The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

Husam Abbas Ali[1], Hiba Youssef Taha[2]

Abstract:

Purpose: This study showed how the impact of the banking sector in rentier countries on economic growth for the period from 2004-2020, for each of Iraq, Qatar, Algeria, Libya, Kuwait.

Design/Methodology/Approach: The method used is the Panel Data Regression Models methodology.

Findings: The results show the weak development of the banking sector in general in the rentier countries, and the weakness of impact of the development of the lending interest rate and the number of bank branches on economic growth, while it found that domestic credit is directly related to economic growth, in addition to that the crises of international oil prices have negatively affected the development of the banking sector. From one period to another, the banking sector's connection with government activities has increased as a result of the weakness of the rest of the economic sectors.

Practical Implications: The study showed the weak development of the banking sectors in the rentier countries, the field of research as a result of their increased dependence on oil and the lack of development of other sectors and consequently the weakness of the private sector, which led to the adhesion of the banking sector to government activities, and the banking sector was exposed to repeated crises arising from the fluctuation of international oil prices as well as the existence of the study.

Originality/Value: The necessity of diversifying the structure of the economy of the rentier countries, the study sample, in a way that leads to the involvement of the banking sector in financing the private sector effectively, reducing interest rates and making them more flexible.

Keywords: Development of the banking sector, economic growth, rentier countries, COVID-2019.

JEL Classification: G2, G21, G24, O16, O33.

Paper type: Research article.

[1]*Al-Furat Al-Awsat Technical University,* *hbtywsf1@gmail.com;*
[2]*Al-Furat Al-Awsat Technical University*

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

114

1. Introduction

One of the central areas of growth economics is explaining why economic growth rates differ between countries. (Balcilar *et al.* 2018) and (Lucas, 1988) shows in his study that the reasons for the increase in economic growth are the accumulation of human capital through education. And the accumulation of specialized human capital through learning by doing, while (Barro, 1991) identified a group of reasons that have an impact on economic growth rates, such as government consumption, which is inversely related to it, and public investment that increases economic growth.

Political stability, which is positively related to growth rates, also, distortions in the prices of investment goods harm economic growth, while savings and population growth are one of the important reasons that affect economic growth because high savings or low population growth leads to higher incomes (Mankiw *et al.,* 1992).

The study (Holtz and Schwartz, 1995) came to show the importance of infrastructure in increasing economic growth, as lies the idea that infrastructure is an important entry point for economic growth, and that its decline is due to the insufficient accumulation of infrastructure capital, while the importance of the banking sector emerged as one of the important reasons in Economic growth was studied empirically by Chumpeter (1911).

In fact, the financial and banking sector plays a vital role in financing economic development. Moreover, the upward trend in the banking sector leads to increased rates of economic growth in any economy. This argument has been confirmed by numerous empirical researches around the world. Therefore, the theory of economic growth sees that financial institutions, especially banks, are a useful tool for improving the productive capacity of the economy and its important internal source of financing for any country, especially in the stages of economic growth (Chumpeter, 1911).

The causal relationship between bank credits and economic growth has been the subject of fleeting and controversial debate in the financial literature. According to Boulding and Hicks (1969), the financial system promotes economic growth and development. This is called supply-led, due to which banks provide more money to support economic activities and this leads to increase in bank credit as a result of economic growth (King and Levine 1993; Miller, 1998) emphasized that economic growth results from financial development.

This means that financial development has a significant positive impact on economic growth. Since the banking sector is one of the most important financial intermediaries, it directs money (savings) from savers to investors. Financial intermediaries transfer funds from units that provide surplus funds to those units that require funds for their investments.

This intermediate position makes this sector the most important for economic growth. In fact, the more developed this sector, the more efficient it is to direct funds to more productive and less risky projects (Kenourgios and Samitas, 2007). Because the developed financial sector must reflect the ease with which entrepreneurs (owners of economic projects) can obtain financial resources, and the confidence with which investors expect to obtain sufficient returns.

The system must also be able to measure, segment and distribute challenging risks, allowing them to rest where they can be best tolerated and should be able to do all of these risks at low cost. With this, more savings, investment, higher productivity and thus economic growth will be ensured (Abubakar and Gani, 2013). The banking sector finances various economic sectors, such as the industrial, agricultural and services sectors, which constitute the most important components of the gross domestic product. With higher degrees of banking sector development with higher degrees for economic sectors such as (industrial, agricultural, services) (Tongurai and Vithessonthi, 2018).

2. The Banking Sector in Rentier Countries

The stability of the banking sector is related to the quality of the economy. The economies that depend on oil as a major source of income are affected by the banking sector in international oil prices, as the International Monetary Fund has identified the mechanism of influence through two channels, the first is the direct channel, as oil price shocks affect the profitability of banks directly through an increase in oil-related lending or activity commercial or excess liquidity in the banking system.

Since oil revenues constitute a large part of external and government income in MENA countries, oil income expectations affect fiscal spending, which in turn affects the profitability of companies and banks through private sector lending country. Higher oil prices can lead to higher domestic demand which will return to higher bank confidence and lower non-performing loans and lending.

