

Rents, financial development, and economic growth in MENA* countries, 2000–2020

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This paper investigates the role of natural resource rent and other forms of rent on the economic growth of Middle Eastern and North African (MENA) countries within the framework of the rent curse theory. Rent curse theory suggests that while certain types of rent, such as geopolitical, regulatory, and labour rent, can hinder growth, others may act as incentives. Employing the partial least squares structural equation model (PLS-SEM), this study examines the impact of rent and financial development on economic growth in the region. The empirical findings reveal that forms of rent derived from natural resources and regulatory rent have a negative effect on financial development and economic growth, but labour rent and geopolitical rent do not have any contribution to economic growth, so the rent curse theory cannot be confirmed by these two sources of rent. Furthermore, the result indicates that financial development is a crucial factor for economic progress. Moreover, the study suggests that globalization can enhance financial development in MENA countries and stimulate growth.

Keywords:

resource curse,

rent curse,

financial development,

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Introduction

Countries that possess natural resources such as oil and gas should be able to use these resources to drive economic growth. Historically, resource-rich economies such as Australia and the United States have been able to maintain high gross domestic product (GDP) per capita growth. certain resource-abundant nations have not

* Middle Eastern and North African countries: Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Libya, Morocco, Oman, Qatar, Saudi Arabia, Turkey, and the United Arab Emirates.

enjoyed similar levels of success and are trailing behind their counterparts who have fewer natural resources. Countries in Africa, Latin America, and the Middle East, in particular, have experienced slower economic growth than countries with fewer natural resources like China. This phenomenon is known as the “resource curse,” or the “paradox of plenty,” first described by Auty (1993).

One of the seminal studies on this topic is Sachs et al. (1995), which analysed data from 97 developing countries between 1970 and 1989 and found that countries with high resource-based export-to-GDP ratios had low growth rates. While some studies, such as Mehrara (2009), Philippot (2010), Redmond–Nasir (2020), suggest that natural resources can have a positive impact on economic growth and financial development, they refute the existence of the resource curse. Other studies, such as Cavalcanti et al. (2011), have investigated the validity of the resource curse hypothesis in 53 countries using data from 1980 to 2006 and found that having a large amount of oil can be beneficial for real income and short-term economic growth. The reason for this is that countries with natural resources can base their exports and production systems on high-value-added goods and services. However, despite a large body of literature investigating the relationship between natural resources and economic growth in developing countries since the 1980s, the causes of the resource curse remain uncertain, and the existence of the curse is still debated. Some scholars argue that the curse is caused not only by economic factors such as Dutch disease effects and volatile revenue but also by institutional and political factors such as policy failure and the consequences of trade policy closures in the 1960s and 1970s.

This paper argues that while much of the research on the resource curse has focused on natural resource rents, there are other types of rents that have been ignored in studies of the resource curse. These sources include international transfers such as foreign aid (geopolitical rent), government intervention (regulatory rent), and remittances (labour rent). According to Auty–Furlonge (2019), these rent streams have similar effects as natural resource rents, and therefore, the resource curse is part of a larger rent curse. The research also suggests that the impact of each rent source on GDP is 10-20% or greater, indicating that each rent source can have a significant impact on the economy and affect development outcomes, such as the comparison of economic development in Iran and Hungary by Szanyi–Sedighi (2023).

By incorporating these different types of rent streams and the specific characteristics of these rents in the MENA as a region that received the highest resource rents and foreign aid into our model, we can gain a deeper understanding of how rents impact the economy and identify the specific challenges that need to be addressed to promote economic growth in this area. Additionally, this study examines the financial development curse in MENA countries region as a moderation.

Rent streams and economic growth

Rent streams refer to diverse sources of income or revenue available to countries in the MENA region. These streams encompass various types of rents, including those derived from natural resources such as oil and gas, geopolitical rent resulting from foreign aid, regulatory rent arising from government-driven price changes, and labour rent facilitated by remittances sent by migrant workers. Understanding the distinctive characteristics and effects of these rent streams is vital for promoting economic growth and has a significant impact on the economies and development outcomes of MENA countries.

Historically, the MENA region has heavily relied on oil and gas exports (Table 1), leading to a concentration of wealth and power among a small elite in some countries within the region.

