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INSTITUTIONAL QUALITY AND ECONOMIC GROWTH IN THE NON-EU POST-SOVIET COUNTRIES: DOES ENERGY ABUNDANCE MATTER?

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ABSTRACT. After regaining independence, most of the post-Soviet countries encountered socio-economic difficulties during the transition period. These challenges were also accompanied by low institutional quality. Some of the post-Soviet countries, such as Russia, Turkmenistan, Kazakhstan and Azerbaijan, can be categorized as energy-rich, while the remaining countries are non-rich in terms of energy. Thereby, the aim of this study is twofold: first, to analyze the impact of institutional quality on economic growth in the case of non-EU post-Soviet countries, and second, to determine whether there is any difference in the link of institutional quality and economic growth between the energy-rich and non-rich sample countries. Two-Stage Least Squares reveal a U-shaped association between institutional environment and economic growth. Furthermore, the results suggest that this impact is lower in the energy-rich countries compared with their non-rich counterparts. With regards to the control variables, the findings indicate a positive and statistically significant impact of openness on economic growth. Finally, there is a negative association between the remaining control variables, such as inflation, population growth rate and the dependent variable.

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Introduction

The reasons why some countries have experienced significant economic growth over the years while others have not are a topic of increasing interest among researchers. This disparity in economic growth has prompted scholars to examine the main drivers of growth. There is a widespread belief that the main factors affecting economic growth are human capital, physical capital, natural resources and technological knowledge. However, all these factors are maximized through an effective institutional management, so it is difficult to describe economic growth without considering the institutional framework (Javadov et al., 2022).

Institutional quality refers to the efficiency, transparency, and effectiveness of the institutions that govern a country, including its legal system, regulatory framework, and public sector management. High-quality institutions are thought to promote economic growth by creating a favorable business environment, encouraging investment, and fostering innovation. Conversely, poor institutional quality can impede economic growth by creating barriers to entry, limiting competition, and increasing transaction costs (Kaufmann et al., 2005).

Numerous empirical studies conducted in recent years have revealed that natural resource abundance does not necessarily lead to high economic growth. Even though, natural resource abundance is often associated with a low economic performance (Sachs and Warner, 1995; Gasimov, 2014; Aliyev and Gasimov, 2018). Researchers, such as Bulte et al. (2005a), Isham et al. (2005), Brunnschweiler and Bulte (2008), and Hartwell (2016a) argue that institutions are the key drivers of the relationship between natural resources and economic growth via political, economic and social channels. Moreover, the relationship between institutional quality and economic growth may vary depending on the resource richness of a country (Sachs and Warner, 1995). Resource-rich countries can potentially benefit from natural resource rents but they also face challenges associated with the so-called "resource curse" such as corruption, rent-seeking, and a lack of economic diversification (Ross, 1999).

With the collapse of the Soviet Union in 1991, fifteen republics regained their independency. Most of these countries faced serious socio-economic and political challenges during the transition period. However, Baltic countries, such as Latvia, Lithuania and Estonia underwent smoother transition to a market economy. Owning energy resources created additional opportunities for Azerbaijan, Kazakhstan, Turkmenistan and Russia in overcoming socio-economic difficulties. Oil and gas exports have played a crucial role in the economies of these countries. Russia's export heavily relies on oil and gas, and accounted for 60% of its total exports in 2020. Kazakhstan and Azerbaijan are also highly dependent on oil and gas exports accounting for 70% and 92% of their total exports, respectively, in the same year. Turkmenistan's economy is similarly dependent on gas exports, which constitutes 88% of the country's total exports (World Bank, 2021).

This study aims to examine the impact of institutional quality on economic growth in the non-EU post-Soviet countries. Moreover, the study will investigate whether the relationship between institutional quality and economic growth differs in energy abundant countries compared to the other post-Soviet countries.

This study will use Two-stages Least Squares method to analyze the relationship between institutional quality, natural resource rents on export, and economic growth in post-Soviet countries over the period 1996-2021.

