PROCYCLICAL ECONOMIC POLICY AND RISKS ON ECONOMIC GROWTH SUSTAINABILITY IN ROMANIA

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Abstract. The current situation of the Romanian economy must be understood beginning from the analysis of the main measures of fiscal-budgetary policy applied over the last years by the public authority. In general, the Romanian fiscal policy (before and after accession) was procyclical. However, we continue by presenting some of its characteristics for the past years when we underwent the last ascending phase of the economic cycle. Actually, Romania's GDP exceeded constantly the potential level, and the demand surplus became predominant, generating inflationary pressures. Maintaining the expansionist level of the fiscal policy, in the conditions of a positive deviation of GDP, as of 2017, and opting-out regarding the structural deficit target contributed to affecting the stability of public finances, on short- and medium-term. Romania entered into an extremely difficult economic context, generated by the pandemic, with an extremely narrow fiscal space which limited a lot the possibilities of combating the effects of the pandemic. In this paper we analyzed a period limited to the year 2020, because we consider this time as marking the end of an economic cycle in a period of peace and economic calm, as another is about to begin based on the new realities.

1. Introduction

First, we regard as useful to highlight the role of fiscal-budgetary policy in the framework of the set of macroeconomic policies. The fiscal-budgetary policy is not only that component of the mix of economic policies by which the necessary budgetary resources are ensured for providing public goods and services, but also an important level if designed and applied adequately for stimulating economic growth and balanced distribution of it, with the purpose of assuring concomitantly the development of the country, promoting social inclusion and poverty reduction without affecting financial stability.

Economic theory teaches us that not any economic growth generates long-term development. When the goal of achieving high growth rates of GDP is framed by a short-time vision, the price paid is sacrificing macroeconomic balances, case in which the obtained gaines are ephemeral or minimal. The periods of expansion will be followed, unavoidably, by

correction recessions, and it is possible that previous gains will be considerably eroded or even annulled by their end. In this sense, though seemingly paradoxical, it is preferable to have moderate economic growth (for instance 3.0–3.5% yearly), but over a period of several years, than spectacular temporary increases followed by contractions of at least the same amplitude. The only means by which solid economic advancement and maintenance of internal and external balances of the economy may be delivered simultaneously to the society is by increasing the growth potential of the economy by balanced fiscal-budgetary policies that lead to permanent productivity gains.

2. Theoretic approaches in the specialized literature regarding the use of procyclical/anticyclical policies

The drafting of fiscal-budgetary policy entails realizing it by starting with the identification of the economic cycle phase (increase or decline). When the economy is on increase, and knowing that the action of economic agents is procyclical, the fiscal-budgetary policy (just like the monetary, incomes' and macroprudential policy) is required to be anticyclical or, at least, neutral (respectively null fiscal stimulus) with the purpose of placing effective economic growth in the proximity of the potential one, thus avoiding overheating of the economy. On the other hand, the fiscal-budgetary policy is required to be incentivizing whenever the economy is in the recession phase, by generating adequate fiscal stimulus with the purpose of accelerating the activity towards its potential level.

To this end, an anticyclical fiscal policy helps the economy to adjust more completely and rapidly to such fluctuations. Applying such a policy should equalize actively the economic cycle by decreasing taxes and increasing expenditures during unfavorable periods by stimulating thus the aggregated demand and by diminishing expenditures and increasing savings in the favorable periods (Havard & Bleaney, 2011).

Studying the application of economic policies at the level of world states, we find that in the specialized literature evidence is given about the fiscal cycle differences between developed (rich) countries and developing ones (Kaminski et al., 2004; Talvi & Vegh, 2000) or between countries in the same group over a certain period of time (Fatas & Mihov, 2009).

The global financial crisis of 2008 was the turning point that opened the discussion about the importance of financial stability for economic activity, after decades of government with moderate policy. The primary goal of policymakers was to identify earnings warning signals to predict business cycles and avoid instability in the economy (Škare & Porada-Rochoń, 2020). Fiscal policy aims to mitigate cyclical fluctuations and ensure economic and financial stability of the business cycle (Iancu & Olteanu, 2022).

Fiscal policy is in most of the cases procyclical. Although before the global financial crisis there were several pro-cyclical fiscal policies, after the crisis the fiscal regulatory framework in the EU countries improved, which led to the emergence of counter-cyclical policies. Less cyclical policies are found in the EU member countries than in the rest of the countries outside the euro zone (Gootjes & Haan, 2022).

