WHAT DO WE KNOW ABOUT THE EFFECTS OF EXPANSIONARY FISCAL POLICY – LESSONS FROM THE GREAT CRISES

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ABSTRACT

This paper first describes the design and functioning of fiscal policy during the Great Depression – mainly on the example of the USA. Then it summarizes the debates and different assessments of the efficiency, i.e. inefficiency of the fiscal stimuli during the Great Depression. These estimates, for reasons of objectivity, are placed within the historical context of developments in the 1930s: dominance of the liberal economic philosophy; the "boom" of economic activity in developed countries in the period 1922 – 1929; insufficiently developed macroeconomic science and the increasing influence of Keynes's economic concepts before and during the crisis. Later, the effects of expansionary fiscal policy used for addressing the challenges of the Great Recession are analyzed. In this context, the paper provides the dilemmas and controversies regarding the estimation of the value of fiscal multipliers and the limits of discretionary fiscal policy – especially those related to the accumulation of structural budget deficits and the growth of public debt. In spite of the present controversies and dilemmas about the real possibilities and limits of expansionary fiscal policy, the authors especially/particularly highlight the viewpoint that fiscal stimuli, in time of severe and prolonged recessions, in the presence of a dysfunctional banking system and interest rates near the zero low bound rate, function well. In the end, the paper summarizes the lessons from the experience about the effects of expansionary fiscal policy during severe and prolonged recessions, as lessons for the Republic of Macedonia.

Keywords: fiscal policy, fiscal stimulus, fiscal multipliers, the Great Depression, the Great Recession, structural budget deficits, public debt.
JEL classification codes: E62, G01, H6

INTRODUCTION

There is a general consensus in the modern macroeconomic science that the research related to the most severe crisis in the world economic history – the Great Depression of 1929-1933 i.e. the complex reasons that determined it, the consequences on the real and financial sector of the countries and especially the policy response (fiscal and monetary), their efficiency, that is inefficiency etc., is extremely important for understanding the phenomenology of contemporary economic cycles and the way of functioning of economies. The Great Depression has been a "basic motivation event" in the careers of many prominent economists – the Nobel laureates Klein, Modigliani, Samuelson, Solow, Tobin, who left deep marks in the modern macroeconomic science (Mankiw, 2006). Indeed, according to Bernanke (Bernanke, 2004), the Great Depression was and still remains an intellectual challenge for modern macroeconomics, due to two reasons: (1) the Great Depression enabled the emergence and the fast progress of modern macroeconomics and (2) the experiences of the 1930s continue to influence the "beliefs of macroeconomists" on the recommendations related to the key policies and the agenda for their research (Bernanke, 1994). We believe that the Great Recession of 2007-2009 will also play a similar role and will present a significant "motivation event" for modern macroeconomic science, that it will inspire new researches, i.e. will produce new lessons for crucial issues, including the policy response and increasing their effectiveness in the stabilization of economies. The aim of this paper is to summarize the knowledge and debates in the contemporary macroeconomic science on the effects and limits of fiscal policy in times of big crises (the Great Depression and the Great Recession) and to suggest lesson about the fiscal policy of the Republic of Macedonia.