The paper is structured as follows: after this introduction, Section 2 provides a literature review, Section 3 illustrates the dataset and the methodology, Section 4 presents the result of the research and conclusions are drawn in Section 5.

1. Literature review

Generally, the impact of natural resource abundance on economic growth primarily depends on institutional quality. For instance, Sala-i-Martin and Subramanian (2012) point out that oil revenues negatively impact the economic growth in Nigeria due to low institutional quality. According to the authors, long-run economic growth could be achieved by the development and enhancement of public institutions. Similarly, Bulte et al. (2005b), Mehlum et al. (2006), Nguyen et al. (2020) emphasize the critical role of institutions and mention that sustainable economic growth is realizable through adequate institutional quality. This argument is supported by Iimi (2007) in the case of diamond-rich Botswana. The author claims that government effectiveness, high voice and accountability index, and strong anticorruption policy are critical for natural resource management. In the same vein, Acemoglu et al. (2001) maintain that sustainable economic growth in Botswana could be attainable with the help of high institutional quality. In another study, Rahim and Liwan (2012) point out that Malaysia, as a resource-rich country achieved high economic growth through good governance indicators.

Leite and Weidmann (1999) emphasize corruption as the indirect effect of natural resource abundance, which in turn diminishes economic growth. The authors found that corruption depends not only on resource abundance but also on government policies and bureaucracy. Furthermore, Isham et al. (2005) did their research more comprehensively by considering the rule of law, voice and accountability, government effectiveness, and political instability. They indicate a negative correlation between resource abundance and economic growth in the countries with lower institutional quality. Especially, Cockx and Francken (2014) postulated the negative impact of resource abundance on public health spending using a panel dataset from 1995 to 2009. In another major study, Cockx and Francken (2016), Avila and Gonzalez (2018), Vasilyeva et al. (2018), as well as Aliyev (2023) revealed that there is a substantial negative correlation between natural resource wealth and public education spending as well. The authors particularly highlighted the significant role of institutions and government accountability. Moreover, Bhattacharyya and Hodler (2014) showed that resource-rich states with poor political institutions suffer from an underdeveloped financial sector.

There are also multiples studies investigating the impact of natural resource dependence on democracy. Ross (2001) concluded that oil revenue hinders democracy and this negative effect is more severe in poor states than in rich ones. Similarly, the researchers revealed a significant inverse relationship between natural resource dependence and democracy (Andersen and Ross, 2014; Koziuk, 2021). This finding was also supported by Jensen and Wantchekon (2004) in the sample of African countries. However, Haber and Menaldo (2010) found an insignificant relationship between democracy and natural resources in the case of Latin American states. According to Alexeev and Chernyavskiy (2015), the impact of hydrocarbon wealth on the development of Russia's regions is insignificant. Analyzing 14 regions of Kazakhstan, Oskenbayev et al. (2013) claim that although resource overabundance deteriorates institutional quality, it indirectly increases economic performance.

Luong and Weinthal (2010) argued that the ownership structure determines whether resource-rich states suffer from natural resource curse or not for the sample of post-Soviet countries. Especially, a recent study by Hartwell (2016b) emphasized the crucial function of private property and property rights in resource-rich countries. From his perspective, the development of basic institutions in resource-abundant states makes it possible to achieve more environmentally friendly and sustainable economic growth. Similarly, Kronenberg (2004)

found a strong negative association between economic growth and resource abundance in the economic performance of the post-Soviet countries. The negative link is primarily based on the level of corruption and lack of enough attention to the development of the educational system. Studying the post-Soviet states Horváth and Zeynalov (2014) concluded that the natural resource sector could crowd out the manufacturing industry when institutional quality is not on the adequate level.

In contrast, Alexeev and Conrad (2009) reported no detrimental effect of natural resource endowments on the long-term economic growth of Russia, Ukraine, and Belarus. On the other hand, in her paper, Brunnschweiler (2009) demonstrates positive economic effects of natural resources in the post-Soviet and Eastern European countries by emphasizing institutional quality and political system problems. However, the author also claims that oil revenues have a negative impact on corruption rate, human capital formation, and democracy. According to Zeynalov (2013), good institutional governance, such as high political stability, adequate anticorruption policies, and strong public voice could change the negative association between resource abundance and economic growth in the resource-rich post-Soviet states. Supporting this finding Gasimov et al. (2023) identified a U-shaped link between institutional quality and economic growth for the post-Soviet countries.