Fiscal policy is often pro-cyclical. This procyclicality was considered to be specific to developing countries. According to Eyraud et.al. (2017) fiscal policies in European countries

are also pro-cyclical. Procyclicality can be driven by increased borrowing constraints during periods of economic crisis, forcing the governments introduce fiscal adjustments instead of fiscal expansion. During a boom, it's difficult to keep government spending under control because of political incentives. The study shows that institutional factors (fiscal rules and government efficiency) enhance the cyclical response of fiscal policy. If the institutional factors are weak, they determine a procyclical fiscal policy in all its different stages. Government efficiency and fiscal rules help improve cyclical behavior. In the case of the manifestation of strong institutional factors, the result is acyclical fiscal policies, even if government efficiency and fiscal rules do not seem to complement each other (Eyraud et al., 2017).

Some studies show us that well-designed fiscal rules can reduce procyclicality (Nerlich & Reuter, 2015; Combes et al., 2017; Guerguil et al., 2017), but other studies suggest that result holds only when these rules are sustained by a level high enough of government efficiency/ quality (Bergman & Hutchison, 2015). Bova et al. (2014) find that the adoption of clear fiscal rules has not helped developing economies escape the procyclicality trap. In another study, Bova et al. (2018) find that the adoption of fiscal rules does not significantly reduce the procyclical stance of fiscal policy. These authors show that the efficiency/quality of government institutions are able to help limit procyclicality. Calderón et al. (2016) consider that the quality of the institutional framework has a very important role in the capacity and availability of countries to implement countercyclical fiscal policies. Frankel et al. (2013) argue that key to moving from pro-cyclical to counter-cyclical policies is the institutional policy framework.

Considering that governments' decisions are generally based on highly uncertain estimates of the state of the economy, fiscal policy in reality can be significantly different from the ex-ante intentions of decision makers (Cimadomo, 2016).

At the same time, we notice that, while fiscal policies within OECD countries is anticyclical, in Latin-American countries it is procyclical (Gavin & Perotti, 1997). By making use of the various models for determining the cyclicality in a study on 104 countries, the anti-cyclicality of OCDE economies is confirmed, and at the same time the fiscal pro-cyclicality for developing countries (Kaminski et al., 2004).

The approach in explaining the style differences in applying these policies among developed countries, as compared with developing ones led to two types of reasons: a) restrictions regarding access to domestic and/or international capital markets (Gavin & Perotti, 1997); b) corrupt institutions or political structures (Alesina et al., 2008).

According to the reasons regarding credit restrictions on external financial markets, developing countries are less capable of diminishing the amplitude of the economic cycle, because they have limited access to international credit markets during unfavorable periods. For instance, in countries from Latin America, during periods of severe recession, investors restrict credit on grounds of high fiscal deficits that might become unmanageable, and this occurs because of the high initial deficits. Therefore, procyclicality in these countries is more pronounced.

The sudden diminishment of capital flows to emerging markets during the recession stage is associated with strong depreciation of the national currency, the drastic decrease of investments and strong fiscal reductions. The countries become practically isolated on international

financial markets (Kaminski et al., 2004). In another approach, by using the ration between external liabilities and GDP as measure of financial openness, it is found that a wider access to domestic and external capital markets would allow developing countries to apply anticyclical policies in the descending phases (Calderon & Schmidt-Hebbel, 2008).

The majority of economists agree on the measure according to which the taxation rates and discretionary governmental expenditures as weight in GDP should remain constant over the economic cycle. If governments would comply with these "rules", we should be able to observe an anticyclical model of the fiscal policy, so that in the phase of economic boom: (1) total public expenditures as weight in GDP should decrease because of the automatic stabilizers; (2) with constant taxation rates and a certain degree of progressiveness, public incomes as weight in GDP should increase (the effect would be consolidated by taxation decreases in recession, and increases of taxation in periods of full expansion); (3) hence, budgetary surpluses as weight in GDP should increase. The opposite should occur in the period of recession (Alesina et al., 2008).

Returning to the reasons at the basis of such policies, some authors consider that, in unfavorable periods, many developing countries cannot take loans or if, then at only very high interest rates, and as result they cannot have deficits and must cut expenditures; in boom phases, the countries might take loans easier and can chose to do this by increasing public expenditures (Catao & Sutton, 2002; Kaminski et al., 2004).