Fiscal Policy During The Great Depression

A real assessment of the response of fiscal policy during the Great Depression requires knowledge about the historical context of the developments in the period before and after the emergence of the most severe crisis in the world economic history. The following facts should be kept in mind: (1) the dominance of the liberal economic philosophy; (2) the expansions, the "boom" of economic activity in the developed countries in the period 1922-1929; (3) the underdeveloped macroeconomic science, i.e. the insufficient knowledge of policymakers for the significance and effects of stabilization policies and (4) the increasing importance of Keynes' economic concepts in the period before and during the crisis. The classical economic thought before Keynes claimed that markets have a pronounced power of self-regulation, of quick clearance, and that hence government involvement in economic activity would do more harm than good for economies. The period 1922-1929 was a period of expansions and prosperity. In that period the industrial production and the national income of the USA grew by almost 50 percent. France experienced a fast growth and doubled the industrial production. In Germany the growth was more modest and appeared in 1925-1929, while Great Britain was an exception by not being a part of the prosperity (Marcel and Taieb 2008, pp. 135 - 140). The "boom" periods of economic activity are followed by increasing inflationary pressures, making the governments strengthen the restrictiveness of the key macroeconomic policies – fiscal and monetary. Furthermore, we should keep in mind the fact that the modern macroeconomic science emerged with the publication off Keynes' *General theory of employment, interest and money* and that before that very little was known about the stabilization effects of fiscal and monetary policy. These three factors (liberalism, the 1922-1929 expansion and the underdevelopment of macroeconomic science) show why the developed economies implemented procyclical policies right after the emergence of the Great Depression. This especially applies to France and Great Britain, whose governments were particularly oriented toward eliminating budget deficits and increasing the restrictiveness of monetary policy – rise in interest rates in order to prevent the outflow of gold from the countries and to maintain the fixed exchange rate of the national currencies. The situation was somewhat different in the USA, although there, at least in the starting years of the Depression, the policies can be hardly qualified as typically countercyclical. Namely, immediately after the beginning of the Great Depression, President Hoover, who was otherwise a sworn liberal and believed in the market self regulation, implemented certain countercyclical measures: cutting taxes, introducing government funding of public works, insisting that managers of large companies keep wages and investments and do not fire employees, increasing the expansionaryness of monetary policy etc. Still, he pointed out that the role of the state is limited and that it cannot substitute the private initiative. However, the USA in 1931 faced a significant budget deficit, and Hoover rushed to eliminate it the very next year by increasing taxes, thus de facto suspending the countercyclical fiscal policy (Marcel and Taieb 2008; Romer, 2014). On the other hand, in order to protect the gold standard and to prevent speculative attacks on the dollar, the FED increased the interest rate i.e. tightened the monetary policy. The influence of Keynes' economic philosophy on the design of economic policy measures during the Great Depression has various estimations. Based on the fact that the New Deal program preceded Keynes' capital work *The general theory of employment, interest and money*, there are opinions in the literature that Keynes de facto did not have or at least did not have a significant influence on Roosevelt's New Deal, which was based on creating budget deficits for financing public works in the American economy in the second phase (from spring 1935). However, the fact remains that Keynes, as a prominent and authoritative economist, observed government policies after the emergence of the Great Depression, corresponded with the members of the May Committee in his country who suggested cutting the budget in the heat of the Great Depression. He severely criticized the typically procyclical government economic policy in England, gave statements and commentaries for American newspapers etc. In that time Keynes, who had the opportunity to read the Expert Report of the May Committees on the measures against the depression (which were typically deflationary), stated that that was "the most idiotic document that I have had the misfortune to read".[9] In this sense, the most famous biographer of Keynes, Professor Robert Skidelsky, estimates Keynes' influence on Roosevelt's New Deal in the following way: "I, from my point of view, believe that Keynes had a larger influence on Roosevelt's New Deal, than is generally acknowledged, especially in the first phase of the New Deal, which preceded the General theory." (Skidelsky, 1997, p. 1). In light of this argument by Skidelsky is the fact that Keynes sent an open letter to President Roosevelt in December 1933, where he explained the essence of his policy for economic recovery, i.e. for the growth of national output and raising employment (Keynes, 1933). The letter was published on December 1933 in the New York Times and followed by other newspapers in the USA. Later, in 1935, there was a meeting between Roosevelt and Keynes and their cooperation and correspondence via private letters continued in the following years.

The expansiveness of fiscal policy during the crisis of the 1930s is mainly considered in relation to the implementation of Roosevelt's New Deal in the USA. Roosevelt became President of the USA in March 1933. His New Deal was implemented in two phases. The first phase lasted from May 1933 to spring 1935. This was a period when in the USA, in a short period, around 15 laws were adopted with the goal to reorganize and consolidate the banking sector and to revive the agricultural and industrial production. The second phase of the New Deal started in spring 1935. The countercyclical Keynesian policy was especially pronounced in this phase when big public works began to be organized within the Works Progress Administration (WPA), Tennessee Valley Authority (founded in 1933) etc., mainly financed with rising budget deficits. Through WPA, by 1938, about 3.800.000 people were employed, almost a third of the unemployed in the USA. Furthermore, also, with the intermediation of WPA 122.000 public buildings, 644.000 miles of new roads, 77.000 new bridges, 285 airports, 24.000 channels etc. were built (Fiti, 2009). These results, at least at first sight, seem spectacular and strengthen the conventional Keynesian view that fiscal stimulus within Roosevelt's New Deal, in terms of existence of the liquidity trap phenomenon and monetary policy ineffectiveness, are most creditable for saving the American economy from the claws of the Great Depression. This view has supporters even today. Regarding this, Almunia et al. (2009, p.3) write: "… fiscal policy, where applied, worked extremely well in the 1930s, whether because spending from other sources was limited by uncertainty and liquidity constraints, or because with interest rates close to the zero bound there was little crowding out of private spending."