Moreover, Esanov et al. (2006) hold the view that the revenue from the energy sector decreases the incentive for the implementation of economic reforms in Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan. The researchers also concluded that the waste of energy rents by the ruling elites is commonly observed in the case of sample countries. Analyzing resource-rich transition economies, Pomfret (2012) postulated that the mismanagement of natural resource revenue could lead to widespread corruption and deterioration of the institutional environment.

2. Data and methodology

2.1. Data

This study uses panel data covering 12 post-Soviet countries from 1996 to 2021. We use GDP per capita growth rate as an outcome variable following Butkiewicz and Yanikkaya (2006), Náplava (2018), as well as Gasimov et al. (2023). Institutional quality employed as the main independent variable is obtained by calculating arithmetic mean of the following factors:

1. Voice and Accountability (VOACC) – *“Reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media”*.
2. Political Instability and Violence (POLSTAB) – *“Measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism”*.
3. Government Effectiveness (GOVEFF) – *Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.*
4. Regulatory Quality (REGQUAL)– *“Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development”*.

5. Rule of Law (RULELAW) – “Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence”.

6. Control of Corruption (CONTCOR) – “Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests”. (Kaufmann et al., 2005).

In terms of control variables, we take consumer price index as a proxy for inflation, share of trade in GDP as an openness variable and annual growth rate of population following Kandil (2009), Nguyen et al (2018), Tran et al. (2021), Wandeda et al. (2021), Gasimov et al. (2023), etc. All data is obtained from the World Bank database.

In addition, to the above mentioned variables a dummy variable is employed for denoting the groups, such as the energy rich and non-rich countries. Furthermore, for expressing the impact of energy abundance on the link between institutional quality and economic growth, we include interaction term to the regression as an independent variable. Table 1 summarizes the descriptive statistics on the variables.

Table 1. Descriptive statistics of variables

	GDPGROWTH	INSQUAL2	INSQUAL*RE SRICH	INFL	OPEN	POPGROWTH
Mean	4.572620	0.602864	0.343080	11.34816	89.41801	0.365189
Median	4.779220	0.476100	0.000000	7.691508	88.50294	0.008756
Maximum	33.03049	2.250000	1.500000	168.6202	157.9743	2.684016
Minimum	-14.75897	0.000900	0.000000	-1.403608	29.19230	-3.629546
Std. Dev.	5.615857	0.501238	0.462258	15.12634	28.09446	1.087478
Skewness	0.321021	1.074005	0.898221	5.740737	0.263508	-0.041558
Kurtosis	6.912349	3.423265	2.351737	51.56680	2.410820	2.460349
Jarque-Bera	163.7364	49.92817	37.99429	25943.32	6.509146	3.105531
Probability	0.000000	0.000000	0.000000	0.000000	0.038597	0.211662
Sum	1143.155	150.7161	85.77000	2837.039	22354.50	91.29718
Sum Sq. Dev.	7852.924	62.55860	53.20693	56972.71	196535.4	294.4697
Observations	250	250	250	250	250	250

Note: Results obtained from EViews estimations

2.2. Methodology

For examining the impact of institutional quality on economic growth, we employ Two Stage Least Squares (2SLS) method. This technique is designed to solve the problems, such as omitted variable, simultaneous equations bias, and endogeneity (Angrist and Imbens, 1995). It has also an advantage, such as correcting the errors in both dependent and independent variables (Iyoboyi and Ademola, 2016).

For applying the 2SLS method endogenous and exogenous variable proportion is determined in the first stage. Afterwards, Ordinary Least Square for each of the variables is applied. However, in the second stage, original equation is regressed and 2SLS estimates are obtained from the coefficients of this regression (Amoah, Jehu-Appiah, 2022).

