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THE EUROPEAN UNION BETWEEN MONETARY AND FISCAL UNION

Evropska unija između monetarne i fiskalne unije

Abstract

The aim of the paper is to point out the important issues of functioning of the European Union since its foundation, which are further complicated by global economic and financial crisis. In elaboration of problems, relevant studies and articles, documents of the European Union were used, as well as reports and publications (national and international). Existing data and trends in this area were analyzed, as well as measures affecting further functioning of the EU, by using the methods of qualitative and descriptive analysis. This approach is necessary because there are no universal patterns in domain of specified problems, and the conclusions are valid in strictly defined international symbolic systems and relate to entities of strictly established international interactions in the context of a specific time. The basic results derived from the available empirical research in this area point to the fact that today's debt crisis could contribute to creation of a closer union of European states. This conclusion follows from the fact that member states have expressed willingness to transfer a part of their fiscal sovereignty under a rigorous programme of fiscal consolidation.

Key words: *budget deficit, the European Union (EU), financial crisis, monetary union, the stabilization program.*

Sažetak

Cilj rada je da ukaže na važne probleme funkcionisanja Evropske unije od njenog osnivanja, koji su dodatno usloženi svetskom ekonomskom i finansijskom krizom. U razradi problematike korišćene su relevantne studije i članci, dokumenta Evropske unije, kao i izveštaji i publikacije (domaće i međunarodne). Analizirani su postojeći podaci i trendovi iz ove oblasti, kao i mere koje utiču na dalje funkcionisanje EU, metodama kvalitativne i deskriptivne analize. Ovakav pristup je neophodan, jer ne postoje univerzalni obrazci iz domena razmatranih problema, a izvedeni zaključci validni su u strogo definisanim medjunarodnim simboličkim sistemima i odnose se na subjekte strogo utvrdjenih medjunarodnih interakcija u određenom vremenskom kontekstu. Osnovni rezultati izvedeni iz dostupnih empirijskih istraživanja na ovom području ukazuju na činjenicu da bi današnja dužnička kriza mogla doprineti formiranju čvršće unije evropskih država. Ovakav zaključak sledi iz činjenice da su zemlje članice izrazile spremnost ka ustupanju dela svog fiskalnog suvereniteta pod rigorozne programe fiskalne konsolidacije.

Ključne reči: *budžetski deficit, Evropska unija (EU), finansijska kriza, monetarna unija, stabilizacioni program.*

Introduction

In the early 1990s there was a monetary crisis outbreak in what was then the European Community, as a result of combined effect of several factors related to the strongest economies within the Community. So Germany, for instance, was overburden with the necessity of public financing that could not have been met with the savings of citizens, due to which the country accumulated debt, whereas Bundesbanka rejected its monetisation. A possible solution included attraction of foreign capital by offering high interest rate or by promise to carry out revaluation of domestic currency. In such constellation it was not

proper for the EMS to be based on the currency that was subject of speculation due to the economic problems of the issuing country. On the other hand, Italy needed a drastic cutdown on social budgets, financial sector and public companies [10].

It is obvious that any political programme related to implementation of such project would not have been accepted by citizens since it could be implemented only by a government that would dare to declare economic war. That practically means that such government must be based on cooperation between employers and trade unions, which is completely impossible. In such situations the market of high interest rates, as result of economic weakness records, makes profit, which creates a wicked circle: increase of budget deficit that leads to a new rise of interest rates, currency depreciation that tends to reduce the new rise of interest rates, and so on until reaching an unbearable situation.

The essential issue related to the functioning of EMU since its foundation is the link between the monetary policy of a country and its financial structure. Namely, in the EU there are three confronting types of financial structures:

(1) German, with high actual interest rates policy, universal banking and where the industrial capital is dependant upon the financial capital;
(2) Southern European, where the country plays the role of growth stimulator and social shock- absorber;
(3) Anglo-Saxon, where the market prevails over the industrial capital [11, pp: 240-286].

From the stated point of view, EMU requires stronger coordination and control of fiscal policies and creation of funds that would be transferred in case of unilateral shocks. This might be the only model of solving the current crisis in the EU, especially having in mind the trend of deficit increase among the most developed countries that significantly contribute to the instability of the whole system.

The impact of fiscal deficit and public debt on economic growth

According to the conventional definition, fiscal deficit is the difference between the government's total revenues and total expenses realized within a certain period, mostly within one year. However, fiscal deficit defined in this manner is not a reliable criterion, so for the purpose of analysis of deficit and its effect on other macroeconomic values, it is necessary to precisely determine the contents of such term. That is because the amount and importance of fiscal deficit depends on the scope of the state: central state; consolidated central state, that apart from the central state includes the off-balance funds; consolidated general state, that includes revenues and expenses of local government bodies; public sector as a whole, that includes the balance of financial transactions of public companies, as well as fiscal transactions of financial sector (privatization funds and/or development banks). In accordance with that, the most comprehensive measure of state's impact on other sectors and entire economy should contain the deficit of the state in its widest scope. As we know, such measure is rarely announced, so usually the deficit of central, consolidated central or consolidated general state is used in the analyses [15].

