
A NEW INSTITUTIONAL APPROACH OF THE COMPLEX CORRELATION BETWEEN ECONOMIC FREEDOM AND ECONOMIC GROWTH

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Abstract

This paper proposes to re-examine the relationship between economic freedom and economic growth from a neo-institutional perspective. Two principal thesis are considered: (1) political institutions and the distribution of resources are the fundamental determinants of economic institutions and therefore of growth and (2) the extent to which political institutions and human interactions in society are formed around the concept of freedom constitutes one key determinant of growth, perhaps the ultimate cause for economic agents to actually create and accumulate. To study the relationship mentioned above we use the Index of Economic Freedom that aggregates the following items: Business freedom, Trade freedom, Fiscal freedom, Government size, Monetary freedom, Investment freedom, Financial freedom, Property rights, Freedom from corruption, Labour freedom. Finally, our aim is to review and extend the empirical evidence on the relationship between economic freedom and economic growth. For this reason we build a comparative study of 27 EU countries, including Romania, in order to show how these ten freedoms affect the economic growth indicators.

Keywords: monetary union, growth, balanced budget, deficits

1. Introduction

A large amount of the economic literature has been written out of the desire to provide clear and adequate answers to a crucial question: What causes economic growth? Out of the variety of theoretical paradigms approached by those, who intent to identify the mechanisms to ensure the achieving of high economic growth rates, we shall consider the neo-institutional one.

Although growth theory's focus on institutions is a more recent phenomenon, economists' acknowledgment of institutions is nothing new. In 1776, Adam Smith claimed that the path to economic prosperity begins with a general presumption of freedom from government intervention, and, ever since, liberal economists have continued the tradition. Beginning with the work of

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Douglas North, the link between institutions and economic performance gradually worked its way into the more academic discussions of growth theory [1, 2]. Lately, there is a considerable degree of consensus in New Institutional Economics (NIE) that the explanation for major differences in economic and social performance between the most developed and developing nations lies in the performance and efficacy of their domestic, economic and political institutions [3].

This paper starts from the assertion that between institutions and long-run economic growth there is a complex relationship. They give shape to property rights and provide markets with an environment where competition can exist and flourish. For example, without the existence of property rights, individuals could not invest in human or physical capital, develop or adopt new technologies or implement new ideas. Another important function of institutions is that they help allocate resources in the most efficient way by determining who gets profits, revenues and residual rights of control. When economic institutions do not allow markets to flourish, resources tend to be misallocated. Societies with economic institutions that help facilitate innovation and an efficient allocation of resources are more likely to prosper [4].

More specifically, the analysis can be viewed as a contribution to the literature attempting to test the robustness of the relationship between freedom and growth. From this point of view, we expand on the previously established relationship between economic freedom and economic growth [5-7]. Our main conclusion is that greater economic freedom fosters economic growth. In order to create an empirically feasible analytical scheme on the topic, we used a set of econometric tools adequate for the study of correlation between the indicators that illustrate the economic growth and the multidimensional phenomenon of economic freedom.

The paper is organised as follows: section 2 discusses some popular definitions of institutions and derives an operational definition for the subsequent empirical research. Section 3.1 is a brief literature review on the theme of economic freedom and growth. Section 3.2 presents the case-study, the contents of the indicators that we focus on and establishes the main hypothesis of the study and shows their correlation and our estimation results. The final section offers some concluding remarks.

Throughout, this paper we have tried to follow *the principle of unity between theoretic and empirical investigations (sections 2 and 3)*. Another principle that we want to mention is that of *unity between quantity and quality*, used on the basis of making the research results more efficient. This mixed research methodology is particular to Social science studies. We have tried to reach an optimal combination between qualitative research (sections 2, 3.1, 4) and quantitative research (section 3.2) on the studied topics.

In whatever concerns the gathering and data explanation we have mostly used *the comparative method* both in stating the theoretical aspects as well as in choosing cross-sectional analysis for the empirical part. In sections 2 and 3.1, we have mostly used *the non-participating observation method*, by simply stating

several theoretical aspects, but in sections 3.2 and 4 we have used also the *participating observation method*, by stating some interpretations of results and conclusions. We have used the following *research techniques and procedures*: the review of the new institutional economics literature, the usage of several information sources, the gathering and data processing, the synthesising of the theoretical aspects and the presentation of the results by using graphics (tables).

