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# Political stability - a condition for sustainable growth in Romania?

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**Abstract**

Political stability is a variable of great importance in a country's evolution since, across time, it was identified as causing law level of economic growth, but also it was presented as a consequence of poor economic development. The purpose of this paper is to analyze the influence of political stability on economic growth in Romania and to conclude in what extent this political factor is a condition for a future and continuous sustainable growth in our country. By using statistical and econometric approach (correlation and multivariate regression) we conclude that political stability has an important role in a country's economic growth and that a stable political environment helps in building a coherent and continuous path for sustainable development.

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*Keywords:* Economic growth; political stability; rule of law; sustainable growth

## 1. Introduction

The concept of sustainable development is widely examined by scientists working within different disciplinary frameworks. Sustainable development is defined by three key dimensions: economic, environmental and social. An economically sustainable system must be able to produce goods and services on a continuing basis, to maintain manageable levels of government and external debt, and to avoid extreme sectorial imbalances that damage agricultural or industrial production (Harris and Goodwin, 2001). In this paper we will look at the sustainable economic growth as it is determined by various economic variables and influenced by political stability indicators.

In times of crisis the role of the political economy is crucial in redefining the policies and objectives that must assure the desired economic outcomes. This belief was strongly proved by the recent economic crisis which had a powerful impact on reshaping the political context in almost each European country.

Political stability is a variable of great importance in a country's evolution since, across time, it was identified as causing law level of economic growth, but also it was presented as a consequence of poor economic development. This article intends to analyse the role of political stability in Romania during the 1990-2011 period by using


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correlation and multivariate regression models in addressing the interaction of the economic variables with those variables depicting political stability. The analysis will include the following political indicators which are relevant in measuring a country's political stability: rule of law, durable index, political stability index.

Most of the researchers concluded that there are at least two directions in which political instability has a negative impact on economic growth. First, it disturbs market activities and labour relations, with direct adverse effect on productivity (Perotti 1996a; Landa and Kapstein 2001; Fosu 1992). Secondly, the level of investment will be lower for periods characterized by unstable political environment (North 1981, Barro 1991, Fosu 1992, Alesina and Perotti 1994, Alesina et al. 1996, Svensson 1998, Feng 2001).

The rule of law is affected in a country where we can observe collective violence and attempted or successful revolutions, which translates into a threat to established property rights (Alesina and Perotti 1996). This fact will represent a disincentive to invest. As stated by Kuznets (1966), "[…] clearly some minimum of political stability is necessary if members of the economic society are to plan ahead and be assured of a relatively stable relation between their contribution to economic activity and their rewards". Therefore, we can conclude that stability means a predictable political environment, capable of attracting investment, both internal and from the rest of the world.

## 2. Methodology and calculation

In deciding the methodolgical approach used in this study, we anlaysed prior scientific work and we made a choice, also according with our specific goal. Therefore, we will select various variable measuring economic growth and political stability in Romania. Six multivariate regression will be applied to test whether the economic growth is favoured by the political variables definining the level of stability. In Table 1 are presented the variables included in our models, their expected effects and also, each variable's source and notation.

Table 1: Summary of the variables

| No. | Variable | Expected effect | Data source | notation |
|---|---|---|---|---|
| 1 | GDP growth per capita | +/- | Summers and Heston (2012) | GROWTH* |
| 2 | GDP (per capita US$) | +/- | World Bank | GDP |
| 4 | Government consumption (% GDP) | - | World Bank | GOVC |
| 5 | Household consumption (% GDP) | - | World Bank | HHC |
| 6 | Capital investment (% GDP) | + | World Bank | CAI |
| 7 | Savings (% GDP) | + | World Bank | SAV |
| 8 | Foreign Direct Investment (% GDP) | + | World Bank | FDI |
| 9 | Exports of goods and services (% GDP) | + | World Bank | EXP |

| No. | Variable | Expected effect | Data source | notation |
|---|---|---|---|---|
| 10 | Imports of goods and services (% GDP) | - | World Bank | IMP |
| 11 | Rule of law index | + | TheGlobalEconomy.com | RLi |
| 12 | Durable index | + | Polity IV: Regime Authority Characteristics and Transitions Datasets | DURi |
| 13 | Political stability index | + | TheGlobalEconomy.com | POLSi |

*Dependent variable
Source: The author

### 2.1. Economic development calculation

The variable which was used to measure economic growth is formed by data as shown in PWT - Penn World Table. PWT's growth variable highlights the yearly percentage change in real gross domestic product (GDP) per capita. As shown in the previous literature and also in our results, political instability influences the economic growth in a negative way through lower values corresponding to investment decision. Over time, economic variables like investment, human capital, international trade and inflation were considered determinants of economic growth. In their study, Levine and Renelt (1992) demonstrated that international trade and investment have a major influence on long-term economic growth. Mankiw, Romer and Weil (1992) obtained similar conclusions on the influence that the initial level of growth, savings and human capital exert on the economic growth. Therefore, we considered that the variables presented in the above table will contribute to the measure of economic development as it is reflected by the growth rate of real GDP per capita.