This view is additionally argumented with the indicators of the trajectory of the business cycle in the 1930s. Namely, as known, the Depression lasted 43 months (from August 1929 to March 1933),

[9] See more on the correspondence with the May Committee in Robert Skidelsky's article titled "Once again we must ask: 'Who governs?", *Financial Times*, June 16, 2010.

followed by a strong expansion lasting 50 months (form March 1933 to May 1937) (NBER, n.d.). This coincides with the election of Roosevelt as President of the USA and the beginning of the realization of his New Deal. However, the analyses of the Great Depression made after the Second World War, particularly the analyses of the amount and effectiveness of the fiscal stimulus within Roosevelt's New Deal, from which some especially significant are Brown (1956), Chandler (1970), later Christina Romer (2009; 2011; 2013) etc., question this viewpoint. These studies indicate the following conclusions:

First, contrary to the belief that Roosevelt introduced large fiscal stimulus, the fiscal expansion was small – around 1,5% of GDP of the USA. In that sense, Christina Romer highlights: "Even under Roosevelt the fiscal expansion was modest. When we think about the new Deal, we tend to remember things like the WPA (Works Progress Administration relief programme), which built dams and bridges, and civilian Conservation Corps, which constructed so many building in our national parks. These programmes left enduring legacies, and we often think of the fiscal policy response of the new Deal as being big and aggressive. But, what Chandler points out, building on a classic paper by C Cary Brown, is that the fiscal response to the great Depression was actually quite small ..." (Romer, 2014, p. 6).

Second, the fiscal stimulus during Roosevelt was short lasting, i.e. it was prematurely abolished. The federal budget deficits of the USA, expressed as the difference between budget revenues and budget expenditures (in billion dollars), had the following dynamics: 1933 (-1,3); 1934 (-2,9); 1935 (-2,5); 1936 (-3,5) и 1937 (-o,2) (Marcel and Taieb 2008, pp.166) i.e. they were larger in 1934, 1935 и 1936. Already in 1937 they were de facto suspended and the US economy, since May 1937, entered again a contraction phase that lasted 12 months. Hence the conclusion of C Cary Brown (often cited in the literature): "Fiscal policy, then, seems to have been an unsuccessful recovery device in 'thirties - not because it did not work, but because it was not tried" (Brown, 1956, pp.863).

Third, generally the effects of the fiscal stimuli in the 1930s on the US output are considered weak. This argument is related to errors in the design and implementation of fiscal policy – a small amount of fiscal stimulus, untimely elimination of the small budget deficits (by President Hoover after 1932 and by President Roosevelt after 1936) etc. A concrete estimation of the value of the fiscal multipliers is problematic, especially considering the fact that the statistical basis of the basic indicators of economic activity of the USA in the 1920s and the 1930s was far weaker and less reliable compared to the one after II World War. The literature recognizes that multipliers of fiscal stimuli differ among various programs of public consumption. Public works contributed to growth of economic activity, budget expenditures related to the stimulation of the agricultural sector had a negative impact on output, the increased tax rates, especially the top marginal rates to 58 and 67 per cent, contributed to higher tax evasion and to lower economic activity etc. (Fichback, 2010, pp.386).

Fourth, the recent economic literature in this field holds a view, especially advocated by Christina Romer, that the credit for the exit from the Great Depression does not belong to fiscal policy, but on the contrary, to monetary policy. This viewpoint is opposite to the explanation of the causes that determined a restrictive monetary policy in the 1930s in the case of the USA (the need for higher interest rates in order to prevent the outflow of gold from the USA and to prevent speculative attacks on the American dollar - Bernanke, 1994), but in any case it is interesting and related to what is called a Regime Shift.[10]

[10] Christina Romer claims that monetary policy can be very useful even in terms of near zero nominal interest rate, under the assumption that monetary authorities succeed in influencing expectations, and prevent deflationary expectations. She draws this standpoint as a crucial lesson from the Great Depression of 1929-1933, claiming that during this crisis the monetary expansion was bigger than is believed, since it gained a specific form – "quantitative easing", performed by the American Treasury. Namely, Roosevelt in April 1933 temporarily suspended the gold standard and allowed the dollar to substantially depreciate. Later, the gold standard was reintroduced, now with a new, higher price of gold, which caused a large gold inflow to the USA, especially from the European countries which the FED chose not to sterilize, thus leading to a significant grow of money supply in the US economy (Romer, March 2009). Also in a number of more recent studies professor Romer (2011; 2013), citing Krugman's, Gotti's and other author's contributions in this field, supports the thesis

Fifth, in this context, we must nevertheless not neglect the opposite view (the one in the remarkably well argumented study of Almunia et al., 2009) that also in the 1930s fiscal stimuli, despite their modest amount compared to the severity of the crisis, were efficient, because they were an inexpensive source of finance for consumption due to the low nominal interest rates (liquidity trap situation).

