

## Testing the Easterlin Paradox in the Framework of Resource Curse Hypothesis: A Case Study of the OPEC Countries

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### Abstract

Achieving happiness has been always one of the goals pursued by human societies that has attracted the attention of many policy makers, thinkers and researchers. Meanwhile, the relationship between the oil revenues and happiness in the oil-exporting countries is an important subject that has rarely been noted. Therefore, the purpose of the present paper is to test the Easterlin paradox using resource curse hypothesis and to investigate the threshold effect of oil rent on happiness in OPEC countries in the period 2005-2016. For this purpose, the factors affecting happiness were modeled using dynamic threshold panel model. The estimation results have shown that the Easterlin paradox exists in OPEC countries. In other words, first, the increase in the ratio of oil revenues to GDP has improved happiness in oil-producing countries, and after exceeding the 43% threshold, increasing the ratio of oil revenues to GDP has reduced happiness in these countries.

**Keywords:** Happiness, Resource Curse Hypothesis, Easterlin Paradox, Dynamic Threshold Panel Model.

**JEL Classification:** Q30, I31, Q33, O53, C23.

### 1. Introduction

The scientific evidence has shown that greater happiness makes the mind more dynamic, develops the talent, leads to longer life span, better function, greater production and productivity and as a result to greater employment rate and healthier economy (Oswald et al., 2015). Thus, the identification of the factors affecting happiness is the first step in achieving greater happiness in the society. Meanwhile, the researchers have investigated the economic, social, psychological

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and cultural factors affecting happiness. There are different economic factors affecting happiness like income (Easterlin, 1995; Van Praag & Carbonell, 2004; Carabelli, & Cedrini, 2009); inequality of income distribution (Alesina, et al, 2004); wealth (Argyle, 2001); inflation and unemployment (Knabe & Rätzel, 2010); monetary policies (Ruprah & Luengas, 2011). The first study on the relationship between resource curse and happiness was conducted by Ali et al. (2020) that shows the negative effects of oil rent on happiness in the oil-rich countries but the present study aims to test Easterlin Paradox in oil-exporting countries, thus it features an innovation in relation to the study conducted by Ali et al., (2020). The effect of oil rent on happiness from Easterlin Paradox perspective can be a new and noteworthy subject in completing the Resource Curse hypothesis. Although the use of resource curse phenomenon to explain the causes and roots of underdevelopment of the countries rich in natural resources has a long history, it was proposed and evolved scientifically in 1990s by some researchers such as Auty (1993), Sachs & Warner, (1995). This phenomenon has also elaborated on different aspects of the abundance of natural resources in the countries rich in these resources including the spread of corruption and reinforcement of rent-seeking activities (Arezki & Bruckner, 2011; Ebeke & Omgba, 2011); the weakening of government and democracy (Busse & Groning, 2013; Bowland, 2012); the increase in the inequality of income distribution (Buccellato & Alessandrini, 2009; Mallaye et al., 2015; Nademi, 2018); the decline of capital accumulation and decline in productivity (Philippot, 2010; Blanco & Grier, 2012; Topp & Kulus, 2014).

Therefore, the main research hypothesis is the threshold effect of oil rent on happiness in the OPEC member countries which seeks to answer the question: How does the oil rent affect the happiness in the framework of Easterlin paradox and Resource Curse hypothesis in OPEC member oil-exporting countries.

## **2. Theoretical Literature**

Easterlin (1974) considers the relationship between income and happiness to be ambiguous such that he states that though the relationship between income and happiness is positive in the short run, the happiness does not change much along with the increase in income in the long run. From this perspective, the relationship between income and happiness in the long run is more like an Inverted-U relationship than a direct ascending relationship. As a result, the relationship between income and happiness converts into a puzzle or paradox that is known as Easterlin Paradox in the theoretical literature (Easterlin, 1974). A probable answer as to the reason for the existence of Easterlin puzzle is that while the economic growth improves the living conditions, it also promotes people's living standards, and makes people continuously compare their living conditions and make judgments accordingly (Clark et al., 2008). On the other hand, there is no indication that the people in the developing countries are secure against the increase in their economic ideals and wants. Therefore, the perceptions of one's

financial status and comparing it with those of others is the same thing preventing the increase in people's happiness along with the improvement in people's welfare.

