

# ***The Sway of IMF Policies on the Romanian Economy amid Global Financial Crisis***

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**Abstract:** *Global Financial Crisis (GFC) has raised the role of the International Monetary Fund (IMF, Fund) as a lender of last resort. Given that Romania, as well, has turned to the IMF to cushion the impact of the GFC, the article aims to explore topical relations between Romania and the IMF: by revealing the sway of the IMF policies on the national economy. In order to achieve the main objective we conducted a quantitative research method which is applicable to a phenomenon that can be expressed in terms of quantities and it uses systematic empirical investigation to mathematical or numerical data. Specifically, the method used was multiple linear regression analysis putting in the work two hypotheses. The findings allow us to make conclusions which might be useful for policy makers and contribute to the enrichment of the specific literature through several suggestions for the recovery of Romanian economy.*

**Keywords:** *Romania, IMF, GFC, stand-by arrangement, quota reform, critics.*

**JEL:** *F33; F34; G28; C12.*

## **Introduction**

Global economy, in 2008, entered the most baneful economic crisis after the Great Recession of the 1930s. The GFC was highly synchronized and affected almost all countries regardless their size or development highlighting the discernible swell of interdependence among world economies. Moreover, for the first time in the past 60 years global output decreased in 2009. GDP globally fell by 0.6% which was mostly due to the reduction of GDP in developed countries. GDP tumbled in 89 countries of, economic downturn was significant in Romania, as well (AER, 2010).

Despite the vast amount of studies on this topic and diversity of concluding remarks, majority of scholars agree that the root causes of this crisis has included serious weaknesses in governance and regulatory structures which often led to failures of judgment, implementation and coordination (OECD, 2013). Particularly, the United States Financial Crisis Inquiry Commission (FCIC) (2011) highlights that the cause of the GFC is a lack of government regulation and oversight in the mortgage and mortgage-backed securities market. Alan Greenspan (2008) has

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considered “transgressors” of the crisis the permissive and fraudulent practices of mortgage lending. Furthermore, another scholar points that GFC has started as a result of the credit policy artificial expansion (De Soto, 2010).

The aforementioned issue has not been the sole reason of the GFC, while the fundamentals of the crisis are more profound and have both macroeconomic and microeconomic nature (Altman, 2009, Buitier, 2008, Blanchard, 2009 *cited* Isărescu, 2009). Meanwhile, one should consider the GFC as an opportunity to restructure the economy and to alter the world order, not without reason the Sino-characters of Chinese word WEI-CHI (Crisis) are composed of WEI “danger”, CHI “opportunity” (Baker, 1943). As consequence of the crisis the world might change its course concerning the period where the role of the state is more than ones in private sector (Isărescu, 2009).

As it is mentioned above Romania also has suffered from the crisis, which has entered the economy since last quarter of 2008. All negative shocks have penetrated rapidly into domestic market, as Romanian economy is highly integrated within EU’s economy. When the crisis hit, the Romanian government (Government) turned to the international community for assistance resembling the EU, the IMF and other international financial institutions (IFI) to cushion the impact of the GFC on its economy. The anti-crisis package amounts 20 billion €, which major part is covered by Stand-By Arrangement (SBA) of the IMF.

Consequently, the Fund in collaboration with the EU has issued the measures for the government to comply them in order to get rid of the crisis. Initial solicitation of the Romanian authorities (Authority) was conditioned by drastic shrinkage of capital inflows, negative current account balance and expansive fiscal policy which has led to large budget deficit. Those negative factors has necessitated the Government to ask financial support and aimed to maintain adequate capitalization of banks and liquidity in domestic financial markets by further contraction of public expenditures. Since then, reserves have grown, budget deficit has shrunk and Romania’s sovereign rating has been upgraded from BB+ to BBB- stable by Fitch. Yet, the Government needs further structural reforms as fiscal challenges remain, and the country’s long-term growth potential has been damaged by the crisis.

