stopnji v % od vpisane generacije	53.0	26.5	23.1	42.2	50.7
Gen.,ki je redno diplomirala na visoki stopnji v % od vpisane generacije	64.8	62.7	72.5	74.9	75.0

Source: Own estimate and projection based on SORS data.

Note: * These probabilities are estimated as a ratio between the share of generation successfully finishing individual level of education and the share of the same generation enrolled in the same grade of education.

Applying the presumed coefficients of probability of transition and successful finishing individual grades of education to the projection of population allows us to make a projection of participation and finishing schooling by young people in upper secondary schools and by students. We took into account the latest projection of population in Slovenia Europop 2010 prepared by Eurostat. From the number of persons included in individual levels of education in a calendar year and the number of persons who successfully finished this level of education in the same year we can estimate the yearly outflow of young people from the education system and its educational structure, which we present in the tables in our basic chapter.

III.
Impact of the Economic Crisis on the Credit Market in Slovenia

SUMMARY

The situation in Slovenia's financial sector tightened further in 2011. The volume of Slovenian bank loans to non-banking sectors recorded the largest decline thus far, as a result of both a very limited supply of and a lower demand for loans, which are the main source of finance for Slovenian enterprises. All these factors also represent a risk to Slovenia's lending activity in the future. We estimate that the situation in Slovenia's financial system was one of the important reasons why economic activity in Slovenia again recorded an above-average slowdown.[1]

External factors remain a significant obstacle to the lending activity in Slovenia. The situation on interbank markets tightened significantly in late 2011 due to a lack of confidence between banks in view of the deepening of the sovereign debt crisis. The supply of interbank funds shrank notably, and at the end of the year the ECB adopted another set of non-standard measures to ease pressure on interbank markets. Slovenian banks were highly affected be the limited supply of interbank funds, as Slovenia belongs in the group of euro area countries whose credit ratings declined more noticeably; the credit ratings of Slovenian banks were dropping as well, making access to fresh source of finance even more difficult.

Besides external factors, the supply of banks' sources of finance was also significantly affected by internal imbalances built up in the period of favourable economic trends. Owing to certain bad decisions in the past when they also financed projects that were not economically viable, Slovenian banks have to cope with a significant increase in the share of non-performing claims, one of the largest in the euro area.[2] In view of the deteriorating quality of their assets, banks thus intensified the creation of additional provisions and impairments, which reached the highest level to date. *This deteriorated their balance sheets and additionally impeded the lending activity.* Due to their low capital adequacy, banks have limited access to sources of finance and are unwilling to take on additional risks. The low capital adequacy of Slovenian banks is also indicated by stress test results, which show that two Slovenian banks recorded below-average results despite the recapitalisation. The recapitalisation alone failed to improve the situation in Slovenia's banking sector, given that both banks that were recapitalised last year already need fresh capital[3]. To increase the efficiency of the Slovenian economy, it is therefore essential, in our view, to improve the governance of banks and other companies.

The limiting factors on the side of demand for loans strengthened in 2011. Slovenian companies and non-monetary financial institutions (NFIs) are highly dependent on debt sources of finance and are among the most indebted in the euro area. Despite companies' best efforts to deleverage, corporate indebtedness did not decline significantly by 2010. In 2011 it even grew, almost reaching the record levels in 2008. The increase was thus primarily a consequence of a further shrinkage of corporate and NFI assets due to the negative movements on capital markets. On the other hand, companies and NFIs increased the volume of loans, despite a significant reduction of their liabilities to banks. According to our estimate, this is also attributable to increased inter-company financing, which partly offsets the shortage of bank loans. The risk of balance sheet deterioration due to excessive exposure is thus being transferred to companies and NFIs. The problem of overindebtedness of Slovenia's economy is compounded by companies' poor business results coupled with their inability to generate internal sources of finance and a higher burden on the free cash flow. In the second half of the year economic activity shrank, which also impaired loan demand. Household borrowing, still relatively high in 2010, also slowed significantly, which we estimate is a result of poor labour market conditions, lower lending capacity and a high level of uncertainty on the real estate market.

Despite the ECB's measures, banks thus remain averse to taking additional risks. They mainly invest free assets in the financing of the government, which is in urgent need of funds because of the high public finance deficit. Since the second half of last year, the government has been (due to the limited access to funds on the euro area bond market) borrowing only on the domestic market, by issuing long-term treasury bills. The share of debt securities of domestic nonbanking sectors, most of which are government securities, grew by EUR 1.1 bn in the last six months[4] (despite the maturity of the government bond in the amount of EUR 1 bn[5]). As banks can pledge government securities for refinancing with the ECB, this type of borrowing does not have a significant impact on the liquidity of the banking sector. However, these operations are not without risk, as with a possible further decline in Slovenia's credit rating Slovenian government securities may no longer be accepted as collateral to secure loans from the ECB. Besides, the non-standard measures taken by the ECB are only temporary.

[1] In 2011, only Greece and Portugal recorded a larger real decline of GDP than Slovenia.
[2] A somewhat higher increase then in Slovenia was recorded only in Greece and Ireland.
[3] An additional recapitalisation of the NLB is also required by regulators.
[4] In the last quarter of 2011 and in the first quarter of this year.
[5] Based on balance sheet data we estimate that Slovenian banks owned around EUR 300 m in matured bonds.

We estimate that one of the main problems in the Slovenian financial system is corporate governance of capital investments. After three years of a rapid deterioration of the quality of assets, the investment portfolio has not been cleaned up yet. According to our estimate, on one hand, this is a consequence of the inefficiency of the Slovenian legal system and its lengthy bankruptcy proceedings, which allow additional attrition of ailing enterprises, and on the other, the high degree of state involvement in the economy, which prevents the governance of investments according to economic criteria. Another deficiency is insufficient monitoring of debtors' operations as banks become aware of debtors' problems only when they fail to discharge their liabilities. At that point it is usually already too late as in most cases banks are among the last in the line of entities to face delays in payments by ailing companies.

Introduction

Credit activity in the euro area intensified for most of 2011, while it continued to decline in Slovenia. There are significant discrepancies in the financing of enterprises and NFI by banks. In the EMU, corporate and NFI crediting was predominately rising until October, while credit activity in Slovenia witnessed a sharp drop. This is most likely due to the fact that the sources of financing for Slovenian banks are still highly limited. At the same time, facing rapid deterioration of the quality of their investments, banks are not willing to take on new risks, and the demand for loans is also slowing down. By the end of the year, when the financial market conditions tightened more notably and the lending activity of banks decreased considerably, the ECB once again adopted non-standard measures to offset the financial crisis. The key measure were two long-term refinancing operations with which the EBC provided more than EUR 1000 bn of long-term assets to banks. The pressures on the liquidity of the banking system and the bond market of euro area countries were thus mitigated, but the lending activity remained modest.

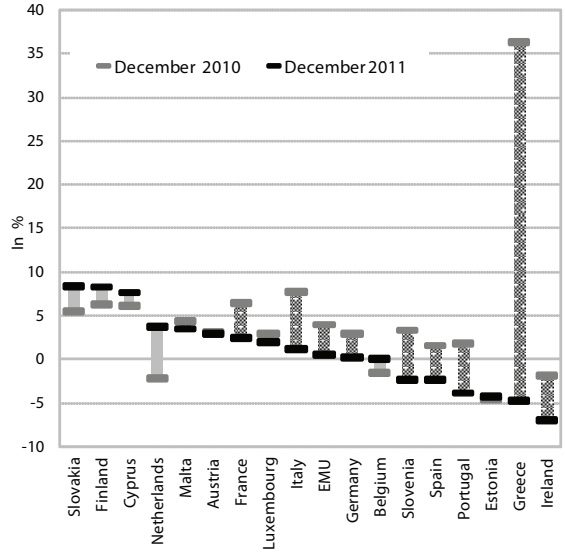
This part of Economic Issues primarily focuses on trends related to the financing of the Slovenian economy. The first section deals with the trends on credit markets in the euro area and in Slovenia. The second provides a more detailed analysis of corporate borrowing and the indebtedness of Slovenian companies, which constitute the most important factor of limited lending activity in Slovenia. This is also greatly affected by the limited bank sources and high dependency of Slovenian banks on foreign debt sources, which will be presented in more detail in the third section. The fourth section provides the risk assessment of the worsening of the situation in Slovenia's banking sector and an even more pronounced slowdown of lending activity, while the final section presents the existing challenges.

1. Credit markets

1.1. Credit markets in the euro area

A comparison of the year-on-year growth rates of loans to non-banking sectors shows that in 2011 lending activity continued to slow down in most EMU countries. A greater drop than in Slovenia was only recorded by Estonia and the countries that were the most affected by the crisis, with the exception of Italy. According to ECB data, the highest growth among the countries of the euro area was achieved by Slovakia, which recorded an above-average increase in loans to domestic non-banking sectors.

Figure 1: **Year-on-year growth rates of loans to non-banking sectors in EMU countries**



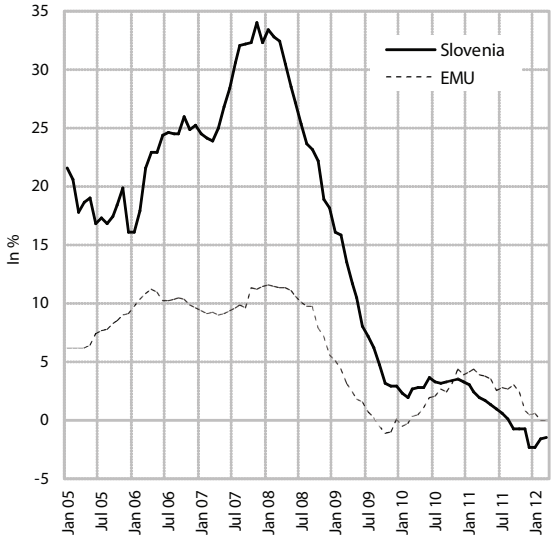
Source: ECB, BS, calculations by IMAD.

Last year, the increase in loans in the euro area reached just over a tenth of the 2010 level. The main reason underlying the gradual slowdown could lie in the softening in household indebtedness and the government's loan repayment, while the financing of enterprises and NFIs rose and represented the bulk of the non-banking sectors' borrowing net flows, yet it is still considerably below the level observed prior to the outbreak of the financial crisis. Considering the increase in the amount of corporate and NFI loans, we estimate that for most of 2011 banks were less averse to taking risks. The end of 2011 was marked by a new tightening of conditions in financial markets, leading to a significant decrease in corporate and NFI crediting which could not be alleviated by the ECB measure.

1.2. Credit market trends in Slovenia

In 2011, lending activity in Slovenia slowed considerably compared to the year before, mostly due to a drop in loans and an increase in the repayment of the non-banking sector loans. For the first time since comparable data have been available, the volume of loans recorded a decline,[6] totalling nearly EUR 800 m. Repayments reached a particularly high level in the second half of the year.

Figure 2: **Year-on-year growth rates of bank loans to non-banking sectors in Slovenia and in the EMU**

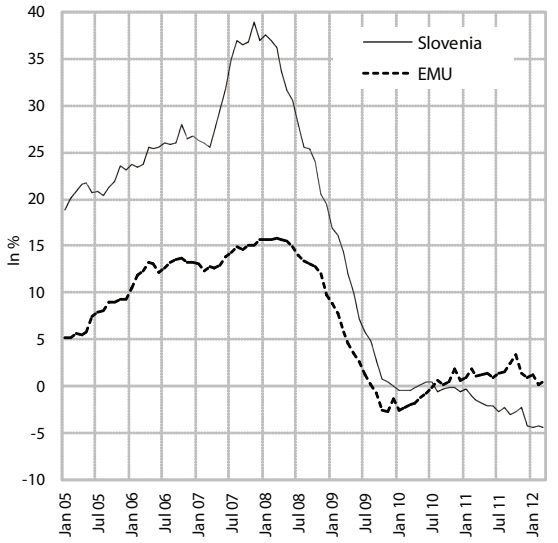


Source: ECB, BS, calculations by IMAD.

1.2.1. Corporate and NFI borrowing

The drop in loans to enterprises and NFIs was even more pronounced in 2011, while at the same time, enterprises and NFIs considerably increased their borrowing abroad. The drop in corporate and NFI borrowing from domestic banks accounted for almost EUR 1 bn. Approximately three quarters of the decrease is due to a decline in corporate loan volumes, which only a year before recorded a slight increase in loans from domestic banks. The decline in NFI loans was also greater than the year before. The volume of loans to enterprises and NFIs was gradually falling throughout the year with a considerable deterioration of the conditions in December. Therefore, the drop in only that month represented more than 60% of the annual decrease in the volume of loans to enterprises and NFI.

Figure 3: **Year-on-year growth rates of bank loans to enterprises and NFI in Slovenia and in the EMU**



Source: ECB, BS, calculations by IMAD.

Larger and financially more stable enterprises primarily took advantage of foreign loans last year. Thus, according to our estimates, they used the better accessibility of foreign financing and the more favourable financing conditions, as the average foreign interest rates are still considerably lower. In 2011, the net flows of foreign loans to enterprises and NFI thus totalled EUR 185.3 m, while net repayments in 2010 reached EUR 261.3 m. Despite increased external borrowing, the maturity structure of the loans taken out abroad remains quite unfavourable, which reflects the low level of trust put by foreign banks in Slovenian borrowers. Thus, long-term loans accounted for only a quarter of the total net foreign loans. However, in the first quarter of this year enterprises and NFI repaid foreign loans in the amount of EUR 10 m, which is the result of net repayment of long-term loans, while net inflows of short-term loans somewhat increased compared to the same period last year.

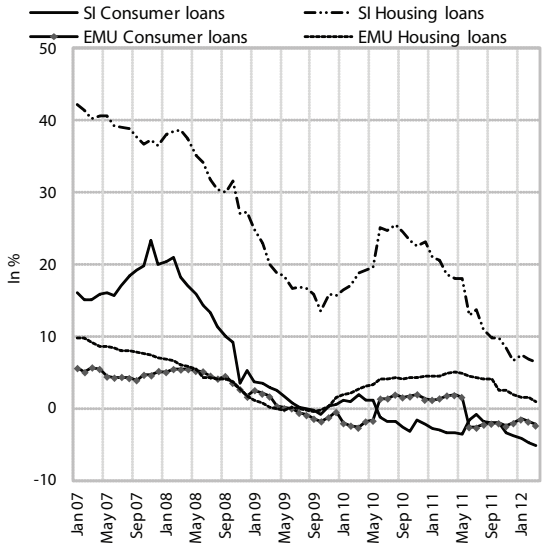
1.2.2. Household borrowing from domestic banks

The volume of household loans only rose modestly in 2011. Only a year before, the volume of loans to households and NPISH rose by over 10%, while 2011 recorded the weakest growth (1.9%) since data have been available (2005). As in the past two years, the growth in 2011 exclusively resulted from housing loans, due to which the share of all household loans in Slovenia is still increasing at a somewhat faster rate than in the EMU. However, the volume of foreign currency loans dropped considerably (-10.3%), which, according to our estimates, is mainly due to the transformation of foreign

[6] Since 2005.

currency loans[7] into euro loans. The fall was slightly lower due to the high value of the Swiss franc which, despite interventions by the Swiss Central Bank, at the end of 2011 was still almost 3% higher than the year before. The share of these loans fell by over one third to 12.3% over the last three years, which was the result of the volatility in foreign exchange markets.