2. Defining institutions

One of the main authors in the new institutional economics, Douglass North, defines institutions as: “the rules of the game in a society or, more formally, the humanly devised constraints that shape human interactions” [2]. This concept provides a roadmap indicating how human beings interact with each other as individuals or as social groups, in political, social or economic exchange processes. Institutions consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights). North’s view of institutions is twofold. Firstly, history matters because institutions evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story. Secondly, institutions have an impact on economic performance by influencing the level of transaction costs because, throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange. Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation, or decline [8]. Furthermore, according to North, economic history is overwhelmingly a story of economies that failed to produce a set of economic rules (with enforcement) that produce sustained economic growth. The central issue of economic history and that of economic development is to account for the evolution of political and economic institutions that create an economic environment that induces increasing productivity [8].

The neo-institutional literature has studied the way in which economies coevolve with the general social system in which they are nested and some valuable conclusions are drawn from this. As institutions are essential in setting up structures of incentives under which people interact within society, they also are a product of the overall society or a social segment. Considering their endogenous nature (as they are the result of a collective desire) we can infer that the act of establishing institutions requires the harmonization of otherwise heterogeneous interests. Within a society, there is no guarantee that all individuals and social groups should make similar institutional choices due to their potential impact on the future sharing of resources.

A very fruitful framework for thinking about why economic institutions vary across countries was outlined by Acemoglu et al [4]. Economic institutions determine the incentives of and the constraints on economic actors, and shape economic outcomes. As such, they are social decisions, chosen for their consequences. Because different groups and individuals typically benefit from different economic institutions, there is generally a conflict over these social choices, ultimately resolved in favour of groups with greater political power. The distribution of political power in society is in turn determined by political institutions and the distribution of resources. Political institutions allocate *de jure* political power, while groups with greater economic power might typically possess greater *de facto* political power. Economic institutions encouraging economic growth emerge when political institutions allocate power to groups with interests in broad-based property rights enforcement, when they create effective constraints on power-holders, and when there are relatively few rents to be captured by power-holders. Consequently, political institutions determine the pattern of economic institutions and in their turn, such institutions will impact a nation's economic performances.

Beside this hierarchy of institutions in the society, institutions occur and operate under some more complex circumstances. As Baumol [9] suggests, in good institutional environments individuals devote their time to developing their talents and engage in productive entrepreneurship; however, under poor institutions, individuals face different incentives and engage in unproductive entrepreneurship. More exactly, his main hypothesis asserts that “the rules of the game that specify the relative payoffs to different entrepreneurial activities play a key role in determining whether entrepreneurship will be allocated in productive or unproductive directions and that this can significantly affect the vigour of the economy's productivity growth” [9].

In different words Ali [10] argues that institutions that operate successfully will provide a setting that will have a substantial impact on economic growth, while poorly functioning ones will hinder it by inducing economic agents to engage in redistributive behaviours that hinder growth. Consequently, institutions matter because they help solving a key economic problem of agents coordinating their economic plans and activities: “[they] promote cooperative behaviour and overcome opportunism; make agents internalize externalities, and reduce uncertainty. They support the formation of social capital and of a historical experience of collective action which, in turn, positively affect the likelihood to credibility commitment in cooperative strategies.” [11]

In order to empirically establish the existence of the correlation between economic freedom and economic growth, we establish an *operational definition* of institutions as economic freedom concentrating on the rules that govern actions in such a manner so as to provide an absolute right of property ownership along with fully realized freedoms of movement for labour, capital, and goods.

3. Economic freedom and growth

3.1. A brief theoretical perspective

The theoretical underpinning regarding the link between economic freedom and economic growth is well established. As De Haan and Sturm [12] note, “since the time of Adam Smith, if not before, economists and economic historians have argued that the freedom to choose and supply resources, competition in business, trade with others and secure property rights are central ingredients for economic progress.” Also De Haan and Sturm mention several contributions [13, 14] of recent empirical studies suggesting that economic freedom may be important in explaining cross-country differences in economic performance.

Economic freedom, in its most compact definition, refers to the protection of private property rights and the freedom of voluntary transactions [15]. It should be distinguished from political and civil liberties that generally encompass the freedom to participate in the political process or the freedom of the press and the rights of individuals in assemble.