It is also likely to expand countries' productive capacity through new public and private investments fueled by oil revenues as a result of higher oil prices, driving up growth rates (Hesse, 2016). Considering the heavy economic dependence on oil, during high price fluctuations. The adverse shocks will push the banking sector to consolidate and tighten credit policies, diversify sources of income and explore new markets. Reliance on a single commodity forces the banking sector in such economies to be homogenous in their business model and ensures a similar response to fluctuations in oil prices (Umar *et al.,* 2021).

The price of crude oil fluctuates up and down affected by many economic determinants of supply and demand factors and their flexibility, as well as the global growth rate, inflation and unemployment rates, as well as determinants and political

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

116

factors. It was close to $22.26 per barrel, while it exceeded $109 in 2012 (Troster *et al.,* 2018).

Perhaps the worst crises that affected global oil prices was in 2019 when the Corona virus began to spread in the city of Hubei Province, China, from where it spread to the whole world and killed many people in the world in different countries. Restrictions were imposed on COVID-2019 control measures that reduced global oil consumption and the price dropped to $2,175 per gallon. The economies of oil-producing countries have been greatly affected because they mostly depend on oil exports (Khan *et al.,* 2020).

Crude oil is not only the most traded commodity in the world, but it is also the most important source of energy in economic activities. The long-term trend of oil prices is determined by supply and demand, which is accompanied by frequent oil-related events (Blair and Rezek, 2008) as well as increased speculation in crude oil-financed products (Fattouh *et al.,* 2013; Büyük and Robe, 2014).

At the same time, oil price volatility increases, and the oil market is unstable. Since 2004, global oil price fluctuations have increased in frequency and breadth (Guo, 2013; Fan and Ji, 2012). The uncertainty caused by oil price fluctuations will affect economic development across Increased production costs (Bernanke, 2010) causing a negative impact on economic activities (Elder, 2010; Van *et al.,* 2019).

In 2019, net oil-exporting countries were hit by an unprecedented double whammy. It is a global economic downturn driven by the COVID-19 pandemic and the collapse of the oil market with the decline in the record price of crude oil for the United States First, the dependence of many of these countries on a single commodity for their exports and revenue makes them highly vulnerable to fluctuations in world oil prices (Gillies *et al.,* 2014).

Second, many of these countries were already in a vulnerable position prior to the current crisis, and further deterioration could exacerbate existing fragility. More than half of the low-income and lower-middle-income countries that depend on oil and gas for their exports and revenues are classified as "fragile". Weak across a number of development measures, including economic growth. (Sachs and Warner, 1995).

Usually, the private banking system in rentier countries is attached to government activities, such as the case of Iraq, for example. Most private banks issue letters of guarantee to customers who deal with the government sector and deal in foreign currency to finance private sector trade. Most of the profits earned by these banks come through these activities in times of savings. Oil finances and thus reduce their contribution to increasing the country's economic growth (Saleh, 2019).

On this basis, this study came to show the amount of difference between the impact of the development of the banking sector on economic growth among some Arab

oil-producing countries, assuming that dependence on oil as a main source of income may reduce the role of the banking sector in contributing to economic growth effectively.

The amount of dependence of each cycle on oil as a percentage of GDP, the highest dependence on oil revenues was for Iraq with an average of (55.1), while the lowest dependence on oil revenues was for Algeria with an average of (21.7) as it is noted from the figure that the trend of dependence on oil revenues Take a zigzag path, and Qatar and Algeria are among the countries that have taken their time baskets in a descending direction. These countries are trying to reduce the percentage of dependence, unlike Iraq, Kuwait and Libya.

Figure 1. *Oil revenues to GDP*
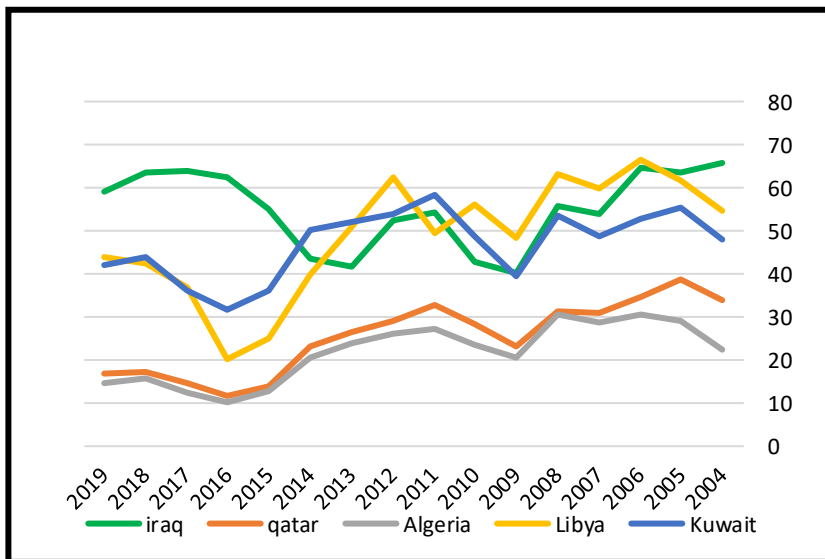
Source: *Prepared by the researcher based on data from the World Bank.*

3. The Development of the Banking Sector in Rentier Countries Compared to Countries with Diversified Economies

Usually, the exports of rentier houses are not diverse and of great focus, especially in the study sample countries, where oil is the main commodity that is exported, without taking into account the development of other economic sectors such as the agricultural, industrial and service sectors, and the government sector is dominant, so the role of the banking sector is centered.

