PUBLIC EXPENDITURE POLICY IN THE CONTEXT OF CYCLICAL DEVELOPMENT

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Abstract

Recent economic crisis has renewed scientists and politicians discussions about fiscal policy as a short-term stabilization tool. In the scientific literature began discussions about what led to reduction of government spending stimulating effect and to what extent this effect is reduced. Also are important the conditions under which expansionary fiscal policy can be applied to economic recovery after the recession. When public debt is high, governments must reduce public spending in order to maintain financial stability. However, the question arises which public spending categories should be reduced and what the structure of the public expenditure to maintain without burdening future growth. The aim of the research is to analyze the factors influencing the formation of public expenditure policy peculiarities in the context of cyclical fluctuations. Object of the research –public expenditure and their structure. Research methodology: public expenditure and their structure, also factors affecting effectiveness of public spending are analyzed in the research. Methods of the research: systematic analysis of scientific literature, logical comparative analysis and generalization methods.

Main conclusions: factors affecting the effectiveness of fiscal policy in stabilizing the economy: financial constraints, the size and openness of economy, the strength, credibility and quality of management of the fiscal authorities, government investment, the possibility of crowding out private investment, the conditions of the financial system and its potential to extend credit to the private sector, the consumer expectations, investors' confidence and the current account deficit. Both in terms of countercyclical and pro-cyclical fiscal policy in economic stabilization purposes first of all, must be protected public expenditures, which would determine the short and long term economic growth support, in particular, public expenditure of investment, as well as health and education.

Keywords: fiscal policy, business cycle, public expenditure, structure of public expenditure.

JEL Classification: E62, E63, G01, H50.

Introduction

Fiscal policy aims to ensure macroeconomic stability in the short term, while also promoting economic growth and development over the long term. In recent years, fighting with the consequences of the economic crisis, governments have applied economic stimulus packages. In order to increase aggregate demand, governments have taken measures related mainly to the increase in public spending, but in most cases was not achieved the desired effect. However, not all governments could use the economic stimulus packages associated with an increase in public spending, because of previously applied pro-cyclical fiscal policies. Therefore, governments which have applied in previous years pro-cyclical fiscal policies should reduce expenditures to comply with fiscal discipline.

Recent economic crisis has renewed scientists and politicians discussions about fiscal policy as a short-term stabilization tool. In the scientific literature began discussions about what led to reduction of government spending stimulating effect and to what extent this effect is reduced. The scientific literature also began examine the conditions under which expansionary fiscal policy can be applied to economic recovery after the recession. When public debt is high, rising budget deficits could lead to the decline of private investments and private consumption, reducing the effect of government spending or higher taxes on aggregate demand. Therefore, governments must reduce public spending in order to avoid the rapid decline in private sector expenditure. However, the question arises as to which public spending categories should be reduced and what the structure of the public expenditure to maintain without burdening future growth.

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Factors affecting fiscal policy effectiveness

Despite the pessimistic view which emerged in application of the discrete fiscal policy for the purposes of economic stabilization in recent years, the scientific literature has formed the view that fiscal policy can still be effective to stabilize the output, if properly formed, and this may be the only tool to deal with the serious and long-lasting supply shocks when monetary policy tools are limited. Politicians and researchers examine fiscal policy effectiveness in a variety of dimensions. The scientific literature does not come to consensus on under which restrictions and what fiscal policy tools should be effective. However, it can be identified more effective and less effective fiscal policies. Depending on how fiscal policy is correlated with indicators of the business cycle, there are discernible three cyclical fiscal policy types: countercyclical, acyclic and pro-cyclical fiscal policy. There are distinguished three groups of factors influencing the type of fiscal policy: political factors, social polarization of preferences, constraints of financial markets (Sineviciene & Vasiliauskaite, 2010). There is a consensus in the scientific literature that should be used countercyclical fiscal policy to stabilize the business cycle. However, under certain restrictions on the credit markets, the pro-cyclical fiscal policy may also be effective (Gupta et al., 2005; Perotti, 2007).

In assessing the possibility of applying discrete fiscal policy stimulus packages that would be focused on growth and development must be taken into account country specific conditions. Financial crisis affect fiscal policy through various channels. Strength of the particular channel differences between countries depending on certain specific circumstances (Darvas, 2009; Carrere & Melo, 2007). Thus, fiscal policy effectiveness in each country is individual and is highly dependent on individual country-specific restrictions.