Figure 4: **Year-on-year growth rates of loans to households in Slovenia and in the EMU**



Source: ECB, BS, calculations by IMAD.

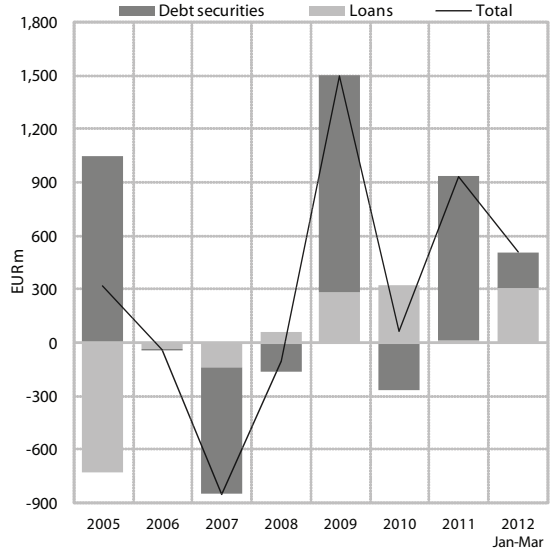
The volume of housing loans increased in 2011, yet less than in the previous years. It was higher by 6.8% or EUR 327 m (December 2011 relative to December 2010). This is also suggested by the SMARS data, according to which the number of transactions in flats and houses in 2011 was lower than in 2010, when a relatively strong growth was recorded and also the volume of such loans marked the highest increase so far, by over EUR 900 m.[8] The share of housing loans thus rose considerably over the last few years; however, it remained lower than in the EMU (December 2011: 72.3%) by nearly 18 p.p. In the first months of 2012, the volume of housing loans continued to rise, but at a slightly lower rate than in the previous year.

During the period of low consumption, the volume of consumer loans in 2011 declined for the second consecutive year. The demand for consumer loans has been decreasing since 2008. The volume of these loans dropped for the first time in 2010 (-2.3%) and the downward trend continued throughout last year (-3.9%), causing the volume of housing loans to fall by EUR 110 m (2010: by EUR 67 m). We estimate that loans are mainly raised for durable goods for which consumption dropped by almost 6% in nominal terms over the last two years, and in 2011 remained at the level of 2009 in real terms. Furthermore, in the first few months of this year, the volume of consumer loans was decreasing. It dropped by EUR 67 m compared to the end of last year, including March, which is a much greater decrease than in the same period last year. The downward trend in consumption for major purchases also continues in 2012, with the income in the retail sale of furniture, household appliances, construction material and audio/video recordings in specialised stores being 3.1% lower y-o-y in the three months to March.

1.2.2. Government borrowing from domestic banks

In 2011, government borrowing from domestic banks intensified markedly. The volume of bank claims to the government[9] ***rose by almost EUR 940 m.*** For the most of the year, government borrowing fell far behind the level of 2010, as in the first quarter of 2011 the government raised EUR 3 bn in loans on international financial markets, which temporarily met the needs for the current financing. Given the deepening debt crisis, the conditions on international financial markets tightened more notably by the end of the year, resulting in Slovenia being suspended from international financial markets. Thus, in December the government borrowed by issuing eighteen-month treasury bills in the amount of EUR 907.0 m, using the collected funds to repay the RS64 Bond which was due for repayment at the beginning of February.

Figure 5: **Estimated increase in the share of bank claims to the government in Slovenia's banking sector**



Source: BS; calculations by IMAD.

[7] The prevailing foreign currency is still the Swiss franc.

[8] This was also due to the appreciation of the Swiss franc, albeit to a lesser extent.

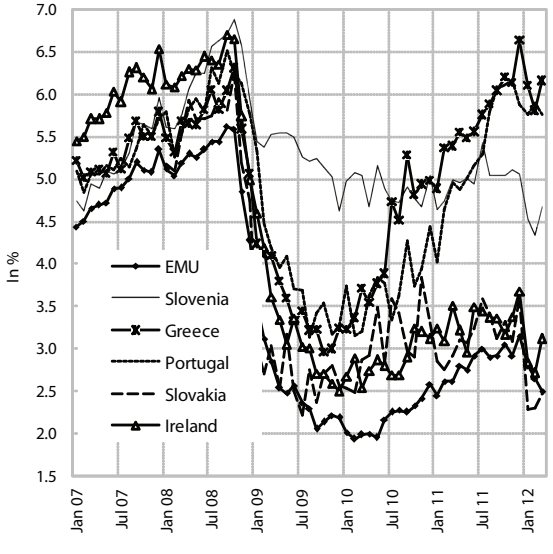
[9] Government loans and debt securities of non-monetary sectors, which, according to our estimates, are mostly the debt securities of the Republic of Slovenia, were taken into account.

Slovenia still has no access to international financial sources in 2012 either; therefore, the financing of the budget's deficit is still based on the borrowing from domestic banks. In the first three months of this year alone, the volume of claims on the government rose by over EUR 500 m. An increase of approximately 60% is due to the higher volumes of loans. Moreover, an increase was recorded in the share of securities even though the overdue bond[10] was repaid.

1.3. Interest rates

In the past year the differences in active interest rates for Slovenian enterprises declined below 200 basis points relative to the EU average. Such a trend is indeed unexpected, since Slovenia's credit rating was downgraded twice last year relative to the end of the third quarter. We could therefore expect that higher interest rates on government borrowing would translate into higher costs of bank borrowing, and consequently of the economy. However, this has not taken place, by our estimates largely owing to the highly restrictive loans policy of banks in Slovenia that approve loans only to clients with first-rate credit scores, while clients with slightly lower credit scores are practically unable to obtain loans. The narrowing of the gap between Slovenian and foreign interest rates also continued in the beginning of this year. There was an upsurge in these differences at the end of the first quarter, exceeding the level of 200 basis points.

Figure 6: **Interest rates for corporate loans in Slovenia and specific EMU countries**

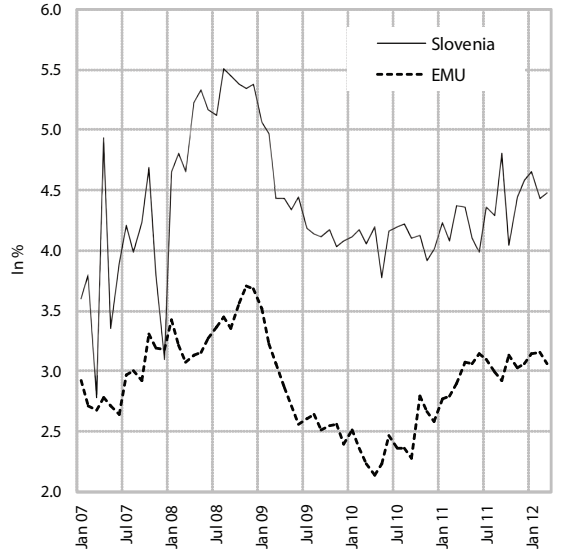


Source: BS, ECB.

Much smaller differences with regard to the euro average may be found in interest rates for household loans, particularly housing loans, which continue to decline, reaching the lowest levels since the introduction of the euro. This is still in part the result of the fact that the banks try to shift their load of over-indebted enterprises, dealing with housing construction, onto less-indebted households. However, housing loans to households have eased off significantly, which, according to our estimates, is due to greater caution by banks, as well as to the limited demand for housing loans, owing to unfavourable conditions on the labour market, poor credit scoring and great uncertainty on the housing market.

Likewise, the differences in interest rates for long-term deposits decreased somewhat last year, but they remain significant. Given the lower accessibility to long-term financial resources at international financial markets, the banks are trying to substitute part of the loss of foreign sources with domestic long-term sources, which in this time of crisis have proved to be more stable than foreign ones. Therefore, the interest rates for such deposits are still significantly above the euro area average. The banks pay particular attention to deposits with maturities of over two years, where the differences are the most accentuated, and no evident reduction was recorded in the first quarter of 2012. However, Slovenian banks continue to offer lower interest rates for short-term loans, whereby they additionally encourage the transfer of short-term deposits among long-term deposits.

Figure 7: **Interest rates for long-term deposits with maturities above two years in Slovenia and in the EMU**



Source: BS, ECB.

[10] In the first five months, the government issued nearly EUR 961.m worth treasury bills (see chapter on Public Finances).

2. Indebtedness and the financial structure of Slovenian enterprises

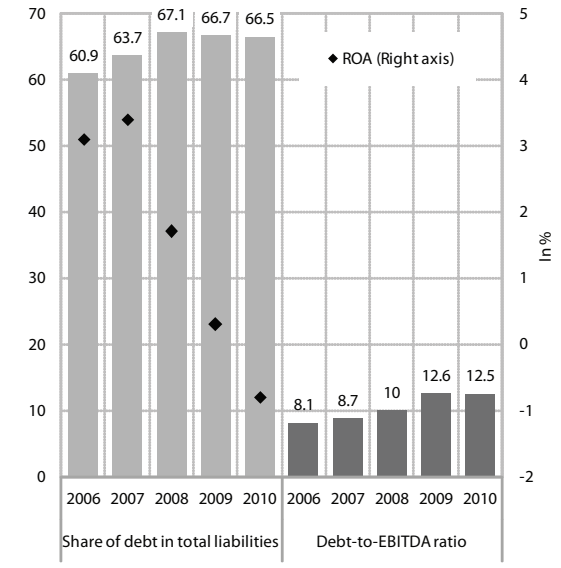
The central topics of this chapter are indebtedness and financial structure of Slovenian enterprises. We analysed them on the basis of individual data from the balance sheets and profit and loss accounts of Slovenian enterprises, gathered by the Agency for Public Legal Records and Legal Services (hereinafter: AJPES) for the 2006–2010 period.[11]

With the onset of economic crisis, the volume of activities of the private-sector enterprises shrank significantly. This also affected the return on assets (ROA), which decreased by 2.5 p.p. in the 2008–2010 period, while in 2010 it even turned negative (-0.8%).

The indebtedness of Slovenian enterprises did not decrease significantly during the crisis. The share of debt in the total liabilities of private-sector enterprises continued to rise steadily in the period before the crisis[12] (2006–2008). However, it declined slightly (by 0.6 p.p.) during the period of crisis. The debt-to-EBITDA ratio, which shows debt repayment ability, recorded an increase during the entire period analysed (2006–2010). The highest growth was registered in the first year of crisis (in 2009), when it increased from 10 in 2008 to 12.6 in 2009. In 2010, this ratio remained at the same level as in the previous year.

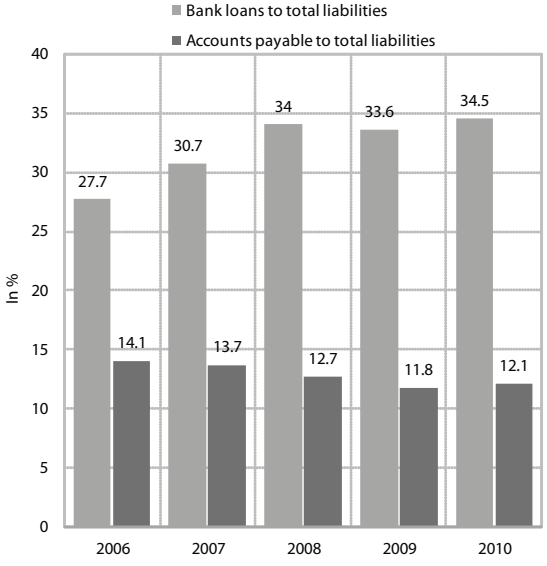
A part of the debt dynamics can be explained both by bank loans and trade credits, which enterprises use for financing their business activities (see Figure 9). The latter represents an additional source of financing and was quite stable throughout the 2006–2010 period (around 13%). The share of bank loans in the total liabilities of enterprises constantly grew until 2008; in 2009, it remained at the level of 2008 (33.6%), whereas in 2010 it rose by about 1 p.p. (34.5%). Thus, the increase in the share of bank loans in the total liabilities of enterprises is the result of the 4.3% decline in the volume of liabilities, as the share of financial liabilities towards banks also decreased by almost 2%.

Figure 8: **The share of debt in total liabilities (in %), the debt-to-EBITDA ratio and the return on assets (ROA) of private-sector enterprises in the 2006–2010 period**



Source: AJPES; calculations by IMAD.

Figure 9: **Share of bank loans and accounts payable in the total liabilities of enterprises in the private sector, 2006–2010**



Source: AJPES; calculations by IMAD.

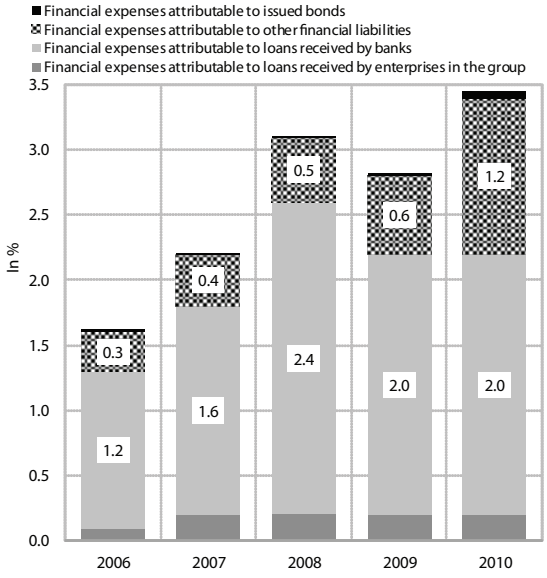
The ratio between financial expenses from financial liabilities and sales revenues of the private-sector enterprises was constantly increasing in the period before the crisis (2006–2008). In the first year of the crisis, it decreased by 0.4 p.p., while in 2010 it increased by as much as 0.7 p.p. to reach 3.5%, just slightly above the pre-crisis level. This is the result of a significant rise

[11] This database includes all Slovenian enterprises. The database excludes extreme values where growth of financial liabilities of enterprises towards banks (both, long-term and short-term loans) was above 50,000% as such enterprises could distort the picture of the actual state of affairs as regards loans to Slovenian enterprises. The final sample covers 25,232 enterprises with an average four-year time horizon (i.e. 100,928 units), which (between 2006 and 2010) accounted for 89.4% of the bank loans of all enterprises included in the database.

[12] Since data are collected on an annual basis, 2008 is also considered as the pre-crisis period, despite the fact that the crisis actually began in the last quarter of 2008. This year still recorded sound economic growth and the lending activity of Slovenian banks remained at a relatively high level. Indeed, there was a sharp drop in demand by the end of the year, resulting in the reduced volume of orders, mainly in export-oriented activities. Export enterprises felt the greatest shock in the first half of 2009, while other enterprises were faced with the crisis at a later stage.

in financial expenses from other loans in which one enterprise recorded a significant rise in these expenses. The ratio of financial expenses from bank loans to sales revenues dropped by 0.4 p.p. in 2009, while also remaining at this lower level in 2010.