Significantly in granting consumer loans and dealing with government activities. According to the UNCTAD report, the concentration of exports to Iraq for the year 2020 reached (0.78), and this ratio is close to one, meaning that there is a large concentration in exports, while the State of Qatar is the least concentrated country in

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

118

the volume of exports, as the ratio is (0.42), then Algeria is followed by (0.44), Libya and Kuwait (0.61) (0.61), respectively. Focusing on a particular sector without another would reduce the development of the banking sector, unlike countries with a large diversification in the structure of production and exports, such as Italy, Austria, Poland and Thailand.

Italy, which topped the world's least concentrated countries in exports with (0.05), is the most diversified and least concentrated country Austria and Poland with a concentration of (0.06) and Thailand with a percentage of (0.07), as Figures 1-4 compare the development of the banking sector between the rentier countries, Italy and Thailand, as Austria and Poland were excluded due to the lack of data on the banking development reached by those countries.

Figure 1 shows the volume of domestic credit extended to the private sector as a percentage of GDP. Thailand is the country that provides the most credit to the private sector, with an average of (134%), followed by Italy (83%), and this percentage indicates that these countries have an effective banking sector It finances the various economic sector, while Iraq was one of the least credit-granting countries with an average of (5.8%).

Figure 2. *Domestic credit provided to the private sector to the output in rentier and diversified countries*
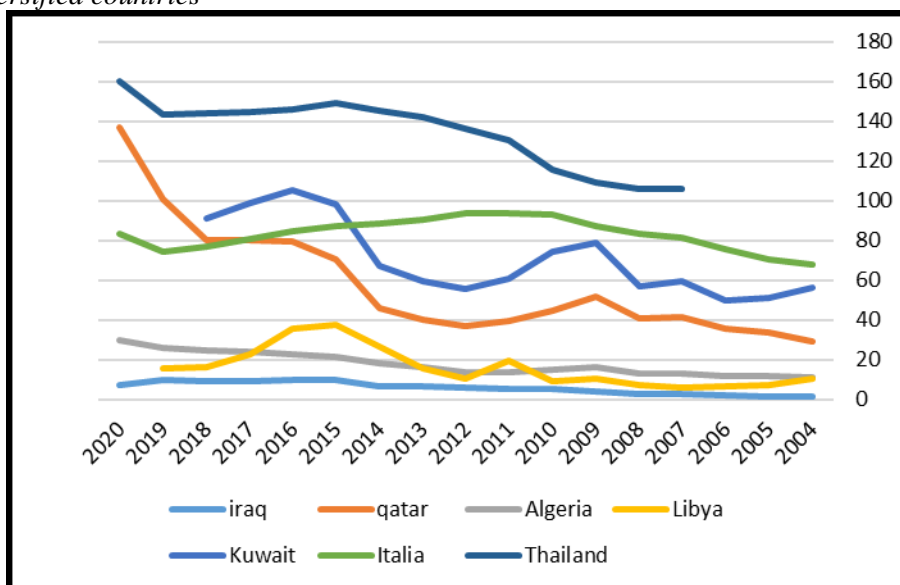
Source: Prepared by the researcher based on data from the World Bank

In terms of the number of commercial bank branches, it is noted that Italy is one of the countries with the most number of branches at a rate of (52.3%), followed by the rest of the rentier countries in which Iraq withers at a rate of (4.3%). Reducing the financing of the various banking sectors.

Figure 3. *The number of bank branches per 100,000 in rentier countries and various countries*
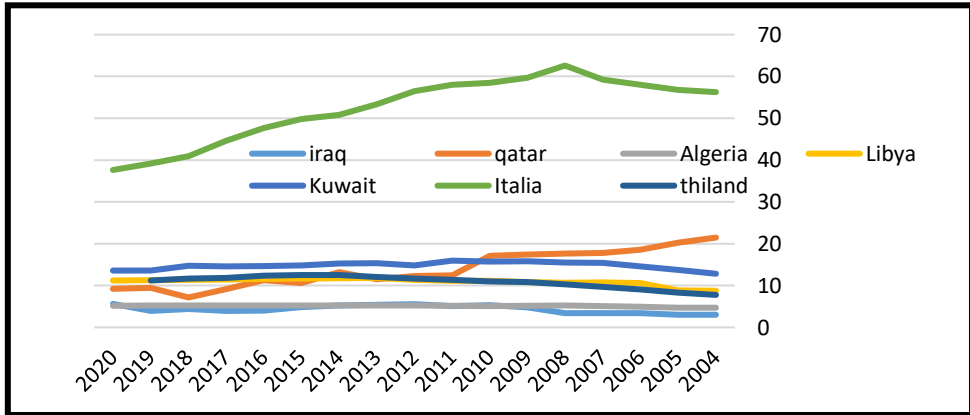
Source: *Prepared by the researcher based on data from the World Ban*k.

In terms of the interest rate, it is accepted that lowering it leads to an increase in demand for loans and thus an increase in economic development. It is noted that Italy and Thailand had the average interest rate on loans (4.4%) g (4.8%), in which it is noted that the interest rates of the rentier roll are high Especially Iraq, where the average lending rate was (13.9%).

