IMPACT OF FISCAL POLICY ON THE ECONOMIC CYCLE IN ROMANIA

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Abstract: *The goal of this study consists of carrying out a qualitative and quantitative analysis that should highlight the impact of the fiscal policy on the economic cycle in Romania. The work proposes the realization of an economic table with an accent on the concept of fiscal policy and the corelation of this concept with the cyclic evolution. To be explained and interpreted to the failure of predictable linearity, it is necessary to define and classify the types of fiscal policy. Following economic globalization and synchronization, the economic cycles are subscribed to a convergence proces, driving the world, regional and romanian economy. Being different in intensity, we can say that cyclic floats are determined by factors related to the normal functioning of economic activity, by the interdependeces between its components and this is regulary reflected on the gross domestic product and the amount of tax revenue.*

Key words*:economic policy, financial policy, fiscal policy, tax revenue, economic cycle.*

JEL Classification Codes: E60, E62, E63

INTRODUCTION

Economic rhetoric, in its entirety, is based on the theoretical foundations of economic policy and transcends the way in which the finite resources of society are used in order to produce valuable goods from a microeconomic point of view.

The body of this article presents the state of knowledge on the plurality of fiscal policy. It will be, therefore, extremely instructive to compare the types of fiscal policies, with arguments and opinions, in the cyclical dynamics of the Romanian economy.

The doctrinal differences regarding the fiscal policy aim from the twentieth century, rather, at the amplitude and the instruments of public intervention. And the need for government intervention through fiscal levers to regulate economic and financial activities is unanimously recognized and is demanded, especially in times of economic crisis (Oprea et al., 2013; Meliveo, 2014; Hogan Lovells, 2017; European Commission, 2017).

Starting from these theoretical foundations of fiscal policy, it is appreciated that a first step in the design and implementation of fiscal policy is to identify the phase in which the economic cycle is. During the growing season, fiscal policy needs to be countercyclical or neutral, at least to avoid overheating the economy. When a crisis, shock or any other unforeseen event occurs, fiscal policy needs to be stimulating - by generating fiscal impulses, in order to stimulate economic activity.

We can say that cyclical fluctuations are determined by factors related to the normal functioning of economic activity, the interdependencies between its components and which reproduce regularly over a period of time, being different in intensity. Naturally, the economy is characterized by different forms of cyclicality (Schumpeter, 1954; Lee, 1955; Talpoș and Avram, 2011; Croitoru, 2017).

Summarizing the countercyclical measures, it can be seen that applied in the economic expansion phase and in the opposite direction of the economic cycle, they aim to temper economic growth in order to have fiscal space when a recession or unforeseen event occurs. On the other hand, the reaction of economic agents to pro-cyclical or growth-stimulating policies in the expansion phase is to raise the level of wages, excessive credit and unsustainable investments. The implementation of these policies is an error, the explanation being the lack of fiscal space for economic stimulation when a crisis occurs. As a consequence, in the absence of room for maneuver and other necessary austerity policies, the economy will experience a severe recession, characterized by mass bankruptcies, lack of investment, declining revenues, both in terms of population and national budget construction.

At the same time, this study aims to complement the principles of good implementation of fiscal policy in Romania. To achieve these objectives, the study places special emphasis on comprehensive analysis and correlation of statistical data to determine the impact of fiscal policy on the economic cycle in Romania. Without reviewing the extensive list of causes that contributed to the cyclical evolution, we can analyze, correlate and interpret tax revenues. At the same time, we are going to analyze the last macroeconomic cycle in terms of the gross domestic product (GDP) growth network and the correlation of this indicator with the fiscal revenues from the analyzed period.

DATA SET AND METHODOLOGY

Fiscal policy can be described as the result of decisions that develop and shape the fiscal system from a structural point of view. At the same time, the fiscal policy ensures the functioning of the fiscal system, in order to obtain the economic goals desired by the public decision maker. Regarding the types of fiscal policy, the main classifications have been identified, proposed by various specialists (Kole, 1988; Afonso, 2006; Leventi et al., 2010; Gravelle, 2013; Adammer et al., 2016; Bussière et al., 2017; Stupak, 2019). Depending on its objective of sustaining equilibrium or growth, fiscal policy can be classified into:

a) Expanding fiscal policy can be one of the tools by which governments have the option to sustain economic growth during a crisis and usually involves excessive spending compared to normal periods. At the same time as reducing taxes to stimulate demand from private consumers, public spending is mainly aimed at measures to increase employment; for example, the construction of new public works, infrastructure, etc. (Kole, 1988; Afonso, 2006). However, expansive fiscal policy can lead to higher interest rates, higher trade and budget deficits, and accelerated inflation, especially if applied during healthy economic expansions (Stupak, 2019);

