

ON THE RELATIONSHIP BETWEEN GLOBALIZATION AND INSTITUTIONAL QUALITY

Summary of Research

[Šárka Laboutková, Pavla Bednářová]

Abstract — This paper is focused on the question of the links between institutional quality (in terms of quality of life, quality of governance, and business conditions) and globalization (measured by the components of the KOF globalization index). It is possible to conclude from the results achieved in the study that globalization remains firstly, a very strong and powerful economic phenomenon. Its positive effects on social development, its force to promote better institutions of all kinds, and its assumed ability to raise people from poverty and misery have still remained weak. In most cases emerging countries achieve worse results in various areas of institutional quality than the developed market economies, and so, any improvement in the parameters in the sub-index of economic or social globalization might contribute to improvement of the quality of institutions. Political globalization expressed by the number of embassies and participation in multinational organizations still says nothing about the activity of these countries and their position or influence in these organizations.

Keywords — Globalization, Institutional Quality, Corruption, Economic Freedom, Inequality Human Development Index, KOF Globalization Index.

I. Introduction

During the last two decades, globalization, political relations, social networks, human movement, and institutional change have become more significant for economic growth. Globalization is a multidimensional process that affects many aspects of economic, social and political development. One of these aspects is institutional quality. Institutions are considered to be a key building block in creating a competitive and innovation-based economy; they form legal and regulatory foundations for effective competition in business, trade and innovations. Institutional factors extend the range of variables that attempt to explain the achievement of long-term growth and particularly the persistent differences between developed and developing economies.

The aim of this paper is to summarize a broader empirical research on the **relationship between globalization and institutional quality in developed and developing countries** and contribute to this stream of research.

Institutional quality can be understood as an evaluation of how monitored institutions function. Currently, there are many approaches to measuring and evaluating the quality of institutions. Institutional quality is approached here in terms of three basic parameters - quality of life (measured with inequality-adjusted Human Development Index - *IHDI* and

Index of Economic Freedom - *EFI*), quality of governance (measured with Worldwide Governance Indicators – *WGI*s and Corruption Perception Index – *CPI*), and business conditions (measured with Ease of Doing Business Index - *EDBI* and Global Competitiveness Index – *GCI*).

Globalization is often understood as increasing global forms of governance, global economic and politic relations, and globally inter-linked social and environmental developments. It is possible to expand this word with other meanings, such as the growing integration of markets, the threat to national sovereignty by trans-national actors, the transformation of national economies, and the spread of inequalities or disparities, how emerging markets have increased the degree of integration into world finance etc. The level of globalization is measured by the *KOF* Globalization Index - *KOF*. The overall index covers the economic, social, and political dimensions of globalization:

- economic globalization (*EG_KOF*) includes the long distance flows of goods, capital, and services and has two dimensions: 1) actual economic flows and 2) international trade and investment restrictions.
- social globalization (*SG_KOF*) has been classified by the *KOF* index into three categories: 1) personal contacts, 2) information flows, and 3) cultural proximity.
- political globalization (*PG_KOF*) is characterized by the diffusion of government policies.

Among the first to use the *KOF* Index for empirical analysis was Ekman (2003), who found a positive, non-linear correlation between the *KOF* Index and population health measured by life expectancy at birth. In later studies, Sameti (2004) has found that globalization increased the size of governments, while Tsai (2007) has shown that globalization improves human welfare. Bjørnskov (2006) analyses the three dimensions of the *KOF* Index and shows that economic and social globalization affect economic freedom, while political globalization does not. Dreher, Gassebner and Siemers (2010) empirically analyzed whether globalization and economic liberalization affect governments' respect for human rights. The positive effects of institutions on promoting economic growth and development, investment, prosperity and well-being of the society were first empirically confirmed by Kormendi, Meguire (1985) and Scully (1988). Later studies include Borrmann *et al.* (2006) or Chousa *et al.* (2004). A comprehensive survey of studies dealing with the effect of institutions on growth up to 2000 can be found in Aron (2000).

Institutions were also found to exert a positive effect on the pattern of foreign direct investment (Gwartney *et al.*, 2004)

II. Methods

For the analysis only countries with complete available data files were chosen. The countries were divided into two groups. The developed market economies consist of 35 countries with the highest values of the composite Human Development Index, in the group of developing countries, there are 75 countries (out of 140 developing member states of the United Nations). To determine the links between the data, the methods of regression analysis 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, 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 the regression coefficient β_1 . 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 Stat graphics Centurion XVI was used.

III. Results

All the correlation analyses for the developed market economies have been summarized in Table 1 and for the developing countries have been summarized in Table 2. Correlations which are statistically insignificant at the 5% level of significance are colored light red in the table.