The Great Recession and the Fiscal Policy Response

The liquidity trap and reaching for fiscal policy measures

The Great Recession of 2007-2009 is the most severe financial and economic crisis since the one of the 1930s. In the economic literature, among other things, there are serious debates about the similarities and differences between the two great crises (see for example Romer, 2009; Almunia et al., 2009). However, what is often pronounced as the most significant common characteristic of both crises is the fall into a liquidity trap (The Zero Bound Interest Rates), of the most severely affected countries. This situation leads to: (1) problemizing the efficiency of monetary policy; (2) losing the credit function of commercial banks and prolonged recovery of the economies and (3) reaching for expansionary fiscal policy measures in order to ensure economic recovery. It seems that these three questions are today in the focus of the post crisis discussions in macroeconomic science. The three issues are extremely complex and accompanied by numerous controversies and dilemmas – can monetary policy be efficient and useful at zero bound interest rates, can deflationary pressures in the economies be prevented by influencing expectations and what are the real possibilities and limitations of fiscal policy? Our analysis focuses on the third question.[11]

After the emergence of the Great Recession the belief prevailed that it could be overcome with the standard measures of the key macroeconomic policies. But soon, this belief was disproved by the development of the global financial and economic crisis. Namely, despite the fact that the central banks of the developed countries quickly reacted with "pouring" extensive liquidity without precedent in the previous history of economic cycles, things started to "go sour". FED, by December 2008, had cut the policy rate to almost zero, the ECB gradually reduced the interest rate to 1%, and similar actions (aggressive monetary policy) were implemented by the central banks of England, Japan and other countries. This reaction of central banks, however, pushed developed economies into a liquidity trap (Krugman, 2009). Thus, the fiscal stimuli became a crucial part of the policy response to the Great Recession, and fiscal policy returned to the center of debates for reviving the economies and for overcoming the consequences of the recession. In the USA, the fiscal stimulus started at the end of President Bush's mandate – he introduced tax cuts in amount of 1200 dollars per family (in the period April – June 2008). Then, Obama suggested a package of 787 billion dollars, 1/3 of which were tax cuts, 1/3 government consumption increase and 1/3 support for the most severely affected in the form of unemployment insurance and other social measures. In any case, Obama's fiscal package

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that monetary policy is useful also in a liquidity trap if there is good expectations management i.e. if radical changes are made to monetary policy through a so called Regime Shift – for example, unconventional measures of monetary policy (announcing the long run trend of interest rate and its tying to a certain target – inflation or unemployment rate – what is now already done by central banks of developed countries), targeting the nominal GDP etc.

[11] In terms of the issue of the efficiency i.e. inefficiency of monetary policy in terms of liquidity trap and of possible approaches for return of crediting, we suggest to the interested readers some, according to our opinion, extremely important papers in this field: Paul Krugman (1998) "It's Baaack Japan's Slump and the Return of Liquidity Trap", *Brookings Papers on Economic Activity, No.2: 137-205*; Eggertsson Gauti and Michael Woodford, (2003) „The Zero Bound on Interest Rates and Optimal Monetary Policy", *Brookings Papers on Economic Activity,* No.1: 139-233; Ben Bernanke (2013): "Communication and Monetary Policy, *Board of Governors of the Federal Reserve System and National Economists Club,* Washington, D.C.; Christina Romer (April, 2013) "It Takes a Regime Shift: Recent Developments in Japanese Monetary Policy Through the Lens of the Great Depression" (eml.berkleley.edu); Christina Romer: "Policy Responses to the Great Recession: The interaction of Leadership and Economic Ideas", Iowa State University, December 1. 2011.

within the American Recovery and Reinvestment Act presents the largest countercyclical fiscal stimulus in the American economic history. Similarly, Germany initiated fiscal stimulus aimed at maintaining jobs in the peak of the crisis, the fiscal stimuli of China of 600 billion dollars were aimed at infrastructure objects and social protection and significant stimuli were implemented also in South Korea and Japan (Romer, 2011). Although the fiscal packages differed in their amount and composition form country to country, they basically included typical unorthodox measures – "nationalization of banks, acquisition of parts of banks assets, guarantying and subsidizing bank credits, even subsidies for acquisition of cars and other durables…" (Petkovski, 2008, p.179). According to estimates of the experts in the IMF, only the direct support of central budgets in certain countries for rescue of their financial systems, cumulatively, for the period 2008-2010, amounted to approximately 1.530 billion dollars i.e. 6,4% of their GDP. If the direct support is corrected for its positive effects on the gross domestic product, it comes down to 1.150 billion dollars, i.e. 4,8%. Actually, the direct support from central budgets of the countries was not that big – it has been much bigger in other episodes of financial crisis in some countries (IMF, 2011, p. 49). Still, the direct budget allocations in certain countries (Ireland, Germany, and Netherlands) absorbed large amounts of their gross domestic product.

Table 1. Direct Support for the financial sector of selected countries from the central budgets and its net effect (from the emergence of the crisis until the end of 2010)

Country	Direct support (% of GDP)	Effect – recovery (% of GDP)	Net direct support (% of GDP)
Belgium	4,3	0,2	4,1
Ireland	30,0	1,3	28,7
Germany	10,8	0,1	10,7
Greece	5,1	0,1	5,0
Netherland	14,4	8,4	6,0
Spain	2,9	0,9	2,0
Great Britain	7,1	1,1	6,0
USA	5,2	1,8	3,4
Average (% of GDP)	**6,4**	**1,6**	**4,8**
in billion US $	**1528**	**379**	**1149**

Source: IMF, 2011, p. 5.