*Financial constraints* strongly restrict the use of economic stimulation policies, especially in countries with a high level of public debt (Barrios & Schaechter, 2008; Darvas, 2009; Karazijienė & Saboniene, 2008; Karazijienė, 2009; Kirchner et al., 2010). Budget deficit results between countries may vary considerably and depend on many factors. Even in countries with low levels of public debt and sizeable fiscal reserves, fiscal policies are strongly limited by the revenue shortfall caused by the unexpected depth of the recession. Debt levels, which are tolerated by the financial markets, are lower in developing and emerging countries than in the main economies. Even a relatively low public debt levels may lead to debt defaults. As stated by Darvas (2009), the greatest impact on the fiscal policy has budget revenue decline, when economic activity is slowing down. Governments can use discrete fiscal policy stimulus programs to stimulate local demand. But as the economic perspective changes, discrete fiscal policy may not be as effective as was expected, because a significant medium / long-term perspectives change has an impact on consumption and savings levels, and investment decisions making.

Previous fiscal consolidations experience shows that there is a possibility during fiscal stress, which is characterized by high debt-GDP ratio indicator, to change qualitatively the economic response to fiscal shocks. I.e. there was observed positive consumption growth after the long-term and substantial reduction of the fiscal deficit. Following 19 OECD countries quarterly data analysis, Perotti (1999) found that the expenditure shock effect on consumption can be positive if the initial state funding needs are small. He argues that expenditure shock effect depends on the scale of tax distortions: (larger) the expected future tax increases lead to (higher) welfare losses, and (higher) decline in consumption now. Significant and permanent reduction in government expenditure can allow consumers to expect of future permanent tax cuts and permanent income increases, and thus lead to an increase in private consumption (Kirchner et al., 2010). Gupta (2005) also empirically determined that fiscal deficits lead to reductions in per capita income growth rate. European Commission (2009) study found that government size, measured by the budget share of GDP is not significantly related to per capita income growth. However, taking into account the quality of governance, there is determined strong positive correlation between government size and growth. But the deficit-financing government spending clearly is detrimental to growth. This confirms that economic stability is a precondition for growth.

*The size and openness of economy.* Fiscal stimulus impact on local economic is highly dependent on whether the country is big and the degree of trade openness is small, or a small and the degree of trade openness is high. Changes in the global economic environment have an important impact on all countries, but the most on open economies. Crisis has affected the flow of capital, risk premium, trade, migration, as well as perspectives for major economies. In small and open economies, the fiscal stimulus effect can easily be pronounced by an increase in imports (Darvas, 2009; Kirchner et al., 2010). Thus, the effect of public
expenditure increase to GDP would be lower, the greater openness of the economy. On the other hand, small, open economies can benefit from the stimulus which will be complied in main target markets through trade and migration links (Darvas, 2009). However, as reported by Shelton (2007), big economic openness is associated with greater overall public spending, if the tax base is volatile, and this phenomenon is more common in developing countries.

**Strength and credibility of the fiscal institutions and the quality of management** significantly affect the results of fiscal stimulus (European Commission, 2009; Kirchner et al., 2010).

**Public investment.** It is considered that the public capital stimulates economic growth. From a theoretical perspective, it is believed that larger fiscal multiplier can be achieved by increasing public investment rather than increasing government consumption, if public capital is used productively (Pappa, 2005; Straub & Tchakarov, 2007). This is because the government's investment has an impact on aggregate demand, as well as the additional effects on increasing of aggregate supply and on increases of private production and employment and the marginal productivity of capital (Kirchner et al., 2010). On the other hand, Leeper et al. (2009) provided evidence that delays of public sector investment projects implementation leads to smaller or negative short-term multiplier, even if public capital is productive.

**The possibility of crowding out private investment** is an important factor restricting fiscal policies of countries facing external financing constraints. Crowding out private investment, related with the government's budget deficit in times of crisis, increases by several factors. First, the decline in domestic private investment, reduces the liquidity of the assets of the country, secondly, the lack of compliance with fiscal discipline also promote international investors to review the country's property assessment. For both reasons, the liquidity premium increases and availability of external funding sources decreases (Caballero & Krishnamurty, 2004). This means that, especially in developing countries, crowding out private investment is stronger in times of crisis, and this is what explains that the application of the pro-cyclical fiscal policy is optimal.

