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The Impact of the Natural Resources Rents on the Economic Growth: The Case of Qatar *

Doğal Kaynak Kazancının Ekonomik Büyümeye Etkisi: Katar Örneği

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ÖZ

Bu çalışma, Katar'da doğal kaynak kazancının ekonomik büyüme üzerindeki etkisini ölçmeyi ve başta petrol ve gaz olmak üzere doğal kaynaklar açısından zengin olan bu ülkede kaynak lanetinin geçerli olup olmadığını ortaya çıkarmayı amaçlamıştır. Çalışmada, ARDL modeli ve (1985-2017) dönemine ait zaman serisi kullanılmıştır. Araştırma sonucu, Katar'da doğal kaynakların getirisi ile ekonomik büyüme arasında eş-bütünleşme ilişkisi olduğunu göstermiştir. Çalışmanın ampirik bulguları, doğal kaynakların uzun vadede ekonomik büyüme üzerinde negatif ve anlamlı bir etkiye sahip olduğunu göstermektedir. Dolayısıyla kaynak lanetinin risklerinin Katar için de geçerli olduğu söylenebilmektedir.

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ABSTRACT

This study aimed to measure the impact of natural resource returns on the economic growth in Qatar, in an attempt to find out whether the resource curse is valid in this country which is abundant in natural resources, especially oil and gas. For this purpose, ARDL model and the time series for the period (1985-2017) were used. The experimental results of the study showed a co-integration relationship between the returns of natural resources and the economic growth in Qatar. The empirical findings of the study show that the natural resources have a negative and significant impact on the economic growth in the long run. Therefore, we can say that the risks of the resource curse apply to Qatar.

1. Introduction

Throughout the ages, natural resources have played a fundamental role in creat-ing prosperity in a number of countries that we now describe as developed. However, in the past few decades, there have been relatively few examples of the countries that are rich in natural resources. Norway and Botswana are mentioned as examples of the countries that have been able to use their resources in an effective manner. However, despite their resources, most resource-rich countries experienced a relatively low (negative) growth. This negative pattern of growth of resource-rich countries, and in general the pattern of poor economic and social performance is called the Resource Curse (Kolstad and Wiig, 2009). The resource curse, a concept that clarifies the contradiction between the in-crease in natural resources (non-renewable ones such as oil and gas) that leads to less economic growth and the emergence of negative results for development and vice versa. The idea that natural resources may be a curse rather than a blessing has begun to emerge in the debates that had taken place in 1950s and 1960s on the economic problems of low and middle income countries (Venables, 2016). This term was used for the first time by the economist Richard Auty in 1993 in his book entitled: Sustaining development in

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mineral economies: the resource curse thesis. He described how the rich-natural re-source countries of low-income have failed to use that wealth to boost the growth of their economies compared to those countries of high-income which do not have those resources and achieve high growth rates (Sachs and Warner, 1995).

In spite of the positive role that natural resource revenues play in the economies of rich countries through their contribution to capital formation, GDP, financing the public budget, and raising the volume of total exports, these revenues have significant and serious negative repercussions, which may lead to deepening the economic struc-tural imbalance of these countries and leading it towards more dependence on those resources on the one hand, and raising unemployment rates on the other hand, through exposing the economy to these countries to the Dutch disease theory, which is considered by researchers and scholars as a theory explaining the curse of natural resources. It is a concept that clarifies the apparent relationship between the increase in the discoveries of natural resources and the decrease in production in the industrial sector. The concept was given to the Dutch in 1977 when it is referred to by the British Magazine the Economist. It refers to the serious structural problems faced by the Dutch economy as a result of the great boom in oil revenues after the discovery of oil and gas in the North Sea (Corden, 1984).

