International Journal of Multicultural and Multireligious Understanding

http://ijmmu.com
editor@ijmmu.com
ISSN 2364-5369
Volume 10, Issue 3
March, 2023
Pages: 76-84

Studying the Impact of Oil and Non-Oil Indicators on Financial Development in Iran

Seyed Valiallah Mirhoseyni[1]; Seyed Hossein Izadi[2]; Narges Khorasani[3]

[1]Assistant Professor, Department of Economics, Payame Noor University, Tehran, Iran

[2]Assistant Professor, Department of Economics, Payame Noor University, Tehran, Iran

[3]Master Student of Management, Payame Noor University, Tehran, Iran

*Corresponding Author: Email: svmir@pnu.ac.ir

http://dx.doi.org/10.18415/ijmmu.v10i3.4498

Abstract

To accomplish the aims of sustainable development, a country's financial sector must develop. Oil earnings impact financial growth in many oil-dependent nations, including Iran, because domestic policy and economic planning are reliant on oil income. In this context, the influence of oil and non-oil indices on financial development in Iran from 1979 to 2019 was examined using the ARDL approach in this study. Oil rent indexes and non-oil indices such as value addition of industry, agriculture, and services were employed. This study revealed that the oil rent index had a positive association with financial development in both the short and long term. In contrast, the value-added of industry and agriculture had a negative and substantial relationship with financial development. The impact of service sector value added on financial development, on the other hand, was not validated in this study. According to the findings, energy (oil) price volatility would substantially influence Iran's financial growth. As a result, fundamental structural changes are required to lessen oil dependency by boosting small and medium-sized businesses and attracting international investment.

Keywords: *Financial Development; Oil Index; Non-Oil Indices; Iran*

Introduction

In many countries, the development of the financial sector has become a necessity for achieving s ustainable development goals (Lane and Milesi, 2007), so this special attention has been devoted to this sector in industrialized nations. With the rise of financial institutions, suitable legislation with various financial instruments have been established to boost the efficiency of this sector. Many experts feel that the financial sector and its growth have a substantial influence on a country's economic performance and that today, the financial industry is responsible for a large portion of key economic changes (Salmani and Amiri, 2009). Banking sector development, non-bank financial sector development, monetary sector development, monetary policy, banking laws, supervision, financial sector openness, and institutional

environment are some of the six elements of financial development (Zarei and Lajevardi, 2018). Existing theoretical and empirical views indicate that the developed financial systems help improve financial intermediation by lowering the costs of supervision, transactions, and information (Alshubiri et al., 2020). The principles of freedom of choice and information transparency are correctly respected in a developed financial system, and suppliers and applicants of financial services trade their desired services with complete freedom and knowledge. Economic growth will be aided if the financial system can perform its core functions of lowering the cost of information, facilitating exchanges, scrutinizing costs, raising funds for innovative activities, creating the right environment for savings, and providing the right source of funding (Fitras et al., 2010).

Assari et al. (2008), Salmani and Amiri (2009), Mohammadi et al. (2014), Abdollahzehi (2017), Ritab (2007), James (2008), Abu-Bader and Abu-Qarn (2008), Dorrucci et al. (2009), and Moradbeigi and Hooklaw (2009) have all studied the relationship between financial development and economic growth in Iran and other countries (2016). This research revealed considerable two-way causation between financial development and economic growth, with financial development enhancing investment efficiency, resulting in economic growth. Indeed, effective financial systems increase investment prospects by recognizing and funding relevant business opportunities, providing savings, hedging and diversifying risk, and simplifying the trade of commodities and services, among other things. Furthermore, boosting the financial system's efficiency will contribute to stronger economic growth in the long run through optimizing resource allocation, encouraging investment, and accelerating capital accumulation. In this sense, economists such as Hicks (1985) stress the development of financial structure, viewing it as a driving force and an important element of the economic growth process.