In addition to the deficit measure that is based on the plain difference between revenues and expenses, very often for special purposes some other deficit indicators are calculated, such as: primary deficit, operational deficit, structural deficit, cyclically adjusted deficit, government budget current account deficit, and the like. For analytical purposes most often conventional deficit, primary deficit and cyclically adjusted deficit are used, whereas during inflation, the actual amounts thereof are used. Cyclically adjusted deficit is applied in multiplier analysis based on traditional IS-LM model. Since conventional deficit is partly endogenous, it has no multiplicative effect because it is a result of rise of transfers to unemployed persons (unlike the deficit that is a result of public investment increase), and as such is embedded in the multiplier [30].

Since the government budget deficit is a residual value, it is obvious that there are some significant difficulties when evaluating its impact on the entire economy, as well as on certain macroeconomic aggregates. This is due to the fact that the cause of deficit does make a difference, whether it is a result of tax reduction or government

expenses increase, and especially the fact that the effect of deficit depends on the tax i.e. expenses that are being changed. The conclusion drawn from the above stated is that the impact of deficit on economy should be considered in the context of particular fiscal policy and measures the policy is based on.

One of important conclusions drawn from numerous empirical analyses is that there is a difference in the performance of permanent and temporary deficits. While the effect of temporary deficits may be stabilizing, the effect of permanent deficit dependes on the manner of deficit financing: money issue and/or borrowing. Namely, public debt does not increase when the deficit is financed by means of money issue, nor it affects the level of indebtedness of the state, except in case the debt is denominated in local currency and it is not indexed. That practically means that public debt is a result of permanent deficits that are financed by means of borrowing (in the country or abroad). From the abovementioned it follows that deficit is the change of public debt level between two years (if not financed by money issue), and their effects on economy correspond in case of permanent fiscal deficit and financing by borrowing.

The consequences of fiscal deficit and public debt

There are three theories on the consequences of budget deficit and public debt: Keynesian, Ricardian and Neoclassical school. Their common characteristic is the fact that they mostly consider the case of deficit due to decrease of tax revenues and not due to increase of public expenditure (although Keynesian school in its original version observes the effect of public spending increase on change of employment and *output*, and only later the effect of decreased tax revenues). Generally speaking, disparate views of deficit and public debt arise from different selection of assumptions on which the models of different schools are based [26].

Pursuant to the classical economic doctrine, deficit and public debt are phenomena legitimate only in exceptional conditions and short-term public spending requirements, whereas their permanent existence is legitimate only in case of financing productive capital projects with return rate that is higher than the interest rate of the taken loans. The views of classical economists are that there is no crucial difference between the borrowing of a state and that of an individual. The only purpose of each type of debt is reconciliation between the flow of revenues and expenses for a specific period.

Neoclassical school is based on the assumption that people's life cycle is limited and that generations overlap, so there is a constant equilibrium on the market. Budget deficits increase total spending for a living by transfering taxes to future generations. If economic resources are completely exhausted, increased spending necessarily means decreased savings. The situation on the capital market is changeable so the interest rate must rise so that the market could regain equilibrium. Deficits of permanent nature in that manner "squeeze out" private capital accumulation, the consequences of which are fatal for economic growth [5].

Keynesian school chronologically precedes the Neoclassical school and is based on the assumption that timely deficits have more favourable influence on prosperity. However, there are situations when stimulation of aggregate demand caused by deficit has unfavourable effect. For example, such is the situation of full employment and fixed supply of money, when increased demand for money leads to increase of interest rates and decrease of investments. Pursuant to the stated, Keynesian school leaves a possibility that the deficit has positive or negative effects, depending on the state of economy. That means that Keynesian theory is not able to provide to politicians universal recommendations, that is, they should recognize the state of the economy in order to take certain measures [14].

Ricardian school assumes that successive generations are connected by voluntary and unselfish resource transfer. That means that expenditure is a function of resources of tax payers and their descendants. Deficits only postpone tax payment, leaving it to future generations, while discounted current tax value is equal to government expenditures, which means that deficit from previous generations leaves unchanged resources. Expenditure, as resource function of generations, does not change due to influence of tax

changes. In other words, policy of fiscal deficit has no effect on real economic dimensions.

Ricardian school starts with a hypothesis on debt neutrality, and it is based on the following, extremely restrictive assumptions: 1) time horizon of citizens/tax payers is infinite, 2) differences between tax burdens motivate citizens to engage in inter-generation transfers based on altruism, 3) consumers are rational and foresighted, 4) capital markets are either perfect or contain a specific mistake, 5) taxes are single (lump-sum), 6) use of deficit cannot create values and 7) public spending cannot indefinitely be funded by means of borrowing. Considering the fact that these assumptions do not match reality and that the hypothesis on debt neutrality cannot maintain if any of the stated assumptions is abandoned, it is deemed that ricardianism cannot provide good instructions for running a specific budget policy [1].