Figure 10: **Ratio between financial expenses from financial liabilities and sales revenues of private-sector companies in the 2008–2010 period**



Source: AJPES; calculations by IMAD.

The structure of financial expenses from financial liabilities suggests the great importance of bank financing in the Slovenian economy. We may note that in terms of expenditure, the expenses from loans prevail (these expenses represented 2% of the total revenues of banks in 2010), while expenditure related to other sources of financing is considerably less accentuated (loans received by enterprises belonging to a group and by issuing bonds). The share of expenses from bank loans saw a slight decrease during the crisis, yet the drop was relatively modest. Thus, the revenues' loan burden stemming from bank loans did not decrease significantly, despite extensive measures taken by the ECB, cutting the central interest rate by 325 basis points. Likewise, a decline of nearly 15% was recorded in the revenues of the private-sector enterprises. Even though interest rates recorded an increase in 2010, they still remained relatively low. A problem will arise when they start to increase and the pressure on expenses is even more severe. In addition to the indebtedness of the private sector, we also carefully analysed the indebtedness of enterprises by size of enterprises, their export orientation and activities.

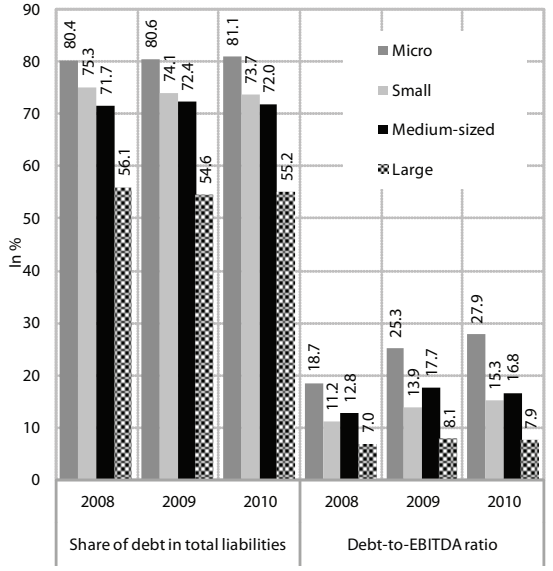
2.1. Corporate borrowing by size of enterprise[13]

As regards the size of the enterprise, the largest share of debt was recorded by micro-enterprises, while the smallest share was seen in large enterprises. Since the beginning of the crisis, the indebtedness of micro-enterprises has even recorded a slight increase (with the share of debt in the total liabilities being above 80%). Small and medium-sized enterprises are slightly less indebted (with the share of debt in the total assets reaching above 70%), but an increase was recorded in the share of debt in the total liabilities of medium-sized enterprises. Large enterprises, however, have by far the smallest share of debt. It accounts for only a half of their liabilities and has also declined slightly during the crisis. The bulk of debt comes from bank loans, which in micro-, small and medium-sized enterprises account for approximately 40% of the total liabilities,[14] while in large enterprises this share remains below 30%. With the economic crisis becoming more severe, the capacity of enterprises (particularly micro-, small and medium-sized enterprises) to repay their debts shrank considerably, due to lower revenues from sales. Therefore, to repay their liabilities towards banks at the level of free cash flow (EBITDA) as was recorded in 2010, micro-enterprises would need nearly 28 years (which is almost 10 years more than in 2008), whereas large enterprises would need 20 years less, their period being longer for one year only. It is interesting that despite loan repayments, small and large companies increased their share of bank loans in total liabilities during the time of crisis, owing to a decrease in the value of liabilities, which was more pronounced than the decrease in the share of bank loans in total liabilities. Moreover, changes are occurring in the maturity structure of the liabilities to banks. The volume of long-term loans was rising also during the crisis (micro- and large enterprises) or their declines were less pronounced than in short-term loans (small and medium-sized enterprises).

[13] Below are the results of the analysis of corporate borrowing by size of enterprise, whereby micro-enterprises employ up to 5 employees, small enterprises 6–50 employees, medium-sized enterprises 51–250 employees and large enterprises above 250 employees. The entire database includes 57% micro-enterprises, 35% small enterprises, 6% medium-sized enterprises and 2% large enterprises. The total number of employees is on average around 321,632; whereby in micro-enterprises there are on average around 13 720 (4%) employees, in small enterprises around 68 451 (21%), in medium-sized enterprises around 82 450 (26%) and in large enterprises around 157 011 (49%) employees.

[14] The greatest discrepancies were observed in small enterprises where the share reached the level of 35.7% in 2010.

Figure 11: **The share of debt in total liabilities (in %), the debt-to-EBITDA ratio by size classes of enterprises of the private-sector enterprises in the 2008–2010 period**

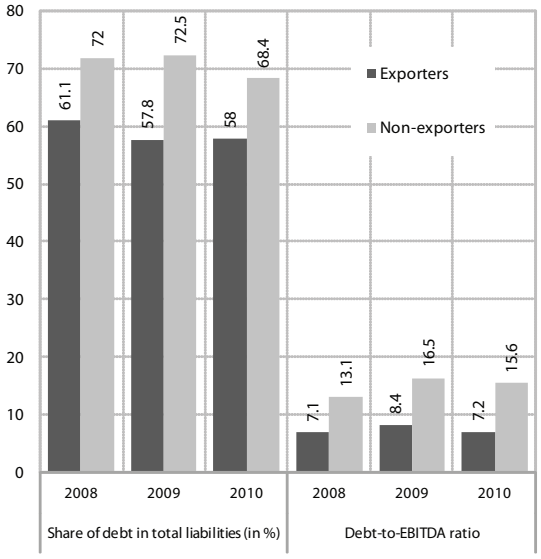


Source: AJPES; calculations by IMAD.

2.2. Corporate borrowing by export-orientation[15]

An analysis of borrowing based on export-orientation revealed that enterprises oriented to the domestic market are more indebted. During the crisis, the share of debt decreased in both non-exporting and exporting enterprises, but the dynamics were different. Thus, in 2009 the share of debt was reduced by exporters and in 2010 also by non-exporters, whereas the indebtedness of exporting enterprises has already recorded a slight increase this year, which is mainly associated with the pick-up of export markets. Growing indebtedness is, however, largely due to the increase in accounts payable, while in 2010 enterprises continued to reduce the volume of bank loans. The share of bank loans in the total liabilities was much higher among non-exporters than exporters and achieved 38% in 2010, which is more than before the crisis. Even though bank financing was only slightly over one-third higher among non-exporting enterprises than exporting enterprises, the ratio of financial expenses from bank loans to sales revenues was about 50% higher among exporters, and in 2010 it rose to the level seen before the crisis. Both export-oriented enterprises and enterprises oriented to the domestic market increased their share of long-term bank loans; however, the maturity structure was much more balanced among exporters, while among non-exporters over 60% are represented by long-term loans. In 2010, the indebtedness measured as a ratio between the debt and the EBITDA dropped to the pre-crisis level, while among non-exporters it was still about a fifth higher than in 2008.

Figure 12: **The share of debt in total liabilities (in %), the debt-to-EBITDA ratio by export orientation of the private-sector enterprises in the 2008–2010 period**



Source: AJPES; calculations by IMAD.

2.3. Corporate borrowing by activities[16]

The analysis of business sector borrowing by activities reveals that in the 2006–2010 period the most heavily indebted were enterprises operating in financial intermediation, construction, real estate and trade. The share of debt in liabilities increased in all of the above activities in the period before the crisis (2006–2008), while in the 2009–2010 period this trend eased off significantly with the indicator values even showing a slight drop in some of the activities.[17]

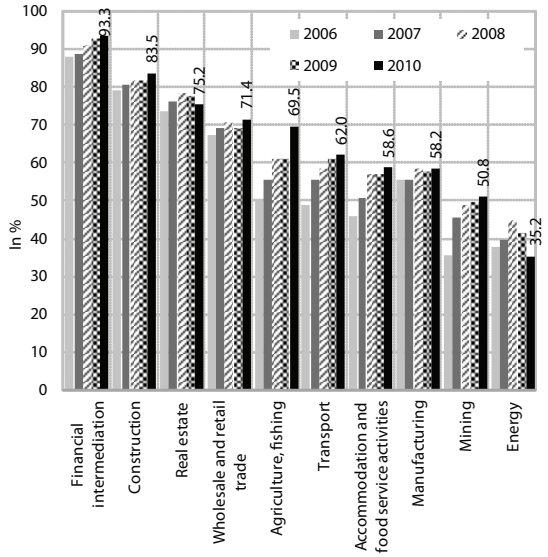
The debt-to-EBITDA ratio, indirectly reflecting the debt repayment ability of enterprises, rose significantly during the crisis, particularly among the most heavily indebted enterprises, which reveals their difficulties discharging the matured liabilities. The rise is the result of the fact that in 2009 and 2010 the volume of the free cash flow decreased by almost a quarter. The

[15] Export-oriented enterprises are enterprises whose sales revenues on foreign markets exceed sales revenues on domestic markets. The database comprises 10% export-oriented enterprises and 90% domestic market-oriented enterprises; the latter account for 66.9% of value added of all enterprises in the database.

[16] In order to ensure greater consistency of the sample, data are classified according to the 2002 Standard Classification of Activities (SCA).

[17] The evolution of the share of debt in capital over the entire period analysed was in line with the evolution of the share of debt in the total assets. In 2010, enterprises in manufacturing had 1.4 times more debt than capital; in construction 5.0 times more; and in trades 2.5 times more.

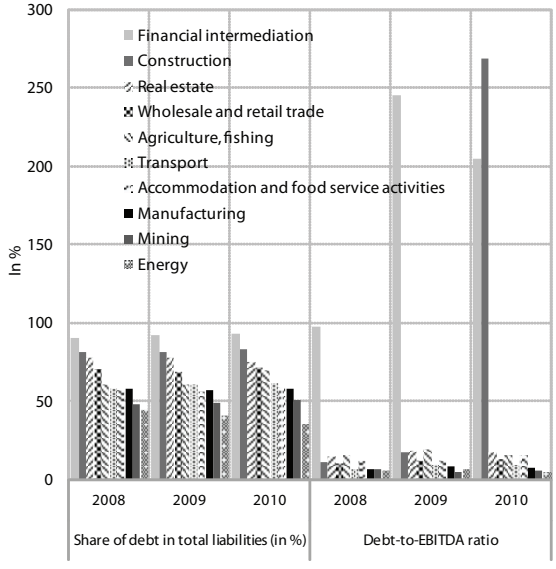
Figure 13: **Share of debt in total liabilities by activities of the private sector, 2006–2010**



Source: AJPES; calculations by IMAD.

greatest increase was witnessed in construction, which in 2010 was also characterised by the highest debt-to-EBITDA ratio, reaching as high as 268. This means that given the 2010 volume of free cash flow, this particular activity would need 268 years to repay its debt.[18] Such a substantial increase in the share can be attributed to the further rapid shrinking of revenues from sales (by -14.6%) and the related significant decrease of the free cash flow.[19] Enterprises in manufacturing and retail trades mainly finance their operations with bank loans,

Figure 14: **The share of debt in total liabilities (in %), the debt-to-EBITDA ratio by activities of the private-sector, 2008–2010**

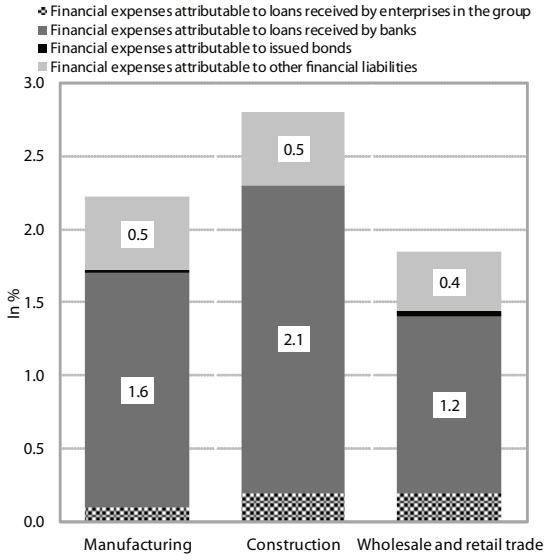


Source: AJPES; calculations by IMAD.

while construction companies largely prefer accounts payable.

On the basis of the data on financial expenses from loans with regard to the revenues, it may be established that their structure is very similar (see Figure 15). It shows that all enterprises of the analysed activities mainly take out bank loans or have high costs with the payment of interests and rarely opt for accounts payable and almost never issue bonds. In 2009, the financial expenses from bank loans shrank considerably. In addition to indebtedness, interest rates began to increase at the end of 2010, which was reflected in renewed growth of financial expenses from bank loans (Table 1).

Figure 15: **Ratio of financial expenses from loans to sales revenues by different activities of the private sector, 2010**



Source: AJPES; calculations by IMAD.

[18] Excluding interest.
[19] In this period, EBITDA went down by 94%.

Table 1: **Selected indicators by different activities of private-sector enterprises, 2006–2010**

		Compared to enterprise revenues (in %)		Dynamic (in %)	
		Fin. expenses from loans	Fin. expenses from bank loans	Fin. expenses from bank loans	Sales revenues
Manufacturing	2006	1.3	1		11.8
	2007	1.6	1.3	42.3	14
	2008	2.3	1.8	47.2	1
	2009	2.3	1.8	-24.4	-21
	2010	2.2	1.6	1	10.4
Construction	2006	1.2	1		15
	2007	1.3	1.1	51.1	43.9
	2008	2	1.5	61.3	12.4
	2009	2.4	1.8	-5.9	-20.5
	2010	2.8	2.1	2.9	-14.6
Wholesale and retail trade	2006	1.1	0.8		7
	2007	1.3	1	35.3	8.9
	2008	1.8	1.4	51.5	12.3
	2009	1.6	1.2	-25	-14.9
	2010	1.8	1.2	-2.6	-2.3
Financial intermediation	2006	69.8	47		31.5
	2007	101.8	78.5	129.3	37.4
	2008	145.7	113.3	82.2	26.2
	2009	87.6	63.2	-55.3	-19.8
	2010	98.3	77.5	29.7	5.6

Source: AJPES; calculations by IMAD.