Figure 4. *The interest rate on lending in rentier and diversified countries*

Source: *Prepared by the researcher based on data from the World Bank.*

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

120
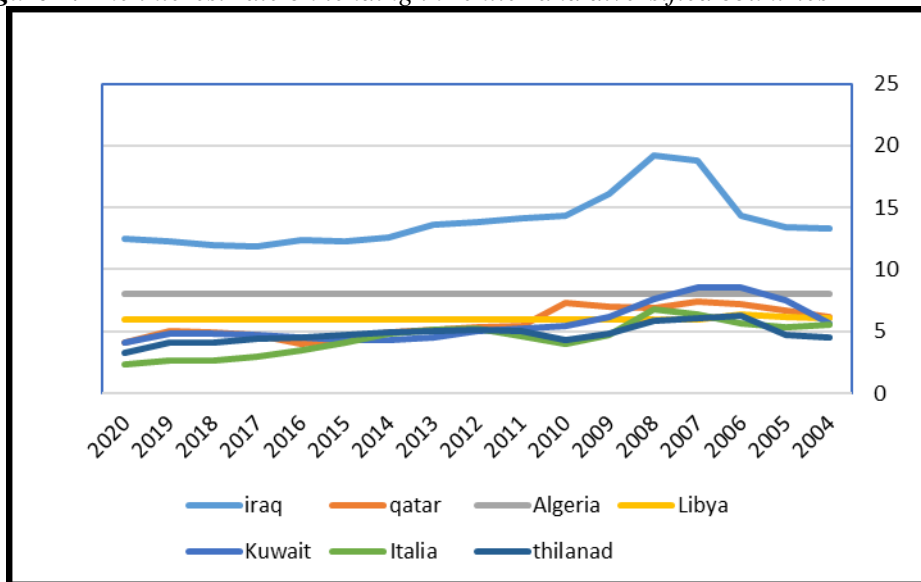
4. Data Collection Sources

All data on the development of the banking sector (domestic credit, number of branches per 100,000 adults, lending interest rate) and data on economic growth (GDP) from the database of the World Bank and the central banks of (Iraq, Qatar, Algeria, Libya, Kuwait) from 2004 to 2020.

We use the total domestic credit, which is one of the important indicators used by many studies (Saci *et al.,* 2009; Dudian *et al.,* 2013; Dudian *et al.,* 2013; Rushchyshyn *et al.,* 2021; Rushchyshyn *et al.,* 2021) and the number of banking sector branches per (100000) adults for the purpose of measuring financial access. This indicator was used by many studies (Tongurai *et al.,* 2018; Rushchyshyn *et al.,* 2021) and the lending interest rate index (Abusharbeh, 2017). The gross domestic product has been used as an indicator of economic growth (Abusharbeh, 2017).

Using the Panel Data Regression Models method, which is a mixture of string data and sectional data and takes the following form:

$$\beta_3 dc_{3it} + \beta_3 nb_{4it} + u_{it} + \beta_1 + \beta_2 dc_{2it} = \qquad Gdp_{it}$$

Where (i) refers to the units, which are the countries of the study sample (N: the number of countries) and (t) to the time period (T, the number of observations), and (Gdp_{it}) represents the independent variable, which is the gross domestic product, and (β_1) represents the fixed limit, while represents the fixed term($\beta_2 dc_{2it}$) to domestic credit (dc) and ($\beta_3 dc_{3it}$) to the number of branches per 100,000 adults (nb) and $\beta_3 nb_{4it}$() to the lending interest rate interest rate on lending *(irl)* and (v_{it}) the rate of random error under these conditions for each country (Gujarati, 2011).

There are two approaches to estimating longitudinal data, which are the fixed effect approach and the random effect approach. In the case of the fixed effect approach (Gujarati, 2011) three important methodologies are applied in the fixed effect approach:

All coefficients constant across time and individuals According to Gujarati (2011) this assumption is unrealistic because it treats all observations equally as if they were homogeneous and does not take into account the difference in observations and time, so this method will be neglected.

Slope coefficients constant but the intercept varies across individuals: the fixed effects or least-squares dummy variable (LSVD) regression model is a method that distinguishes between the observations for each sample without taking time into account (Brooks, 2018) as a dummy variable is added and thus the equation becomes as follows:

$$\beta_3 ir_{3it} + \beta_3 nb_{4it} + u_{it} + \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \alpha_4 D_{4i} + \beta_2 dc_{2it} = Gdp_{it}$$

So that: $D_{2i} = 1$if the item belongs to the State of Iraq, and (0) otherwise, $D_{3i} = 1$if the item belongs to the State of Qatar, and (0) and so on, and accordingly we can make comparisons between countries, meaning that each country has its characteristics unique (Gujarati, 2011).