Another probable reason in response to Easterlin's puzzle is the income inequality accounting for the reason why the economic growth does not always increase happiness. In other words, more uniform distribution of wealth may be the prerequisite for the increase in happiness in the countries because the economic growth is distributed equally in the population, the resulting feeling of equality can contribute to the enhancement of happiness. However, if the economic growth occurs in only a small portion of the population and it is distributed unequally among different deciles, then most probably Easterlin Paradox appears and the growth of income is not accompanied by happiness. There are many psychological mechanisms that can explain this effect well. One of the mechanisms is that when the income inequality increases among the common people, they can no longer feel the advantage of economic growth and in turn they may feel that only a small group of the individuals in the society take advantage of the national wealth growth unfairly (Oishi et al., 2011). On the other hand, when the inequality increases, the people pay more attention to their relative income positions than their absolute income position, and they always compare themselves to others (Schwartz et al., 2002). If the goal of the society is to increase the sense of well-being and happiness, the economic growth per se does not do this. There are some other important factors like complete and widespread employment, social and political security particularly increase happiness (Easterlin, 2013). Not only are such policies acceptable in the high-income countries, but also they are acceptable in the countries constituting most of the world's population. The analysts who claim that economic growth and happiness move in tandem consider the positive short-term relationship also for the zero long-term relationship, or they use some data for the countries in transition that are connected with the date after their economic collapse. However, the time series data show that the cross-sectional studies are a misleading criterion for drawing a conclusion about the historical experience (Easterlin, 2013). Easterlin (2001) addressed the point that the economic wants are almost the same among different income groups, and as a result the greater income will lead to greater happiness in any period of time. However, the wants grow along with the income and eliminate the desirable impact of income growth on happiness. On the other hand, people always assume that they used to be less happy in the past and they are going to be happier in the future because they consider their wants during their life cycles to be the same, but since the wants grow along with the growth in income, the happiness experienced by individuals is systematically different from the predicted happiness.

In recent studies regarding Easterlin Paradox, Jin & Wunnava (2020) have examined welfare and life satisfaction during the period of 1994-2018 using the Russia Longitudinal Monitoring Survey. They suggest the way one perceives their

own economic welfare is a significant determinant of life satisfaction, and that the subjective economic welfare may be the driver of the 'Easterlin paradox.' In another study, Lim et al, (2020) have considered the effect of income on happiness and They have examined the moderating effect of societal values in the context of the East-Asian happiness gap using the World Values Survey during the period of 2010–2014. They have found that the effect of income on happiness is the lowest in Thailand and Philippines; and the highest in South Korea and Taiwan. Also, they have shown that the impact of income becomes insignificant once it is moderated by the societal values.

### **2.1. Why Does Easterlin Paradox Can Hold for the Oil-Exporting Countries?**

The Easterlin paradox may hold for the oil-exporting countries because of the double and conflicting effects of oil rent on happiness. These effects can be both positive and negative, thus the oil has conflicting effects on happiness in the society. The same conflicting and different effects can indicate the non-linearity of the oil rent effect on happiness or confirm Easterlin Paradox. Thus, its probable positive and negative effects will be discussed in the following lines.

#### **2-1-1- The Probable Positive Effects of Oil Rent on Happiness**

On the one hand, the oil revenues can decrease the financial burden imposed on people through providing considerable income resources to supply the budget required by the governments, and thus it increases people's disposable income, and the people enjoy greater welfare as a result the increase in people's income through entertainment, travel, amusement costs and buying different types of goods and services. Also, the high oil revenue enables the governments to allocate a greater budget to the development-based expenditure such as the expenditure on education, health, entertainment, sports, energy infrastructures, road construction and generally on the public goods. Thus, the government can provide all people in the society with greater welfare, and will probably make them happier through providing the above-mentioned facilities relatively cheaply. Meanwhile, some oil-rich countries seek such goal through making modern sports and recreational facilities, and holding international sports competitions. The UAE is a case in point.

