



Oil Rents, Institutions and Financial Development: Case Study of selected Oil Exporting Countries

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Abstract

Based on the empirical evidence and researches, the majority of oil dependent countries have the low level of financial development. So the aim of this study is to investigate whether the oil rents weakens the financial development in oil dependent economies? In this study, direct and indirect impact of the oil rent on financial development is examined using Generalized Method of Moments (GMM) for 17 selected oil exporting countries, over the period 2002-2010. The result suggests that oil rent has had a negative effect on financial development and has provided the context of the weakening financial markets in two direct and indirect (through institutional quality channel and weakening it) ways. Also the result indicates that there is a positive and significant relationship between institutional quality and financial development. So improving the institutional quality is a necessary and essential condition to enhance financial development.

Keywords: Financial development, institutional quality, oil rent, oil exporting countries, generalized method of moments (GMM).

Introduction

Since the 1980s, many studies have confirmed the negative relationship between economic growth and natural resource abundance in developing countries and many studies^{1,2} debate about the causes of the resource curse. These studies have mostly tried to explain the slow economic growth in resource abundant countries. But they have neglected the impact of resource abundance on financial development and paid little attention to the relationship between financial development and resource abundance. In fact it could be claimed that resource curse can also be happened in financial development and lead to weaken the country's financial system. According to available empirical evidence, the financial development is weak in the most of developing oil economies. It can be expressed that the same mechanisms, through which the resource abundance causes slow economic growth in oil-dependent countries, can also weaken financial development. Since the financial development plays an important role in economic development³, examining the relationship between oil rents and financial development can provide the new mechanism for recourse course and slow rate of economic growth in oil countries. So in this study, we examine the impact of oil rents on financial development in direct and indirect (through the institutional quality) way. Examining this relationship may provide a new interpretation for different levels of financial development among countries and also understanding this relationship help policymakers apply appropriate policies to improve the financial development.

This study is organized of 7 sections. Introduction provided, is the first part of the study. The next section is devoted to the theoretical foundations. The third section provides the literature review. In the section 4, the model and data are introduced. After that the estimation method is described. Then the results are reported and finally the last section concludes the paper.

Theoretical foundations: Since we try to investigate the impact of the institutional quality and oil rents on financial development, in the following, their theoretical foundation is provided. But before that, the theoretical foundation of resource curse in economic development is provided.

Resource curse in economic development: Studies related to recourse course are divided into two general strands. Some studies have examined Dutch disease and explained the causes of resource curse only from the economic perspective^{4,6}. Another strand of studies has paid attention to the role of institutional quality in recourse curse⁷⁻⁹. In the most countries, the revenue of natural resources is belonging to the government. Therefore institutional quality and governance play an important role in the course or the blessing of recourse abundance. The role of institutional quality can be investigated in two dimensions. The first dimension is related to the maturity of institutional framework. If the oil is discovered in a country with mature and efficient institutions (like Norway), oil rent would be blessing and if the oil is discovered in a country with mature and inefficient institutions, oil rent would be the curse. The second is related to infancy of institutional framework in the countries. In such circumstances, oil rents provide the context of creating a rentier government¹⁰. In the most of

developing countries, oil rents have led to change institutional structure and, through this way, provided slow pace of economic growth. Therefore resource abundance not only affects directly on economic growth, but also affects indirectly on economy through institutional quality. So if institutional quality is damaged by oil, the resource curse would be expected to occur. In the most of oil dependent countries, weak institutional quality is due to huge oil rents. In the following, each of mentioned perspectives is discussed in the aspect of financial development.

Financial development and Dutch disease: The most important problem appearing in resource abundant countries is dutch disease. This economic phenomenon has been seen in many countries where exports are concentrated in one sector. The exploitation of natural resources leads to shift the production factors away from manufacturing sector^{4,11}. So resource abundance tends to shrink the traded sector. But trade sector plays an important role in financial development. According to empirical evidence, there is a positive relationship between trade sector and financial development. Some economists believe that expansion of trade sector in a country leads to increase firm's need to external financial resources¹². So resource abundance that weakens the traded sector may also have a negative effect on financial development. In addition, Dutch disease decreases investment in manufacturing sector. So the potential demand for finance is decreased and financial markets are weakened.