The table above does not include the support from regional and local levels, which must not be underestimated – approximately one third to one fourth of total public consumption in modern countries is executed on a regional and local level (Bogoev, 2004). For example, in Germany the financial injection from the regional governments and KFW bank for development is estimated at 1,1% of the country's GDP, in Belgium at 1,6% of GDP etc. (IMF, 2011, p. 8).

On the Efficiency of Fiscal Stimulus

Expansionary fiscal policy during recession (higher government consumption, lower taxes or a combination of both) expands structural budget deficits and causes accumulation of public debt, with all the negative consequences (short term and long term). Hence, the increased interest of macroeconomists for assessment of the efficiency of fiscal stimulus. This topic is complex and controversial, and the debates are focused on a few relevant issues – how big is the multiplier effect of increased government consumption, and of tax cuts; whether spending multipliers are higher than tax multipliers; are the fiscal multipliers the appropriate approach and indicator for measuring the efficiency of the fiscal stimulus?

The estimates of the value of fiscal multipliers, especially those from prominent authors form the USA vary significantly (even for the same type of budget expenses) ranging from zero to 4, even to 6. This can be illustrated with the assessments of the multipliers of the fiscal expansion as a response to the Great Recession in the USA, but also in other countries. Christina Romer, once President of the Council of Economic Advisors to Obama, claimed that the government consumption multiplier (within the American Recovery and Reinvestment Act) would be between 1,5 and 1,6 and that the output gap of the American economy of 1.000 billion dollars would be closed by 2010. Contrary to the predictions of Christina Romer, Professor Robert Barro argued that previous experiences of the USA confirmed that in “normal times” the fiscal multiplier essentially moves around zero, that the increase in government consumption presumes cutting other items in the components of the aggregate demand – private consumption, investments or net-exports and therefore "The government spending is no free lunch". According to him, the government spending multiplier of Obama’s fiscal stimulus (500 billion dollars) will be only 0,5, because the process will be accompanied by a crowding-out effect of 250 billion dollars. According to Sargent, the calculations of the efficiency of the fiscal stimulus that the Council of economic advisors provided to President Obama are completely naïve and “ignore what we have learned in the last 60 years of macroeconomic research” (Sargent, 2011). Professor Harold Uhlig’s research suggests an even smaller multiplier of budget spending – from 0,3 to 0,4, i.e. a growth of real GDP of 150 to 200 billion dollars, and a far higher tax multiplier, i.e. 0,5 after the first year, 2 after the second year and even 6 after the third year (Parkin 2012, pp.338 – 339; Ilzetski, Mendoza and Végh, 2012, p. 2). Spilimbergo et al. (2008, p.18-20) summarize the results of estimates from different authors of the fiscal multipliers in the USA and in other countries. For example, the estimation of the fiscal multipliers of the American economy based on VAR methods show larger multiplier effects from government consumption in the short run and lower in the long run. The opposite applies to tax cut multipliers. In this context the research by Blanchard and Perotti (2002) confirms that the multiplier effects of tax cuts and government spending vary in time. Christina and David Romer find that a tax cut in the USA of 1% of GDP, within few years, creates a multiple effect of close to 3% of GDP. On the other hand, Ramey’s (2008) research shows that even unproductive government spending (for weaponry) can have a multiplier effect larger than 1. Elmendorf and Furman (2008) concluded that “…the temporary tax cut in amount of 1% of GDP results in a 1% growth of GDP in the short run, if 50% of the released income by the tax cut is spent, but if only 20% of the released income is spent, the effect on GDP would be only 0,3% and that the increased government purchases has a larger effect on GDP than permanent tax cuts.” A study of nine EU countries, using the European Commission macroeconomic model, showed that the tax cut multiplier is only 0,3 in the first year or even less, while the government spending multiplier is between 0,3 and 0,7. Other studies show that both multipliers (from tax cuts and from government consumption) are larger if directed toward subjects with higher marginal propensity to consume (lower income population). Different and often controversial results come from assessments of fiscal multipliers of public infrastructure investments. These variations, in different countries (Australia, Canada, Germany, Great Britain and USA) range from zero to 4. Hence, Spilimbergo et al. (2008) conclude that even though the fiscal multipliers from key government objects have in principle significant productive effects for the private sector, there is no clear evidence that they are larger than those from government consumption. Further, fiscal multipliers tend to be higher in larger than in smaller countries. For example, some studies show that the fiscal multiplier (for a one year period) from direct and indirect tax cuts and from fiscal transfers are higher in Germany compared to France, Italy, Spain and Great Britain and that the short run multiplier from government purchases during unanticipated shocks tend to be higher in the USA than in Great Britain, France and Belgium etc. Perhaps such large spreads in the estimates of the efficiency of fiscal policy made some authors to resignedly ascertain that: “Nevertheless, it is remarkable that, 80 years after the Great Depression and the onset of Keynesian economics, the range of mainstream estimates for multiplier effects is almost embarrassingly large." (Auerbach, Gale and Harris, 2010, p.159). In this context, Barro argues that it would be far better to estimate the efficiency of fiscal policy with the cost-benefit approach, instead with the multiplier concept. (Barro, 2009). Yet, these differences in the estimated value of fiscal multipliers (the (in)efficiency of the fiscal stimulus) only point to the complexity of the issue and to the fact that many determinants affect the value of the fiscal multipliers. Putting aside the differences in the applied methods for assessment of the fiscal multipliers and the more extensive methodological problems (that strongly influence the results), we can find the following significant determinants of the value of fiscal multipliers (especially of long run fiscal multipliers):