Establishment of the Ministry of happiness and tolerance in the UAE indicates the attempt of this oil-exporting country to address the subject of increasing happiness (Shamsi et al., 2018).

The oil revenues on the one hand can strengthen the security of the oil-exporting countries, as a result, the people in these countries feel more secure, and prepare the ground required for the promotion of happiness in the society. In other words, if there is no security in a society, it will not be possible to see any promotion of happiness in the society and vice versa i.e. the lack of security is itself one of the preoccupations of some developing societies that decreases the level of happiness in the society (Ouweneel, 2002).

The increase in the oil revenues and distribution of the oil revenues through direct and indirect subsidies can also partly increase happiness particularly among the economically low income groups in the society through decreasing the absolute poverty. Providing unemployment insurance and decent pension can provide the people in the society with a greater peace of mind, and at least prevent from the decline in happiness. Also, the oil revenues can enhance the government power to intervene in the markets to maintain price stability. Also, the government can provide satisfaction to some extent in the short run through stabilizing the foreign exchange rate and the prices of the tradable commodity and implementing the market regulation policies.

The increase in the oil revenues can increase the government power to increase the salaries and wages paid the civil servants and those of the people who have retired from the public sectors, and provide a relative satisfaction at least in the short run. This increase in the revenue can increase the amount of the help given by the people to the charitable foundations and social support bodies, thus it can have positive effects on the happiness of the society.

If the oil revenues are allocated to the development of the new businesses, support of private sector investors, support of the scientific elite of the society in order to commercialize the ideas and to promote the quality of the human capital, it can perpetuate the economic and human capitals in the society, thus preventing the investors and brains from escaping. Also, these revenues can be used to enhance and promote the social, political, and cultural activities of the civil organizations; thus, it enhances the social capital through increasing the awareness in the society and enhancing trust, cooperation and empathy. In turn, the social capital engenders a feeling of social satisfaction, as a result the level of happiness is promoted in the society.

### **2-1-2- The Probable Negative Effects of Oil Rent on Happiness**

According to limited order access theory that introduced by North et, al (2007), the oil rent in some countries contributes to the strengthening of security through enhancing limited access order and selective distribution of oil rent among those in power, and enhancing the motivation for preserving the existing order by those in power in the society. On the other hand, considering the inequality in oil rent distribution in the society among the main economic, political and social groups, the oil rent can increase the motivations for violence, protests and riots among the groups deprived of the oil rent who intend to change the selective oil rent distribution and finally lead to the spread of violence and insecurity. In other words, if the oil rent distribution is selective and leads to the greater popular dissatisfaction with not enjoying any oil rent, it can lead to the violence in the society, and this violence may be demonstrated in different ways such as demonstrations, guild and public protests and in the more extreme cases as revolutions. For example, though Libya managed to provide the public security for many decades through the oil rent, the selective distribution of oil rent by the

rulers, and also the accumulation and escalation of the popular dissatisfaction finally led to a devastating revolution in Libya such that the lack of insecurity and spread of violence lingers on after several years from the revolution in Libya. Thus, oil rent has the potential to provoke violence and to decrease the level of happiness dramatically in the society. In other words, from the perspective of the new institutionalism, if the oil rent enhances the limited access order, it will create a great potential of violence in the society (North et al., 2007) which will decrease the happiness in the society.