Resource curse and institutional quality: If the government has significant and direct revenue from resources, the rentier effects would be created⁸. These rents have significant effect on institutional quality and governance.

There are various mechanisms through which natural resources can affect institutions and subsequently affect financial development. First, government's access to huge oil revenue decreases the government's need to finance through the tax. In such circumstances, the government has no commitment to be accountable and people demand less accountability for defining and guaranteeing property rights and economic security. This in turn, reduces the pressure to improve institutional quality. Weak property rights cause distortion of the business and decrease incentive to invest¹³. In addition, reducing security and weakening property right lead to decrease innovation, creativity and also entrepreneurship incentives in the society. Since entrepreneurs are the potential promoter for financial development¹⁴, the weakening of property rights may undermine the financial markets.

Second, expected return of rent-seeking activities is high and opportunity cost of such activities is low. As a result, people compete with each other to control these resources and achieve this revenue¹⁵. Wide spread rent-seeking can cause corruption in the government and also people's business, reduce productive investment and divert Resourceallocation¹⁶. Also rent seeking

reduces incentives for innovation and creativity. Because people prefer to achieve high rent and leave manufacturing activities¹⁷. Corruption may reduce the confidence to the government and hence undermine its policy credibility. So, the implementation of some financial reforms will be difficult for the government¹⁴. Moreover some researchers argue that when the ratio of entrepreneurs to rent-seekers is reduced, the financial development is weakened due to reducing its demand.

Third, resource abundance may weaken private and public incentives to accumulate human capital¹⁸. In addition resource abundance may decrease social capital in the society. Since social capital determines the level of the trust which is the important factor for financial contracts, the reduction of trust may weaken the level of financial development. Social capital is an important factor for financial development. Moreover, the low level of human and social capital may have negative effects on the investment in physical capital, because they are supplements to each other in productive firms¹⁴. So resource abundance leads to weaken the financial development, because of reducing the level of human and social capital.

Fourth, the governments who obtain huge oil rents prevent the formation of political parties, because, these social groups can be powerful to take their political rights. So their absence will make less pressure on the government to be accountable. Moreover, government prevents modernization of the economy, because strong and perfect manufacturing sector is a barrier for government's political power^{8,19}. In such circumstances, government can't easily be deposed and democracy can't be established. In fact, the power is only in the hand of special groups and rent seekers in these societies. Many studies^{20,21} related to importance of democracy in financial development indicate that democratic government provide better property right, contract enforcement and more encouragement to invest than dictatorship. In other worlds, democracy helps financial development be enhanced. So, resource abundance can weaken financial development through mentioned mechanism.

In the following, most important theories of impact of institutional quality on financial development are presented.

Institutional quality and financial development: Financial economists believe that efficient institutions are required to manage risk and enhance financial systems. The quality of institutions and legal structure are likely to affect financial development through the allocations of resources to finance productive activities. In the circumstance that adequate regulatory framework is absent the lack of depositors' confidence may undermine the ability of financial markets to mobilize funds. This will carry funds away and generally away from viable domestic investment opportunities²².

One of the popular theories related to institutions and financial development, is law and finance theory which is discussed by Laportaetal.²³. In this theory, the effects of different legal

systems on financial development have been intensely investigated. In their idea, the legal systems of many countries come from those of England or France. Legal systems based on the laws of England are typically described as the common law tradition, while those based on the laws of France are described as the civil or Roman law tradition. These traditions have spread around the world through some ways like conquest, imperialism, outright borrowing, and imitation. According to this theory the differences in the legal protections of investors and creditors and the quality of enforcement of laws can explain the differences of financial development among countries. Based on this theory, the British Common law tends to protect private property owners against the crown²⁴. This improves the ability of private property owners to transact confidently, with positive impact on financial development²⁵. In contrast, the French Civil law eliminates the role of a corrupt judiciary, solidify state power, and prevent the courts from interfering with state policy. Over time, civil law tradition focuses more on the rights of the state and less on the rights of individual investors than the British Common law²⁶. Therefore the law and finance theory predicts that countries that have adopted a French Civil law tradition will emphasize less on private property rights protection and will experience correspondingly lower levels of financial development compared to countries with a British Common law tradition.