A different view has been put forward by Freedom House. Wright [16], for instance, argues: „To examine economic freedom is to assess the degree to which persons are free individually and collectively to undertake economic activities of their choice, regardless of political structure”. According to this point of view, there is thus a substantial difference between the degrees to which people are free individually and collectively to undertake economic activities. Individual freedom means the right to pursue economic activities free from arbitrary control and interference by the state and other individuals. Collective freedom refers to the extent to which the economic system that controls choice reflects the expressed preferences of the majority of the citizenry rather than those of a ruling few.

As a short concluding remark for this section and the previous one, economic theory indicates that economic freedom affects incentives, productive effort, and the effectiveness of resource use, and through these enhance economic growth.

3.2. Some empirical findings

This section reviews previous attempts to analyse the correlation between economic freedom and economic growth and finally explores our empirical strategy and results.

The existing literature overwhelmingly supports the theory that economic freedom displays a significantly positive effect on economic growth. Referring to a fundamental study [15], it finds that the countries with the highest ratings in terms of economic freedom in 1993–1995, achieved an average annual growth rate of per capita real GDP of 2.4% during 1980–1994. In contrast, the average annual growth of per capita real GDP for the studied countries with the lowest

ratings was minus 1.3% over the same period. No country with a persistently high economic freedom rating during the two recent decades failed to achieve a high level of income. Also, Nelson and Singh [17] use economic freedom as control variable in their model on the relationship between economic growth and political freedom. Their study refers to the 1970–1989 period and includes 67 developing countries. The measure of economic freedom used is based on price stability, government size, discriminatory taxation, and trade restrictions. The authors conclude that economic freedom exercises a significantly positive effect on economic growth. More recently, Gwartney, Holcombe and Lawson [18] reaffirm that there are strong and beneficial effects of the economic level freedom and of its improvement on growth rates.

There are just a small number of studies yielding insignificant (or even negative) effects of economic freedom on growth [19]. However, it is important to note that even the studies with atypical results generally only report insignificant or negatively significant results for a particular category, noting positively significant results overall.

Given the large body of existing evidence regarding the effect of economic freedom on economic growth, we set in our empirical study the following hypothesis: *Economic freedom increases economic growth.*

To measure economic freedom, we used the well-cited and established indicator of the Heritage Foundation Wall Street Journal [20]. This indicator takes 10 elements into account: trade policy, taxation, government intervention in the economy, monetary policy, foreign investment, banking, wage and price controls, property rights, and black market activity.

The Index measures the level of economic freedom, utilizing the above mentioned 10 different components, grouped in 4 categories: *Rule of law* (property rights, freedom from corruption), *Limited government* (fiscal freedom, government spending), *Regulatory efficiency* (business freedom, labour freedom, monetary freedom) and *Open markets* (trade freedom, investment freedom and financial freedom). Each of the freedoms is individually scored on a scale of 0 to 100. A country's overall economic freedom score is a simple average of its scores on the 10 individual freedoms.

Along with the Index of Economic Freedom compiled by Heritage Foundation, in our research we consider the traditional proxy for economic growth, i.e. the real GDP per capita (% for previous year, from Eurostat Database). We gather cross-sectional data, published in 2012 with reference to 2011, for the 27 EU Member States.

As techniques for modelling and analysing the variables, in our study we use the regression method, which focuses on the relationship between a dependent variable, economic growth in our case, and one or more independent variables, the indicators which measure the economic freedom in our case.

The generic form of the linear regression model used in this paper is:

$$y = f(x_1, x_2, \dots, x_K) + \varepsilon = \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_K x_K + \varepsilon \quad (1)$$

where y is the dependent or explained variable; x_1, \dots, x_K are the independent or explanatory variables and the term ε is a random disturbance. The disturbance

arises because we cannot hope to capture every influence on an economic variable in a model, no matter how elaborate.

Table 1. Pairwise correlations for year 2011 UE-27.