Natural resources, particularly oil, play an important role in the economic development and long-term prosperity of many countries. Oil capital is a key source of state funds for many economies around the world (Basnet and Upadhyaya, 2015), and these resources play a significant role in determining domestic policy, trade relations, particularly imports and exports, and a country's balance of payments position with other countries, because a country's reliance on oil sources of revenue leads to the adoption of economic policies that are consistent with the oil economy (Lardic and Mignon, 2008 and Nkomo, 2006). As a result, the funding of infrastructure and development projects, as well as the attainment of sustainable development, is influenced by oil earnings in many oil-dependent nations, including Iran. However, diminishing income during the current global financial crisis s prompted questions about the long-term viability of oil wealth (Al-Shubiri et al., 2020). Changes in oil prices, in this regard, have a substantial impact on numerous economic activities through altering the financial sector and bank credit in a nation. These changes have an impact on countries' trade, export, and import balances (Lane and Milesi, 2007). Furthermore, unlike other nations whose GDP is influenced by domestic pricing, oil-exporting countries' GDP is heavily influenced by global oil price variations (Oladosu, 2009). To put it another way, as the percentage of oil-related activity in an economy grows, so does the influence of crude oil prices on the nominal GDP of that nation.

Various points of view exist on how oil prices change; some say that high oil costs stifle macroeconomic activity (Brown and Yücel, 2002). Rising oil prices, according to Rezaei et al. (2015), Arouri et al. (2011), and Neelam (2014), have increased economic uncertainty by causing financial instability and poor budget execution. The economy is negatively impacted by the financial system. Similarly, any rise in government expenditure combined with growing oil prices is unsustainable because any disruption in the oil markets will have disastrous effects on the economy. As a result, governments that rely largely on oil earnings must implement strategies to mitigate these losses. However, in separate studies in developing countries, researchers such as Zarei and Lajevardi (2018), Ibrahim et al. (2014), Shahbaz et al. (2016), Jarrett et al. (2019), Al-Shubiri et al. (2020), and Atil et al. (2020) have shown that rising oil prices will boost the country's export profits, and if the financial system is effective, resources will be distributed to the right industries, resulting in economic development. Countries may solve the problem of oil price volatility from the standpoint of sustainable development if they conserve

considerable sums of oil earnings during periods of high oil prices. Instead of implementing extreme financial and austerity measures, this circumstance might lead to the establishment of reserves to finance when oil prices are low (Nidhaleddine and Waël, 2016). Furthermore, if oil resources are seen as an additional source for financial institutions, the link between financial development and economic growth will be strengthened. However, if they are used to replace private savings, they can reduce the efficiency of investment projects and prevent the proper functioning of the pricing system, resulting in lower economic growth. As a result, these countries must diversify their sources of income and reduce their reliance on the oil sector (Al-Shubiri et al., 2020).

Considering what has been discussed, oil-dependent countries like Iran rely heavily on oil cash for growth and prosperity. These countries' oil riches are a double-edged sword. On the one hand, oil money may aid financial development and consequently economic development by raising national revenue, but it can also stymie long-term economic progress by upsetting the balance in other economic sectors (Zarei and Lajevardi, 2018). The focus in these nations should be on early financial transition forecasts (Brown and Youssef, 2002). Furthermore, because heavy reliance on the oil sector can lead to economic risks and financial system weakness (Iwedi et al.2015), special attention should be paid to the exploitation of the non-oil sector in order to reduce the challenges of oil price fluctuations and the development of financial infrastructure (Korkmaz, 2015). As a result, several facets of the link between financial development and oil and non-oil indicators must be examined. In this respect, the influence of oil and non-oil indicators on financial development is attempted to be detailed in this study, which is presented below, with a focus on Iran as one of the oil-dependent economies over the period 1980-2019.

