“Fiscal stimuli and consolidation in emerging market economies”

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FISCAL STIMULI AND CONSOLIDATION IN EMERGING MARKET ECONOMIES

Abstract

The Great Recession has imposed vital limitations on the policy maker's ability to react to further economic challenges. In this article, the authors set a purpose to assess the expediency and the size of fiscal consolidation or expansionary measures for countries with emerging markets depending on economic dynamics. The data on the episodes of large changes in fiscal policy, representing both fiscal stimuli and consolidation in Ukraine and in the EU countries with emerging market economies from 2001 to 2017, were evaluated. The authors examined the main reasons of fiscal policy's volatility and its impact on economic growth. The countries with low and medium level of institutional framework for fiscal policy formulation could face permanent deficit and public debt problem. Episodes of expansionary fiscal adjustments based on government revenues cuts and spending increases were more effective compared with those that were entirely based on spending increases. Empirical investigation showed that successful fiscal consolidation measures obligatory included the government primary spending reduction. In those cases, the budget deficit-to-GDP and public debt-to-GDP ratios were declined. Medium-term priorities to develop the methodical bases of fiscal policy design were justified.

Keywords fiscal policy, fiscal stimuli, fiscal consolidation, taxes, government spending, cyclically-adjusted budget balance, economic growth

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INTRODUCTION

Historically, fiscal policy was quite often used as a tool to ensure financial stability and to force economic growth. Applying a wide spectrum of fiscal instruments and levers, this policy provides a certain regulation of the economic agents' business activity, the investment and consumer demand, and the household incomes as well. The budgetary policy's model depends on the phase of the economic cycle and the potential for the discretionary measures' implementation. The Great Recession significantly influenced the development processes of fiscal and monetary policies both during its actual course (from the late 2000s to the early 2010s) and in the subsequent years of post-crisis recovery. Its impact is quite essential up to the present day. The measures of the government countercyclical financial regulation have reached their limits. That fact is a global challenge to ensure further economic growth. In advanced countries (the G7 and the OECD), the interest rates, set by the respective central banks, tended to zero. In some notable cases, the programs of quantitative easing were prolonged. Because of the mentioned above measures, the GDP growth rates in those countries were simultaneously positive and unsteady. In emerging economies, considering a wide range of institutional problems as well as a permanent price instability monetary stimuli were not consid-

ered to be the priority ones (because of their immanent potential to ruin macroeconomic equilibrium) or to have a high degree of efficiency. Regarding the above, both the scientific schools' and the public institutions' attention to the role of fiscal policy as a macroeconomic regulation instrument was raised. Gradual increase in the public debt-to-GDP ratio influenced the realization prospects of fiscal stimuli and their overall performance. That influence should be estimated. Under conditions of stable economic growth and controlled inflationary processes, the share of public debt in GDP could be reduced without any significant changes in fiscal policy. Nevertheless, in the current situation, there are crucial debt risks due to a high share of external public debt. This requires a systemic change in fiscal policy. In addition, an uncontrolled inflation constantly contradicts the main goal of monetary policy, which could be formulated as achievement of price stability. Taking into account the specific conditions of an emerging economy, it is perspective from a scientific point of view to determine the appropriateness as well as the limits of fiscal consolidation and expansionary policies (depending on the economic situation).

