THE POTENTIAL EFFECT OF NON-TRANSPARENT LOBBYING ON COMPETITIVENESS THROUGH ECONOMIC FREEDOM IN THE EU – AN EMPIRICAL SURVEY

Šárka Laboutková, Lucie Staňková

Abstract: The competitive strength of individual countries is not only affected by their economic efficiency and productiveness, there is also a broad range of other socio-economic and political factors that includes institutional quality. Crucial factors influencing institutional quality are transparency and the scope of civil and economic liberties. It should be easy to scrutinize how decisions are made, the influences behind them and how taxpayer’s money is allocated. On the other side the plurality of interests is a necessary prerequisite and starting point for a free and open society. The lobbying and consultancy industry is a natural, important and legitimate part of the democratic decision-making process, however sometimes lobbying practices go beyond the legitimate representation of interests, and methods are deceptive. This kind of behavior is usually non-transparent and unfairly influences political processes, generating the potential for corrupt practices and excessive regulation of economic activities negatively influencing economic freedom and thus the competitiveness. The aim of the article is to prove the significant effect between economic freedom and competitiveness within the European Union countries based on an analysis of two indexes – the Economic Freedom Index and the Global Competitiveness Index. A direct and fairly strong dependence was proved.

Keywords: Competitiveness, Economic freedom, European Union, Lobbying, Transparency, Regulation.


Introduction

The growing demand for various levels of economic activities that have appeared throughout the globalization process has brought extraordinary attention to international competitiveness over the two most recent decades. The competitiveness of an economy can be defined as the ability of a specific country to positively assert itself on the global market [29]. The most useful definition of national competitiveness is the following: national competitiveness represents the degree to which it can, based on free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens. [24]. However, this aggregated ability is not only affected by its economic efficiency and productiveness, there is also a broad range of other socio-economic and political factors that may include institutional quality. Among factors influencing institutional quality are transparency and the scope of civil and economic liberties. It should be easy to scrutinize how decisions are made, the influences behind them and how taxpayer’s money is allocated. On the other side the plurality of interests is a necessary prerequisite and starting point for a free and open society [20]. The lobbying and consultancy industry is a natural, important and legitimate part of the democratic decision-making process. However, sometimes lobbying practices go beyond the legitimate representation of interests, and methods are deceptive. This kind of behavior can take place backstage, be non-transparent and unfairly influence political
processes, generating potentially corrupt practices and excessive regulation of economic activities, all of which negatively influence economic freedom.

Because economic theory indicates that economic freedom affects incentives, productive effort, and the effectiveness of resource use, it should positively affect economic growth and national competitiveness as well.

In literature, there is a rather wide arrangement of studies that deal with the effects of economic freedom on promoting economic growth, e.g. [2], [4], [9], [10], [21]. Herciu and Ogrean [11] found a strong and direct link between economic freedom and national competitiveness. Verner [34] tested the relationship between the same variables for the most economic free countries, the four countries of Visegrad and the less economic free countries.

One of the serious symptoms of non-transparent lobbying is a privileged access. It can be a privilege to be regulated if the regulations somehow limit competition or disproportionately raise the costs of rival firms. That, unfortunately, can make these regulated (and privileged) firms powerful opponents of economic freedom [18]. Another likely outcome from non-transparent lobbying is corruption. Corruption erodes economic freedom by introducing insecurity and uncertainty into economic relationships [31]. Ali and Isse [1] have established a strong negative correlation between economic freedom and corruption. It is therefore possible to identify a connection between opaque lobbying and competitiveness through indicators of economic freedom, which are negatively affected by the consequences of non-transparent lobbying.

