*Miroslav VERBIČ, Andrej SRAKAR, Boris MAJCEN, Mitja ČOK**

SLOVENIAN PUBLIC FINANCES THROUGH THE FINANCIAL CRISIS

Abstract. *In the article, we present the main Slovenian public finance aggregates and measures in times of the financial crisis. We describe the Slovenian macroeconomic reality, starting positions in 2008, and the dynamics of macroeconomic aggregates in the crisis. We also present key public finance measures that were implemented to prevent the adverse influence of the crisis and simulations of their effects. The article is an attempt to summarise the consequences of the financial crisis in Slovenia, while it also presents some new results of simulations of the effects of the adopted measures to prevent the adverse influence of the crisis.*
Keywords: *financial crisis, public finance dynamics, Slovenia, preventive measures, fiscal austerity, imbalances*

Introduction

With the Slovenian independence in 1991, changes in the political and the economic system started taking place, mainly the transition to democracy and market-driven society. On the other hand, for more than a decade Slovenia followed the path of "gradualism" (see e.g. Rojec et al., 2005), i.e. gradual reforms, which in many aspects have not broken with previous system networks and methods (Pezdir, 2005). It was only with the outburst of the financial crisis in 2008 that it became apparent that Slovenia is neither politically nor economically prepared for the crisis. We claim that the delayed response to the crisis and political instability were among the main reasons for the pronounced macroeconomic (and, particularly, public finance) problems of the financial crisis in Slovenia – reasons that added to the general effects of financial crisis observed almost everywhere.

In the article, we address the public finance dynamics in Slovenia during the financial crisis. Our main aim is retrospective: we present and describe the starting position of Slovenian public finance before the crisis, the effects

* *Miroslav Verbič, PhD., Associate Professor, Faculty of Economics, University of Ljubljana & Institute for Economic Research, Ljubljana; Andrej Srakar, PhD., Institute for Economic Research, Ljubljana & Faculty of Economics, University of Ljubljana; Boris Majcen, PhD., Institute for Economic Research, Ljubljana; Mitja Čok, PhD., Professor, Faculty of Economics, University of Ljubljana.*

of the crisis on selected macroeconomic aggregates, and the main adopted macroeconomic and social policy measures and their effects. In the literature, there have been so far few attempts to present a coherent picture of the Slovenian public finances in times of the financial crisis, despite numerous popular press articles on the topic. It is our aim, therefore, to fill in this gap and to present an assessment of Slovenian public finance responses to the crisis, their net effects and some considerations and reflections on the topic.

The article contributes to the literature devoted to answering the question of the sustainability of responses of European countries to the financial crisis and the soundness of the austerity policies implemented mainly in EU countries after 2010 (see e.g. Krugman, 2013b; Salomon, 2015). Slovenian "austerity" measures started with a significant delay, in 2012, and we demonstrate their positive and adverse consequences. While most of the documents addressing the macroeconomic condition of Slovenia (IMAD, 2012; 2013; 2014; 2015; European Commission, 2014) point to fiscal consolidation as one of the key problems of addressing the Slovenian macroeconomic condition, this leaves open a question of whether a more expansive fiscal policy would be a more sound way to address the problems of Slovenia during the crisis.

At present, the European Commission lists five main challenges for the Slovenian economy: (1) the need for a permanent restoration of the banking sector, (2) treatment of state ownership of companies, (3) ensuring the stability of public finances, (4) improving the performance of the export companies and Slovenian competitiveness, and (5) increase of the profitability and viability of companies. Although the financial crisis opened up many problems, such as fiscal consolidation and unemployment problems, many issues were pressing already before the crisis, apart from the above also the long-term sustainability of public finance, related to the ageing of the population. Slovenia is the only country in the EU that has a high risk to the sustainability of public finances in the long run, so particularly the latter is a highly pressing problem, which had not been brought in by the crisis. In the article, we will present how non-responsiveness to this and other pressing problems contributed to the unpreparedness of Slovenia to the coming of the crisis and probably severed its effects.

The article is structured as follows. In Section 2, we present the general macroeconomic conditions in Slovenia before the crisis. In Section 3, we present the Slovenian public finance dynamics during the crisis. In Section 4, we present some main adopted measures and simulations of their effects on the fiscal system. In the final section, we give a discussion and a reflection of the findings.

Impact of the financial crisis: The macroeconomic picture

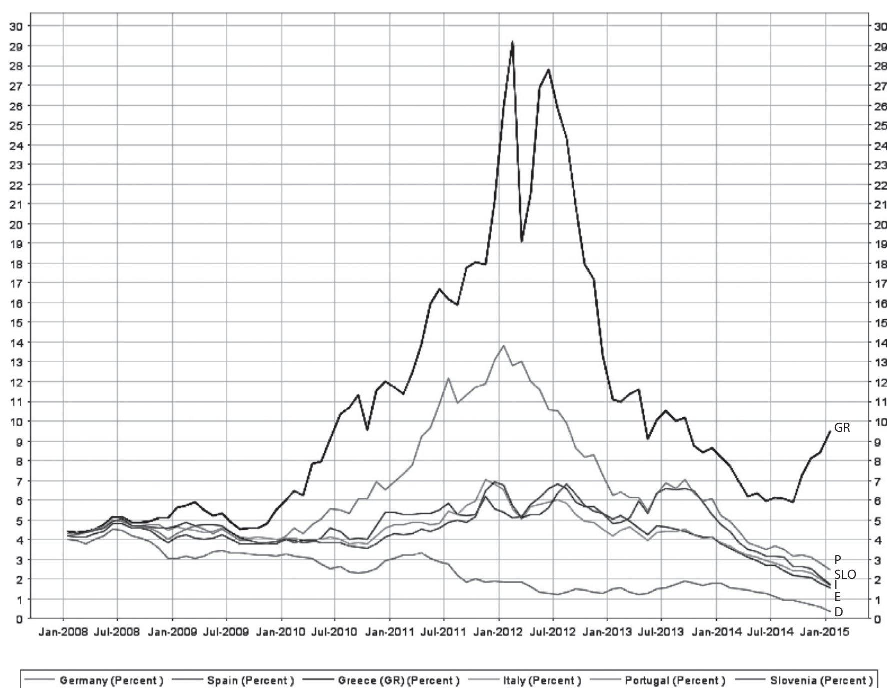
In the period 2005–2008, Slovenia achieved high rates of economic growth (reaching almost 7% in 2007, see e.g. Government of the Republic of Slovenia, 2015). With the outburst of the financial crisis in 2008, it soon became apparent that Slovenia is neither politically nor economically prepared for the crisis. Both the rigidity of public expenditures and high structural deficits in the period of high economic growth led to the increased exposure of public finances during the crisis. Before the crisis, the general government deficit declined and in 2007, even a balanced general government budget was attained. However, the structural deficit was rising before the crisis, which contributed to the pro-cyclical tendencies of the Slovenian macroeconomic policy (see e.g. IMAD, 2012).

During the crisis, Slovenia suffered from one of the highest falls in economic activity among the EU member states, as well as one of the largest deterioration in the public finances (particularly in the level of public debt). Nevertheless, the newly elected government estimated that the crisis will be of a short-term nature and mainly searched for solutions in raising the social transfers and benefits for private companies. This led to a final outbreak in 2011, with a proposal for serious structural reforms (particularly pension and labour market reforms), which were blocked by a joint action of the opposition and trade unions.