b) Contractual fiscal policy aims to influence an expanding economy by reducing tax rates. In conjunction with this fiscal policy measure, there is a reduction in public spending, especially when rising inflation is a rational concern. The government can use contractionary fiscal policy to slow economic activity by increasing fiscal revenues (Gravelle, 2013; Stupack, 2019). When this fiscal measure is applied during an economic crisis, it is found under the name of "austerity policy" and allows governments to make savings (Leventi et al., 2010). In other words, the contractionary fiscal policy presupposes a lower level of public expenditure than the tax collected from revenues. This peculiarity occurs when net government expenditures are reduced by a higher percentage than tax revenues, by decreasing government expenditures or a combination of the two (Adammer et al., 2016, Stupack, 2019).

c) Fiscal neutral (acyclic) policy could be considered implicit when an economy does not expand rapidly, but does not contract, and the government does not intend to actively intervene in the economy. In other words, neutral fiscal policy reveals the composition of public revenues and expenditures that stimulate the growth of Gross Domestic Product (GDP) while keeping the fiscal pressure constant (Bussière et al., 2017).

Starting from the genesis of cyclical evolution, each important school of economic thought disseminated its own doctrine in an attempt to explain economic cycles. For example, in the classical school of economics, the main causes of cyclical evolution are government intervention and restrictions on economic freedom.

In turn, apologists for Keynesian doctrine appreciate the low level of spending as the driving force behind economic cycles, while the neo-classical school focuses on exogenous shocks, and neo-Keynesian thinking analyzes the relationship between prices and wages. A common denominator and important factor of growth in all these economic theories is technological progress. In order to explain and interpret fiscal policy in different contexts, it is necessary to understand the fluctuating and unpredictable evolution to the detriment of predictable linearity. As a result of globalization and economic synchronization, macroeconomic cycles are subscribed to a process of convergence, progressively involving the regional and global economy (Profiroiu and Popescu, 2003; Talpoș and Avram, 2011). A complete cycle consists of four phases (Talpoș and Avram, 2011), as follows: the phase of economic expansion is characterized by the increase of the real gross domestic product; the peak or the moment when the economy fully encompasses production capacities, a period characterized by low unemployment; the recession occurs when economic activity shrinks and gross domestic product falls consecutively for two quarters; the depression is the point where aggregate demand reaches its lowest level, a phase characterized by high unemployment and reluctance of investors.

Depending on their duration, Talpoș and Avram (2011) divided the economic cycles into: long cycles, secular or found under the name Kondratieff; decennial cycles also known as Juglar; short cycles, lasting between six months and three years.

The analysis of the GDP growth rate aimed at the impact of the fiscal policy on the economic cycle in Romania during the years 2005-2019. For this purpose, using the Pearson correlation as a research tool, the association coefficient between the tax revenue dynamics and the Gross Domestic Product (GDP) was measured.

The examination of the information regarding the evolution of the main budgetary aggregates in cash standards in the period 2005-2019 (table no. 1) detects a constant increase of revenues in Romania, respectively from 34.3 billion lei in 2005 to a total of 156.0 billion lei in 2019, except for the period of the economic crisis in 2009 and the consequences of the implementation of fiscal reforms in 2016.

Table 1. Evolution of fiscal revenues and GDP in nominal terms, between 2005-2019

Fiscal year	Total income (bilions lei)	The value of GDP (bilions lei)	% of GDP
2005	34,3	288,9	11,9
2006	37,9	335,9	11,3
2007	76,6	416,0	18,4
2008	94,8	514,7	18,4
2009	87,1	498,0	17,5
2010	92,9	513,6	17,8
2011	104,7	578,5	18,1
2012	114,0	586,8	19,4
2013	119,1	637,6	18,9
2014	124,9	666,6	18,8
2015	138,3	712,8	19,4
2016	136,4	762,3	17,9
2017	140,2	858,3	16,3
2018	142,0	952,4	14,9
2019	156,0	1040,8	15,2

Source: MFP

Appreciated as the most representative economic indicator of results, the level of GDP in Romania (figure no.1) was in nominal terms in 2019 by 52.2% above the level recorded in 2009 and by 72.2% compared to 2005, a year characterized by natural disasters.