The oil rent makes the government feel that it does not need the tax revenues through providing sufficient income resources for the government. As a result, it weakens the tax system and intensifies the lack of economic transparency. Weakening the tax system as the intermediate factor between the public and private sectors weakens the relationship between economic policy-making and enhancement of private sector economy. This finally leads to the long-term decrease in economic growth through the negative effects originating from the anti-development and anti-production policy-making. Following this decrease in the economic growth, the increase in the unemployment rate leads to the popular dissatisfaction where the people's level of happiness declines. Also, the lack of a strong tax system and government's need for such a system reinforces the government's unaccountability to the people. As a result, the bases of democracy and civil society in the society are weakened, and the level of happiness decreases in the society through causing political dissatisfaction.

The huge resources of oil rent converts the government into a center of creation and distribution of oil rents, and this damages the public trust in the government by escalating the rent-seeking activities and the spread of corruption. Thus, it can decrease the people's happiness level. Also, the extreme dependency of the economy on oil rent leads to the transfer of the foreign fluctuations and shocks like the sanctions or negative oil prices shocks to the domestic economy, and it can cause widespread popular dissatisfaction through producing sharp fluctuations in the domestic economy. On the other hand, the dependency of economy on oil and the Dutch disease create an imbalance between the tradable part and non-tradable part of the economy that leads the allocation of resources to the non-tradable section and spread of intermediating because of the increase in the relative prices of the non-tradable commodities in relation to the tradable commodities. Thus, this results in the weakening of the tradable part of the economy and escalation of the inequality of income distribution and reinforcing the dissatisfaction in the low-income deciles which has a negative effect on the level of happiness (Nademi, 2018).

The increase in oil revenues and government expenditure lead to the larger share of the government of the economy, thus decreasing the relative share of the private sector in relation to that of the public sector through crowding-out effect and weakening the private sector in the economy. This has some negative effects on production and employment in the long run. The growth in government size

often leads to the intensification of economic inefficiency as well as the increase in government expenditure. It also changes into an obstacle to the public economy through spreading bureaucracy. The large governments run agencies and involve themselves in the market activities in some countries, and they also damage the welfare of their consumers through creating a monopoly for their producers. Also, the probability of budget deficit increases in the countries depending on oil when negative oil shocks hit, and the method used to compensate for the budget deficit has some destructive effects on the economy. For example, compensating for the budget deficit through borrowing from the Central Bank causes inflation and the inflation decreases the level of happiness in the societies as a inflation tax through decreasing the purchasing power of a large part of the society while increasing the inequality of income distribution (Nademi, 2018).

### 3- Methodology

This research is based on the econometric methodology because the specified model has been extracted based on the theoretical literature. The data on happiness index in will be obtained from the world happiness report<sup>1</sup>. Other data will be collected from the World Bank Website and the WDI data in the period 2005-2016.

The following model is specified to investigate the effects of oil rent on happiness in the OPEC member countries using the theoretical literature:

$$Hap_{it} = f\left(Hap_{it-1}, \left(\frac{Oil}{GDP}\right)_{it}, Infexp_{it}, Un_{it}\right) + \varepsilon_{it} \quad (1)$$

In the above model,  $Hap_{it}$  indicates happiness index, and  $Hap_{it-1}$  indicates the first lag of the happiness that has been included in the model to investigate the dynamics of happiness index in the model because this year's happiness can also be a function of last year's happiness. Also, happiness is a mental entity, and remembering the happy past moments can also lead to happy present moments and vice versa, that is, the unhappiness of the previous years and reviewing the past bad events in mind can lead to the unhappiness at the present time. This is the case such that in the social dimensions that consist of all people making up the society, the good past happenings or the bad past happenings in the society and remembering them now can lead to the happiness or unhappiness of the individuals. Therefore, it seems that happiness can be modeled dynamically.  $\left(\frac{Oil}{GDP}\right)_{it}$  indicates the ratio of oil rent to GDP,  $Infexp_{it}$  indicates the expected inflation,  $Un_{it}$  indicates the unemployment rate and  $\varepsilon_{it}$  indicates error component model. The theoretical justification of considering the oil rent effect on happiness has been completely presented in the theoretical literature, and the variables of

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<sup>1</sup> <https://worlddatabaseofhappiness.eur.nl/>

inflation and unemployment in the happiness model has been taken into consideration based on the previous studies like the study conducted by Perović and Golam (2010). Therefore, all variables included in the model have sufficient theoretical basis based on the econometric methodology.