Increasingly more often, in the specialized literature is posed the question why these countries (developing ones) remain always captive in the vicious circle of procyclical policies. Why they chose such decisions that contribute to higher amplitude of the cycles and to macroeconomic instability. A possible answer might be the restrictions regarding the capital market, mentioned already. However, this argument seems incomplete and generates another critical question: why these countries do not take assurance measures, over the phases of economic cycle growth, by attempting to create budgetary surpluses so as to have wider fiscal space for the periods of recession/crisis? Or, in another interpretation, why they cannot have access to cheap credits (comparable to the ones in developed countries) during crises?

Thus, we touch on the second major reason – political (structures) institutional quality. The tendency towards budgetary "gifts" or to paying obligations towards "friends" of the government exists in these countries, and the effect is compounded by imperfect information, or even by the lack thereof for the electors. The population does not ask for irrational policies, it is just insufficiently informed or even misinformed sometimes about the economic actions of the government. Hence, when the economy is in full expansion, and the electors perceive this (also due to the presentation of some economic data by the government with electoral purposes), they desire to maximize their own utility by forcing the government to social policy actions which often contradict the macroeconomic laws/bases – most often the increase of the governmental expenditures' weight and of loans in the phases of economic boom (Alesina et al., 2008)

In another study, it is shown that developing countries display a significant procyclical fiscal policy from the statistical point-of-view, regarding both expenditures and taxation. At the same time, the conclusion is drawn that the elasticities of public debt are considerably

higher in these countries, as compared with OECD countries. Moreover, the same situation is encountered regarding GDP volatility. The empirical evidence is in agreement with the idea that the countries with a procyclical fiscal policy are characterized by deeper financial frictions (more insufficiency of the market and higher elasticity of debt) and show more volatility in production (Fernandez et al., 2021).

The volatility of economic activity (cycle amplitude) increases whenever fiscal policy has a procyclical character, that is it is lax even though the economy develops over the potential, and is restrictive when there is demand deficit in the recession phase. "The ample fluctuations of the effective GDP dynamics induce substantial uncertainties in the decisional process, and the risk premiums demanded by the investors and creditors are on increase. Important rating agencies use the criterion regarding economic growth volatility in country evaluations sanctioning countries with wide fluctuations of the economic activity. Consequently, fiscal policy is necessary to be drafted and dosed adequately in the framework of economic policies mix. Therefore, not all policies of stimulating demand lead to increases in the living standard" (Georgescu, 2017).

Depending on the historical period and assumed ideology, various roles have been attributed to the fiscal-budgetary policy in the process of economic growth, for instance: the role of stabilizing the economic cycle, of stimulating economic growth on long-term (sustainability), of redistributing and sustaining inclusive economic growth (Musgrave, 1959). The economic growth depends "increasingly on productivity gains and our capacity for innovation, and thus on investment in training and research and development" (Sorici, 2009).

The economic cycle may be stabilized by anticyclical fiscal policy, that is by discretionary policy and/or by the action of automatic stabilizers (the mechanisms and characteristics of the economy which, without governmental intervention, act automatically in the direction of limiting fluctuations). "In the ascending phase of the cycle, automatic stabilizers should be enough without resorting to discretionary measures, and the latter should be used only in special circumstances. The intervention of the state by fiscal policies is conditioned, however, by the existence of fiscal space: it might be defined as the capacity of the Government to implement fiscal stimuli (tax reductions and/or expenditure increases) in the conditions of maintaining access to financial markets and preserving the sustainability of public debt" (Dumitru, 2018).

3. Analytical study on macroeconomic variables over the preceding period of the pandemic year 2020

The elaboration and implementation of the fiscal-budgetary policies in Romania is characterized by the following realities over the last years:

- Over the period 2006–2019 a strong procyclical fiscal policy was applied so that in the expansion phases the economy was stimulated (2006–2008, respectively 2016–2019), and during the recession periods and recovery (when the economy operated below its potential), the measures were of deceleration for economic activities (2010–2015). This led to amplified fluctuations of the economic cycle and to more marked imbalances accumulated in the economy. With a permanently procyclical fiscal policy we might lose democracy and monetary policy (Croitoru, 2015, 2017).