The economic crisis in Europe has not managed to change the essential priorities of economic policies of individual countries or the entire EU – increasing competitiveness. The European Union implemented its first decennial strategy for improving the competitiveness of its member countries and the EU as a whole, known as the Lisbon Strategy, in 2000. Problems associated with achieving the objectives and priorities stipulated in the Lisbon Strategy have been evident since the very beginning of its implementation, to be further accentuated by the global financial and economic crisis. The failure to achieve the objectives and aims of the Lisbon Strategy has even been admitted by the European Commission several times, e.g. at the beginning of 2010 not long before the implementation of the new decennial strategy – Europe 2020. The current strategy formulates relevant objectives with greater caution, so the ambition to become the most competitive and dynamic economy in the world has been replaced with support for enhancing economic competitiveness, as defined in the Sustainable development pillar. The relevant data published by The Heritage Foundation has shown that economic freedom reached its peak in 2008 followed by a decrease till 2014. The Foundation concluded that economic freedom has been adversely affected by the implementation of new government measures in response to the recent financial and economic crisis [31]. A more detailed analysis of these data for EU countries has shown a decrease in the average value practically in every sub-index of The Index of Economic Freedom during the period 2008 - 2014. The more a government does, the more opportunities are presented for rent-seeking. Rent-seeking is the process of expending resources in an attempt to influence public policy outcomes [33], [13]. Corporations know much more about how regulations affect their business interests than regulators or politicians do. It's not hard for lobbyists to take advantage of that knowledge gap. And the more valuable the privileged access, the more resources will be wasted in rent seeking [18]. Rent seeking is negatively related to economic freedom [5]. Del Rosal [7] classified the empirical papers on measurement
of rent-seeking into four categories: the indirect measure of rent-seeking costs, e.g. trade restrictions, monopoly position or regulation and other government-induced restrictions to competitive markets [33], [13]; estimations of rent-seeking cost by searching for sources of expenditures, e.g. budgetary changes [12], campaign contributions and in-kind gifts [28]; effects on aggregate economic performance, e.g. influence of corruption on growth, bureaucratic efficiency [16], the change in income distribution [27]; other studies which do not fit appropriately into the previous categories, e.g. the relationship between government revenues associated with tariffs and the political régime [8].

The question in this survey is therefore laid out as follows: Can improving the economic freedom level be one of the methods to support competitiveness? In other words, has the decline in economic freedom in Europe during the global financial crisis influenced Europe's competitiveness? The aim of this paper is to prove or disprove the hypothesis of a link between economic freedom (expressed using the Index of Economic Freedom) and national competitiveness (expressed using the Global Competitiveness Index) within the European Union and to contribute to holding professional discussions about the factors that affect competitiveness. The emphasis is placed on non-transparent lobbying as one of the strong underlying factors affecting competitiveness.

The paper is structured as follows: Section 2 will briefly characterize the used indexes mentioned above; Methods, empirical results and discussion will be provided in Section 3 and Section 4 will conclude the paper and suggest further research.

1 Variables

This section provides an analytical description of the index of economic freedom and the global competitiveness index.

1.1 Economic Freedom

For the purpose of this research, the Economic Freedom Index (EFI) provided by the Heritage Foundation was selected. All of its ten components might be successfully influenced by particular interests if the decision-making process is not transparent. The actual report, “Lobbying in Europe – Hidden Influence, Privileged Access” provided by Transparency International has shown that a regional average score of 26 % in transparent lobbying reveals a low level of transparency around lobbying in particular, and public decision-making in general [19].

EFI is based on conservative values, focusing mainly on the evaluation of economic factors with an emphasis on the development of a market economy and minimizing governmental intervention. The index consists of ten components that are rated on a scale from 1 (oppressed country) to 100 (free country). The 10 measured aspects of economic freedom may be grouped into four broad categories: rule of law (property rights, freedom from corruption), government size (fiscal freedom, government spending), regulatory efficiency (business freedom, labor freedom, monetary freedom), and market openness (trade freedom, investment freedom, financial freedom). For more details see the Heritage Foundation [31].