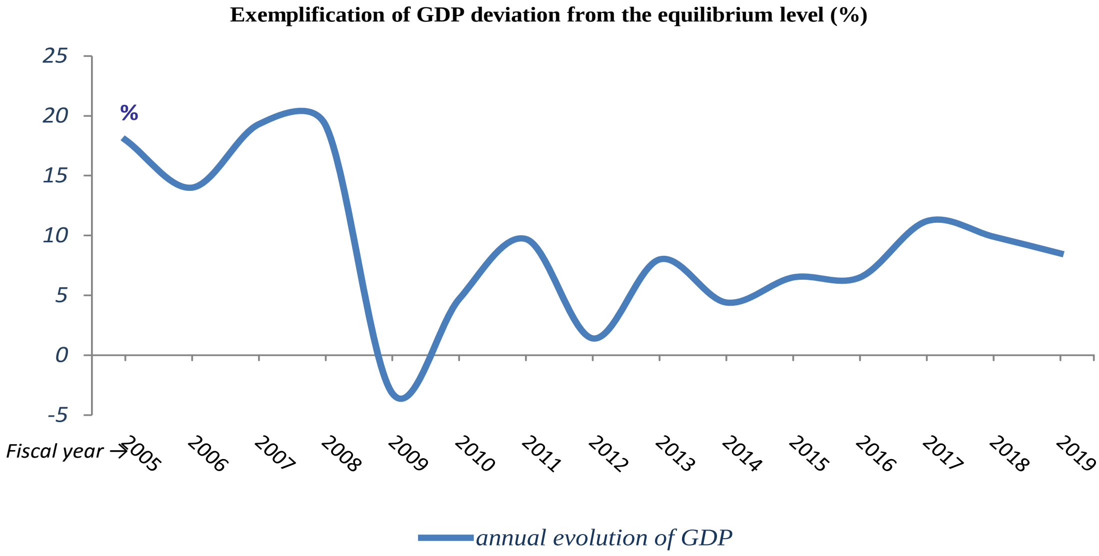

Figure 1. Evolution of GDP between 2005-2019

Source: the World Bank

From the point of view of the cyclical evolution, it is important not so much the amplitude of the gap between the main budgetary aggregates in the analyzed period, but, especially, the correlation of these data with the GDP; this being for the period between 2005 and 2019 the main macroeconomic aggregate of the national accounts and which represents the final result of the production activities of the resident productive units. The series have been seasonally adjusted, expressed in real terms, as an annual variation, which ensures their stationary character.

The growth trend of the economy, in the period between 2005 and 2019, is observable by the increase of real GDP. During the analyzed period, the evolution was not constant, during this economic interval there was the period between 2005 and 2008 of expansion, years in which the economic growth registered high levels, followed by the decrease of GDP by -19% occurred in 2009 and a slow economic growth of GDP in 2010, 2011 or even 2012 by 5%, 6% and 1% respectively. These fluctuations represent the economic cycle, even though their duration and size were different in magnitude, which creates problems in measuring and highlighting them.

GDP fluctuations between 2005 and 2019 were the result of shocks to aggregate demand and / or aggregate supply. Demand shocks affected total consumer income. These types of shocks have been mitigated or amplified by fiscal policy measures through changes in taxes and fees. Fiscal policy measures have been closely dependent on changing conditions that have influenced savings and borrowing through changes in interest rates or fluctuations in import and export activities, the trade balance.

The value of GDP has had an upward trend since 2005 and lasted until 2008, so we can refer to a distinct part of a cycle with continuous economic development. It turns out that during this period, Romania went through an economic growth which, according to the economic cycle, falls into the phase of economic boom. The respective period of economic growth and expansion was due to several factors, among which we mention the expansion of lending and which, in turn, amplified the increase of services and goods. The global economic crisis began in 2008 with the bankruptcy of Lehman Brothers, and in 2009 it culminated in an economic recession that transpired in Romania through a decrease in GDP by about 2.3% over the previous year.

Investigating the evolution of the main budgetary aggregates in the analyzed period, it is observed that the fiscal revenues from the depression stage in 2009 were higher than those from 2008 by 8.9%, higher than the increase by 6.09% of the level of consumer prices. After this period, the analyzed indicators show that the economic balance has been gradually restored. Without the existence of a general pattern, in fiscal year 2019 the share of fiscal revenues in GDP increased from 15.2% to 14.9% in 2018. In their structure, for the whole time series included in the analysis, the correlation coefficients increased as a result of a favorable macroeconomic evolution. For example, gross domestic product for 2019 was 223 billion euros in current prices, an indicator more than about 2.7 times compared to 2005.

