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The effects of Natural Resources Rents and Good Governance on Happiness in Selected Countries: A Generalized Method of Moments approach

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EXTENDED ABSTRACT

INTRODUCTION

The economics of welfare and happiness is one of the most prominent and important domains in economic literature which, in recent years, has been greatly attended to by many economists. With the advent of the economics of happiness in economic literature, the necessity to investigate how political and economic factors influence happiness has proved to be more and more critical. The present study investigates the effects of natural resource rents and good governance on the happiness index of resource rich countries. The test for interaction effect of good governance and natural resource rents on the happiness level of the selected countries which rely on natural resource revenues, is the pivotal issue in this research which has not been discussed in previous studies.

METHODOLOGY

The interaction effect of natural resource rents and good governance index on happiness in 66 countries having a natural resource rent of over 5 percent of gross domestic production from 2005 to 2018 has been estimated using panel data and the generalized method of moments (GMM). To ensure the appropriateness of using this method for estimating the empirical model, two tests are presented to investigate the validity and accuracy of instrumental variables. The first test is the Sargan test with a null hypothesis representing the uncorrelatedness between the instruments and the error term. The

statistical value of the Sargan test in the three applied models in this research is greater than 0.05. As a result, the null hypothesis of no correlation between instruments and error terms cannot be rejected. The second test is the test of first-order autocorrelation AR(1) and second-order autocorrelation AR(2) in error terms in a way that the null hypothesis representing the absence of first-order autocorrelation must be rejected but the absence of second-order serial autocorrelation must not be rejected. The test results of the three models used in this study show that the applied instrumental variables are independent of the error term and enjoy sufficient validity for estimating the models.

FINDINGS

According to the results of the estimation of the models, natural resource rents have a negative and statistically significant impact on happiness while good governance have a positive and significant impact on happiness. Additionally, the interaction effect of natural resource rents and good governance on happiness index is negative and significant. The negative impact of the interaction term between natural resource rents and good governance on happiness leads to the weakening of the positive effects of good governance on happiness.

CONCLUSION

Natural resource rich countries earn a lot by selling their resources. It is expected that having these great levels of revenue, resource rich countries experience economic development and growth and consequently high levels of happiness and welfare, but in practice, they suffer from low degrees of happiness and welfare. This is because the natural resources and the misuse of their revenues lead to a reduction in governance quality. On the other hand, the weakness of institutional indexes creates a negative effect on happiness and growth which makes the windfall of natural resource revenues to become a curse for resource dependent countries. The lack of structural-institutional frameworks in most of the countries studied, the increase of natural resources and the misuse of resource rents by different groups of rent seekers are followed by a great decline in equality, welfare and happiness. Inflation and unemployment have significant negative effects on the happiness index. An increase in inflation and unemployment and their consequent reduction in purchasing power leads to a decrease in happiness levels. The coefficient of the human development index is significant and positive and as a result, the

improvement of the quality of the human development index, which leads to a rise in health, education, revenue and life standards, has a positive effect on happiness. Additionally, with regard to the negative effect of natural resource rents on happiness, some measures including natural resource management, implementing instruments like a Sovereign Wealth Fund, using the revenue of natural resources to invest in productive economic sectors and decreasing the share of resource revenue in the current government budget can decline rent-seeking activities and prevent their negative effects on happiness.

Reference

- Ahmadov, I., Mammadov, J., & Aslanli, K. (2013). Assessment of Institutional Quality in Resource-Rich Caspian Basin Countries. Available at SSRN 2274813: <https://ssrn.com/abstract=2274813> or <http://dx.doi.org/10.2139/ssrn.2274813>.
- Alexeev, M. & R. Conrad. (2011). The Natural Resource Curse and Economic Transition. *Economic Systems*. 35(4): 445–461.
- Argyle, M. (2005). *Happiness Psychology*. (M. Gohari, H. Taherneshatdost, F. Bahrami, H. Palahang, & M. Kalantari, Trans.) Isfahan, ISF: Jahad University (Original work published 2001) (in Persian).
- Aristotle, (1979). *Aristotle's politics* (H. Enayat Trans) Tehran. Teh: Amir Kabir, Pocket Books (Original work published 322 - 384 BC) (in Persian).
- Auty, R. M. (2001). *Resource abundance and economic development*. Oxford University Press, Oxford and New York.
- Behboudi, D., Asgharpour, H., & Mohammadlou, N. (2012). The Role of Institutional Quality on Relationship between Resource Abundance and Economic Growth in Oil Economies. *Quarterly Journal of Economic Research and Policies*, 20 (62), 95-116 (in Persian). URL: <http://qjerp.ir/article-1-390-en.html>
- Bravo-Ortega, C. & J. De Gregorio (2005), The relative richness of the poor? Natural resources, human capital and economic growth, The World Bank, Policy Research Working Paper Series No. 3484.
- Bulte, E. H., Damania, R. & Deacon, R.T. (2003). Resource Abundance, Poverty and Development *Departmental Working Papers*, Department of Economics. UCSB, Uc Santa. Available at: <https://escholarship.org/uc/item/66z854gv>.