Materials and Methods

In this study, the variables of financial development index (DC: the ratio of bank loans to the private sector to total GDP), oil rent (OIR: as an oil index equal to the ratio of cost to income) Oil to total GDP), and non-oil indices such as the ratio of value-added of agriculture (Agri), industry (Indu), and services (Serv) to GDP were used to examine the effect of oil and non-oil indices on financial development. Variable data was gathered from the Central Bank of the Islamic Republic of Iran's economic time series database, the Iranian Statistics Center, and the World Bank for the years 2009-2019. The time series analysis approach of self-explanatory pattern with Autoregressive Distributed Lag (ARDL) was used to analyze the influence of oil and non-oil indices on financial development in Iran, as explained below.

According to current studies, the ARDL approach to combined studies is better than other traditional approaches such as the Engle and Granger methods (Fadaei and Kazemi, 2012). The ARDL approach was chosen for this study because 1. It is suitable for small samples, and 2. It is applicable regardless of whether the existing variables are (0) I or (0) II (1). However, if there are time series (2) I in the model, the ARDL methodology cannot be employed (Al-Shubiri et al., 2020), 3. The ARDL method can discriminate between variables in the long run. To estimate the error correction model in the ARDL approach, a linear deformation is used (ECM). The ARDL pattern has the following general shape:

$$\alpha(L,P)y_t = \alpha_0 + \sum_{i=1}^{k} \beta_i(L,P)x_{it} + \gamma w_t + \varepsilon_t$$

$$\alpha(L,P)y_t = 1 - \alpha_1 L + -\alpha_2 L^2 - \dots\dots - \alpha_p L^p$$

$$\beta_i(L,q_i) = \beta_{i0} + \beta_{i1} L + \beta_{i2} L^2 + \dots\dots + \beta_{iq_i} L^{q_i} \quad (1)$$

$$I = 1, 2, \dots\dots, k$$

Where y_t is the dependent variable, α is the fixed component, L is the lag operator ($\mathrm{L}y_t = y_{t-1}$), and w_t is the ($S \times 1$) vector is the definitive variables such as the width of the origin, time trends, or exogenous variables with fixed intervals. Long-term coefficients in the above equation are computed as follows (Fadaei and Kazemi, 2012):

$$\Pi = \frac{\lambda'(\widehat{p}, \widehat{q_1}, \widehat{q_2}, \dots, \widehat{q_k})}{1 - \widehat{\alpha_1} - \widehat{\alpha_2} - \cdots - \widehat{\alpha_p}} \quad (2$$

Eq. (2) $\lambda'(\widehat{p}, \widehat{q_1}, \widehat{q_2}, \dots, \widehat{q_k})$ provides OLS estimates of λ in Equation (1) for the selected ARDL model. The error correction model related to ARDL$(\widehat{p}, \widehat{q_1}, \widehat{q_2}, \dots, \widehat{q_k})$ is obtained by writing Eq. (1) in terms of interrupt levels and first-order variables y_t ، w_t و $x_{1t}, x_{2t}, \dots, x_{kt}$.

$$\Delta y_t = \Delta\alpha_0 - \alpha(1,\hat{p})ECM_{t-1} + \sum_{i=1}^{k} \beta_{i0}\,\Delta x_{it} + \lambda\Delta w_t - \sum_{j=1}^{\hat{p}-1} \alpha_{0j}\,\Delta y_{t-j} - \sum_{i=1}^{k}\sum_{j=1}^{\widehat{q_{t-1}}} \beta_{ij}\,\Delta x_{i,t-j} + \varepsilon_t \quad (3$$

ECM is an error correction model and is defined as below:

$$ECM_t = y_t - \alpha - \sum \beta_i x_{it} - \lambda w_t + \varepsilon_t \quad (4$$

Where x_t is the k-dimensional forcing variables and ε_t expresses the random error vector with zero mean and constant variance-covariance. The presence of an error correction statement among many aggregated variables suggests that changes in the dependent variable are a result of both the imbalanced levels in the aggregate relation (created by ECM) and changes in the other explanatory variables, indicating that any divergence from the long-run equilibrium will cause the dependent variable to alter in order to return to the long-term equilibrium (Masih and Masih, 2002). For estimating long-term associations, the ARDL method has two steps:

Step 1: This stage entails determining whether or not all of the variables in the equation have a long-term connection. In order to find the best interval length for each variable, the ARDL model calculates the number (p + 1) of regressions (p is the maximum number of interrupts and k is the number of variables in the equation).