We can conclude that isolating the business cycle is a controversial issue. It is identified and measured by macroeconomic variables that are difficult to observe, and the sum of the market value of all goods and services produced during the analyzed period and its connection with total tax revenues are another controversial topic in the literature. Although estimates of the business cycle can be interpreted in an empirical process, a comparative analysis of the results obtained was used in this paper. From the point of view of the cyclical evolution in Romania, the picture captures the main macroeconomic developments, such as the effects of the global economic crisis in 2009 followed by economic growth between 2010 and 2015. From 2015 to 2019 the Romanian economy it was characterized by a pronounced economic growth and which translated into significant increases in the tax base.

These results are likely to validate the empirical evidence on the identification and classification of economic cycles, according to which the periods of growth of fiscal revenues can be correlated with the evolution of GDP, depending on the phase of the economic cycle. The fact that in 2010 the indicators increased can be interpreted to a large extent by the persistence of the effects of the global economic crisis that began in 2008.

Considering the entire analyzed period, the analysis and comparison of revenues highlights the fact that Romania's economic cycle has been correlated with legislative changes regarding the taxation regime. All this derives from Romania's status as a member state of the European Union, which since January 1, 2007 implies common rights and obligations.

However, the records show that the effects of the reduction in tax rates from 16% to 10% and the tax base for the years 2015-2016 were measures of a pronounced pro-cyclical nature. Although the fiscal policy of this period favored indicators such as consumption, job creation and development or lending, this approach has resulted in diminishing vital fiscal space in stimulating the economy in phases of recession or unforeseen events and may limit the fluidity of fiscal-budgetary policy difficult economic times.

In the case of Romania, the period between 2010 and 2018 was marked by a strongly pro-cyclical fiscal policy, with an effect of stimuli on the economy during the expansion period and slowing down in the period when it operated below potential, contributing to amplifying fluctuations specific to evolution cyclical economic developments and the accentuation of the macroeconomic imbalances accumulated up to that date. The fiscal consolidation process was interrupted starting with 2016 simultaneously with the reform of the provisions of the fiscal code, which translated into a broad fiscal relaxation simultaneously with the transposition into legislation of an important package of expenses, mainly salaries and pensions. In addition, this situation was in contradiction with the fiscal governance treaties to which Romania acceded in 2007. Even though in 2017 Romania was placed in the preventive mechanism of the Stability and Growth Pact, until the end of the year. 2019 the conduct of fiscal policy has become strongly expansionist again.

As expected, Romania registered in 2019 a level of fiscal revenues (taxes and social contributions) of 30.02% of GDP, with a difference of approximately 13 percentage points compared to the EU average, being ranked on the penultimate place. Compared to 2018, the gap between this country and the EU average has increased in the case of budget revenues, by 0.2 percentage points of GDP.

In dynamics, there is also a linear increase of this indicator in the case of GDP since 2010, and the analyzed indicators had an upward trend until 2016. While the evolution of GDP continued the linear evolution, from figures no. 2 shows the oscillating dynamics of tax revenues between 2015 and 2019, depending on the economic growth recorded. In part, this dynamic of indicators is due to the reforms started in 2016 by which fiscal decision makers provided fiscal incentives. This situation shows that fiscal policy was pro-cyclical, and the economy benefited from incentives during the growth period.

