ARTIFICIAL INTELLIGENCE IN CULTURE AND CORRUPTION ANALYSES AS INFLUENTAL FACTORS ON ECONOMIC DEVELOPMENT

Boris Kuzman[1]

Institute of Agricultural Economics, Belgrade, Serbia

Biljana Petkovic[2]

Faculty of Economics, University of Kragujevac, Kragujevac, Serbia

Dalibor Petkovic[3]

University of Niš, Pedagogical Faculty in Vranje, Serbia

MOTIVATION

Causality between the influential effects of culture and corruption by means of incorporating economic growth and human development is an important topic in economic development. Determination of causality between the influential effects of culture and corruption on economic development by means of incorporating economic growth and human development. Despite the fact that culture and corruption in addition to development were substantially tested in current years, evaluating these variables and detecting how they could affect each other is of particular interest.

RESEARCH QUESTION

Cultural components of corruption may be explored. On account that there's no incorporation of those variables and cultural factors, the paper may even make contributions to existing economic development works. Figuring out the extent these variables influence the economic development of emerging economies may likewise be a benefit to official representatives and policymakers. Besides that, the awareness of the interrelation of culture and corruption can have a beneficial effect on putting the right legislations into place to foster the quality of good institutions.

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[1] Email address: kuzmanboris@yahoo.com

[2] Email address: biljana.p85@gmail.com

[3] Email address: dalibortc@gmail.com

METHODOLOGY

In overall it can be noticed that Economic Development, as the dependent variable, was sub-divided into Economic growth and Human Development. The present research made use of the economic data published on an annual base by the World Bank (2017c) as well as the Human Development Index (UNDP, 2017). The Cultural dimensions found by Hofstede (2010) including Power Distance, Individualism, Maskulinity, Uncertainty Avoidance, Long-term orientation as well as Indulgence are besides corruption the independent variables within this study. Corruption is measured by the Corruption Perception Index (Transparency International, 2016b). The upcoming sub-chapter will elucidate the variables and measures more precisely. Thereof ANN analysis and correlation matrixes are used within this study. The gathered secondary data, retrieved from public organizations comprising the World Bank, the United Nations Development Program, Transparency International as well as Hofstede's Research Centre has been used.

RESULTS

In regard to economic growth and prosperity within the panel, dataset has shown a mean annual per capita GDP (PPP) of about 11.486 $. This seems to be pretty high for emerging economies, but when considering the standard deviation (SD = 9024), a different picture is presented. The average GDP growth of all emerging countries circle around the 3 % mark, but also deviating in about the same height (SD = 3,01). The rate of HDI averages on the 67,5 unit level (out of 100), also showing a divergence of about 11 % (SD = 11,57).

CONTRIBUTION

Figuring out the extent these variables influence the economic development of emerging economies may likewise be a benefit to official representatives and policymakers. It needs to be pointed out that significant correlations are existent among the cultural variables itself, but just on a moderate level (r=0,12<0,5). This is especially important to be aware of possible multi-collinearity issues.

KEY WORDS

Culture, corruption, economic development, artificial intelligence

JEL CLASSIFICATION

012, R53

REFERENCES

1. Abed, G. T., & Gupta, S. (2002). *Governance, Corruption & Economic Performance*. Washington DC: International Monetary Fund.
2. Acemoglu, D. (2008). *Introduction to modern economic growth*. Princeton University Press. Retrieved from https://personalwebs.coloradocollege.edu/~pdearaujo/Introduction%20to%20Modern%205-9%20Acemoglu.pdf
3. Acemoglu, D. (2009). Introduction to Modern Growth. Princeton: Princeton University Press.
4. Aidt, T., Dutta, J., & Sena, V. (2008). Governance regimes, corruption and growth: Theory and evidence. *Journal of Comparative Economics*, 36, 195–220.
5. Al-Hilani, H. (2012). HDI as a Measure of Human Development: A Better Index than the Income Approach? *IOSR Journal of Business and Management*, 2(5), 24–28.
6. Allen, M. P. (2004). *Understanding Regression Analysis*. New York: Plenum Press.
7. Casson, M., & Godley, A. (2000). *Cultural Factors in Economic Growth.* Berlin-Heidelberg: Springer-Verlag.
8. Lucas, R. E. J. (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics*, (22), 3–42.
9. Luthans, F., & Doh, J. P. (2012). *International Management: Culture, Strategy, and Behavior (8th ed.).* New York: McGraw-Hill.
10. Malhotra, N. (2011). *Basic Marketing Research: Integration of Social Medi*a (4th ed.). New Jersey: Prentice Hall.
11. Malhotra, N. K. (2010). *Marketing Research: An Applied Orientation (6th ed.).* New Jersey: Pearson Education.
12. Marx, K. (1867). [Review of Capital: a critique of political economy, by A. Tickell]. *Area,* 25(3), 285–286.
13. Mauro, P. (1995). Corruption and Growth. The Quarterly Journal of Economics, 110(3), 681–712. https://doi.org/10.2307/2946696
14. McGillivray, M. (1991). The human development index: yet another redundant composite development indicator? *World Development*, 19(10), 1461–1468.
15. McGranahan, D. V., Richaud-Proust, C., Sovani, N. V., & Subramanian, M. (1972). *Contents and Measurements of Socio-economic Development*. New York: Praeger.
16. Méndez, F., & Sepúlveda, F. (2006). Corruption, growth and political regimes: Cross country evidence. *European Journal of Political Economy,* 22(1), 82–98. https://doi.org/10.1016/j.ejpoleco.2005.04.005
17. Merriam Webster. (2016). merriam-webster.com. Retrieved 07 10, 2016, from http://www.merriam-webster.com/dictionary/culture
18. Minier, J. (2005). Nonlinearities and Robustness in Growth Regressions. *Social Science Research Network.* Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=813132
19. Mitchell, M. L., & Jolley, J. M. (2010). *Research Design Explained (7th ed.).* Belmont: Wadsworth Publishing.

20. Mo, P. H. (2001). Corruption and Economic Growth. *Journal of Comparative Economics*, 29(1), 66–79. https://doi.org/10.1006/jcec.2000.1703
21. Morris, M. D., & Council, O. D. (1979). *Measuring the condition of the world's poor: the physical quality of life index (Vol. 42).* New York: Pergamon Press, for the Overseas Development Council.
22. Murdoch, A. (2009). How much culture is there in corruption? Some thoughts on transformation-cum-collective culture shock in post-communist Poland. *Journal of Intercultural Management,* 1(1), 42–63.
23. Nardon, L., & Steers, R. M. (2009). The culture theory jungle: divergence and convergence in models of national culture. In R. S. Bhagat & R. M. Steers (Eds.), *Cambridge Handbook of Culture, Organizations, and Work* (pp. 3–22). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511581151.002