1. LITERATURE REVIEW

Arestis (2012) defined fiscal policy as an effective macroeconomic stabilization instrument, especially when it was closely coordinated with both monetary regulation and other components of financial stability policies. Blanchard and Perotti (2002), using the structural VAR approach, evaluated the dynamic effects of fiscal shocks (including shocks in taxes and government spending) on the dynamics of economic growth in the USA in the postwar period. They found that positive shocks in government spending increased both GDP and consumption, but simultaneously had a strong negative effect on investment. At the same time, positive tax shocks reduced the output, consumption, and investment as well (Blanchard & Perotti, 2002). Mountford and Uhlig (2009) conducted a detailed analysis of the fiscal shocks' impact on the economy. They considered three different types of the mentioned shocks, corresponding to the three scenarios of deficit-spending, deficit-financed tax cuts, and a balanced budget spending expansion. Those scholars also argued that deficit-financed tax cuts worked the best among the above scenarios to improve economic growth (Mountford & Uhlig, 2009). Baum and Koester (2011), applying the improved SVAR approach, identified some variation scenarios for the optimal fiscal policy mix over different stages of the business cycle. The authors defined such situations, when the rising fiscal spending multiplier allows to increase the effectiveness of discretionary measures (Baum & Koester, 2011). Teles and Mussolini (2014) focused attention on the fact that the fiscal policy's effect on economic growth has varied considerably (depending on the public debt-to-GDP ratio). The increase in the debt-to-GDP ratio reduced the positive effects of productive government expenditures on a long-term growth. Based on performed modeling, it was concluded that (in certain situations) the increase in the public debt has been followed by the higher real GDP growth rates. In that case, government debt was purposeful (transformed into productive expenditures), and fiscal equilibrium, in general, was found (Teles & Mussolini, 2014). Idrisov and Sinelnikov-Muriliev (2013) showed that the possibilities for fiscal policy in the field of economic stimulation were limited. This statement concerned the issue of the budget spending increases as well. The prerequisites for ensuring a long-term economic growth included the quality improvement of the budget institutions, the structural optimization of public expenditures (in order to raise the human capital) as well as the information and transport infrastructures' development (Idrisov & Sinelnikov-Murilev, 2013).

Domestic scholars noted that fiscal policy should be determined by the cyclical nature of economic development, the state of public finances, and the budget system's safety factor. A substantial reduction in the mentioned above factor could lead to the complications in conducting an effective budget regulation (targeted to induce economic revitalization). The scientists substantiated the feasibility of countercyclical budget regulation. Using econometric models, Vdovichenko (2013) concluded that fiscal policy (provided in Ukraine from 2000 to 2012) has been neutral. The transition to the active role of that policy as a countercyclical tool in order to increase its effectiveness was recommended by the scholar (Vdovychenko, 2013).

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Aims. The objectives of this study are to assess the expediency and the size of fiscal consolidation and expansionary measures for countries with emerging markets depending on economic dynamics, and to disclose the institutional framework for successful implementation of that measures.

2. METHODS

Blanchard and Perotti (2002) argued that the decision to formulate fiscal policy was taken with a time lag. Given the inertia of the fiscal measures' development, it could be stated that the frequency of structural changes in the respective policy was low and crucially depended on economic dynamics (Blanchard & Perotti, 2002). Christina D. Romer and David H. Romer (2010) pointed out that budgetary regulation measures represented the consequences of the decisions, taken by the authorities, motivated by the past rather than perspective economic situation. Thus, in the short-run, it is notably difficult or practically impossible to track the stimulating or stabilizing effects of fiscal policy. Considering the foregoing, we share the position of Devries, Guajardo, Leigh, and Pescatori (2011), Alesina and Ardagna (2010), Auerbach and Gorodnichenko (2017): to assess the regulatory impact of fiscal policy, we'll study the annual budget indicators and their fluctuations.

Presumably, the extent of fiscal stimuli or consolidation programs could be ultimately estimated by the changes in the primary budget balance's share in GDP. Meanwhile, it's necessary to note that such approach has a certain disadvantage. It does not take into account the particular situation of simultaneous increase or reduction in the primary budget expenditures' and tax revenues' levels, whereas that situation is also considered as a kind of economy's fiscal regulation. However, firstly, the changes in tax rates or tax base (opposed to the changes in public spending) occur with a certain lag. Secondly, Engen and Skinner (1992) proved that a balanced-budget increase in public spending was predicted to reduce output growth rates. So, that measure was not effective in the context of macroeconomic regulation. In this article, we use the indicator of the cyclically-adjusted primary budget balance (CAPBB). Firstly, this indicator helps to differentiate the discretionary component of the deficit from its cyclical component. Secondly, the CAPBB allows to evaluate the extent of fiscal stimuli and restrictions. Thirdly, the above indicator provides an opportunity to characterize the stability and consistency of the implemented fiscal policy. In the EU, the CAPBB is used as an important target that serves as a compliance indicator of established fiscal rule. That target has been set in the Stability and Growth Pact. It is possible to calculate the given indicator using the next formula (1):

$$CAPBB = \frac{\sum_{i=1}^{n} T_i^* - G^* + NTR}{GDP^*}, \quad (1)$$

where T_i^* – cyclically-adjusted component of the *i*-th category of tax (taxes on capital, labor taxes, taxes on consumption), NTR – non-tax revenues, G^* – cyclically-adjusted current primary budget expenditures, GDP^* – level of potential GDP.