As this research estimates the impact of institutional quality on economic growth, we take institutional quality as the main independent variable. Since the authors, such as Chong (2020), Tran et al. (2021), and Gasimov et al. (2023) found a nonlinear link between institutional environment and economic growth rate, we include square of institutional quality.

After taking the above mentioned facts into account, the model for the regression is defined as:

$$\text{GDPGROWTH} = B_0 + B_1 \text{INSQUAL}_{it}^2 + B_2 \text{INSQUAL} * \text{RESRICH}_{it} + B_3 \text{INF}_{it} + B_4 \text{OPEN}_{it} + B_5 \text{POPGROWTH}_{it} + e_{it}$$

Where i and t subscript the country and time. e_{it} is the error term.

3. Results

In this section, we present the empirical results. Detailed information about the 2SLS regression findings is given on Table 2.

Table 2. 2SLS model results

Independent variables	Coefficients	t-statistic	P-value
INSQUAL ²	2.070288	2.100609	0.0362
INSQUAL*RESRICH	-2.936048	-2.515418	0.0125
INFL	-0.056356	-2.345280	0.0198
OPEN	0.050577	3.288808	0.0012
POPGROWTH	-1.438777	-3.597258	0.0004
C	-1.040301	-0.702990	0.4827
F-statistic: 5.5030034			
Prob (F): 0.000081			
Sum squared resid: 7057.114			

The results of the 2SLS model reveal a nonlinear and statistically significant link between institutional quality and economic growth for the sample of non-EU member post-Soviet countries. In other words, any progress in institutional environment after threshold level will positively contribute to the economic growth. However, for the case of the interaction term (INSQUAL*RESRICH), we found a negative impact of energy abundance on the link between institutional quality and economic growth in the energy-rich countries. In terms of control variables, there is a positive relationship between openness and economic growth. This association is negative in the case of inflation and population growth.

4. Discussion and conclusion

The link between institutional quality and economic growth is one of the most researched topics in the last decades. Despite the vast body of existing literature with conflicting findings, there is a general consensus on the positive impact of institutional quality on economic growth (North, 1990; Aron, 2000). However, it should be also emphasized that a number of scholars revealed a negative impact of energy richness on the association between institutional environment and economic growth. In other words, authors, such as Jensen et al. (2004) and Aliyev et al. (2018) indicate that natural resource abundance has a negative impact on the link between institutional quality and economic growth.

This study examines the association between institutional quality and economic growth in non-EU member post-Soviet countries, specifically Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan from 1996 to 2021. The estimation findings are twofold. Firstly, the results demonstrate a U-shaped relationship between the institutional environment and economic prosperity. In other words, any improvement in institutional quality after the threshold level will positively contribute to the economic growth in the sample countries. However, the findings also reveal that the impact of institutional quality on economic growth is lower in the energy abundant

countries, such as Russia, Turkmenistan, Kazakhstan and Azerbaijan in comparison with non-rich states.

The regression results also met our expectations for the relationship between control variables and economic growth. The findings suggest a positive relationship between openness and dependent variable, while this association is negative for the impact of inflation and population growth rate.