- Busse, M. & Groning, S. (2011). The Resource Curse Revisited: Governance and Natural Resources. *Springer* 154:1-20, Available at: <https://www.jstor.org/stable/23326390>.
- Carbonnier, G. Wagner, N., & Brugger, F. (2011). Oil, Gas and Minerals: The Impact of Resource-Dependence and Governance on Sustainable Development. The Centre on Conflict, Development and Peace building. CCDP Working Paper. (Geneva: The Graduate Institute). Available at: <http://www.graduateinstitute.ch/ccdp>.
- Clark, A., Frijters, P. & Shields, M. A. (2008). Relative Income, Happiness, and Utility: An Explanation For The Easterlin Paradox And Other Puzzles". *Journal of Economic Literature*, 46(1), 95-144.
- Debanath, R.M. & Shankar, R. (2014). Does good governance enhance Happiness: a cross nation study. *Social Indicators Research*, 116: 235-253.
- Dehqani, H., Akbarzadeh, F., Khoshfar, Gh. R., & Rabbani, R. (2011). A Study of The Impacts of Economic Capital on the Youth Happiness. *Quarterly Journal Strategy for Cultural*, 4(12-13),159-182 (in Persian).
- Di Tella, R.& Mac Culloch, R.J. (2006). Some Uses of Happiness Data in Economics. *Journal of Economic Perspectives*. 20(1): 25-46.
- Dizaji, S.F., (2012), Exports, government size and economic growth (evidence from Iran as a developing oil-export based economy), International institute of Social Studies of Erasmus University Rotterdam, working paper, No. 535.
- Dizaji, S.F. (2014). The effects of oil shocks on government expenditures and government revenues nexus (with an application to Iran's sanctions), *Economic Modelling*, 40: 299-313.
- Dizaji, S.F. (2016). Oil rents, political institutions, and income inequality in Iran. In: Farzanegan, M.R., Alaedini, P. (Eds). *Economic Welfare and Income Inequality in Iran: Developments since the Revolution*. Palgrave Macmillan/Springer Nature: 85-109.
- Dizaji, S.F. (2019). The potential impact of oil sanctions on military spending and democracy in the Middle East, International institute of Social Studies of Erasmus University Rotterdam, working paper, No. 644.
- Dizaji, S.F., Farzanegan, M.R., Naghavi, A. (2016). Political institutions and government spending behavior: theory and evidence from Iran. *International Tax and Public Finance*, 23, 522–549.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. *Nations and households in economic growth*. Academic Press, New York, 89-125.

- Easterlin, R. (1995). Will Raising the Income of All Increase the Happiness of All? *Journal of Economic Behavior and Organization*. 27(1), 35-48.
- Easterlin, R.A. (2003). Explaining happiness, *Proceedings of the National Academy of Sciences*. 100 (19): 11176-11183.
- Eddington, N. & Shuman, R. (2004). Subjective well-being. Presented by Continuity Psychology Education. *The Journal of Personality & Social Psychology*, 34(8), 41-57.
- Ebrahimi, M., & Salarian, M. (2009). An investigation of curse phenomenon of natural resources and oil-exporting countries and the influence of presence in OPEC on the economic growth of its member countries. *Quarterly Journal of Quantitative Economics (JQE)*, 6(1), 77-100 (in Persian).
- Eskandari, J. (2010). *Comparison of the Effects of Unemployment and Inflation on Happiness* (Master's thesis), Faculty of Economics, Management and Administrative Sciences, Semnan University. (in Persian).
- Eysenck, M. W. (1996). *Happiness: Facts and Myths*. (M. Firoozbakht & Kh. Beygi Trans) Tehran, Teh: Badr, (Original work published 1990) (in Persian).
- Headey, B. & Wearing, A. (1992). *Understanding happiness: A theory of subjective well-being*. Melbourne, Australia: Longman Cheshire.
- Helliwell, J. & Huang, H. (2008). How's your government? International evidence linking good government and well-being. *British Journal of Political Science*, Cambridge University Press, 38(4): 595–619.
- Helliwell, J.F., Huang, H. Grover, Sh. & Wang, Sh. (2018). Empirical linkages between good governance and national well-being. *Journal of Comparative Economics*, 46 (4): 1332–1346.
- Hesabi, H., (2016). *Investigating the Effect of Environmental Quality on Happiness* (Master's thesis), Faculty of Economics, Allameh Tabataba'i University (in Persian).
- Ho, L.S., & Ng., Y.K. (2016). Happiness and government: The role of public spending and public governance. (CPPS Working Papers Series no.197). Retrieved from Lingnan University website: <http://commons.ln.edu.hk/cppswp/97>.
- Huang, C. J. (2016). The Impact of Governance on Happiness: Evidence from Quantile Regressions. World Academy of Science, Engineering and Technology, *International Journal of Economics and Management Engineering*. 10 (7).