Neoclassical and Keynesian paradygm can be quite well complemented, if they are understood as analyses of two different aspects of fiscal policy. By breakdown of deficit to its permanent and temporary components it can be concluded that neoclassical analysis takes into account effects of permanent deficits, while Keynesian takes into account effect of temporary deficits that are taken in order to stabilize cyclical fluctuations within equilibrium with full employment. In other words, neoclassicists believe that lower debt is more favourable from the point of view of average national savings, but they allow temporary deficits that serve to the government for stabilization of economy near equilibrium.

From theoretical point of view, it seems that neoclassical analysis is based on least restrictive assumptions and that provides the most realistic description of reality. Considering the effect of deficit on economy, neoclassicists believe that the key question is whether the deficit is temporary or permanent. Namely, if consumers are focused on their own consumption, reduction of deficit caused by increase of tax burden would, according to the neoclassicists, cause greater decrease in demand if consumers believe that such reduction is permanent. In that case, attempt by the government to achieve equilibrium with greater savings can reduce demand to such an extent that it will cause recession. On the other hand, neoclassicists believe that influence of permanent deficit of any sign to the economy depends on degree of economic development and economic goals. In other words, if private savings are insufficient to achieve desired level of capital accumulation, then the state must achieve permanent suficit.

The main shortcoming of these theories lies in the fact that they, when studying effects of deficit and public debt to economic activity, mostly neglect: (a) method for deficit financing (debt emissions or monetary financing); (b) cause of occurrence of deficit (increase of government expenditure or reduction of tax revenues); (v) structure of tax revenues and structure of government expenditure; (g) deadline for deficit financing (except for neoclassical that differentiates permanent and temporary deficits); (d) whether exogenous policies were anticipated or not. From that point of view, some recent considerations of the effect of deficit to economic activity start with the fact that, with the aim to evaluate effect of fiscal policy to aggregate demand, it is necessary to create a model of economy and specify reference policy (in relation to which some other policy can be called expansive or restrictive) [7].

Sustainability of budget deficit

Problem of sustainability can be formulated as follows: budget deficit leads to public debt growth that would have to be serviced in the future. If interest rates to the public debt exceed growth rate of economy, debt is dynamically set so that ratio between the public debt and GDP is deteriorating. It is clear that this can become unsustainable and that it requires corrective measures [4].

When considering ratio between the debt and deficit, starting point is known restriction of the budget [13]:

$$G - T + rB = dB/dt + dM/dt \quad (1)$$

where: G – level of public spending (without payment of interest rate to the public debt), T – tax revenue, r – interest rate to the public debt B, and M – level of primary money (monetary base). The left side of the equation (1) presents budget deficit. Debt consists of primary budget deficit (G - T) and payment of interest rates to the public debt (rB). The right side is the financial side: budgetary deficit can be financed through creation of debt (dB/dt) or printing of primary money dM/dt.

Growth rate in time unit, marked by a dot above the symbol is: □ = dB/dt

When we express variables as ratio toward GDP:

b= B/YW (2)

where: Y - BDP, and b - ratio debt/GDP; where follows:

□ = □/Y – □F/□ (3)

or by using (2) and inserting equation:

□ = □Y + b□ (4)

By replacing (4) in (1) follows

□ = (g-t) + (r-x)b (5)

where: g = G/Y; t = T/Y a x - □/Y (GDP growth rate).

Equation (5) defines debt dynamics: once nominal interest rate r exceeds nominal growth of economy x, the government should take actions to realize suficit of primary budget (g-t), and by not doing so, the ratio debt/GDP would increase indefinitely. Final outcome would be unsettled public debt, out of which arises that is condition of government solvency necessary: □= 0 or (r - x)b = t – g [11, pp: 322-335].

Therefore, if the government accumulates significant deficit in the past, it has to realize in the folowing periods adequate budget suficit in order to protect ratio debt/GDP against automatic growth. At first glance we conclude that the only way of such situation is by cutting public expenditure and/or increase of taxes [3, pp: 408-411].

In a stable country □ equals 0, which means that d ≡ gb (6), where:

b – (stable country) level of public debt stabilization (expressed in % GDP);

g – growth rate of nominal GDP,

d – government budget deficit expressed in % of GDP.

Necessity for the Stability and Growth Pact reform in global economic crisis

Key condition of convergence for countries that intend to join the Economic and Monetary Union refers to request for reduction of budget deficit to 3% and public debt to 60% of GDP (defined by the Stability and Growth Pact). If we consider now mathematical identity d ≡ g × b and introduce conditions for budget convergence, conclusion would be that stabilization of public debt to 60% of GDP could be achieved *only and only if* nominal growth rate of GDP was equal to 5%, that is, 0,03 = 0,05 × 0,60. However, there is no rational economic explanation to this rule because it is not clear why should public debt be stabilized at precisely 60%?