The GFC has strengthened the role of the IMF as global financial architect giving an opportunity for its revitalization. Meanwhile, many scholars along before the GFC have written concerning the lack of accountability and transparency amongst the Fund (Bradlow, 2006, Stiglitz, 2003, Portugal, 2005). Thus, Lane and Maenland (2010) note that the GFC is not just another economic turmoil, and it warns the need for fundamental changes in the management of the global market economy. Hence, it is the time to reshuffle voting rights and quotas of the Fund, recognizing palpable shifts in global economic power. Particularly, the IMF board of governors in 2010, December 15 approved a package of Fund’s quotas and governance reforms. While, the deadline for reform have not been met and has

evoked disappointment over delay among developing countries, especially India (ET, 2013).

This article discusses Romanian relations with the IMF in the context of the GFC. Primary objective of the research is to identify the sway of the IMF programs on the domestic economy. Yet, this is quite challenging issue as it is hard to identify which decisions should be made by Romanian policy-makers in the absence of IMF lending. Besides, it is arduous to separate the sway of the IMF because the Romanian government acts in collaboration with other IFIs, as well, such as World Bank (WB), European Bank of Reconstruction and Development (EBRD), European Investment Bank (EIB) and effects in Romania's economy.

The contribution of our research is making some conclusions which allowed us to draw palpable recommendations for Romanian policymakers. The findings calls for further investigation of the collaboration between the Government and the IMF.

The article is structured as follows: Section 2 turns to literature review of the relations between Romania and the Fund by highlighting topical alteration of the IMF quota reform. Section 3 provides brief discussion of the Government relations with the IMF focusing on recent 5 years. Fourth section is the part of descriptive analyses: Analysis of Variance and Regression. The main conclusions are insinuated in final section and based on sequiturs we propound recommendations for policy-designers towards better performance.

### **1. Literature review**

Although liberalization and privatization policies have dominated in the reform package of countries since 1990s, it appears to seize initial significant given to the unrestrained markets (Rodrik, 2006). Moreover, the history showed that fast privatization had not brought any regular benefits, because of the corrupt politicians who used the requirement of the IMF for fast privatization to buy electro-energy and water-supply companies in their countries (Djonlagic, Kozaric, 2010). In addition, Jorra (2012) finds that IMF programs increase the probability of sovereign defaults by approximately 1.5-2.0 percentage points. Another conclusion against Fund's assistance is that the program participation reduces growth rates as long as countries remain under a program (Przeworski, Vreeland, 2000). Moral hazard stays central issue for the IMF critics, as well. It takes place especially when the politicians avoid making hard choices and continue with unsustainable policies for far longer taking into consideration possibility of easy credit from the IMF.

Consequently, countries has started to express their disagreements. Particularly, Argentine president Kirchner noted in 2005, "There is life after the IMF and it is a very good life" (Rush, 2005). These national decisions decreased the Fund's customers list to include only those countries that had no choice but to borrow from the IMF. As a result its lending portfolio declined from \$100 billion in 2003 to \$13 billion in 2007 (Lerrick, 2007 cited Chorev, Babb, 2009).

Furthermore, Painter (2009, 10 April) referring to British prime-minister G. Brown cited that Wasington Consensus was death. Therefore, developing countries and emerging markets could not be indifferent towards all above mentioned and fairly raised their insurrection related to the IMF governance and conditioning. Consequently, they urge further alterations in governance and quota-sharing which should reflect topical trends of world economy.

Since late-2000s' financial crisis, noble prize winner Stiglitz (2003) has claimed the need of global financial architecture reform in the aftermath of the crisis pointing the IMF as central variable. Current crisis seems have strengthened the criticism towards the Fund functioning and calls for further reform in governance and quota reform. In order to meet requested requirements of the countries the IMF has launched Fund's governance reform, yet as of 2013, 18 October 152 members having 78.47 percent of total quota had consented, instead for acceptance of the proposed amendment needs to be approved by 113 members having 85 percent of voting power.