The MENA region is renowned for possessing some of the world's largest proven oil and gas reserves. According to the Oil and Gas Journal (2021), the MENA region's oil reserves amounted to 57% of the world's proven oil reserves and approximately 41% of the world's proven natural gas reserves. Crude oil production is approximately 30.4 million bpd, amounting to approximately 31% of the total oil produced in the world and 50% of the oil exported worldwide. Major oil producers include Saudi Arabia, Iraq, the UAE, Kuwait, and Iran. Therefore, resource rent is the cornerstone and pivotal to economic growth and development in the MENA region.

The impact of oil and gas rent has been significant, leading to the emergence of a distinct type of state known as the rentier state in the MENA region (Beblawi–Luciani 2015). While not all countries in the region possess abundant oil and gas revenues, the literature suggests that the presence of oil resources has created a pervasive “rentier mentality” that affects the entire region (Beblawi–Luciani 2015). Different sources of rent among countries have been identified, including international transfers such as remittances, foreign aid, and regulatory rent. In the case of Yemen, migrant worker remittances alone can constitute up to 85% of GDP. In rentier states in which a country's national GDP is heavily reliant on oil rent or related sources such as intraregional foreign aid, royalties, and workers' remittances, as is the case for many countries in the MENA region, the price of oil or changes in these international transfers has a profound impact on the elites' ability to implement distributive policies and economic growth. The following explains the effects of other sources of rent.

In addition to natural resource rent, foreign aid can also replicate symptoms associated with the resource curse. Over the past fifty years, the MENA region has received approximately three times more net aid per capita than Latin America (Boone 1996). It has been confirmed that foreign aid can replicate resource curse symptoms, as it often does not contribute to increased investment rates but is primarily allocated to consumption and expanded government activities within recipient countries (Boone 1996). The domestic expenditure of aid within the public

sector can trigger Dutch disease effects, stifling labour-intensive manufacturing (Rajan–Subramanian 2011). Moreover, foreign aid has been subject to abuse by the elite to accrue personal wealth and maintain political power. This is achieved by allocating more funds to universal public goods that benefit both supporters and opponents.

Table 1

Comparing the labour rent and resource rent in the World

Country name	Average personal remittance received (% of GDP)			Average total natural resources rent (%GDP)		
	1990–1999	2000–2009	2010–2019	1990–1999	2000–2009	2010–2019
East Asia & Pacific	0.209	0.362	0.448	0.963	2.126	2.174
Europe & Central Asia	0.417	0.513	0.735	0.710	1.494	1.782
Latin America & Caribbean	0.698	1.535	1.335	2.974	5.056	4.116
Middle East & North Africa		1.727	1.946	18.360	24.961	22.353
North America	0.029	0.046	0.047	0.981	1.366	0.736
South Asia	2.069	3.584	4.106	2.111	3.104	2.629
Sub-Saharan Africa	0.944	1.775	2.348	8.926	11.694	9.852
World	0.349	0.527	0.711	1.545	2.867	2.919

Source: [3].

The third significant source of rent in the MENA region is remittances from expatriate workers. The interconnectedness among nations is perpetually escalating, with the expansion of relationships facilitated by migration and the surge in people's mobility (Kincses–Tóth 2020). The phenomenon of migration demonstrates a pronounced territorial concentration, as evidenced by Winders (2014); as of 2019, half of the worldwide migrant populace resided in a mere nine nations. Within the realm of international migration, there exist focal points in the form of sizable host countries and global migration destinations, which exert a magnetic pull on migrants spanning long distances. Among these pivotal locales are the United States, Canada, Australia, the United Kingdom, Germany, France, and Spain.

Unlike oil and aid, remittances are dispersed among recipients and serve as a diffuse form of rent that enhances domestic consumption, often benefiting the poorest members of society and supporting local investment, especially in underdeveloped financial systems (Giuliano–Ruiz-Arranz 2009). However, large inflows of remittances can also have adverse effects on GDP growth. This occurs when substantial remittance inflows lead to an appreciation of the exchange rate, making the country's exports less competitive and resulting in the Dutch disease effect and decreased economic growth (Rajan–Subramanian 2011).