In the last ten years of existence, the Stability and Growth Pact went through several crises. The first big crisis occurred in 2003 when fiscal thresholds were exceeded by two big EU countries: France and Germany. Those two countries exceeded the public debt limit of 60% of GDP several times in the period between 1999 to 2004. Thus, in 2003 a procedure for excessive debt was initiated. However, instead of getting a *note* as their final warning before sanctions, after ignoring recommendations by the European Commission, further procedures were blocked and another set of 'recommendations' was delivered. This case was the reason for reforms from the Pact from 2005.

Criticism of the Pact was divided into three groups related to the following:

a) basic methodology of defining criteria for fiscal discipline,
b) unwanted effects that can occur due to strict execution of fiscal rules,
c) loose and selective implementation of fiscal discipline [8].

The issue of implementation and imposition of criteria from the Pact that should be fulfilled is actualized today, especially within Eurozone countries. Fiscal responsibility in all phases of economic cycles means both expansion of government expenditure in period of crisis and 'tightening the belt' in times of economic 'boom'. A deficit-prone policy, often for political reasons (e.g. increase of social payments in election year), leads to unsustainable public finance. On the other hand, averting decision-making within the Pact from automatic punishment of the countries that exceed the limit of 3% to possibility of discretionary decision-making led to politization of decisions on excessive deficit.

From the stated point of view, strict observance of fiscal discipline criteria in Eurozone causes numerous unwanted effects. Some Eurozone member states are EU countries with the most vulnerable public finance. For some countries like Greece, Italy, Portugal and Spain rating agencies have already gave low international rating marks due to excessive share of the public debt and deficit

in GDP, which additionally complicates position of these countries.

Global economic crisis showed numerous shortcomings of the Pact and monetary union, so when bankruptcy of some member states was mentioned a question was posed regarding *'non-bail out clause'*. In that context, the following question is considered: will Greece, Spain, Ireland and other countries continue to burden EU economy with its high deficits and *'bury'* european financial market by selling their debts or some countries will have to leave the Eurozone. What is completely clear is the fact that healthy and quality consolidated public finance with mid-term or long-term sustainability have proven to be *conditio sine qua non* of macroeconomic stability. In other words, since monetary policy of the Eurozone countries is under supra-national competence, fiscal policy remains the only instrument for maintenance of stability.

Effect of the world financial crisis on the European Union

After current crisis outbreak, European banks have been exposed to risky American mortgage loans, due to which they had already experienced great losses. Fear of the same scenario on the European Union market affected the increase in interbank interest rates, because banks have reluctantly lent money to one another. Instead, banks and other investors have invested surplus of available assets into government bonds and other financial instruments of low risk and low yield. Such a situation made European countries engage into joint protective measures aimed at curbing the crisis. However, unlike the USA as a single state, the EU consists of 27 states, which additionally complicates and makes hard reaching a joint solution. The EU has important financial institutions such as the European Central Bank, but its major drawback is the lack of European government that would enact quick and binding decisions for all member states. Namely, under the current legislative solutions each member state is allowed to independently create measures for overcoming the crisis, in which process the planned measures do not have to be harmonized among the member states.

Similarly to bailout package provided to Greece, the adopted European stabilization mechanism should provide loans to states with financial difficulties within next three years. The new mechanism will entail 60 billion Euros from the European Commission and 440 billion Euros as a Special Purpose Vehicle, to be guaranteed by member states, in proportion to their share in the ECB capital. In addition, the IMF should provide additional 250 billion Euros. Of course, Germany will have the highest share of 123 billion Euros, whereas the share of France will be significantly lower, around 92 billion Euros [29, pp: 12-16].

After adopting the European stabilization mechanism, the European Central Bank showed readiness to buy back eurozone government and corporate bonds in order to ensure market profundity and liquidity, and that all interventions are sterilized and do not pose so-called quantitative easing, by which the fear of inflation is excluded. Appraisals that such stabilization fund is the first step towards fiscal union are well grounded, since a clear political will to back the Euro and euro bonds is shown by its adoption. However it should be highlighted that unless those measures are supported by rigorous fiscal measures, the solvency problems will worsen and monetary union will get into deadend that would eventually lead to its quick demise.

Similarly to the crisis of the fixed currency rates maintenance system (Exchange Rate Mechanism - ERM) in the early 1990s that sparked the quick foundation of a monetary union, current debt crisis could contribute to the foundation of a tighter European union. Such a conclusion can be drawn from the fact that member states have agreed to back to one another and showed readiness to put a part of their fiscal sovereignty under rigorous fiscal consolidation programmes. The fact that the Stabilisation fund accounts for 8% of the eurozone GDP and that leads to joint issue of government bonds through the European Commission is very significant, although past experience of the Stability Pact brings a doubt of efficiency of the process within Ecofin and the European Commission. Next important conclusion is that the major role in the stricter control will have the biggest guarantor of this construction and the state that invested and gained the most from the Euro project - Germany.