The findings can be used for policy-making purposes in the sample countries. By reducing the energy resource dependency, the countries can increase the positive impact of institutional quality on the factors driving economic growth. Thereby, policymakers should intensify the efforts on upgrading the institutional environment for achieving the desired economic outcomes.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5), 1369-1401.
- Alexeev, M., & Conrad, R. (2009). The elusive curse of oil. *The review of Economics and Statistics*, 91(3), 586-598.
- Aliyev, K. & Gasimov, I.(2018). Testing resource curse triangle hypothesis: Extractive dependence, governance quality and economic growth. *ASERC Journal of Socio-Economic Studies*, 1(1), 3-21.
- Aliyev, K. (2023). Perceived “common” social problems and macroeconomic trends in Azerbaijan. *Journal of International Studies*, 16(1).
- Amoah, C., & Jehu-Appiah, J. (2022). Factors Driving Industrialization in Africa: A Panel Two-Stage Least Square Approach. *Modern Economy*, 13(2), 144-158.
- Andersen, J. J., & Ross, M. L. (2014). The big oil change: A closer look at the Haber–Menaldo analysis. *Comparative Political Studies*, 47(7), 993-1021.
- Angrist, J. D., & Imbens, G. W. (1995). Two-stage least squares estimation of average causal effects in models with variable treatment intensity. *Journal of the American statistical Association*, 90(430), 431-442.
- Aron, J. (2000). Growth and institutions: a review of the evidence. *The World Bank Research Observer*, 15(1), 99-135.
- Avila, F. J. M., & González, M. D. C. P. (2018). Determinants of education quality in the Canal del Dique y Zona Costera region of Colombia. *Journal of International Studies Vol*, 11(4).
- Bhattacharyya, S., & Hodler, R. (2014). Do natural resource revenues hinder financial development? The role of political institutions. *World Development*, 57, 101-113.
- Brunnschweiler, C. N. (2009). Oil and growth in transition countries. *CER-ETH-Center of Economic Research at ETH Zurich, Working Paper*, (09/108).
- Brunnschweiler, C. N., & Bulte, E. H. (2008). The resource curse revisited and revised: A tale of paradoxes and red herrings. *Journal of Environmental Economics and Management*, 55(3), 248-264.
- Bulte, E. H., Damania, R., & Deacon, R. T. (2005b). Resource intensity, institutions, and development. *World development*, 33(7), 1029-1044.
- Bulte, E., Damania, R., & Deacon, R. T. (2005a). Resource abundance, poverty and development. Cambridge University Press.
- Butkiewicz, J. L., & Yanikkaya, H. (2006). Institutional quality and economic growth: Maintenance of the rule of law or democratic institutions, or both?. *Economic Modelling*, 23(4), 648-661.

- Chong, C. Y. (2020). Nonlinear impact of institutional quality on economic performance within the comprehensive and progressive agreement for trans-pacific partnership. In *Understanding Digital Industry* (pp. 396-399). Routledge.
- Cockx, L., & Francken, N. (2014). Extending the concept of the resource curse: Natural resources and public spending on health. *Ecological Economics*, 108, 136-149.
- Cockx, L., & Francken, N. (2016). Natural resources: a curse on education spending? *Energy Policy*, 92, 394-408.
- Esanov, A., Raiser, M., & Buiters, W. (2006). *Nature's blessing or nature's curse? The political economy of transition in resource-based economies*. In Energy, wealth and governance in the Caucasus and Central Asia (pp. 53-70). Routledge.
- Gasimov, I. (2014). Resource Curse and Dutch Disease in Azerbaijan: Empirical Analysis (Doctoral dissertation, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).
- Gasimov, I., Asgarzade, G., & Jabiyev, F (2023). The impact of institutional quality on economic growth: Evidence from post-Soviet countries. *Journal of International Studies*, 16(1), 71-82. doi:10.14254/2071-8330.2023/16-1/5
- Haber, S., & Menaldo, V. (2010). Natural Resources in Latin America: Neither Curse nor Blessing (p. 21). Mimeo, Stanford.
- Hartwell, C. A. (2016a). Institutions and the resource curse in developing countries. *The Journal of Developing Areas*, 50(4), 415-428.
- Hartwell, C. A. (2016b). The institutional basis of efficiency in resource-rich countries. *Economic Systems*, 40(4), 519-538.
- Horváth, R., & Zeynalov, A. (2014). The natural resource curse and institutions in post-Soviet countries (No. 24/2014). IES Working Paper.
- Iimi, A. (2007). Escaping from the Resource Curse: Evidence from Botswana and the Rest of the World. *IMF Staff Papers*, 54(4), 663-699.
- Isham, J., Woolcock, M., Pritchett, L., & Busby, G. (2005). The varieties of resource experience: natural resource export structures and the political economy of economic growth. *The World Bank Economic Review*, 19(2), 141-174.
- Iyoboyi, M., & Ademola, A. S. (2016). The institutional and policy environment and the quest for industrialization in Nigeria. *Journal of Economics and Behavioral Studies*, 8(2 (J)), 13-25.
- Javadov, S., Rustamov, A., Aliyev, E., Bahmanov, Y., & Yarmammadli, N. (2022). Impact of the Institutions on Economic Growth in Selected Post-Soviet Countries.
- Jensen, N., & Wantchekon, L. (2004). Resource wealth and political regimes in Africa. *Comparative political studies*, 37(7), 816-841.
- Kandil, M. (2009). Determinants of institutional quality and their impact on economic growth in the MENA region. *International Journal of Development Issues*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2005). Governance matters IV: governance indicators for 1996-2004. *World bank policy research working paper series*, (3630).
- Koziuk, V. (2021). Does political regime matter for abnormal hoarding of international exchange reserves?. *Journal of International Studies*, 14(2), 208-227
- Kronenberg, T. (2004). The curse of natural resources in the transition economies. *Economics of transition*, 12(3), 399-426.
- Leite, M. C., & Weidmann, J. (1999). Does mother nature corrupt? Natural resources, corruption, and economic growth. International Monetary Fund.
- Luong, P. J., & Weinthal, E. (2010). Oil is not a curse: Ownership structure and institutions in Soviet successor states. Cambridge University Press.