The composition of government spending – in principle, long run fiscal multipliers related to infrastructure are higher than those related to "unproductive" government expenditures;

The level of development of the country – long run fiscal multipliers are higher in developed than in developing countries;

The exchange rate regime – countries with fixed exchange rate have higher long run multipliers;

Trade openness – open countries for trade have lower and often negative multipliers;

The level of public debt – highly indebted countries often have negative long run fiscal multipliers;

The economic cycle phase – the multipliers are higher during recessions than in expansions and they are far higher in times of prolonged recession and inefficient monetary policy, i.e. in terms of liquidity trap;

The strength of the automatic stabilizers – the weaker effect of automatic stabilizers suggests lower fiscal multipliers.

The above rules are relevant (although certain exceptions can be found) and are confirmed especially in recent studies in this field.[12]

Although the large spreads in the assessments of the fiscal multipliers complicate the analysis of the efficiency of expansionary fiscal policy in terms of serious contractions of economic activity, the experiences from the big crises (the Great Depression and the Great Recession) confirm that fiscal policy plays an important role in the recovery of economies. Even in the case of the Great Depression, when the fiscal expansion of the USA was modest (compared to the severity of the crisis), the psychological effects of Roosevelt's New Deal on encouraging spending by the large macroeconomic sectors – household and business - must not be underestimated. Concerning the efficiency of Obama's fiscal stimulus, it should be noted that there is an increasing number of authors that claim that they gave a big contribution to the recovery of the American economy and to reducing the unemployment – according to Christina Romer, they created (or prevented the loss of) almost 3 million jobs in the USA (Romer, 2011). The Nobel Prize winners Stiglitz and Krugman are known for their support for even larger fiscal stimulus than that planned with the Programme of President Obama. Other prominent neokeynesian economists also note that the effects of fiscal stimuli during severe and prolonged recession, such as the Great Recession of 2007-2009 proved to be more efficient than was presumed in the last 20 years. Even the IMF, known for its advocacy of fiscal austerity, also supported increasing the fiscal stimuli – a study by the IMF form 2010, analyzing the budgets of 15 countries which shows fiscal austerity in the last 30 years confirmed that in all cases the measures resulted in a fall in output and a rise of unemployment after each fiscal contraction (Romer, 2011, pp.18 –19). The faster recovery of the US economy and especially of the American labor market compared to the situation in Europe is definitely in some part attributed to the fiscal stimulus projected in the American Recovery and Reinvestment Act.

[12] Here we point to the study by Ilzetski, Mendoza and Vegh *How big (small) are fiscal multipliers?* NBER, 2012, based on the research of fiscal multipliers in 44 countries of which 20 developed and 24 developing countries, where the assessment is based on innovated quarterly data for a long period, compared to a number of other studies that use annuals statistical data.

On the Limitations of Fiscal Policy

The limits of discretionary fiscal policy are mainly related to (1) the long inside time lag of fiscal policy; (2) the limitations of the positive effects of budget deficits on output in the short run[13] and (3) accumulation of structural budget deficits and creation of public debt. Budget deficits and public debt in developed countries in the period after 2008, resulting from the expansionary fiscal policy, surpassed the historical average typical for the post World War 2 period.

Table 2. Growth of budget deficit and public debt in selected countries, since 2008