Several experimental and theoretical studies dealt with the relationship between the abundance of natural resources on the one hand, and the achievement of economic growth on the other hand. Most studies have concluded that the abundance of natural resources leads to a slowdown in economic growth rates in countries rich in these re-sources. Among the studies that dealt with this relationship, the study carried out by the two economists Sachs and Warner in 1995 related to a number of countries rich in natural resources for the time period 1971-1989, which is one of the first and most im-portant applied studies in this field. In addition, the study of Auty (1993), Gelb and Associates (1988) and Gylfason and Zoega (2006) mentioned studies concluded that the abundance of natural resources leads to a slowdown in the economic growth rates in the countries rich in these resources. Aali (2012) study which examined the Dutch disease viability for 124 dif-ferent countries, using the analysis of panel data during the period 1990-2010. For this purpose, the researcher created 6 different models using the following variables: per capita from gross domestic product, share of fixed capital formation in gross domestic product, human development index, share of natural resource exports from gross do-mestic product, real effective exchange rate index, and labor force variable. The results of the created and tested models in the study showed that there is no evidence of the validity of the Dutch disease in the studied countries for the covered period. Also, Yürük (2008) study which examined the phenomenon of Resource Curse in Russia through the mechanism of the Dutch disease. In the light of the reached findings, the researcher found that the Russian economy has the symptoms of the Dutch disease. Anisa and Mustaf (2014) studies aimed to clarify the impact of oil use and its revenues on the economic growth in Algeria. The researcher concluded that the increasing rate of oil use and its revenues has a negative impact by limiting the growth of strategic sectors. The researcher added that the wealth resulted from the Oil revenue is only ostensibly represented in the growth of macroeconomic indicators, and therefore Algeria is suffering from the resource curse. In contrast, Mehar at al. (2018) study which examined the relationship between the natural resource revenues and economic growth for the case of Paki-stan and India during the period 1970-2017. The study used the Co-integration method to study the long-term relationship between the variables of the study.

The study concluded that total natural resources have a positive and important impact on the economic growth in Pakistan and India. The study, also, concluded that there is a co-integration relationship between the study variables in the both countries. On the other hand, the study of Şanlısoy and Ekinci (2019) which examined the validity of the symptoms of Dutch disease in the Azerbaijani economy for the time period (2001Q1-2018Q2), using two variables (prices of crude oil and real GDP). The study concluded that there is no evidence of the validity of Dutch disease in the Azerbaijani economy during the studied period. Hamdi and Sbia (2013) study aimed to examine the dynamic relationship between oil revenues and both the government spending and eco-nomic growth in Bahrain during the period 1960-2010, using Co-integration method. The study concluded that oil revenues represent the main source of the economic growth and it is the main channel through which the government spending is funded.

The study of Ahmad and Masan (2015) which examined the short-term and long-term relationships between real oil revenues and both real government spending and real GDP in Oman, using Co-integration method. The study found that government spending is the main source of the economic growth in the short-term and long-term. In addition, the study found a co-integration relationship between the three studied variables. In his research, Tsani (2013), examined the relationship between governance, resource financing and institutional factors by applying it to several countries rich in natural resources. The results of the study showed that there is a positive significant relationship between financing natural resources and institutional factors, as inde-pendent variables, and governance, as a dependent variable. The results also showed that financing natural resources can explain what is known as the "phenomenon of Resource Curse".

2. Methodology, Data Sources, Model Specification

This study uses the empirical method in studying and analyzing the relationship between economic growth, as a dependent variable, and fixed capital formation, natu-ral resources rents and exports, as independent variables, through the use of time se-ries analysis methods represented in the co-integration method ARDL. The study data for the model was approved on an annual basis for the period (1985-2017), and this da-ta were taken from the base of the World Bank and the Organization of Islamic Cooperation (SESRIC). The data and symbols used in the analysis of the model to be estimated showed in table1.

Table 1: Variables and Their Sources

Symbol	Variable	Source
RGDP	Gross Domestic Product	SESRIC
EXP	Exports	SESRIC
K	Fixed capital formation	SESRIC
TNRR	Natural Resources Rents	The World Bank

The model has been formulated as follows:

RGDP=F (REXP, K, TNRR)

The log – linear formulation of the model is:

〖LnRGDP 〗_t= β_0 + β_1 〖LnREXP 〗_t+β_2 〖LnK 〗_t+β_3 〖LnTNRR 〗_t+〖μ 〗_t (1)

Where:

〖μ 〗_t= Random Error;

β_0= Constant or intercept.

3.1. Descriptive Statistics

The results of the descriptive analysis presented in Table 2 show that the total rents of natural resources are highly volatile compared to the formation of fixed capital, exports and economic growth. Jarque-Bera estimates confirm the natural state of the variables (economic growth, total returns of natural resources, exports, and fixed capital formation). The correlation matrix analysis indicates that there is a negative correlation between the total returns of natural resource and economic growth. The relationship between exports and economic growth is positive. The relationship between capital formation and economic growth is also positive.