Step 2: The estimation of the long-term and short-term coefficients of the equation is the same at this point. The second step is completed only once the previous stage has confirmed the presence of a long-term link between variables (Shahbaz, 2007).

The extra variable F test technique using long-term equation modeling as a general self-explanatory model (VAR) of order p is used to explore the presence of a long-run relationship between variables as follows:

$$Z_t = C_0 + \beta_t + \sum_{i=1}^{p} \emptyset Z_{t-1} + \varepsilon_t \quad 5)$$

t = 1, 2, 3, … …., T

$$\Delta Z_t = C_0 + \beta_t + \Pi Z_{t-1} + \sum_{i=1}^{p} \Gamma Z_{t-1} + \varepsilon_t$$

$$t = 1,2,3,\ldots,T \quad (6$$

In Eq. (5), matrices Π and (Γ) (k+1)x(k +1) in i=1, 2, … , p-1 are defined as below:

$$\Pi = I_{k+1} + \sum_{i=1}^{p} \Psi_i \quad (7$$

$$\Gamma_i = -\sum_{j=i+1}^{p} \Psi_j i \quad (8$$

The matrices Π Γ are associated with long-term incremental coefficients, whereas the vector error correction model (VECM) is related to short-term dynamic coefficients in the aforementioned connections (Pesaran et al., 2001). Z_t is the vector of the variables y_t and x_t, respectively, y_t is the dependent variable (1) I defined as Ly_t, x_t is a vector matrix of regressors (0) I and (1) I, and the error vector ε_t has a mean of zero and an independent and uniform multivariate distribution (i.i.d) (Khan-Ashfaq, 1997).

Results

The short- and long-term relationships between the variables, as well as the requisite classical assumptions, were investigated in this part. The value of the F statistic obtained by Boys et al. (2001) will not be trustworthy if the degree of co-accumulation of variables is two or more thus it is required to first assess the importance of the variables. The unit root (meaning of variables) was tested using the Augmented Dickey-Fuller (ADF) statistic in this study, and the findings are presented in Table (1). The unit root test revealed that all variables were non-stationary and became stationary with one exception. As a result, all variables in this study are aggregated from grade (1) I, and aggregate analysis known as ARDL may be used.

The ARDL model was calculated after confirming the degree of co-integration of variables and defining the best interruption using Schwarz's Bayesian Criterion (SBC) statistics. Table 1 shows the findings of evaluating the short-term association between study variables (2). Table 1 shows the findings of evaluating the short-term association between study variables (2). The findings of short-term relationship estimation revealed that oil rent had a positive and significant influence on financial development in the first interval, whereas the value-added of industry and agriculture had a negative and significant effect on financial development in the first interval. The impact of the service sector's value-added on financial development was dismissed. The preceding period's financial development index had a strong beneficial impact on present financial development. To put it another way, the preceding period's domestic credit will have a favorable and considerable impact on financial development. Interruptions in value-added variables in industry, agriculture, and services had little influence on financial development, according to the findings.

Besides, in this model, traditional hypotheses were tested. In this case, the Jarque-Bera Test was employed to evaluate the normality of the error distribution, and the hypothesis of the normality of the error distribution was validated based on the value of the statistic (1.40) and its significance level of greater than 0.05. The ARCH test was employed to examine variance homogeneity, and this hypothesis was also validated based on the statistical value of this test (2.42) and its significant level (0.13). The

hypothesis of serial autocorrelation in the model was tested using the LM test, which also showed the lack of autocorrelation in the model. Furthermore, the F-statistic (55.93) and its significance level (0.00) highlight the statistical significance of the entire regression model, while the R2 statistic demonstrates the model's excellent explanatory power in connection to changes in financial development.