Too slow and inadequate response to the crisis in its initial period has increased the pressure on the contemporary fiscal policy that pursues the objective of reducing the deficit to below 3%. After a strong increase in the deficit in 2009 due to the increase in expenditure and the declining revenues, the functioning of public finances over the next few years has been primarily focused on limiting the growth of expenditures that managed only to maintain the deficit at a level around 6% of GDP. Only in 2012, Slovenia started with a fiscal consolidation and the reduction in almost all categories of total expenditure. The gap between the revenues and expenditures nevertheless closed only slowly due to the significant impact of recapitalization of banks and some state-owned enterprises. Growth of debt and interest expenditure, together with a further growth of certain expenditures on social protection (pensions, health), which in 2008–2012 represented the largest increase among the total expenditure items, increasingly restricted the room for measures of fiscal policy and for the raising of taxes in relation to international comparisons of taxation levels. The level of public debt, which in a few years moved Slovenia from low-indebted to medium-indebted countries (in 2013 alone it was raised by 17.3 percentage points, see e.g. IMAD, 2014; European Commission, 2014), significantly contributed to the pressing situation. Although the literature on the effects of public

debt on economic growth is growing, the findings are not uniform: while some authors (e.g. Cecchetti, Mohanty and Zampolli, 2011; Checherita and Rother, 2010; Clements, Bhattacharya and Nguyen, 2003; Kumar and Woo, 2010; Reinhart and Rogoff, 2010a; b; Mencinger, Aristovnik and Verbič, 2014) find negative effects on growth after a certain threshold is reached, there have been notable critiques of this view as well (e.g. Pescatori, Sandri and Simon, 2014) so it remains undecided whether raising indebtedness of Slovenia indeed has an adverse macroeconomic effect.

Figure 1: YIELDS OF 10-YEAR GOVERNMENT BONDS (IN PERCENT), 2008–2015



Source: Eurostat Statistical Data Warehouse.

A new government that took the stand in 2012 started a series of austerity measures, aimed particularly towards the public sector. In 2012 the general government deficit due to those measures noticeably decreased and was the lowest since the beginning of the crisis (4% of GDP). Furthermore, it has been estimated that in that year, a shift towards a more sustainable restructuring of public expenditure took place (see IMAD, 2013). Nevertheless, the austerity measures led to several public outbursts and finally to the dissolving of the coalition and in March 2013, yet a new government started its mandate. At its start, the situation on the financial markets was dire; the

spread for 10-year government bonds overpassed the 7% critical limit (see Figure 1), which was attributed to growing political instability in Slovenia and incapacity of the adoption of the reforms. Most economists have written statements that the "coming of the Troika" is inevitable (see e.g. Damijan, 2013b). Despite this, the newly elected government managed to satisfy the financial markets, and the situation slowly but gradually started to improve.

Nevertheless, some poorly implemented measures led to the dissolving of the government and, finally, to another early elections in July 2014. The elected party formed the current government and had taken responsibility for the economic policy to date. The financial indicators started to improve, yet it is still hard to tell if these are a consequence of the measures of the current government (or any of the past governments) or simply of the changes in the export markets (as discussed in past by e.g. Lin, Lee and Huang, 1996; Palley, 2011).

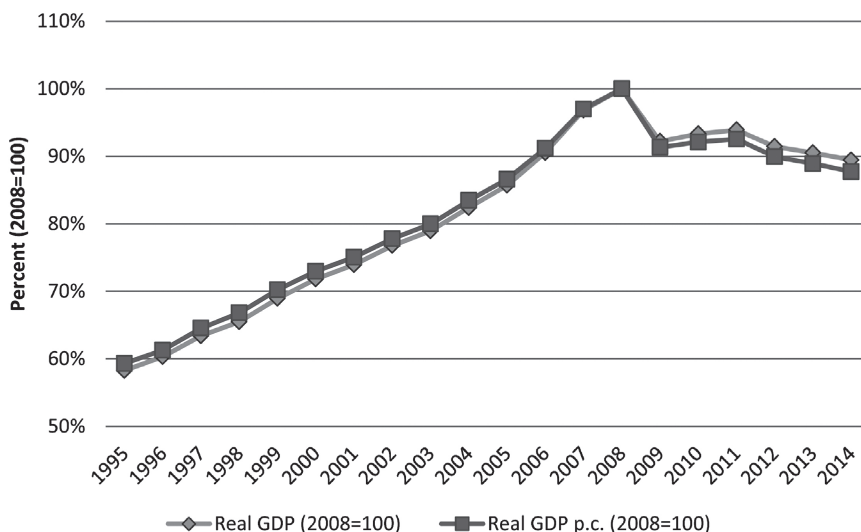
The economic situation in Slovenia during the financial crisis has been accompanied by the sovereign debt crisis. At the start of the 2000s, the net government debt was almost zero. The situation changed significantly during the government in years 2004–2008, with latter governments only adding to the trend in the level of government debt. The outburst of the trend was during the crisis in 2014, when government, at last, started to solve the banking crisis, after the results of the stress tests, with injections of capital into banks and the formation of the so-called "bad bank", following the examples of Ireland, Spain and the Baltic countries (see e g. Gandrud and Hallerberg, 2014; Laeven and Valencia, 2010). This led to almost doubling of Slovenian government debt, which will be fully explained below. Still, the Slovenian public debt remains below the EU member state and Euro area averages.

Before the crisis, Slovenia closely cooperated with the European Union and after the accession to the Union in 2004 and adoption of the Euro in 2007 counted as the "best pupil" (Čar, 2013) and as a role model for other new countries. This was reflected in a significant upward trend in the level of real GDP (and real GDP per capita after 2003) and lasted until 2008 (including 2008, which confirms our previous observation that the response of Slovenia to the crisis was delayed). After the peak in 2008, there was a significant drop in 2009 (by 7.89 percentage points, using data from the SORS), followed by a stagnation until 2012, when the austerity measures of the government of 2012–2013 caused another significant reduction in the level of real GDP by 2.48 percentage points. In 2014, finally, the real GDP started to grow again as compared to the year 2013.

Conditions on the Slovenian labour market are significantly worse now than before the crisis (see e.g. IMAD, 2014). In the period 2008–2013, many EU countries, including Slovenia, significantly differed from national

employment objectives written in the Strategy EU–2020. Most of the countries responded to problems in the labour market with policy measures and institutional reforms. At the start of the crisis, Slovenia responded with few measures strengthening the employment possibilities and existing jobs, but after 2011, it stopped with continuous measures in this area (again, see e.g. IMAD, 2014).

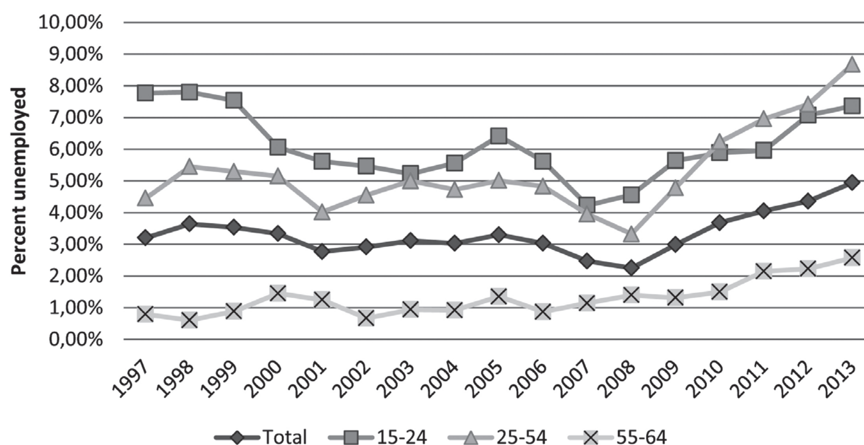
Figure 2: EVOLUTION OF NATIONAL INCOME: REAL GDP AND REAL GDP PER CAPITA (INDEXED AT THE PEAK OF 2008), 1995–2014



Source: Own calculations using datasets from SORS and IMF.

Results are visible from the figures below. While the percentage of unemployed in total population has been steadily growing after 2008 (by 17.06% on average annually) – particularly worrisome is the level of unemployed for younger workers – unemployment in the age group 15–24 increased from 4.56% in 2008 to 7.36% in 2013, while in the age group 25–54 it increased from 3.32% in 2008 to 8.67% in 2013 (an average annual increase of 21.16%; see Figure 3). According to IMAD (2014), the most endangered groups include the young, men and poorly educated. It is also important to note that in the young population there is a high level of flexible (precarious) work, which contributes to their insecurity in the labour market and problems in forming their families and normal life in general (see also Gubenšek, 2013).