Table 2: Descriptive Statistics and Correlation Matrix

Variables	$LnRGDP_t$	LnEXP t	LnK_t	$LnTNRR_t$
Mean	24.56178	23.32415	22.90136	3.468313
Median	24.37047	23.11905	22.70580	3.454602
Maximum	25.87566	25.60982	25.01478	3.890359
Minimum	23.48270	21.41344	20.88873	2.731283
Std. Dev.	0.855347	1.457734	1.454637	0.244126
Skewness	0.322659	0.247150	0.112355	-1.191994
Kurtosis	1.584631	1.538289	1.454889	4.738930
Jarque-Bera	3.327095	3.273780	3.352063	11.97251
$LnGDP_t$	1			
$LnEXP_t$	0.980	1		
LnK_t	0.983	0.977	1	
$LNTNRR_t$	-0.283	-0.1137	-0.2353	1

3.2. Unit Root Tests

Most time series of economic variables are characterized by non-stationary because they contain the unit root. The presence of the unit root in any time series results in an average independence and variance from time to time. In empirical models, when a regression relationship is made to time series that actually contain the unit root, it results in a spurious regression between them and problems in econometric analysis (Narayan et al., 2008). Therefore, the co-integration test requires that the time series of the variables to be stationary of the same order. To find out the order of integration, the Dickey-Fuller (ADF) test is used according to the following models:

Trend Model

$$\Delta y_t = \alpha_0 + \beta y_{t-1} + \sum_{i=1}^{p-1} \beta_i \Delta y_{t-1} + u_t \dots\dots\dots\dots\dots\dots\dots (2)$$

Constant and Trend Models

$$\Delta y_t = \alpha_0 + \beta y_{t-1} + \sum_{i=1}^{p-1} \beta_i \Delta y_{t-1} + \alpha_1 t + u_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (3)$$

Where Δ refers to the first difference and y_t refers to the variable of which time series stationary to be examined (GDP logarithm). For analyzing the time series stationary, the hypotheses were put in the unit root tests, ADF and PP, as follows:

H0: β = 0 The unit has root, the series is non-stationary

H1: β ≠ 0 The unit has no root, the series is stationary

Table 3 shows the results of unit root tests for all data as follows:

Table 3: Results of the Unit Roots Tests

	Augmented Dickey–Fuller (ADF)				
	Level		First Difference (Δ)		
Variables	Constant	Constant and Trend	Constant	Constant and Trend	Order of Integration
$LnRGDP_t$	*0.165141 (0.9657)*	*-2.154620 (0.5703)*	*-3.791730 (0.0073)****	*-3.776397 (0.0317)***	*[1(1)]*
$LnEXP_t$	*-0.327348 (0.9099)*	*-2.392861 (0.3760)*	*-5.143846 (0.0002)****	*-5.047179 (0.0016)****	*[1(1)]*
LnK_t	*0.025234 (0.9542)*	*-2.909497 (0.1729)*	*-5.552291 (0.0001)****	*-5.410301 (0.0006)****	*[1(1)]*
$LnTNRR_t$	*-2.190973 (0.2133)*	*-2.285814 (0.4292)*	*-5.037943 (0.0003)****	*-5.230141 (0.0010)****	*[1(1)]*
	Phillips–Perron (PP)				
	Level		First Difference (Δ)		
Variables	Constant	Constant and Trend	Constant	Constant and Trend	Order of Integration
$LnRGDP_t$	*0.373562 (0.9786)*	*-2.016825 (0.5703)*	*-3.816204 (0.0068)****	*-3.823820 (0.0286)***	*[1(1)]*
$LnEXP_t$	*-0.377727 (0.9015)*	*-2.595323 (0.2847)*	*-5.143846 (0.0002)****	*-5.047179 (0.0016)****	*[1(1)]*
LnK_t	*0.017672 (0.9535)*	*-2.965776 (0.1569)*	*-5.605808 (0.0001)****	*-5.442967 (0.0006)****	*[1(1)]*

$LnTNRR_t$	-2.136671 (0.2324)	-2.467984 (0.3406)	-6.231670 (0.0000)***	-7.404621 (0.0000)***	[1(1)]

Note: "**" and "***" represent statistical significance at 5%, and 1% respectively

From Table 3, in the light of the results of the two tests, it is clear that all study variables (LnRGDP, LnEXP, LnK, LnTNRR) are non-stationary in level, that is, their coefficients have a unit root. We cannot reject the null hypothesis that says the time series has a unit root, which means that it is non-stationary at the level [1(0)]. After studyıng time series using the first differences method, it was found that all the vari-ables are stationary at the first difference because the probability value is less than the significance levels % 1 or 5%, so we reject the null hypothesis and accept the alternati-ve hypothesis that the variables are stationary at the first difference. This means that they are stationary of the order [1(1)].