Table 2: **Selected indicators by different activities of private-sector enterprises, 2007–2010**

		A&B	C	D	E	F	G	H	I	J	K
2007	**Sales revenues**	14.2	12.1	14	45.1	43.9	8.9	28.8	14.5	37.4	29.5
	Value added	-1.8	4.9	12.2	2.8	25.9	10.3	16.9	13.5	69.6	27
	ROA	2.3	2.2	4.0	1.7	3.3	4.1	1.4	4.8	3.0	3.7
	Bank loans to total liabilities	29.2	16.5	24.9	10.2	26.5	30.6	28.4	22.6	73.8	39.2
	Long-term bank loans to total liabilities	16.5	7.5	11.3	7.7	8.5	15.5	22.1	14.8	58.9	19.6
	Short-term bank loans to total liabilities	12.7	9	13.6	2.5	18	15.1	6.3	7.8	14.9	19.6
2008	**Sales revenues**	16.7	13.1	1	8.7	12.4	12.3	10.3	3.7	26.2	15.9
	Value added	4	1.3	1.4	0.5	17.7	8.6	5.8	1.8	4.5	16.1
	ROA	-1.8	-1	2.3	1.4	2.3	1.6	-1.5	2.7	0.5	1.6
	Bank loans to total liabilities	32.6	19.9	28.2	12.3	27.8	33.4	33	26.2	73.8	40.9
	Long-term bank loans to total assets	19.6	9.1	12.1	9.4	7.1	14.7	23.4	15.8	57.9	19.6
	Short-term bank loans to total liabilities	13	10.8	16.1	2.9	20.7	18.8	9.6	10.3	15.9	21.3
2009	**Sales revenues**	-5.3	-6.4	-21	12	-20.5	-14.9	-1.5	-14.5	-19.8	-10.4
	Value added	7.2	2.7	-15.3	-3.1	-15	-4.5	0.4	-13.2	-21.9	10
	ROA	-4	0.2	0.2	0.9	-0.2	1.6	-1.4	-1	-0.7	0.9
	Bank loans to total assets	33.9	23.1	28.8	12.6	29.8	31.6	33.9	25.6	73.9	38.8
	Long-term bank loans to total liabilities	20.1	12.4	13.3	9.6	9.6	13.9	23.8	17.6	53.5	19.2
	Short-term bank loans to total liabilities	13.8	10.7	15.5	3	20.2	17.7	10.1	8	20.4	19.6
2010	**Sales revenues**	-4.7	6.6	10.4	3.3	-14.6	-2.3	-3.4	4.1	5.6	5.7
	Value added	3.2	-2.5	4.3	9.1	-23.7	-5.6	-4.3	1.4	1.7	-10.2
	ROA	-9.4	0.7	0.9	1.7	-4.3	0.04	-2.2	-5.8	-1.4	0.2
	Bank loans to total liabilities	39.9	23	29	15.7	34.3	33	35	27.1	74.8	37.8
	Long-term bank loans to total liabilities	18.8	12.8	14.3	11.7	11.2	14.9	24.6	17.8	56	21.6
	Short-term bank loans to total liabilities	21.1	10.2	14.7	4	23.1	18.1	10.4	9.3	18.8	16.3

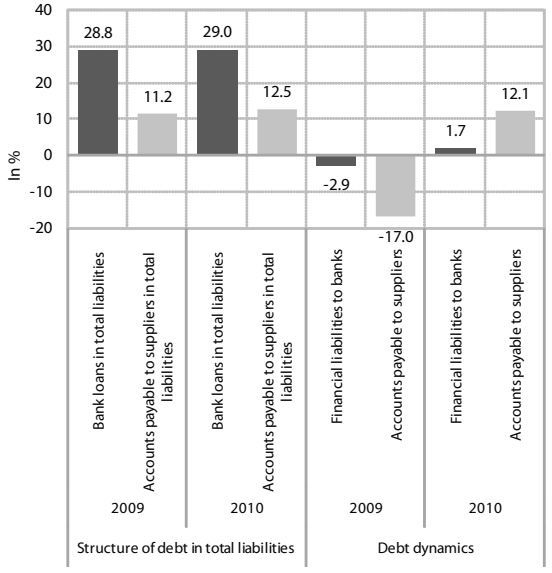
Source: AJPES; calculations by IMAD.

Note: SCA 2002: A&B: Agriculture and Fishing; C: Mining; D: Manufacturing; E: Energy; F: Construction; G: Wholesale and Retail Trade, Repair of Motor Vehicles, Certain Repair; H: Hotels and Restaurants; I: Transport, Storage and Communication; J: Financial Intermediation and K: Real Estate, Renting and Business Activities

2.3.1. Manufacturing

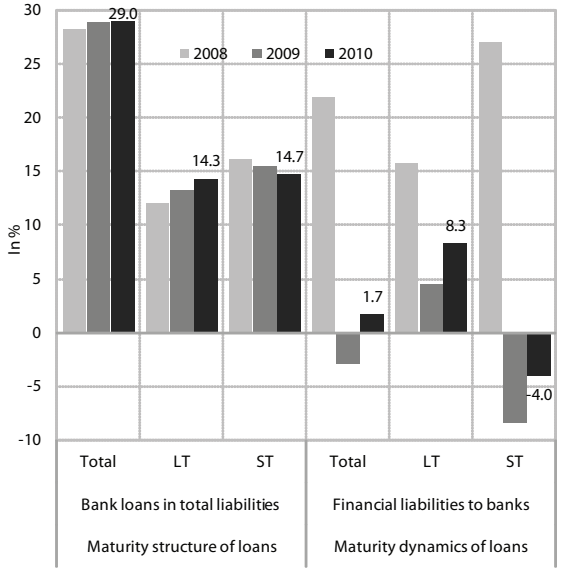
In manufacturing, the share of bank loans grew constantly throughout the entire period, but growth has slowed down considerably in recent years. Bank borrowing or financial liabilities of manufacturing towards banks continued to rise in the pre-crisis period, but with the onset of the crisis in 2009 dropped by 3% and in 2010 again rose by 2%. Accounts payable were more than one half lower and ranged around 13% during the whole period. The crisis mainly affected manufacturing, which is the most export-oriented activity, and sales revenues decreased by over one fifth in 2009. On the demand side and given the equity deficiency of enterprises, the modest manufacturing activity and restricted cash flow of manufacturing enterprises are, according to IMAD's estimates, the most important reasons for reduced bank borrowing among these enterprises.

Figure 16: **Structure of debt in liabilities and debt dynamics of manufacturing enterprises, 2009–2010**



Source: AJPES; calculations by IMAD.

Figure 17: **Maturity structure and dynamics of loans of manufacturing enterprises, 2008–2010**



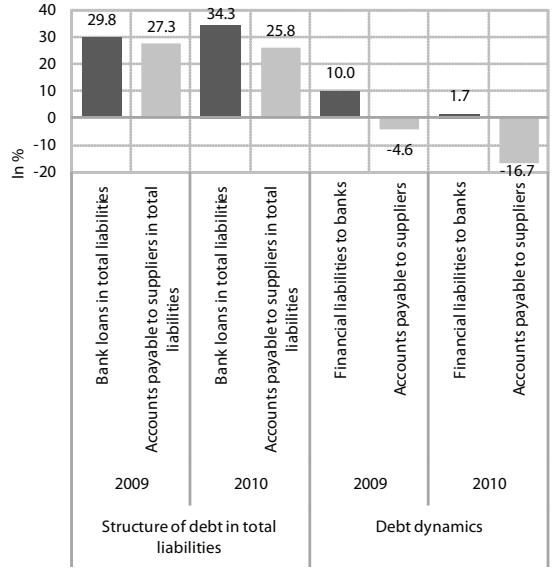
Source: AJPES; calculations by IMAD.

Along with the crisis, the maturity of loans began to change. Typical of enterprises operating in manufacturing in the whole period was a higher share of short-term borrowing, which might have been the consequence of the fact that enterprises in this sector mainly took up loans to finance their current operations. This started to change in 2009, when short-term borrowing decreased, also due to a lower volume of operations, and this trend continued also in 2010, resulting in long-term and short-term loans reaching nearly balanced levels.

2.3.2. Construction

The share of bank loans in construction was rising in 2006–2010 and accounted for nearly one third of the total liabilities in 2010. With the onset of the crisis, bank loans prevailed over accounts payable, which according to our estimates, is also a consequence of the modest activity in this industry. Compared to other activities, construction enterprises also much more often rely on accounts payable.[20]

Figure 18: **Structure of debt in liabilities and debt dynamics of construction enterprises, 2009–2010**



Source: AJPES; calculations by IMAD.

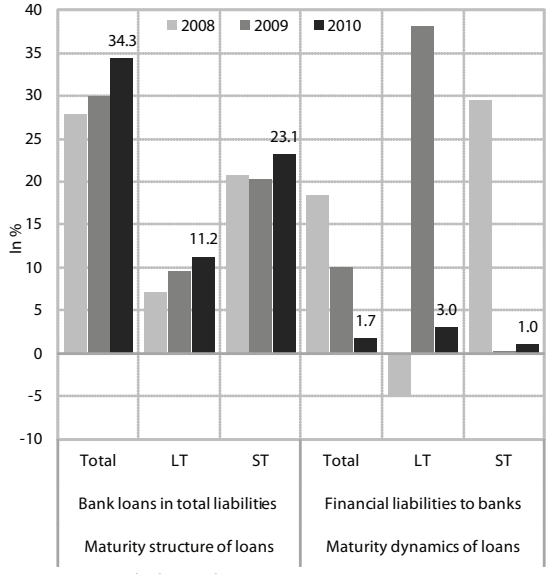
Along with the growth of the share of bank loans, the ratio between the share of financial expenses from bank loans and revenues of enterprises was also increasing

[20] We estimate that this was partially due also to the payment indiscipline which is relatively high in this industry.

throughout the analysed period (2006–2010). Thus, the steepest rise was seen in 2008 when financial expenses from bank loans increased by 61%. During the crisis, the latter first dropped (by almost 6%), while in 2010 a slight pick-up was seen (3%).

Construction is one of the rare activities whose volume of bank loans increased by more than 10% during the crisis. We estimate that this was due to further refinancing of loans of construction enterprises, even though it was becoming increasingly evident in what poor business condition they had found themselves. The maturity structure of borrowing did not change considerably with the crisis, so short-term loans continue to dominate, despite the fact that long-term loans also recorded an upturn in recent years.

Figure 19: **Maturity structure and dynamics of loans of construction enterprises, 2008–2010**



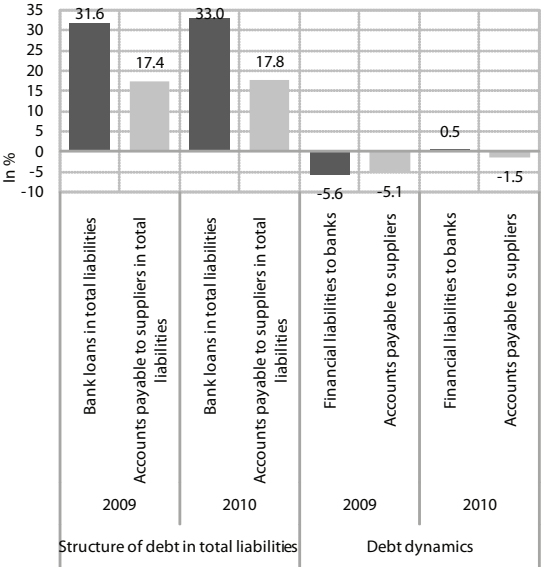
Source: AJPES; calculations by IMAD.

2.3.3. Wholesale and retail trade, repair of motor vehicles

Of all the analysed activities, during the financial crisis the share of liabilities to banks saw a slight fall only in wholesale and retail trade, and repair of motor vehicles (hereinafter trade). The decrease of bank loans (almost 6%) in 2009 was larger than in other activities, while in 2010 the growth was fairly subdued. Throughout this period, accounts payable on average accounted for 19% and decreased in the period of crisis.

The ratio between financial expenses from financial liabilities and sales revenues did not fall during the crisis period, whereas before the crisis (2006–2008) it was constantly growing. This is the consequence of the growing share of financial expenses arising from loans

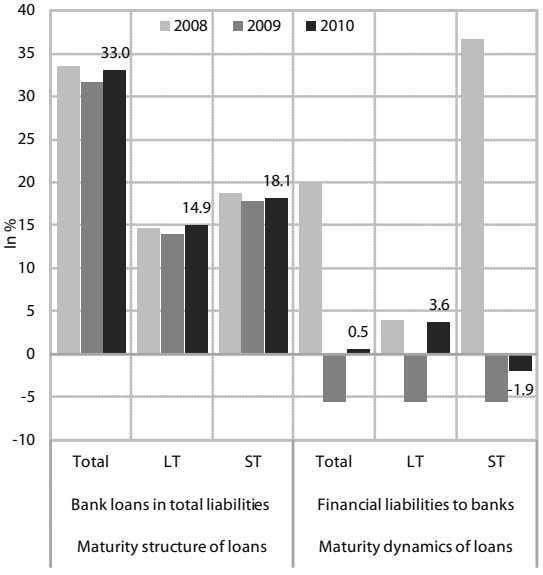
Figure 20: **Structure of debt in total liabilities and debt dynamics in enterprises operating in wholesale and retail trade, and repair of motor vehicles**



Source: AJPES; calculations by IMAD.

from enterprises within the group and the financial expenses incurred in connection with other financial liabilities, while the share of financial expenses from bank loans recorded a slight decrease. The trade also witnessed changes in the maturity structure of borrowing, but it remained different with regard to other activities. In the period before the crisis, the shares of short-term and long-term loans reached similar levels; however, in 2008 the structure turned in favour of short-term loans.

Figure 21: **Maturity structure and dynamics of loans in enterprises operating in wholesale and retail trade, and repair of motor vehicles**

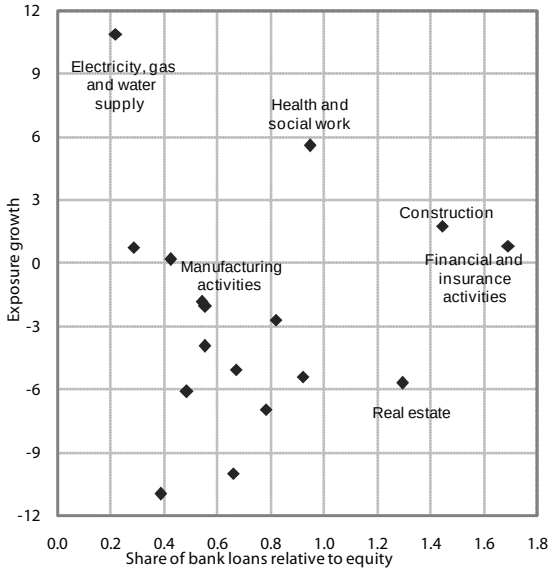


Source: AJPES; calculations by IMAD.

2.3.4. Bank borrowing by activities in 2011[21]

The exposure of the Slovenian banking system to Slovenia's economy also strengthened in 2011, yet the increase was almost four-fifths lower than in 2010. Thus, the total exposure to all economic activities rose by EUR 250 m. Banks still tend particularly to finance the least risky activities. Therefore, the rise of the total exposure is largely underpinned by the increased borrowing in public administration, defence and compulsory social security. Due to restricted access to financial resources in international financial markets, the Ministry of Finance issued over EUR 900 m of treasury bills in Slovenia. We estimate that these treasury bills were mainly bought by Slovenian banks, as this month the level of debt securities issued by domestic non-banking sectors increased by more than EUR 850 m. Thus, without the government borrowing, the exposure to other economic activities would decrease by almost EUR 540 m. Banks were reducing exposure to most of the remaining activities, while a slight increase was only seen in the exposure to electricity, gas and water supply, and financial intermediation.[22] It is however surprising that the total exposure to construction is still on the rise. This rose by over EUR 60 m in 2011; however, it accounts for less than one quarter of the rise achieved in 2010. We estimate that this could also result from the fact that particularly the main debtors in this activity further increase the delays, as the delays of over 90 days represent a nearly 50% share, despite very modest borrowing in construction.