CUSUM and CUSUMQ tests were used to examine the model coefficients' stability overtime after calculating the short-run association between the variables. Figures (1) and (2) illustrate the results of structural failure testing (2). The produced statistical diagrams are positioned between the upper and lower bounds, as shown in diagrams (1) and (2), and so the stability of the coefficients at the 95 percent confidence level was not rejected. To put it another way, the results suggest that the estimated coefficients generated from the short-term connection model between the variables are stable and dependable. The presence or absence of a long-term link between the variables was checked using the band test before calculating the long-run relationship between the variables, and the findings were given in Table (3). The presence of a long-term association between the study variables may be validated based on the F-statistic of the Bounds Testing Approach, which is larger than the upper limit (I (1)).

The long-term relationship of the ARDL model was computed and displayed in Table after establishing the presence of a long-term relationship between the model variables as well as the structural stability of the model (4). A long-term relationship produces comparable consequences as a short-term connection. Oil rents had a good and considerable long-term influence on financial development, although this impact was bigger than its short-term impact. Industry and agriculture activities, or the added value of those sectors, had a negative and considerable influence on financial development in the near term. The service sector had a small but significant negative influence on financial development. Furthermore, the -0.6 value of the CointEq coefficient (-1) suggests that the short-run connection between the variables will be exponentially near to the long-term relationship. In other words, 6% of the difference between the long-term and short-term connection is corrected in each quarter.

Conclusion

The relationship between oil and non-oil variables on Iran's financial development was explored in this study. First, over the period 1979 to 2017, oil (oil rent) and non-oil (value-added of industry, services, and agriculture) indices were defined and gathered. The ARDL approach was also used to assess the connection between variables. Oil operations have had an influence on financial development, according to the findings of an investigation into the link between oil rents and financial development. Indeed, it can be claimed that energy (oil) price volatility will have a considerable influence on financial development, especially in the long run. The link between agricultural activities and industry and financial development was also investigated, and it was shown that there is a negative and substantial association between these two sectors and financial development. That is, the agricultural and industrial sectors do not use bank loans to fund their activities. These findings are consistent with research by Al-Shubairi et al. (2020) in Oman, who found that the government could not rely on agriculture and industry to finance and minimize reliance on the oil sector and price volatility issues. In order to expand, develop, and raise GDP, the government has not been able to minimize its reliance on the oil sector. The results of this study's examination of the link between services and financial development revealed that there was no substantial association between the two. In other words, the service sector's operations are unrelated to the domestic credit sector, and the size of the service sector has no bearing on financial growth, contrary to the findings of Al-Shubiri et al. (2020). As a result of higher oil prices and increased trade, the Iranian government must accomplish financial growth and development, respond to domestic demand, and strengthen banking sector liquidity, fundamental structural changes in trade relations, and fiscal policies, according to the findings. This rule applies to everyone. It is advised that the government lessen its reliance on oil by promoting small and medium-sized businesses and attracting international investment.

For more intensive investigations, it is also advised that comprehensive studies be done in other oil-exporting nations. In addition, many economic and financial factors, as well as social and environmental dimensions, might be utilized in future research, which are critical elements in the process of sustainable development.

References

Abdollah zehi, R (2017): In*vestigating the relationship between financial development and value-added growth of Iran's agricultural sector.* Second International Conference on Management Coherence and Development Economics. Tehran, Osweh Higher Education Institute, Osweh University.

Abu-Bader, S. & A. Abu-Qarn. (2008). Financial Development and Economic Growth: the Egyptian Experience. Journal of Policy Modeling, 30(5): 887-898.

Acemoglu, D., Johnson, S and Robinson, J. A. (2002). "An African Success Story: Botswanna". CPER Discussion Papers 3219.

