EASY OF DOING BUSINESS AND GLOBALIZATION – LINKAGES BETWEEN BOTH IN DEVELOPED MARKET ECONOMIES AND DEVELOPING COUNTRIES

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Abstract

Good business regulations enable the private sector to thrive and businesses to expand their transactions network. Striking the right balance in business regulation can be a challenge. It becomes an even greater challenge in a changing globalized world, where regulations must continually adapt to new realities. The aim of this article is to map, analyze and evaluate, by means of statistical analysis, the mutual relationships between globalization and easy of doing business in developed market economies and developing countries. The first part provides the methodology of measuring globalization using the composite Index of Globalization KOF 2012. The second part introduces the way of measuring doing business – Easy of Doing Business Index EDBI 2012. The third part compares indices and scores together, analyzes them, and confirms or refutes the empirical relationship between indexes. It is possible to conclude from the results that a statistically significant association between globalization and easy of doing business was demonstrated but only in the case of the developing countries. There are moderately correlated relationships between economic and social dimension of globalization and easy of doing business. The globalization is not statistically significantly correlated with doing business in the developed market economies.

Key words: KOF Globalization Index, economic globalization, social globalization, political globalization, Easy of Doing Business Index.

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Introduction

During the last two decades, political relations, social networks, movement of labor, and institutional change have become more involved. Globalization and institutional quality have multiple connections in between. (Kocourek, Bednářová & Laboutková, 2013) As the globalization advances, countries and regions are challenged to shape more flexible arrangements to ensure that the new risk are dealt with and the new opportunities are exploited. (Fárek, 2006) Globalization measures or indices have been employed to intermediate an insight into the investment climate, the current developments of growth, and for understanding the international business environment as well as providing a world perspective that the policy initiatives will be operational within. Impact of globalization on innovation activities is indisputable. (Jindřichovská, 2011) Good business regulations enable the private sector to thrive and businesses to expand their transaction networks. But regulations put in place to safeguard economic activity and facilitate business operations, if poorly designed, can become obstacles to doing business.

The main hypothesis of this paper is that a higher level of globalization increases easy of doing business in the developing countries more than in the developed economies. Also it can be assumed that economic globalization will be in developing countries more powerful links with institutional quality of the business environment than social and political globalization. The aim of this article is to identify and assess the relationship between easy of doing business and globalization. At the beginning the methodology of measuring globalization and doing business will be introduced. The back-bone of the article consists of verifying and testing the strength of mutual relationships between dimensions of globalization (economic, social and political) and easy of doing business. The paper will show the results for a selected sample of countries (developing countries and developed economies), analyze it, and confirm or reject the hypothesis about the significant linkages of globalization and easy of doing business.

1. KOF Globalization Index

The KOF Globalization Index produced by the KOF Swiss Economic Institute was first published in 2002. Each of the variables is transformed to an index on a scale from 1 to 100. Higher values again denote higher levels of globalization. The data are transformed according to the percentiles of the original distribution. The year 2000 is used as the base year. (Dreher & Gaston, 2008) The Table 1 indicates updated weights of variables in the 2012 KOF Index of Globalization. (KOF, 2012a)

Tab. 1: Weights of variables in the 2012 KOF Index of Globalization

Indices and Variables	Weights (%)
Economic globalization (EG_KOF)	**36**
(I) Actual economic flows	50
(II) International trade and Investment restrictions	50
Social globalization (SG_KOF)	**38**
(I) Data on personal contact	33
(II) Data of information flows	36
(III) Data of cultural proximity	31
Political globalization (PG_KOF)	**26**
(I) Embassies in country	25
(II) Membership in international organizations	28
(III) Participation in U.N. Security Council missions	22
(IV) International Treaties	25

Source: KOF, 2012

The 2012 KOF Globalization Index covers 208 countries: the top ten most globalized countries are Belgium, Ireland, the Netherlands, Austria, Singapore, Sweden, Denmark, Hungary, Portugal and Switzerland. In contrast, for example, Germany on the twenty-second place is not among the 20 most globalized countries. The first place in the ranking of economic globalization is occupied by Singapore, followed by Luxembourg, Ireland, Malta and Belgium. In all the cases these represent small and open economies. Cyprus, Ireland, Singapore, Austria hold leading positions in the case of measuring the social dimension of globalization. European countries occupy the top positions in the political dimension of globalization: Italy, France, Belgium, Austria and Spain. (KOF 2012b)

2. Doing business index

The Easy of Doing Business Index EDBI is a project of the World Bank, and it provides practical and specific information about the operation of the business environment and about the costs and administrative demands that are associated with running a business. The Independent Evaluation Group (2008) has made a positive evaluation of the scope, transparency and information sources of the EDBI. (IEG, 2008) Other studies have presented the results of the factor analysis, which demonstrated lower reliability of selected indicators that represent the business environment in the country. (Pinheiro-Alves & Zambujal-Oliveira, 2012) Table 2 provides the sub-parameters used to calculate the Easy of Doing Business Index 2012.

