STUDIA I ROZPRAWY

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AUTOMATIC STABILIZERS OF BUSINESS CYCLE AS MECHANISMS OF STABILIZATION POLICY OF PUBLIC FINANCE IN POLAND

Summary

The purpose of this article is to present the essence and describe the operation of automatic stabilizers, which – in addition to discretionary measures – are tools of the stabilizing function of public finance. Stabilization policy is closely related to the phenomenon of the business cycle. Its task is to mitigate the fluctuations in the course of the business cycle through the use of income and expenditure instruments affecting economic processes in the macroeconomic scale. Automatic business stabilizers are solutions implemented in the income and expenditure system that cause changes in the structure of cash flow between the public and private sectors – in favor of the private sector as the economic climate deteriorates, while improving the economic situation – in favor of the public finance sector.

Key words: public finance, stabilization function, automatic stabilizers

JEL: H71, H26, H72

1. Introduction

One of the main functions of public finances is the stabilizing function. It involves the use of budget revenues and expenses to achieve macroeconomic goals, which are: high utilization of productive potential, stability of the price level, high and sustainable economic growth and stability of the balance of payments [Musgrave, 1984, p. 13]. Stabilizing tools of public finances include automatic stabilizers and discretionary stabilization measures.

The aim of this article is to present accurately the nature and functioning of automatic stabilizers of public finance in Poland. Particular attention was paid to the instruments which are usually classified as automatic stabilizers in the literature of the subject, i.e. unemployment benefits and personal income tax.

2. The essence of the stabilizing function of public finance

The stabilization function is undoubtedly one of the most important functions of public finances. It is closely related to the other two main functions, which are the allocation function and the redistributive function. As S. Owsiak has noted, the negative consequences and undesirable effects arising as a result of using the allocation and redistribution functions may be partially neutralized through the use of public finances to stabilize a market economy [Owsiak, 2013, p. 73].

The stabilizing function of public finances consists in using revenues and expenditures to influence economic processes on a macroeconomic scale in order to mitigate or ease the effects of fluctuations in the business cycle. The role of this function is to ensure that, during periods of high dynamics of economic growth, it can reduce inflation, maintain a high level of employment, and balance the balance of payments at the same time [Ziółkowska, 2012, p. 54].

As noted above, the stabilizing function is closely related to the cyclical fluctuations of the economic situation, whose occurrence is one of the features of the market economy. All economic processes run with varying intensity in time. There are alternating periods of intensified economic activity and periods of economic downturn, until the general level drops and then goes into recession. It should be noted that the very phenomenon of economic fluctuations is inevitable and there is no possibility of its complete elimination. However, it is possible to take measures to limit the scale of those fluctuations and thus contribute to stabilizing the fluctuations of the business cycle to an achievable extent [Wernik, 2014, p. 155].

The instruments of the stabilizing function of public finances are both taxes and expenditures made from the state budget. The so-called automatic stabilizers of the economic situation are subject to detailed considerations in the further part of the article. These are tools embedded permanently in the public finance system, reacting automatically – i.e. without the need for additional, separate decisions by state authorities – to change the business cycle [Budzyński, 2012, p. 29]. It should be explained how the abovementioned automatic instruments work. The automatic operation of these measures lies in the fact that:

- after approval, they begin to function without the need to introduce frequent adjustments resulting from changes in business activity,
- the strength and scope of their impact depend almost exclusively on the scale of changes in the level of economic structure [Milewski, 2005, p. 331].

Automatic progress stabilizers include progressive income taxes and unemployment benefits. Indirect taxes affecting consumer goods and corporate taxes also contribute to the stabilization of the business climate within the tax system. The stabilization measure is also fulfilled by agricultural aid schemes, i.e. the policy of guaranteed prices of agricultural products and subsidies [Budzyński, 2012, p. 29].