### 2.2. Political stability calculation

After a deep analysis of other empirical research we concluded that political stability was operationalized in different ways and that, across time, it was identified as causing law level of economic growth, but also it was presented as a consequence of poor economic development. In our study, political stability is defined as the measure of the perceptions regarding the probability that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. Therefore an unstable political environment will reduce investment and the speed of economic development and will increase the probability of a government collapse and political unrest (Alesina, Ozler, Roubini, Swagel, 1996).

We will also look at the values of rule of law index as, across time, it was proved that countries with strong rule of law are characterized by low levels of political instability. In such environments people make long-term investments and build large organizations. In contrast, if the property rights and contracts are not enforced and the business regulations are not clear, a prosperous economy would not develop.

We made use of both indexes, political instability and rule of law as they were published by the World Data Bank.

To accomplish our objective of highlighting the impact of political stability on Romania's economic development we included in our models the variable DURABLE, which consists of the number of years since the most recent regime change or the end of transition period defined by the lack of stable political institutions (Polity IV, 2013).

## 3. Results

With the aim of avoiding possible multicollinearity problems we first ran a correlation among the variables presented in the previous section. Multicollinearity is said to be a problem when an approximately linear relationship among two or more of the explanatory variables leads to unreliable regression estimates in the sense that they are poorly determined and tend to vary erratically from sample to sample: large standard errors for the estimators implying high sampling variability; confidence intervals that are wide reflecting the relatively imprecise information provided by the sample data about the unknown parameters; estimated coefficients that are unstable to small changes in either the model specification or the sample. We should first note that multicollinearity presents itself as a problem because of the limited information content of the data rather than because of some misspecification of the model. This might be a problem also in our case. The availability of data for the analysed countries was not uniform and was missing in some cases. To avoid multicollinearity challenges we might hope to increase the information content on which our regression estimates are based by: increase sample information; increase the number of observation; enhance the variability in the explanatory variables by appropriate sample design; collect data on relevant variables which were previously relegated to the disturbance term.

Corelating all the different measures of economic development and political instability generated the results presented in Table 2. They show that between two of the variables measuring political stability and growth is a negative, but weak relationship (durable index, political stability index) and that the rule of law index values proved to have the biggest impact on Romanian's economic growth (-0.5530). Taking into account the period of our analysis, 1990-2011, we might consider these results as close to the reality in our country's case. On the other hand, the results shows that between the level of GDP and the variables durable index and rule of law index is a strong, positive relationship. Also, from our correlation outputs we observe that rule of law index and durability index have a strong and positive impact also on capital investment and savings.

Because the political stability influences in a positive direction the level of GDP we might suggest that they contribute to the economic development through the earlier mentioned variables. Durable index (the number of years since the most recent regime change) is positively correlated with GDP, capital investment, savings, foreign direct investment, and also with the other two political indexes, fact that allow us believe to believe that for the period 1990-2011, the durability of the political environment was more important than any other political variable.

Table 2: Correlation matrix of variables in the growth model

| Variables | GROWTH | GDP | GOVC | HHC | CAI | SAV | FDI | EXP | IMP | RLi | DURi | POLSi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GROWTH | 1 | | | | | | | | | | | |
| GDP | -0.1 | 1 | | | | | | | | | | |
| GOVC | -0.26 | -0.44 | 1 | | | | | | | | | |
| HHC | 0.54 | -0.41 | -0.43 | 1 | | | | | | | | |
| CAI | 0.08 | 0.8 | -0.04 | -0.58 | 1 | | | | | | | |
| SAV | -0.49 | 0.68 | -0.07 | -0.86 | 0.63 | 1 | | | | | | |
| FDI | 0.6 | 0.14 | -0.29 | 0.54 | 0.2 | -0.43 | 1 | | | | | |
| EXP | 0.04 | 0.24 | -0.3 | -0.32 | 0.13 | 0.57 | -0.14 | 1 | | | | |
| IMP | 0.46 | 0.47 | -0.29 | -0.21 | 0.57 | 0.42 | 0.38 | 0.75 | 1 | | | |
| RLi | -0.55 | 0.69 | 0.01 | -0.62 | 0.51 | 0.63 | -0.31 | -0.04 | -0.08 | 1 | | |
| DURi | -0.09 | 0.9 | -0.57 | -0.32 | 0.61 | 0.68 | 0.14 | 0.54 | 0.61 | 0.5 | 1 | |
| POLSi | -0.17 | 0.05 | 0.16 | -0.24 | 0.16 | 0.14 | -0.26 | -0.27 | -0.26 | 0.26 | 0.05 | 1 |