The fourth source of rent stems from government intervention in the economy, creating regulatory rent that favours certain groups over others. This practice is particularly prevalent in the MENA region, where the economy is often characterized by monopoly concessions, price controls, regulations, and arbitrary trade barriers.

These conditions facilitate the concentration and ease of acquiring regulatory rent, leading to its misuse and theft (Tollison 1982). Rent-seeking occurs when governments manipulate markets to maintain prices below competitive levels. This diverts resources away from productive activities that contribute to societal improvements, redirecting them towards unproductive or even detrimental activities, resulting in social costs (Tullock 1967, Tollison 2012). Although there is a lack of precise estimates regarding the overall societal cost of rent-seeking, the empirical literature consistently indicates that it impedes economic growth. This is primarily due to obstacles in the development of market competition, increases in market prices, and resulting deadweight losses for society (Murphy et al. 1993).

Rents and financial development

After the 2008 financial crisis, the importance of financial development gained significant attention. However, the role of rents in financial development has received limited exploration in the literature. Different sources of rent play a critical role in shaping the financial environment and can either facilitate or impede financial development. Further research is needed to comprehensively understand the intricate relationships between these factors and their influence on financial development. The financial sector plays a vital role in channelling windfalls (rents) from various sources into investment projects that contribute positively to the overall economy.

Regarding natural resources, Badeeb et al. (2016) highlight that they serve as an additional source for financial institutions, which can enhance the finance-growth linkage. The study conducted by Yildirim et al. (2020) examines the relationship between natural resources and financial market development in developing economies from 1994 to 2017. The results indicate that natural resource rents have a positive long-term impact on financial market development, although no short-term effects were observed. Similarly, Nawaz et al. (2019) support the concept of “resource blessing” in the case of Pakistan, demonstrating that natural resources positively affect the relationship between finance and growth. Additionally, they find that the growth of financial markets leads to increased domestic production in the country. Another study on Pakistan’s economy by Atil et al. (2020) confirms a positive relationship between natural resources and financial market development, further supporting the resource blessing hypothesis.

Remittances also play a significant role in promoting financial development. They increase the aggregate level of deposits and credits, enhance the availability of funds for investment and lending, boost demand for financial services, contribute to the stability and resilience of the financial system, and foster greater financial inclusion (Aggarwal et al. 2006, Gupta et al. 2009, Demirgüç-Kunt et al. 2011, Cooray 2012).

On the other hand, Guan et al. (2020) examine the connection between natural resources and financial market development in China using cointegration and

autoregressive distributed lag (ARDL) analysis. The findings reveal long-term associations that support the resource curse hypothesis. Similarly, in another study on China, Khan et al. (2020) and Umar et al. (2022) identify a negative relationship between natural resources and financial market development, particularly in emerging and developing economies. However, this negative association can be mitigated by considering factors such as institutional quality, trade openness, and human capital (Sun et al. 2020). Furthermore, Moradbeigi–Law (2017) explore the inverse impact of oil resource abundance on economic growth in economies rich in oil resources. In a study of Association of Southeast Asian Nations (ASEAN) economies, Nathaniel (2021) discovers a negative relationship between natural resources and financial market development using panel econometric analysis. The results demonstrate that resource abundance hampers financial development. Additionally, Tang et al. (2022) found a negative association between resource rents and financial market development in another study of ASEAN nations. However, Ali et al. (2022) reveal that favourable business regulations can counterbalance the negative relationship between finance and resources. They also observe that the abundance of natural resources impedes financial market development in Malaysia's banking sector.

These findings underscore the complexity of the relationship between rents and financial development. The financial sector's pivotal role in channeling rents from various sources into productive investment projects underscores the need for a nuanced and comprehensive approach to this evolving field of study.

Data source and descriptions

Our study extensively utilizes data from international sources [1–4]. The dataset covers panel data from 2000 to 2020 and includes thirteen MENA countries, namely, Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Libya, Morocco, Oman, Qatar, Saudi Arabia, Turkey, and the United Arab Emirates. By relying on these authoritative sources, we ensure the reliability and validity of our findings.

