MULTI-YEAR BUDGETING – TOWARDS THE ENHANCEMENT OF FISCAL DISCIPLINE

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─Abstract ─

The identification of the reasons for the existing fiscal imbalance shows that it is necessary to introduce the institutional solutions of the budgetary process. This paper aims to verify the hypothesis that the application of multi-year budgeting is a factor which increases fiscal discipline and promotes efficiency and transparency of public finance. The research presents a comparative analysis of the quality of macroeconomic forecasts for EU countries including parameters such as the real GDP growth rate, general government sector deficit to GDP ratio, public debt to GDP ratio. Information contained in the EU Stability and Convergence Programmes and in the International Budget Practices and Procedures Database published by the OECD constituted the source of data for the research.

Key Words: *government budget, public budgeting, fiscal discipline*

JEL Classification: H61, H68

1. INTRODUCTION

In recent years the financial systems of many countries have undergone changes that resulted in the extension of budget planning period. The classic model of public budgeting, with its focus on an annual budget, is being extended to include successive periods of several years (Boex et al, 2000:91).

A multi-year budget may be considered a complete spending plan, linking the priorities of public authorities to decisions on the allocation of public funds. It is prepared with a time horizon of more than one year, based on the fiscal framework subject to macroeconomic forecasts.

In the implementation of multi-year budgeting accurate macroeconomic forecasts are of key importance. The experience of many countries in that regard indicates a

few drawbacks in the process of forecasting. Firstly, because of their excessive optimism, such forecasts provide only a limited predictability of budget policy, which makes them rather inaccurate (Frankel, 2011:536-562). Secondly, such forecasts are seldom being viewed in a rational light by the public, which is aware of the limited usefulness of the presented projections (Heinemann, 2005:20). The estimates of macroeconomic parameters published by governments are often criticised on the grounds of being motivated by political considerations. For this reason such forecasts are based on unrealistic assumptions that do not reflect the true potential of the economy (Hallerberg, Strauch von Hagen, 2009:950). It is also emphasized that for some euro zone countries the unwarranted optimism in making macroeconomic forecasts was the main cause behind the excessive deficit (Leal et al, 2008:350). Hence, there is growing support for the view that the process of forecasting macroeconomic parameters for public finances should be realised by independent institutions, to ensure that the established fiscal framework is free of any political motives (Calmfors, 2010:14).

2. ANNUAL BUDGET VS MULTI-YEAR BUDGET

Although the annually adopted budget act remains the main document that defines the country's financial policy, it should be remembered that most budget decisions go beyond the annual cycle. In this connection, a one-year perspective does not provide a reliable basis for accurate budgeting. Wildavski, while describing the shortcomings of the traditional annual budget, said that it leads to: "…short-sightedness - because only the next year's expenditures are reviewed; overspending, because huge disbursements in future years are hidden; conservatism, because incremental changes do not open up large future vistas; and parochialism, because programs tend to be viewed in isolation rather than in comparison to their future costs in relation to expected revenue"(Wildavsky, 1986:317).

In the narrow sense, the multi-year budget may be understood as a document specifying budget income and expenditure in a long term perspective. Such policy is applied in the United States, where state and local authorities implement biennial budgets. In Israel, a two-year budget has been legally binding since 2009, replacing the rule of adopting state budgets for one year (Rolef, 2009:1).

In the wider context, the multi-year budget reflects the situation where the budget plan made on an annual basis is accompanied by a strategic document, which is a starting point for making projections on budget income and expenditure in line with long term goals of public authorities. This means that such budget is used for

the management of public finance sector. Thus, the multi-year budgeting is a financial exemplification of governmental strategic plans.