Another type of tool of public finance stabilization, apart from automatic stabilizers, are discretionary stabilization measures. Discretionary actions are taken by politicians on an ad hoc basis in a targeted and conscious manner. They are aimed at a specific situation or a specific process, and their aim is to influence changes in economic activity. In addition to counteracting economic fluctuations, discretionary policy is also used to reduce unemployment and stabilize prices [Spychała J., Spychała M., 2015, p. 52].

In practical terms, discretionary stabilization measures constitute separate decisions that directly cause an increase or decrease in public incomes or expenditures, to ensure at the same time an increase (in a situation of weakening demand) or a reduction (when the economic situation improves) of disposable income of private sector entities. Discretionary measures can be divided into those that require statutory regulations and those that are triggered based on decisions of the executive [Wernik, 2014, p. 161].

A characteristic feature of discretionary stabilization measures is that their introduction requires a longer period of time. In the light of the above, the so-called effect of delays may appear. A relatively long period of time passes from the moment when the problem in the economy is identified to the preparation of appropriate solutions. Very often it turns out that the economic situation has changed in the meantime and the problem is no longer valid. Subsidies (mainly for economic tasks), expenditures in the budgetary sphere (including maintenance of infrastructure, financing of state reserves), as well as property expenses are also of particular importance in the area of the influence of the authorities on the economy as they create demand for goods and services, thus contributing to an economic revival [Ciak, 2002, p. 18].

The basic types of discretionary measures in the area of public finance stabilization policy include changes in existing tax rates, changes in expenditure on public works and investments, as well as changes in the distribution of transfers from the state budget [Spychała J., Spychała M., 2015, p. 52].

3. Automatic stabilizers of the economic situation as a tool of the stabilizing function

Automatic stabilizers of the economic situation are solutions implemented in public income and expenditure systems. They evoke the expected changes in the structure of cash flow between the public finance sector and the private sector. These changes act in favor of the private sector together with the deterioration of the economic situation in the state, while in favor of the public finance sector – along with the improvement of the economic situation [Wernik, 2014, p. 161].

The automatic nature of the response of these instruments indicates that they are not the result of earlier decisions, but they must first be introduced into the financial system in the country. Their continued operation results from their sensitivity to changes in the level of unemployment and national income

adequate for particular types of taxes and expenses [Spychała J., Spychała M., 2015, p. 52]. In connection with the above, it should be emphasized here that automatic stabilization tools only require implementation into a functioning financial system, and their proper functioning does not require any state decisions to be taken in this area.

The instruments should be recognised as automatic stabilizers when they meet the following criteria:

- they are sensitive to GDP changes and unemployment levels and they show some fluctuations during the business cycle;
- they mitigate GDP fluctuations and consumption, thus leading to stabilization of the economy;
- they are constructed and implemented in such a way that their operation is not inhibited by the operation of discretionary stabilization measures;
- they have an impact on the pro-cyclicality of the budget balance they contribute to the generation of a budget surplus during a boom and a deficit during the recession;
- they act automatically, i.e. regardless of the decisions of state authorities [Krajewski, 2005, p. 188].

The functioning of automatic stabilizers is the result of the sensitivity of the vast majority of taxes and some public expenditures to GDP and unemployment level changes.

During a recession there is a decrease in production and a drop in the level of employment and income of people and companies, which in turn causes a fall in budget revenues. At the same time, there is an increase in public expenditure related to unemployment. Therefore, a decrease in economic activity reduces tax burdens and increases transfers to the society. The existence of a public finance sector equipped with appropriate tools means that during a recession the decline in disposable income is lower than the decline in GDP. The impact of automatic stabilization instruments on the mitigation of economic fluctuations is thus caused by the influence of tax fluctuations and public expenditure on the level of disposable income and, consequently, on consumption. Consequently, automatic stabilizers contribute to lowering consumption and GDP [Mackiewicz, Krajewski, 2008, p. 7].

One of the classic examples of automatic stabilizers is unemployment benefits. Thus, it is necessary to scrutinise the mechanism of functioning of this stabilization instrument.