- Kaufmann, D. & Kraay, A. (2007). Governance Indicators: Where Are We, Where Should We Be Going? Global governance Group, Policy Research Working Papers, No 4370, Washington DC: World Bank.
- Kesebir, P., & Diener, E.D. (2008). In Pursuit of Happiness: Empirical Answers to Philosophical Questions. *Perspectives on Psychological Science*. London: Allen Lane. 3.(2): 117-125.
- Khorsandi, M., & Alibabaei, N. (2016). Which is Worse, Unemployment or Inflation: The Comparison of the Effect of Unemployment and Inflation on Happiness. *Journal of Economic Research*, 16(63), 1-24 (in Persian).
- Kolstad, I., & Wiig, A. (2009). It's the rents, stupid! The political economy of the resource curse. *Energy Policy*. 37(12): 5317-5325.
- Koromi Nouri, R., Mocrie, A., Mohammadifar, M., & Yazdani, E. (2002) The Study of Happiness & Well Being and The Role of Different Factors for Them Among Students of Tehran University, *Journal of Psychology and Education*, 32(1) 3-41 (in Persian).
- Leamer, E., Maul, H., Rodrigues, S., & Schott, P. (1999). Does natural resource abundance increase Latin American income inequality? *Journal of Development Economics*. 159: 3-42.
- komijani, A., & Salatin, P. (2009) . Effects of Good Governance on Economic Growth in the Selected Countries of OPEC and OECD. *Quarterly Journal of Economical Modeling*, 2(6), 1-24 (in Persian).
- Mauro, P. (1995). Corruption and growth. *Quarterly Journal of Economics*, 110: 681–712.
- May, D. (2007). Determinants of Well-Being. Newfoundland and Labrador Statistics Agency. www.budgaultonphotography.com.
- Mehrara, M., Abrishami, H., & Zamanzadeh Nasr Abadi, H. (2010). Cursed by resources or institutions? The Case Study: Oil exporting countries. *Economic Research Review*, 10(3), 205-223 (in Persian).
- Mehrara, M. & Asadian, Z. (2009). The effect of good governance on direct foreign investment in countries with average revenues, *International Economics Studies*, 20(35), 1-20 (in Persian).
- Moeinifard, M., & Mehrara, M. (2015). Effect of Abundance of Natural Resources on Governance Quality in Developing Countries. *Journal of Economic Development Policy*, 3(4), 9-32 (in Persian).
- Monsef, A., Mozghan Moalemi, M., Biyabani, J., Nejati, M., & Taherizadeh, J. (2019). Investigating Economic Factors Affecting Happiness in Selected Countries: Panel Threshold Regression Approach. *Quality*

- journal of: Economic Growth and Development Research*, 9(36), 15-24 (in Persian).
- Naseri, A. R, Dizaji, S.F., & Poursalimi, H. R. (2018). Control of natural resource rents efficiency on corruption by good governance indexes. 13(55), 107-132 (in Persian).
- Izadkhasti, H., dadgar, Y., & beygi, P. (2022). Investigating the Simultaneous Impact of Institutional Quality and Tax Evasion on the Performance of the Tax System in Selected Mena Countries. *Quarterly Journal of Quantitative Economics (JQE)*, 18(4), 125-158. doi: 10.22055/jqe.2021.31807.2181 [In Persian]
- Ogundiya, I.S. (2010). Democracy and Good Governance: Nigeria's Dilemma. *African Journal of Political Science and International Relations*. 4(6), 201-208.
- Ott, J. C. (2005). Level and equality of happiness in nations: Does greater happiness of a greater number imply greater inequality in happiness? *Journal of Happiness Studies*, 6(4).
- Ott, J. C. (2010). Good governance and happiness in nation: Technical quality precedes democracy and quality beats size. *Journal of Happiness Studies*, 11(3), 353–368.
- Ott. J. C. (2011). Government and Happiness in 130 Nations: Good Governance Fosters Higher Level and More Equality of Happiness. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*. 102 (1), 3-22.
- Rousseau, J. B. G. (2009). *Essays on The Economics of Happiness*. (Ph.D. Dissertation) University of Michigan, Michigan, The United States.
- Sachs, J. D. & Warner, A. M. (1995). *Natural resource abundance and economic growth*. Development Discussion. Paper No. 517a. Harvard Institute for International Development, Harvard University.
- Sachs, J.D., & Warner, A.M. (2001). Natural resources and economic development: the curse of natural resources. *European Economic Review*. 45(4-6): 827-838.
- Suh, M. & Oishi, Sh. (2002). Subjective Well-Bing Across Culture. *Online reading in psychology and culture*. 10(1). <https://doi.org/10.9707/2307-0919.1076>.
- Toorani galosalar, N. (2017). *The Interaction of Good Governance and Abundance Natural Resources on Total Factor Productivity in Selected Countries of Petroleum Exporting and developed countries the period*



(1996-2014). (Master's thesis), Faculty of Social Sciences and Economic, Alzahra University (in Persian).

Torvik, R. (2009). Why do some resource- abundant countries succeed while others do not? *Oxford Review of Economic Policy*, 25(2), 241-256.