Figure 3: EVOLUTION OF THE SHARE OF UNEMPLOYED (OVERALL AND BY AGE GROUP) SHOWING UNEMPLOYED AS PERCENTAGE OF TOTAL POPULATION (NOT AS PERCENTAGE OF ACTIVE POPULATION AS IS USUALLY DONE), 1997–2013

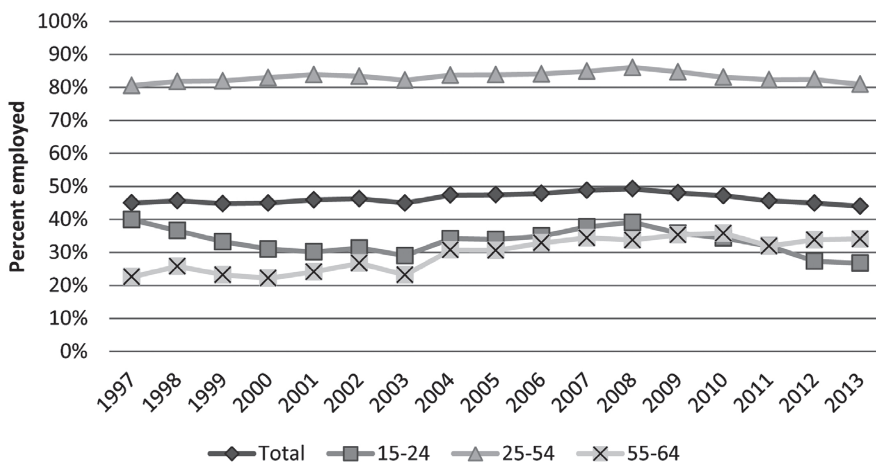


Source: Own calculations using ILO data.

Another issue is the low level of working activity of older people. This is seen in Figure 4, where the lowest employment rates are among the young and (particularly) the older people. It is interesting that in the years 2012 and 2013 the employment rates among the older people have been slightly increased, particularly as compared to employment rates of the young, which have been in sharp decline after 2008 (falling from 39.13% in 2008 to 26.72% in 2013, which corresponds to an average yearly decrease of 7.35%). The level of employment of those aged 25–54 has been falling in 2008–2013 at an average yearly rate of 1.22%. The general employment level has fallen in this period stagnantly, but not significantly, by an average yearly rate of 2.23%.

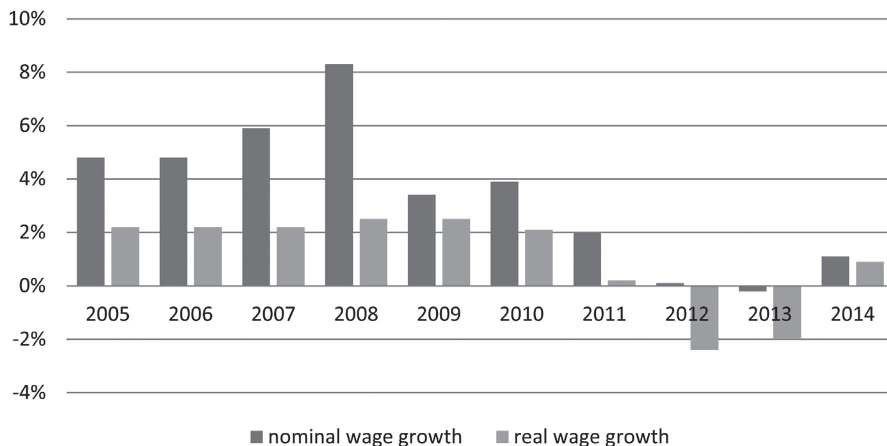
Concerning average wages, nominal and real wages have been rising until 2012, as shown in Figure 5, and have then increased only in 2014, when a slight, almost insignificant rise can be observed. Furthermore, as shown by Srakar and Verbič (2015) and Stanovnik and Verbič (2014), income inequality in Slovenia that is already among the lowest in the world continued to decline during the crisis, which is attributed to the rise in the minimal wage and the institutional factors.

Figure 4: CHANGE IN EMPLOYMENT RATES (OVERALL AND BY AGE GROUP), 1997–2013



Source: Own calculations using ILO data.

Figure 5: REAL AND NOMINAL WAGE GROWTH, 2006–2014



Source: own calculations using SORS data.

There are several other significant structural problems of the Slovenian economy having an influence on public finances in times of the crisis. Most of them are addressed in the Country Report Slovenia 2015 for the European Commission (European Commission, 2015). The high level of non-performing loans and low demand for credit, coming from firms, capable of taking credits, could have implications for the condition in the banking

sector. As stated by the European Commission, "there is scope for further consolidation of the banking sector, which could be facilitated through the continuation of the privatisation process" (ibid: 2). High debt, pressures for the deleveraging and ongoing restructuring of the firms have an adverse effect on the private investment and growth. In particular, further deleveraging of the corporate sector (the problematic companies represent approximately 40% of the total Slovenian financial debt, see Brezigar Masten et al., 2014) and the role of newly envisaged institutions, like Privatization Consortium, Credit Consortium and Substitute Mezzanine Fund (see Simoneti, 2015) would help restore the conditions for a rebound of private investment. A high level of state involvement (as for banks, about 60% are in the state ownership, see Damijan, 2015), combined with weak governance in firms distorts the allocation of resources and deters growth and corporate investments. Although there is a renewed commitment to fight corruption and increase the effectiveness of public administration and the judiciary, there are still significant pressures in this area, constantly reflected in Slovenian daily press and politics. Attracting foreign direct investment where Slovenia is at the bottom of EU countries (in per capita terms) will also be essential in ensuring a sustainable recovery.

Public finance responses

The position of public finances before the crisis is disputed, particularly in political debates. While the data show that the structural budget in 2007 was almost completely balanced, several economists (see e.g. Marn, 2012) claimed that the policy of 2004–2008 was pro-cyclical and severed the effects of the upcoming crisis due to the imbalance in the structural budget and incentives for indebtedness of the private firms.

Public debt as a percentage of GDP stood stagnant (around 27%) until 2006 and had even decreased by 2008 (see Figure 8). There was a significant difference between internal and external Slovenian debt; as stated by Mozetič (2007), Slovenia gradually raised its ratio of internal to external indebtedness, amounting in 2002 to 58.7% : 41.3%, while in 2005 it was already 75.7% : 24.3%. In general, most of the debt can be attributed to the central government, with a significantly lower proportion of indebtedness of the local government and social security funds.

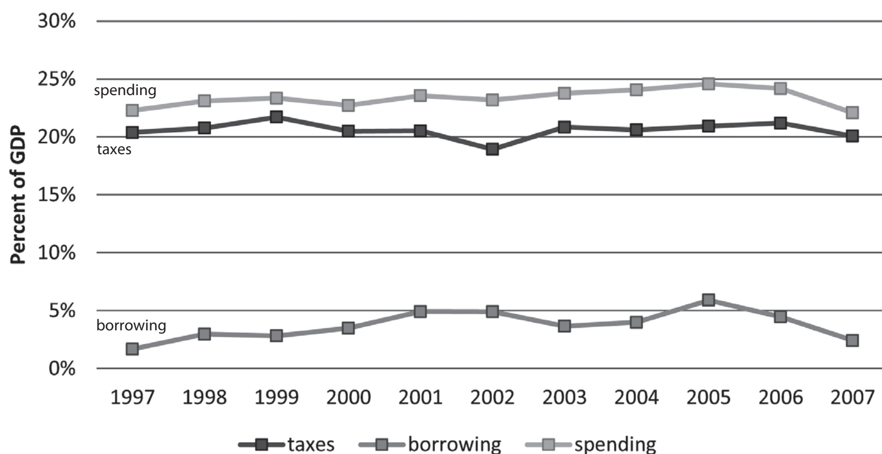
In 2007, most of the current expenditure was spent in five main areas: pensioner benefits, social protection, education, health, and public administration (see Ministry of Finance of the Republic of Slovenia, 2014). Each of those areas amounted to between 13–20% of the total, with the largest being pensioner benefits (19.39%). In general, the pension system is one of the key macroeconomic imbalances of Slovenia (see e.g. European

Commission, 2014; IMAD, 2014; 2015) and has been addressed in numerous studies (e.g. Verbič, Majcen and van Nieuwkoop, 2006; Verbič and Spruk, 2014). Slovenia also has one of the lowest retirement ages for both men and women (see e.g. Ferk, 2015).