Figure 22: **Share of financial liabilities to the banking sector and growth of exposure of the Slovenian banking system to individual economic activities**



Source: SORS, AJPES; calculations by IMAD.

Banks continued to reduce the exposure to most economic activities. For the third consecutive year, the exposure to trade recorded a decline, which in 2011 was lower by EUR 240 m than in the previous year.[23] A considerable decline (of EUR 132.9 m) in exposure was also seen in relation to transport and storage. Having declined for the second year in a row, exposure to manufacturing was more than EUR 120 m lower, recording a 35% larger drop than in 2010. Reduced exposure last year was also largely due to a decline in exposure in relation to technologically more advanced industries, such as the chemical industry and the production of computer, electronic, optical products and electrical appliances, while other groups of manufacturing industries also witnessed a strong decline in exposure to the manufacture of textile products, clothing, leather and leather products.

[21] Data on activities in 2011 are classified according to 2008 SCA and are not fully comparable with those used in the analysis on previous pages.

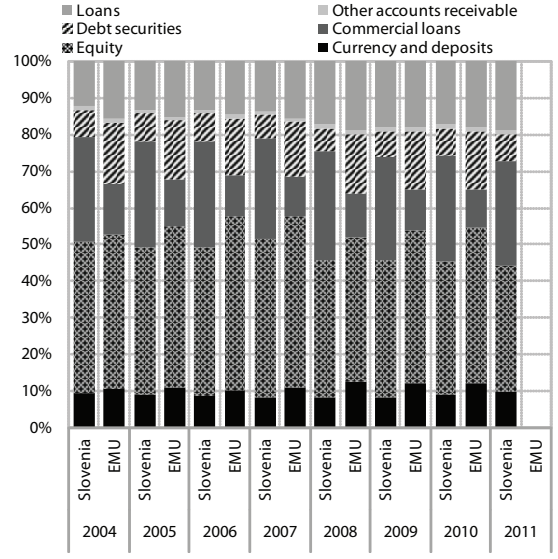
[22] Particularly the insurance activity, which is one of the least indebted sectors in the Slovenian economy.

[23] Since the end of 2008, the exposure of this activity reduced by over EUR 530 m.

2.4. Financial structure of enterprises

Compared to the euro area average, Slovenian enterprises and NFI remain financially undernourished. The share of financial assets of enterprises and NFI in Slovenia accounts for less than 60% of financial liabilities, while in the EMU it is almost 80%. The Slovenian economy has an above-average share of less liquid financial assets such as the trade credits, which (given the pervasive lack of payment discipline) threatens its liquidity even more. Conversely, the share of currency and debt securities that (provided there is a smooth functioning of the capital market) are considered to be one of the more liquid investments is much lower than in the EMU countries on average.

Figure 23: **Structure of financial assets of enterprises and NFI in Slovenia and in the euro area, 2004–2011**

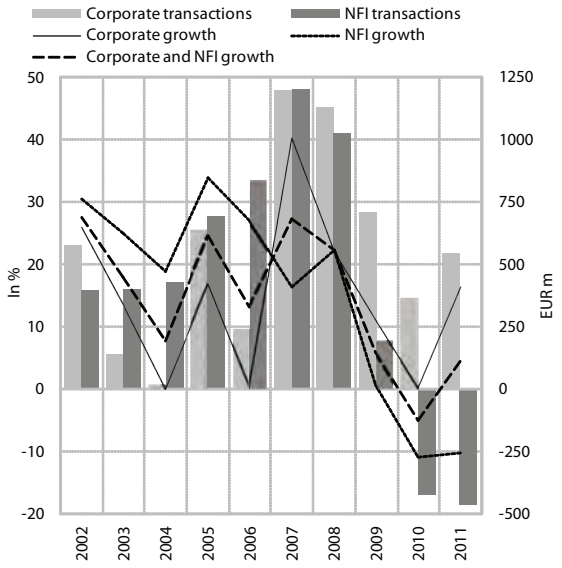


Source: BS, Eurostat; calculations by IMAD.

The share of financial assets of companies and NFI in Slovenia shrank by 3% in 2011. This decrease was largely generated by an 8.4% reduction of the value of equity, which we estimate is mainly the result of negative trends on the capital market. A considerable drop was also seen in other accounts receivable, including trade credits and advance payments. In our estimate, this is partly due to the slowdown in production activity of the Slovenian economy. However, it could also result from the poor liquidity of the Slovenian economy, due to which enterprises transferred part of their claims among loans and also converted them into other equity, since these two types of financial assets strengthened last year.

Financial assets of enterprises and NFI recorded the most significant increase in the volume of loans, which, by our estimates, was mainly due to an increased borrowing between enterprises. Given the restricted bank financing, enterprises slightly strengthened mutual financing. Thus, the volume of loans increased by more than 15%. A solid half of the growth was due to credit transactions or the actual increased indebtedness, while the rest was the consequence of value-based changes.[24]

Figure 24: **Year-on-year growth rates of loans to enterprises and NFI in financial assets**



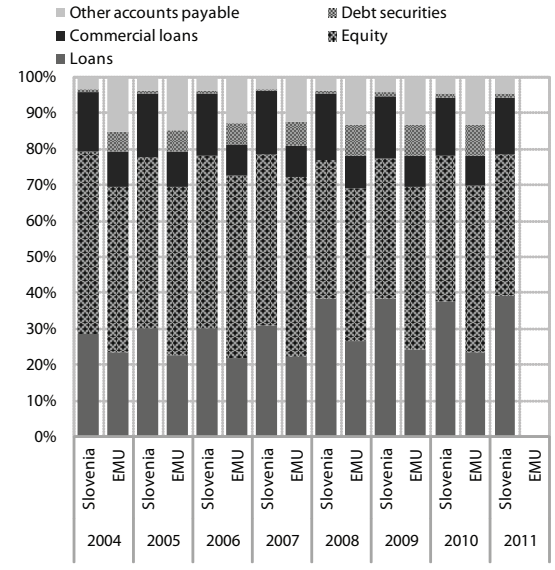
Source: BS, Eurostat; calculations by IMAD.

2.4.1. Structure of financial liabilities

The structure of financial liabilities of Slovenian enterprises deteriorated notably in 2011. The value of financial liabilities of Slovenian enterprises and NFI dropped by 3.1% or by EUR 3.3 bn. Almost three-quarters of the fall may be accounted for by lower values of shares,[25] while other equity slightly rose (by over EUR 370 m); however, this was not nearly enough to compensate for the drop in the share equity. Thus, the decline was largely felt in the volume of long-term financing resources, while it was not as pronounced as regards the short-term resources, this being primarily due to a lower level of other accounts payable, particularly trade credits and advances. However, it is surprising that the share of loans to enterprises and NFI in 2011 rose by approximately EUR 370 m, as the figures of the Bank of Slovenia indicate that the share of bank loans to enterprises and NFI shrank by almost EUR 1 bn in that period. As mentioned in the previous subchapter, we estimate that, in addition to foreign financing growth, business-to-business financing also grew stronger last

[24] Slovenian Railways was divided into passenger transport, infrastructure and freight transport. Bank loans raised by Slovenian Railways were then distributed among these enterprises as the Slovenian Railways' loans to subsidiaries, which was shown in the value-based changes.
[25] Those listed and those not listed on the stock exchange.

Figure 25: **Structure of financial liabilities of enterprises and NFI in Slovenia and in the euro area, 2004–2011**



Source: BS, Eurostat; calculations by IMAD.

year, thus at least partly compensating for the shortfalls in domestic banks' financing and alleviating the liquidity problems of Slovenian enterprises.

2.4.2 Foreign sources of corporate financing

The International Investment Position of Slovenia shows that in terms of corporate financing, a significant share is held by liabilities of 'other sectors', including enterprises, and those foreign liabilities of banks which are potentially the source of loans to enterprises; these are debt securities (bonds and notes), loans, currency and deposits, and other liabilities (Table 3). The volume and trends of foreign sources of corporate financing are examined by means of analysis of Slovenia's international investment position in 2002–2011.

By 2008, the total, actual and potential (through banks) amount of foreign sources of finance was rising markedly (in 2002–2008 it increased by almost 3.3

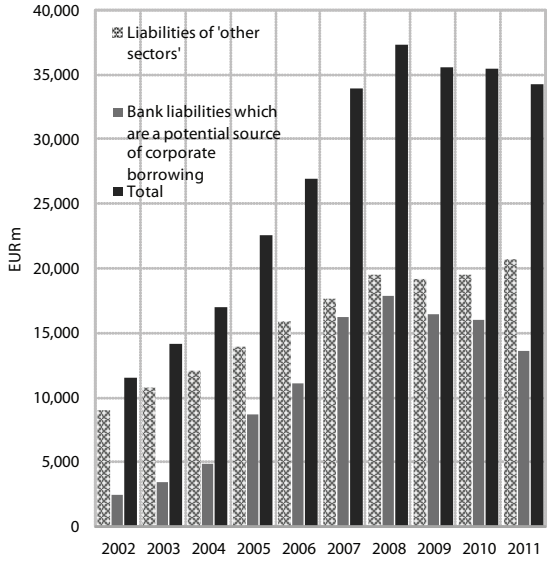
Table 3: **Liabilities of 'other sectors' and those bank liabilities which are the source of loans to enterprises in Slovenia's international investment position – liabilities by items, in EUR m**

EUR m	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
LIABILITIES OF 'OTHER SECTORS' - Total	9,052.6	10,731.9	12,101.5	13,974.8	15,902.7	17,707.6	19,489.4	19,159.6	19,498.5	20,730.5
FDI IN SLOVENIA	3,308.6	4,367.5	4 871	5,427.9	5,795.8	8,547.1	9,787.2	9,053.5	9,342.5	10,172.1
Equity and re-invested profits	2,974.2	3,917.7	4,301.6	4,901.7	5,256.7	5,558	6,023.7	5,955.9	6,068.9	6,230
Net liabilities to affiliated enterprises	334.4	449.8	569.4	526.2	539.1	2,989.1	3,763.5	3,097.6	3,273.6	3,942.1
INVESTMENTS IN SECURITIES	96.4	233.7	185.9	274.6	620.8	1 215.6	544.3	849.4	894	869
Equity securities	74.8	205.4	176.2	261.3	604.1	1 209.4	540.5	578.3	643.9	628.4
Debt securities – bonds and notes	21.6	28.3	9.7	13.3	16.7	6.2	3.8	271.1	250.1	240.6
TRADE CREDITS	1,730.3	1,693.5	1,878.9	2,855.2	3,337	3,855.5	4,018.7	3,429.4	3,748.3	3,931.1
LOANS	3,831.7	4,346.8	5,063.8	5,319.5	5,980.9	4,057.9	5,102.5	5,693.7	5,379.6	5,610.2
OTHER LIABILITIES	85.6	90.4	101.9	97.6	168.2	31.5	36.7	133.6	134.1	148.1
BANK LIABILITIES AS A POTENTIAL SOURCE OF CORPORATE BORROWING - Total	2,425	3,445.4	4,854.4	8,643	11,019.1	1,6216.4	17,886.5	16,414.2	16,013.2	13,557.7
Debt securities – bonds and notes	19.6	33.4	221.4	336.3	331.8	352.7	436.9	2,033	2,771.7	2,567.8
Loans	1,633	2,284.3	3,255.5	5,929.6	7,354.6	11,374.9	12,704.7	9,740.2	9,127	7,678.2
Currency and deposits	662.3	1,063.6	1,286.8	2,312.6	3,286.5	4,450	4,701.3	4,621.8	4,106.4	3,307.5
Other liabilities	110.1	64.1	90.7	64.5	46.2	38.8	43.6	19.2	8.1	4.2
TOTAL	11,477.6	1,4177.3	16,955.9	22,617.8	26,921.8	3,3924	37,375.9	35,573.8	35,511.7	34,288.2

Source: BS.

times), but recorded a fall later on. This fall was entirely due to a decrease in bank loans to enterprises arising from foreign sources of finance, while direct foreign sources of finance for enterprises continued to increase, yet the dynamics slowed down significantly. The total amount of foreign sources of corporate financing reflected in foreign liabilities of 'other sectors' was constantly rising during 2002–2008, while in 2009 it recorded a slight decrease, but quickly recovered, which shows that enterprises still acquire foreign sources of financing. However, the foreign liabilities of the banks that represent the potential source of corporate loans reveal a different picture. After rising rapidly until 2008, these liabilities began to slow down, suggesting that this potential source of corporate financing is declining. A significant drop was seen also in 2011, when the foreign sources of corporate finance had already improved considerably. Therefore, the total, actual and potential amount of foreign sources of corporate financing declined after 2008, solely due to the decrease in the part of foreign finance that comes to enterprises by bank intermediation, while foreign direct corporate financing continued to increase, particularly in 2011 (Figure 26).

Figure 26: **Liabilities of 'other sectors' and those bank liabilities which are the potential source of loans to enterprises in Slovenia's international investment position in 2002–2011 – total**



Source: BS.

The most important among foreign sources of corporate financing is foreign direct investment (FDI), followed by loans. At the end of 2011, FDI accounted for 49.1% of the total foreign sources of finance of 'other sectors', whereby 30.1% thereof was held by equity capital and reinvested earnings and 19.0% were net liabilities of Slovenian subsidiaries to their parent enterprises arising from intra-company loans. The next 27.1% was held by loans and 19.0% by commercial credits. Only a modest 4.2% of foreign financing was related to investments in securities, of which 3.0% was equity securities and 1.2% debt securities (Table 4). If data on direct foreign sources of corporate financing also included those that come to enterprises by the intermediation of domestic banks, the dominant form of foreign finance inflows would come from loans.