- Such measures resulted in decreases of the fiscal space required for stimulating the economy in periods of recession (2009–2010) and to limiting the fiscal-budgetary instruments in difficult economic periods, as was the case in 2020 because of the pandemic. The automatic and beneficial action of automatic stabilizers is restricted by the discretionary procyclical policy.
- Experts in the field have shown, in numerous occasions, that the idea according to which it is enough to maintain the budgetary deficit below 3% of GDP is wrong; this level does not represent a "target", but a ceiling that may be reached only in adverse cyclical conditions, of deep recession, which was not the case for Romania over the period 2016–2019. The rule regarding structural deficit – MTO (Mid-Term Objective by –1% of GDP) was no longer complied with, without providing explicitly the way for its adjustment as of 2016. Actually, the only milestone for the fiscal-budgetary policy was represented by the 3% of GDP threshold for the effective budgetary deficit (Consiliul Fiscal al României, 2019).
- The elaboration of public budgets in the preceding years was marked by two important vulnerabilities: a) the very low level of fiscal incomes as weight in GDP, compared with the other EU countries, and b) the increasingly more marked rigidity of the budgetary expenditures structure, the weight of personnel and pension expenditures exceeding 75% from fiscal incomes (in 2019). Over the period 2016–2019, these vulnerabilities were augmented also by the fiscal relaxation initiated by the new Fiscal Code enforced as of 2016 (decrease in indirect fiscal pressure – 2016, and direct fiscal pressure – 2018) (Consiliul Fiscal al Roâaniei, 2019).

A macroeconomic analysis, taking into account the main fiscal-budgetary variables over the period 2013–2019 is presented hereunder.

In the following table we present the evolution of the budgetary incomes and expenditures according to the ESA-2010 standards (% GDP).

In Figure 1 we can see the evolution of the budgetary balance for Romania over the period 2013–2019.

By analyzing the budgetary incomes and expenditures, we find the following:

- a strong diminishment of the budgetary incomes as weight in GDP on average over the period 2016–2019, as compared with the period 2013–2015;
- a reduction, however, less significant of the budgetary incomes as weight in GDP on average for the two periods of analysis.

The final outcome is a negative gradual increase of the budgetary balance as of 2016 from 2.6% to 4.4% by the end of 2019 (the highest budgetary deficit within the European Union!).

The reasons pertain to the procyclicality elements of the fiscal policy in our country, when during the ascending (normal) phase of the economic cycle occurred two episodes of fiscal relaxation (January 2016 – diminishment of VAT from 24% to 20%, and in January 2018 – decrease of the income tax from 16% to 10%), respectively the augmented increase of personnel expenditures (from 7.8% in 2015 to 11.2% in 2019 as weight in GDP). All these, corroborated with a diminishment of the public investment weight in GDP from 4,6% in average (2013–2015) to 3% in average (2016–2019), led unavoidably also to an increase in the trade

Table 1. Evolution of budgetary incomes and expenditures, ESA-2010 standards (% GDP)
(source: processing after Consiliul Fiscal al României, 2019)

| Year Incomes/ expenditures	2013	2014	2015	2016	2017	2018	2019
Total incomes from which:	33903	34.1	35.5	31.9	30.8	31.9	31.8
Indirect taxes	12.7	12.7	13.3	11.3	10.3	10.4	10.6
Direct taxes	5.9	6.2	6.6	6.4	6.1	4.9	4.8
Social Insurance Contributions	8.6	8.5	8.1	8.8	9.4	11.4	11.3
Other budgetary incomes	6.1	6.7	7.5	5.4	5.0	5.2	5.0
Total expenditures from which:	35.4	35.3	36.1	34.5	33.5	34.8	36.2
Intermediary consumption	5.7	6.0	5.9	5.6	5.2	5.1	5.4
Employees remuneration	8.1	7.9	7.8	9.0	9.8	10.9	11.2
Interests	1.8	1.7	1.6	1.5	1.3	1.1	1.2
Social assistance	11.7	11.5	11.5	11.5	11.6	11.6	11.8
Subventions	0.5	0.4	0.4	0.3	0.4	0.4	0.4
Fixed capital gross formation	4.4	4.3	5.2	3.6	2.6	2.7	3.4
Other budgetary expenditures	3.2	3.5	3.7	3.0	2.6	3.0	2.6
Budgetary balance (Total incomes – Total expenditures)	–2.1	–1.3	–0.6	–2.6	–2.7	–2.9	–4.4
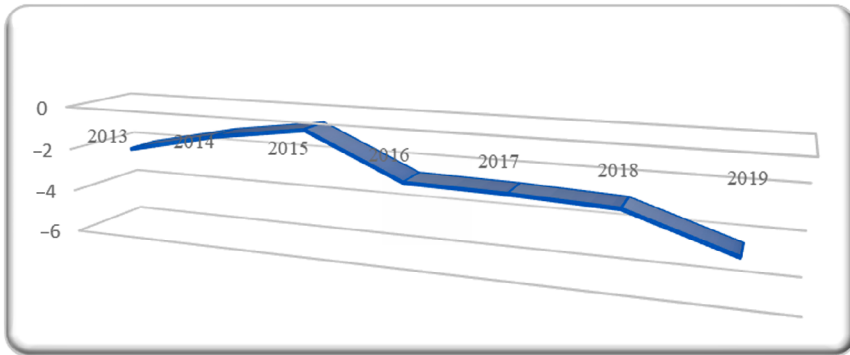
Figure 1. Evolution of the budgetary balance for Romania over the period 2013–2019
(source: Consiliul Fiscal al României, 2019)

