

Investigating the Effect of Oil Revenues with Emphasis on Institutional Quality Index on Economic Growth in a Selection of Developing Countries: A Panel Vector Autoregression Approach

*Azadeh Valihi**

*Seyed Nematollah Mousavi***

*Abbas Aminifard****

DOI: 10.22096/ESP.2023.537636.1565

Received Date: 29/09/2021 - Accepted Date: 29/01/2022

Abstract

Because resources, including natural resources, play an important role in economic growth, with speedy economic and population growth, economic growth is facing a scarcity of resources worldwide. Resource-economy coordination has become every government's main focus in reaching strategic development goals in countries that are on the path of rapid economic development. And since most developing countries are dependent on oil revenues and their economic growth is affected by this income, to reduce this dependence, it is necessary to attract foreign investment and receive and transfer technology and knowledge from developed countries. This will be possible due to security and interaction in countries with better institutional quality. The purpose of this study is to inspect the effect of oil dependence and institutional quality on economic growth with the Panel VAR approach. In this regard, 10 developing countries between the years 1995-2019 have been selected. The results of the research with reaction functions tells us that the shock of renting crude oil in developing countries affects economic growth positively at first and when reaching its final stages this trend becomes

* PhD Student in Oil and Gas Economics, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran.

Email: azad.valihi@gmail.com

** Associate Professor, Department of Economics, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran. (Corresponding Author)

Email: seyed_1976mo@yahoo.com

*** Assistant Professor, Department of Economics, Shiraz Branch, Islamic Azad University, Shiraz, Iran.

Email: aaminifard@yahoo.com



negative. The oil share shock is positive at first and later on has a negative effect on economic growth. In the end the shock from the institutional quality index economic growth in developing countries is negative in the primary stages and turns positive later on.

Keywords: Institutional Quality; Economic Growth; Oil Dependence; Oil Rent; Panel Vector Autoregression.

JEL Classification: C33,O13,Q38

Bibliography

- Ahmad Pourkacho, Ali & Dahmardeh, Nazar. "The effect of financial development and institutional quality on economic growth in Member countries of the Organization for Economic Cooperation and Development". *Economy and Regional Development*. 26. No 17 (2019). 33-62. [In Persian]
- Ahmadi, Ali, Ahmadi Jashfaqani, Hossein Ali & Abolhassani Hastiani, Asghar. "The Impact of Credit Risk on the Banking System's Performance: (PANEL VAR Approach)". *Financial Economics*. 10. No 34(2016): 131-152. [In Persian]
- Ali, Saban, Murshed, Syed Mansoob, Papyrakis, Elissaios. "Happiness and the resource curse". *Happiness Studies* 21. No. 2 (2020): 437-464.
- Arin, Kerim Peren, Braunfels, Elias. "The resource curse revisited: A Bayesian model averaging approach". *Energy Economics*. No. 70 (2018): 170-178.
- Auty, Richard. *Sustaining Development in Mineral Economics: The Resource Curse Thesis*. London. Routledge, 1993.
- Bjorvatn, Kjetil, Farzanegan, Mohammad Reza, Schneider, Friedrich. "Resource curse and power balance: Evidence from oil-rich countries". *World Development*. No. 40 (2012). 1308-1316.
- Blanchard, Oiver Jean. and Nobuhiro, Kiyotaki. "Monopolistic Competition and the Effects of Aggregate Demand". *American Economic Review* 77. No. 4 (1987): 647-666.
- Boschini, Anne, Pettersson, Jan, Roine, Jesper. "The resource curse and its potential reversal". *World Development*. No. 43 (2013): 19-41.
- Clootens, Nicolas, Kirat, Djamel. "Threshold regressions for the resource curse". *Environment and Development Economics* 25. No. 6 (2020):583-610.
- Fathollahi, Jamal & Najafi, Seyed Mohammad Bagher. "An Explanatory Pattern of the New Institutional Economics on the Influences of Oil Income on the Iranian Economy". *International Political Economy Studies* 3. No 2 (2020). 629-654. [In Persian]
- Fischer, Stanley. "Capital Accumulation on the Transition Path in a Monetary Optimizing Model". *Econometrica* 47. No. 6 (1979): 1433-1439.
- Fischer, Stanley. "Long-Term Contracts, Rational Expectations, and the Optimal Money Supply Rule." *Journal of Political Economy* 85. No. 1 (1977): 191-205.
- Friedman, Milton. "Nobel Lecture: Inflation and Unemployment". *Journal of Political Economy* 85. No. 3 (1977): 451-72.
- Friedman, Milton. "The Role of Monetary Policy", *American Economic Review* 58. No.1 (1968): 1-17.
- Gasmi, Farid & Laourari, Imene. "Has Algeria Suffered from the Dutch Disease? Evidence from 1960-2016 Data". *EconPapers* 127. No.6 (2017):1029-1058.
- Granger, Clive. "Investigating Causal Relations by Econometric Models and Cross-Spectral Methods". *Econometrica* 37. No.3 (1969): 424-438. <https://doi.org/10.2307/1912791>