*Source: The author*

Table 3 presents the results of our multivariate statistical analysis. Column (1) represents an economic model of growth, column (2) is a political stability model of growth, columns (3) to (6) highlight political economic models obtained by varying the economic and the political variables.

Table 3: Multivariate regression results on growth

| Variables | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| **GROWTH** | 36635.14 | -3.557438 | -8842.324 | 50756.03 | 1587.981 | -19574.76 |
| **GDP** | -.0014101 | - | -.0014867 | -.0060923 | -.000607 | .0074723 |
| **GOVC** | -366.3806 | - | 84.71732 | -506.5222 | -18.93793 | 193.8439 |
| **HHC** | -366.9648 | - | 88.2329 | -507.9391 | -16.09233 | 195.3858 |
| **CAI** | -362.492 | - | 87.76871 | -503.7104 | -15.1633 | 197.6688 |
| **SAV** | -4.221674 | - | -3.780369 | -4.999884 | -5.236281 | -7.698457 |
| **FDI** | 3.990559 | - | -4.223097 | 2.566549 | -3.74971 | -2.450323 |
| **EXP** | -361.2952 | - | 84.0131 | -504.6168 | -18.25982 | 198.4331 |
| **IMP** | 362.9651 | - | -80.79934 | 505.3847 | 21.35959 | -194.3034 |
| **RLi** | - | -88.57866 | 22.19289 | - | - | -42.69248 |
| **DURi** | - | .7610933 | - | 4.270427 | - | -4.200581 |
| **POLSi** | - | 1.555218 | - | - | 4.443687 | 7.653331 |
| **$R^2$** | 0.5528 | 0.3519 | 0.8936 | 0.6051 | 0.8993 | 0.8730 |

*Source: The author*

From our regressions results we can notice that the model with the least relevance is the one second one, where we ran the regressions having only the political stability variables as control variables (the value of R-squared is 0.3519). The model with the highest explanatory power seems to be presented in column (5) and it corresponds to the regression where we had as control variables all the economic ones, but only political stability index as political one. It is closely followed by the models from columns (3) and (5). Both these models illustrate the positive contribution that government consumption, household consumption, capital investment and exports have on Romanian's economic growth, if the political stability is assured by the selected political variables. Giving these results we may also state that for assuring the right environment sor a sustainable economic growth in Romania the political environment must be stable.

The model run only with variables reflecting political stability as control variables, reveals that rule of law index affects the economic growth in Romania in a negative way, while the other two indexes have a positive effect on the level of economic development. From all our four political economic models of growth, the highest relevance proved to have the model which was ran by introducing all the variables used in the carried out analysis. From the relevance point of view, the above model is followed by the one presented in column (5).

## 4. Conclusions

From this paper we could observe that, at least for the period 1990 – 2011 the political stability contributes to Romanian's economic development. As we stated at the beginning of our paper, it was proved that the dimension of political instability affects the level of economic growth by lowering the value of real GDP per capita and we can notice this fact also from our results on measuring Romania's economic development. Therefore we agree with prior research where political instability is associated with the uncertainty that investors face concerning the security of property rights (Svensson, 1998).

The main goal of any government is to increase the welfare of its citizens and by the mean of this paper we were able to determine in what extent the political stability from Romania had a positive impact on its economic development.

Therefore, in terms of aspiring to a sustainable economic growth Romanian's political environment must meet the condition of stability which assures job creation, higher state revenues, poverty reduction, increased welfare and education level. All these mentioned achievements will bring benefits to all citizens of any country, therefore the probability of violence will significantly decrease.

We may conclude that when talking about political stability in the context of growth, we refer to a specific kind of stability: the rule of law, strong institutions rather than powerful individuals, a responsive and efficient bureaucracy, low corruption and a business climate that is conducive to investment (Shepherd, 2010).

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