Figure 1 shows that all the variables (economic growth, exports, fixed capital, total returns to natural resources) studied in the model are stationary of the same order (1(1)). Since the variables are stationary in the first differences and the sample size is small, we can examine the co-integration relationships between the variables by using ARDL model in the next section.

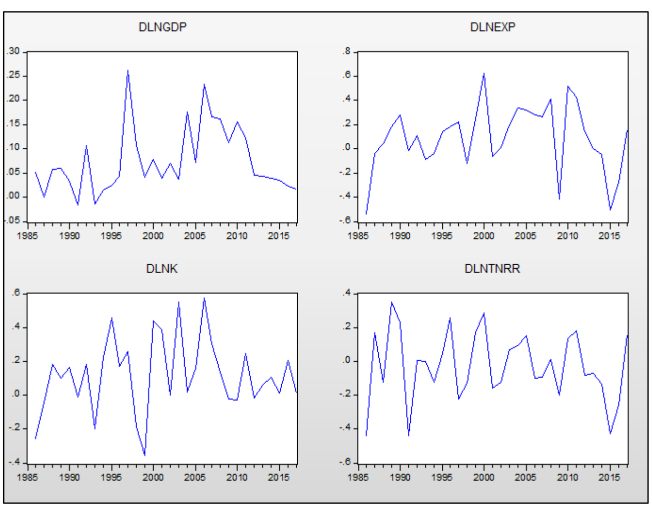

Figure 1: Stationary Series with Differences

3.3. ARDL Bounds Testing Approach to Co-integration

The ARDL method based on the UECM model and the ARDL Bound Testing Ap-proach proposed by Pesaran et al. (2001) is the most appropriate model for examining the existence of a co-integration relationship between the model variables in the long term. The only condition for applying this test is that the order of integration of any of the variables is not](1(2)[which had already confirmed in our study, as the variables under study are stationary at the level](1(1)[. ARDL Method can be also applied if the sample size is small, which is the opposite of most classical co-integration models that require a large sample size for the results to be more efficient.

Co-integration is tested according to the UECM model as follows:

$$\Delta LnGDP_t = \alpha_0 + \beta_1 LnEXP_{t-1} + \beta_2 LnK_{t-1} + \beta_3 LnTNRR_{t-1} + \sum_{i=1}^{p} \gamma_1 \,\Delta LnEXP_{t-1} + \sum_{i=1}^{p} \gamma_2 \,\Delta LnK_{t-1} + \sum_{i=1}^{p} \gamma_3 \,\Delta LnTNRR_{t-1} + u_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

In order to test the existence of the co-integration between variables in the model, the hypotheses are formulated as follows:

H₀: $\beta_{LnGDP} = \beta_{LnEXP} = \beta_{LnK} = \beta_{LnTNRR} = 0$ (No Co-integration).

H₁: $\beta_{LnGDP} = \beta_{LnEXP} \neq \beta_{LnK} \neq \beta_{LnTNRR} \neq 0$ (Co-integration).

The bounds testing is based on the F-statistics, and the decision is as follows: If the value of F-stat is greater than the upper bound of the critical values, we reject the null hypothesis (H0) that there is no co-integration relationship and we accept the al-ternative hypothesis (H1) that there is a co-integration relationship between the model variables. However, if the F-stat is less than the lower bound of critical values, we accept the null hypothesis (H0) that there is no co-integration relationship. If the criti-cal value of Fischer statistic F lies between the upper and lower bound of critical values proposed by Pesaran and al. (2001), then we cannot decide. Before estimating the model, based on the Akaike criterion, lag length for all the model variables should be deter-mined. Figure 2 shows the results of the optimal lag length, in which the optimal mod-el ARDL (1,1,1,0) is chosen because it gives the lowest value for the Akaike criterion.