Ajmi A, Gupta R, Babalos V, Hefer R (2015) Oil price and consumer price nexus in South Africa revisited: a novel asymmetric causality approach. Energy Explor Exploit 33(1):63–74.

Alshubiri, F. N., Tawfik, O. I., & Jamil, S. A. (2020). Impact of petroleum and non-petroleum indices on financial development in Oman. Financial Innovation, 6(1), 1-22.

Arouri, Mohamed El Hedi & Lahiani, Amine & Nguyen, Duc Khuong (2011)," Return and volatility transmission between world oil prices and stock markets of the GCC countries", Economic Modelling, pp 1-12.

Assari, A., Naseri, A., and Mr. Khondabi, M. (2018). *Comparison of OPEC and non-oil developing countries using the Generalized Torque (GMM) method.* Journal of Economic Research, 43 (1), 1-22.

Atil, A., Nawaz, K., Lahiani, A., & Roubaud, D. (2020). Are natural resources a blessing or a curse for financial development in Pakistan? The importance of oil prices, economic growth and economic globalization. Resources Policy, 67, 101683.

Basedau, M. and J. Lay, J. (2009). "Resource Curse or Rentier Peace? The Ambiguous Effects of Oil Wealth and Oil Dependence on Violent Conflict". Journal of Peace Research 46(6): 757–776.

Basnet HC, Upadhyaya KP (2015) Impact of oil price shocks on output, inflation and the real exchange rate: evidence from selected ASEAN countries. Appl Econ 47(29):3078–3091.

Brown, S. P., & Yücel, M. K. (2002). Energy prices and aggregate economic activity: an interpretative survey. The Quarterly Review of Economics and Finance, 42(2), 193-208.

Dorrucci, E., Meyer-Cirkel, A., & Santabárbara, D. (2009). Domestic financial development in emerging economies: Evidence and implications. ECB occasional paper, (102).

Fadaei, M., and Kazemi, Sh. (2012). *Investigating the Effects of Foreign Direct Investment Growth on Employment Level in Iran (Self-Explained Model with ARDL Intervals)*. Economic Growth and Development Research, 3 (9), 71-84.

Farhadikia, A. (2011). "Exploring Characteristics of Structural Changes of Iran's Economy". The Weekly Barnameh. Year 9. No 424. (In Persian).

Fitras, M.H., Najarzadeh, A., and Mahmoudi, H. (2010). *Investigating the relationship between financial development and economic growth in Iran using factor analysis method*. Quarterly Journal of Economic Research and Policy, 18 (56), 64-73.

Glasmeier, A., & Howland, M. (1993). Service-led rural development: definitions, theories, and empirical evidence. International Regional Science Review, 16(1-2), 197-229.

Ibrahim A, Ayodele A, Hakeem M, Yinka A (2014) Oil Price shocks and Nigerian economic growth. Eur Sci J 10(19):375–391 Ito K (2008) Oil price and the Russian economy: a VEC model approach. Int Res J Financ Econ 17:68–74.

Isham, R. H. (2004). U.S. Patent No. 6,765,372. Washington, DC: U.S. Patent and Trademark Office.

Iwayemi A, Fowowe B (2011) Impact of oil price shocks on selected macroeconomic variables in Nigeria. Energy Policy 39(2): 603–612.

Iwedi M, Igbanibo DS, Onuegbu O (2015) Bank domestic credits and economic growth nexus in Nigeria. Int J Finance Account 4(5):236–244.

James B. Ang(2008), What are the mechanisms linking financial development and economic growth in Malaysia, Economic Modeling, Volume 25, Issue 1, January 2008, Pages 38-53.

Jarrett, U., Mohaddes, K., & Mohtadi, H. (2019). Oil price volatility, financial institutions and economic growth. Energy Policy, 126, 131-144.

Köhler M (2015) Which banks are more risky? The impact of loan growth and business model on bank risk-taking. J Financ Stab 16:195–212.