Reform supposes a doubling of quotas, including 6 percent point shift in quota share from developed countries to emerging markets and developing countries. Yet, some scholars have argued that the reform package has not met the expectations, while western policymakers and the Fund's officials have labelled as historical agreement. Particularly Malkin and Momani (2011) argues that current alterations of the IMF's governing structure provide only a superficial enhancement of the IMF's legitimacy and effectiveness as an IFI and do not meet an increasing multipolarity in the global economy. Furthermore, Lesage et al (2013) notes that the US keeps veto power with 16.5 percent of voting shares, meanwhile the BRIC countries with a total post-reform voting share of 13.5 percent remain deprived of veto power as a bloc. Aftermath, despite such criticism towards the IMF and significance of the proposed reform, the GFC has allowed the Fund a spectacular comeback. In addition, amid crisis the IMF has significantly reduced its fame as a staunch imposer of austerity economic policies. Lutz and Kranke (2010) concludes that the Fund has displayed less preference for rigors in recent crisis lending as it was before.

Finally, a few studies have been held concerning the sway of IMF, which have more direct relevance to the present work. Particularly, Weiner (2001) has inquired the relations between the IMF and Romania in the period 1996-2001 by focusing on political changes in the Government. Meanwhile, Pop (2002) has analyzed the evolution of Romania's cooperation with the IMF, nevertheless its effects on policy has not been examined. In the light of Romanian structural reforms, Stoiciu (2012) has reviewed recent austerity measures imposed by the IMF keeping focus on topical economic alterations.

A growing debate in the literature on the efficiency of the sway of the IMF programs on domestic markets and the enlargement of Fund's lending capacity during the GFC calls for further study in these field (Androniceanu, Drăgulănescu,

2012). In this end raises the interest to investigate whether the IMF loans have boosted our economy or they have had retarding influence.

## **2. Main features of Romanian government relations with the IMF**

The main directions of the IMF's cooperation with the countries are as follows: surveillance, trainings, technical and financial assistance.

### *2.1. Brief historical remark*

The IMF implements multilateral *surveillance* by reviewing global and regional economic trends and illustrate the results in the reports: *World Economic Outlook* and *Global Financial Stability*. In Romania, the Fund has conducted regional surveillance through Article IV consultations.

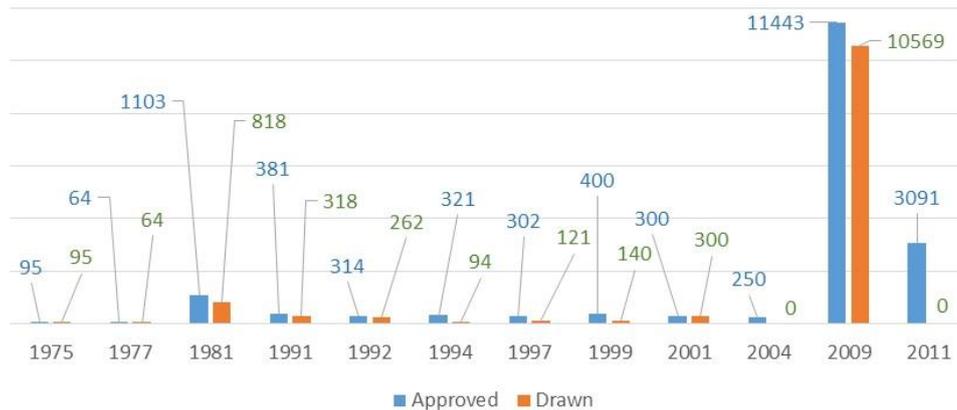
Through *trainings* the IMF aims to train officials of member countries. The IMF Regional Office for Romania and Bulgaria is also actively engaged providing in-country training on specific topics related to the regular discussions on policies.