In turn, cyclically-adjusted components of tax revenues and budget expenditures are calculated by adjusting their actual values. In that case, the output gap as well as the elasticity coefficients should be taken into account. The above is represented by the formulae (2) and (3):

$$\frac{T_i^*}{T_i} = \left(\frac{GDP^*}{GDP}\right)^{\varepsilon_{t_i,y}}, \quad (2)$$

$$\frac{G_i^*}{G_i} = \left(\frac{GPD^*}{GPD}\right)^{\varepsilon_{g,y}}, \quad (3)$$

where T_i – actual tax revenues for the *i*-th category of tax, GPD – actual GDP level, $\varepsilon_{t_i,y}$ – elasticity of the *i*-th tax category with respect to the output gap, G_i – actual current primary budget expenditures, $\varepsilon_{g,y}$ – elasticity of the primary budget expenditures with respect to the output gap.

The elasticity of tax is used as indicator needed to estimate the quantitative effect of the changes in the tax base (GDP, household incomes, final consumer expenditures, etc.) on the dynamics of respective revenues. So, it helps to determine the interrelation between economic development

and fiscal trends. Regarding its significant cyclical impact on the balance of the budget system and the amount of tax revenues, the elasticity is crucially important for cyclical adjustment of the budget balance. There are three main scientific approaches to assess the elasticity of taxes. Using the first approach, it is necessary to determine the elasticity of tax revenues to the changes in their specific tax bases (taxes on consumption – final consumption expenditures, labor taxes – wages and salaries expenses, corporate income tax – financial results before taxation, etc.). The second approach requires to calculate the elasticity to the potential output. The third approach implies calculation of the tax revenues' elasticity to nominal GDP. In our study, the second approach is used. Price, Dang, and Guillemette (2014) suggested the following method to calculate the elasticity of tax:

$$\varepsilon_{t_i,y} = \varepsilon_{t_i,tb_i} \cdot \varepsilon_{tb_i,y}, \quad (4)$$

where ε_{t_i,tb_i} – elasticity of the i-th tax category with respect to its base, determined by tax code, $\varepsilon_{tb_i,y}$ – elasticity of the relevant tax base to output gap.

The elasticity of the relevant tax base to output gap was assessed using the error correction model (ECM), presented below:

$$\Delta \ln\left(\frac{b_t}{GDP_t^*}\right) = a + \alpha\Delta \ln\left(\frac{GDP_t}{GDP_t^*}\right) + \\ +\gamma\left(\ln\left(\frac{b_{t-1}}{GDP_{t-1}^*}\right) - \beta \ln\left(\frac{GDP_{t-1}}{GDP_{t-1}^*}\right)\right) + e, \quad (5)$$

where a – constant, b_t – tax base, α – short-run elasticity (relevant to the cyclical adjustment process), β – long-run elasticity; lags are captured by γ – error correction term, which describes how much of the past deviation from long-term trend $t-1$ is corrected in time t, which is adjusted in t, e – error.