Since the hypothesis of the present study tests Easterlin paradox or the non-linear effects of oil rent on happiness index, the experimental model will be specified as a threshold model according to the hypothesis.

$$\begin{aligned}
 Hap_{it} = & \beta_1 + \beta_2 Hap_{it-1} + \beta_3 Inflexp_{it} + \beta_4 Un_{it} + A \left[ \left( \frac{Oil}{GDP} \right)_{it} \leq \gamma \right] \\
 & * \beta_5 \left( \frac{Oil}{GDP} \right)_{it} + A \left[ \left( \frac{Oil}{GDP} \right)_{it} > \gamma \right] * \left( \beta_6 + \beta_7 \left( \frac{Oil}{GDP} \right)_{it} \right) + \varepsilon_{it} \\
 A \left[ \left( \frac{Oil}{GDP} \right)_{it} > \gamma \right] = & 1 \quad \text{if} \quad \left[ \left( \frac{Oil}{GDP} \right)_{it} > \gamma \right] \\
 A \left[ \left( \frac{Oil}{GDP} \right)_{it} \leq \gamma \right] = & 1 \quad \text{if} \quad \left[ \left( \frac{Oil}{GDP} \right)_{it} \leq \gamma \right]
 \end{aligned} \tag{2}$$

The equation (2) indicate the dynamic threshold panel regression where  $\left( \frac{Oil}{GDP} \right)_{it}$  indicates the threshold variable and  $\gamma$  indicates the threshold value of oil rent ratio to GDP, and it must be estimated. The threshold value, following Hansen's method, is obtained based on the estimation of the equation (2) for different values of threshold variable, that is,  $\left( \frac{Oil}{GDP} \right)_{it}$  and minimizing the Sum Squared Errors. In other words, the part of the threshold variable that includes the least Sum Squared Errors is the optimal threshold, and if this threshold is found to be significant, through testing its significance, we estimate the model using the generalized moment test based on the obtained threshold. Hansen's bootstrapping method (1996, 1999 & 2000) is used for the significance of this threshold. In addition, Hansen's method is also used to construct the confidence interval and to test one threshold against two thresholds (1999).

Also, Seo & Shin method (2016) was employed to estimate the model through the generalized moment, and the instrumental variables of the second and third lags of the dependent variable were used along with the first and second lags of the explanatory variables. Also, the existence or non-existence of the relationships between the instrumental variables and error term are examined using Sargan Test.

#### 4. Estimation Results

Before estimating the model, the stationary of the variables should be examined. For this purpose, the unit root tests of Levin-Lin-Chu, Im, Peseran, Shin, and Dickey Fuller (ADF)-Fisher Chi-square were used. The results of these tests have been provided according to Table (1).



**Table 1. Panel Unit Root Tests**

Variable	ADF-Fisher	Im, Peseran, Shin	Levin-Lin-Chu	Results
	P-Value	P-Value	P-Value	
$Hap_{it}$	0.00	0.00	0.00	Stationary
$Infexp_{it}$	0.00	0.00	0.00	Stationary
$Un_{it}$	0.00	0.00	0.00	Stationary
$\left(\frac{Oil}{GDP}\right)_{it}$	0.02	0.00	0.00	Stationary

Source: Own Calculation

As the results presented in Table 1 show, all variables are stationary at the 5% significance level. Thus, the research model can be estimated without being caught in spurious regression. Therefore, the results of the model have been provided in the Table 2.