During the crisis, the equity capital in FDI achieved the best results among foreign sources of financing of 'other sectors', and after the initial fall, also the net liabilities to affiliated enterprises and trade credits rose above the pre-crisis level. In 2009 (i.e. during the crisis), the value of debt securities increased strongly, yet this was a one-time increase and remains at a modest level. The lowest figures during crisis were seen in loans and equity securities. Following a rapid and dramatic fall – loans in 2007 and equity securities in 2008 – they have not recovered to date and remain below the pre-crisis level. Figures 27 and 28 show trends in the value and

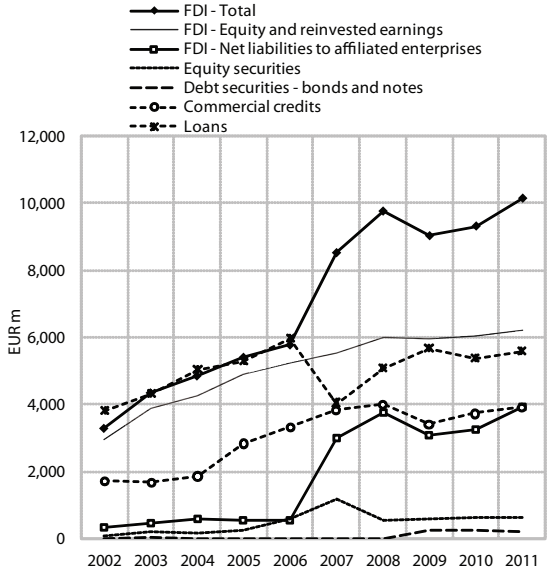
Table 4: **Stock of international investments of 'other sectors' of Slovenia – liabilities by items, end of 2011**

	EUR m	%
LIABILITIES OF 'OTHER SECTORS' - Total	20,730.5	100.0%
FDI IN SLOVENIA	10,172.1	49.1%
Equity and re-invested profits	6,230.0	30.1%
Net liabilities to affiliated enterprises	3,942.1	19.0%
INVESTMENTS IN SECURITIES	869.0	4.2%
Equity securities	628.4	3.0%
Debt securities – bonds and notes	240.6	1.2%
TRADE CREDITS	3,931.1	19.0%
LOANS	5,610.2	27.1%
OTHER ACCOUNTS RECEIVABLE	148.1	0.7%

Source: BS.

structure of foreign liabilities to 'other sectors'. The most evident characteristic of the values of flows in Figure 27 is the significant increase in the liabilities from FDI after 2006. This increase, which is only to a small extent due to the higher value of equity capital and reinvested earnings, is largely the result of the increased net liabilities of Slovenian enterprises to affiliated enterprises, i.e. the increased intra-company loans to Slovenian subsidiaries. The increase was primarily due to the methodological change, which extended the statistical monitoring of such intra-company loans from foreign parent enterprise to all enterprises within the system of the parent enterprise. The value of loans recorded a strong drop in 2007 and has not recovered since. The value of trade credits and net liabilities to affiliated enterprises saw a slight decline no earlier than in 2009, but have already attained their pre-crisis levels. Throughout this period, the values of equity and debt securities remain at modest levels, whereby the value of equity securities witnessed a dramatic fall in 2008, ranking somewhere at the middle of the value achieved in 2007, while the value of debt securities rose markedly in 2009 and later remained unaltered (Figure 27).

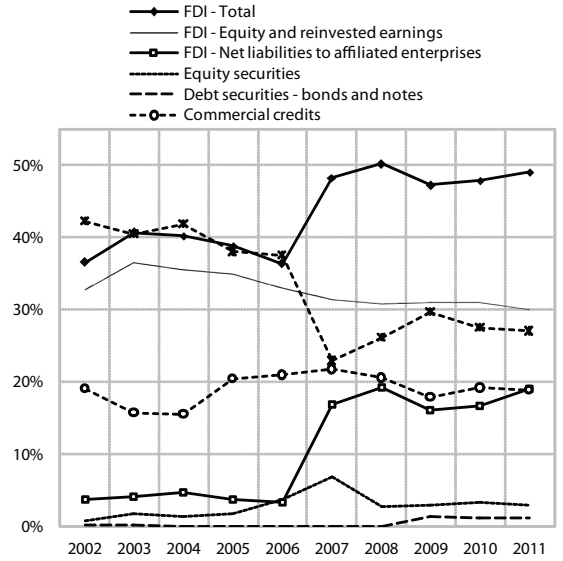
Figure 27: **Value of liabilities of 'other sectors' Slovenia's international investment position – liabilities by items, 2002–2011**



Source: BS.

The main characteristic of foreign sources of corporate financing in Slovenia is that the volume of direct foreign financing of enterprises in 2011 surpassed the pre-crisis level, with only foreign loans still lagging behind. However, the foreign liabilities of banks, which represent the potential source of loans to enterprises, i.e. mainly those foreign sources of corporate financing acquired by intermediation of domestic banks, are still well behind the pre-crisis level. Despite this divergent fluctuation of the values of individual forms of foreign sources of

Figure 28: **Structure of liabilities of 'other sectors' in Slovenia's international investment position – liabilities by items, 2002–2011**



Source: BS.

corporate financing – with due consideration of the impact of methodological change in the monitoring of intra-company loans between associated enterprises in the framework of FDI, which not only increases the share of this component, but also decreases the shares of other components – the structure of these sources remains relatively stable (Figure 28).

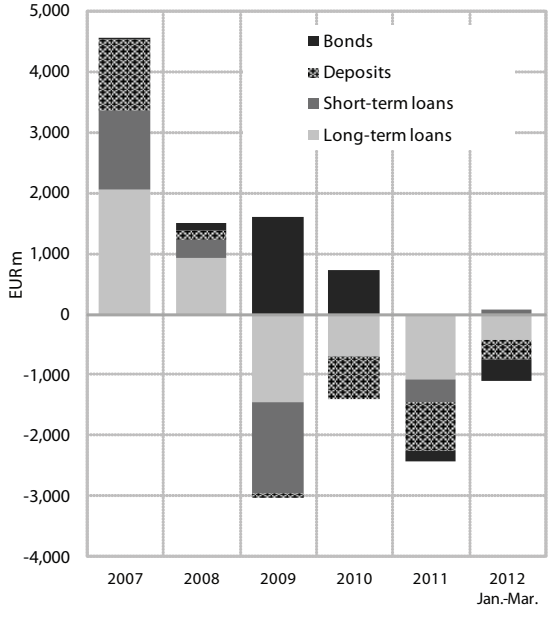
3. Bank sources

With the worsening of the debt and financial crisis, the offer of bank sources continued to shrink also in 2011. Banks' total assets in Slovenia decreased for the second consecutive year, this time by EUR 1.5 bn, to EUR 48.8 bn, which was the sharpest decline so far. A possibly steeper decline was prevented by the ECB, which by the end of the year adopted a package of non-standard measures, among which the most important were two operations of long-term refinancing with a three-year maturity. Thus, at the first auction, Slovenian banks obtained funds in the amount of nearly EUR 900 m. On the other hand, in 2011 when state guarantees for bank borrowing abroad were no longer applicable, net repayment of foreign liabilities rose significantly. State deposits recorded modest net inflows and a slowdown was also observed as regards the inflows of household deposits in banks.

3.1. Foreign sources

Last year, domestic banks strongly stepped up net repayment of foreign liabilities.[26] Net repayments totalled EUR 2.4 bn and were higher than in 2009 and 2010 in total. The majority of net repayments concerned repayments of foreign loans equalling EUR 1.5 bn, almost twice as much as in 2010, of which nearly three quarters came from net repayment of long-term loans. Lower net repayment than in 2010 was recorded only by foreign bank deposits.

Figure 29: **Net flows of foreign sources in the Slovenian banking system between 2007 and the first quarter of 2012**



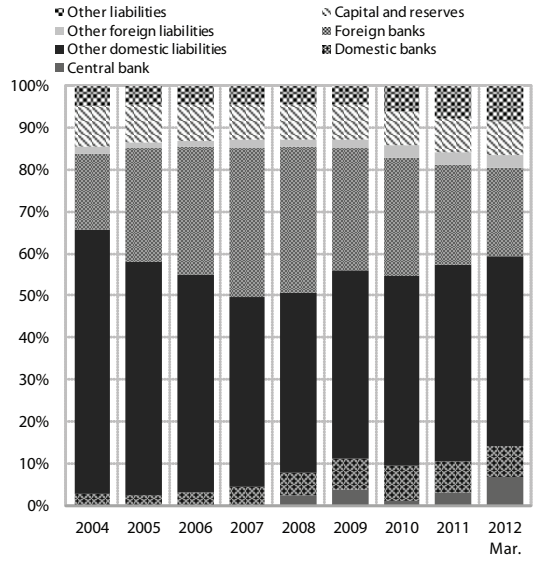
Source: BS.

[26] Foreign loans, deposits and bonds.

After a part of matured foreign liabilities had been refinanced in 2009 and 2010 with bond issues based on state guarantees, in 2011 such type of borrowing was no longer in play. Only the SID Bank still borrowed by issuing bonds, in the amount of EUR 350 m guaranteed by the state pursuant to the Slovenian Export and Development Bank Act (Official Gazette of the RS No. 56/2008), whereas other banks decreased borrowing by bonds. Total net repayment thus equalled EUR 162.1 m.

In the first quarter of 2012, banks further increased net repayment of foreign liabilities. Net repayments thus totalled EUR 1.1 bn and were equally distributed among loans, deposits and bonds, ranging between EUR 330 and 380 m. Some major differences were however observed in net repayment of loans owing to the rise of short-term borrowing and positive net flows amounting to just under EUR 60 m, while similarly to other bank liabilities an upward trend was recorded in net repayments of long-term loans.

Figure 30: **Structure of bank sources between 2004 and 2012**



Source: BS; calculations by IMAD.

The banking sector's dependency on foreign sources of finance significantly decreased but nevertheless remained high. Only in 2011, following the decline in total assets, did the share of liabilities towards foreign banks decrease, by nearly 5 percentage points to 23.8%. In the same period, their volume decreased by 17.0%, reaching just above EUR 12 bn. Nevertheless, liquidity pressures remain significant. In this year alone, about one third of the banks' foreign liabilities will fall due. Financial market insecurity is the main reason for the banks financing a large part of liabilities due only with short-term borrowing, which increases the concentration of maturing liabilities to foreign banks and raises the liquidity pressures on the Slovenian banking system.

According to the Bank of Slovenia, the share of liabilities to foreign banks due within one year dropped to 28.4% by the end of March as a result of the high net repayments of foreign liabilities in the first quarter of the year. A solid fifth of liabilities falls due within one to three years. The rest, about a half of the total liabilities to foreign banks, falls due within a period longer than three years, i.e. upon the completion of the three-year operations of long-term refinancing by ECB, which will again increase the pressures for refinancing the Slovenian banking system.

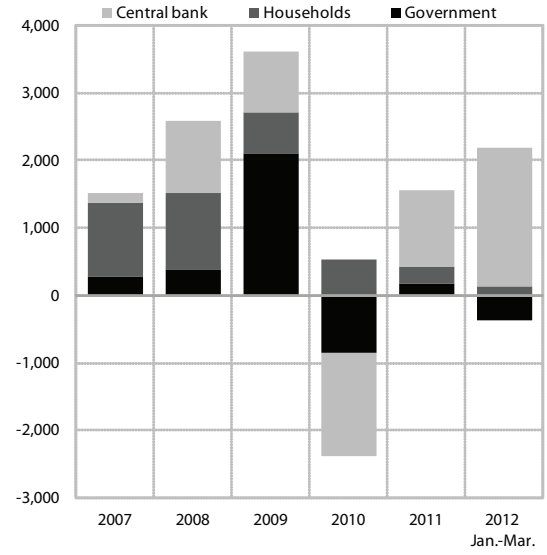
3.2. Domestic sources and sources of the euro system

Domestic sources of finance to banks remain rather limited as well. Owing to unfavourable conditions on the labour market and great uncertainty, the inflows of household deposits remain modest. The fierce public finance crisis limits the state's liquidity support to the banking system. Pressures on the liquidity of the Slovenian banking system were significantly reduced at the end of 2011 and the beginning of 2012 only by the ECB, which provided long-term assets with which Slovenian banks will be more likely to repay matured liabilities, which to IMAD's estimates will mitigate the further decline in the banks' lending activity.

In 2011, household deposits in banks recorded the smallest growth since comparable data have been available.[27] Their rise thus equalled EUR 257.6 m and was over 50% less than in the previous year. The maturity structure of deposits slightly improved, yet the increase of long-term deposits slowed down considerably, reaching only 30% of the highest level achieved the year before. The increase of overnight deposits went down by almost a half. Short-term deposits recorded a downward trend for the third consecutive year. The situation on the labour market does not seem to be improving, and it cannot be expected that the inflows of household deposits into the banking system will increase significantly.[28] This leaves the banks further dependent on other sources of finance. Despite a slight rise recorded in the first quarter of the year, net inflows of household deposits remain relatively modest.

The volume of government bank deposits grew in 2011 but growth was rather modest. At the onset of the crisis, the government stepped up borrowing abroad and invested these funds into banks, thus buffering liquidity pressures on the Slovenian banking system. The worsening of the crisis enhanced the pressures on public finances, resulting in the government recently taking up loans mainly to cover its own needs. New borrowing in 2011 amounted to approximately EUR 4 bn, with state

Figure 31: **Increase of government and household deposits and liabilities towards the central bank in the Slovenian banking system between 2007 and 2012**



Source: BS; calculations by IMAD.

deposits in banks rising for just above EUR 170 bn. Such a rise was due to the increase of short-term and overnight deposits. The maturity structure of state deposits thus recorded a slight deterioration. In the first quarter of 2012, the volume of state deposits went down by over EUR 350 m, although in this period the government borrowed by issuing treasury bills in the amount of nearly EUR 700 m.[29]

Owing to the expansion of the debt crisis and the tough conditions on financial markets, at the end of last year the ECB again adopted non-standard measures. The main measure involved two operations of long-term refinancing with a three-year maturity, allowing the banks to access (with adequate insurance) long-term sources of finance. In fact, the offer of funds on interbank markets shrank considerably as a result of increased mistrust, which put additional pressure on banks in terms of refinancing matured liabilities, while lending activity in the euro area also slowed down sharply. Banks in the euro area were provided over EUR 1000 bn of three-year funds. At the above two auctions, Slovenian banks obtained long-term financing in the amount of approximately EUR 3 bn. Nevertheless, it cannot be expected that these funds will significantly stimulate the lending activity of Slovenian banks. The funds were party used to repay matured liabilities towards foreign banks while the rest was deposited on the accounts of the central bank and of commercial banks abroad and saved to repay liabilities due in the future. Another part of funds was invested in short-term state securities that banks can use as collateral for ECB refinancing in the event of liquidity needs.

[27] Since 2005.

[28] Great uncertainty in some countries of the euro area has caused a considerable outflow of deposits from banks in the last months.

[29] The matured bond in the amount of EUR 1 bn was repaid in February.

4. Risks to the lending activity

In the past year, some of the risks slowing down lending activity already materialised but remain a potential risk factor for the lending activity in Slovenia. The risks are on the side of both supply and demand, where they further increased as a consequence of deteriorated conditions in the economy. Risks on the supply side include: (i) reduced possibilities to refinance matured liabilities, (ii) further deterioration of the quality of bank assets and the related creation of bank impairments and provisions, (iii) low capital adequacy of banks, which reduces their possibility of obtaining fresh sources of finance and prevents them from assuming additional risks. On the side of demand, the most explicit are (i) the over-indebtedness of Slovenian enterprises, (ii) low economic activity, and (iii) uncertain situation on the labour and real estate markets.