- Gutawa, Taufiq. "Developing Public Sector Growth through E-Government and Democracy a Detailed Analysis". *Journal of Enterprise Business Management* (<http://ijaict.com/jebm.html>). JEBM 1. No. 1 (2020).
- Hilmawan, Rian and Jeremy Clark. "Resource dependence and the causes of local economic growth: An empirical investigation". *Australian Journal of Agricultural and Resource Economics* 65. No. 3 (2021): 596-626.
- Hilmawan, Rian, Clark, Jeremy. "An investigation of the resource curse in Indonesia". *Resource Policy* 64 (2019): 101483.
- Kolstad, Ivar, Wiig, Arne "It's the Rents, Stupid! The Political Economy of the Resource Curse". *Energy Policy* 37. No. 12 (2009): 5317-5325.
- Kurtz, Marcus J, Brooks, Sarah M. "Conditioning the resources curse: Globalization, human capital and growth in oil-rich nations". *Comparative Political Studies* 44. No.6 (2011): 747-770.
- Lucas, Robert E. "Expectations and the Neutrality of Money". *Journal of Economic Theory* 4. No. 1(1972): 103-124.
- Mladenovic, Z. "Relationship between Inflation and Inflation Uncertainty: The Case of Serbia". *Yugoslav Journal on Operational Research* 19. No.1 (2007): 2334-6043
- Moss, Todd, Young, Lauren. "Saving Ghana from Its Oil: The Case for Direct Cash". *Center for Global Development*, Washington D.C. (2009)
- Moss, Todd. "Oil to Cash: Fighting the Resource Curse through Cash Transfers". *Center for Global Development*. Washington D.C (2015).
- Nademi, Younes. "The resource curse and income inequality in Iran". *Quality & Quantity: International Journal of Methodology* 52. No.3 (2018): 1159-1172.
- Namazi, Mehdi, Mohammadi, Emran. "Natural resource dependence and economic growth: A TOPSIS/DEA analysis of innovation efficiency". *Resources Policy* 59 (2018): 544-552.
- Parkin, Micheal. "The Output-Inflation Tradeoff when Prices are Costly to Change". *Journal of Political Economy* 94. No.1 (1986): 200-224.
- Pouokam, Nathalie. "Sharing Resource Wealth Inclusively Within and Across Generations". *International Monetary Fund* 2021.No. 097 (2021).
- Raifu Isiaka Akande, Alarudeen Aminu & Abiodun O. Folawewo. "Investigating the relationship between changes in oil prices and unemployment rate in Nigeria: linear and nonlinear autoregressive distributed lag approaches". *Future Business Journal* 6.No. 28 (2020): 1-18.
- Sadik-Zada, Elkha, Richard, Loewenstein, Wilhelm, Hasanli, Yadulla. "Production linkages and dynamic fiscal employment effects of the extractive industries: Input-output and nonlinear ARDL analyses of Azerbaijan. Miner". *Mineral Economics* 34, No.1 (2021): 3-18.
- Sadik-Zada, Elkha, Richard. "Addressing the growth and employment effects of the extractive industries: White and black box illustrations from Kazakhstan". *Post-Communist Economies* 33, No.4 (2020): 402-434.
- Sadik-Zada, Elkha, Richard. "Distributional bargaining and the speed of the structural change in the petroleum exporting labour-surplus economies". *European Journal of Development Research* 32, No.1 (2020): 51-98.
- Sadik-Zada, Elkhan Richard. Loewenstein, Wilhelm. "A note on revenue distribution patterns and rent seeking incentive". *International Journal of Energy Economics and Policy* 8. No.2 (2018): 196-204.

- Siakwah, Pius. "Actors, networks, and globalized assemblages: Rethinking oil, the environment and conflict in Ghana". *Energy Research & Social Science* 38. No.2 (2018): 68–76.
- Siakwah, Pius. "Are natural resource windfalls a blessing or a curse in democratic settings? Globalized assemblages and the problematic impacts of oil on Ghana's development". *Resources Policy* 52. No. c (2017): 122–133.
- Sim, Piseth. "Natural resources and economic growth: The conditional curse". *The International Journal of Economic Policy Studies* 8 (2013). 113–145.
- Sobhi, Samin, Sameti, Morteza, Ghobadi, Sara, Sameti, Majid. "The Influence of the Effective Shocks on Economic Growth in Iran with the Emphasis on Institutional Variables". *Quarterly Journal & Economical Modeling*. 14. No 52(2021). 53-78. [In Persian]
- Taylor, J. "Estimation and Control of a Macroeconomic Model with Rational Expectations." *Econometrica* 47. No 5 (1979): 1267–1286.
- Taylor, John. "Aggregate Dynamics and Staggered Contracts." *Journal of Political Economy* 88. No. 1 (1980): 1-23.
- Temple, Jonathan. "Inflation and Growth: Stories Short and Tall." *Journal of Economic Surveys* 14. No. 4(2000): 395– 426.
- Tobin, James. "Money and Economic Growth". *Econometrica* 33.No.4 (1965): 671–684.
- Wang, Rong, Zameer, Hashim, Feng, Yue, Jiao, Zhilun, Xu, Li, Gedikli, Ayfer. "Revisiting Chinese resource curse hypothesis based on spatial spillover effect: A fresh evidence". *Resources Policy. Elsevier* 66(c) (2019).
- Wang, Ying, Chen, Xiangyuan. "Natural resource endowment and ecological efficiency in China: Revisiting resource curse in the context of ecological efficiency". *Resources Policy. Elsevier* 66(c) (2020).
- Wright, Gavin, Czelusta, Jesse. "Why economies slow: the myth of the resource curse". *Challenge Taylor & Francis Journals* 47. No.2 (2004): 6–38.
- Xie Xuan, Ke Li, Zhiqiang Liu and Hongshan Ai. "Curse or blessing: how does natural resource dependence affect city-level economic development in China?" *Australian Journal of Agricultural and Resource Economics* 65. No. 2 (2021): 413-448.
- Xie, Rongwei, Zhai, Xiaoying. "Is financial development hampering or improving the resource curse? New evidence from China". *Resources Policy, Elsevier* 67(C) (2020).
- Zhang, Zhiwei, Wang, Zhen. "The Determinants of Enterprise Capital Structure and Its Dynamic Influence—Based on Panel VAR Model". *Journal of Service Science and Management* 12. No.7 (2019): 899-908.