1.2 The Global Competitiveness Index

Global Competitiveness Index (GCI) provided by the World Economic Forum (WEF) is a highly comprehensive index, which captures the microeconomic and macroeconomic foundations of national competitiveness. Competitiveness is defined as the set
The level of productivity, in return, sets the sustainable level of prosperity that can be earned by an economy. [25, p. 3-4]

The GCI has 12 pillars divided to 3 sub-indexes: the basic requirement sub-index covers institutions, infrastructure, the macroeconomic environment and health and primary education; the efficiency enhancers sub-index focuses on higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness and market size; the innovation and sophistication factors sub-index deals with business sophistication and innovation. Specific parts of sub-indexes have different weights with respect to calculating GCI. Calculating GCI is therefore based on a weighted average. The global competitiveness index may achieve values from 1 (low) to 7 (high). Although there is some similarity in categories of “institutions” and categories that monitor EFI, they differ in methodology. For more details see the World Economic Forum [25], [35], [36].

2 Methodology and Methods

The methodology approach is based on the new institutional economics. The question of whether institutions are an endogenous or exogenous feature has not been clearly answered, even in the case of the new institutional economics. According to Thornton, Ocasio and Lounsbury [32] most authors assume an endogenous character of the institutions, because they are aware of the amount and diversity of institutional arrangements, which is the result of historical development, governance, state systems and the legal systems. Economic freedom or specifically the measurement of economic freedom can be considered as an endogenous variable because it is essentially a measurement of state regulation or degree of intervention of state authority into free market forces, which is closely related to the rules determining allocation mechanisms. Although both monitored variables can be classified as indicators of institutional quality, competitiveness can also be understood as a category of productivity or prediction of performance of the economy as defined above. Hanke and Walters [10] concluded that indicators of competitiveness are more “growth forecasts.” A subsequent statistical analysis therefore examines how economic freedom affects the national competitiveness and conversely.

To determine the links between the data, methods of regression analysis were applied. For easier comparison and interpretation of the examined relationships, a correlation analysis was chosen as a suitable tool, although it assumes a linear character of regression between the variables; one independent variable – the Economic Freedom Index (EFI) – and one dependent variable – the Global Competitiveness Index (GCI). As there is assumed also the inverse dependence, the regression was carried out in a way where GCI is an independent variable and EFI is a dependent variable. The methods of regression analysis and correlation analysis were used because it is not difficult to gain relevant and substantive results. These methods are also well known and often used for examining the relationship between the data. The statistical set consists of 28 elements, n = 28. This is the basic set, because it includes all EU Member States. EU countries were selected not only for reasons that were mentioned in the introduction, but also for methodological reasons. For a more accurate determination of the degree of interdependence between economic freedom and competitiveness, it is necessary to isolate all the disturbing factors. One of them, the
most relevant, is the geographic location. Both historical determination and similar options of resources lead to “external” homogeneity.

A statistical survey of linear dependence starts with an analysis of correlation issues for values subject to monitoring. Any linear dependence proven between the values monitored will be followed by its interpretation in terms of a mathematical formula using regression. The values of variables are expressed in numerical form. When examining the number of values achieved by variables, these can be considered continuous variables. Variables may actually gain any values from the terminal interval that differs per index.

The significance level selected for all the subsequent tests is equal to 5 %, i.e. \( \alpha = 0.05 \). To accept or reject \( H_0 \) the significance level needs to be compared to the \( P\text{-Value} \). The significance level of the test implies a reliability coefficient of \( (1 - \alpha) \), which corresponds to 95 %. The software Statgraphics Centurion was used for calculations.

### 2.1 Result of statistical relation between the indicators in individual years

In the first instance, the relationship between two mentioned variables above for the time period 2001–2014 was tested. Both the regression and correlation analyses imply that there is a close relationship between the Economic Freedom Index and the Global Competitiveness Index.

### 2.2 Summary analysis – spatial perspective

In the second step of our testing of dependence we conducted correlation and regression analysis for all of the years 2004-2014 (2001-2003 are not included because not all values are available). A summary of correlation and regression analysis can be done, because indexes are spatial variables. The time factor is not important. The statistical set is 308 now, because the comparison is performed for the 28 countries which formed the contemporary European Union during the period 2004-2014.