Tab. 2: Easy of Doing Business Index framework

Conditions for starting a business: the number of procedures, time, costs and financial aspects
Difficulty of obtaining building permission: the number of procedures, time, costs for obtaining a building permit
Obtaining electricity connection: the number of procedures, days and financial costs required to obtain electrical connections
Ownership registration: the number of procedures, days and financial costs required for the sale of a property between two businesses and the transfer of property rights
Possibility of getting a loan: the legislation power index and index of credit information
Protection of investors: the transparency of transactions, responsibility of managers for their own operations and the ability of shareholders to sue managers
Tax burden: the number, the time for preparation and completion of tax returns, the share of the overall tax burden on gross profit
Trading across borders: the documents, costs, and time connected with exports and imports
Efficiency of courts: the procedures, costs and time required for settling commercial disputes
Declaration of insolvency: the time (in years) for which creditors get paid and the financial costs of insolvency proceedings

Source: (WB, 2012)

The EDBI ranks economies from 1 to 185. A high EDBI ranking means that the regulatory environment is more conducive to the starting and operation of a local firm. Each economy's ranking is calculated as the simple average of the percentile rankings on each of the 10 topics included in the 2012 EDBI. The 10 highest-ranked economies with the most business-friendly regulations are Singapore, Hong Kong, China, New Zealand, the United States, Denmark, Norway, the United Kingdom, the Republic of Korea, and Iceland. (WB, 2012)

3. Methods

For the analysis only countries with complete available data files available were chosen. The countries were divided into two groups. The Developed market economies consist of 35 countries, in the group of developing countries, there are 75 countries. For the analysis data from both the 2012 EDBI and 2012 KOF Globalization Index (and of their components) were used. For easier comparison and interpretation of the examined relationships, the correlation analysis was chosen as a suitable tool, although it assumes the linear character of the regression between the variables. This simplification makes it possible to compare not only the statistical power (robustness) of the identified links (statistically significant at the customary 5% significance level), but also the intensity with which globalization is connected to competitiveness, or the slope of the linear relationship between the individual pairs of variables expressed by in the regression coefficient $\beta 1$ in the standard equation for linear regression (1):

$$\hat{y} = \beta_0 + \beta_1 \cdot x \tag{1}$$

where x is the value of the independent variable (in this case the value of KOF, EG_KOF, SG_KOF and PG_KOF) and represents the model (estimated) value of the dependent variable (EDBI). Both regression coefficients (β0 and β1) can be estimated using the following equations (2) and (3).

$$\beta_0 = \frac{\sum y_i \cdot \sum x_i^2 - \sum x_i \cdot \sum y_i \cdot x_i}{n \cdot \sum x_i^2 - \left(\sum x_i\right)^2}, \tag{2}$$

$$\beta_1 = \frac{n \cdot \sum y_i \cdot x_i - \sum x_i \cdot \sum y_i}{n \cdot \sum x_i^2 - \left(\sum x_i\right)^2}, \tag{3}$$

where y stands for the real value of the dependent variable (EDBI) and n is the number of statistical units. Individual correlation models will be evaluated based on their individual indices of correlation R_{XY} and also according to the calculated p-value of significance, according to which the robustness of a particular model is evaluated at the 5% significance level. For the following calculations and statistical analysis, the statistical software Statgraphics Centurion XVI was used. The thick black straight line represents the estimated correlation model, the narrow dark gray bordered strip shows the confidence interval for the mean forecast; the broader light gray bounded strip is the confidence interval for predictions. We can assume that the average values a given level of KOF index will fluctuate with a 95% confidence within the dark gray limits, expected specific values of the dependent variable will then with the same probability fall into the area between the light gray borders.