The Fund supports members to enhance their capacity in both human and institutional resources by *technical assistance*. The latter is about one-fifth of IMF's operating budget. Romania has attained technical assistance in a number of areas, including tax and customs, fiscal, monetary policy and budget management. Romania being member of the IMF since 1972, December has used Fund's *financial assistance* 12 times as financial support for government economic programs<sup>2</sup>. Yet, SBAs approved in 2004 and 2011 with total amount SDR 3.3 billion have been considered as precautionary (See Figure 1.). Besides the years with noted drawn amount zero, which shows the precautionary type of lending, one can observe that in general Romanian financial assistance remained unaccomplished, especially Romania did not receive full disbursement from the Fund due to failing to comply with the requirements. As Weiner (2001) concludes it was caused because of two level negotiating process that required agreement between the IMF and the Government on the one side and among the various coalition partners on the other. Furthermore, the author notes that two level process was caused by the Romanian political algorithm, which assumed quite complex political formula for distributing ministerial portfolios among parties. Mainly on the strength of that time prime-minister Mugur Isărescu, the year 2001 was the turning point concerning fulfilling the requirements of the IMF and involving full disbursement of the SBA.

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<sup>2</sup> Romanian government has claimed precautionary SBA in 2013, October which has not been approved yet by the IMF.

Figure 1. Romanian Stand-By Arrangements



Source: IMF country data

The GFC has hurt almost all countries in the world, but there are states which have been more vulnerable among them is considered to be Romania, as well (IMF, 2013). Romanian authorities in 2009, April involved SDR 11.4 billion from which about 0.9 was considered as precautionary, but it assumed quite austerity conditions for the Government (Stoiciu, 2012).

## 2.2. Financial Assistance and Conditionality amid the GFC

Romania has joined the IMF on 1972, December and its quota is SDR 1.03 billion (about € 1.16 billion). Its latest arrangement with the IMF was a SBA that expired on 2006, July before the GFC penetrated into the domestic market. The stellar economic growth in the period of 2005-2008 in Romania led to the increase of current account deficit up to 11.6 percent of GDP in 2008, which was mainly financed by the landings from private sector. While the economy since the fourth quarter of 2008 started to feel effects of sharp drop in private capital flows. On the other hand due to faulty budgetary planning Romanian public administration is considered to be thriftless (Profiroiu, Păceșilă, 2010). This was the main cause of the almost doubling of the government spending amid mentioned years and public sector wages nearly tripled due to high wage raises mixed with public employment enlargement. In addition, the lack of managerial capacity in public sector put additional pressure on the government to react adequately to the economic downturn (Androniceanu, 2012). Hence, aforementioned issues strengthened the defencelessness of the Romanian economy to external shocks. Therefore, the Government ability to withstand solely the emerged difficulties has hushed. Consequently, the Authorities' first solicitation from the IMF and the EU for financial assistance took place in 2009, April.

As was mentioned, Romania requested from the Fund 24-month, SDR 11.4 billion (Euro 12.9 billion) and Euro 5 billion from EU under balance of payment financing facility, thereby contributing to unprecedented cooperation between the IMF and the EU. In addition, such collaboration between two institutes has come in scene conditioned by the GFC's hard hit in Romania, Hungary and Latvia, which all have been in the queue to enter to Eurozone. Another interesting fact, which is common for mentioned countries, is that the prime-ministers' resignation was followed after the receiving first part of tranches in 2009 (Lutz, Kranke, 2010).

Initial Stand-By program has proposed to cover three main areas: To curtail public expenditures, to maintain adequate capitalization of banks and liquidity in domestic financial markets and to bring inflation within the national bank's target and underpin it there.

In the light of measures the Government has been imposed to decrease fiscal imbalance to bring the deficit back under 3 percent of GDP by 2011. Policymakers has intended to achieve the reduction of government expenditures through large elimination of 137,000 workplaces in public sector, by freeze on goods and services, premiums, pensions and certain transfers. Another restriction for Authorities is to uphold sufficient capitalization of banks and liquidity in domestic financial markets. In their turn parent institutions of nine largest foreign-owned banks from Romania, with a market share of 70 percent of assets have agreed to invest in domestic economy and to subscribe under the coordinated commitments. Operation forfeits of ten the largest loss-making state-owned enterprises (SOE) should be curtailed. Authorities have to avoid of accumulation of external arrears and to meet the ceiling on general government domestic arrears (IMF, 2011).