In 2007, most of the government revenues came from the "trinity of large taxes": 36.04% from social security contributions (although Slovenian general tax burden amounts to 38% of GDP and is below the EU average, Slovenian employment system is frequently criticized for its tax-overburdening of wages, see e.g. IMAD, 2015), 22.78% from VAT, and 14.14% from personal income tax (Ministry of Finance of the Republic of Slovenia, 2014). Much lower were the contributions of excise duties (9.08%) and the corporate income tax (8.73%). Other taxes on consumption contributed 3.40%, payroll taxes 3.28%, and wealth taxes 1.62%. The contribution of other taxes was less than 1%.

As can be seen from Figure 6, government borrowing from the mid-1990s up to the eve of the crisis was stagnant and has increased sharply only after 2008. Similarly, spending and taxes were slightly falling but stagnant in general until the eve of the financial crisis.

Figure 6: TAXES, BORROWING AND SPENDING AS A SHARE OF GDP, 1997–2007

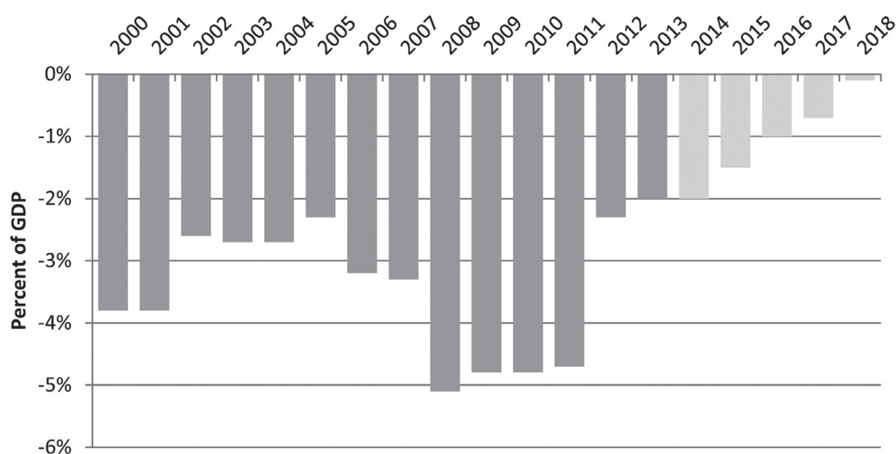


Source: IMAD, own calculations.

The impact of the crisis on the deficit was somewhat more complex. Figure 7 shows the structural deficit as a share of GDP in years 2000–2018, where the shares for 2014–2018 are based on IMAD projections. After 2007, we can observe a sharp rise in the structural deficit by almost two percentage points (in 2008 it peaked at 5.1%). We can see that in 2012 and later, the structural deficit has been controlled and kept closer to the Maastricht

criteria. As can be seen in Table 2 later on, this was made at the expense of the GDP, and it is questionable whether the policy focusing on Maastricht criteria was sound. Projections for years following 2014 are even more optimistic, and it is estimated that in 2018 the structural deficit would amount to only 0.1%, decreasing from 2% in 2013 and 2014. This is strongly related to the adoption of the fiscal rule in 2014, which should contribute to the balance of the public budget deficits (see e.g. IMAD, 2015).

Figure 7: GOVERNMENT STRUCTURAL DEFICIT (ACTUAL AND PROJECTED) AS A PERCENTAGE OF GDP, 2000–2018



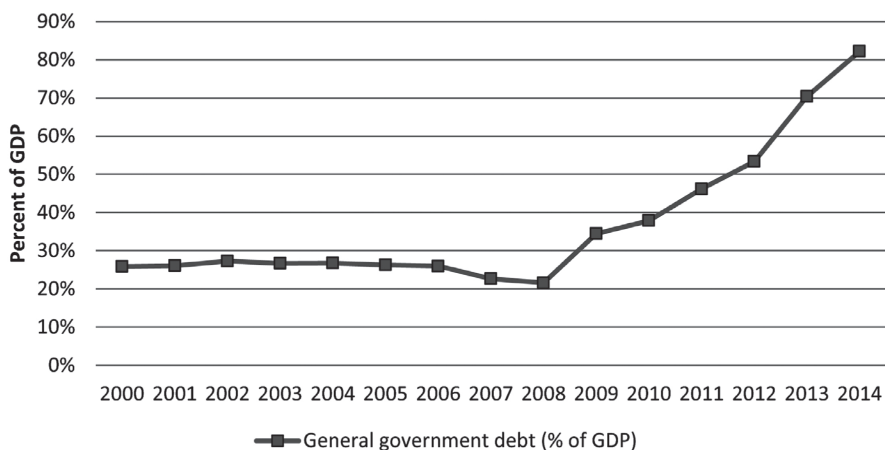
Source: Ministry of Finance RS, IMAD, own calculations.

It was only the financial crisis that caused the explosive increase in debt, which had risen to 82.2% in 2014, an average annual increase of 24.95% for the period 2008–2014 (see Figure 8). Most of the rise in 2013 and 2014 can be attributed to addressing the banking crisis (this resembles the growth of the public debt immediately after Slovenian independence, see e.g. Mozetič, 2007). As stated by the European Commission (2014), approximately half of the increase is due to the accumulation of primary deficits, a quarter is due to the impact of slower growth and higher interest rates while the remaining quarter is due to the adjustment of stocks and flows in the form of capital support measures.

Figure 9 shows government expenditure, taxation and borrowing as a percentage of GDP. We see a decline in tax revenues from 2008 on, particularly in years 2009 and 2010 and after 2012. This can be attributed to the decrease of corporate income tax rate and abandoning of the payroll tax. Furthermore, after 2008, this can be attributed to lower incomes in the economy in general. The decrease after 2012 can be attributed to the supply-side

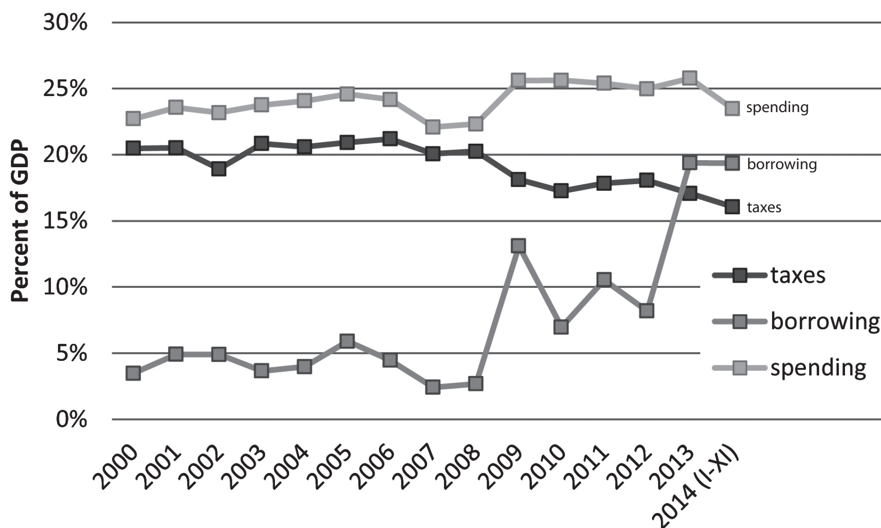
economics approach of the government of 2012–2013. It is of no surprise that borrowing (at the annual level) has been significantly raised, with the most significant increase that happened in 2013 and can be mostly attributed to solving the banking crisis.

Figure 8: PUBLIC DEBT AS A SHARE OF GDP, 2000–2014



Source: Ministry of Finance RS, IMAD, own calculations.