#### 2.2.1 Verification of the suitability of linear function

It can be assumed that there is a linear dependence between both indexes. Nevertheless, this assumption is confirmed by statistical calculation. Firstly, the correlation analysis proves that there is linear dependence. A correlation coefficient (0.6648) and \( P\text{-Value} \) (0.0000) show this direct linear dependence between The Economic Freedom and Global Competitiveness Indexes.

Secondly, the comparison of other possible functions indicates that the linear function is the most suitable function. This comparison is performed by R-squared. There can be found some other functions with higher R-squared than the linear function has. However, the variance is very low (R-squared for linear function is 44.2 % and this index for the best function is 47.3 %) and it is required that the function should be as simple as possible.

Thirdly, the homoscedasticity of the variance of random errors is proved. The F-test for comparing variances is used for this confirmation. The test statistic \( F = 1.095 \) and \( P\text{-Value} \) (0.573) establish that the null hypothesis, which assumes that there is homoscedasticity, is not reject. This is another assumption of the linear model.

Finally, the correlation between the residue of Economic Freedom Index and the residue of Global Competitiveness Index verified that the course of indexes is not merely alike. The correlation coefficient is 0.6682 which means that the correlation is not spurious but real. These verifications confirm that the linear function is the most convenient for the exploration of dependence between EFI and GCI.
The combination of these criteria and tests leads to the verification of linear dependence between both indexes.

2.2.2 Regression analysis – EFI independent variable and GCI dependent variable

Regression models are mathematic models that express the concept of a course of variable dependence. The linear regression, which is used in this research, has the following general regulation of function:

\[ \eta = \beta_0 + \beta_1 x \]  

(1)

The estimation of unknown parameters of linear regression function is performed. The linear model for all of the years demonstrates that the coefficients \( b_0 \) and \( b_1 \) are both significant because the P-Value is less than 5 %. The results are arranged in the Tab. 1.

**Tab. 1: Coefficients – EFI independent variable and GCI dependent variable**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Least Squares Estimate</th>
<th>Standard Error</th>
<th>T Statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.04054</td>
<td>0.236941</td>
<td>4.39155</td>
<td>0.0000</td>
</tr>
<tr>
<td>Slope</td>
<td>0.053659</td>
<td>0.00344654</td>
<td>15.569</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: own calculations based on [31], [17], [6], [3], [35], [36], [14], [15], [23], [26]

The R-squared is about 44 percent. It means that this model describes 44 percent of variability of global competitiveness. The mathematic formula is following:

\[ \text{GCI} = 1.04054 + 0.053659 \times \text{EFI} \]  

(2)

Fig. 1 shows the course of a defined linear model and values of indexes. The Analysis of Variance (ANOVA) is used for confirmation of the appropriateness of the chosen regression model. The F-Ratio (242.39) and P-Value (0.0000) prove that the test is statistically significant and the linear model is suitable.

**Fig. 1: Linear model – EFI independent variable and GCI dependent variable**

Source: own calculations based on [31], [17], [6], [3], [35], [36], [14], [15], [23], [26]

2.2.3 Regression analysis – GCI independent variable and EFI dependent variable

Naturally, this linear model for all of the years also shows that the coefficients \( b_0 \) and \( b_1 \) are both significant. The results are arranged in the Tab. 2.
The R-squared is again about 44 percent and the mathematic formula follows:

\[
\text{EFI} = 29.6293 + 8.2373 \times \text{GCI}
\]  

(3)

**Fig. 2: Linear model – CGI independent variable and EFI dependent variable**

The fitted model and the values of both indexes are shown in Fig. 2. The Analysis of Variance is used for confirmation of the appropriateness of the chosen regression model again. In accordance with the previous part of regression analysis the F-Ratio (242.39) and P-Value (0.0000) prove that the chosen linear model is appropriate.

### 2.3 Comparison of different years - comparison of regression lines

A final step is to compare each year of the analysed indexes. Firstly, the GCI is a dependent variable and EFI is an independent variable. The comparison is made by level codes – YEAR. The R-squared is more than 46 percent.