	2008	2009	2010	2011	2012	2013	General government gross debt in 2013 (% of GDP)
Belgium	-1,1	-5,5	-4,0	-3,9	-4,1	-2,9	104,5
Germany	0,0	-3,0	-4,1	-0,9	0,1	0,1	76,9
Ireland	-7,0	-13,9	-32,4	-12,6	-8,0	-5,7	123,3
Greece	-9,9	-15,2	-11,1	-10,1	-8,6	-12,2	174,9
Spain	-4,4	-11,0	-9,4	-9,4	-10,3	-6,8	92,1
France	-3,2	-7,2	-6,8	-5,1	-4,9	-4,1	92,2
Italy	-2,7	-5,3	-4,2	-3,5	-3,0	-2,8	127,9
Hungary	-3,7	-4,6	-4,5	-5,5	-2,3	-2,4	77,3
Austria	-1,5	-5,3	-4,5	-2,6	-2,3	-1,5	81,2
Portugal	-3,8	-9,8	-11,2	-7,4	-5,5	-4,9	55,7
UK	-5,1	-10,8	-9,6	-7,6	-8,3	-5,8	87,2
EU - 28	:	:	-6,4	-4,5	-4,2	-3,2	85,4
EU - 18	:	:	-6,1	-4,1	-3,6	-2,9	90,9
USA	-6,7	-13,3	-11,2	-10,0	-8,9	-5,6	122,7
Japan	-2,5	-3,0	-8,3	-8,7	-9,0	-9,2	218,8

Source: Data Eurostat, 25.03.2015; IMF World Economic Outlook Database, October 2014; OECD Country Statistical Profile - United States, 2014; Japan www.tradingeconomics.com.

In the standard macroeconomic literature, the negative economic effects from the accumulation of budget deficits and the increased public debt can be located in several areas – reduction of national saving, consequences on the future generations (increased burden of public debt service) and crowding out private sector investments (Fiti and Tashevska, 2008). IMF analyses suggest that the growth of public debt of almost 40 p.p. of GDP (compared to the pre-crisis situation), will increase interest rates by 2 p.p. and reduce economic growth rates by 0,5 to 1 p.p. annually in the following years (Horton 2010, p. 28). Hence, neoclassical macroeconomists strongly oppose the large fiscal stimulus and remind that economies, in the long run, tend to function on their potential level and to reach full employment, that "they distort market confidence" and that they contribute to the abstinence of private investors due to expectations related to the negative implications from the fiscal

[13] Budget deficits increase GDP in the short run. In the medium run, due to the increased money demand and interest rates, their positive effect disappears. In the long run, the crowding-out effect reduces the accumulation of capital and redirects it to unproductive uses, which ultimately reduces the output of the economy.

expansion (Lucas, 2011; Sargent, 2011) The views of some new Keynesians (especially Krugman and Stiglitz) regarding this question are diametrically opposite. Yet, the dramatic rise of budget deficits and public debt imposed the need for fiscal consolidation, as a long term process that is supposed to bring deficits and debts down to reasonable levels. But the dilemmas and controversies are many in this field as well. "In the short run, policymakers face a crucial dilemma. If they consolidate too soon - that is, they take actions to reduce budget deficits in the near term - they could kill the recovery. But inaction or policy mistakes could lead to concerns about further debt accumulation and ultimately reignite a crisis." (Horton, 2012, p. 26). In this sense, other economists also suggest that during a crisis we have to restrain from a premature termination of the fiscal stimulus (Romer, 2009).

Lessons for the Role and Importance of Fiscal Policy during Prolonged and Severe Recessions

Our analysis of the stand and functioning of fiscal policy during crises is based on the examples from the Great Depression and the Great Recession. Although the two big crises differ significantly, not only in terms of their intensity and consequences on the financial and real sector of the economies, but also in terms of the historical context of events, the state of economics science, especially of macroeconomics (Almunia et al., 2009), they nevertheless have common characteristics. The biggest similarity of these tremendously important episodes in the history of business-cycles is that both crises were global and mixed (financial and economic) and that in both crises the liquidity trap phenomenon existed and commercial banks lost their credit function. Experiences and mistakes of policymakers during the Great Depression were an important lesson for today's policymakers. The most important lessons on the role and importance of fiscal policy during prolonged and severe recessions can be summarized in the following way:

First, when economies fall into a liquidity trap (this in principle applies to mixed crises – financial and economic), fiscal policy proves to be a powerful tool for recovery of economies.

Second, the fiscal stimulus should correspond to the severity of the crisis in terms of amount, composition and timeline. Small fiscal stimuli, again relatively, i.e. against the severity of the crises, have small effects. The composition of government spending is extremely important. Public investments in large infrastructure are in principle more efficient, compared to government "unproductive expenses". Tax stimuli are more efficient if they are intended for those segments of the population that have lower income, i.e. higher marginal propensity to consume. A premature suspension of fiscal stimuli decelerates, prolongs the economic recovery.

Third, despite the numerous controversies related to the assessment of fiscal multipliers, the evidence shows that the efficiency is higher during deep crises and problematic efficiency of monetary policy. This assessment, as was previously concluded, is consistent with the argument that the efficiency of fiscal stimulus is larger when the banking system is dysfunctional, and the fiscal policy is inexpensive in view of the debt burden, i.e. it has low interest rates (Bernanke, 2014; Almunia et al., 2009).

Fourth, in good times governments should create enough fiscal space to enable action of fiscal policy in times of crisis.