However, regardless of the new financial package, one key question remains open - how to make certain governments limit their spending and thus avoid payment of their debt by other states. So far, only Greece is in question but soon it could apply to other states, such as: the Great Britain, Spain. The process of bridging the problem of Greece as well as of other indebted nations highly affects the additional increase in debt and deficit regional ratio, without possibility of solving the main problem.

However, all that looks good on paper, but becomes useless since only a symptom instead of a source of a disease is being cured. Permanent depreciation of Euro and aggravation of business conditions in Europe have damaged American export, so American federal reserves were used to help by activating a programme of euro to dollar swap that the European Central Bank will borrow to European banks. Since European banks need dollars and American banks are unwilling to meet their needs ever since the chaos in Greese started, the problems the European partners are about to encounter are obvious [6].

Next step is an attempt to coordinate group economies, and one of the main steps should be introduction of stricter rules that would prevent overborrowing of states. Currently, the EU limits deficit to three percents, but that is being complied with by few countries. The European president Herman Van Rompuy announced the preparation of a series of proposals that will enable the EU to function as a single economic power instead of a set of nations acting independently [10].

However, it should be underlined that it is not the main problem. The bottom line is how to solve the problem of almost nonexistent economic growth? Many analysts warn that European governments have not found an adequate solution so far, although they are familiar with the measures to be taken:

(a) to cut down social rights and
(b) to effectively force working population to work longer and more.

If they fail to take such measures on their own, the states will be forced to do so by the bond markets, which is an undesired solution.

Increase of public debt and spending

Various empirical researches throughout the world showed that the main instruments and leverage of public finances are budget deficit, public debts, public expenses and revenues; and that for the last ten years or so they have been loosely controlled by the state as an institution. Unlike proclaimed and much praised principles of liberalism and monetarism, most world economies developed in their practice state interventionism and New Keynesian theory and policy for regulating economy by means of deficit financing and cheap money policy.

Previously, states appeared on financial market just like any other entity, especially before recession and crisis, at what time borrowing exceeds the limits, public debt and budget deficit rise rapidly, and the share of public expenses in gross domestic product grows continuously. Parallel to these processes, the role of public sector in basic economic sectors has also grown, especially in investment, employment and social sector (developed countries became "economies of old men" or "zombie economy") [20].

Table 1: Public debt share for selected states - in % GDP

	1970.	1990.	2000.	2007.	2008	2009.	2010.	2011.
Austria	18,9	57,9	71,1	63,1	66,3	72,6	78,6	80,0
Belgium	64,0	125,7	113,7	88,1	93,3	100,5	100,7	100,7
Denmark	38,8	65,8	60,4	34,3	42,6	52,3	55,5	57,1
Finland	11,8	14,4	52,5	41,4	40,6	52,4	57,4	62,7
France	30,1	40,2	65,6	72,3	77,0	89,2	94,0	97,3
Germany	18,1	43,2	60,4	65,3	69,3	76,3	87,0	87,3
Greece	17,6	90,0	115,3	112,9	110,0	131,6	147,3	157,1
Ireland	4,9	97,2	39,4	28,8	43,6	71,6	102,4	120,4
Italy	38,1	105,4	121,6	112,8	121,6	122,1	126,8	129,0
Japan	10,6	61,4	135,4	167,0	174,0	194,1	199,7	212,7
Holland	51,5	78,8	63,9	51,5	64,5	67,6	71,4	74,3
Norway	41,8	42,8	32,7	57,4	54,9	48,0	49,5	56,1
Portugal	-	60,5	60,2	75,4	80,6	93,1	103,1	110,8
Spain	3,9	50,6	66,5	42,1	47,4	62,3	66,1	73,6
Sweden	31,5	44,3	64,3	49,3	49,6	52,0	49,1	45,4
G.Britain	4,9	39,1	45,1	47,2	56,8	72,4	82,0	88,5
USA	11,7	55,3	54,5	62,6	71,8	84,3	93,6	101,1
Eurozone	-	-	75,8	71,6	76,5	86,9	92,7	95,6
OECD	-	-	69,8	73,1	79,3	90,9	97,6	102,4
Serbia			37.7%	30.9%	29.2%	34.8%	42.9%	44.9%

Source: OECD Economic Outlook, Volume 2011, Issue 1 – No.89, © OECD 2011, Annex Tables: Table 32. General government financial liabillities.

Data given in Table 1 show that many of the European Union states do not meet criteria they impose on prospective members. In the end of 2011, almost all EU states (with the exception of Sweden, Finland, Norway and Denmark) exceeded the limit of "allowed" 60%, whereas in Belgium, France, Greece, Portugal, Italy and Ireland public debt exceeded 100% of their GDP. Likewise, it is interesting to observe the movement of public debt in some EU countries. One can see that since 2000, in Belgium, Greece and Italy debt has continuously exceeded the limit of 100% GDP. Average share of public debt in GDP in eurozone countries is around 90% of GDP, and is not likely to drop soon to the level specified under the Maastricht criteria. Serbia's public debt reached statutory minimum of 45% GDP, which is far from being the highest debt in Europe [25]. But Serbia has another problem: distrust of investors in Serbia's capacity to pay back already relatively low debt, which results in borrowing under the rates several times higher than the GDP growth.