deficit by imbalancing strongly the relationship "aggregated demand – aggregated supply". A large part of the consumption demand surplus (as result of rapid increase in incomes) was found in the increase of imports, as illustrated by Figure 2.

As it might be noticed, the trade deficit increased gradually (in absolute figures), so that by the end of 2019 it had a value 2.07 higher than in the year 2015 (an almost double growth). This evolution was reflected inevitably also in the depreciation of the national currency in relation to the European currency, the exchange rate reaching 4.77 RON/Euro in

2019 on the background of the marked increase of hard currency demand. It might be said that a good part of the GDP growth in Romania "financed" the economies of other states!

From Figure 3, on the GDP line is noticed a sudden change in its dynamics as of 2016 when consistent increases are recorded in relation to the preceding years. Thus, over the period 2016–2019, the average GDP growth is by 5.1%, compared to the period 2013–2015, when the average increase is by 3.4%. It is an increase in the average dynamics which from statistical perspective is encouraging. However, if we analyze the line of the budgetary balance and the evolution of inflation, we find the following: a) in one period (2016–2019) in which the GDP increase was over 5%, on average, the budgetary deficits grew on a yearly basis, resulting an average by 3.1% of GDP for the analyzed interval. By comparison, in the years 2013–2015, the average of the budgetary deficit was only 1.3%; b) the inflation rate undergoes also a marked increase as of 2017, reaching a maximum by 4.6% in 2018, after the economy was faced even with a deflationary phenomenon in the preceding years (2015 and 2016).
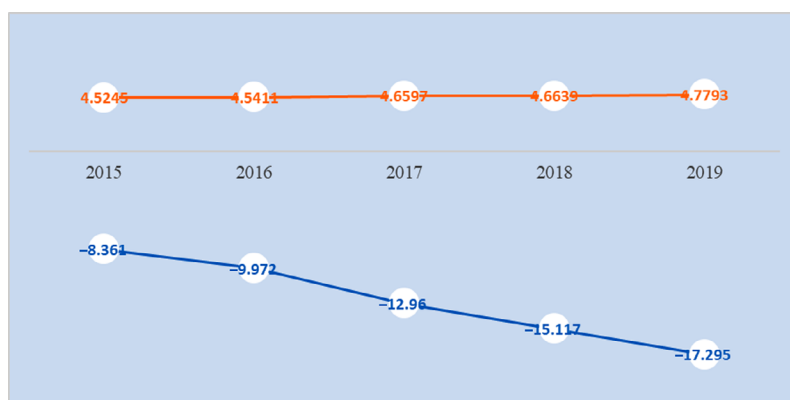

Figure 2. Evolution of trade deficit and of the exchange rate
(source: Institutul Naţional de Statistică, n.d.; Banca Naţională a României, n.d.)

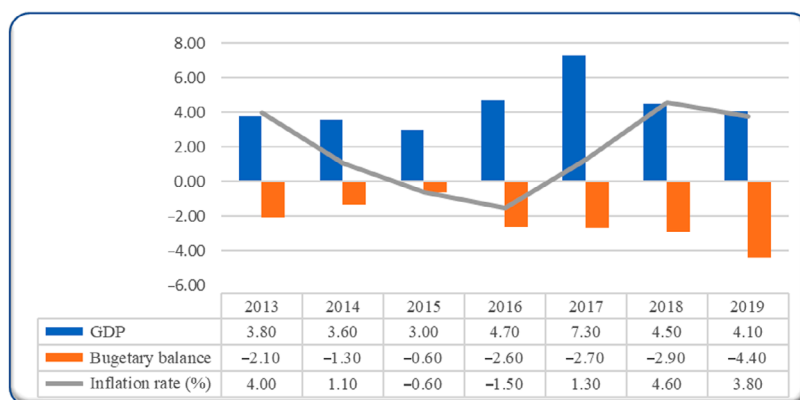|	2013	2014	2015	2016	2017	2018	2019
GDP	3.80	3.60	3.00	4.70	7.30	4.50	4.10
Bugetary balance	−2.10	−1.30	−0.60	−2.60	−2.70	−2.90	−4.40
Inflation rate (%)	4.00	1.10	−0.60	−1.50	1.30	4.60	3.80

Figure 3. Evolution of real GDP, budgetary balance, and inflation rate over the period 2013–2019
(source: processing based on Consiliul Fiscal al României, 2019; Institutul Naţional de Statistică, n.d.)