TABLE I. THE CORRELATION ANALYSES – DEVELOPED MARKET ECONOMIES

	KOF	EG_KOF	SG_KOF	PG_KOF
IHDI	$\alpha = 0,0001$	$\alpha = 0,0067$	$\alpha = 0,0000$	$\alpha = 0,1455$
	$R_{XY} = 0,6153$	$R_{XY} = 0,4498$	$R_{XY} = 0,6445$	$R_{XY} = 0,2512$
	$\beta_1 = 0,0045$	$\beta_1 = 0,0026$	$\beta_1 = 0,0034$	$\beta_1 = 0,0016$
EFI	$\alpha = 0,0100$	$\alpha = 0,0032$	$\alpha = 0,0543$	$\alpha = 0,8262$
	$R_{XY} = 0,3979$	$R_{XY} = 0,4842$	$R_{XY} = 0,3281$	$R_{XY} = -0,0385$
	$\beta_1 = 0,3851$	$\beta_1 = 0,3393$	$\beta_1 = 0,2326$	$\beta_1 = -0,0274$
CPI	$\alpha = 0,0031$	$\alpha = 0,0219$	$\alpha = 0,0036$	$\alpha = 0,4692$
	$R_{XY} = 0,4854$	$R_{XY} = 0,3864$	$R_{XY} = 0,4794$	$R_{XY} = 0,1265$
	$\beta_1 = 0,9530$	$\beta_1 = 0,5493$	$\beta_1 = 0,6894$	$\beta_1 = 0,1826$
WGI	$\alpha = 0,0001$	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,1811$
	$R_{XY} = 0,6093$	$R_{XY} = 0,9366$	$R_{XY} = 0,9379$	$R_{XY} = 0,2314$
	$\beta_1 = 0,0375$	$\beta_1 = 0,0146$	$\beta_1 = 0,0147$	$\beta_1 = 0,0124$
EDBI	$\alpha = 0,8525$	$\alpha = 0,6103$	$\alpha = 0,9545$	$\alpha = 0,9474$
	$R_{XY} = -0,0326$	$R_{XY} = -0,0892$	$R_{XY} = 0,0100$	$R_{XY} = 0,0116$
	$\beta_1 = -0,0001$	$\beta_1 = -0,0003$	$\beta_1 = 0,0000$	$\beta_1 = 0,0000$
GCI	$\alpha = 0,0174$	$\alpha = 0,1813$	$\alpha = 0,0295$	$\alpha = 0,0438$
	$R_{XY} = 0,3996$	$R_{XY} = 0,2313$	$R_{XY} = 0,3682$	$R_{XY} = 0,3428$
	$\beta_1 = 0,0257$	$\beta_1 = 0,0118$	$\beta_1 = 0,0172$	$\beta_1 = 0,0192$

source: own construction

TABLE II. THE CORRELATION ANALYSES – DEVELOPING COUNTRIES

	KOF	EG_KOF	SG_KOF	PG_KOF
IHDI	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,3797$
	$R_{XY} = 0,8219$	$R_{XY} = 0,6901$	$R_{XY} = 0,8069$	$R_{XY} = 0,1029$
	$\beta_1 = 0,0133$	$\beta_1 = 0,0085$	$\beta_1 = 0,0087$	$\beta_1 = 0,0011$
EFI	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,6112$
	$R_{XY} = 0,5308$	$R_{XY} = 0,5416$	$R_{XY} = 0,4964$	$R_{XY} = -0,0596$
	$\beta_1 = 0,3938$	$\beta_1 = 0,2934$	$\beta_1 = 0,2426$	$\beta_1 = -0,0303$
CPI	$\alpha = 0,0002$	$\alpha = 0,0163$	$\alpha = 0,0002$	$\alpha = 0,3989$
	$R_{XY} = 0,4129$	$R_{XY} = 0,2767$	$R_{XY} = 0,4151$	$R_{XY} = 0,0988$
	$\beta_1 = 0,4171$	$\beta_1 = 0,2041$	$\beta_1 = 0,5762$	$\beta_1 = 0,0684$
WGI	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,9845$
	$R_{XY} = 0,5549$	$R_{XY} = 0,5486$	$R_{XY} = 0,5486$	$R_{XY} = -0,0023$
	$\beta_1 = 0,0272$	$\beta_1 = 0,0194$	$\beta_1 = 0,0180$	$\beta_1 = -0,0001$
EDBI	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,0000$	$\alpha = 0,7533$
	$R_{XY} = 0,6097$	$R_{XY} = 0,5183$	$R_{XY} = 0,6208$	$R_{XY} = 0,0369$
	$\beta_1 = 0,0039$	$\beta_1 = 0,0025$	$\beta_1 = 0,0027$	$\beta_1 = 0,0002$
GCI	$\alpha = 0,0000$	$\alpha = 0,0001$	$\alpha = 0,0000$	$\alpha = 0,0048$
	$R_{XY} = 0,6774$	$R_{XY} = 0,4303$	$R_{XY} = 0,6161$	$R_{XY} = 0,3227$
	$\beta_1 = 0,0317$	$\beta_1 = 0,0153$	$\beta_1 = 0,0193$	$\beta_1 = 0,0100$