Slope coefficients constant but the intercept varies over individuals as well as time: the dummy variables express the effect of the difference in observation (the state) and the time component can be entered, meaning that the degree of influence of the independent variable on the dependent changes with change with time due to changing government rules and oil prices Globally or due to external factors such as wars and natural disasters, since we have (17) years, it is possible to use (16) dummy variables and write the equation as follows:

$$Gdp_{it}$$
$$+ \lambda_0 + \lambda_1 Dum2004 + \lambda_2 Dum2005 + \cdots + \lambda_{16} Dum2019 \quad + \beta_2 dc_{2it} =$$
$$\beta_3 nb_{4it} + u_{it} \beta_3 ir_{3it} +$$

That is $Dum2004$ takes the value for observations in the year 2004 and (0) otherwise the year 2020 was used as a base year, so the truncated part in terms of (λ_0)

Equation (2) is mixed with equation (3) as follows (Gujarati, 2011):

$$Gdp_{it}$$
$$=$$
$$\alpha_1 + \alpha_2 Diq_i + \alpha_3 Dqr_i + \alpha_4 al_i + \alpha_5 + Dly_i + \lambda_0 + \lambda_1 Dum2004 + \cdots + \lambda_{16} Dum2019 \quad + \beta_2 dc_{2it}$$
$$(\beta_3 ir_{3it} + \beta_3 nb_{4it} + u_{it} \qquad \dots +$$

That is, the effect of time and intercept (states) is mixed in one model.

As for the random effect method, it proposes different cross-sectional limits for each country, and they are fixed over time, assuming that the relationships between the explanatory variable and the explanatory variables remain the same, both cross-sectional and temporally (Brooks, 2018).

Usually, the trade-off between the fixed effect and the random effect is done through the model presented by Housman in 1978. If the null hypothesis is rejected, the random effect model is not suitable for representing the relationship, while if the null hypothesis is accepted, the random effect is appropriate to represent the relationship at the expense of the fixed effect (Gujarati, 2011).

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

122

The following table shows the coding of the study variables and the medical relationship between the independent and dependent variables.

Table 1. *Study variables*

variable	Variable type	Code	nature of relationship
domestic credit	Independent	Dc	+
Number of commercial bank branches	Independent	Nb	+
interest rate on lending	Independent	Irl	-
gross domestic product	Dependent	Gdp	؟

Source: *Own study.*

5. Findings and Discussion

Slope coefficients constant but the intercept varies across individuals: the fixed effects or least-squares dummy variable (LSVD) regression model:

Table (1) shows that the coefficients of the tendency for domestic credit and the interest rate are insignificant, that is, there is no effect between the domestic credit, the interest rate and the number of branches on the gross domestic product at a significant level.(%5)

In terms of distinguishing the constant section , the table shows that Libya has a negative impact on the domestic product, while the rest of the cut parts of the countries show a positive relationship.

Coefficient of Determination(R^2):

The results showed that there were other variables that were not included in the model, as the development of the banking sector on the gross domestic product amounted to (0.585602) and this is due to the weak contribution of the development of the banking sector to the GDP in Iraq gross domestic product.

F-statistic:

The results indicate the significance of the estimated relationship, as the calculated F (15.54451) which is greater than the tabulated F (2.6802) at the level of significance (5%) and at the level of freedom (n-K), in addition to reaching the value of Prob(F-statistic) (0.000000).

Durbin-Watson statistic:

The results showed a self-correlation between the data, as it showed the value of Durbin-Watson (0.550574) which is less than (2).

Table 2. *Slope coefficients constant but the intercept varies across individuals*

Prob.	t-Statistic	Std. Error	Coefficient	Variable
Dependent Variable: LOG(GDP_?)				
Method: Pooled Least Squares				
Date: 12/08/21 Time: 13:36				
Sample: 2004 2020				
Included observations: 17				
Cross-sections included: 5				
Total pool (balanced) observations: 85				

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	74.67250	0.353980	26.43254	C
0.4646	0.734984	6.24E-15	4.59E-15	DC_?
0.1884	-1.327138	0.044481	-0.059032	IRL_?
0.0123	-2.563991	0.022823	-0.058518	NB_?
				Fixed Effects (Cross)
			0.257412	Iraq
			0.228960	Qatar
			0.091581	Algeria
			-0.844820	Libya
			0.266866	Kuwait
Effects Specification				
Cross-section fixed (dummy variables)				
0.585602	R-squared		0.380645	Root MSE
0.547929	Adjusted R-squared		25.40388	Mean dependent var
0.399930	S.E. of regression		0.594814	S.D. dependent var
12.31569	Sum squared resid		1.094335	Akaike info criterion
-38.50925	Log likelihood		1.324232	Schwarz criterion
15.54451	F-statistic		1.186806	Hannan-Quinn criter.
0.000000	Prob(F-statistic)		0.550574	Durbin-Watson stat

Source: *Prepared by the researcher based on the outputs of the EViews 12 program.*

Slope coefficients constant but the intercept varies over individuals as well as time:

The model shows the significance of each of the lump-sum part of the Arab countries amounting to (26.33313), as well as the morale of domestic credit at the level of significance (5%), as the calculated t amounted to (3.448698), which is greater than its tabular value of (1.660), while the model shows the insignificance of the price of The interest on economic growth is due to the stability of the interest rate in some Arab countries, such as Libya and Algeria, and the slight change that occurs in the interest rate in Iraq.

As for distinguishing the cut parts, it appears that both Libya and Iraq have a negative impact on economic growth due to the weak development of the banking sector in these countries, as a result of wars and rampant corruption in them, where the rest of the sections (Kuwait, Algeria, Qatar) showed a positive impact.

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

124

Coefficient of Determination(R^2):

The results showed a rise (R^2) as a result of adding dummy variables if its value was (0.890146).