Taxes on labor (collected to the consolidated budget) are represented by personal income tax and military contribution. The calculation of their elasticity is performed regarding certain peculiarities: a) the progressive as well as the proportional taxation scales were applied over different time periods; so, the figures on 2004 (considered as the external ones) were not taken into account during our calculations; b) the named taxes have two-component structure; each component (related to earnings and capital) has a unique base; so, that fact required to split tax revenues into respective groups. Thus, over the analyzed period from 2001 to 2017, the elasticity coefficient of the tax revenues component related to earnings was equal to 1.24, and the elasticity coefficient of the tax revenues component related to capital was equal to 1.32. The elasticity coefficient of taxes on consumption (namely the VAT, the excise tax, and the duty) was equal to 1.25. However, its theoretical value was assumed to be closer to 1. In Ukraine, those certain differences were caused by the specific features of VAT reimbursement. The elasticity coefficient of the corporate income tax was equal to 2.32. Over the analyzed period, the share of the personal income tax (paid jointly with military contribution) in GDP was equal to 4.80 %, the share of the corporate income tax was equal to 3.92 %, and the share of selected taxes on consumption was equal to 11.67 %. In total, these taxes amounted to 88.31 % of the total tax revenues (excluding a single social contribution).

The elasticity of the primary expenditures to output gap is calculated in two stages. Initially, the elasticity of public unemployment spending to the unemployment rate is determined. Secondly, the elasticity of the unemployment rate to output gap is estimated. In our study, the primary expenditures are considered as the consolidated budget expenditures minus debt interest payments. In Ukraine, public unemployment spending is not considered as a part of the consolidated budget, but as the expenditures of the extra-budgetary state social insurance funds. Thus, in this paper, we consider the elasticity coefficient of transfers (from the state budget to the Pension Fund) to the output gap. That amendment, in view of the domestic realities, was also made by Vdovychenko (2013). Substituting (2) and (3) into (1) yields the following equation for the cyclically-adjusted primary budget deficit calculation:

$$CAPBB = \frac{\left(\sum_{i=1}^{n} T_i\left(\frac{GDP^*}{GDP}\right)^{\varepsilon_{t_i,y}} - G_i\left(\frac{GDP^*}{GDP}\right)^{\varepsilon_{g,y}} + NTR\right)}{GDP^*}. \quad (6)$$

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3. RESULTS

The purpose of the CAPBB is to examine the influence of economic dynamics on public finances in order to develop effective regulation measures (taking into account the structural budgetary position). The necessity to achieve financial stability or to restrain the growth of domestic demand for cyclical purposes could be saturated by a deficit reduction or even by a budget execution with a surplus. Due to the plurality of causes, the first scenario is more common for Ukraine (in particular) as well as for the countries with emerging economies (in general). The deficit growth and spending increase could be characterized as a stimuli creation of for economic development or as a result of unbalanced fiscal policies (due to the significant political cycle's impact on the decision making in financial sector). The dynamics of the consolidated budget's primary balance and the CAPBB is represented below (Figure 1).

The annual improvement or deterioration in the CAPBB is an assessment indicator of discretionary fiscal measures. Adapting the approach, proposed by Alesina and Ardegna (2010), we studied fiscal adjustments and stimuli in those cases, when the CAPBB changed by at least 1.5% of GDP. That criaterian allows to characterize some extremely steep fluctuations in fiscal policy. Regarding the fact that budget adjustments and stimuli were applied at different timescales, we selected the most significant examples. Over the period from 2001 to 2017, there were identified 8 years (47% of the observations in the sample) with the annual changes in the CAPBB by at least 1.5% of GDP. That fact indicates a crucial volatility of fiscal policy. In 5 cases, moreover, the deteriorations in the budgetary position were recorded. That could be considered as a result of fiscal stimuli. The improvements in the budgetary position, reflecting the stabilizing vector of fiscal policy, were observed in 3 cases. In addition, there were identified 2 episodes of consistent two-year extension: fiscal stimuli were applied from 2003 to 2004; fiscal consolidation took place from 2014 to 2015.

The above examples of fiscal policy's implementation as an instrument of macroeconomic regulation are related to the three different time stages. In particular, the period from 2003 to 2004 was characterized by the high growth rates of real GDP (9.5 and 11.8%, respectively) as well as the transition from restrained to socially oriented fiscal policy in the phase of intensified political battles and electoral processes. During that period, an increase in the share of the consolidated budget's primary expenditures in GDP was observed. Meanwhile, a decline in the specific weight of tax revenues, equal to 2% of GDP, was observed in 2004 (compared to 2003). The diametrically opposite tendencies in the budget position were recorded from 2010 to 2012. Those tendencies were determined by the complex of macroeconomic and social factors. In 2010 (the post-crisis year), the support programs for economic recovery were

Source: Authors' own calculation based on State Statistics Service and Government Treasury data and equation 6.