The dynamics of the budgetary balance and of the inflation rate which accompanied the (sustained) increases of GDP reveal that the Romanian economy had a positive deviation of the GDP generated by an excess of the consumption demand (current GDP exceeded potential GDP). The potential gross domestic product is equivalent to the level of the indicator that might be achieved in an economy in a non-inflationary way. It depends on short-term on the productive capacity of the economy generated by the endowment with labor force, capital components, and total production factors' productivity. Potential GDP is an important indicator, which is not observable directly, and which is used by the public authority (fiscal and monetary) in view of establishing the optimum mix of macroeconomic policies. Knowledge about the potential GDP is imposed by the estimation of the cyclically adjusted budgetary position required for evaluating the budgetary effort along the economic cycle (Mănătescu & Lazăr, 2014).

Investments (especially public ones) are essential for increasing potential GDP of a country (the level of GDP at which capital stock and the factor labor are in a relation that does not generate inflationary pressures). Public investments have a triggering role for private investments, so that their diminishment (out of the need to respect the deficit limits) constitutes a negative signal for autochthonous companies, but especially for the foreign ones regarding the investment appetite. In order to have sustainable economic growth it is necessary to keep macroeconomic balances, and increase the factors contributing to potential GDP growth – capital, labor force (Lazea, 2017).

4. Correlation between macroeconomic deficits and evolution of taxes, of wage expenditures and public investments

The two types of deficits ("twin" deficits) – the budgetary and, respectively, the trade deficit can be explained in various ways.

Regarding *budgetary balance*, the correlation is obvious between the size off the deficit and the dynamics of budgetary expenditures and incomes (Budgetary balance = Incomes – Expenditures).

By analyzing Table 1, a relatively constant weight of expenditures in GDP may be noticed, along with a decrease in the weight of budgetary incomes in GDP for the entire evaluated period.

Maintaining a relatively constant weight of the budgetary expenditures, even though personnel expenditures increased significantly in the last part of the period, is explained by the decrease in the weight of capital-investment expenditures (the phenomenon of "budgetary compensation").

However, fiscal relaxation (direct and indirect) realized over two stages (January 2016, and January 20018) led to a sudden diminishment of the budgetary incomes' weight in GDP, as shown in Table 1.

As regards *trade balance*, we consider as necessary to realize a regression model for clarifying its dependency on the components of budgetary incomes (direct and indirect taxes), and on the structure of budgetary expenditures (wages, investments).

The necessity of resorting to such a model results from the fact that the constitute elements of the budgetary incomes (taxes) and of the budgetary expenditures (personnel expenditures and capital-investment expenditures) are not related directly to the exports' and imports' volume. The causality relationship between them and the trade balance is not as obvious as in the case of the budgetary balance. Nevertheless, the trade balance deficit increased continuously over the analyzed period, suggesting somehow a link with the fiscal-budgetary policy, but not clarified enough yet based on the simple observation of statistical data.

At the same time, we take into account the clarification limits of the conclusions detached as result of applying the model, because the period of analysis is not very long (7 years). We anticipated this to a certain extent, by considering just a sequence of the economic cycle (the one of re-launch and expansion), that followed the crisis of 2008–2010. Meanwhile, the expansion stage concluded suddenly, when the pandemic crisis broke out in the year 2020, which determined a reorientation of the study and limiting it to the respective period. However, we believe that there is a probability, depending on the obtained values, to identify some essential correlations between the used variables and which might clarify (even if just partially) certain aspects regarding the enforcement of the fiscal-budgetary policy in Romania.

We assume the following work hypotheses:

H0. *There is no link between trade deficit and the independent variables: direct taxes, indirect taxes, wage expenditures and public investments.*

H1. *Trade deficit is influenced by public investments, wage expenditures and direct and indirect taxes.*

Table 2 shows the arithmetic average and the standard deviation of the variables considered in the regression model.

The analysis of the correlation between variables is made based on the correlation matrix of the considered variables, according to Table 3.