Figure 9: TAXES, BORROWING AND SPENDING AS A SHARE OF GDP, 1997–2014



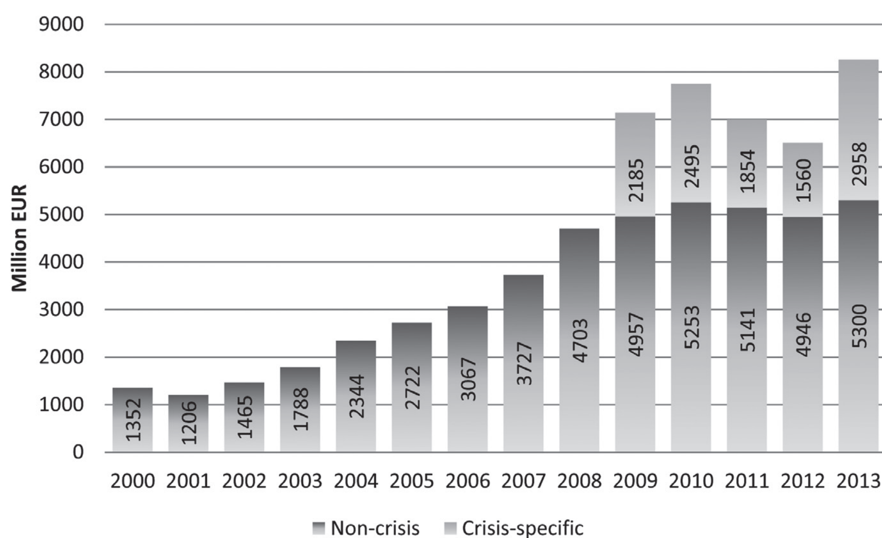
Source: Ministry of Finance RS, IMAD, own calculations.

Table 1. THE STATE GUARANTEES TO LIMIT THE EFFECTS OF THE FINANCIAL CRISIS, 2007–2013

State guarantees	2007	2008	2009	2010	2011	2012	2013
Non-crisis (in million EUR)	3,727	4,703	4,957	5,253	5,141	4,946	5,300
Crisis-specific (in million EUR)	0	0	2,185	2,495	1,854	1,560	2,958
Share in GDP, crisis-specific	0.00 %	0.00 %	6.03 %	6.89 %	5.04 %	4.34 %	8.17 %
Share in GDP, total	10.60 %	12.40 %	19.70 %	21.40 %	19.00 %	18.10 %	22.80 %

Source: IMAD, own calculations.

Figure 10: THE STATE GUARANTEES TO LIMIT THE EFFECTS OF THE FINANCIAL CRISIS, 2000–2013, IN MILLION EUR



Source: IMAD, own calculations.

Due to delayed response to the financial crisis, the austerity measures took place on a more serious scale only since 2012, when government spending decreased by 985 million EUR (5.4 % compared to 2011), of which resources for employees in the public sector decreased by 151 million EUR (3.3 %), social transfers by 171 million EUR (2.2 %), and investments and capital transfers by 624 million EUR (30.2 %). As stated by Damijan (2013a), the decrease in investments can be attributed for the main part to the fall in (nominal) GDP in 2012, which amounted to 2.3 % (the decrease of investments by 624 million EUR represented 1.8 % of GDP, not taking into account the fiscal multiplier effects).

Main measures in combating the financial crisis related to state guarantees, given particularly to private companies. Such schemes started in 2009 and represented 4–8% of the GDP. The largest share of crisis-specific guarantees, provided by the state, were given in 2010 when they amounted to 2.50 billion EUR (6.89% of GDP) and in 2013, when they amounted to 2.96 billion EUR (8.17% of GDP). The detailed numbers and figures are provided in Table 1 and Figure 10. It has been estimated that most guarantees have been seldom used (see e.g. Government of Slovenia, 2014).

Policy responses: An opportunity for reform?

In this section, we provide a summary of the main public finance (tax i.e. income side vs. benefit i.e. spending side) responses and examine their distributional impact. Table 2 presents the main tax changes that occurred between 2008 and 2015, whereas Table 3 shows the main changes to social welfare benefits.

Table 2: MAJOR TAX CHANGES, 2008–2015

Personal income tax changes, introduced in 2012, with main changes: raised ceiling of normed income to 50.000 EUR and raised level to 70%; cedular tax for income from the rent of property; lowering of some tax reliefs (some groups, e.g. self-employed with normed incomes are even left with no reliefs); changes in income from interests.
Changes in investments reliefs (2012), where the ceiling of 30.000 EUR for legal subjects has been abandoned; also, the unused part of the relief can be transferred to the period of next 5 years.
In 2012, a level of relief for R&D investments has been raised to 100% of the value of investment, bounded above by the level of tax base.
Value added tax rate increased in 2013 from 20% to 22% (the lower rate changed from 8.5% to 9.5%).
Several raises in excise taxes, the last one in 2015 (raised excise on cigarettes).
A new tax on financial services (2012; in 2014 slight changes adopted). The level of tax has been set to 8.5%, which was conclusively set and accepted in 2014.
Several attempts of adopting a new property tax, the last one in 2014, which resulted in severe failures in calculations of the tax parameters and finally led to government crisis.
Changes in social insurance rates and pension legislation (2012), with the aim of stability of the pension system. Significant changes in calculation of social contributions, where social contributions brackets were abandoned for several groups (self-employed, sole proprietors). The changes will be implemented gradually in the period 2013–2018.
In 2009, the payroll tax was abandoned.
Corporate income tax remains at a low rate of 17% due to changes in the mid-2000.

There were several changes in the income/tax side in the Slovenian economy during the crisis. First, new personal income-tax legislation was introduced in 2012, with the main effects related to normed incomes of individual entrepreneurs and self-employed, and some changes in the tax on interests, dividends and property. Second, new pension legislation has been adopted in the same year, with significant changes in the treatment and calculation of social contributions, particularly for sole proprietors and the self-employed. The changes will come into effect only gradually in the period 2013–2018. Value added tax rate has been raised after a while of discussions and outcries from 20% to 22% (and the reduced rate from 8.5% to 9.5%). There were several rises of excise taxes, which was one of the main government instruments to close the annual budget construction. In 2009, the payroll tax, heavily criticised for contributing to the excess level of labour costs in Slovenia (one of the highest in Europe), has been abandoned. Finally, property tax tried to be implemented in 2014 with a poorly prepared design and calculations and was finally abandoned, which led to the eventual fall of the incumbent government.

Table 3: MAJOR BENEFIT CHANGES, 2008–2015

Changes in child benefit, state scholarship (upper secondary students), state scholarship (tertiary students), social assistance, state pension, and minimum pension support; all coming into effect in 2012.
Direct subsidies to private companies; only in the period 2008–2011 the Ministry of Economy has supported over 6,000 public and private projects in the total amount of 876 million EUR.
Guarantee schemes for bank credits and loans to companies.
Adoption of the "fiscal rule" in 2014, which limits the public spending.
Cuts in the public sector, starting with Public Finance Balance Act in 2012: improvements of efficiency of the public sector, rationalisation of its services, changes in redistributive role of the state.
Formation of the Capital Assets Management Agency (AUKN) in 2010, which served until 2012 (when it was abandoned) to manage the state-owned companies and other assets.
Formation of the Bank Assets Management Company (DUTB) and Slovenian Sovereign Holding (SDH) in 2014 as measures to solve the banking and sovereign debt crisis.

Regarding the spending side, several main measures have been implemented. Several schemes of direct subsidies to private companies have been adopted; in the period 2008–2011 alone the Ministry of the Economy has supported over 6,000 public and private projects in the total amount of 876 million EUR. Also, several guarantee schemes for bank credits and loans to companies have been adopted. Cuts in the public sector have been

implemented, starting with Public Finance Balance Act in 2012, with the main objective to improve the efficiency of the public sector, rationalize its services, and change the redistributive role of the state. In 2014, the 'fiscal rule" has been adopted (and written into the Slovenian Constitution), which limits the public spending. In 2010, Capital Assets Management Agency (AUKN) had been constituted, which served until 2012 (when it was abandoned) to manage the state-owned companies and other assets. To solve the banking and sovereign debt crisis, the Bank Assets Management Company (DUTB) and Slovenian Sovereign Holding (SDH) have been constituted in 2014, after several years of debates and proposals (related to the concept of so-called "bad bank"). Finally, changes in child benefits, state scholarships (upper secondary education and tertiary education), social assistance, state pension, and minimum pension support came into effect in 2012.