The Ex Post evaluation of the Stand-by arrangement (2012, March) by summarizing attained achievements and failures has concluded that Romanian government had demonstrated strong efforts to meet the measures. In general terms, all criterions have been met despite initial impediments in program.

The IMF approved another 24-month SBA in the amount equal to SDR 3.1 billion in 2011, which was claimed as precautionary. The arrangement has been requested to support ongoing structural reforms by further focusing on health reform and contraction of local government arrears and restructuring core loss-making SOEs.

The IMF officials in the seventh and eighth reviews under the loan program (2013, July) note in spite of the soundness of monetary and fiscal policies Romanian government has miscarried to meet three of five quantitative targets for the end-December, 2012. This was mainly caused by Romanian political parties' preparations for parliamentary elections in 2012, December. The aforementioned might have been the reason that authorities claimed an extension of the arrangement for three months until the end-June, 2013.

Furthermore, Romania has treated another precautionary arrangement in 2013. October, which seeks to maintain topical achievements and to support further structural reforms, as well, given that issue with SOEs has not solved yet. The amount requested should allow access to 2-year SDR 1.7 billion.

Summarizing recent Romanian relations with the IMF, one might be concluded that Romanian side strives to meet the measures drawn by the Fund in cooperation with the EU, yet not everything has done as it had been projected. Particularly, austerity measures has raised disagreement among the citizens by propelling them to protest against government as consequence it caused Romanian prime-minister Boc resignation in 2012, February. Amongst implemented policies it appears the following ones have had more severe sway on the population:

- Health care system reforms which has included closings of 67 hospitals.
- Value added tax increase from 19 percent to 24 percent.
- Contraction of public employment, which was top-ranked amongst all EU countries.

Although, the efforts has been done towards better implementation of the targets economic growth remains slow comprising 0.7 percent in 2012. Moreover, five years have passed but national economy is still lagging behind by 3.1 percent in comparison with its 2008 size. The same situation is with total investments which are estimated to be only 26.1 percent of GDP. The labour market is still negative affected by the GFC and unemployment rate is 7.0 percent, which is lower than the average EU-28 unemployment rate. (Table 1).

**Table 1. Romanian main macroeconomic indicators 2008-2013, percent**

<b>Indicators</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013<sup>3</sup></b>
GDP growth (100%=2008)	100.0	-6.6	-7.6	-5.7	-5.0	-3.1
GDP growth	7.3	-6.6	-1.1	2.2	0.7	2.0
Total investment/GDP	31.3	25.4	25.6	26.9	27.0	26.1
Inflation, average consumer prices	7.8	5.6	6.1	5.8	3.3	4.5
Unemployment rate	5.8	6.9	7.3	7.4	7.0	7.1
Budget deficit/GDP	-4.8	-7.3	-6.4	-4.3	-2.5	-2.3
Government gross debt	13.6	23.8	31.1	34.4	38.2	38.2
Current account balance/GDP	-11.6	-4.2	-4.4	-4.5	-3.9	-2.0

Source: IMF World Economic outlook 2013 and author's calculation

<sup>3</sup> Indicators are estimations of the IMF

Government gradually has managed to coerce public expenditures and current account balance bringing them to projected level, particularly in 2013 budget deficit has estimated to be 2.3 percent of GDP and current account balance 2 percent. Another target was achieved by reducing inflation up to 3.3 percent in 2012, but it seems to be higher in 2013 due to its high level in the first and second quarters accordingly 5.6 and 5.3 percent<sup>4</sup>. Government general gross debt almost tripled in 5 years consisting 38.2 percent of GDP in 2013. In this end it is interesting to observe how the Government debt affects GDP, therefore we have conducted descriptive statistics which is explored in the next chapter.