Fifth, considering the fact that the effects of budget deficits in the short run increase GDP, but disappear in the medium run (because of the rising money demand and interest rates) and in the long run even reduce growth rates (crowding-out effect, displacement of accumulated capital toward unproductive uses etc.), fiscal consolidation is necessary after episodes of creation of large budget deficits and high public debt. One of its main goals is creating enough fiscal space for intervention in "bad times".

Lessons for the Republic of Macedonia

The Republic of Macedonia, after 2008, abandoned the strategy of fiscal austerity and began to create, for Macedonian terms, relatively large budget deficits. This resulted in a fast growth of public debt in the few recent years - the central government debt in the period 2008-2013 has practically doubled. In the case of Macedonia, there are a few key determinants of the value of fiscal multipliers that question the efficiency of the fiscal expansion implemented since 2008:

Unfavorable composition of public spending – a large share of public investments financed by budget deficits are unproductively spent on administrative buildings, monuments etc. A significant amount of public spending is also used for current expenditures, i.e. for covering the deficits in the pension funds, for wages of the hypertrophied public administration (including the increase in salaries recently implemented by the government) etc., which is an absurd and unsustainable situation.

The Republic of Macedonia is a small and open, highly import-dependent country – this factor also determines low fiscal multipliers. Even in the case of construction, a large part of the direct inputs are imported. Also a large part of the equipment for the administrative buildings (furniture, carpets, etc.) is produced abroad.

Aggravated situation with the public debt – the Republic of Macedonia, at first glance, has a relatively small public debt – the share of general government debt in GDP is slightly below 40% and places the country in the category of low to medium indebted countries. However, the debt is actually larger, if we consider the indebtedness of the local government units and the deficits of the public enterprises, as an integral part of public debt. Still, the problem with the public debt does not arise from its share in GDP, but from the weak export performance of the Macedonian economy, which already creates problems for the servicing the debt.

The Republic of Macedonia is a small country with low per capita income, and these features of the country suggest lower fiscal multipliers compared to large developed countries.

As a result of this situation: (1) the efficiency of the fiscal stimulus is small (according to some estimates, the fiscal multipliers of government expenditures are de facto negative) (Trenovski, 2013); (2) the fiscal space of the country is significantly narrowed, i.e. lost; (3) the debt sustainability is becoming problematic, even in the medium run.

In order to improve the situation we suggest immediately, without any delay to begin the process of fiscal consolidation, which should rely on a spending-based approach, and not on a tax-based approach. That is the best way to abandon the existing model of economic growth within which the Government (which is by definition a bad businessman and uses resources irrationally) is the biggest investor and employer in the Macedonian economy. The business sector should become the basic creator of economic growth. A well drafted and consistently implemented fiscal consolidation would allow creation of enough fiscal space for "bad times". The so called new generation of fiscal rules that has been implemented in many countries in the post crisis period (balanced budget rules, rules based on the pay-as-you-go principle, rules for control of public debt etc.) (IMF, 2012), together with more dynamic economic growth rates of the country can substantially help to improve the composition of public expenditures of the country and to reduce the share of public debt in GDP. In this context, it is especially important that in the future, a priority of public investment is infrastructure (roads, railway, gasification etc.) that have a favorable effect on the business-climate in the country.

CONCLUSION

Our analysis, derived from the summarized effects of fiscal policy during the Great Depression and the Great Recession show that during mixed and deep crises (financial and economic) and in the presence of liquidity trap, the expansionary fiscal policy has an unavoidable role in the recovery of economies. The efficiency of fiscal stimuli is determined by their extent, composition and timeline. The extent of fiscal stimulus should be in correlation to the severity of the crisis. Fiscal multipliers related to public investments in infrastructure are in principle higher than the ones related to "unproductive" public expenditures, and the multipliers from tax stimulations are higher if they are directed toward the part of the population with higher marginal propensity to consume. The time schedule of the fiscal stimulus is also important – their premature abolishment prolongs the recovery of economies. The budget deficits in the short run increase GDP, but their positive effect disappears in the medium run (due to the increased money demand and interest rates), and reduce economic growth rates in the long run. The limitations of expansionary fiscal policy are largely determined by the fact that during recession it increases structural budget deficits and public debt. Hence, fiscal consolidation, after episodes of creating large budget deficits and public debt, is necessary. One of its main goals is to create enough fiscal space in the periods of upward trend of business-cycles. These lessons for fiscal policy are relevant for the Republic of Macedonia. The most important determinants of the height of fiscal multipliers, elaborated in this paper, question the efficiency of expansionary fiscal policy in the case of the Republic of Macedonia. Macedonia, in the period after 2008, unfortunately "lost" its fiscal space with unproductive public investments. Therefore the process of fiscal consolidation should start without delay. Public investments in the future need to be primarily directed toward infrastructure – road, railway, gasification, energy etc.

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