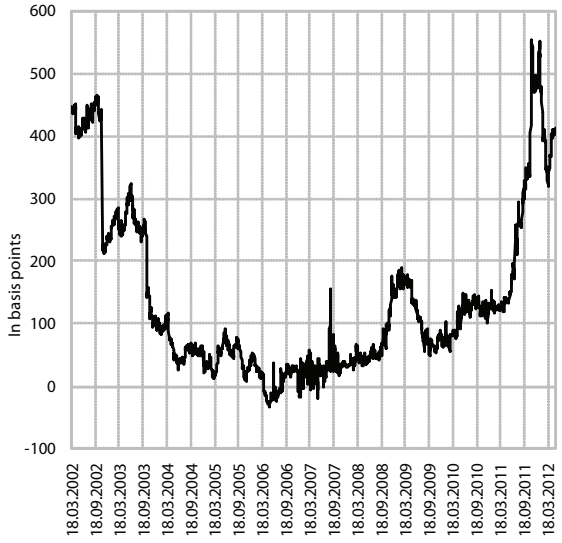
4.1. Reduced possibilities to refinance matured liabilities

The risk of refinancing was significantly reduced by the ECB providing long-term sources of finance. Thus, more than EUR 3 bn of liabilities to foreign banks will fall due in the next three years. Based on the data provided by the Bank of Slovenia (balance sheets of other monetary financial institutions), it is estimated that the banks have sufficient reserves to repay the liabilities due in such period. ***However, n***ew major liquidity pressures can be expected from 2015 onwards, unless the situation on international financial markets and in the Slovenian banking system stabilises.

Currently, the access of Slovenian banks to market sources of finance is heavily limited. The situation further deteriorated at the end of the third quarter of 2011, when the credit ratings for Slovenia[30] ***and some Slovenian banks began to downgrade.*** This also reflected in the yield-to-maturity of Slovenian government bonds, which in the following months, also due to the general aggravation of the debt crisis, rose considerably. This eventually tightened the conditions for the borrowing of Slovenian banks.

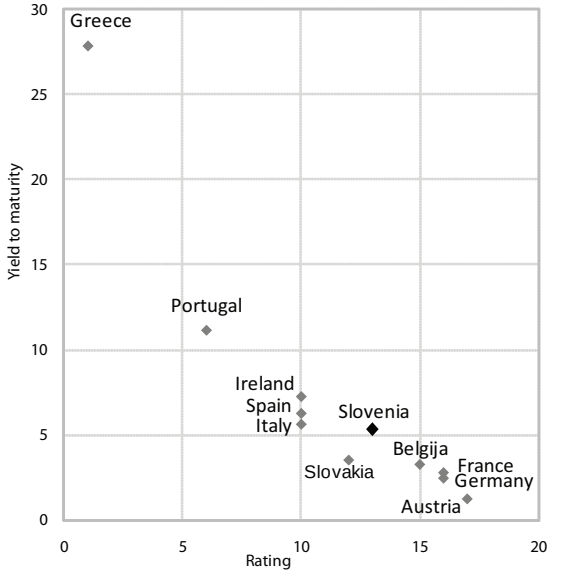
The aggravation of the debt crisis in individual Member States significantly increased the uncertainty on international financial markets. Thus, the spreads of yields-to-maturity of Slovenian and German bonds oscillated considerably. In the first half of 2012, the spreads to German bonds ranged between 320 and 550 basis points and were about ten times higher than prior to the financial crisis. This was largely due to much higher requirements for yields-to-maturity of Slovenian bonds, as well as to the uncertainty on the financial markets that increased the demand for the least risky securities, so that yield to maturity of the German bonds reached historical lows.

Figure 32: **Spread of Slovenian and German 10-year bonds**



Source: EUROSTAT, Bloomberg.

Figure 33: **Correlation between S&P ratings and yield to maturity for state bonds on 15 May 2012**



Source: S&P, Bloomberg.

Note: 17 on the x-axis means the best rating (AAA), while 1 means a rating of CCC, achieved by Greece in May.

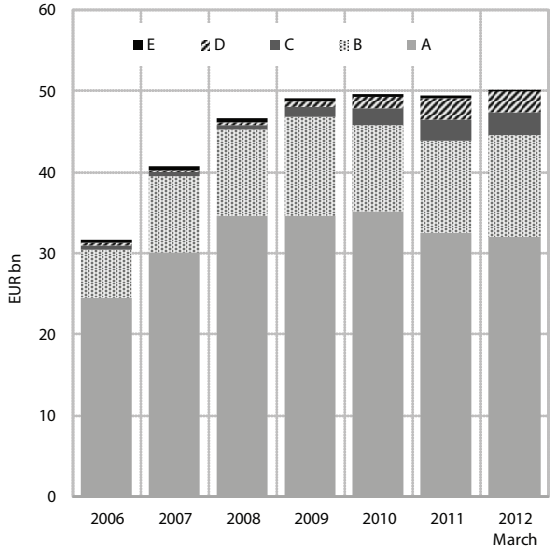
[30] One of the main reasons for downgrading was the situation in the Slovenian banking system. Other reasons included poor public finance conditions, slow introduction of structural reforms, and the impact of the repayment of loans by enterprises on the banking sector (Caprirolo, 2012, p. 19).

Financial markets rank Slovenia among the most risky countries of the euro area. Its current rating is A+[31] (one notch better than Slovakia), yet yield to maturity of Slovenian bonds was nevertheless more than 180 basis points higher and comparable with Italy and Spain, whose ratings are three notches below Slovenia's. Besides the reduced liquidity, the high yield to maturity of Slovenian state bonds can also be attributable to the untrustworthiness of its fiscal policy, barriers in adopting structural reforms, political inconsistency, and the often unconvincing communication of economic policymakers (Jesenko et al., 2012).

4.2. Deterioration of the quality of bank investments

Last year, the quality of bank assets continued to deteriorate at a similar pace as in 2010. The total volume of bad claims rose by almost two fifths, which was nearly 50% less than in 2010, yet such a slower rise was largely due to a higher base since net inflows of bad claims (C, D and E ratings together), totalling over EUR 1.5 bn, lagged only slightly behind the volume of net inflows recorded in 2011. At the end of December, the share of bad claims was already 11.2% of the total claims of the banking sector. The increase is attributable to the reduced quality of bank claims and to a minor extent to the repayment of debts by creditworthy borrowers, while new borrowing is rather modest. The volume of claims with a rating of A shrank by EUR 2.5 bn, whereas total exposure was down by EUR 300 m.

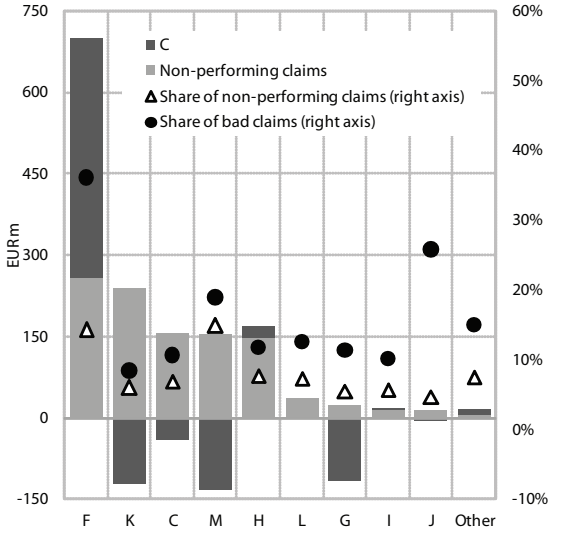
Figure 34: **Volume of claims by individual ratings between 2006 and 2012**



Source: BS; calculations by IMAD.

Nearly 85% of the total increase of bad claims resulted from the worsening of the quality of foreign claims and of claims related to construction, foreigners and transport and storage activities. These three segments saw a significant deterioration compared to the year before, whereas the worsening of the quality of claims related to financial and insurance activities, also recording a relative increase of bad claims, slowed down compared to 2010. In manufacturing, the decrease in the quality of claims was similar to the 2010 level. At the end of 2011, bad claims totalled EUR 5.5 bn; over 50% were claims with ratings D and E, while the inflows of claims with rating C had been slowing down throughout the year mainly because of high outflows into lower ratings.

Figure 35: **Increase of non-performing claims and claims with rating C and their share in the total bank exposure by economic activities in 2011**



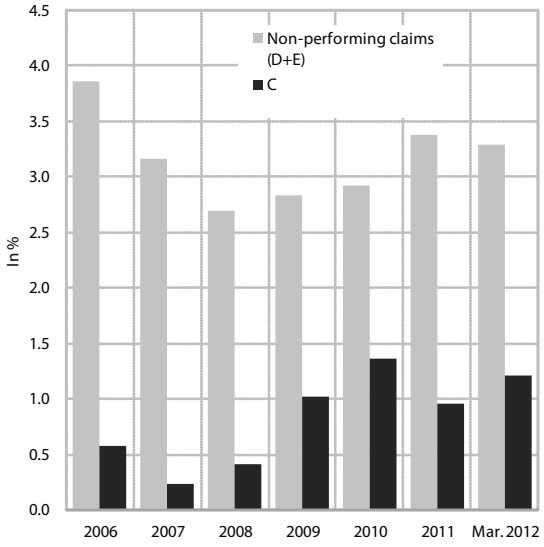
Source: BS; calculations by IMAD.

Note: F – construction, K – financial intermediation, C – manufacturing, M – professional, scientific and technical activities, H – transport and storage activities, L – real estate activities, G – wholesale and retail trade, motor vehicle repair, I – accommodation and food service activities, J – informatics.

In the past year, the quality of claims on households slightly worsened. Nevertheless, households are still among the least risky bank clients. Around 96% of all claims have ratings A and B (the share of claims with rating B rose from 1.7% to 10.4%), and 3.4% are non-performing claims. The share of non-performing claims on households is lower than in 2006; these claims recorded a slight increase in the past year but are nevertheless rising more slowly than in economic activities (Figure 36). The share of claims with rating D grew considerably, while the share of those with rating E decreased. The share of bad claims stays at the 2010 level and is similar as in 2006.

[31] S&P rating.

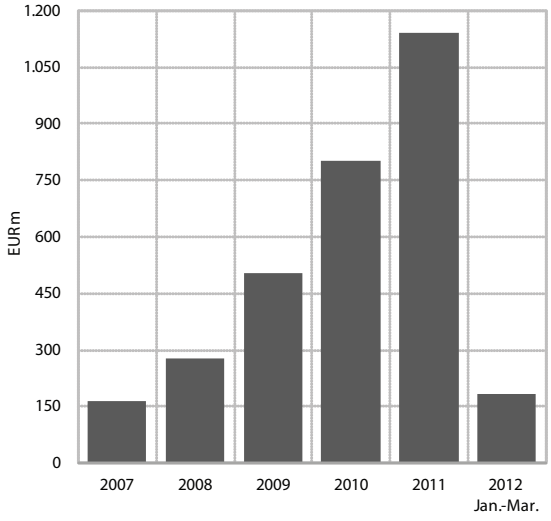
Figure 36: **Share of non-performing claims and claims with rating C among households, in %, 2006–2012, end of the period**



Source: BS; calculations by IMAD.

Given the rapid deterioration of the quality of bank assets, in 2011 the banks intensified the creation of additional provisions and impairments, which amounted to EUR 1.1 bn and was more than two fifths above the 2010 level. The intense creation of provisions and impairments was also a major reason for the worst business results of the Slovenian banking system ever, which in 2011 recorded a loss of nearly EUR 440 m. By the end of last year, impairments rose to EUR 3.2 bn. They increased by more than a third compared to 2010; according to IMAD's estimates, by the first quarter of 2012 impairments totalled EUR 3.4 bn.

Figure 37: **Creation of additional impairments and provisions in the Slovenian banking system between 2006 and 31 March 2012**

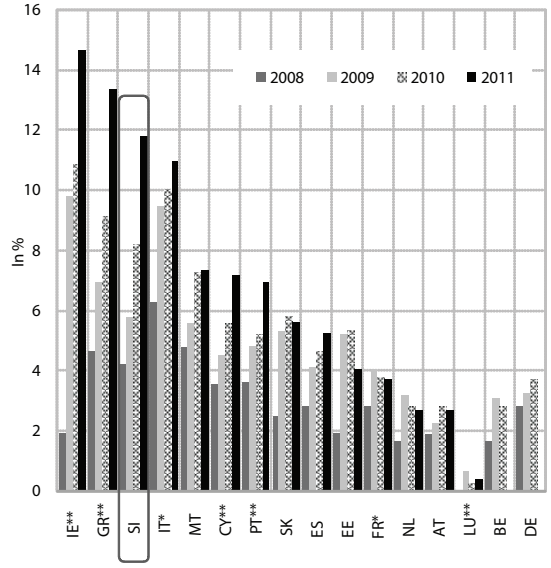


Source: BS; calculations by IMAD.

In the first quarter of the year, the quality of bank claims deteriorated further. The total volume of bad claims thus rose by 8.5% and came very close to EUR 6 bn, thus accounting for 11.8% of the total exposure of the Slovenian banking system, which is the highest share since data have been available (1995). More than a half of the increase was due to the accelerated growth of non-performing claims, while claims with rating C stayed close to the 2010 level. The quality of bank assets still records an above-average rapid deterioration in construction and in activities related to buyouts, as well as in manufacturing owing to the heavy rise of bad claims in the manufacture of transport equipment amounting to EUR 66.9 m.[32] With the deteriorating quality of the bank assets, the banks accelerated the creation of additional impairments and provisions which amounted to EUR 181.7 m, which was 50% more than in the same period last year.

The unfavourable situation in the Slovenian banking system is indicated also by the international comparison of the shares of non-performing loans,[33] ranking Slovenia among euro area members[34] with the largest share of such loans. In 2011, the share of non-performing loans further grew while in the countries with lower shares of non-performing loans than Slovenia their increase was much less accentuated, even showing a downward trend in some countries.

Figure 38: **Share of non-performing loans in individual countries of the euro area between 2008 and 2011 (in %)**



Source: BS, IMF – financial soundness indicators.
Note: *Data for q2 2011, **Data for q3 2011.

[32] Slightly more accentuated (around EUR 15–30 m) was the increase of non-performing claims in wholesale and retail trade and repair of motor vehicles, real estate activities, and professional, scientific and technical activities.

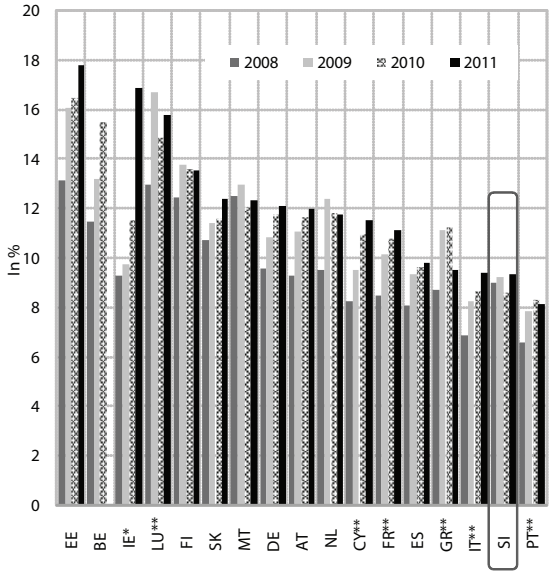
[33] According to internationally comparable data based on IMF methodology, non-performing claims comprise claims with a delay of over 90 days while the Bank of Slovenia includes claims where the share of impairments and provisions exceeds 40%.