source: own construction

A statistically significant link was demonstrated between globalization KOF and all of the indicators of institutional quality for both groups of countries except EDBI in the case of developed countries. 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 (Bednářová and Laboutková 2013b).

A strong correlated relationship has been proved between the economic and especially social dimensions of globalization and human development in the developing economies and in the relationship between SG_KOF and WGIs in developed countries. Cross-country social globalization has a generally higher variation than the values of the aggregated KOF Globalization Index: the less globalized countries, the lower its level of social globalization. On the other hand the values of the inequality-adjusted life expectancy index are significantly higher than both the values of the inequality-adjusted education index and IHDI as a whole. In other words, the life expectancy component of IHDI often raises the aggregated values of IHDI in countries with low IHDI values, while the education component usually raises the aggregated values of IHDI in countries with very high IHDI values. Increased involvement of developed market economies into a globalized world economy therefore brings not only a higher level of human development, but is also associated with improvements in social inequalities within these economies (Laboutková, Bednářová and Kocourek 2012). Despite the evidence of a closer relationship between economic and social globalization (EG_KOF and SG_KOF) and WGIs in developed countries, it was shown that an increase in both sub-indicators of globalization by one point will produce slightly better results in improving the quality of governance in emerging markets. This is probably caused by the fact that while it is rather about improving the ethical and finer elements of functioning governance in developed countries, it is still about the fundamental issue of

governmental functions in developing countries (Laboutková and Bednářová, 2013a).

Robust links exist between the total value of globalization KOF for developing countries (and its three sub-indices: EG_KOF, SG_KOF and PG_KOF) and the global competitiveness of these economies. As it turns out, social globalization especially contributes to the growth of the global competitiveness of developing countries the most intensively (Bednářová, 2013).

Moderately correlated relationships have been found between the EG_KOF and EFI as well as between the EG_KOF and CPI in the developed and developing markets. It has been shown that an increase in the EG_KOF by one point will produce slightly better results in improving the level of economic freedom in emerging markets. Conversely in the case of developing countries it has been shown that an increase in the economic sub-indicator of globalization by one point will produce slightly worse results in improving the level of corruption in emerging markets. This is probably caused by differences in attitudes towards corrupt behavior across the world. The developed countries are based on the principles laid down by standards of ethical universalism, where each citizen is treated equally by the state and all public funds are distributed fairly. In developing countries, where the norm is particularism (individuals are not treated as autonomous, but by their links to the ruling elite or according to that person's social or political group), corruption, as the principal representative of poor governance, is not a failure of the individual but of the entire system. The involvement of these countries in global economic relations does not have the necessary power to change the local climate of corruption (Laboutková, 2014). Another moderately correlated relationship has been proved between SG_KOF and EFI in developing countries. In most cases emerging countries achieve worse results in various areas of economic freedom than the global average, and so, any improvement in the parameters in the sub-index of social globalization might contribute to greater economic freedom (Bednářová, 2014).

A statistically significant link has not been demonstrated between KOF, EG_KOF, SG_KOF and EDBI for developed countries; between EG_KOF and GCIs for developed countries, SG_KOF and EFI for developed countries and between PG_KOF and all of the indicators of institutional quality for both groups of countries except GCI. The business environment in developed market economies as well as their global competitiveness is probably the result of long-term development, the political environment, institutional quality and the technological and innovative processes inside the countries rather than a direct reflection of the globalization process (Bednářová, Laboutková 2013b).

The degree of political involvement on the world political scene has no effect on the institutional quality inside the economies. This may be a result of the fact that the coefficient of political globalization index is merely the quantification of embassies, International Treaties, and participations in multinational organizations and does not reflect the activity of these countries and their position or influence in these

organizations. Furthermore, it was shown that political globalization in developing countries has a negative impact on the quality of governance: these countries have a chronic shortage of educated elite. Having every educated citizen abroad, whether in embassies or international institutions weakens the internal public policy (Laboutková, Bednářová 2013a).