Besides, data from Table 1 - unambiguously point to the conclusion that Western economies have been maintained and "developed" by means of ever increasing debts and unhealthy economic structure thus "producing" the stagnation of economic growth and development, which has finally led to economic breakdown. Accumulation of debt and liabilities arising therefrom have become permanent processes, causing economic crisis, downfall of banks, financial market breakdown and stock exchange collapse [16, pp: 84-89].

These data correspond to previously stated conclusions on the negative impact of public debt on economic growth, which is confirmed by the data on modest rates of GDP real growth, given in Table 2. It is estimated that global economy did not enter the crisis earlier owing to the cheap money and ever growing state debts. Public debt in Greece exceeded 300 billion Euros or 157,1% GDP, with the estimate of further growth in 2012 to 159,3%. Portugal, Spain, Ireland, Italy and Iceland are near bankruptcy [17, pp: 29-32].

Table 2: GDP real growth for selected countries

	2000.	2007.	2008	2009.	2010.	2011.
Austria	3,3	3,7	2,2	-3,9	2,1	2,9
Belgium	3,8	2,8	0,8	-2,7	2,1	2,4
Denmark	3,5	1,6	-1,1	-5,2	2,1	1,9
Finland	5,3	5,3	1,0	-8,3	3,1	3,8
France	4,1	2,3	0,1	-2,7	1,4	2,2
Germany	3,5	2,8	0,7	-4,7	3,5	3,4
Greece	4,5	4,3	1,0	-2,0	-4,5	-2,9
Ireland	9,7	5,6	-3,6	-7,6	-1,0	0,0
Italy	3,9	1,4	-1,3	-5,2	1,2	1,1
Japan	2,9	2,4	-1,2	-6,3	4,0	-0,9
Holland	2,9	3,4	-0,7	0,0	2,5	0,8
Norway	3,3	2,7	0,8	-1,4	0,4	2,5
Portugal	3,9	2,4	0,0	-2,5	1,3	-2,1
Spain	5,0	3,6	0,9	-3,7	-0,1	0,9
Sweden	4,6	3,4	-0,8	-5,3	5,3	4,5
G.Britain	3,9	2,7	-0,1	-4,9	1,3	1,4
USA	4,1	1,9	0,0	-2,6	2,9	2,6
Eurozone	4,0	2,8	0,3	-4,1	1,7	2,0
OECD	4,2	2,7	0,3	-3,5	2,9	2,3

Source: OECD Economic Outlook, Volume 2011, Issue 1 – No.89, © OECD 2011, Annex Tables: Table 1. Real GDP.

On the other hand, data from Table 2 show that debt of the new EU member states, i.e. states outside the eurozone, is lower. This phenomenon can partially be explained by so-called *Balassa-Samuelson effect*. Higher inflation of developing countries means higher nominal GDP, which contributes to the decrease of public debt/GDP ratio [2, pp: 584-596]. The practice of presenting budget deficit and public debt of Serbia confirms this conclusion.

Table 3: Public debt of countries outside the eurozone in the period 2007-2011)

	2007.	2008.	2009.	2010.	2011.
Bulgaria	17.2	13.7	14.6	16.3	17.5
The Czech Republic	27.9	28.7	34.4	37.6	39.9
Denmark	27.5	34.5	41.8	43.7	44.1
Latvia	9.0	19.8	36.7	44.7	44.8
Lithuania	16.8	15.5	29.4	38.0	37.7
Hungary	67.0	72.9	79.7	81.3	75.9
Poland	45.0	47.1	50.9	54.9	56.7
Romania	12.8	13.4	23.6	31.0	34.0
Sweden	40.2	38.8	42.7	39.7	36.3
Great Britain	44.4	54.8	69.6	79.9	84.0
EU	59.0	62.5	74.7	80.3	82.5

Source: Statistical Annex, European Economic Forecast – Autumn 2011., http://ec.europa.eu/ economy _finance/eu/ forecasts/2011_autumn_forecast_en.htm

Budget deficit movement in developed economies

Great portion of debts has been incurred for the purpose of economic recovery, and the states have actually failed in this respect since economy was developing under very low growth rates of 1-2%, which leads to the conclusion that debts are out of control. According to the IMF aevaluation, in 2014 public debt will reach 239% GDP in Japan, 132% in Italy, 113,51% in the USA and 100% in Great Britain, which has lead to rating downgrade of the states with high debt and weak fiscal position [12, pp: 7-23]. These facts confirm the validity of assumption on unsustainability of key convergence criterion that defines the ratio of budget deficit, public debt and economic growth rate.

Data from table 4 illustrate that budget deficits are skyrocketing in developed economies. Regardless of the proclamations on deficit decrease and restriction of public expenses, they increase is getting greater thus affecting growth of the role of the state in economy [17, pp: 29-32]. State intervention is spread in all economies which leads to constant increase of public expenses in GDP.