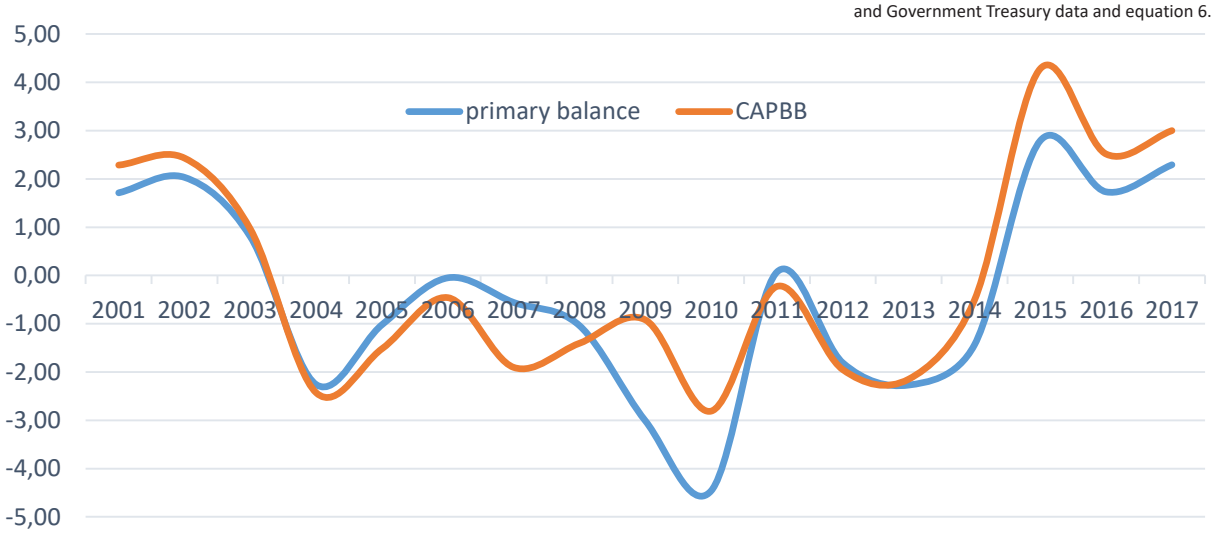

Figure 1. Primary deficit of consolidated budget in Ukraine over the period 2001–2017, % to GDP

continued. The mentioned programs simultaneously influenced the real and financial sector. In 2011, the state institutions' efforts were aimed to reduce the budget deficit and to balance the public finance system as well. Instead, in 2012, an increase in the share of budget expenditures in GDP and, consequently, a rise in the budget deficit (due to the implementation of infrastructure's development programs and electoral promises to raise the social standards) were observed. The situation significantly changed over the period from 2014 to 2016. In the first two years of that period, as a result of hybrid aggression against Ukraine, partial loss of territory and economic potential, fiscal consolidation measures have been actively pursued to achieve macroeconomic stability. Thus, the budget was executed with a substantial primary surplus. In the period 2014–2015, the improvement in the primary balance (equal to 4.99% of GDP) was ensured by simultaneous reduction in the share of primary budget expenditures in GDP by 2.60 percentage points and increase in the share of budget revenues by 2.39 percentage points. In 2016, a slight positive economic growth was restored. That fact was supplemented by an increase in defense and social spending. The consolidated budget's primary expenditures rose by 1.00% of GDP.

Applying the method of economic regression, fiscal policy from 2001 to 2017 could be defined as neutral (with a relatively low R^2 values). The changes in the type of fiscal policy from procyclical to countercyclical (depending on the time periods and macroeconomic conditions) are the most plausible explanation for that situation. A political cycle has rather significant impact on fiscal policy. The changes in the CAPBB of the consolidated budget during 2004, 2007, 2010, and 2012 electoral campaigns should be considered as the evidences. Fiscal policy, aiming to reduce the tax burden and to increase the budget expenditures, including social spending, is often implemented before the elections. In general, there are three political factors (reflected in the dynamics of public spending and budget deficit) that play a major role in fiscal policy-making. Those factors are: electoral preferences, political stability, and institutional accountability.