4. Results

All the correlation analyses for the developed market economies and developing countries have been summarized in Table 3. Correlations which are statistically insignificant at the 5% level of significance are colored gray in the table.

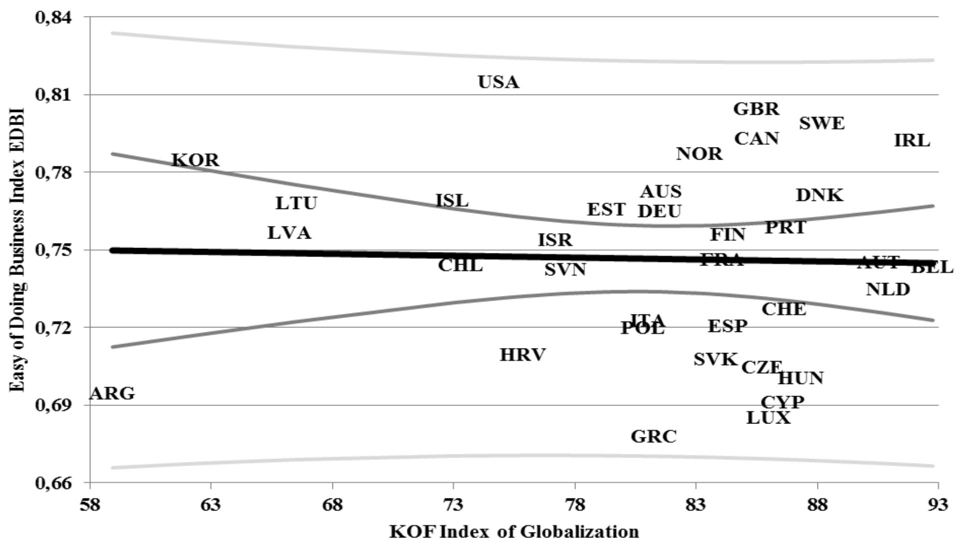
Tab. 3: Correlation Characteristics

	KOF	EG_KOF	SG_KOF	PG_KOF
EDBI Developed Market Economies	α = 0,8525	α = 0,6103	α = 0,9545	α = 0,9474
	R_{XY} = - 0,0326	R_{XY} = - 0,0892	R_{XY} = 0,0100	R_{XY} = 0,0116
	β_1 = - 0,0001	β_1 = - 0,0003	β_1 = 0,0000	β_1 = 0,0000
EDBI Developing Countries	α = 0,0000	α = 0,0000	α = 0,0000	α = 0,7533
	R_{XY} = 0,6079	R_{XY} = 0,5183	R_{XY} = 0,6208	R_{XY} = 0,0369
	β_1 = 0,0039	β_1 = 0,0025	β_1 = 0,0027	β_1 = 0,0002

Source: own construction

Statistically insignificant correlation has been identified between globalization and doing business in the sample of the developed market economies. The linkage between KOF and EDBI is characterized by a coefficient of correlation R_{XY} in the value of - 0,0326 with the slope of the regression line β_1 = -0,0001. (See Fig. 1) The business environment in developed market economies does not show a statistically significant relationship with any of the three components of globalization (EG_KOF; SG_KOF; PG_KOF) and EDBI. Changes in the economic, social and political globalization, therefore, do not affect the ease of doing business in developed market economies.