Table 4: Budget deficits of some of the most developed countries in the world (in % GDP)

	1970.	1980.	1990.	2000.	2007.	2008.	2009.	2010.	2011.
USA	-0,6	-2,3	-2,6	1,5	-2,9	-6,9	-13,5	10,6	-10,1
Germany	-0,6	-1,0	-2,0	1,3	0,3	0,1	-3,0	-3,3	-2,1
France	-0,7	1,1	-1,8	-1,5	-2,7	-3,3	-7,5	-7,0	-5,6
Italy	-3,8	-9,2	-10,8	-0,9	-1,5	-0,7	-5,3	-4,5	-3.9
G.Britain	-1,1	-2,5	-4,0	3,7	-2,8	- 4,8	-10,8	-10,3	-8,7
Sweden	-0,9	-3,4	-3,3	3,6	3,6	2,2	-0,9	-0,3	0,3

Source: Budget deficits: What governments are d-oing, available at: http://www.oecd.org/ document/ 49/ 0,3746,en_33873108_33873500_46664497_1_1_1_1,00.html, (12.03.2011)., and OECD Economic Outlook, Volume 2011, Issue 1 – No.89, © OECD 2011, Annex Tables: Table 27. General government financial balances.

Another paradox, connected to the level of budget deficit and public debt confirms overall complexity of the role of a modern state as an institution, refers to the fact that all states note extremely high increase of government expenditure and increase of their share in GDP (data from the Table 5). In the USA it increased from 28% in 1960 to 41% in 2011; in Germany from 32% to 45%; France from 35% to 55%; in Italy from 33% to 51%; G. Britain from 32% to 50% and Sweden from 31% to 51%. Almost identical situation can be seen with other countries. What is most worrying is the fact that the greatest part of this expenditure refers to non-production expenditure, so that long-time hidden problem of pension, health and social system emerged to the surface, which cannot be financed any longer. Thus, indebtedness leads to a new pressure on the social function of the state (budgets) that becomes "guilty" for high non-production expenditure and budget deficit [6].

Table 5: Public expenses of some of the most developed countries in the world - in % GDP

	1960.	1980.	1990.	2000.	2007.	2008.	2009.	2010.	2011.	2012.
USA	28	33	35	37	37	39	42	42	41	41
Germany	32	36	48	48	44	44	48	47	45	44
France	35	36	55	56	52	53	56	56	55	55
Italy	33	38	46	53	48	49	52	51	51	49
G.Britain	32	48	56	57	44	44	51	51	50	49
Sweden	31	45	65	55	51	52	55	53	52	51

Source: OECD Economic Outlook, Volume 2011, Issue 1– No.89, © OECD 2011, Annex Tables: Table 25. General government total outlays.

Conclusion

The European Monetary Union calls for tighter coordination and control of fiscal policies alongside with the forming of funds which would be transferred in the event of unilateral shocks. In general, this is the only possible model for solving the present crisis in EU, particularly when taking into account the upward deficit tendency in the most developed countries, which considerably contribute to the instability of the whole system.

As the government budget deficit is a residual value, it is *c*learly very difficult to assess its impact on the economy as a whole, as well as on individual macroeconomic aggregates. This means that it matters how the deficit occurs, whether as: a consequence of tax reduction; a consequence of government expenditure growth; and an important fact is that the deficit`s impact differs depending on which taxes, i.e. expenditure is changed. From the above said it may be inferred that the deficit` s impact on national economy should be considered in the context of a concrete fiscal policy and measures on which it is based.

From the above presented point of view follows the conclusion that sound and adequately consolidated public finances, with medium-term or long-term sustainability, proved to be *conditio sine qua non* of macroeconomic stability. In other words, as the monetary policy of the Eurozone member countries comes within supranational competence, the fiscal policy remains the only instrument for maintaining stability.