By analyzing the correlation matrix is found that there is a significant and strong positive correlation at a significance level by $\alpha = 0.01$ between trade deficit and wage expenditures, the Pearson correlation value being $r = 0.932 > r_{cr\ 0.01}$ and $p < 0.002$.

Public investments and indirect taxes are correlated negatively with the trade deficit at a significance level by 0.05.

Considering the hypotheses, hypothesis H_0 is rejected, and the hypothesis H_1 is verified at a significance level by 0.05.

By using the linear regression model, we will forecast the evolution of the analyzed variables based on the correlations between them. We opted for the variant Enter which introduces simultaneously in the analysis model all the independent variables. Table 4 comprises the model built with SPSS software, in view of identifying depending on the chosen method the best combination of independent variables that explain the variation of the dependent variable – trade deficit.

Table 2. Descriptive statistics

	Mean	Std. Deviation	N
def	5.93743	1.540255	7
impdir	5.84286	0.713809	7
impind	11.61429	1.260197	7
chsal	9.24286	1.422272	7
Invpub	3.78571	0.985611	7

Table 3. Correlations

		def	impdir	impind	chsal	Invpub
def	Pearson Correlation	1	−0.651	−0.878**	0.932**	−0.786*
	Sig. (2-tailed)		0.113	0.009	0.002	0.036
	N	7	7	7	7	7
impdir	Pearson Correlation	−0.651	1	0.633	−0.859*	0.634
	Sig. (2-tailed)	0.113		0.127	0.013	0.127
	N	7	7	7	7	7
impind	Pearson Correlation	−0.878**	0.633	1	−0.910**	0.977**
	Sig. (2-tailed)	0.009	0.127		0.004	0.000
	N	7	7	7	7	7
chsal	Pearson Correlation	0.932**	−0.859*	−0.910**	1	−0.861*
	Sig. (2-tailed)	0.002	0.013	0.004		0.013
	N	7	7	7	7	7
Invpub	Pearson Correlation	−0.786*	0.634	0.977**	−0.861*	1
	Sig. (2-tailed)	0.036	0.127	0.000	0.013	
	N	7	7	7	7	7

Note: **Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Table 4. Variables entered/removed[a]

Model	Variables Entered	Variables Removed	Method
1	Public investments. direct taxes. employ-ees remuneration indirect taxes[b]	–	Enter

Note: a – Dependent Variable: trade deficit; b – All requested variables entered.

Table 5. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.994[a]	0.989	0.967	0.27156

Note: a – Predictors: (Constant); public investment; direct taxes; employee remuneration; indirect taxes.

In Table 5 we find for each identified regression model in the Table Variable Entered/Removed the value of the correlation coefficient R, the value of the determination coefficient R^2, the adjusted value of the determination coefficient R^2 and the standard error of the estimate.

The value of the multiple correlation coefficient $R = 0.994$ signifies a very strong correlation between the combined influences of the independent variables taken into account: public investments, direct taxes, employee remuneration, and indirect taxes.

The multiple determination coefficient $R^2 = 0.989$ indicates that the combined influence of the 4 independent variables taken into account explain in a share by 98% the total variation of the trade deficit, as the difference by 2% from this variation can be attributed probably to other variables, to the measurement errors or to chance.

Table 6 presents the results off the F-test statistic used for testing the used regression model.

A value of $F < F_{cr}$ or $p < \alpha = 0.05$ confirms the hypothesis that there is a relationship of significant linearity between the considered variables, respectively the factors public investments, direct taxes, employees' remuneration, and indirect taxes which explain the variation of trade deficit.

The non-standardized regression coefficients, standard errors, the standardized regression coefficients, the t-test statistic value for each coefficient and the sig. value are found in Table 7.

Taking into account the value of the non-standardized regression coefficients, the multiple regression line described is represented by the following regression equation:

$$Trade\ def = -47.8 + 2.368 * dirtax + 1.314 * indirtax + 2.824 * wagexp - 0.402 * publinv. \quad (1)$$

Table 6. ANOVA[a]

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.183	4	3.296	44.693	0.022[b]
	Residual	0.147	2	0.074		
	Total	13.331	6			

Note: a – Dependent Variable: trade deficit; b – Predictors: (Constant), public investments, direct taxes, employees' remuneration, indirect taxes.