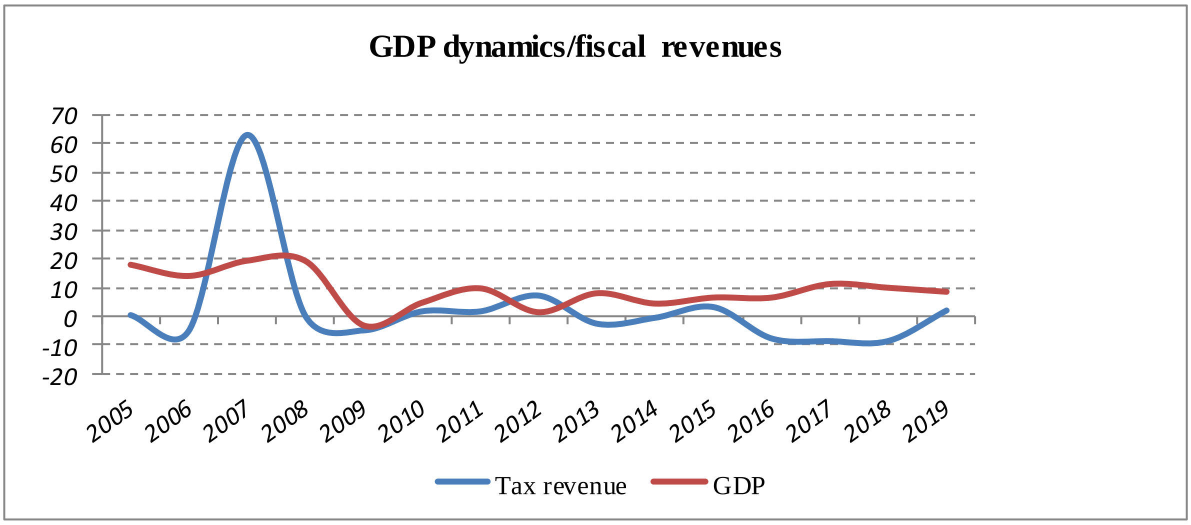

Figure 2. Dynamics of tax revenues and GDP between 2005-2019

In Romania, the share in GDP of revenues from taxes on production and imports increased gradually, reaching a level of 10.6% of GDP in 2019, by 0.2% higher than in 2018. Compared to 2018, revenues from VAT in 2019 were additionally influenced by the extension of the application of the reduced VAT rate of 5% instead of 9% for services in the hotel and food industry. Regarding excise revenues, they increased in 2019 compared to the previous year, as a result of the increase in the level of excise duties for fuel and tobacco. Expressed as a share in GDP, incomes from social insurance contributions were on an upward trend as a result of the favorable evolution of the wage fund, having a more pronounced character since 2015. Another significant increase took place in 2018 compared to 2017 because of the transfer of social security contributions from employer to employee. In fiscal year 2019, revenues from social security contributions were 11.3% of GDP, slightly below the level of the previous year, respectively 11.4% of GDP. On the one hand, the evolution of this indicator was influenced by the slowdown in wage dynamics in the fourth quarter of 2019 and, on the other hand, by the fiscal facilities adopted in the construction sector. Also, the share of income tax revenue in GDP decreased marginally in 2019 compared to 2018, with a decrease from 4.9% of GDP in 2018 to 4.8% of GDP in the following year. Consequently, the evolution of income and wealth tax revenues underlines the dynamics of the wage fund in the economy and the negative impact on the budget generated by the exemption of employees in the construction industry from the payment of income tax.

The problem with the research was, in this case, whether there is an association between tax revenues and the GDP growth rate. The above-mentioned variables being measured on a numerical scale, having a normal distribution and being in a linear relationship, the problem was a typical one for the Pearson linear correlation test.

Thus, to deepen the study, we considered useful a correlation analysis to measure and describe the degree of linear association between tax revenues in Romania and GDP. The variables considered for the analysis are tax revenues and GDP growth rate for the period 2005-2019 (table no.2).

Table 2. Correlation between tax revenues in Romania and GDP in the period 2005-2019

	Tax revenue	**GDP**
Tax revenue	1	0,45
GDP	0,45	1

To this end, a database with 30 records representing the dynamics of tax revenues and real GDP, distributed Gaussian, was set up. The database includes each year from the analysis interval, respectively the period between 2005 and 2019. We obtained a positive linear correlation coefficient Pearson R Square = 0.448, which indicates that there is an average degree of association between the quantitative variables considered.

CONCLUSIONS

Given that Romania is part of emerging economies and is prone to experience extreme cycles of the economy and, as a result, being part of countries vulnerable to severe crises, has led to a study to conduct a policy assessment in 2020. on the economic cycle.

The fiscal system has an important role in achieving the economic and social objectives of a state. In the context of cyclical evolution, achieving and maintaining a state of equilibrium or stabilizing the economy affected by the action of disruptive factors are the main objectives that must be met.

In the absence of an integrated database that raises the transparency of the impact of fiscal policy in Romania, the examination of the evolution of fiscal revenues and GDP reveals the economic cycle and its dynamics. The value of GDP has had an upward trend since 2005 and lasted until 2008. This indicator reveals a distinct part of a cycle with continuous economic development which, according to the stages of the economic cycle, is in the boom phase. economic. The global economic crisis that began in 2008 culminated in 2009 with an economic recession and subsequently transpired in Romania through a decrease in GDP by about 2.3% compared to the previous year. During the period under review, it was determined that the dynamics of tax revenues were largely influenced by the sum of the market value of all goods and services.

In order to provide a substantiated picture of Romania's position, there was another decrease in tax revenues in 2016 followed by an increase until 2019. One of the hypotheses is determined by a broad legislative reform that took place during 2015-2016 from this country related to the reduction of both tax rates and the tax base. In 2019, the fiscal-monetary parameters showed the fact that, firstly, the fiscal space was limited, and secondly the perspectives not anchored in the realities of the cyclical economy for the formulation of long-term financial policies that ensure environmental stability. Business. Thus, a shock or unforeseen event is expected to generate stronger effects in the medium and long term on the Romanian economy, this country having limited mechanisms of macroeconomic stabilization.

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