**Conditions of the financial system and its potential to extend credit** to the economic participants are one of the crucial factors for economic recovery. Following one crisis after another quite well demonstrated that do to imperfect local currency debt securities markets macro-economic policy choices in different stages of the crisis may be constrained (Sinevićienė & Vasiliauskaité, 2008), because economies are still strongly dependent on the banking sector and the financial possibilities of diversification are still low (Sinevićienė & Vasiliauskaité, 2009; Lakstutiene et al., 2006), while successful functioning financial sector in each country is an important condition for economic growth (Lakstutiene, 2008). Caballero and Krishnamurty (2000, 2004) notes that when restrictions of local and international credit markets in times of crisis asserts, from a crisis suffered companies have no direct access to international financial markets, and are dependent on local investors. During the crisis, companies' financial needs are greater than the available resources that can guarantee the loans, so companies face the problem of availability of financial resources. In this case, the pro-cyclical fiscal policy can be effective: the government must reduce the budget deficit, particularly if the government's borrowing position in foreign markets is no better than private investors, but try as much as possible to support companies in difficulty. In this case, pro-cyclical fiscal policies changes must be made in expenditure side rather than in taxes side (Caballero & Krishnamurty, 2000, 2004).

**Consumers' expectations.** Expansionary government spending shocks tend to generate crowding out of private consumption and therefore relatively small multipliers on GDP, if consumers expect higher future taxes payments. This is due to the negative impact on consumer welfare, which leads to higher future taxes payments, which encourages consumers to save more and consume less in order to maintain a similar level of consumption in the future (Kirchner et al., 2010). However, credit constraints and limited private property market activity may inhibit this effect if there is a relatively large proportion of the funds constrained consumers (Kirchner et al., 2010; Gali et al., 2007). It is also important to note that fiscal policy is an effective tool for short-term economic stabilization, because marginal propensity to consume current income increases during recessions (Roeger & IN't Veld, 2009; Tagkalakis, 2008).

**Investors confidence** in the economy stimulating programs have a significant impact on expected efficiency of economic stimulating programs. The program is weaker, the more likely that would be increased the desired risk premium and, in the near future the interest rates and capital outflow (Ardagna, 2004; Darvas, 2009).

**The current account deficit.** Blanchard (2007) examined interaction between the current account deficit, unexpected shocks to the economy, fiscal policies and financial restrictions. In the current account deficit and probability that the country may be forced out of the global financial markets, in order to balance
the current account deficit the real exchange rate must be depreciated. But if due to financial constraints, open to foreign competition economic sector (traded sector) do not have funds for development, while before that was followed by a long period of low profits, should be applied fiscal policy tools: government expenditure on the closed to foreign competition sector should fall in order to help to open foreign competition sector.

**Peculiarities of public expenditure policy formation**

Scientists, politicians and economists are constantly looking for the answer to the question: what size and what should be the composition of public expenditure. In the scientific literature there is proposed not to limit budget analysis only to expenditure side in determining the amount of public expenditure. Together with an analysis of budget expenditure there is necessary to perform and revenue part analysis, and also analysis of budget surplus or deficit.

In the growth models public expenditure are classified into productive and unproductive and taxes into distortionary and non-distortionary (Chu *et al.*, 1995). Such a classification allows predicting effect of fiscal policies on economic growth. Impact of fiscal policies on growth depends both on the composition of public expenditures and the tax form for their funding. Impact on growth can be either positive, negative or zero depending on taxes and expenditure mix. When government spending increases with the increase of the budget surplus, the effect is positive when productive expenditure is financed, there is no effect in the case of unproductive expenditures. Expenditure impact on growth depends on the combination of relative expenditure productivity and expenditure composition in the budget. This means that changes in expenditure structure can be as important as changes in the levels of expenditure on economic growth (Gemmell *et al.*, 2009).

Scientific studies have shown that expenditure classified as productive, has a positive impact on growth, while classified as unproductive has no significant effect on growth. However, in countries with high governance indicators, impact on growth is enhanced. This effect was much less or there was no effect in countries where governance indicators were poor. Thus, it is concluded that the countries in order to increase economic growth should focus on improving governance, rather than increasing the size of public expenditure (European Commission, 2009). In general, the empirical evidence supports the hypothesis that certain types of public spending could stimulate, while some slow economic growth. The second case occurs when expenditure is not precisely planned and funding creates negative consequences of too high level of public debt, or distortionary taxes (Barrios & Schaechter, 2008). Country's implemented macro-economic adjustments or structural reform programs through fiscal policy measures lead to changes in government revenue and expenditure areas. Countries seeking to reform their expenditure policy should determine areas where private sector would be able effectively change the public sector, and concentrate limited resources where it is most necessary. It is necessary to consider functional and economic classification of public expenditure if changes in expenditure policy are performed.