The implementation consistency and prudence of discretionary fiscal policy have a impact on the further dynamics of economic development and social stability. The high fluctuations of the main budget indicators evidence that tax and budget legislation has been permanently changed over the period under study, while the paradigm of regulatory economics has been transformed as well. That situation is typical for transition economies. Traditionally, such economies require systemic institutional changes in public finances. However, the transformational processes in Ukraine were extremely prolonged, slowing down economic growth and threatening financial stability. Under the given conditions, it is necessary to introduce some fiscal rules and impose the series of restrictions on the size and structure of the budget expenditures. Social spending, primarily the minimum social standards and guarantees, should closely correlate with the indicators of economic growth. The introduction of a three-year budget planning should reduce the frequency and the scope of political populist intentions. Stability of tax legislation is an important condition for the long-term forecasting and planning of investors' activities. The system of public control over the budget spending efficiency should be developed and adaptively modified. Fiscal decentralization contributes to the quality improvement in public financial management.

It's expedient to carry out an analysis of the fiscal policy's effectiveness in the context of macroeconomic regulation in emerging economies. In this paper, we focused on the countries that have provided structural reforms (including essential transformations in the field of public finances) since the beginning of the 1990s. The given sample includes 10 countries: Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Hungary, and the Czech Republic. The range of data (selected for the analysis), as in the case of Ukraine, covers the period from 2001 to 2017. Nowadays, based on the IMF data, the Baltic states, Slovakia, Slovenia, and the Czech Republic are classified as the countries with advanced economies. However, considering the indicators of GDP per capita (compared with the high developed economies), the public institutions' quality, and the length of the analyzed period, in our study, those countries were included into the group of emerging economies. In the analysis (conducted for the EU member states), we used the indicator of the cy-

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clically-adjusted general government budget balance, including social insurance funds. That was made due to the data accessibility and features of the state statistics for those countries. Thus, there were identified 53 episodes of fiscal consolidation or stimuli (31.2% of the observations in the sample) with huge annual changes in the balance, estimated by at least 1.5% of GDP. Over the observed period, Hungarian fiscal policy was the most volatile, while in Poland and Lithuania it was rather stable. Notably, there were detected 25 episodes of fiscal stabilization measures (14.7% of the observations in the sample). The vast majority of the latter (17 episodes) lasted only for one year, 4 lasted for two consecutive years (Estonia, Poland, and Hungary). Meanwhile, there were identified 28 episodes (16.5% of the observations in the sample) that had involved stabilization measures to improve the budget position. In 16 episodes, those measures lasted for one year. 3 episodes of fiscal stabilization had consistent two-year extension. In 2 cases, those measures lasted for three years (Romania and Hungary).

An episode of fiscal adjustments or stimuli could be defined as an expansionary if the average growth rate of GDP in the three-year period, including the year of undertaken measures, corresponds to the upper quartile's value of the sample. For those 4 episodes lasting for more than a year, the first year of fiscal measures was taken as a reference point. Thus, there were identified 6 episodes of expansionary fiscal policy implementation (3.5% of the observations in the sample). The dynamics of real GDP growth and the key budget indicators for the respective periods is reflected in Table 1.

We need to admit that the indicators of total and primary revenues, expenditures and deficit were cyclically adjusted. The period [t–2, t–1] reflects the calculated indicators' average values for the two-year period preceding the first year t of fiscal adjustments. Accordingly, the period [t+1, t+2] reflects the calculated indicators' average values for the two-year period following the beginning of an episode. Obviously, the fiscal policy's expansionary measures were undertaken in the situation of rather high economic growth rates. In the vast majority of cases (5 out of 6), despite the deterioration in the budget position, that initial conditions were complemented by the decrease in the debt-to-GDP ratio. The composite structure of discretionary measures, disclosed during the study, appeared to be rather unexpected. In the year of fiscal adjustments, the primary budget expenditures grew up by 1.01% of GDP, while the budget revenues declined by 1.06% of GDP. A comparative analysis of these indicators' values over the periods [t+1, t+2] and [t–2, t–1] revealed that the primary expenditures' share in GDP increased by 0.75 percentage points, while the revenues' share in GDP fell by 0.89 percentage points. Theoretically, it was expected that increase in the share of budget expenditures (primarily productive) in GDP would ensure a positive impact on the dynamics of economic development. The other fiscal adjustments under consideration were characterized by the further growth of the debt-to-GDP ratio. The given episodes par excellence took place