During an economic crisis, a significant increase in the unemployment level and a drop in demand are noticeable. When there is an automatic system of benefits, which – apart from fulfilling social and redistributive functions – limits further decline in demand resulting from the loss of income from work, it affects the mitigation of fluctuations in the business cycle. When the economic growth phase follows, payments of benefits decrease, while the income of employees grows. If the increase in income is excessive, then they are subject to the action of automatic stabilizers [Owsiak, 2013, p. 75].

Other automatic stabilizers on the expenditure side also include various types of social benefits provided to persons whose income does not exceed a certain threshold. Along with a deteriorating economic situation, the income of natural persons decreases and, as a consequence, more people become entitled to benefits. In a situation of economic recovery, the reverse process takes place. In comparison with the unemployment benefits discussed earlier, the degree of automaticity in the functioning of social benefits as a stabilizing tool is smaller. In this case, registering as an unemployed person is insufficient. It is also necessary to document the income situation [Wernik, 2014, p. 160].

Next to budget income, a progressive tax on individual income is considered the most important automatic business stabilizer. As the economic situation deteriorates, the income of many taxpayers decreases, going to lower rates of progression in which lower tax rates are applied. In order to obtain noticeable effects on a macro scale, the tax should be properly constructed. The main point is that progression should be sufficiently severe and dense – it should include a lot of ranges with different thresholds that grow rapidly as income increases. However, at present, the personal income tax in our country is characterized by mild progression and a small number of thresholds [Wernik, 2014, p. 161].

The literature on the subject often emphasises the regularity that the importance of automatic stabilizers increases with the increase of the role of the state in the economy, in particular, with an increase in budget revenues from taxes and public expenditure in GDP [Szołno-Koguc, Twarowska, 2014, p. 292]. It should be noted that this relationship is not linear in nature, as confirmed by research [Czyżkowicz, Opala and Rzońca, 2012, p. 132].

The advantage of automatic stabilization tools is a noticeable shortening of the delay in response to changes in the economic situation, as well as the limitation of discretion, relatively frequent in the case of ad-hoc actions of state authorities. Such instruments should imitate market mechanisms to a large extent, but they also have their disadvantages. The stabilization of the economic situation in their application is of a mechanical nature. The operation of these tools is not dependent on the phase of the business cycle and is essentially limited to restoring the initial level of global demand. Thus, they function properly under conditions of market equilibrium, while in a period of deep imbalance, their usefulness is limited and related processes may even noticeably reduce economic growth [Dziemianowicz, Poniatowicz and Budlewska, 2016, p. 34].

4. Functioning of automatic stabilizers in Poland in 2007–2016

Automatic stabilization tools are inextricably linked to the course of the business cycle. After explaining thoroughly the essence and principles of these instruments' operations, their functioning should be analyzed on the example of the Polish economy. The period from 2007 to 2016 was analyzed.

First, the course of the business cycle in Poland in the analyzed period should be identified. According to stock market analyses, the peak of the business cycle in the period under consideration fell in the years 2007, 2011, and 2015, and thus regularly every four years. A similar analogy can be observed in the case of bottom turning points. The bottoms of the business cycle fell in 2009 and in 2013 [Bull market on the Polish stock...]. The analysis reviewed the functioning of unemployment benefits and income tax for individuals in terms of stabilizing the economic climate.

Considering the course of the business cycle in Poland in the analyzed period, it should be analyzed how budget expenditures were shaped for unemployment benefits, which belong to stabilizing instruments. As mentioned above, unemployment benefits should be intensified during periods of crisis and depression, while their reduction should take place in periods of recovery and prosperity. The table below presents the shaping of expenses on unemployment benefits in the analyzed period.

 ${\bf TABLE~1}$ Expenses for unemployment benefits in Poland in 2007–2016

Year	Unemployment benefits with social security contributions (in PLN thousand)
2007	2 224 734.1
2008	1 840 771.3
2009	2 833 300.0
2010	3 287 358.2
2011	3 046 526.0
2012	3 395 481.6
2013	3 667 300.4
2014	2 969 417.5
2015	2 637 917.1
2016	2 282 444.3

Source: own elaboration based on: [https://www.mpips.gov.pl/praca/fundusz-pracy/informacje-o-wydatkach-funduszu-pracy/, date of entry: 16.02.2018].