Korkmaz S (2015) Impact of bank credits on economic growth and inflation. J Appl Finance Bank 5(1):57–69.

Lane PR, Milesi GM (2007) The external wealth of nations mark II: revised and extended estimates of foreign assets and liabilities, 1970–2004. J Int Econ 73(2):223–250.

Lardic, S., & Mignon, V. (2008). Oil prices and economic activity: An asymmetric cointegration approach. Energy Economics, 30(3):847–855.

Leite, M. C., & Weidmann, J. (1999). Does mother nature corrupt: Natural resources, corruption, and economic growth. International Monetary Fund.

Lescaroux F, Mignon V (2008) On the Influence of Oil Prices on Economic Activity and Other Macroeconomic and Financial Variables. OPEC Energy Rev 32(4):267–380.

Mohammadi, H., Alaei, M.M., and Asgharnejad, A. (2014). *Investigating the factors affecting financial development in the member countries of the Organization of the Islamic Conferenc*e. Strategic and Macro Policies, 2 (6), 25-37.

Moradbeigi, M., & Law, S. H. (2017). The role of financial development in the oil-growth nexus. Resources Policy, 53, 164-172.

Moradbeigi,M, Hook Law,S. (2016). Growth volatility and resource curse: Does financial development dampen the oil shocks?, Resources Policy,48:97-103.

Neelam T (2014) Impact of bank credit on economic growth in Nepal. NRB working paper, no 22. Niger J Econ Soc Stud 49(1):209–234.

Nidhaleddine BC, Waël L (2016) Revisiting the role of inflation environment in exchange rate pass-through: a panel threshold approach. Econ Model 52:233–238.

Nkomo JC (2006) Crude oil price movements and their impact on South Africa. J Energy Southern Afr 17(4):25–32.

Oladosu G (2009) Identifying the oil price–macro economy relationship: an empirical mode decomposition analysis of US data. Energy Policy 37(12):5417–5426.

Ragoobur, V. T. (2010). "The Services Sector and Economic Growth in Mauritius: A Bounds Testing Approach to Co integration". University of Mauritius Reserch Journal. 16, 313-331.

Rezaei, M., Yavari, K., Ezzati, M., and Etesami, M. (2015). *Investigating the effect of the abundance of natural resources (oil and gas) on financial repression and economic growth through the channel of influence on income distribution*. Iranian Journal of Energy Economics, 4 (14), 89-122.

Ritab S. Al-Khouri (2007), Financial Sector Development and Sustainable Economic Growth in Regionally Co-Integrated EmergingMarkets, Advances in Financial Economics, Volume 12, 2007, Pages 345-360.

Ross, Micheal (2001). "Does oil hinder democracy". World Politics 33(3): 325-361.

Salmani, B., and Amiri, B. (2009). *Financial Development and Economic Growth: The Case of Developing Countries*. Quantitative Economics Quarterly (Former Economic Studies), 6 (4), 125-145.

Shahbaz, M., Shahzad, S. J. H., Ahmad, N., & Alam, S. (2016). Financial development and environmental quality: The way forward. Energy Policy, 98, 353-364.

Siegle, J. (2007). "The Governance Root of the Natural Resource Curse". Developing alternatives 11(1): 35-43.

Singh, N. (2006). 'Services-led industrialization in India: Assessment and lessons". MPRA Paper No. 1276. http:// mpra.ub.uni-muenchen.de.

Topcu, M., & Payne, J. E. (2017). The financial development–energy consumption nexus revisited. Energy Sources, Part B: Economics, Planning, and Policy, 12(9), 822-830.

Trovik, R. (2002). "National Resource, Rent Seeking and Welfare". Journal of Development Economics 67(2): 445-470.

Zarei, B., and Lajevardi, H. (2018). *Investigating the relationship between financial development and oil shocks on economic growth instability*. Financial Economics Quarterly, 12 (43), 193-208.

Copyrights