Table 7. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	−47.809	24.379		−1.961	0.189
	Direct Taxes	2.368	0.766	1.134	3.091	0.091
	Indirect Taxes	1.314	1.370	1.111	0.959	0.439
	Employees' remuneration	2.824	0.880	2.694	3.208	0.085
	Public investments	−0.402	1.044	−0.256	−0.385	0.737

Note: a – Dependent variable: Trade deficit.

In order to evaluate the separate influences of the independent variables on the trade deficit we use the standardized regression coefficients Beta. Thus, the multiple regression equation is given by the following formula:

$$\textit{Trade def} = 1.134 * \textit{dirtax} + 1.111 * \textit{indirtax} + 2.694 * \textit{wageexp} - 0.256 * \textit{publinv}. \quad (2)$$

The strong impact that the variables – wage expenditures on trade deficit (with a positive relationship between the two) – is noticeable for both equations. Moreover, the dynamics of personnel expenditures (in the sense of increase) compensated and exceeded the effects of the fiscal relaxation on the trade balance, because increasing higher trade deficits were recorded for the entire period. public investments are also correlated negatively with the trade balance suggesting the idea that their more marked increase in the detriment of personnel expenditures would have been beneficial for diminishing the negative balance of the trade balance.

Conclusions

The year 2020 was marked by the economic and health crisis generated by the COVID-19 pandemic which recorded the highest lockdown of modern history with severe implications on the social life from Romania and the world.

During the pandemic crisis, the fiscal rules were suspended, however, this does not mean that economic laws do not react to imbalances and unsustainable aspects of macroeconomic policies, and sooner or later the necessary corrections become a requirement.

The procyclical economic policy practiced by Romania over the period 2016–2019 led to the exhaustion of the necessary fiscal space for stimulating the economy in the periods of recession and limited harshly the fiscal-budgetary policy tools in the pandemic period. If in the case of the preceding crisis (2008–2009) almost all member-states of the European Union were in excessive deficit procedure, now only Romania is found in this situation.

Making use of procyclical fiscal policies in the expansionist phase of the normal cycle led to diminishing the efficiency of the anticyclical policy measures in the period of recession/crisis. The attempts to "smooth" over the amplitude of the cycle in the descending phase (by efforts of maintaining the consumption demand at an incentivizing level for supply) have succeeded partially.

A process of fiscal consolidation would have been necessary over the period of expansion, by diminishing the "twin" deficits, i.e., the trade and budgetary deficit. The accrual of a fiscal intervention space during the recession for stimulating the economy is of vital importance regarding the attenuation of costs for exiting the crisis. As this "vital space" of maneuvering was unavailable, the costs of enforcing anticyclical measures (which are absolutely necessary) were very high – an increase of the public debt by about 12% in relation to GDP.

The procyclical economic policy (of additional increase in the consumption demand, to the detriment of investments), even though the economy was in the ascending phase of the business cycle led relatively quick to the insufficiency of the domestic supply of production, in relation to the demand in expansion; this imbalance was displayed also in international exchanges by the marked increase of the trade deficit.

An anticyclical fiscal policy leads to lessening the amplitude of economic fluctuations which means lower positive or negative shocks, a more linear evolution of businesses, that is a more stable business environment and more inclined towards increasing investments. By contrast, strong shocks (positive or negative) destabilize both companies and population. The very high increases in the expansion phase, followed by severe contractions during recession are equivalent to a lower average increase of GDP (on medium-term) as compared, for instance, with an economy in which the fluctuation of effective GDP is placed in the proximity of the potential GDP.

Anticipating the phases of the economic cycles (in order to prepare accordingly the mix of fiscal-budgetary policy), even though a process hard to achieve, might be done by taking into account the following indicators that are relevant for the state of the economy at a given moment: GDP deviation (output gap) – either positive or negative; the dynamic of the unemployment rate (employment degree); evolution of the inflation rate; evolution of consumption; the level of interest rates on various periods; exchange rates, etc.

As stipulated already, the economic theory explains it, and the economic realities from the past ascertain that when the objective is to achieve high growth rates of the GDP are framed within a short-term vision, the price paid is sacrificing the macroeconomic equilibria which, sooner of later will generate economic and social consequences.

A neutral policy during the period of economic relaunch, with investment efforts for increasing potential GDP, so that the GDP gap will be as low as possible, might help in higher efficacy of the budgetary and fiscal tools used in the recession phase which is inevitable in such an economic cycle.

Author contributions

Authors were alltogether involved in development of the work, data collection, analysis and interpretation, drafting the article, writing the paper and approved its final version.

Disclosure statement

The authors declare that they do not have competing financial, professional, or personal interests from other parties.

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