F-statistic:

The results indicate the significance of the estimated relationship, as the calculated F ((21.49062) which is greater than the tabular F (2.6802) at the level of significance (5%), and this shows that the current model is the most appropriate for estimating the relationship as a result of the improvement in the value of (F) over its value in the previous model, as well as About the significance of Prob(0.00000), which indicates the statistical significance of the model.

Durbin-Watson statistic:

The results showed a significant improvement in the Durbin-Watson test, which amounted to (0.811563), and this confirms that the slope coefficients model is constant, but the cut off part of the y-axis varies according to observations and time, which is the most appropriate to estimate the relationship between the development of the banking sector and economic growth.

Table 3. *Slope coefficients constant but the intercept varies over individuals as well as time*

Prob.	t-Statistic	Std. Error	Coefficient	Variable
Dependent Variable: LOG(GDP_?)				
Method: Pooled Least Squares				
Date: 12/08/21 Time: 13:37				
Sample: 2004 2020				
Included observations: 17				
Cross-sections included: 5				
Total pool (balanced) observations: 85				
0.0000	103.3851	0.254709	26.33313	C
0.0010	3.448698	4.14E-15	1.43E-14	DC_?
0.3071	-1.029977	0.031936	-0.032893	IRL_?
0.0000	-5.057491	0.014153	-0.071580	NB_?
			Fixed Effects (Cross)	
			-0.010610	Iraq
			0.356161	Qatar
			0.002402	Algeria
			-0.759609	Libya
			0.411656	Kuwait
			Fixed Effects (Period)	
			-0.821089	2004—C
			-0.492878	2005—C
			-0.227101	2006—C
			0.041813	2007—C

0.377696	2008—C	
0.092447	2009—C	
0.226588	2010—C	
0.208055	2011—C	
0.463592	2012—C	
0.436441	2013—C	
0.325309	2014—C	
-0.101433	2015—C	
-0.211324	2016—C	
-0.118805	2017—C	
0.065656	2018—C	
0.043023	2019—C	
-0.307990	2020—C	
Effects Specification		
Cross-section fixed (dummy variables)		
Period fixed (dummy variables)		
0.890146	R-squared	0.195983 Root MSE
0.848726	Adjusted R-squared	25.40388 Mean dependent var
0.231346	S.E. of regression	0.594814 S.D. dependent var
3.264791	Sum squared resid	0.143128 Akaike info criterion
17.91708	Log likelihood	0.832817 Schwarz criterion
21.49062	F-statistic	0.420540 Hannan-Quinn criter.
0.000000	Prob(F-statistic)	0.811563 Durbin-Watson stat

Source: *Prepared by the researcher based on the outputs of the EViews 12 program.*

In terms of distinguishing the time periods, the sections show negative effects, and others positive effects as a result of the exposure of those countries to external crises, for example, in the year (2004-2005-2006) the clips in those time periods showed a negative impact, as the average closing price of crude oil decreased and reached (41) dollars per barrel for the year 2004 and then began to improve until it reached (72) dollars per barrel in 2007 and continued to rise in the year 2014 and reached (94) per barrel.

The world oil price fell suddenly and reached (48) dollars per barrel, as a result of the increase in global production of crude oil by the United States, ten million to 14 million barrels per day, and Iraq 3.3 to 4.3 million barrels per day. The return of Iran as an exporter and the increase in Brazilian production from 2.6 to three million barrels per day. According to OPEC statistics, 72 new oil wells were drilled in Brazil last year, compared to 87 wells in 2014.

The negative impact of the development of the banking sector continued in this way until 2018 as a result of the improvement in the price of a barrel to reach (65) dollars per barrel, but this The impact did not last long after the outbreak of the Corona epidemic, the Corona virus significantly affected energy demand around the world, especially in China, which is today the largest importer of crude oil, as it consumes about 10 million barrels per day. Factories have been disrupted and thousands of flights have been canceled around the world.

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

126

While the outbreak of the Corona virus, which began in Wuhan, has become, the outbreak of the virus is slowing down global demand, as it creates a kind of panic and uncertainty at the level of the family sector and the business sector, except for the demand for medical supplies, devices and vaccines, which is expected to increase significantly compared to the demand for other goods and services affected by the virus, such as oil, tourism and air transport services, and the restriction of the movement of goods and travelers across borders even in the European Union.

The products and exports of major countries affected by the outbreak of the Corona virus also represent manufacturing inputs to each other and to other countries of the world. Thus, any supply shock resulting from the epidemic will affect the world as a whole, through contagion through international value chains, especially intermediate goods.

Figure 5. *The impact of the sections on economic growth in light of oil prices*

Source: *Prepared by the researcher based on data from the World Bank.*

Random effect:

Table (4) shows that the random effect model does not give a distinction to the sections, as it appears that the fixed limit has a significant effect for all countries, as it reached (25,73322)in order to reach (Prob.) (0.0000), which is less than a significant percentage (5%) and the value of (t) -Statistic) (2.443437), which is less than its tabular value of (1.660).

As for the other parameters, they are not significant, except for domestic credit, which amounted to (1.23) at a significant percentage (1%), meaning that an increase in domestic credit by one unit leads to an increase in GDP. The total amounted to (1.23).