Methodology: Structural equation modelling

Structural equation modelling (SEM) is a statistical analysis methodology employed for analysing complex relationships between constructs and indicators, a topic thoroughly examined by Hair et al. (2022) and Hair (2021). It was first introduced by the Swedish econometrician Wold (1983) and later expanded by Lohmöller (1989). The SEM estimates unknown parameters by two alternative methods: the covariance-based approach (CB-SEM) and the partial least squares method (PLS-SEM). In CB-SEM, the objective is to minimize the difference between the matrices of the sample and predicted covariance using a maximum likelihood (ML) function. The estimation of ML is predicated on the assumptions of a joint normal multivariate

distribution and the independence of observations. Conversely, PLS-SEM aim to maximize the explained variance of the endogenous latent variables through the estimation of partial model relationships in an iterative sequence of ordinary least squares (OLS) regressions (Hair et al. 2011). In accordance with (Hair et al. 2019) recommendations for choosing between the two structural equation modelling (SEM) methods, partial least squares SEM (PLS-SEM) should be used when (a) the analysis aims to evaluate a theoretical framework from a predictive perspective; (b) the path model encompasses one or more formatively measured constructs; and (c) researchers intend to explore small sample sizes with nonnormal data. One key advantage of PLS-SEM is its capacity to find a balance between machine learning methods, which are mainly predictive but lack theory (Hair et al. 2021), and factor-based SEM, which focuses on theory confirmation (Hair–Sarstedt 2021). This balance makes PLS-SEM especially useful for applied research disciplines.

In general, the PLS approach comprises two model types: the structural (or inner) model and the measurement (or outer) model. The inner model specifies the relationships between the latent variables, both endogenous and exogenous. The outer models encompass the links between the latent and observed or manifest variables. Two forms of outer models exist: the reflective measurement model, in which the manifest variables reflect the latent variable, and the formative measurement model, in which the manifest variables constitute the latent construct. Accordingly, taking into account the intrinsic multidimensionality of the rent curse and economic growth and the nonobservable nature of regulatory rent, the PLS-SEM method arises as an appropriate statistical approach to this empirical research. One crucial benefit of employing PLS-SEM in comparison to alternative structural models lies in the absence of any precondition pertaining to the normality of the variables encompassed within the analysis. Additionally, it is possible for a latent variable to be underpinned by a manifest variable, which is directly observable (Kovács–Lukovics 2022). It is also worth mentioning that PLS-SEM has been extensively used to study moderation models where the strength of the relationship between two constructs depends on a third construct, known as the moderator (Hair et al. 2022). This provides valuable insights into real-world functional mechanisms. This study uses financial development as a moderator.

The PLS-SEM specification

The potential indicators that define the measurement (or outer) reflective models of the latent variables are, i.e., regulatory rent, financial development, and economic growth, and the outer formative models for latent control variables are resource rent, labour rent, and geopolitical rent.

In PLS path analysis (Figure A1 in the Appendix), the process starts with the specification of structural and measurement models, followed by the examination of

data. Next, the PLS-SEM algorithm determines and provides an overview of important considerations when running the analyses.

The measurement (or outer) models

The regulatory rent in this study is a latent construct by a reflective model that includes two indicators. The first is the Bayesian Corruption Index (Standaert 2015). This indicator is a composite index of the perceived overall level of corruption. The second observable indicator of the regulatory rent latent construct in the index of political corruption is estimated by Coppedge et al. (2019).

The second latent construct is defined as resource rent. It is calculated by oil rents and natural gas rents as a percentage of GDP, and it is extracted by the World Development Indicators [3]. The third latent variable accounts for economic development. For this purpose, the growth rate of real GDP and life expectancy at birth are used as proxies of the overall quality of a population's health and well-being. The fourth latent construct in the PLS-SEM measures financial development. The reflective outer model of these latent variables includes financial institutions and financial markets. To control omitted variable bias, the globalization index, which is composed of economic globalization and social globalization, has been applied.

The structural (or inner) model

The baseline of the inner specification of PLS-SEM is:

$$EcGrowth = \beta_1 ResR_t + \beta_2 RegR_t + \beta_3 Rem_t + \beta_4 Aid_t + \beta_5 FD_t + \beta_6 Glob_t + \zeta_t$$

With this specification, we can test whether all sources of rent hinder economic growth in the MENA region. In addition, we can understand to what extent the curse of rents is conditional on the development of financial markets and globalization in this region.