Analyzing the above data against the background of the business cycle in Poland, there should be some relationship between expenditures for unemployment benefits and the cycle phase. In 2009 and 2013 there was a phase of depression – in those years there was also an increase in expenditure on unemployment benefits. After 2009, there was a further increase in these expenses – it was closely related to the financial crisis in the world, which resulted in a significant economic slowdown in Poland. There is also a visible correlation between the level of expenditure on benefits and the phase of the business cycle

in the periods of expansion. There was a decrease in the level of these expenses in 2011 compared to 2010 and in 2015 compared to 2014.

It should be noted that despite the adequacy of changes in the level of unemployment benefits paid in particular phases of the business cycle, this does not significantly affect the effective stimulation of consumer demand during periods of economic downturn. It results from the fact that the impact of changes in the amount of benefits paid on demand depends mainly on the benefits system, and more specifically on their amount and the length of the period in which the unemployed are entitled to the collection of these benefits. In Poland, therefore, the impact of paid benefits on the formation of consumer demand for individuals due to the modest amount of the allowance and the short collection period is insignificant [Wernik, 2014, p. 160].

The second automatic economic stabilizer, whose functioning has been analyzed, is the income tax from natural persons. In the case of this stabilizing tool, higher budget revenues from personal income tax should be recorded in a positive business cycle, while lower budget revenues from this title – during a deteriorating economic situation. Table 2 presents the shaping of budget revenues from personal income tax in the analyzed period.

TABLE 2 Budget revenue from personal income tax in Poland in 2007–2016

Year	Income from personal income tax (in PLN thousand)
2007	60 959 164
2008	67 193 526
2009	62 740 785
2010	62 487 000
2011	67 505 115
2012	70 621 939
2013	73 751 310
2014	78 127 386
2015	83 140 145
2016	89 340 154

Source: own elaboration based on: [http://www.finanse.mf.gov.pl/budzet-panstwa/wplywy-budzetowe, date of entry: 16.02.2018].

Analyzing the data presented in the above table, it should be noted that the level of budget income from personal income tax is not dependent on the business cycle phase, as was the case with the unemployment benefit system. In the analyzed period, the tendency to an increase in the level of budget revenues from personal income tax is noticeable. The exceptions were 2009

and 2010, when the level of budget revenues from this tax decreased. This was caused by the significant economic slowdown during this period.

At this point, it should be considered why the personal income tax does not fulfill the expected role of an automatic stabilizer of the economic situation in the Polish economy. Undoubtedly, this is due to the fact that in income tax from natural persons operating in Poland there are only two progression thresholds, and the vast majority of taxpayers are taxed in the first range. In the present situation, income tax cannot be an effective automatic stabilizer of economic conditions [Wernik, 2014, p. 161].

5. Conclusions

The purpose of this article was to present the essence and functioning of automatic stabilizers in Poland. These are some fiscal components that reduce the scope of changes in the GDP level without the need for separate economic decisions, and regardless of whether the need for intervention was noticed or not [Kalinowska, 2015, p. 154]. The functioning of the main automatic stabilization tools, such as unemployment benefits and personal income tax, were analyzed. Payments for unemployment benefits immediately respond to changes in the level of unemployment, which is one of the most sensitive indicators of the economic climate. Nevertheless, the impact of paid benefits on the formation of consumer demand is negligible due to the low level of benefits and the short period of their collection. Taking into account the personal income tax, it should be noted that it does not fulfill the effective role of an automatic stabilizing tool. This is due to the fact that the personal income tax in Poland is characterized by a small number of thresholds and a mild progression. Therefore, there is no clear relationship between income to the budget due to personal income tax and the present phase of the business cycle.

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