To estimate the predicted effects of different proposed government measures, in 2011 a simulation study was done by Majcen and Čok for the Government Office for Development and European Affairs (see Majcen and Čok, 2011). The methodology consisted of two main steps: firstly, the consequences of the measures proposed in the area of income tax and social contributions were evaluated using a microsimulation model. The results obtained were then used to assess the complex macroeconomic consequences on the Slovenian economy by using a recursive dynamic general equilibrium model. In the analysis, the authors firstly assessed the implications of each measure and in the end, performed a simulation taking into account all of the measures at the same time. In our article, we only report on the results of the individual measure' assessments and only note the results of the joint estimation.

In Figure 11, we report on the results of the measures, affecting the demand side of the economy:

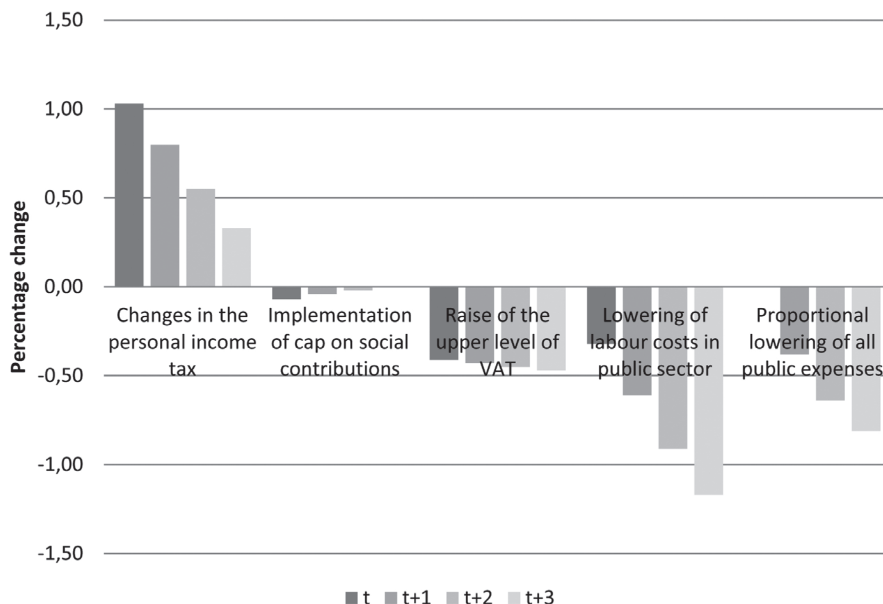
- Changes in the personal income tax, consisting of three parts: 1) cancellation of the both existing special general allowances; 2) introduction of the new uniform general relief of 6,000.00 EUR; 3) introduction of the new personal income tax scale;
- Implementation of cap on social contributions in the level of 47,000.00 EUR;
- Rise of the upper level of VAT by two percentage points (from 20 % to 22 %);
- Lowering of labour costs in public sector by 10 %;
- Proportional lowering of all public expenses so that it does not exceed 45 % of GDP in 2013.

Reported are results of the baseline scenarios (the study of Majcen and Čok evaluates different scenarios – usually two – for all proposed measures), and only for the level of total GDP (in the study the effects on different aggregates, such as employment, private and government consumption, investments, exports and imports, current budget deficit, interests and public debt, are estimated).

The finding shows that the implementation of the noted changes in personal income tax would greatly increase the disposable income of households, their consumption and saving, which would have a positive impact on GDP growth and employment. Crowding out of private investment due to the rise in the budget deficit would have a negative impact on investment growth and would thus mean the gradual reduction in GDP growth and employment. The introduction of a cap on social contributions would have a positive impact on the reduction of labour costs and the disposable income of households and their consumption. This would be reflected in an increase in the production and GDP in the private sector, increasing employment and reducing unemployment. Raising the upper rate of the value-added tax by two percentage points, would tend to increase budget revenues and reduce the budget deficit, but the measure would have a significant negative impact on the disposable income of households, private consumption, GDP, foreign trade and employment. Gradual reduction of labour costs of employees in the public sector by 10% would reduce the current government consumption and thus the production of public sector services, leading to a decline in total GDP. Proportional reduction of public spending at the level of 45% of GDP, on the other hand, would cause a decrease in the current account deficit, interest payments and gross debt. The aggregate GDP and prosperity of households would be reduced in all income brackets, particularly in the bottom one.

We can, therefore, see that most of the projected measures would tend to have a negative effect on GDP and most of other macroeconomic aggregates. The exceptions are changes in personal income tax, where the effects would be positive but diminishing over time, and the cap on social contributions with a delayed positive effect. Particularly interesting and related to our topic: reducing the public spending (a classical example of austerity policies) would tend to have a significant negative effect on GDP, similarly as reducing the labour costs of employees in the public sector. The size of those effects on the level of GDP is significant and amounts of up to 0.5–1.0 percentage point in the time limit of two years and more.

Figure 11: SIMULATION OF THE IMPACT AND DYNAMICS OF SOME PUBLIC FINANCE CHANGES ON DEMAND SIDE ON THE LEVEL OF GDP, BASELINE SCENARIOS



Source: Majcen and Čok (2011).

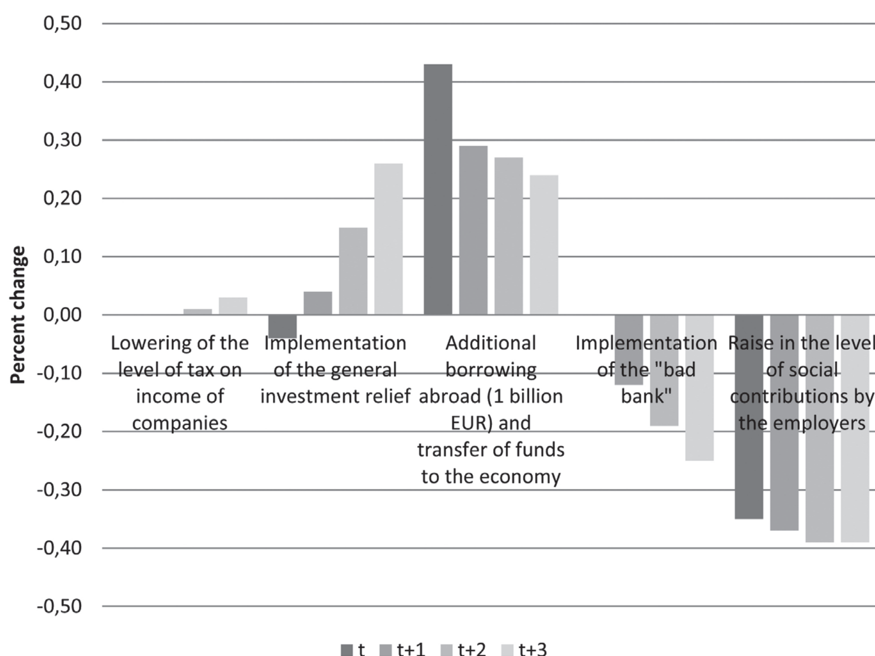
In Figure 12, we also report on the results of the measures, affecting the supply side of the economy:

- Lowering of the level of tax on income of companies to 15%;
- Implementation of the general investment allowance at the level of 40% of the invested amount;
- Additional borrowing abroad (1 billion EUR) and transfer of funds to the economy;
- Implementation of the "bad bank";
- The rise in the level of social contributions by the employers by six percentage points from 16.1% to 22.1%.

The findings report that the assumed gradual reduction of tax on corporate income from 20% to 15%, at constant country consumption would not cause notable changes in the macroeconomic aggregates in the country in the period of four years. Incremental introduction of the general investment tax allowance of up to 40% of the amount invested, with an unchanged consumption of the country in the period of four years would cause a positive effect on the present macroeconomic aggregates, although these effects would be relatively small and their size largely dependent on the reaction

of the local population and foreign investors. Additional borrowing of the country abroad and spending money on investments in the private sector (in the form of capital transfers) shows positive macroeconomic effects, particularly in the level of GDP. The increase in gross debt and interest payments are reflected in the small increase in the budget deficit after the first year. Additional borrowing by the state abroad for three billion EUR, for the purposes of the introduction of the "bad bank" would tend to increase gross debt, interest payments and the budget deficit and reduce the aggregate savings, private investment, employment, consumption and GDP, depending of course on the level of interest rate. Finally, increasing the rate of employers' social contributions for six percentage points would increase labour costs which would have negative impacts on employment, unemployment, production, private consumption, foreign trade and GDP.