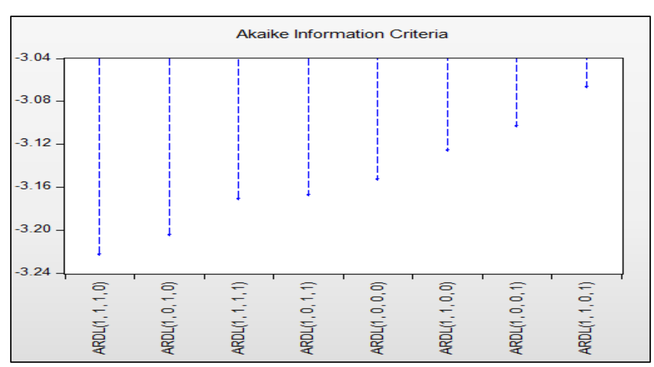

Figure 2: Selection Optimal Model ARDL According to Akaike Criterion

After determining the optimal lag, the F test is used to investigate whether there is a co-integration relationship between the model variables. Table 4 shows the results of the bound testing for Co-integration.

Table 4: Results from Bounds Tests

Dependent Variable	F-statistic	K
$LnGDP_t$	9.21	3
	Critical Value	
Significance Level	**Lower Bound I(0)**	**Upper Bound I(1)**
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

Table 4 shows that F-stat is greater than the upper bound of the critical values at dif-ferent significant levels (1%, 5%, 10%), and therefore we reject the null hypothesis (H0) that there is no long-term equilibrium relationship and accept the alternative hypothe-sis (H1) That there is a long-term relationship between the study variables.

Table 4 shows that F-stat is greater than the upper bound of the critical values at dif-ferent significant levels (1%, 5%, 10%), and therefore we reject the null hypothesis (H0) that there is no long-term equilibrium relationship and accept the alternative hypothe-sis (H1) That there is a long-term relationship between the study variables.

3.4. Long Run Relationship

The ARDL model that will be used in analyzing the long-term relationship between variables is constructed as follows:

$$LnGDP_t = \alpha_0 + \beta_1 LnEXP_{t-1} + \beta_2 LnK_{t-1} + \beta_3 LnTNRR_{t-1} + u_t \dots\dots\dots\dots\dots\dots (\mathbf{5})$$

Table 5: Long Run Long Results ARDL (1,1,1,0)

Regressor	Coefficient	Standart Error	Probability
C	5.028	1.264	0.0005***
$\boldsymbol{LnEXP_{t-1}}$	0.303	0.103	0.0074**
$\boldsymbol{LnK_{t-1}}$	0.287	0.112	0.0167**
$\boldsymbol{LnTNRR_{t-1}}$	-0.306	0.148	0.0494**

Note: "**" and "***" represent statistical significance at 5%, and 1% respectively.

Table 5 shows the results of long-term coefficients. There is a positive relationship with statistically significance 5% between exports and economic growth (RGDP). The results showed that an increase in exports of 1 percent leads to a 0.30 percent increase in economic growth RGDP. Fixed capital formation has a positive effect on economic growth (RGDP) in the long run. The results showed that the increase in fixed capital formation by 1 percent leads to a rise in economic growth (RGDP) by 0.28 percent. The returns of natural resources have a negative impact on economic growth (RGDP), and these results are consistent with the resource curse view, which states that the abun-dance of natural resources leads to low economic growth in the long run. The results showed that the increase in the returns of natural resources by 1 percent leads to a de-crease in the economic growth (RGDP) product by 0.30 percent.

3.5. Short Run Relationship

After obtaining the long-term relationship according to ARDL model, the ECM model, representing the short-term dynamics (short-term relationship) between the inde-pendent and dependent variables, is estimated according to the following formula:

$$\Delta LnGDP_t = \alpha_0 + \sum_{i=1}^{p} \gamma_1 \Delta LnEXP_{t-1} + \sum_{i=1}^{p} \gamma_2 \Delta LnK_{t-1} + \sum_{i=1}^{p} \gamma_3 \Delta LnTNRR_{t-1} + \Delta ECM_{t-1} + u_t \dots\dots\dots..(\mathbf{6})$$

Table 6: Error Correction Model Results ARDL (1,1,1,0)

Regressor	Coefficient	Standart Error	Probability
C	5.028	0.773	0.000***
$\Delta\boldsymbol{LnEXP_{t-1}}$	0.184	0.033	0.000***
$\Delta\boldsymbol{LnK_{t-1}}$	0.022	0.036	0.542
ECM(-1)	-0.42	0.064	0.000***

Note: "**" and "***" represent statistical significance at 5%, and 1% respectively.