Empirical results

To assess the reflective outer models, I test:

(a) the reliability of the reflective indicator – outer loading should be larger than 0.708;

(b) the internal consistency reliability – Cronbach's alpha (Ca) and composite reliability (CR) fall between the thresholds 0.70 and 0.95;

(c) convergent validity – the average variance extracted (AVE) of each construct is 0.50 or higher. This criterion is defined as the grand mean value of the squared loadings of the indicators associated with the construct (i.e., the sum of the squared loadings divided by the number of indicators). Therefore, the AVE is equivalent to the commonality of a construct. The AVE is calculated using the following formula:

$$\frac{\sum_M \lambda^2}{2}$$

$$AVE = \frac{\sum_{i=1}^M l_i^2}{M}$$

where l_i symbolizes the standardized outer loading of the indicator variable i of a specific construct measured with M indicators.

(d) discriminant validity – I test the heterotrait-monotrait (HTMT) ratio of correlations lower than 0.90 (Henseler et al. 2015). In short, HTMT is the ratio of the between-trait correlations to the within-trait correlations. HTMT is the meaning of all correlations of indicators across constructs measuring different constructs. The HTMT statistic for the relationship between Y_1 and Y_2 therefore equals:

$$HTMT_{Y_1 Y_2} = \sqrt{\frac{\text{mean}(R_{Y_1 Y_2})}{\text{mean}(R_{Y_1 Y_1}) \text{ mean}(R_{Y_2 Y_2})}}$$

where $R_{Y_1 Y_2}$ is the matrix of correlations between every indicator of Y_1 and Y_2 , and $R_{Y_1 Y_1}$ and $R_{Y_2 Y_2}$ are matrices of correlations between each indicator of Y_1 and Y_2 .

Tests that suggested assessing the formative outer models (Hair et al. 2020): (a) Convergent validity – the correlation of the formatively measured construct with the single-item construct should be 0.70 or higher; (b) indicator of collinearity – variance inflation factor (VIF) values of 5 or above indicate potential collinearity problems; (c) statistical significance of weights (p values should be lower than 0.05); and (d) relevance of indicators with a nonsignificant weight (by checking if the outer loading is larger than 0.50). Outer loadings represent the correlation of an indicator with the construct.

Table 2 reports C_a , CR, AVE, HTMT, loadings, and p values of loadings to assess reflective models.

According to the assessment statistics in Table 2, I conclude that the reflective latent construct is satisfactorily measured by their outer model. For the economic development construct, the manifest variables GDP per capita and life expectancy at birth are included. The outer loadings indicate the strength of the relationship between the manifest variables and the latent construct. The values of 0.89 and 0.91 suggest strong associations. The regulatory rent comprises two manifest variables: Bayesian corruption and political corruption. The outer loadings indicate the degree of association between each manifest variable and the latent construct. The values of 0.96 and 0.52 indicate varying strengths of relationships. Globalization is measured by two manifest variables: economic globalization and social globalization. The outer loadings of 0.94 and 0.95 indicate varying strengths of associations. The financial development construct includes two manifest variables: financial institution and financial market. The outer loadings indicate the strength of the relationships, with values of 0.88 and 0.70.

Table 2

Assessment of reflective and formative outer models

Reflective models	$C\alpha$	CR	AVE	HTMT
Economic development	0.781	0.787	0.820	0.864
	loading		p values of load.	
GDPg	0.895		(0.00)	
LifeEx	0.916		(0.00)	
Regulatory rent	0.445	0.736	0.603	0.256
	loading		p values of load.	
BCI	0.967		(0.00)	
Pol_Corr	0.520		(0.00)	
Financial development	0.447	0.777	0.820	0.798
	loading		p values of load.	
FM	0.883		(0.00)	
FI	0.704		(0.00)	
Globalization	0.890	0.947	0.900	0.765
	loading		p values of load.	
Glo_Eco	0.940		(0.00)	
Glo_So	0.957		(0.00)	

The natural resource rent construct is measured by the manifest variable total natural resource rent (% of GDP). The outer loading of 1.00 signifies a perfect relationship between the manifest variable and the latent construct. It is similar to labour rent and geopolitical rent.