Figure 12: SIMULATION OF THE IMPACT AND DYNAMICS OF SOME PUBLIC FINANCE CHANGES ON SUPPLY SIDE, ON THE LEVEL OF GDP, BASELINE SCENARIOS



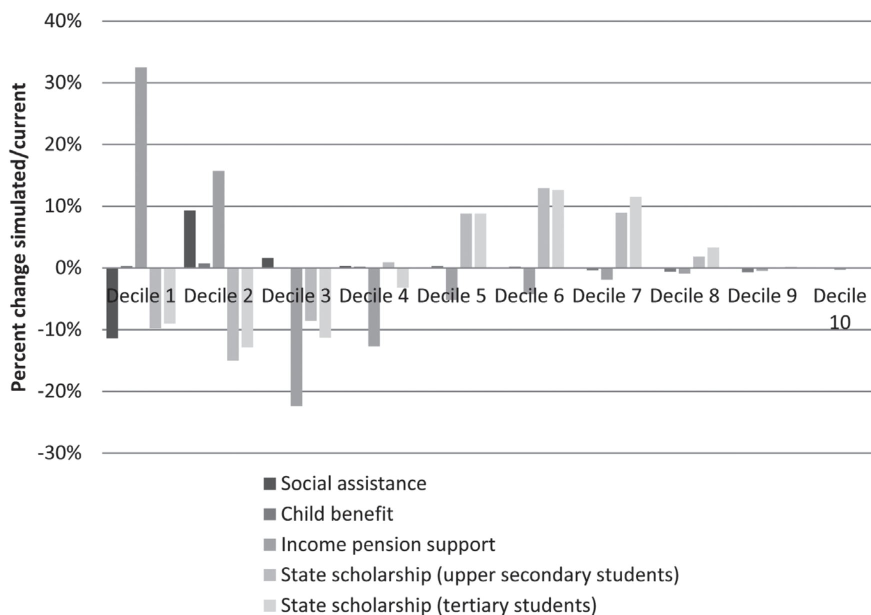
Source: Majcen and Čok (2011).

As of supply side measures, therefore, there would tend to be positive effects of the incremental introduction of the general investment tax allowance and additional borrowing of the country abroad for the spending of

the money on investments in the private sector. Other measures, particularly the introduction of the "bad bank" and increase of the rate of employers' social contributions would tend to have significant negative effects on most of the macroeconomic aggregates.

New legislation governing social transfers was adopted in July 2010 and was supposed to be enacted in June 2011. The Slovenian social transfers system has become characterised by claims that the system was regulated by too many different acts and institutions that lead to un-harmonised official records. Besides, work incentives are low, and the accumulation of benefits is possible. The new legislation changed the eligibility rules for most social benefits, which influenced the income position of beneficiaries and the income distribution. To a certain extent, the new legislation was based on estimations performed by the microsimulation model, which was constructed for the reform by the Institute for Economic Research (see Kump, Majcen and Čok, 2011). As a result, the expected consequences of the reform were relatively extensive and gave benefits mostly to individuals and households at the bottom of the income distribution (particularly regarding the pension income support). Some of the simulated effects are shown in Figure 13 (the bars show the difference between projected and actual decile effects).

Figure 13: SIMULATION OF THE REDISTRIBUTIVE IMPACT OF SOME BENEFIT CHANGES BY DECILE OF EQUIVALISED HOUSEHOLD INCOME



Source: Own calculations based on Kump, Majcen and Čok (2011).

However, these reforms are expected to harm the government budget in the short run, as the expenditure on simulated social benefits is supposed to rise by EUR 100.4 million (by 17% at current expenditure). At the moment of the cited study, Slovenia faced an unfavourable financial situation: the general government deficit in 2010 was estimated at 5.5% of GDP and general government consolidated gross debt at the end of 2010 at EUR 38.0% of GDP. Therefore, the Slovenian government postponed the enforcement of both acts to the beginning of 2012. An improperly established information system and inadequate official records contributed to this postponement.

Conclusion

Slovenia was one of the countries with the largest impacts of the Great Recession. It perhaps did not have such predispositions for the crisis to flourish, as e.g. the PIIGS countries, as it did not have such over-indebtedness problems. Main problems arise from its unstable political situation and blocking of key structural reforms. As we showed in the article, this significantly contributed to a rather strange dynamics of responses to the crisis, occurring with a significant delay and causing great instability in the system. We consider that political reasons (government changes, PR and media presentations, measures, etc.) were among the main reasons (for some other reasons see e.g. De Grauwe and Ji, 2014) why the spreads of Slovenian government bonds and by that, the cost of debt grew excessively (which can be verified by observing the correlation of government changes and bond spreads, only descriptively presented in this article) and only with gradual measures and stability of each new government the situation has gradually stabilised.

The level of GDP has significantly dropped, yet this again happened in two waves: first as a consequence of the crisis, and second following the adopted austerity measures. Also, the level of unemployment has been raised, with particular problems in the unemployment levels of the young, similarly to most South East and Mediterranean European countries (while still retaining a comparatively better position as compared to those countries).

At present, the European Commission (2014) lists five main challenges for the Slovenian economy: the need for a permanent restoration of the banking sector, treatment of state ownership of companies, ensuring the stability of public finances, improving the performance of the export companies and Slovenian competitiveness, and increase of the profitability and viability of companies. A further challenge, pointed out in several studies (see e.g. IMAD, 2014; IMAD, 2015), is the long-term sustainability of Slovenian public finance. In general, Slovenia will have to cope with all five challenges to effectively address the imbalances and to fully realize its potential

for growth. Particularly pressing is the issue of deleveraging of private companies, related to the restoration of the banking sector. Furthermore, the success and viability of fiscal consolidation remain an open issue, as well as so far not completed privatization process and non-implemented labour market reforms and reforms of health and long-term care. We consider political (in)stability and (in)determination to implement the necessary measures to be decisive for the macroeconomic and, particularly, fiscal position of Slovenia in the upcoming years.

Many efforts of the Slovenian government have been invested in the satisfaction of Maastricht criteria, particularly as related to the level of structural deficit. As noted by some economists (Krugman, 2013a; Beesley, 2012), it is questionable whether Europe was facing a debt crisis, but rather a banking crisis or even a simple Keynesian crisis of lack of demand. It is, therefore, appropriate to ask, whether too much effort has been invested in solving the wrong problems, or even – with words of Burger and Rojec (2012) – if the Slovenian government measures were not merely a "waste of money". Our article does not provide answers to this issue but merely points to some main problems of the Slovenian response to the financial crisis. It appears that the main Slovenian problems are being solved: the GDP and employment started to grow, the deficit has been controlled and the fiscal rule, limiting the arbitrariness of fiscal policy, was adopted. Still, it is reasonable to ask whether this means a gradual solution of the "Slovenian crisis" or is mainly an accidental externality of changes in the global economic environment. At this point, there are signs for either of the both possibilities. As there are many factors which are frequently difficult to access, only the future will be able to decide if the problems of Slovenian economy and public finances have been, at last, solved in a sustainable manner.

BIBLIOGRAPHY:

Beesley, A. (2012): EU Commission Unveils Proposals on Bondholder 'Bail-ins' for Banks. The Irish Times, 6 June 2012, available at http://www.irishtimes.com/news/eu-commission-unveils-proposals-on-bondholder-bail-ins-for-banks-1.1064184 (Accessed: 07/03/2015).

Brezigar Masten, A., G. Caprirolo, M. Hafner, J. Kušar, G. Ploj, M. Trošt (2014): Zadolženost in razdolževanje slovenskih podjetij. Ekonomski izzivi 2014. Ljubljana: IMAD.

Burger, A., M. Rojec (2012): Slovenian Anti-recession Measures: Waste of Money. 2nd EBR Annual Conference 2012, Mimeo.