**Table 2. Estimation Results (Threshold Panel GMM)**

Variables	Coefficient	P-Value
Threshold Value	0.43	0.00
$Hap_{it-1}$	0.26	0.01
$\left(\frac{Oil}{GDP}\right)_{it} \leq 43\%$	0.019	0.05
$\left(\frac{Oil}{GDP}\right)_{it} > 43\%$	-0.108	0.00
$Un_{it}$	-0.16	0.03
$Infexp_{it}$	-0.008	0.06
Jarque-Bera Test	4.01	0.13
Heteroskedasticity Test (LR Test)	14.97	0.38
Sargan- J-statistic	48.57	0.409
AR(1)-Arellano-Bond Serial Correlation Test	-3.22	0.00
AR(2)-Arellano-Bond Serial Correlation Test	-0.206	0.83
Interval Confidence of Threshold Value (95% Level)	0.41	54.15
The test of existing one threshold against two threshold value (P-Value)	0.99	

Source: Own Calculation

The ratio of oil rent threshold to GDP in the OPEC member countries was obtained as 0.43, such that the results of Hansen's linearity test with bootstrapping also confirms the threshold significance. Also, the 95% confidence interval shows that the obtained threshold is within the 95% confidence interval, thus we can trust this threshold. Also, the test of one threshold against two thresholds shows that it

is not possible to accept two thresholds simultaneously and the null hypothesis proposing a threshold at the 5% significance level is not rejected. This threshold means that the Easterlin paradox exists in OPEC countries. In other words, in the low oil rent regime means that the increase in the oil rent had a significant positive effect on happiness as long as the ratio of oil rent to GDP is less than 0.43. Also, in the high oil rent regime that when the ratio of oil rent to GDP is greater than 0.43, the increase in oil rent leads to the decline in happiness. Therefore, it can be concluded that the Easterlin paradox holds for the oil-exporting countries. This effect can be analyzed in the following way. In the low oil rent regime, the oil revenues have led to the increase in happiness in the society through increasing the budget allocated to hygiene, education, road construction infrastructures, transferring energy to different parts of the country, building community facilities like stadiums and recreational facilities, development of higher education and universities, and increase in employment rate through injecting the oil revenues to increase the happiness in the society. However, the sharp rise in oil rent in these countries, and the inclination of oil rent towards the non-development expenditure like military expenditure, direct subsidies instead of investing in the infrastructures, reinforcing the rent-seeking activities in the economy, reinforcing the limited access order, weakening the good ruling and diminishing the government accountability to the people, and as a result weakening democracy, increasing corruption, weakening the civil society at the cost of the growth in government size, weakening the activities of the private sector and formation of the quasi-public sector, and removing the popular sector from the economic activities, government's financial independence from the people and weakening the taxation system as the connecting point between the public and government. Thus, the insufficient attention paid by the government to the promotion of national product and discriminatory suboptimal allocation of the resources increase the poverty and inequality and decrease the economic growth and national product. Thus, this decreases people's happiness both socially and politically. In the period under study, the countries that passed the mentioned threshold are Angola in the periods 2004-2008 and 2011, Equatorial Guinea Equatorial Guinea 2000-2008, Iraq in the periods 2004-2008 and 2011-2012, Kuwait in 2000 and in the period 2000-2004 and 2010-2014, Libya in the period 2002-2011 and Saudi Arabia in the periods 2007-2008 and 2011-2012. Other countries have not exceeded the threshold 43% of oil rent in the interval under study.

The unemployment rate has had a negative and significant effect on the happiness in the OPEC member countries. In other words, the happiness has decreased in the countries along with the increase in unemployment resulting in the spread of absolute poverty in the society and increase in the crime which is compatible with the theories and the evidence in the real world.

The expected inflation rate also had a significant negative effect on happiness in these societies. The expected inflation decreases the happiness in the societies

because of reduction in people's purchasing power, increase in inequality of income distribution, creating mistrust in the economic climate and also weakening the competitive power of the domestic producers in comparison with the foreign rivals and as a result weakening the national product.

The first lag of happiness has had a significant positive effect on happiness that indicates the dynamics of happiness in the society. Also, the past happiness and unhappiness affect the present happiness and unhappiness as a mental factor.