The results in table 6 reflect the short-term relationships. The exports have a direct re-lationship with the gross domestic product, and they are statistically significant in the short term. The increase in exports by 1% in the short term leads to an increase in eco-nomic growth (RGDP) by 0.18%. Also, the fixed capital formation has a positive rela-tionship with the gross domestic product in the short-run but not statistically signifi-cant. In the short term, the negative indication and the statistical significance of the error correction coefficient (-0.42) in the above table indicate that the error correction mechanism works and indicates a long-term balance relationship between the model variables. In addition, the Error Correction model ECM (-1) refers to the speed of ad-justment from short term disequilibrium to long term equilibrium. The coefficient of the ECM (-1) or the speed of adjustment to equilibrium for the ARDL estimate is -0.42, indicating that the deviation of variables from the short to the long term equilibrium is significantly adjusted and corrected by 0.42 % annually for Qatar.

Table 7: Results of Diagnostic Tests

Diagnostic Tests	x^2 statistic	Probability
Breusch-Godfrey Serial Correlation LM	0.207843	0.9278
White Heteroskedasticity	22.70464	0.5373
ARCH	1.606181	0.2050
Jarque-Bera	0.536809	0.764598
Ramsey RESET	0.007374	0.9323

After we have evaluated the model and proven the co-integration relationship be-tween the variables, and to ensure the quality of the estimated model and its absence from econometric problems, we will apply some diagnostic tests. Through Table 7 the results of the diagnostic tests indicate that the model. It also passes all the diagnostic tests against serial correlation, heteroscedasticity, and normality of errors. The Ramsey RESET test also suggests that the model is well specified. The ARCH statistics also in-dicates that the null hypothesis that the variance of the random error limit is fixed in the estimated model has not been rejected. Once the Error Correction Model given by equation (6) has been estimated, the cumulative sum of recursive residuals CUSUM and the CUSUM of square are applied to assess the parameter stability (Pesaran and Pesaran, 1997). Graphs 2 and 3 plot the results for (CUSUM) and (CUSUMSQ) tests. The findings indicate the absence of any instability of the coefficients because the plot of the (CUSUM) and (CUSUMSQ) statistic fall inside the critical bands of the 5% confidence interval of pa-rameter stability.