The other theory is the endowment theory which is developed by Acemoglu et al.²⁷. In the endowment theory, the authors focus on the initial endowment encountered by the colonizer and how these endowments shaped both colonization strategy and the quality of institutions. They believe that Europeans adopted very different colonization policies, which created different sets of institutions. Countries like the Canada, United States, Australia, and New Zealand, Europeans migrated and settled in the colonies and tried to create institutions that protected private property and encouraged investment. In contrast, as in the Congo and much of Latin America, the main goal of colonization strategy was to transfer the resources of the colony to the colonizers. In these "extractive states", Europeans create institutions that empowered the elite to extract gold, silver, et. So, the main purpose of institutions in these colonies was not the protection of private property rights or control of the expropriation power of the government. Hence, these institutions had harmful and negative effects on investment and subsequently economic growth. Based on this theory, the colonization strategy depended on the living conditions in the colonies. Europeans did not like to live in the places where mortality rates were high due to disease environment. The disease environment encountered by colonizers affected institutions. In these colonized countries, Europeans were more likely to establish extractive states. Moreover the institutions shaped by colonization strategies have survived, even after the independences of the colonies²⁸.

Beck et al.²⁸ tested the endowment theory in financial development and examine cross-country differences in financial

development. In an extractive environment, colonizers will not create institutions that improve competitive financial markets because such markets may threaten the position of the extractors. In settler colonies, however, colonizers will be much more likely to create institutions that protect private property rights and then enhance financial development. Also they analyzed both law and finance and endowment theories. They found strong evidence for the validity of endowment theory. They suggested that endowment theory explain more the cross countries differences of financial development than law and finance theory.

Literature review: The literature that focuses on the impact of natural resources on financial development is rather small. But there are many researches that have examined the role of institutional quality in financial development.

Among literature about the relationship between natural resource and financial development, we can point to the study of Gylfason and Zoega¹⁶. They applied Solow growth model for 85 countries over 1965-1998, and found that countries with more dependent on natural resource have lower level of financial development. Beck²⁹ shows that resource-based economies have low level of financial development and their banks are more liquid, better capitalized and more profitable, but give fewer loans to firms. He indicates that there is some indication of a natural resource curse in financial development, which effect more on enterprises than on households. Yuxiang and Chen¹⁴, using provincial panel data of China covering the period 1999 to 2006, concentrate on the resource curse by focusing on a new mechanism. Their result indicates such a negative relationship between mineral resource abundance and financial development. They suggest that the resource-rich regions tend to have a slower rate of financial development compared to resource-poor regions. Hodler and Bhattacharyya³⁰ examine the relationship between financial development and natural resource revenues. Based on their model, resource revenues undermine financial development in countries with poor political institutions, but not in countries with comparatively better political institutions. They test their theoretical model, using panel data for the period 1970 to 2005 for 133 countries and 1870 to 1940 for 31 countries. Their empirical results indicate that their estimation confirm theoretical predictions. Rasti¹² using deprivation ratio method, discussed different aspects of development (economic, commercial, financial and human) in OPEC countries. He found that the level of financial development in OPEC countries is lower than average financial development in the world. Moreover, the level of financial development is lower than economic and commercial development in the most of countries of this organization.

As it mentioned before, there are many researches which only have examined the role of institutions in financial development. Some important studies are listed below.

Girma and shortland³¹, examine the effect of a country's characteristics like democracy and regime change on financial development using panel data of some developed and developing countries covering the period 1975 to 2000. Their results indicate that regime stability and democracy enhance the financial development. Huang³², by using of a panel dataset of 90 developed and developing countries during 1960-99, examines the impact of political institutional on financial development. Their result indicates that institutional improvement has a positive impact on financial development at least in the short-run, particularly for lower income countries. The study of Yang³³ indicates that while cross-section results show a positive relationship between democracy and bank development, this relationship disappears in panel regressions. Komijaniet al.³⁴ by using of Williamson framework in Iran, identify environment condition, governance, managing and informal institutions like culture and religion as effective factors on financial development. Samadi³⁵ by using of time series data during 1971-2006 in Iran shows that weak property right and the low level of social capital (as institutional factors) are obstacle to financial development.