References

1. Arrau, P., (1990), "How Does the Debt Crisis Affect Investment and Growth?", *International Economics Department, The World Bank*, April 1990., http://www-wds.worldbank. org/servlet/ WDSContentServer /WDSP/IB/1990/04/01/000009265_3960929014431/ Rendered/PDF/ multi0page.pdf, (accessed: 22.12.2011).
2. Balassa, B., (1964.): "The Purchasing Power Parity Doctrine: A Reappraisal", *Journal of Political Economy*, vol. 72, str. 584-596.
3. Bajt, A., (1979), "Osnove ekonomske analize i politike", *Informator*, Zagreb.
4. Ball, L. & Mankiw G., (1996), "What Do Budget Deficits Do?", http://mostlyeconomics. wordpress. com/2009/06/05/what-do-budget-deficits-do/, (accessed: 12.11.2011).
5. Bernheim, D. B., (1989), "A Neoclassical Perspective on Budget Deficit", *Journal of Economic Perspectives,* vol. 3, br. 2, 1989; spring 1989., pp 55-72, http://www.jstor.org/pss/1942669, (accessed: 12.11.2011).
6. Budget: finances publiques 2009-2012., dostupno: http:// www.assemblee-nationale. fr/13/ dossiers/loi_finances_2009. asp, (22.12.2011).
7. Buiter, W. H., (1985), "Guide to Public Sector Debt and Deficits", *Economic Policy: A European Forum 1,* 13-79., (accessed: 12.11.2011).
8. Calmfors, L., (2005), "What remains of the Stability and Growth Pact?", *Swedish Institute for European Policy Studies*, novembar/2005.
9. Council Financial Regulation of 21 December 1997 applicable to the general budget of the European Communities, OJ No L 356, 21.12.1997, p.1; Regulation as last amended by Regulation (EC, ECSC, Euratom) No 762/2001 (OJ L 111, 20.4.2001, p.1)., (accessed: 12.11.2011).
10. Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, OJ L 248/1, 16.9.2002; Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities, OJ L 357/1, 31.12.2002., (accessed: 20.01.2012).
11. De Grauwe, P., (2004), „Ekonomija monetarne unije", *Izdavačka knjižarnica Zorana Stojanovića*, Sremski Karlovci – Novi Sad.
12. *Eurobarometer* 70, June 2010, str. 7-23, dostupno: http:// ec.europa.eu/eurostat/ euroindicators, (accessed: 12.02.2012).
13. Horvat B., (1976), „Ekonomska politika stabilizacije", *Naprijed*, Zagreb.
14. *Investopedia*, (2011), „Can Keynesian Economics Reduce Boom-Bust Cycles?", http://www. investopedia.com/articles/ economics/08/keynesian-economics.asp #axzz1jnZqhnfz, (accessed: 12.11.2011).
15. Jacobs, D., Schoeman N., Jan van Heerden, (2002), „Alternative Definitions of the Budget Deficit and its Impact on the Sustainability of Fiscal Policy in South Africa", http://www.essa.org.za/ download/papers/ 006.pdf, (accessed: 12.11.2011).
16. Komazec, S., (2011), "Dolar, evro i kriza svetskog monetarnog sistema", *Studija o budućnosti dolara i evrozone, Biblioteka naučno-istraživačkih radova – Savremena kriza i izazovi budućnosti*, Asterix i Obelix, Zemun.
17. Margolis, M., (2011), "Welcome to Welfare 2.0 For the World's Poor, The Key to Power", *Newsweek*, Special Edition, Issues 2011, December - February, str. 29-32., (accessed: 12.01.2012).
18. Nikolić, A., Đorđević, D., (2008), "Evropske javne finansije i budžet Evropske unije", *Privredna akademija*, Novi Sad.
19. Nikolić, A., (2011), "Teskoće funkcionisanja Evropske unije u odsustvu čvršće fiskalne koordinacije", *Ekonomija-teorija i praksa*, 1/2011.
20. *OECD Economic Outlook*, Volume 2011, Issue 1 – No.89, © OECD 2011, Annex Tables: Table 27. General government financial balances & Table 32. General government financial liabilities.
21. *OECD Economic Surveys*, dostupno: http://www.oecd-ilibrary.org/ economics/ oecd-economic-surveys_16097513. (22.12.2011).
22. *OECD*, "Economic Survey of the United States 2010", http:// www. oecd.org/ home/ 0,2987,en_ 2649_ 201185 _1_1_1_ 1_1,00.html, (accessed: 16.12.2011).
23. *Revidirani memorandum o budžetu i ekonomskoj i fiskalnoj politici za 2011*. godinu sa projekcijama za 2012. i 2013. godinu, decembar 2010., (accessed: 02.12.2012).
24. Samuelson, P. A. (1964.), "Theoretical Notes on Trade Problems", The Review *of Economics and Statistics*, br. 46, str. 145-154
25. *Statistical Annex*, "European Economic Forecast – Autumn 2011.", http://ec.europa.eu/ economy _finance/eu/ forecasts/2011_autumn_forecast_en.htm
26. Tempelman, H. Jerry, James M., (2007), „Buchanan on Public-Debt Finanse", http://www. jerrytempelman.com /Jerry's%20 website/Publications/03.%20Government% 20debt%20 finanse/01.%20 Buchanan%20Gov't-Debt%20Finanse%20 paper.pdf, (accessed: 12.11.2011).
27. Tepavac R, (2008), "Institucionalni investitori na finansijskom tržištu", Beograd, *Izdanje IP Filip Visnjić*.
28. Tepavac R, (2011), "Novi pristup reformi budžetskog sistema", *Revizor* 54/2011, Beograd, *Institut za ekonomiku i finansije*, str 78-82.
29. Theil, S., "How Europe's New Goals - Will Pay Off, The Key to Power", *Newsweek*, Special Edition, Issues 2011, December - February, 2011, str. 12-16.
30. Tobin, James, (2001), „Its Macroeconomics in Perspective", *Cowles Foundation for Research in economics, Yale university Box 208281*, New Haven, Connecticut, dostupno - http://cowles.econ.yale.edu /P/cd/d13a/ d1301.pdf. (accessed: 12.11.2011).

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