The second step of assessing a PLS-SEM consists of evaluating the structural model. Following the PLS-SEM literature, I consider the following statistics: (1) the statistical significance of standardized path coefficients. (2) The collinearity assessment (VIF)-ideal values are lower than 3. (3) The adjusted coefficient of determination (R_{adj}^2)-represents how much of the variance in the dependent constructs is explained by the independent constructs. R-squared values range from 0 to 1, with higher values indicating a better fit of the model. A common rule of thumb is that R-squared values of 0.25, 0.50, and 0.75 represent weak, moderate, and strong effects, respectively. (4) Assessment of a model predictive power, which consists of applying an algorithm that splits the full dataset into K equally sized subsets of data. The algorithm then predicts each fold with the remaining K-1 subsets, which, in combination, become the training sample- Shmueli et al. (2019) propose a metric for good prediction performance ($Q_{pred}^2 > 0$).

To determine the significance of the path coefficients, I employed a bootstrapping algorithm. This technique is in line with the recommendations of Hair et al. (2011), who suggested 10,000 subsamples for the bootstrapping process. I conducted a bootstrapping routine to scrutinize the path coefficients' significance. Table 3

illustrates the results of the final estimation. The table presents the causal relations between the latent variables and their corresponding path coefficients. Each path coefficient is accompanied by its respective coefficients (P values) and 95% confidence intervals (2.50% and 97.50%).

Table 3

Bootstrapping algorithm results for path coefficients

Latent V. (Direct effects)	Path coefficients (p value)	2.5%	97.5%
Resource rent → Financial development	-0.255 (0.00)*	-0.328	-0.175
Regulatory rent → Financial development	-0.186 (0.00)*	-0.343	-0.041
Labour rent → Financial development	-0.082 (0.049)	-0.182	0.015
Geopolitical rent → Financial development	0.091 (0.16)	-0.044	0.222
Globalization → Financial development	0.082 (0.00)*	0.363	0.679
Financial development → Economic development	0.524 (0.00)*	0.448	0.597
Resource rent → Economic development	-0.134 (0.00)*	-0.175	-0.091
Regulatory rent → Economic development	-0.097 (0.02)**	-0.188	-0.021
Labour rent → Economic development	-0.044 (0.11)	-0.102	0.007
Geopolitical rent → Economic development	0.047 (0.15)	-0.023	0.115
Globalization → Economic development	0.27 (0.00)*	0.180	0.375

I find that financial development positively and significantly causes economic growth in MENA countries. This result is in line with the results of Tran et al. (2020), Cong Nguyen et al. (2019), Yang (2019), and Kutan et al. (2017), which confirm the positive contribution of financial development to economic growth.

According to the results, the resource curse hypothesis is confirmed, in which resource rents are negatively correlated with economic growth and financial development. This confirms that an increase of one percent in natural resource rents tends to decrease economic growth by 0.134%. Our findings align with the work of Shabbir et al. (2020), Rahim et al. (2021), and Inuwa et al. (2022), who also highlighted the adverse effects of natural resources on economic and sustainable growth. Considering the regulatory rent, this rent also has a significant negative effect on the economic growth and development of the financial market and institutions in this region, which supports the rent curse theory introduced by Auty–Furlonge (2019).

However, I cannot find significant results and no correlation between labour rent and geopolitical rent with economic growth and financial development, so these results do not support the rent curse theory of Auty–Furlonge (2019), which suggests that all kinds of rent have a negative effect on economic growth, such as natural resources.

Finally, we underscore the critical role of globalization in fostering institutional reform, leading to financial development and economic growth. As Mishkin (2009) argued, developed countries can facilitate this process by opening their markets to

goods and services from emerging economies, incentivizing these nations to implement necessary reforms.

Overall, our analysis provides critical insights into the different sources of rent influencing economic growth in the MENA region, contributing to the broader discourse on sustainable growth and financial stability.