Fig. 1: Relationship between KOF and EDBI in Developed Market Economies

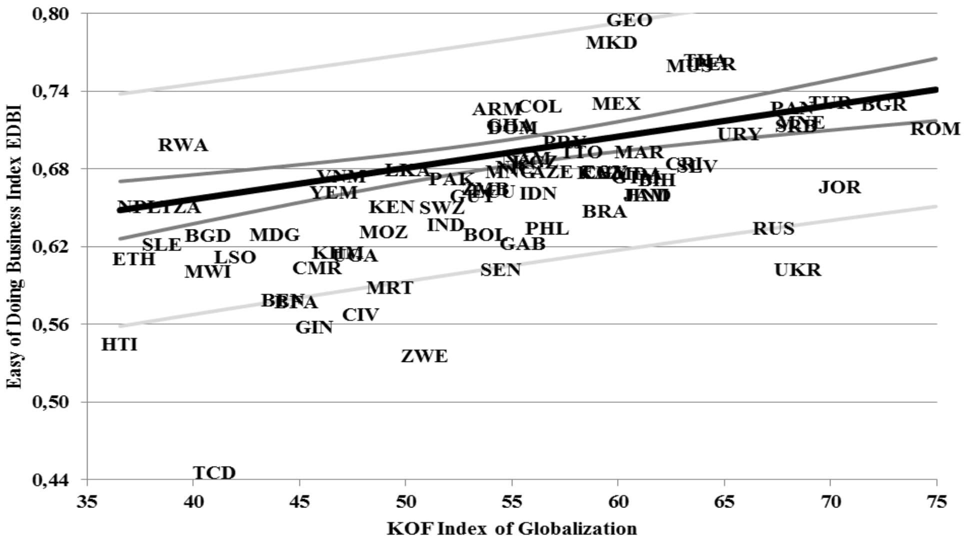


Source: own construction

Greece is the weakest economy in terms of the easy of doing business, although there is a relatively high degree of globalization. It is followed by Luxembourg, Cyprus and Argentina, which are also countries with a low level of globalization. Countries with a similarly degree of globalization such as Luxembourg, the Czech Republic, Canada, and the United States show indexes of EDBI with a differences of up to 20%. The business environments in developed market economies are the result of long-term development, the political environment, and institutional quality, rather than a direct reflection of the globalization process.

In contrast, in developing countries, it is possible to see a statistically significant association between **globalization** and doing business. (See Fig. 2) This, however, does not represent an intensive relationship, a correlation index R_{XY} of 60,79 % indicates a moderately correlated relationship between the indices. The slope of the model line β_1 = 0.0039 indicates that a KOF increase of one point brings an increase in average EDBI by as little as 0.0039 points in the developing countries. Globalization as a process therefore contributes slowly but significantly to improving the business climate in developing countries.

Fig. 2: Relationship between KOF and EDBI in Developing Countries

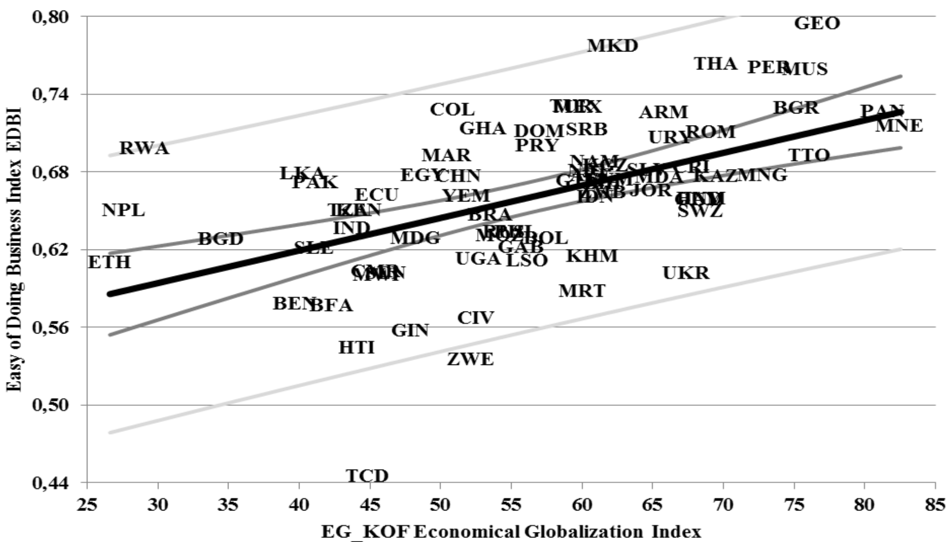


Source: own construction

Figure 2 indicates that extremely unfavorable business environment exists in Chad, and Haiti in particular, but also in Zimbabwe and Guinea is. Burkina Faso, Benin, Mauritania and Senegal are also outside the confidence intervals, all in sub-Saharan Africa. The results of the evaluation of the quality of the business environment in Russia (2012 EDBI rank 112) and Ukraine (2012 EDBI rank 137) are also very interesting. Both of these Eastern European economies are outside the confidence intervals. The quality of the business environments has deeply below average rating, despite the relatively intensive globalization of both countries. These results are in contrast with long-term liberal-market oriented Georgia, which escapes from the confidence interval in a positive direction and boats the friendliest business climate out of all the analyzed developing countries.