[34] No data for Finland.

4.3. Capital adequacy of banks

Research shows[35] that during the financial crisis the impact of the banks' capital adequacy on their lending activity is increasing. In such instable times, the providers of financial assets are much more cautious as regards the capital adequacy of banks and their capacity to absorb potential losses. The banks with low TIER 1 capital compared to their risk-adjusted assets have less possibility of accessing fresh sources of finance and obtaining resources under less favourable terms than the banks that are strong in capital, which slows down their lending activity.

Figure 39: **Tier 1 capital adequacy in the EU and in selected members of the euro area between 2008 and 2011 (in %)**



Source: BS, IMF – financial soundness indicators.

Note: *Data for q2 2011, **Data for q3 2011.

The low capital adequacy of the Slovenian banking system is thus one of the main reasons for the banks' limited access to market sources of finance. Measured by the Tier 1 capital adequacy ratio, the Slovenian banking system ranks among the less capitalised banking systems of the euro area. Ever since the worsening of the crisis in 2008, the capital adequacy compared to most other EMU members did not pick up significantly,[36] which points to a very low responsiveness of Slovenian banks' owners whose passive attitude additionally deepens the problems of the Slovenian banking system and, indirectly, of the Slovenian economy.

[35] See e.g.: Gambacorta and Marques-Ibanez, 2011.

[36] Between 2008 and 2011, capital adequacy decreased only in Malta, whose banking system is nevertheless one of the most capitalised in the EMU.

The low capital adequacy of the Slovenian banking system further reflects in the results of the stress tests published by the European Banking Authority (EBA). In Slovenia, these tests involved two banks which, considering the volume of Tier 1 capital, at the end of 2010 ranked in the lower third of all tested banks. NLB even had the fifth lowest score. By the end of April last year, both banks were provided capital injections in the total amount of over EUR 350 m[37] that improved their capital position and thus the results of the stress tests, which they both successfully passed, but NLB nevertheless needs to further enhance its capital position. Capital injections are planned also for NKBM and some minor banks. Limited access to fresh capital and lower capital adequacy are problems faced mainly by those Slovenian banks that are not strategically linked with large foreign bank groups that could support them with sufficient capital to finance their operations. If low capital adequacy persists and the reduction of Slovenian banks' ratings continues, it can be expected that loans in the Slovenian economy will further shrink and that the already high active interest rates will grow even more.

4.4. Slow economic activity and over-indebtedness of the Slovenian economy

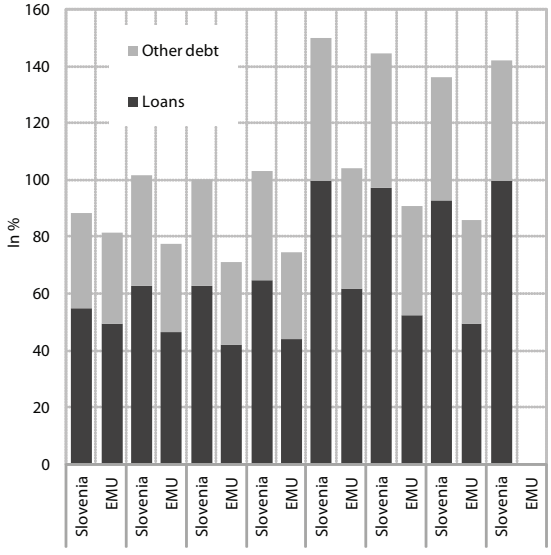
The slowdown of economic activity in 2011 increased the risks related to lending activity. The companies' business results are in fact under heavy pressure, with shrinking cash flow further enhancing the risks of non-payment of matured liabilities towards banks. The banks estimate that demand for loans slowed down parallel with economic activity. According to the Bank of Slovenia, the decline in demand was heavier than in the euro area. Slovenian banks also tightened lending terms, yet considerably less so than in 2008 and 2009. The decrease was largely due to lower demand for investment loans. In 2012, another slowdown of economic activity is expected, together with further deceleration of corporate demand for investment and current production financing.

Slovenian enterprises and NFI are among the most heavily indebted in the EMU, which additionally reduces their access to sources of finances. Heavy indebtedness is, among other things, a result of the irresponsible management of enterprises, since borrowing was not intended to finance development projects providing higher value added but rather to finance ownership consolidation with no synergies whatsoever. In 2011, indebtedness began to rise again and came close to the highest level recorded in 2008. The volume of loans to enterprises and NFI thus accounted for 99.8% of their equity, which is one of the highest levels in the euro area. The rise of debts of enterprises and NFI was primarily a

[37] NLB: EUR 250 m, NKBM: over EUR 100 m.

consequence of the considerable decrease of equity that was down by a solid 5%, largely due to negative trends on the capital markets. In contrast, the volume of loans increased by almost one percent, which additionally raised the value of the indicator of corporate and NFI borrowing.

Figure 40: **Share of corporate and NFI borrowing relative to the volume of equity in Slovenia and the euro area between 2004 and 2011**



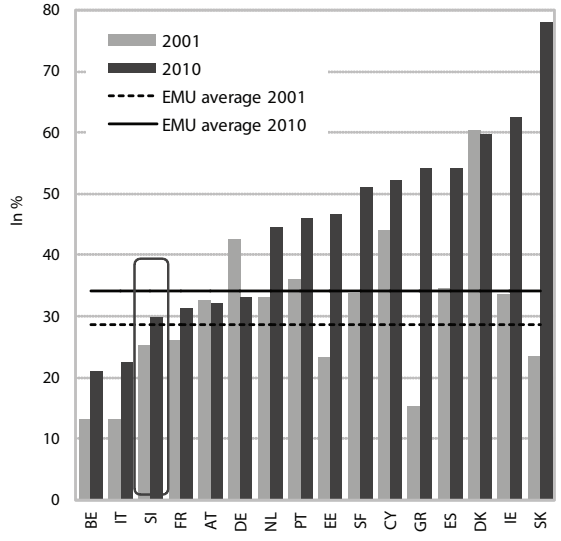
Source: BS, Eurostat; calculations by IMAD.

It is estimated that the fluctuations of the volume of equity in the past years significantly affected the indebtedness of the Slovenian economy. A typical characteristic of equity is that it has a pro-cyclical effect, thus distorting the true picture of indebtedness of the economy. In times of favourable economic trends (2006 and 2007), despite heavy borrowing of the Slovenian economy no significant rise in corporate and NFI indebtedness[38] was recorded and the volume of equity grew rapidly. Indebtedness leapt only in 2008 when lending activity was still rather high but slowing down, and the values of shares on the capital markets were decreasing. A similar yet less accentuated trend involved enterprises and NFI in 2011, which points to the fact that even a strenuous effort to repay liabilities due will not suffice to reduce the indebtedness of the Slovenian economy on a short run. Therefore, to realise their credit potential, enterprises will be forced to provide additional capital, ensuring new resources and at the same time reducing the financial leverage to facilitate the acquisition of debt sources of finance. According to estimates, such a possibility is rather limited considering that there is almost no other way in Slovenia to obtain financial sources except for bank debt financing. It is therefore indispensable to attribute greater significance to foreign equity and create favourable conditions for corporate growth, which will importantly contribute to improving business results that currently do not allow the enterprises to raise their equity and do not contribute to the process of deleveraging of the Slovenian economy; quite the opposite, they increase indebtedness.

4.5. Unfavourable conditions on the labour market and real estate market illiquidity

At the aggregate level, household indebtedness grew slightly in 2011 but was still relatively low compared to other countries. According to quarterly financial accounts data, the volume of household liabilities (-0.1%) stayed close to the end-of-2010 level, whereby the volume of short-term loans decreased for the second consecutive year, while the volume of long-term loans achieved the lowest growth rate ever (0.9%; between 2002 and 2010 it grew on average by around 15% per year). The volume of financial assets[39] was down by 1.7%. Since households' available assets decreased more than liabilities, borrowing measured as ratio between liabilities and financial assets slightly rose compared to 2010 (by 0.4 p.p. to 30.4%), while borrowing measured as a share of GDP fell by 0.3 p.p. (to 35.1%).

Figure 41: **Share of liabilities in households' and NPISH assets, 2010 and 2011, EMU**



Source: EUROSTAT – Financial Accounts.
Note: EMU countries for which data are available (Luxembourg excluded). Weighted average.

[38] Measured as the ratio between total loans and other debts and capital.

[39] Currency and deposits, securities, equity, insurance technical reserves, loans, etc.

Unfavourable conditions on the labour market (see chapter on labour market) reduce the demand for loans. Increased uncertainty in fact decreased households' demand for durable goods, while lower available income together with higher minimum wage shrank the lending capacity of households. According to IMAD's estimates, demand for household loans also heavily depends on the situation on the real estate market where the number of unsold housing units is growing; nevertheless, the prices of real estate did not decrease considerably[40] and remain rather high. Hoping for a significant reduction of prices on the real estate market, households postpone any purchase of real estate to future times.

[40] This was also one of the findings of the first Early Mechanism Report published by the European Commission at the beginning of 2012.

5. Challenges

The unfavourable conditions in the Slovenian financial system have negative impacts on public finance and the economy. The situation in the Slovenian financial system is also one of the main reasons for Slovenia's lower ratings. The slowdown in economic activity recorded last year was one of the most pronounced in the euro area and was partly due to the fact that over-indebted companies were heavily burdened with the repayment of bank loans, while others had restricted access to bank sources and could not take full advantage of the available business opportunities; in addition, there were practically no other sources of finance in Slovenia.

The main challenge of the Slovenian financial system is to ensure a smoother functioning thereof and provide greater support to the Slovenian economy to exit the crisis. The conditions for such must be provided primarily by owners and economic policymakers. It is necessary to ensure in particular (i) a strong capital base of the banking system able to re-assume risks, (ii) a more active management of all, particularly non-performing assets in the Slovenian banking system based on economic arguments, (iii) greater responsibility in the management of Slovenian enterprises and effective bankruptcy procedures, and (iv) withdrawal of the state from the active management of the economy. In such context, it is necessary to provide an ownership structure that will support the Slovenian enterprises with capital as they are undernourished in terms of capital. On one hand, this will provide enterprises with the necessary resources for further accelerated development which is a good basis for economic growth, while on the other it will reduce their indebtedness and facilitate access to debt sources of finance.

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Annex - definition of indicators used in the analysis of indebtedness and financial structure of Slovenian enterprises

Share of debt in total liabilities = $\sum_{i=1}^{n}$ (Provisions and long-term accrued costs and deferred revenues (aop72) + Long-term liabilities (aop75) + Short-term liabilities (aop85) + Short-term accrued costs (expenses) and deferred payments (aop95)) / $\sum_{i=1}^{n}$ (Liabilities (aop55)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of debt relative to capital = $\sum_{i=1}^{n}$ (Provisions and long-term accrued costs and deferred revenues (aop72) + Long-term liabilities (aop75) + Short-term liabilities (aop85) + Short-term accrued costs (expenses) and deferred payments (aop95)) / $\sum_{i=1}^{n}$ (Equity capital (aop56)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of debt relative to EBITDA = $\sum_{i=1}^{n}$ (Provisions and long-term accrued costs and deferred revenues (aop72) + Long-term liabilities (aop75) + Short-term liabilities (aop85) + Short-term accrued costs (expenses) and deferred payments (aop95)) / $\sum_{i=1}^{n}$ (Operating profit (aop151) - Operating loss (aop152) + Depreciation (aop145)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Net sales on the domestic market = $\sum_{i=1}^{n}$ (aop110), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Financial liabilities to banks = $\sum_{i=1}^{n}$ (Long-term financial liabilities to banks (aop78) + Short-term financial liabilities to banks (aop89)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Accounts payable to suppliers = $\sum_{i=1}^{n}$ (Long-term accounts payable to suppliers (aop82) + Short-term accounts payable to suppliers (aop93)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of bank loans in total liabilities = $\sum_{i=1}^{n}$ (Long-term financial liabilities to banks (aop78) + Short-term financial liabilities to banks (aop89) / $\sum_{i=1}^{n}$ (Liabilities (aop55)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of accounts payable to suppliers in total liabilities = $\sum_{i=1}^{n}$ (Long-term accounts payable to suppliers (aop82) + Short-term accounts payable to suppliers (aop93)) / $\sum_{i=1}^{n}$ (Liabilities (aop55)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Return on assets = $\sum_{i=1}^{n}$ (Net profit for the period (aop186) - Net loss for the period (aop187)) / $\sum_{i=1}^{n}$ (Liabilities (aop55)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Value added = $\sum_{i=1}^{n}$ (Gross operating returns (aop126) - Costs of merchandise, material and services (aop128) - Other operating expenses (aop148)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of financial expenses from financial liabilities relative to net sales = $\sum_{i=1}^{n}$ (Financial expenses from financial liabilities (aop169)) / $\sum_{i=1}^{n}$ (Net sales (aop110)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of financial expenses attributable loans received from banks relative to net sales = $\sum_{i=1}^{n}$ (Financial expenses attributable to loans received from banks (aop171)) / $\sum_{i=1}^{n}$ (Net sales (aop110)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of financial expenses attributable to loans received from companies in the group relative to net sales = $\sum_{i=1}^{n}$ (Financial expenses attributable to loans received from companies in the group (aop170)) / $\sum_{i=1}^{n}$ (Net sales (aop110)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of financial expenses attributable to issued bonds relative to net sales = $\sum_{i=1}^{n}$ (Financial expenses attributable to issued bonds (aop172)) / $\sum_{i=1}^{n}$ (Net sales (aop110)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of financial expenses from other financial liabilities relative to net sales = $\sum_{i=1}^{n}$ (Financial expenses from other financial liabilities (aop173)) / $\sum_{i=1}^{n}$ (Net sales (aop110)), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Financial expenses attributable to loans received from banks = $\sum_{i=1}^{n}$ (aop171), where i=1, 2,…n and n is the total number of enterprises covered by the sample.

Share of long-term financial liabilities to banks relative to total liabilities = $\sum_{i=1}^{n}$ (Long-term financial liabilities to banks (aop78)) / $\sum_{i=1}^{n}$ (Liabilities (aop55)); where i=1,2,…n and n is the total number of enterprises covered by the sample.

Share of short-term financial liabilities to banks relative to total liabilities = $\sum_{i=1}^{n}$ (Short-term financial liabilities to banks (aop89)) / $\sum_{i=1}^{n}$ (Liabilities (aop55)); where i=1,2,…n and n is the total number of enterprises covered by the sample.

Net sales on foreign markets = $\sum_{i=1}^{n}$ (Net sales on the EU market (aop115) + Net sales outside the EU market (aop118)), where i=1, 2,…n and n is total the number of enterprises covered by the sample.

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