Table 4

Assessment statistics for the inner model

	VIF_{adj}	R^2	Q^2_{pred}
EcGI	2.792		
FI	1.091		0.179
FM	1.091		0.485
GDPg	1.696		0.228
LifeEx	1.696		0.331
SoGI	2.792		
BCI	1.089		
Pol Corr	1.089		
Financial development	1.089	0.272	0.342
Economic development		0.546	0.533
BIC (Economic development)	-69.627		

Table 4 provides the assessment statistics for the inner model. This indicates that most of the variables have low VIF values, suggesting no collinearity. The adjusted R-squared and Q-squared values suggest that the models for “Financial Development” and “Economic Growth” explain a significant amount of variance in the respective constructs and have good predictive relevance. Additionally, the BIC value for the “Economic Growth” construct indicates that the model has a good balance of fit and complexity.

Analysis of indirect effects on economic growth

Table 5 presents an analysis of the indirect effects of various factors on economic growth in the MENA region through financial development. These indirect effects suggest that financial development acts as a mediating factor in the relationship between these variables and economic development.

The results reveal a positive indirect effect of globalization on economic development through financial development. Specifically, a one-unit increase in globalization increases economic development by 0.265 units through financial development. This is statistically significant with a p value of less than 0.001. This suggests that globalization could enhance financial development, which, in turn, propels economic development. This finding implies that greater international interactions and exchanges could drive financial growth and contribute to economic

prosperity. Also, there is a significant negative indirect effect of natural resource rents on economic development through financial development. Namely, a one-unit increase in natural resource rent results in a 0.124-unit decrease in economic development via financial development. This relationship is statistically significant, as indicated by the p value of 0.005. This suggests that an influx of foreign currency from natural resources might destabilize financial development, thereby impeding economic growth. This again reinforces the phenomenon of the resource curse, where abundant natural resources may not always lead to economic progress.

Table 5

Assessment of the structural model

Latent V. (Indirect effects)	Path coefficients (p value)	2.5%	97.5%
Labour rent → Financial development → Economic development	-0.34(0.25)	-0.095	0.021
Globalization → Financial development → Economic development	0.265(0.00)*	0.173	0.377
Resource rent → Financial development → Economic development	-0.124(0.00)*	-0.167	-0.079
Geopolitical rent → Financial development → Economic development	0.054(0.13)	-0.020	0.118
Regulatory rent → Financial development → Economic development	-0.095(0.03)	-0.193	-0.014

Our results also indicate a significant negative indirect effect of regulatory rent on economic growth through financial development. Specifically, a one-unit increase in regulatory rent leads to a 0.095-unit decrease in economic development through financial development. The p value of 0.036 confirms the statistical significance of this relationship. This suggests that regulatory rent might deteriorate financial development, thereby hampering economic growth. This underscores the importance of prudent government intervention in economic activities.

These findings confirm the direct effect of these factors on economic growth and the crucial role of financial development as a mediator in influencing economic development in the MENA region. Therefore, enhancing financial stability and improving financial institutions can be effective strategies for promoting economic growth.

Discussion and policy recommendation

Our research has presented several significant insights into the dynamics of economic growth in the MENA region. These insights focus on the roles of rent-seeking, financial development, and globalization. Each of these components has shown significant interplay and impact on the economic development of the region. Confirming the resource curse hypothesis, the research found that natural resource rents significantly and adversely impact economic development. This resource curse implies that an increase in natural resource exploitation can destroy the financial

system through pervasive corruption in these rentier states. The study revealed that regulatory rent has a negative effect on both financial and economic development. Excessive government intervention, especially without concrete industrial strategies, can lead to negative economic outcomes. Simultaneously, it could destabilize the financial sector, further hampering economic growth. In addition, the paper confirms the positive impact of globalization on both financial development and economic growth. Opening economies to global markets can promote institutional reforms, enhance the efficiency of the financial sector, and stimulate economic development (Mishkin 2009). Finally, our findings underscore the crucial role of financial development in driving economic growth. Financial development has proven to be a conduit for the effects of regulatory rent and globalization on economic development.