In the current study, we examine the direct effect as well as indirect effect (through the channel of institutional quality) of oil rents on financial development in important oil exporting countries. Also the role of institutional quality in financial development is investigated.

Methodology

In this study, the following model examines the impact of oil rent and institutional quality on financial development in a panel dataset of 17 countries and 9 years (2002 – 2010):

$$FD_{it} = \alpha_{it} + \beta_1 FD_{i,t-1} + \beta_2 OIL_{it} + \beta_3 INS_{it} + \beta_4 OIL_{it} * INS_{it} + \beta_5 X_{it} + u_{it} \quad (1)$$

Where i indicate the countries and t is time periods. FD_{it} stands for selected indicators for financial development and $FD_{i,t-1}$ is its lagged value. OIL represents the index of oil rent, INS is the index of institutional quality, OIL*INS is the interaction term reveals the indirect effect of oil rents on financial development through the channel of institutional quality. X is a vector of the control variables including the inflation, GDP per capita and trade openness.

According to the literature and availability of data three indexes have been selected among the various indexes of the financial development. These indexes are private credit by deposit money banks and other financial institutions/GDP, M2/ GDP and the financial system deposits / GDP. So, the above model will be estimated for each index. The information for these indexes has been obtained from IFS database.

In this model, OIL is the ratio of oil rent to GDP. The reason of use of this index is that in the oil-export dependent economies,

the oil rent is at the head of government revenues and the same huge oil rents provide the context of undermining institutional quality and consequently financial development in countries. According to the World Bank definition, the oil rent is the difference between the value of crude oil production at global prices and total cost of production. This index' data has been obtained from World Development Indicators (WDI) database.

Also, the overall governance index has been used as a proxy of institutional quality variable. The governance indicators, is the result of study of three researcher from word bank, Kufmann, Kraay and Lobaton, whose has gather the findings of various international institutions, such as the Economist Intelligence Unit (EIU) and the International Country Risk Group (ICRG), the Heritage Foundation and Freedom House, about the economic, political and social situation of countries and has introduced some new indicators as the governance indicators. These indicators include voice and accountability, political stability, control of corruption, regulatory quality, government effectiveness and rule of law.

In this study using the exploratory factor analysis technique (Principal Component Analysis) an overall governance index was extracted from above 6 indexes. The information related to the governance indicators has been obtained from World Governance Indicators (WGI).

In addition, the control variables used in model are GDP per capita (in US\$ at constant 2000 prices), the inflation based on consumer price index and the trade openness, that is the ratio of the sum of imports and exports to GDP. The information of these variables is obtained from WDI.

In this study based on UNCTAD (2008) classification, 17 countries were selected among the 22 oil exporting countries. These countries includes Algeria, Angola, Brunei, Congo, Gabon, Guinea, Nigeria, Kuwait, Libya, Iran, Saudi Arabia, Oman, Syria, Trinidad and Tobago, Sudan, Ecuador, Yemen and Venezuela. Since the aim of this study is to investigate that how the oil rent damages the financial development of oil-export dependent countries through the institutional quality channel, the countries have been selected that their oil rent to GDP ratio is a significant amount. As mentioned before, it seems that the existence of huge oil rents damage the institutional quality of these countries.

In the equations which in their estimation the non-visible effects of country-specific and the existence of lagged dependent variable in explanatory variables is an essential problem, the GMM estimator- that is based on dynamic panel data model- is used³⁶. Also according to Bond³⁷ and Baltagi³⁸ the GMM method is used when the number of cross-sections (N) is greater than the number of time series (T), (N>T), which in this study is such, that is the number of countries is greater than the number of years.