iv. Conclusion

This paper is focused on the question of the links between institutional quality (in terms of quality of life, quality of governance, and business conditions) and globalization (measured by the components of the KOF globalization index). It is possible to conclude from the results achieved in the study that globalization remains firstly, a very strong and powerful economic phenomenon. Its positive effects on social development, its force to promote better institutions of all kinds, and its assumed ability to raise people from poverty and misery have still remained weak. In most cases emerging countries achieve worse results in various areas of institutional quality than the developed market economies, and so, any improvement in the parameters in the sub-index of economic or social globalization might contribute to improvement of the quality of institutions. Political globalization expressed by the number of embassies and participation in multinational organizations still says nothing about the activity of these countries and their position or influence in these organizations. It should be stressed that the conclusions provided an important base for future research. One of the possible challenges for future research should be identification of the direction of the causality between institutional quality and globalization (in other words, whether the progress in globalization is supporting human development and institutional quality, or vice versa).

Acknowledgment

This article was created as a research project at the Faculty of Economics TUL years 2014-2016 funded from institutional support for long-term strategic development research organizations.

References

- [1] J. Aron, "Growth and Institutions: A Review of the Evidence." World Bank Research Observer 15(1), pp. 99-135, 2000.
- [2] P. Bednářová, Š. Laboutková, "Ease of Doing Business and Globalization – Linkages between Both in Developed Market Economies and Developing Countries." In The 7th International Days of Statistics and Economics, 1. Ed. Prague: University of Economics, 2013 b., pp. 88 – 98.
- [3] P. Bednářová, "Global Competitiveness of Developed Market Economies and its Relation to Dimensions of Globalization." In Proceedings of the 11th International Conference Liberec Economic Forum, 1. Ed. Liberec: Technical University of Liberec, 2013, pp. 27 – 35.
- [4] P. Bednářová, "Does Economic Freedom Depend on Degree of Globalization?" In Proceedings of the 12th International Conference Economic Policy in the European Union Member Countries, 1. Ed.. Opava: Silesian University in Opava, 2014.

- [5] C. Bjørnskov, "Globalization and Economic Freedom: New Evidence." The 2nd Danish International Economics Workshop, University of Aarhus, 2006.
- [6] A. Borrmann, M. Busse and S. Neuhaus, "Institutional Quality and the Gains from Trade." *Kyklos* 59(3), 2006, pp. 345-368.
- [7] A. Dreher, M. Gassebner and L. H. R. Siemers, "Globalization, Economic Freedom and Human Rights." CESifo Working Paper No. 3228, 2010.
- [8] B. Ekman, "Globalization and Health: An Empirical Analysis Using Panel Data." Lund: Lund University, 2003.
- [9] J. D. Gwartney, R. G. Holcome and A. Lawson, "Economic Freedom, Institutional Quality, and Cross-country Differences in Income and Growth." *Cato Journal* 24, 2004, pp. 205-233.
- [10] J. P. Chousa, H. A. Khan, D. Melikyan and A. Tamazian, "Assessing Institutional Efficiency, Growth and Integration." (CIRJE-F-285), 2004.
- [11] R. C. Kormendi, P. G. Meguire, "Macroeconomic Determinants of Growth: Cross-country Evidence." *Journal of Monetary Economics* 16(2), 1985, pp. 141-163.
- [12] Š. Laboutková, P. Bednářová and A. Kocourek, "An Analytic Study on Internal Linkages between Human Development and Globalization." *Journal of Modern Accounting and Auditing*. 1. ed. El Monte, CA, USA: David Publishing, vol. 8, issue 12, 2012, pp. 1823 – 1837.
- [13] Š. Laboutková, P. Bednářová, "Quality of Governance in Developing and Developed Countries and Its Relation to the Dimensions of Globalization." In *Proceedings of the 11th International Economic Policy in the European Union Member Countries*. 1. ed. Ostrava: Technical University of Ostrava, 2013a .
- [14] Š. Laboutková, "Relation between Corruption in Developed and Developing Countries and the Level of Their Globalization." In *Proceedings of the 12th International Conference Economic Policy in the European Union Member Countries*. Opava: Silesian University in Opava, 2014.
- [15] M. Sameti, "Globalization and Size of Government Economic Activities." Isfahan: Isfahan University, 2004.
- [16] G. W. Scully, "The Institutional Framework and Economic Development." *Journal of Political Economy* 96(3), 1988, pp. 652-62.
- [17] M. C. Tsai, "Does Globalization Affect Human Well-Being?" *Social Indicators Research*, 81(1), 2007, pp. 103-126.

About Author (s):

Šárka Laboutková, associate professor, Ph.D.

Department of Economics, Faculty of Economics, Technical University in Liberec
Liberec
Czech Republic

Pavla Bednářová, assistant professor, Ph.D.

Department of Economics, Faculty of Economics, Technical University in Liberec
Liberec
Czech Republic