### **3. Analysis of government debt and inflation sway on GDP in Romania: recent 14 years**

The research is conducted in two ways - analytical and descriptive. The analytical approach was considered to reveal the sway of IMF program on Romanian economy through the study of the relations of the Government with the IMF and exploration of policy documents, agreements and media coverage. As source to estimate IMF conditionality might serve signed memorandums, government policies and SBAs. As for the descriptive part a quantitative research method was used which is applicable to a phenomenon that can be expressed in terms of quantities and it uses systematic empirical investigation to mathematical or numerical data, to explain the correlation between government debt and GDP taking into consideration that the main lender is the IMF.

**Hypothesis I:** The correlation between gross government debt and GDP is positive.

**Hypothesis II:** Inflation correlates with GDP positively.

The method specifically used was multiple linear regression analysis which was effectuated in Excel which assumes that the relationship between the dependent variable  $y_i$  (GDP modification) and the  $p$ -vector of repressors  $x_i$  (gross debt modification and inflation) is linear and is presented by the following equation:

$$y_i = \beta_1 x_{i1} + \dots + \beta_p x_{ip} + \varepsilon_i = \mathbf{x}_i^T \boldsymbol{\beta} + \varepsilon_i, \quad i = 1, \dots, n,$$

where  $T$  denotes the transpose, so that  $\mathbf{x}_i^T \boldsymbol{\beta}$  is the inner product between vectors  $x_i$  and  $\boldsymbol{\beta}$ .

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<sup>4</sup> Self-calculation based on Romanian National Statistical Institute monthly metadata

Often these  $n$  equations are stacked together and written in vector form as

$$y = X\beta + \varepsilon,$$

where

$$y = \begin{pmatrix} y_1 \\ y_2 \\ \vdots \\ y_n \end{pmatrix}, \quad X = \begin{pmatrix} x_1^T \\ x_2^T \\ \vdots \\ x_n^T \end{pmatrix} = \begin{pmatrix} x_{11} & \cdots & x_{1p} \\ x_{21} & \cdots & x_{2p} \\ \vdots & \ddots & \vdots \\ x_{n1} & \cdots & x_{np} \end{pmatrix}, \quad \beta = \begin{pmatrix} \beta_1 \\ \beta_2 \\ \vdots \\ \beta_p \end{pmatrix}, \quad \varepsilon = \begin{pmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \vdots \\ \varepsilon_n \end{pmatrix}.$$

In Table 2 are presented the yearly percentage modification in Romania's GDP and also the gross debt modification and inflation from year 2000 till 2014.

**Table 2. Modifications of the indicators**

Year	GDP Modification (%)	Gross debt modification (%)	Inflation (%)
2001	5.678915	-5.6	34.4
2002	5.077101	0.4	22.5
2003	5.236733	-10.2	15.4
2004	8.490145	-11.4	11.9
2005	4.153826	-15.0	9.0
2006	7.874583	-26.7	6.6
2007	6.31711	0.7	4.8
2008	7.348823	6.7	7.8
2009	-6.57589	70.5	5.6
2010	-1.14906	29.1	6.1
2011	2.158026	9.9	5.8
2012	0.68915	10.7	3.3
2013	1.996485	0.0	4.5
2014	2.155844	-0.1	2.8

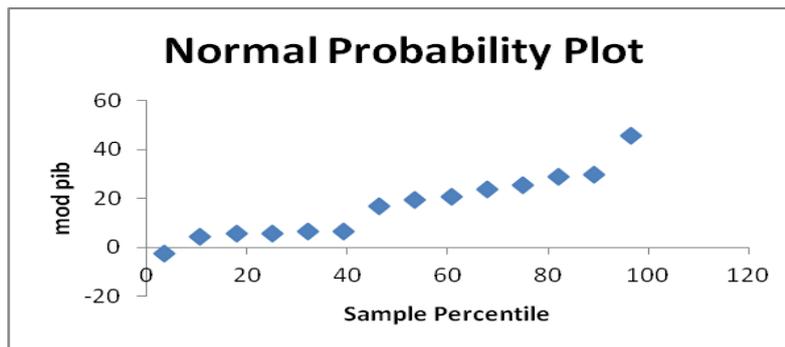
In table 3 we observe that the highest modification in GDP was in 2004, with the value of 8.49 % and the lowest value was in 2009 with the value of -6.58% and for the gross debt it is noticed that the highest value is in 2009 of 70.5% and the lowest is in 2006 with -26.7% and that inflation started to fell in continuous mode with forecast to get to 2.8% in 2014.