Sargan test that is used to validate the instrumental variables shows the lack of relationship between the instrumental variables with the error term. Thus, the instrumental variables used in the model were valid. Also, the Arellano-Bond test for autocorrelation (1991) confirmed the dynamics of the model and lack of higher-order autocorrelation in the component error model. Also, the Jarque Bera test and Heteroscedasticity LR test indicate the normality and homoscedasticity in residuals.

Therefore, the main research hypothesis indicating the threshold effects of oil rent on happiness in the OPEC member countries in the period 2005-2016 cannot be rejected. As a result, it can be said that the oil rent has converted into a curse after a certain threshold through decreasing the happiness in the society which confirms the Resource Curse Hypothesis for the oil rent regime, though the oil rent before the threshold managed to increase happiness in the society as a blessing.

## 5. Conclusion

In the present study, the relationship between oil rent and happiness in the selected OPEC member oil-exporting countries in the period 2005-2016 was evaluated. The hypothesis of the present study is the non-linear and threshold relationship between oil rent and happiness in these oil-rich countries. The factors affecting happiness in the society have been modeled based on the econometric methodology to test the hypothesis using the theoretical literature and review of literature. For this purpose, a dynamic threshold panel method was used. The results of the estimation model show that the Easterlin paradox exists in OPEC countries. In other words, the oil rent had an increasing effect on the happiness in the society until the threshold of 0.43 of the ratio of oil rent to GDP index; however, after exceeding the mentioned threshold and sharp rise in oil rent in the economy, this variable had a decreasing effect on the happiness in the society. Also, the results of the research models show the decreasing effect of unemployment rate and expected inflation rate on happiness in the OPEC member countries that is compatible with the empirical evidence.

Therefore, this paper confirms the existence of Easterlin paradox and this result is consistent with the prior studies like Clark et al (2008) and Oishi et. al (2011).

It is suggested according to the research results that the policy makers in the OPEC member countries pay attention to the threshold relationship between the oil rent effect on happiness in the society when implementing their policies and

allocating the oil resources in the budget. Meanwhile, the policy-makers can spend most of the oil resources to enhance happiness through some expenditure like the expenditure on sports, health, hygiene, road infrastructures, recreation and entertainment centers to attract foreign and domestic tourists.

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(مقاله پژوهشی)

## آزمون پارادوکس استرلین در چارچوب فرضیه نفرین منابع: مورد مطالعاتی کشورهای عضو اوپک

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### چکیده

دستیابی به خوشبختی همیشگی یکی از اهدافی است که تو سط جوامع بشری دنبال می شود و مورد توجه بسیاری از سیاست‌گذاران، اندیشمندان و محققان قرار گرفته است. در همین حال، رابطه بین درآمد نفت و خوشبختی در کشورهای صادرکننده نفت موضوع مهمی است که به ندرت مورد توجه قرار گرفته است. بنابراین، هدف مقاله حاضر آزمایش پارادوکس ایسترلین با استفاده از فرضیه نفرین منابع و بررسی تأثیر آستانه رانت نفت بر خوشبختی در کشورهای اوپک در دوره ۲۰۰۵-۲۰۱۶ است. برای این منظور، عوامل مؤثر بر خوشبختی با استفاده از مدل پانل آستانه پویا مدل سازی شدند. نتایج برآورد نشان داده است که پارادوکس ایسترلین در کشورهای اوپک وجود دارد. به عبارت دیگر، ابتدا افزایش نسبت رانت نفت به تولید ناخالص داخلی موجب بهبود شادی در کشورهای نفتی شده است و پس از عبور از حد آستانه ۰.۴۳٪، افزایش نسبت رانت نفت به تولید ناخالص داخلی موجب کاهش شادی در این کشورها شده است.

**کلیدواژه‌ها:** شادی، فرضیه نفرین منابع، پارادوکس استرلین، مدل پانل پویای آستانه‌ای.

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