Secondly, the EFI is a dependent variable and GCI is an independent variable. R-squared is the same as the situation where the dependence is the opposite way.

Because the P-value in the ANOVA test is less than 0.05 in both situations, there is a statistically significant relationship between the variables at the 95.0 % confidence level. The following Fig. 3 and 4 compare the values of individual years. Both figures show that all of the linear functions are similar. There is only a slightly different slope.
Firstly, governments too often follow a “precautionary principle” – that is, regulating against the possibility of hypothetical harm without realizing that they are trying to extinguish “previous fires”. This locks entrepreneurs into rigid rules that stifle innovative activity. Regulators must avoid hasty regulation. A number of tools are available for the determination of effective and useful regulation; one of them is the RIA system (Regulatory Impact Assessment). In essence, RIA attempts to clarify the relevant factors for decision-making. Its most important contribution to the quality of decisions is the action of analyzing – questioning, understanding real-world impacts, and exploring assumptions [22]. According to OECD [22] many regulatory failures stem from a faulty understanding of the problem and from inadequate attention to the indirect effects of government action that can undermine results. Rather, the reaction of regulators should be to encourage and enable the development of bottom-up, organic, self-regulating institutions.

Secondly regulatory intervention might be the result of powerful interest groups exerting pressure on politicians and regulators to capture rents. Decisions made by a politician can be significantly stronger regulatory measures than in periods of economic growth. In many cases, it is a political demand or the result of particular interests, rather than one based on the real needs of the economy.

Especially in times of crisis there is the tendency of governments to introduce significantly stronger regulatory measures than in periods of economic growth. In many cases, it is a political demand or the result of particular interests, rather than one based on the real needs of the economy.
evaluated in terms of the objective of attracting the necessary support for successful reelection. Stigler [30] argued that firms will lobby legislators for regulation when such regulation provides: a) direct monetary subsidies, b) constraints on substitute products or subsidies on complementary products, c) an easier price-fixing/collusive atmosphere, and d) incumbent firms with the ability to control entry by potential new rivals. A more transparent environment will increase the accountability of governments for their decisions and decrease unfair lobbying practices. Transparency is an obstacle to pursuing unilateral interests or favoring one group over another in adopting unnecessary or questionable regulations.

**Conclusion**

The aim of this article was to answer the question of whether there is a relevant relationship between economic freedom and global competitiveness based on statistical analysis and thereby to point out a possible negative impact of non-transparent lobbying on competitiveness. Results have proven a statistically significant linear relationship between Economic Freedom Index and Global Competitiveness Index. This dependence is direct and fairly strong. The suitability of linear function was affirmed by correlation analysis, regression analysis, Durbin-Watson statistic and correlation analysis of residues.

It is possible to conclude that higher regulation of economic activities and thus restricting economic freedom leads to lower competitiveness.

Further research could be aimed at a more detailed distinction between transparent and non-transparent lobbying and its direct impact not only on economic freedom but on competitiveness in general and its individual pillars. Another relevant issue for further studies could be analyzing groups of countries clustered according to chosen parameters. This article is part of a complex project that deals with the issues mentioned.

**Acknowledgements**

This work was supported by the Czech Science Foundation, project No. 16-08786S “Impact of Transparency of Lobbying on Democratization and Its Consequences”.

**References**


**Contact Address**

**doc. Ing. Šárka Laboutková, Ph.D.**  
Technical University of Liberec, Faculty of Economics, Department of Economics  
Studentská 2, 461 17 Liberec, Czech Republic  
Email: sarka.laboutkova@tul.cz  
Phone number: +420 48 535 2400

**Ing. Lucie Staňková**  
Technical University of Liberec, Faculty of Economics, Department of Economics  
Studentská 2, 461 17 Liberec, Czech Republic  
Email: lucie.stankova1@tul.cz  
Phone number: +420 48 535 2406

Received: 30. 12. 2015  
Reviewed: 01. 02. 2016, 03. 03. 2016  
Approved for publication: 08. 09. 2016