The GMM estimators are of the moments of the form

$$h(\beta) = \sum_{i=1}^N h_i(\beta) = \sum_{i=1}^N \Psi_i' u_i(\beta) \quad (2)$$

Where Ψ_i is a $T_i \times p$ matrix of instruments for cross section i and $u_i(\beta) = (Y_i - f(X_i, \beta))$. Specially, GMM minimizes the following quadratic model with respect to β

$$M(\beta) = \sum_{i=1}^N \Psi_i' u_i(\beta) W \sum_{i=1}^N \Psi_i u_i(\beta) = \zeta(\beta)' W \zeta(\beta) \quad (3)$$

Where W is a $p \times p$ weighting matrix. The coefficient covariance matrix may be estimated as

$$V(\beta) = \sum_{i=1}^N (\hat{G}WG)^{-1} (\hat{G}W\Xi WG)(\hat{G}WG)^{-1} \quad (4)$$

Where Ξ is estimated as follow:

$$E(\zeta_i(\beta)\zeta_i(\beta)) = E(\Psi_i' u_i(\beta) u_i(\beta) \Psi_i) \quad (5)$$

And G is a $T_i \times k$ matrix given as

$$G(\beta) = \left(- \sum_{i=1}^N \Psi_i' \nabla f_i(\beta) \right) \quad (6)$$

The weighting of matrix W can be calculated using the White robust covariance. The coefficient covariance estimates are obtained as

$$\left(\frac{M^*}{M^* - k^*} \right) \left(\sum_{t=1}^T X_t' X_t \right)^{-1} \left(\sum_{t=1}^T X_t' \hat{u}_t \hat{u}_t' X_t \right) \left(\sum_{t=1}^T X_t' X_t \right)^{-1} \quad (7)$$

Where $\left(\frac{M^*}{M^* - k^*} \right)$ is an adjustment to the degrees of freedom relying on the total number of observations; M^* is the number of stacked observations and k^* is the number of estimated parameters.

According to Arellano³⁹ orthogonal deviations express each observation as the deviation from the mean of future observations in the sample and in order to standardize the variance, weight each deviation:

$$x_{it}^* = \frac{\left[x_{it} - \frac{x_{i(t+1)} + \dots + x_{iT}}{T-t} \right] \sqrt{(T-t)}}{\sqrt{T-t+1}} \quad (8)$$

$$t = 1, \dots, T-1$$

We can write the $(T_i - q)$ equations for individual unit i as

$$Y_i = \delta w_i + d_i \eta_i + v_i \quad (9)$$

Where δ is a vector of parameters including α_i 's, β 's and λ 's; w_i is a matrix containing the time series of the lagged endogenous variables, the time dummies, and the x 's. d_i is a $(T_i - q) \times 1$ vector of ones.

Linear GMM estimators of δ can be computed by Arellano M. and Bond S.⁴⁰

$$\delta = \left[\left(\sum_{i=1}^N W_i' Z_i \right) \frac{1}{\frac{1}{N} \sum_{i=1}^N Z_i' H_i Z_i} \left(\sum_{i=1}^N Z_i' W_i Y_i \right) \right]^{-1} \times \left(\sum_{i=1}^N W_i' Z_i \right) \frac{1}{\frac{1}{N} \sum_{i=1}^N Z_i' H_i Z_i} \left(\sum_{i=1}^N Z_i' Y_i \right) \quad (10)$$

Where W_i^* and Y_i^* is some transformation of w_i and Y_i such as orthogonal deviations, first differences or levels. Z_i is a matrix including the instrumental variables and H_i is an individual specific weighting matrix.

Results and Discussion

The model specified in 1 has been estimated in the method developed by Arellano and Bover⁴¹ and Blundell and Bond⁴² that is called System-GMM (SGMM) dynamic panel, using STATA 11 for each three mentioned index of financial development. In this models the indexes of financial development includes private credit by deposit money banks and other financial institutions to GDP ratio, M2 to GDP ratio and financial system deposits to GDP ratio, respectively.

The validity of the SGMM results is related to the statistical diagnostics; so, we first interpret the model diagnostics which are reported in tTable-1. In this study two-step estimates are applied that yield theoretically robust results⁴³. In addition, the two-step estimator gives the robust Hansen J-test (with the null hypothesis of “the instruments as a group are exogenous”) instead of Sargan test, which are not available in one-step estimation.