	OS	BF	TF	FF	GS	MF	IF	FinF	PR	FC	LF	RGDP
Overall Score (OS)	1.00											
Business Freedom (BF)	0.55	1.00										
Trade Freedom (TF)	0.24	0.01	1.00									
Fiscal Freedom (FF)	-0.19	-0.58	0.03	1.00								
Government Spending (GS)	0.01	-0.52	0.21	0.84	1.00							
Monetary Freedom (MF)	0.03	0.00	-0.28	-0.18	-0.07	1.00						
Investment Freedom (IF)	0.79	0.45	0.49	-0.24	0.04	0.06	1.00					
Financial Freedom (FinF)	0.75	0.47	0.09	-0.32	-0.24	-0.16	0.51	1.00				
Property Rights (PR)	0.75	0.61	0.02	-0.64	-0.48	0.21	0.63	0.63	1.00			
Freedom from Corruption (FC)	0.76	0.73	0.12	-0.68	-0.49	0.18	0.64	0.60	0.93	1.00		
Labour Freedom (LF)	0.33	0.03	0.03	0.05	-0.01	-0.13	0.02	0.27	-0.02	0.00	1.00	
RGDP per capita % change on prev. year (RGDP)	0.17	-0.13	0.41	0.39	0.35	0.10	0.23	0.01	-0.09	-0.08	0.09	1.00

Our objective is to estimate the unknown parameters of the model, use the data to study the validity of the theoretical propositions. Using the correlation matrix we can infer that many of the variables of interest are correlated with one another (see Table 1 for a pairwise correlation matrix). For example, business freedom is positively correlated with freedom from corruption (0.73), with property rights (0.61), investment freedom (0.45) and financial freedom (0.47) and also is negatively correlated with fiscal freedom (-0.58) and government spending (-0.52). Trade freedom is positively correlated with investment freedom (0.49). Fiscal freedom is positively and strongly correlated with government spending and negatively correlated with property rights and freedom for corruption.

Real GDP per capita is positively correlated with trade freedom (0.41), with fiscal freedom (0.39), with government spending (0.35) and with investment freedom (0.23). Based on these we employ ordinary least squares (OLS) regression (see Table 2). We report significant results for trade freedom. Column (1) shows that trade freedom is positive and highly significant, directly

affecting economic growth. The OLS results suggest that one unit increase in trade freedom improves the growth rate by 0.8144 percentage points. Column (2) also reports that trade freedom positively and significantly affects growth. In column (3) we combine fiscal freedom and investment freedom in the regression. Both affect positively, but not in a high degree the economic growth; a unit increase in fiscal freedom increases the growth rate by 0.1052 percentage point and a unit increase in investment freedom increase the growth rate by 0.1058 percentage points.

Table 2. Index of economic freedom and growth; OLS regression. Dependent variable: Growth rate.

	Model 1	Model 2	Model 3
Trade freedom	0.8144** (2.3722)	0.7175** (1.9472)	
Fiscal freedom	0.0842** (2.2270)		0.1052** (2.6033)
Government spending		0.06479 (1.5212)	
Investment freedom			0.1058* (1.8850)
Constant	-74.55**	-63.22*	-13.11**
Observations	27	27	27
Adj. R-squared	0.2544	0.1786	0.1983

Note: Standard deviations of estimators are in parentheses. Significance level: ** at 5%, * at 10%

Taken as a whole, the 27 EU countries have been undergoing tumultuous and uncertain times epitomized by the ongoing sovereign debt crisis. Europe’s overall economic freedom rating is seriously undermined by weak scores in the management of government spending, reflecting the cost of expanding government services and transfer payments that plainly hinder both productivity growth and more dynamic job creation. Stagnant growth has also exacerbated debt levels, leaving many European Union countries with no choice but to cut spending to reduce unsustainable fiscal deficits. Our findings for 2011 are that one unit increase in government spending rises the growth rate by only 0.06479 percentage point. However, the accumulation of past debt is a considerable threat to their economic freedom. The future generation is obligated to pay off past debts, and as that occurs, the ratio of government spending to GDP rises, thus reducing economic freedom and growth dynamism.

4. Conclusions

Theoretical considerations gave reason to expect a close relation between economic freedom and the level and rate of economic growth, and little more than casual observation sufficed to show that what theory suggested, experience

documented. What we have done in this paper is to acquire a set of data and to develop a methodological setting that can be used to explore just how the relation works, and what are the essential connections. Synthetically, we found that real GDP per capita is significantly positively correlated with trade freedom, fiscal freedom, government spending and with investment freedom. Employing a regression analysis we report that trade freedom is most significant, directly affecting economic growth. This result indicates that the creation and consolidation of the internal market's specific freedoms, could bring great potential for future economic growth of EU countries taking into account the operational definition of economic freedom formulated in the paper. Providing an adequate right of property ownership along with highly realized freedoms of movement for labour, capital, and goods, the countries participating to the internal market have positive premises for enjoying long-term economic growth.

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