Table 3. Summary output

SUMMARY OUTPUT	
Regression Statistics	%
Multiple R	0.883561
R Square	0.780679
Adjusted R Square	0.740803
Standard Error	2.06735
Observations	14

In the above table was calculated the standard error which equals 2.07. If this value is “0” it means that all the observed points are on the regression line. R square is a measure of fit and represents how much of the GDP growth (our dependent variable) it is explained by our independent variables. As it can be seen 78.07% of GDP growth it is explained by our variables - gross debt and inflation. It is recommended that the value of R square to be closer to 1, considering that 1 signifies that our variables (independent variables) totally explain the dependent variable value. We can notice that we have 14 observations and the adjusted R square is 74.08%, which represents a value corrected for the independent variables in the model. The figure 2 shows that the data set is approximately normally distributed.

Figure 2. Romanian Stand-By Arrangements



ANOVA (Analysis of variance) refers to statistical models used to analyze the differences between group means and their associated procedures. df regression presents degrees of freedom - the number of independent variables (factors) in linear regression equation. The total degrees of freedom equals  $n - 1$ , where  $n$  is the sample size. Here  $n = 14$  data points were used. Total SS presents the sum of the squares of the differences between values of  $y$  and the average  $y$ . Each of the mean square (MS) is computed by  $(SS)/(DF)$ . We should observe that  $4.27 \approx 47.013/11$ . Significance  $F = (\text{Regression } F, \text{Regression } df, \text{Residual } df) = \text{probability that the}$

liner regression equation does not explain the variation in  $y$ ; this is based on the F probability distribution. Table 4 contains the analysis of variance output. The F test indicates only that at least one of the parameters is linearly related to the response variable (GDP modification).

**Table 4. Analysis of variance output**

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	2	167.3453	83.67263	19.57742	0.000238	
Residual	11	47.01328	4.273935			
Total	13	214.3586				

Since the  $p$ -value (significance  $F$ ) = 0.00023 < 0.05 =  $\alpha$ , we conclude that the regression model is a significantly good fit; i.e. there is only a 0.023% possibility of getting a correlation this high (0.88) assuming that the null hypothesis is true.

Table 5 shows the size of the coefficient for each independent variable, gives us the size and the effect that the variables are having on the dependent variable, negatively or positively depending on the sign it holds.

**Table 5. Descriptive statistics of the chosen indicators**

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	6.530544376	2.24228	2.91246	0.01413	1.59532	11.4658	1.5953	11.4658
Gross debt	-0.21672265	0.0598	-3.6244	0.004	-0.3483	-0.0851	-0.348	-0.0851
Inflation	1.11853323	0.16812	6.65311	3.6E-05	0.7485	1.48857	0.7485	1.48857

Intercept represents the constant term, so the “a” coefficient equals 6.53. This means that if Romania would have no gross debt and the inflation would be 0%, the GDP modification would be of 6.53%. The  $b_1$  coefficient has a value of -0.217 which could be translated by the fact that with a gross debt increase of 1% the GDP would decrease by 0.217%. The value of last coefficient shows us that if the inflation rate augments with 1%, the GDP would also increase with 1.119%.

Standard error, which is an estimate of the standard deviation of the coefficient, it can be thought of as a measure of the precision with which the regression coefficient is calculated. If a coefficient is large compared to its standard error, then it is probably different from 0. T statistic represents the coefficient divided by its standard error. Regarding the P-value, if 95% of the t distribution is closer to the mean than the t-value on the coefficient we can conclude then that we have a P value of 5%. The table 6 includes the residual and the predicted values on the basis of the regression model.