Based on these findings, we suggest the following policy recommendations: Policy-makers should continue to pursue policies that promote integration with the global economy. This includes opening markets, lowering trade barriers, and encouraging foreign direct investment. There should be a focus on developing a robust and inclusive financial sector. Financial development can play a pivotal role in directing resources to productive sectors, promoting entrepreneurship, and stimulating economic growth. Governments should focus on enhancing governance and crafting regulations that encourage economic growth without leading to instability in the financial sector. A sound and clear regulatory framework is essential for economic and financial stability. To counter the resource curse, policy-makers should develop strategies to diversify the economy and reduce overdependence on natural resource rents. This could include investing in other sectors, such as manufacturing, services, and technology. These recommendations should be considered in the development of strategies aimed at stimulating sustainable economic growth in the MENA region. Future research could delve deeper into these dynamics, considering other factors such as political stability, technological innovation, and human capital development. These can provide even more comprehensive insights for policy-makers.

Conclusion

This study presents an analysis of the influences of different forms of rent, financial development, and globalization on economic development within the context of the MENA region. The results highlight the critical importance of these factors and their interconnected relationships in determining economic growth. The study confirms the rent curse theory by negatively correlating resource rent and regulatory rent with economic growth, but it cannot be proven by geopolitical and labour rent.

The findings underline that various sources of rent have different impacts on economic growth. Policy-makers should focus on managing resource wealth and decreasing government interventions, but these countries also need to improve

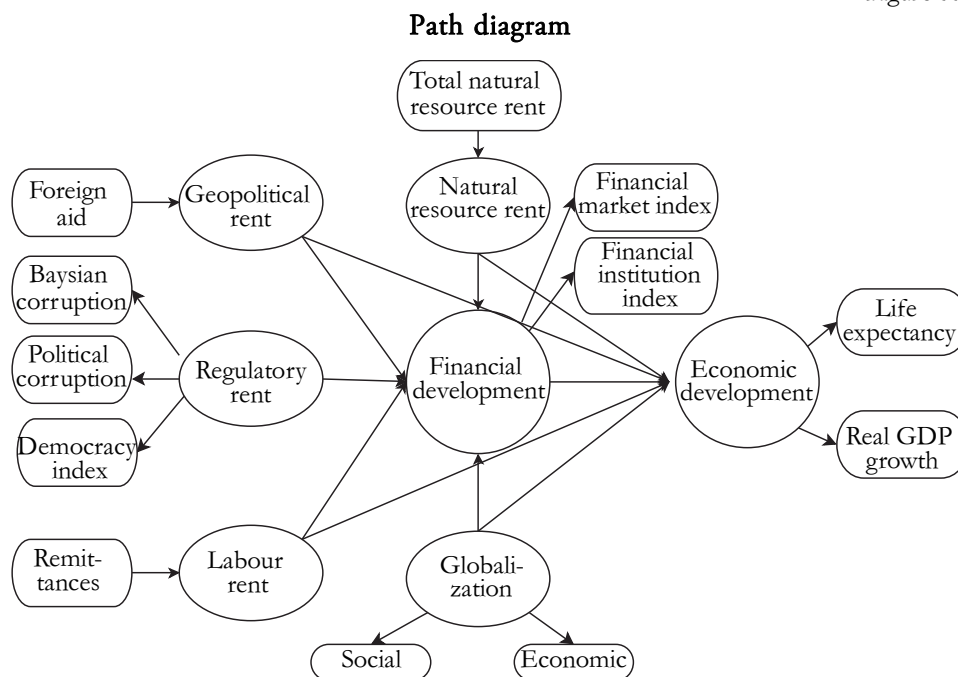
regulatory governance, develop financial markets, and encourage globalization. Policy-makers should be aware of the intricate dynamics of these influences when formulating strategies to stimulate economic development in the region.

Our research contributes to the literature by exploring the complex interplay of rent, financial development, and globalization on economic growth, especially in the context of the MENA region. However, it is also crucial to acknowledge that numerous other factors, such as political stability, institutional quality, human capital, and technological innovation, can play significant roles in shaping economic development. Further studies exploring these elements in tandem with our findings can provide a more holistic understanding of economic growth patterns in the region.

While this study opens up new avenues for understanding the economic growth scenario in the MENA region, it also serves as a reminder of the importance of nuanced, informed, and thoughtful policy-making in this region that is driven by rent. It is through such endeavours that economic growth can be achieved.

Appendix

Figure A1



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