- Mehlum, H., Moene, K., & Torvik, R. (2006). Institutions and the resource curse. *The economic journal*, 116(508), 1-20.
- Náplava, R. (2018, April). The Importance of Institutional Quality for Economic Performance in Post-Soviet States. In *INPROFORUM 2017*.
- North, D. C. (1990). Institutions, institutional change and economic performance. Cambridge university press.
- Nguyen, C. P., Su, T. D., & Nguyen, T. V. H. (2018). Institutional quality and economic growth: The case of emerging economies. *Theoretical Economics Letters*, 8(11), 1943.
- Nguyen, C. P., Schinckus, C., Thanh, S. D., & Chong, F. H. L. (2020). Institutions, economic openness and credit cycles: An international evidence. *Journal of International Studies*, 13(4), 229-247.
- Oskenbayev, Y., Yilmaz, M., & Abdulla, K. (2013). Resource concentration, institutional quality and the natural resource curse. *Economic Systems*, 37(2), 254-270.
- Pomfret, R. (2012). Resource management and transition in Central Asia, Azerbaijan and Mongolia. *Journal of Asian Economics*, 23(2), 146-156.
- Rahim, K. A., & Liwan, A. (2012). Oil and gas trends and implications in Malaysia. *Energy Policy*, 50, 262-271.
- Ross, M. L. (1999). The political economy of the resource curse. *World Politics*, 51(2), 297-322.
- Ross, M. L. (2001). Does oil hinder democracy?. *World politics*, 53(3), 325-361.
- Sachs, J. D., & Warner, A. M. (1995). Natural resource abundance and economic growth. National Bureau of Economic Research Working Paper No. 5398.
- Sala-i-Martin, X., & Subramanian, A. (2012). Addressing the natural resource curse: An illustration from Nigeria. *Journal of African Economies*, 22(4), 570-615.
- Tran, O. K. T., Le, H. D., & Nguyen, A. H. V. (2021). Role of institutional quality in economic development: A case study of Asian countries. *Problems and Perspectives in Management*, 19(2), 357-369.
- Vasilyeva, T., Lyeonov, S., Adamičková, I., & Bagmet, K. (2018). Institutional quality of social sector: The essence and measurements. *Economics & Sociology*, 11(2), 248-262.
- Wandeda, D. O., Masai, W., & Nyandemo, S. M. (2021). Institutional quality and economic growth: evidence from Sub-Saharan Africa countries. *African Journal of Economic Review*, 9(4), 106-125.
- World Bank. (2021). World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators>
- Zeynalov, A. (2013). Do Sufficient Institutions Alter the Relationship between Natural Resources And Economic Growth?. MPRA Paper, (46850).