**Table 6. Residual and probability output**

<b>RESIDUAL OUTPUT</b>			
<i>Observation</i>	<i>Predicted GDP real</i>	<i>Residuals</i>	<i>Standard Residuals</i>
1	6.501802	-0.82289	-0.43271
2	4.718653	0.358448	0.18849
3	6.040205	-0.80347	-0.4225
4	5.977286	2.512859	1.321385
5	6.32302	-2.16919	-1.14067
6	7.858065	0.016518	0.008686
7	3.713432	2.603678	1.369143
8	2.98579	4.363033	2.294298
9	-6.44588	-0.13002	-0.06837
10	-0.38827	-0.76079	-0.40006
11	2.423836	-0.26581	-0.13978
12	2.211783	-1.52263	-0.80068
13	3.81018	-1.8137	-0.95373
14	3.721887	-1.56604	-0.8235

The P value is the probability of finding a result as extreme as the one we are getting at value as large as ours in a collection of random data in which the variable had no effect.

#### 4. Some final remarks

The global financial crisis that started in 2008 has underlined several challenges. First of all it has called for structural reform in the global financial architecture. Then the GFC has strengthened the role of the multilateral relations thereby providing spectacular returns of the IMF as last resort lender. Moreover, crisis was so harmful in some EU-member countries that has stimulated an unparalleled cooperation between the EU and the Fund. On the other hand it was the major cause of the governance and quota-sharing reform of the IMF which was approved by the board in 2010, December and seeks consents of the member countries, at least by those who have overall 78.47 percent of quota.

The crisis was severe in Romania, as well, which damaged entire economy propelling the Romanian authorities to ask helping hand from international institutions. The IFIs in their turn have not been late and have approved recovery package, which have included severe measures and Romanian policymakers have been obliged to act under the IMF and the EU conditionality.

As financial aid package Romania and the IMF have approved two SBAs and one is in process. Under the IMF conditionality Romanian government in general terms have met the targets, yet economy is still vulnerable and remains dependent on the developments of the EU member-countries. Particularly, Romanian economic output after five years seizes its 2008's size by 3.1 percent, total investments have not achieved the pre-crisis level, as well. Poverty and unemployment remain the major issues and migration of the labour force towards EU major countries also take place. As a result Romanian government has managed to curb public expenditures reducing them to desired level, as well as inflation is underpinned at acceptable plane. Consequently, we can conclude that the Government has made one step forward to meet the challenges of the modern developments and collaborate with the IMF. Yet, Romanian authorities should continue announced reforms and not to fail to meet the targets even if there are upcoming presidential elections.

Descriptive analyses of the government gross debt and inflation correlation with the GDP in recent 14 years shows that debt and GDP has been correlated negatively, while inflation positively. Particularly, one unit increase of the government debt causes GDP contraction by 0.2 point. It means that the government has not used the assistance as it should, otherwise it might have supported economic activity and to contribute the enlargement of economic output. Hence, given that the IMF is major "culprit" of government debt growth it might be concluded that in the middle and long term it is likely to entail to sovereign default. The inflation is correlated positively with GDP and 1 unit decrease of inflation causes 1 point decrease of GDP growth. Thereby, it might be concluded that National Bank efforts to reduce inflation from its 2008 value of 7.8 percent to 3.3 percent in 2012 has added additional pressure on GDP, particularly contributing to the contraction of GDP 5.0 percent.

Our conclusions claim for better governance of the Fund's allocations, as it has shown government debt is correlated negatively with GDP in Romania, meanwhile in good practice it should have had expanding effects. Authorities should heed thoroughly the foreign investments by attracting alternative funds for further recovery. As source might serve the EU structural and cohesion Funds, thereby the government should strive to enhance absorption rate of the funds not only speaking about it from high tribunes, but by operating determined.

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