Table 4. *Random effect*

Prob.	t-Statistic	Std. Error	Coefficient	Variable
		Dependent Variable: LOG(GDP_?)		
		Method: Pooled EGLS (Cross-section random effects)		
		Date: 12/08/21 Time: 13:41		
		Sample: 2004 2020		
		Included observations: 17		
		Cross-sections included: 5		
		Total pool (balanced) observations: 85		
		Swamy and Arora estimator of component variances		
0.0000	108.6279	0.236893	25.73322	C
0.0167	2.443437	5.03E-15	1.23E-14	DC_?
0.8642	-0.171536	0.016777	-0.002878	IRL_?
0.0070	-2.767681	0.012315	-0.034085	NB_?
			Random Effects (Cross)	
			0.000000	Iraq
			0.000000	Qatar
			0.000000	Algeria
			0.000000	Libya
			0.000000	Kuwait
		Effects Specification		
Rho	S.D.			
0.0000	0.000000	Cross-section random		
1.0000	0.399930	Idiosyncratic random		
		Weighted Statistics		
0.131247	R-squared		0.551137	Root MSE
0.099071	Adjusted R-squared		25.40388	Mean dependent var
0.564581	S.E. of regression		0.594814	S.D. dependent var
4.079024	F-statistic		25.81888	Sum squared resid
0.009457	Prob(F-statistic)		0.257474	Durbin-Watson stat
		Unweighted Statistics		
25.40388	Mean dependent var		0.131247	R-squared
0.257474	Durbin-Watson stat		25.81888	Sum squared resid

Source: *Prepared by the researcher based on the outputs of the EViews 12 program.*

Coefficient of Determination(R^2):

The results showed that the value of (R^2) in the amount of (0.131247), which shows the weak influence of the independent variable (the development of the banking sector) on the dependent (economic growth) as a result of the weakness of the banking sector in the Arab oil-exporting countries, the study sample.

F-statistic:

The results indicate the significance of the estimated relationship, as the calculated F (4.079024) is greater than the tabulated F (2.6802) at the level of significance (5%),

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

128

as well as the significance of Prob(0.00000), which indicates the statistical significance of the model.

Durbin-Watson statistic:

The results of the Durbin-Watson test showed a positive correlation, as its value was (0.257474), and this confirms the existence of a correlation between the data.

The comparison between fixed and random effects:

The (Hausman Test) shows that the fixed effect is the appropriate model for estimating the relationship, as Table 5 shows that the value of (Prob.) amounted to (0.000000), which is less than (5%), and therefore the null hypothesis is rejected and the alternative hypothesis is accepted, that is, the random effect is excluded and the use of the fixed effect model.

Table 5. *The comparison between fixed and random effects*

Correlated Random Effects - Hausman Test				
Pool: GDP				
Test cross-section random effects				
Prob.	Chi-Sq. d.f.	Chi-Sq. Statistic	Test Summary	
0.0000	3	84.082439	Cross-section random	
Cross-section random effects test comparisons:				
Prob.	Var(Diff.)	Random	Fixed	Variable
0.0369	0.000000	0.000000	0.000000	DC_?
0.1728	0.001697	-0.002878	-0.059032	IRL_?
0.2035	0.000369	-0.034085	-0.058518	NB_?

Source: *Prepared by the researcher based on the outputs of the EViews 12 program.*

6.   Conclusions and Recommendations

The study showed the weak development of the banking sectors in the rentier countries, the field of research as a result of their increased dependence on oil and the lack of development of other sectors and consequently the weakness of the private sector, which led to the adhesion of the banking sector to government activities, and the banking sector was exposed to repeated crises arising from the fluctuation of international oil prices as well as the existence of the study.

The absence of an impact on the interest rate and the number of branches on economic growth, while it was found that domestic credit had a positive impact on economic growth.

The necessity of diversifying the structure of the economy of the rentier countries, the study sample, in a way that leads to the involvement of the banking sector in financing the private sector effectively, reducing interest rates and making them more flexible to encourage banks to compete and increasing the number of commercial bank branches to increase the coverage of economic sectors in the banking service provided.

References:

Abubakar, A., Gani, I.M. 2013. Impact of Banking Sector Development on Economic Growth: Another Look at the Evidence From Nigeria. Journal of Business Management & Social Sciences Research, 2(4), 47-57.

Abusharbeh, M.T. 2017. The Impact of Banking Sector Development on Economic Growth: Empirical Analysis From Palestinian Economy. Journal of Emerging Issues in Economics, Finance and Banking, 6(2), 2306-2316.

Balcilar, Mehmet, et al. 2018. The Synergistic Effect of Insurance and Banking Sector Activities on Economic Growth in Africa. Economic Systems, 42(4), 637-648.

Barro, R.J. 1991. Economic Growth in a Cross Section of Countries. The Quarterly Journal of Economics, 106(2), 407-443.

Bernanke, B. 1983. Irreversibility, Uncertainty, and Cyclical Investment. Q. J. Econ., 98, 85-106.

Blair, B.F., Rezek, J.P. 2008. The Effects of Hurricane Katrina on Price Pass-Through for Gulf Coast Gasoline. Econ. Lett., 98, 229-234.

Brooks, C. 2019. Introductory Econometrics For Finance (4th Ed.). Cambridge: Cambridge University Press.