Table-1 presents summary of model diagnostics for each three model. Two columns of each model contain outcome of regressions for the first differences (DGMM) and orthogonal deviations (OGMM) equations. The first test for System-GMM estimation is Arrelano-Bond test with null hypothesis that there is no serial correlation. The p-values of this test that are reported in Table-1 indicate that the model specification is valid in each tree models– we have no second order autocorrelation in each three model.

The second test – a test that checks joint validity of GMM and IV instruments-is Hansen test of over identified restrictions. This test is also satisfied in our three models under the null of joint validity of selected instruments.

The p-values of Hansen test excluding group and difference-in-Hansen test show validity of IV and GMM instrument subsets apart. The null hypothesis of first test is that excluded instruments, as a group, are not correlated with independent variables; the last test check whether instruments are exogenous. These tests are satisfied as well in our each three models.

The number of instruments used in our three models satisfies the rule of thumb which states the number of instruments should not exceed the number of observations, which is the case in our study. Also According to Roodman^{43,44} atleastale sign may be used to specify whether the number of instruments is optimal.

This sign is a perfect Hansen J-statistic with the p-value equal to 1.00. The p-value should have a higher value than the conventional 0.05 or 0.10 levels, at least 0.25. In our three models, the Hansen J-test has a p-value equal to 0.99, 0.77 and 0.69, respectively, in the case of first difference and 0.97, 0.88 and 0.82 in the case of orthogonal deviations which satisfies the rule.

In total, the conducted statistical tests show that this model is an appropriate econometric model.

Now, after ensuring of suitability of model we can interpret the results reported in tTable-2. The results suggest that the lagged dependent variable has a positive and significant effect on the financial development in the current period. Also, the inflation as a proxy of economic risk has a negative and statistically significant effect on the financial development. The other control variables include GDP per capita and trade openness has a positive and significant impact on financial development.

These results are quite consistent with initial expectations. In fact a lower inflation and a higher GDP per capita and trade openness is associated with higher financial development level. Also it is seen from table-2 that our main variable of interest (oil rent) has two direct and indirect effects on financial development. The direct effect, in fact, is the same estimated coefficient of OIL RENT and indirect effect (through the channel of institutional quality), is the coefficient of the interaction term, OIL*INS. Therefore, the overall effect of oil rent on financial development is as follow:

$$\frac{dFD}{dOIL} = \beta_1 + \beta_3 INS \quad (11)$$

As we have shown in model description, β_1 is the estimated coefficient of oil rent and β_3 is coefficient of interaction term, OIL*INS. INS indicates the average amount of institutional quality index over the considered period.

Table-1
Model diagnostics

Model test	Model I		Model II		Model III	
	DGMM	OGMM	DGMM	OGMM	DGMM	OGMM
Number of groups (panels)	17	17	17	17	17	17
Number of instruments	13	13	16	16	13	13
Number of observations	122	122	107	107	98	98
Wald- test Ho: Independent variables are jointly equal to zero (pr>chi2)	2428.44 (0.000)	2575.56 (0.000)	1072.92 (0.000)	2904.97 (0.000)	1563.76 (0.000)	1984.91 (0.000)
Test for AR(1) Pr> z (null – no autocorrelation)	0.408	0.427	0.663	0.561	0.215	0.373
Test for AR(2) Pr> z (null – no autocorrelation)	0.269	0.288	0.405	0.720	0.937	0.676
Hansen test Pr>chi2 (null –the instruments as a group are exogenous)	0.985	0.971	0.772	0.880	0.691	0.815
Hansen test excluding group for GMM instruments Pr> chi2	0.893	0.792	0.514	0.842	0.566	0.929
Difference-in-Hansen tests for exogeneity of GMM instruments Pr> chi2 (null – instruments are exogenous)	0.962	0.941	0.760	0.728	0.614	0.708
Hansen test excluding group for IV instruments Pr> chi2	0.850	0.784	0.428	0.784	0.806	0.765
Difference-in-Hansen tests for exogeneity of IV instruments Pr> chi2 (null – instruments are exogenous)	0.973	0.971	0.942	0.736	0.405	0.614

Source: Authors' calculations using STATA 11.