Table 1. Expansionary fiscal adjustments in the EU countries with emerging market economies: size and composition

Source: Authors' own calculations based on OECD and European Commission data.

Indicator	[t–2, t–1] (1)	t (2)	[t+1, t+2] (3)	(3) – (1)
GDP growth	5.55 (2.44)	7.40 (2.94)	6.03 (2.03)	0.48
Public debt	31.78 (24.22)	26.35 (19.89)	24.21 (16.26)	–7.57
Change in public debt	–1.78 (2.36)	–4.07 (4.75)	–2.06 (5.05)	–0.28
Total deficit	1.23 (2.04)	3.29 (2.07)	3.08 (2.40)	1.85
Primary deficit	0.13 (1.61)	2,20 (1.34)	1.77 (2.35)	1.64
Total revenues	36.11 (3.32)	35.05 (2.58)	35.22 (2.72)	–0.89
Primary expenditures	36.24 (3.02)	37.25 (3.24)	36.99 (1.94)	0.75

Note: Variables are in share of GDP. Standard deviations of the means are in parentheses.

under conditions of slowing economic growth or even recession. Thus, their general objective – economic revitalization by an increase in domestic demand – was not achieved. Notably, the budget position's deterioration was caused be an increase in the share of public expenditures in GDP. The obtained result is diametrically different from the theoretical positions of the Keynesian economics and the empirical results for developed countries as well. In addition, the budget funds usage efficiency and the economic paradigm (determined by the level of public administration and institutional development) were different for each country under study.

The effectiveness of fiscal consolidation should be valued regarding the next positions simultaneously: a) the immanent need to reduce the deficit-to-GDP and debt-to-GDP ratios (that could be considered as an indicator of public finances' stabilization); b) the nature of respective budgetary restrictions' impact on the dynamics of economic development. In this paper, to analyze the effectiveness of fiscal policy (aiming to improve the primary balance of the budget), we regarded the first criterion. Our calculations were performed taking into account that the cumulative reduction of the debt-to-GDP ratio in three years after the beginning of a fiscal adjustment was equal to 3.5% of GDP (the value of the lower quartile of the debt-to-GDP ratio's fluctuation among the total sample of identified fiscal adjustments). There were observed only 5 episodes of such fiscal policy's implementation (2.9% of the observations in the sample). The size and compositional structure of successful fiscal consolidation in the EU countries with emerging market economies are presented in Table 2.

It should be admitted that successful fiscal consolidation has led to a revival of economic growth rates. The above confirms the fact that reduction in the budget deficit-to-GDP and public debt-to-GDP ratios positively influences the dynamics of real GDP. Hence, the primary budget balance was improved by 2.60 % of GDP in the year of fiscal stabilization. The observed situation was caused by the primary expenditures cut. Instead, the level of budget revenues remained practically unchanged. That was a distinctive feature of the expansionary fiscal policy's compositional structure. The period [t+1, t+2] was characterized by the decline in the level of primary budget expenditures by 0.95 percentage points. Meanwhile, the revenues-to-GDP ratio was reduced by 0.99 percentage points. Those facts were complemented by an economic revitalization. Thus, for the emerging economies under conditions of unsustainable economic growth or recession, it is necessary to adopt a budget without a primary deficit. The above requires a structural optimization of the budget expenditures. The issues of social spending cuts, freezing the indexation of payments to public servants and employees of the budget sphere (with the simultaneous reduction of their number), suspending programs to finance unproductive (while socially significant) expenditures are urgent, but rather unpopular. The crucial influence of the political cycle on the decision making in the budgetary sphere (in terms of insufficient

Table 2. Successful fiscal consolidation in the EU countries with emerging market economies: size and composition

Source: Authors' own calculations based on OECD and European Commission data.