In practice, multi-year means medium term - that is, a perspective covering no fewer than two years, and no more than four years beyond the budget year. In developing countries, given the fluid situation, a perspective covering two years beyond the budget year is probably appropriate (Schiavo-Campo, 2009:9). A characteristic feature of the budget plans for the coming years is that they are less detailed, compared with the budget for the next year. Simultaneously, such multi-year budgets are attached great importance in the course of defining and implementing the country's strategic goals. In this way, public budgeting becomes an inherent part of the process of managing the country. Thus, multi-year budgeting allows the budget planners to focus their attention on the feasible structural changes aimed at increasing the efficiency of public funds. The implementation of multi-year budgeting procedures will make it possible to put into practice the previously announced projects according to transparent rules. Multi-year budgeting promotes rational spending of public funds. The possibility of a systematic review of spending priorities and commitments undertaken by government authorities will make the budget more reliable and transparent. Furthermore, multi-year budgeting makes it necessary for different government agencies to cooperate in the coordination of fiscal activities aimed at the implementation of long term goals. The implementation of the concept of multi-year budgeting will, in a longer perspective, reduce the country's macroeconomic risk, resulting in a reduced financing costs of public funds (decrease of the premium risk on the bond market), and affect microeconomic decisions (especially with respect to investment budgeting).

3. MULTI-YEAR BUDGETING – INTERNATIONAL EXPERIENCE

The review of the solutions regarding multi-year budgeting is included in the *International Budget Practices and Procedures Database* (OECD, 2008). International examples show that in most cases multi-year budgets are treated as accompanying documents to traditional annual budgets. Such plans are typically used at the executive level and are not affected by parliamentary decisions. The provisions contained in those plans are mostly indicative in character. For example, in most EU countries the formulation of multi-year targets is a result of those countries' obligation to comply with the provisions of the Stability and Growth Pact regarding the preparation of convergence and stability programmes (European Commission, 2007:152-179).

There are various approaches to multi-year budgeting (IMF, 2007: 48). One of them is limited to defining the medium term fiscal goals and making medium term macroeconomic projections of basic fiscal categories. The aforementioned point of view is called medium-term fiscal frameworks (MTFF). It is further developed by assigning budget estimates over the period of several years to individual budget owners, allowing for the establishment of medium term budget frameworks (MTBF). This should enable the allocation of resources to government priorities in conjunction with overall fiscal goals. The advantage of such approach is increasing the expenditure predictability on the part of budget owners, while ensuring fiscal discipline. If multi-year budgeting additionally includes the methods for increasing the efficiency and effectiveness of public spending, using the measurement of the results obtained within the planning horizon, it may be treated as a process of creating a complex plan of expenditure and then it is as medium term expenditure frameworks (MTEF). In this form, the budget is not only limited to the statement of expenditure on a multi-annual basis. Since it implies a need for the prioritisation of programmes and activities, their evaluation and tailoring to available funds (Fölscher, 2007: s.128), it has a "programmatic" dimension (Schiavo-Campo, 2009:15). Such approach is typically applied in the countries that implement a performance budgeting. The Polish regulations regarding Multi-year Financial Plan of the State (WPFP) provide for the implementation of such solutions.

4. MULTI-YEAR BUDGETING– POLISH EXPERIENCE

In Poland, the Multi-year Financial Plan of the State was introduced by the provisions of the Act on Public Finance of 2009. It consists of the system comprising 22 state functions, along with the objectives and indicators of the extent, to which the objectives of a given function have been fulfilled. It has been so designed as to ensure a close interconnection between the expenditure and the performance budget structure. Each year, following the adoption of the budget, this document is updated. This makes it a rolling type of plan, each time covering a given fiscal year and three consecutive years. The budget should meet the formal requirements, stipulating that the deficit level in the draft budget for a given fiscal year, submitted by the Council of Ministers to the parliament (Sejm), must not exceed the level of deficit foreseen for this fiscal year in the Multi-year Financial Plan of the State.

In assessing the results of the first year of the WPFP operation in Poland, it is worth noticing that more than one third of the measures used for the assessment of the plan implementation in 2010 have not been achieved. The low quality of the

planning of measures value at the function level is further evidenced by the fact that in more than 45% of the applied measures the value of their performance deviated by more than 5% from the planned value. An additional factor adversely affecting the previous practice of planning the measures values for WPFP is the fact that in almost 25% of cases, the values of measures planned at the end of WPFP period for the years 2011-2014 may deteriorate to the levels lower than those planned at the end of the period 2010-2013. It means that the process of implementing the multi-year budgeting in Poland needs significant improvement, since the two-year experience in that regard is not satisfactory.