Table-2
The results of system GMM estimation

Model Variable	Model I		Model II		Model II	
	DGMM	OGMM	DGMM	OGMM	DGMM	OGMM
Fd _{t-1}	0.932 ^{***} (9.76)	0.932 ^{***} (10.29)	1.316 ^{***} (4.50)	1.316 ^{***} (4.44)	1.167 ^{**} (1.86)	1.025 ^{***} (3.60)
Inf	-0.327 ^{***} (-4.21)	-0.281 ^{***} (-3.80)	-0.659 ^{**} (-2.06)	-0.736 ^{**} (-2.10)	-0.458 (-1.44)	-0.435 ^{**} (-1.83)
GDP	0.002 ^{***} (3.37)	0.002 ^{***} (2.60)	0.002 [*] (1.69)	0.002 [*] (1.79)	0.003 ^{**} (1.86)	0.003 ^{**} (2.08)
Trade	0.275 ^{***} (3.66)	0.293 ^{***} (3.75)	0.262 ^{**} (1.85)	0.271 ^{***} (2.40)	0.345 ^{***} (2.38)	0.378 ^{***} (2.82)
Oil Rent	-0.719 ^{***} (-10)	-0.751 ^{***} (-8.19)	-0.840 ^{***} (-2.67)	-0.894 ^{***} (-5.10)	-1.052 ^{***} (-2.74)	-1.112 ^{***} (-3.16)
Ins	6.504 ^{***} (3.47)	6.877 ^{***} (2.70)	18.458 ^{**} (1.94)	19.114 [*] (1.68)	14.158 [*] (2.04)	11.384 (1.45)
Oil*ins	-0.596 ^{***} (-5.13)	-0.589 ^{***} (-4.48)	-0.947 ^{***} (-2.97)	-1.075 ^{***} (-2.71)	-0.946 ^{***} (-2.65)	-0.929 ^{***} (-3.39)

Significance levels: *** 1%, ** 5%, * 10%, Source: Authors' calculations using STATA 11.

The results imply that not only the direct effect of oil rent on financial development is negative and statistically significant, but also its indirect effect through the channel of institutional quality is negative and significant and thus the overall effect of oil rent on financial development is negative.

Also, table-2 shows that our another variable of interest (institutional quality) has a positive and significant impact on financial development in each model except in the model III in the case of orthogonal deviations which has a little difference from significant level of 10%. In total, we can conclude that the increase of institutional quality level leads to increase of the level of financial development.

Conclusion

So far the empirical studies have focused on the resource curse and its role in economic growth of countries and have tried to explain the cause of resource curse in these countries. But the fact is that the resource curse may be also occurred in financial development of oil-dependent countries and weaken their financial development level. Hence in this research it is tried to survey direct and indirect effects of oil rent on financial development in major oil exporting countries.

The obtained results show that in oil-export dependent countries the huge oil rents in addition to weaken the financial development directly, also leads to worsen the institutional quality indirectly and thereby reduce the level of financial development in countries. So, oil resources abundance in selected countries, has become a curse rather than a blessing. Also the results suggest that institutional quality (the overall

governance index) has a positive and statistically significant effect on financial development. Hence improving the institutional quality is a necessary and essential condition to promote the financial development level and policy makers have to make appropriate policies for improving governance in these countries. In other words, in order to promote the financial development level, policy makers must adopt some policies to enforce law among individuals, reducing corruption, increasing the voice of people and accountability of authorities. Also the governments must promote their efficiency and ability for implementing policies and managing by creating the transparency and improving the accountability system as well as employing qualified managers.

Also improving the quality of laws and regulations (such as avoiding the cumbersome rules and long and complicated bureaucracy) can help to promote financial development. In fact, the government's efforts to improve and maintain a high level of institutional quality, prevents the negative impact of oil rents on institutional quality and will neutralize to some extent the negative effects of oil rents on institutional quality and subsequently on financial development. Also, considering the positive effect of economic growth (which is proxied by GDP per capita) as well as degree of trade openness and the negative effect of inflation on financial development in these countries, it is recommended that in order to promote the level of financial development, policymakers adopt appropriate policies to increase economic growth, trade openness and control the inflation.

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