While in the theory is proposed framework, how determine growth enhancing types of public expenditure, but in practice it is difficult to assess. In theory, public expenditure on public goods and the expenditure intended to combat market and external failures can strengthen growth. In practice, this would be applied to types of expenditure, thanks to which public infrastructure is created, the liquidity to constrained households is given and possibility to get credit to small and medium-sized businesses to invest in human and physical capital is given, or is created a social safety net, i.e. what the market itself fails to provide. All of these types of expenditure may increase labor and capital productivity. In general, public investment is associated with a higher marginal productivity than public consumption. However, the main identification problem of expenditure as productive is essentially concerned with the existence of public goods, market imperfection and the ability to solve problems without creating more distortions due to public spending (Gerson, 1998; Barrios & Schaechter, 2008). Empirical studies determined certain types of expenditure which have been associated with higher growth. In research papers government expenditure has been classified according to economic and (or) functional classification. Results of researches, classifying government expenditure into productive and unproductive, are summarized in Table 1.
Table 1. Classification of public expenditure into productive and unproductive

<table>
<thead>
<tr>
<th>Authors</th>
<th>Country coverage and sample period</th>
<th>Productive expenditure</th>
<th>Unproductive expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrios &amp; Schaechter, 2008</td>
<td>Summarized results of other researchers</td>
<td>Science, R &amp; D, Public Infrastructure, Health, Public Order, Environmental Protection</td>
<td>General Public Services, Public Debt, Transfers between levels, Defence, Public Order, Fuel, Energy and Social Protection</td>
</tr>
<tr>
<td>Furceri, 2009</td>
<td>1980-2003, 11 OECD countries</td>
<td>Social expenditure, particularly pension and unemployment expenditure</td>
<td></td>
</tr>
<tr>
<td>Gupta et al., 2005</td>
<td>1990-2000; 39 low-income countries</td>
<td>Capital expenditure</td>
<td>Wage expenditure</td>
</tr>
<tr>
<td>Afonso &amp; Furceri, 2008</td>
<td>1970-2004, EU and OECD countries</td>
<td>Investment (however, established impact insignificant); transfers (only in EU countries)</td>
<td>Public consumption and investment volatility have a significant negative effect on growth (in EU)</td>
</tr>
<tr>
<td>Ghosh &amp; Gregoriou, 2008</td>
<td>1972-1999; 15 developing countries</td>
<td>Current expenditure (health and education)</td>
<td>Capital expenditure (operational and maintenance expenditure)</td>
</tr>
<tr>
<td>Gemmell et al., 2009</td>
<td>1970-2004; 17 OECD countries</td>
<td>Investment</td>
<td>Consumption expenditure</td>
</tr>
<tr>
<td>Kirchner et al., 2010</td>
<td>1980-2008; Euro zone counties</td>
<td>Investment</td>
<td>Wage expenditure</td>
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Summarizing the findings of various researchers, it can be argued that in formulating expenditure policy government should take into account the expenditure productivity characteristics. If it’s implemented countercyclical or pro-cyclical fiscal policy for the purposes of economic stabilization, government should primarily protect expenditure, which supports economic growth of both the short and long term. In countries should be reduced government spending to stabilize the economy due to former applied pro-cyclical fiscal policies, but should be protected investment expenditure, as well as health and education as the having highest impact on economic growth, in spite of the fact that public sector wage expenditure and increased social spending cuts could lead to higher political costs. While most studies have been classified expenditure for social needs as non-productive expenditure, but Furceri (2009) in assessing context of economic stabilization, social expenditure has classified as productive, hence protection of this group expenditure in economic recession is important. Formulating public spending policies should be taken into account not only expenditure productivity character, but should be evaluated cost-effectiveness, because if the funds are used inefficiently and expenditure with the productive character wouldn’t have the desired effect on economic growth.
Conclusions

Summarizing the obtained results can be identified facts affecting the effectiveness of fiscal policies in stabilizing the economy: financial constraints, the size and openness of economy, the strength, credibility and quality of management of the fiscal authorities, government investment, the possibility of crowding out private investment, the conditions of the financial system and its potential to extend credit to the private sector, the consumer expectations, investors' confidence and the current account deficit.

If it’s implemented countercyclical or pro-cyclical fiscal policy for the purposes of economic stabilization, government should primarily protect expenditure, which supports economic growth in the short and long run. Primarily should be protected investment expenditure, as well as health and education expenditure.

In the case of pro-cyclical fiscal policy, when public spending is reduced during periods of economic downturn, the first should be reduced expenditure with unproductive character, i.e. public sector wage payments and spending for social needs, despite the higher reduction of these expenditure groups may lead to higher political costs. But reconsideration of expenditure especially for social needs should be very cautiously and well-considered.

References