5. MULTI-YEAR BUDGETING VS MACROECONOMIC FORECASTS – RESULTS

Based on the international experience regarding the application of medium term budget frameworks, the following conclusions can be drawn:

- there is no single universal model and substantial differences between the countries relate to the subjective scope (the entire general government sector or selected elements of such sector), time horizon (most often 3-5 years for rolling plans or periodical), level of detail (aggregated data or division into specific fields of government activity);
- multi-year budgeting was typically introduced in the periods of budget problems and aimed at ensuring fiscal discipline;
- the minister of finance with considerable powers and prerogatives played a key role in ensuring the success of the implementation;
- the process of implementation of multi-year budgeting is supported by other institutional solutions (fiscal rules, independent fiscal institutions, performance budgeting);
- credible macroeconomic forecasts play a key role in the implementation of multi-year budgeting.

In order to determine the credibility of macroeconomic forecasts, a measure of the average value of differences between the forecasts (AVFD) of specific economic categories was used (i.e. real GDP growth, ratio of general government deficit to GDP and ratio of public debt to GDP) for each of twenty five countries of the European Union (Bulgaria and Romania were excluded from the study). The average value for each country is calculated on the basis of differences between the forecast value of a given parameter for a given year under the convergence

program (stability), and the forecast value of such parameter for the same year under the convergence (stability) program of the previous year.

The subject of research were the forecasts for the years 2004-2012, derived from the convergence (stability) programmes, which were announced by individual countries in the period from 2003/2004 to 2011. The AVFD value was calculated as follows:

$$AVFD = \frac{1}{N}\sum_{i=2004}^{2012} e_{i,t+1,t}$$

The average value of differences may, however, be at a low level, if the differences in subsequent forecasts show contradictory tendencies. Therefore, development of the average absolute value of differences between the estimates of a given parameter from successive years (AAVFD) was subject to analysis. The AAVFD value was calculated as follows:

$$AAVFD = \frac{1}{N}\sum_{i=2004}^{2012} \left|e_{i,t+1,t}\right|, \text{ where:}$$

N - number of differences between the forecasts of specific parameters for each country

$e_{i,t+1,t}$ – the result of the subtraction of the value of the parameter (GDP growth, deficit, debt) for the year *i,* forecasted in the convergence (stability) program from the year *t+1*, and the value of such parameter for the year *i* under the convergence (stability) program from the year *t*.

The AVFD and AAVFD values are shown in table 1. The presented measures may be the indicators of forecasts credibility. A negative AVFD value for GDP growth in all examined countries (except for Malta) shows that the growth rate of GDP has been overestimated in forecasts. This implies the need to revise down forecasts, which is usually done as the year, to which the forecast pertains, approaches. A similar trend can be observed in the case of deficit forecasts. All UE countries (except for Luxemburg and Czech Republic) on average followed a certain trend in the examined period: the better the level of budget balance in the forecast for the given year, the further away the forecast period. For that reason, the balance projected for the given year had to be revised down in subsequent convergence (stability) programmes. In the case of public debt forecasts included in subsequent convergence (stability) programmes, most countries made such forecasts in a similar way to projecting the remaining parameters, i.e. represented

the forecast value of public debt for a given year at the lower level than the forecast value of the debt for the same year in the next convergence (stability) program. It is not surprising that such trend is particularly evident in such countries as Ireland and Greece, as evidenced by a high value of AVFD for each of the examined parameters.

Table 1. The credibility of forecasts of GDP growth, ratio of deficit to GDP and ratio of public debt to GDP for the period between 2004-2011