Büyük Sahin, B., Robe, M. 2014. Speculators, Commodities and Cross-Market Linkages. J. Int. Money Financ., 42, 38-70

Chumpeter, J. 1911. The Theory of Economic Development. Oxford: Oxford University Press.

Dudian, M., Popa, R.A. 2013. Financial Development and Economic Growth in Central and Eastern Europe. Theoretical and Applied Economics, 20(8), 59-68.

Elder, J., Serletis, A. 2010. Oil Price Uncertainty. J. Money Credit Bank, 42, 1137-1159.

Elgouacem, A., Halland, H., Botta, E., Singh, G. 2020. The Fiscal Implications of the Low-Carbon Transition. OECD Green Growth Papers.

Fattouh, B., Kilian, L., Mahadeva, L. 2013. The Role of Speculation in Oil Markets: What Have We Learned So Far? Energy J., 34, 7-33.

Gillies, A., Guéniat, M., Kummer, L. 2014. Big Spenders: Swiss Trading Companies, African Oil and the Risks of Opacity. Erklärung Von Bern.

Gujarati, D.N. 2011. Econometrics By Example (Vol. 1). New York: Palgrave Macmillan.

Guo, J.F, Ji, Q. 2013. How Does Market Concern Derived from the Internet Affect Oil Prices? Appl. Energy, 112, 1536-1543.

Haralayya, B., Aithal, P. 2021. Implications of Banking Sector on Economic Development in India. Flusserstudies, Volume 30, 1068-1080.

Hesse, H., Poghosyan, T. 2016. Oil Prices and Bank Profitability: Evidence From Major Oil-Exporting Countries in the Middle East and North Africa. In: Financial Deepening and Post-Crisis Development in Emerging Markets, 247-270. Palgrave Macmillan, New York.

The Impact of the Development of the Banking Sector in Rentier Countries on Economic Growth in Light of Recurrent Crises

130

Hicks, J., Boulding, K.E. 1969. A Theory of Economic History. American Journal of Agricultural Economics, 52(4), 619-620.

Holtz-Eakin, D., Schwartz, A.E. 1995. Infrastructure in a Structural Model of Economic Growth. Regional Science and Urban Economics, 25(2), 131-151. https://Unctadstat.Unctad.Org/En/About.Html.

Ji, Q., Fan, Y. 2012. How Does Oil Price Volatility Affect Non-Energy Commodity Markets? Appl. Energy, 89, 273-280.

Kenourgios, D., Samitas, A. 2007. Financial Development and Economic Growth in a Transition Economy: Evidence from Poland. Journal of Financial Decision Making, 3, 35-48.

Khan, N., Fahad, S., Naushad, M., Faisal, S. 2020. Covid-19 Locked Down Effects on Oil Prices and Its Effects on the World Economy. Available at: SSRN 3588810.

King, R.G., Levine, R. 1993. Finance And Growth: Schumpeter Might Be Right. The Quarterly Journal of Economics, 108(3), 717-737.

Lahn, G., Bradley, S. 2020. How Covid-19 Is Changing the Opportunities for Oil and Gas-Led Growth. OECD Blog. https://oecd-development-matters.org/2020/07/10/how-covid-19-is.

Lucas, Jr.R.E. 1988. On The Mechanics of Economic Development. Journal of Monetary Economics, 22(1), 3-42.

Mankiw, N.G., Romer, D., Weil, D.N. 1992. A Contribution to the Empirics of Economic Growth. The Quarterly Journal of Economics, 107(2), 407-437.

Miller, M.H. 1998. Financial Markets and Economic Growth. Journal of Applied Corporate Finance, 11(3), 8-15.

Rushchyshyn, N., Mulska, O., Nikolchuk, Y., Rushchyshyn, M., Vasyltsiv, T. (2021. The Impact of Banking Sector Development on Economic Growth: Comparative Analysis of Ukraine. Investment Management and Financial Innovations, Volume 18, Issue 2, 193-206.

Sachs, J., Warner, A. 1995. Natural Resource Abundance and Economic Growth. National Bureau of Economic Research, Working Paper 5398.

Saci, K., Giorgioni, G., Holden, K. 2009. Does Financial Development Affect Growth? Applied Economics, 41(13), 1701-1707.

Salih, Mazhar Muhammad. 2019. The Rent of Private Banks in Iraq: Behavior and Performance. Iraqi Economists Network, 1-3.

Tongurai, J., Vithessonthi, C. 2018. The Impact of the Banking Sector on Economic Structure and Growth. International Review of Financial Analysis, 56, 193-207.

Troster, Victor and Shahbaz, Muhammed And Uddinm, Gazi Salah. 2018. Renewable Energy, Oil Prices, and Economic Activity: A Granger-Causality in Quintiles Analysis. Universities De Les Illes Balears, Spain, Montpellier Business School, France, Linkoping University, Sweden, 1-42.

Van Eyden, R., Difeto, M., Gupta, R., Wohar, M.E. 2019. Oil Price Volatility and Economic Growth: Evidence From Advanced Economies Using More Than a Century's Data. Appl. Energy, 233-234.

Umar, M., Ji, X., Mirza, N., Rahat, B. 2021. The Impact of Resource Curse on Banking Efficiency: Evidence From Twelve Oil Producing Countries. Resources Policy, 72, 102080.