Indicator	[t–2, t–1] (1)	t (2)	[t+1, t+2] (3)	(3) – (1)
GDP growth	0.26 (5.68)	4.20 (2.92)	5.06 (1.49)	4.80
Public debt	44.99 (3.16)	42.70 (4.54)	36.94 (7.51)	–8.05
Change in public debt	4.17 (15.78)	–2.90 (3.24)	–5.76 (3.75)	–9.93
Total deficit	4.2 (2.50)	1.46 (2.53)	1.39 (2.05)	–2.81
Primary deficit	2.46 (1.92)	–0.14 (1.98)	–0.10 (1.30)	–2.56
Total revenues	38.57 (1.99)	38.54 (2.10)	37.55 (1.80)	–1.02
Primary expenditures	41.03 (2.80)	38.40 (1.79)	37.45 (2.17)	–3.58

Note: Variables are in share of GDP. Standard deviations of the means are in parentheses.

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development of the public institutions) leads to the search for some compromises. Obviously, the budget expenditures should be cut. In order to decline the deficit, some compensators (aiming to induce the budget revenues) should be found as well.

4. DISCUSSIONS

Our empirical studies proved that the fiscal policy's design and implementation mechanism in the system of macroeconomic regulation dynamically responds to the changes in the phases of business cycle. The next discussion should concern the issue of discretionary fiscal policy measures' preparation to provide positive impulses for economic growth. It is expedient to determine the implementation tools appropriate for expansionary fiscal policy. In most cases, that policy could involve tax cuts or primary spending increases. Investment and consumption expenditures form two opposite groups of the budget spending. Considering the above, the regulatory approaches to the compositional structure of the budget expenditures are scientifically significant. Similarly, in the field of tax policy, it is relevant and necessary to identify some specific categories of tax revenues (taxes on capital, labor taxes, and taxes on consumption) to regulate their bases and rates properly, aiming to achieve the best economic effect. Identification of variable scenarios for fiscal consolidation, in order to reduce the public debt-to-GDP ratio and to provide the fundamental conditions for sustainable economic development as well, is a promising direction in scientific research. The budget funds usage efficiency is the debatable issue for the emerging economies.

CONCLUSION

The significant changes in fiscal position of Ukraine and the EU member states with emerging economies (using the indicator of the cyclically-adjusted primary budget balance) were identified during this study. It was proved that fiscal policy in Ukraine from 2001 to 2017 was rather volatile. That fact reduces its total impact on economic development. The observed situation was caused by an inadequate development of public institutions, a strong impact of political cycle and electoral populist preferences on the fiscal policy preparation, and a crucial lack of medium-term budget planning as well. Taking into account the above, it is advisable to introduce fiscal rules and to impose institutional constraints on the key budget indicators' formation. For the sample of 10 emerging economies, it was defined that effective fiscal stimuli have been provided by simultaneously reduction in the share of government revenues in GDP and increase in the specific weight of the primary expenditures. The mentioned fiscal policy's expansionary measures were undertaken in the situation of rather high economic growth rates, complemented by the decrease in the debt-to-GDP ratio, despite the budget position's deterioration. In the identified episodes of successful fiscal consolidation, economic growth has been reactivated. It was empirically confirmed that reduction in the budget deficit-to-GDP and public debt-to-GDP ratios positively influenced the dynamics of real GDP. Vital improvement in the primary budget balance was achieved by reduction in the primary expenditures' specific weight. For emerging economies under conditions of unsustainable growth or recession it is expedient to adopt a budget without a primary deficit. The above requires a structural optimization of the budget expenditures. Cut in unproductive social spending to gain macroeconomic stabilization is urgent, but rather unpopular. That fact forms an institutional barrier. The public control over the budget spending efficiency should contribute to the quality improvement of management decisions in respective sphere.

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