Cecchetti, S. G., M. S. Mohanty and F. Zampolli (2011): The Real Effects of Debt. BIS Working Papers No. 352, Basel: Bank for International Settlements.

Checherita, C. and P. Rother (2010): The Impact of High and Growing Government Debt on Economic Growth: An Empirical Investigation for the Euro Area. ECB Working Paper Series No. 1237, Frankfurt: ECB.

Clements, B., R. Bhattacharya and T. Q. Nguyen (2003): External Debt, Public Investment and Growth in Low-income Countries. IMF Working paper 03/249, Washington, DC: IMF.

Čar, A. (2013): Najboljša učenka. Dnevnik, 6. 5. 2013, available at https://www.dnevnik.si/1042588551/mnenja/kolumne/najboljsa-ucenka (Accessed: 07/03/2015).

Damijan, J. P. (2013a): Katastrofalni učinki 'varčevanja' v EU in Sloveniji, available at http://damijan.org/2013/04/23/katastrofalni-ucinki-varcevanja-v-eu-in-sloveniji (Accessed: 07/03/2015).

Damijan, J. P. (2013b): Prisilna uprava iz Bruslja, available at http://damijan.org/2013/05/07/prisilna-uprava-iz-bruslja (Accessed: 07/03/2015).

Damijan, J. P. (2015): Razdolževanje po polžje in impotentnost bank, available at http://damijan.org/2015/04/13/razdolzevanje-po-polzje-in-impotentnost-bank/ (Accessed: 15/01/2016).

De Grauwe, P., Y. Ji (2014): Disappearing government bond spreads in the eurozone – Back to normal? CEPS Working Document, No. 396 / May 2014.

European Commission (2014): Makroekonomska neravnotežja – Slovenija 2014. Brussels: European Commission.

Ferk, B. (2015): Zakaj so se upokojili, koliko časa so upokojeni in koliko stari so se upokojili. Višina pokojnine. Primerjava z EU. In: Populacija 50+ v Sloveniji: Potencial aktualnih družbenih reform za aktivno staranje. Ljubljana: Institute for Economic Research.

Gandrud, C., M. Hallerberg (2014): Bad Banks in the EU: The Impact of Eurostat Rules. Bruegel Working Paper 2014/15, available at http://bruegel.org/wp-content/uploads/imported/publications/Bad_Banks_in_the_EU.pdf (Accessed: 13/01/2015).

Gubenšek, T. (2013): Davčni vidiki prekarnega dela v Sloveniji. Maribor: Pravna fakulteta.

Krugman, P. (2013a): Currency Regimes, Capital Flows, and Crises. Paper presented at the 14th Jacques Polak Annual Research Conference, 7–8 November 2013, available at http://www.imf.org/external/np/res/seminars/2013/arc/pdf/Krugman.pdf (Accessed: 07/03/2015).

Krugman, P. (2013b): How the Case for Austerity has Crumbled. New York Review of Books, LX, 10.

Kumar, M. S. and J. Woo (2010): Public Debt and Growth. IMF Working Paper 10/174, Washington, DC: IMF.

Laeven, L., F. Valencia (2010): Resolution of Banking Crises: The Good, the Bad, and the Ugly (June 2010). IMF Working Paper No. 10/146, pp. 1–35.

Lin, K. S., H. Y. Lee and B. Y. Huang (1996): The role of macroeconomic policy in export-led growth: The experience of Taiwan and South Korea. In: Takatoshi, I. and A. Q. Krueger (Eds.): Financial Deregulation and Integration in East Asia. Chicago, IL, University of Chicago Press.

Marn, U. (2012): Dr. Tine Stanovnik. Mladina 12, 23. 3. 2012, available at http://www.mladina.si/110561/dr-tine-stanovnik-vse-dozdajsnje-poteze-janseve-vlade-kazejo-na-zeljo-po-po/ (Accessed: 07/03/2015).

Mencinger, J., A. Aristovnik, M. Verbič (2014): The Impact of Growing Public Debt on Economic Growth in the European Union. Amfiteatru Economic, 16(2014), 35, pp. 403–414.
Mozetič, M. (2007): Javni dolg Republike Slovenije. Koper: Fakulteta za management.
Palley, I. T. (2011): The Rise and Fall of Export-led Growth, Working Paper No. 675, Levy Economics Institute.
Pescatori, A., D. Sandri, J. Simon (2014): Debt and growth: Is there a magic threshold? IMF Working Paper No. WP/14/34.
Pezdir, R. (2005): Gradualizem – inhibitor tranzicije v Sloveniji. Ljubljana: Inštitut za civilizacijo in kulturo – ICK, Zbirka Delovni zvezki ICK. Ekonomska serija.
Reinhart, C.M. and K. S. Rogoff (2010a): Growth in a Time of Debt. American Economic Review, 100(2), pp. 573–578.
Reinhart, C. M. and K. S. Rogoff (2010b): Debt and Growth Revisited. MPRA Paper No. 24376, Munich: Munich University Library.
Rojec, M., J. Šušteršič, M. Bednaš, S. Jurančič, B. Vasle (2004): The rise and fall of gradualism in Slovenia. Post-communist econ., Vol. 16, No. 4, 459–482.
Salomon, M. E. (2015): Of Austerity, Human Rights and International Institutions. LSE Law, Society and Economy Working Papers 2/2015.
Simoneti, M. (2015): Coordinated approach to corporate deleveraging in Slovenia. Available at http://damijan.org/2015/04/03/coordinated-approach-to-corporate-deleveraging-in-slovenia/ (Accessed: 15/01/2016).
Srakar, A., M. Verbič (2015): Dohodkovna neenakost v Sloveniji in gospodarska kriza. Teorija in praksa, 52, 3, 538–553.
Stanovnik, T., M. Verbič (2014): Personal Income Tax Reforms and Tax Progressivity in Slovenia, 1991–2012. Financial Theory and Practice, 38, 4, 441–463.
Tavčar, B., I. Zakotnik, I. Strmšnik, T. Kraigher (2007): Scenariji gospodarskega razvoja Slovenije do leta 2030. Working Paper 8/2007. Ljubljana: Institute of Macroeconomic Analysis and Development.
Verbič, M., B. Majcen, R. van Nieuwkoop (2006): Sustainability of the Slovenian Pension System: An Analysis with an Overlapping-generations General Equilibrium Model. Eastern European Economics, 44, 4, 60–81.
Verbič, M., R. Spruk (2014): Aging Population and Public Pensions: Theory and Macroeconometric Evidence. Panoeconomicus, 61, 3, 289–316.

SOURCES

Government of the Republic of Slovenia (2015): Gospodarstvo, available at http://www.vlada.si/o_sloveniji/gospodarstvo (Accessed: 26/07/2015).
IMAD (2012): Ekonomski izzivi 2012. Ljubljana: Institute of Macroeconomic Analysis and Development.
IMAD (2013): Ekonomski izzivi 2013. Ljubljana: Institute of Macroeconomic Analysis and Development.
IMAD (2014): Ekonomski izzivi 2014. Ljubljana: Institute of Macroeconomic Analysis and Development.

IMAD (2015): Ekonomski izzivi 2015. Ljubljana: Institute of Macroeconomic Analysis and Development.

International Monetary Fund (2014): World Economic Outlook Database, available at http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/index.aspx (Accessed: 07/03/2015).

Kump, N., B. Majcen, M. Čok (2011): Assessing the Benefits Reform in Slovenia Using a Microsimulation Approach. 3rd General Conference of the International Microsimulation Association, 8–10 June 2011. Stockholm, Mimeo.

Majcen, B., M. Čok (2011): Ocena makroekonomskih posledic pomembnejših predlaganih ukrepov. Ljubljana: Inštitut za ekonomska raziskovanja (IER).

Ministry of Finance of the Republic of Slovenia (2014): Bilten javnih financ, XVI, 12, December 2014.

SORS – Statistical Office of Republic of Slovenia (2015): SI-STAT Database, available at http://pxweb.stat.si/pxweb/dialog/statfile2.asp (Accessed: 07/03/2015).