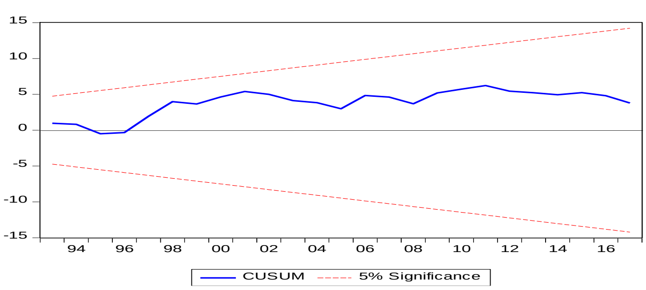

Figure 3: Cumulative Sum of Recursive Residual

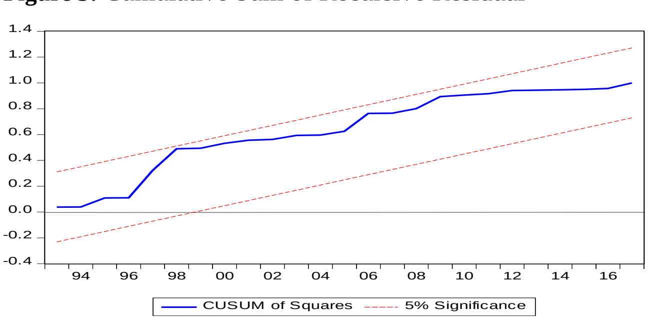

Figure 4: Cumulative sum of square of recursive residual

4. Conclusions

The main objective of this study is to examine the effect of both exports and natural resources revenues on economic growth in Qatar during the time period (1985-2017) using the bound testing approach (ARDL). A number of conclusions have been reached in this study: the time series stationary test for the variables that frame the research was applied using the unit root tests augmented Dickey–Fuller and Philips - Perron (PP, ADF), and it was found that the variables (LnRGDP, LnEXP, LnK, LnT-NRR) are stationary at the first difference 1(1), and there are no integrated variables of the order 1(1). Thus, the co-integration method can be applied using the ARDL model. The results showed that there is a long-term equilibrium relationship (co-integration) among the research variables. There is a statistically significant relationship between the gross domestic product and both exports and the fixed capital formation, and a negative relationship with statistical significance between the returns of natural re-sources and economic growth (RGDP) in the long term, which may indicate the expo-sure of the Qatari economy to the phenomenon of "the resources curse". The results of the short-term relationship showed a positive and significant effect of exports on the gross domestic product, while this significant effect between the accumulation of cap-ital and gross domestic product in the Qatari economy is absent.

References

Kolstad, I., & Wiig, A. (2009). *Political Economy Models of the Resource Curse: Implications for Policy And Research*. https://www.africaportal.org/documents/689/SAIIA_Occasional_Paper_40.pdf, (Erişim: 20.02.2022)

Venables, A. J. (2016). Using Natural Resources for Development: Why Has It Proven So Difficult? *Journal of Economic Perspectives*, 30(1), 161-84.

Sachs, J. D., & Warner, A. M. (1995). Natural Resource Abundance and Economic Growth (No. w5398). *National Bureau of Economic Research*. https://www.nber.org/system/files/working_papers/w5398/w5398.pdf, (Erişim: 10.03.2023)

Corden, W. M. (1984). Booming Sector and Dutch Disease Economics: Survey and Consolidation. *Oxford Economic Papers*, 36(3), 359-380.

Auty, R. (1993). *Sustaining Development In Mineral Economies: The Resource Curse Thesis*. London: Routledge.

Gelb, A. H. & Associates (1988). *Oil Windfalls: Blessing or Curse?* New York: Ox-ford University Press.

Gylfason, T., & Zoega, G. (2006). *Natural Resources and Economic Growth: The Role of İnvestment*. World Economy, 29(8), 1091-1115.

Aali, A. (2012), *Hollanda Hastalığı Üzerinde Ampirik Bir Araştırma*. Yüksek Lisans Tezi. Erzurum: Atatürk Üniversitesi.

Yürük, M. S. (2008). *Kaynakların Laneti Olgusu: Rusya Örneği*. Yüksek Lisans Tezi. Edirne: Trakya Üniversitesi.

Anisa, R. & Mustaf, B. (2014), Exhausted Natural Resources and their Impact on Economic Growth: A Case Study of Petroleum in Algeria, Recherchers Economiques Manageriales, 8(1), 293–314.

Mehar, M. R., Hasan, A., Sheikh, M. A., & Adeeb, B. (2018). Total Natural Resources Rent Relation with Economic Growth: The Case of Pakistan and India. *European Journal of Economic and Business*, 3(3), 14-22.

Şanlısoy, S., & Ekinci, R. (2019). Azerbaycan Ekonomisinin Hollanda Hastalığı Açısından Değerlendirilmesi. *Yönetim ve Ekonomi: Celal Bayar Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 26(2), 595-608.

Hamdi, H., & Sbia, R. (2013). Dynamic Relationships Between Oil Revenues, Government Spending and Economic Growth in an Oil-Dependent Economy. *Economic Modelling*, 35, 118-125.

Ahmad, A. H., & Masan, S. (2015). Dynamic Relationships Between Oil Revenue, Government Spending and Economic Growth in Oman. *International Journal of Business and Economic Development*, 3(2), 93-115.

Tsani, S. (2013). Natural resources, governance and institutional quality: The role of resource funds. *Resources Policy*, 38(2), 181-195.

World Bank: https://www.worldbank.org// (Erişim: 10.02.2022)

Organization of Islamic Cooperation: http://www.sesric.org/oicstat-ar.php (20.03.2022)

Narayan, Paresh and Smyth, Russell. (2008). “Energy Consumption and Real GDP in G7 Countries: New Evidence from Panel Co-integration with Structural Breaks”. *Energy Economics*, 30(5), 2331–2341.

Pesaran, M.H., Shin, Y. & Smith, R.J. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*, 16, 289-326.

Pesaran, M. & Pesaran, B. (1997). *Working with Microfit 4.0: Interactive Econo-metric Analysis*. Oxford: Oxford University Press.