The EG_KOF index, representing **the economic globalization** component of the KOF Globalization Index, reflects the economic and business links between the national economy and the world economy. The statistical relationship between the EDBI and EG_KOF index is not very strong (R_{XY} = 51.83%), meaning that economic globalization improves the business environment only very slowly. But there is in fact a statistically significant correlation. (See Fig. 3) Economically low globalized countries with a very low level of business environment quality include Zimbabwe, Haiti, Benin and Guinea. In these cases, the increased openness of their economies to international trade has helped to improve the business environment throughout countries.

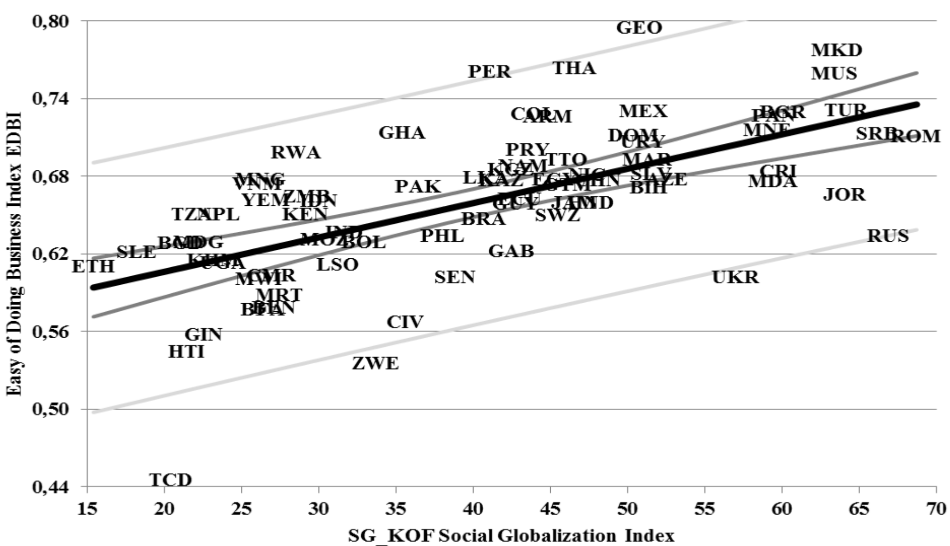
Fig. 3: Relationship between EG_KOF and EDBI in Developing Countries



Source: own construction

The social globalization index SG_KOF primarily refers to personal and social international relations and communications.

Fig. 4: Relationship between SG_KOF and EDBI in Developing Countries



Source: own construction

The correlation index R_{XY} with a value of 62,08 % and with the slope of the regression line β_1 = 0,0027 indicates a moderate correlation between the indexes. An increase of one point in the SG_KOF index causes an increase in average EDBI by as little as 0.0027 points in developing countries. (See Fig. 4) Georgia and Peru, for example, are countries outside the confidence interval, but in a positive direction. In these countries, there is a more favorable business environment in regard to the degree of social globalization. On the other side Zimbabwe, Haiti and Guinea are at a very low level on EDBI, but due to a low level of social globalization it is possible to increase doing business by increasing social globalization.

The analysis of the relationship between the **political globalization** (PG_KOF) and doing business (EDBI) shows a very surprising conclusion: the business environment in developing countries is not significantly correlated with the countries´ political dimension of globalization. The degree of political involvement developing countries on the world political scene has no effect on the quality of the business environment inside the economy. This is not a good result mainly in regards to the efforts of the World Bank and the United Nations to support entrepreneurship in developing countries.

Conclusion

The aim of this article was to answer the question of whether in developed market economies or developing countries can increase their easy of doing business by intensifying their efforts towards globalization. The main hypothesis of this paper was that a higher level of globalization increases easy of doing business in the developing countries more than in the developed economies. The article also assumed at its outset that economic globalization in developing countries is more directly linked with the institutional quality of the business environment than social and political globalization.

It is possible to conclude from the results that a statistically significant association between globalization and easy of doing business was demonstrated only in the case of the developing countries. There are moderately correlated relationships between the economic and social dimensions of globalization and the easy of doing business, but the business environment in the developing economies is not significantly correlated with the political dimension of globalization. The possibility of stimulating the business environment by promoting economic globalization or social globalization is therefore useful only for economies with low values of these monitored indices. Globalization is not, however, statistically significantly correlated with the easy of doing business in the developed market economies. The business environment in developed market economies is the result of long-term development, the political environment, institutional quality rather than a direct reflection of the globalization process.

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