	GDP growth		Surplus/Deficit		Public debt	
	AVFD	AAVFD	AVFD	AAVFD	AVFD	AAVFD
Belgium	-0,25	0,60	-0,65	1,10	2,40	5,01
Czech Republic	-0,30	1,31	0,01	1,23	-0,29	3,47
Denmark	-0,01	0,69	-0,52	1,49	3,69	5,04
Germany	-0,29	0,78	-0,20	1,29	2,67	6,18
Estonia	-1,03	2,63	-0,12	1,20	0,79	2,50
Ireland	-0,91	1,58	-1,95	3,11	8,45	10,65
Greece	-0,91	1,07	-1,10	2,85	8,62	11,03
Spain	-0,53	0,78	-1,08	1,81	2,27	4,94
France	-0,45	0,63	-0,87	1,26	3,77	4,26
Italy	-0,58	0,82	-0,61	0,89	3,16	3,48
Cyprus	-0,72	0,83	-0,32	1,28	1,64	3,90
Latvia	-1,11	2,89	-0,73	1,77	2,19	6,50
Lithuania	-0,72	2,09	-0,83	1,51	1,70	3,66
Luxembourg	-0,23	1,31	0,33	1,67	0,79	2,97
Hungary	-0,90	1,31	-0,47	1,24	2,81	4,48
Malta	0,13	0,92	-0,56	0,88	1,20	3,13
Netherlands	-0,28	0,63	-0,42	1,60	2,39	7,40
Austria	-0,19	0,69	-0,20	0,72	0,72	2,41
Poland	-0,15	0,66	-0,51	1,20	-0,13	3,35
Portugal	-0,67	0,71	-0,95	1,38	2,85	4,95
Slovenia	-0,52	1,09	-0,46	0,87	0,64	2,80
Slovakia	-0,09	1,37	-0,65	0,86	-0,22	3,78
Finland	-0,04	1,11	-0,28	1,44	2,01	4,04
Sweden	-0,04	1,15	-0,07	1,55	0,72	4,63
United Kingdom	-0,87	1,24	-1,10	1,56	3,92	5,17

Source: own calculations based on the European Commission data

The exceptions are three countries: Poland, the Czech Republic and Slovakia, for which the AVFD value is negative for public debt. This implies the need for greater caution in making forecasts for public debt in those countries, as compared with other countries. In the case of Poland, it may be due to the fact that for many years it was the only UE country, in which the level of acceptable public debt was limited by Constitution. It is worth noticing that the AVFD value is close to zero for each of these countries. The close-to-zero AVFD value, with the AAVFD

value at the level of more than 3, does not, however, mean that there are minor differences in the projections of debt between successive convergence programmes, but rather that these differences developed symmetrically, i.e. the negative and positive differences nearly cancelled each other out.

It should be noted that such homogeneity amongst individual countries in the formation of differences between the level of specific macroeconomic parameters in successive years is, to a large extent, caused by the necessity to radically restate the assumptions included in the convergence (stability) programmes since 2009, brought about by the crisis of public finances throughout the European Union. The revision of previous forecasts aimed at limiting the expected rate of economic growth, reducing the balance of public finances, and increasing the public debt resulted in a significant increase in the value of differences between those parameters in the years between 2009-2012, compared to the values projected in the pre-crisis period. Hence, it must be assumed that the perturbations in the public finances from 2009 have led to the increase of the scale of differences between the estimates of specific parameters from subsequent years.

At the same time, it can be observed countries such as Greece and Ireland obtained low values in the MTBF index (medium term budgetary framework index), published for 2008 by the European Commission (European Commission, 2009:98). The index takes into account both the existence and properties of national medium-term budgetary frameworks and the preparation and status of stability and convergence programmes. Furthermore, Greece took the last place in the OECD ranking of the use of medium-term perspective in the budget process at the central level of government (OECD, 2009:91).

If one takes into account the fact the AVFD values for each of the three examined parameters make Greece and Ireland occupy final positions in the ranking, it may be assumed that one reason for the low credibility of macroeconomic forecasts in these countries is a limited scope of multi-year budgeting procedures. Thus, it is not surprising that the institutional reforms carried out in order to repair public finances involve the implementation of solutions aimed at strengthening medium term fiscal frameworks. In the case of Greece, such solutions include the Medium-Term Fiscal Strategy, as well as top-down budgeting with expenditure ceilings for the state budget and multi-year expenditure estimates by line ministry, whereas Ireland has implemented a multi-annual expenditure framework, setting out fixed limits for current expenditure and a new system of performance budgeting to focus on actual outputs and outcomes delivered.

6. CONCLUSION

Institutional changes of contemporary public finances are made evident by the tendency to supplement the traditional annual budget planning with the multi-year budget. The aim is to increase the transparency of budget decisions and ensure fiscal discipline. In light of the presented analyses, it can be assumed that one of the essential factors in the implementation of multi-year budgeting is a credible macroeconomic forecast. One reason for the low credibility of macroeconomic forecasts in some EU countries may be a limited scope of multi-year budgeting. The comparison of EU member states indicates that there are differences in the level of discrepancies between successive forecasts of such parameters as GDP growth rate, ratio of public finance sector deficit to GDP, and ratio of public debt to GDP.

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