

-RESEARCH ARTICLE-

THE IMPACT STRUCTURE OF THE PRODUCTIVE ECONOMY ON THE ECONOMIC GROWTH: EVIDENCE FROM IRAQ

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—Abstract—

A productive economy's structural effects are necessary for economic development (EG) and have attracted global attention. The current research explores the impact of the structure of a productive economy, such as the production of services, manufacturing, banking, agriculture, and the oil sector, on the EG in Iraq. The researchers used secondary data from the World Development Indicators (WDI) database between 1986 and 2021. The researchers additionally evaluate the relationship between the variables using Dynamic Autoregressive Distributed Lag (DARDL). The results demonstrated a good relationship between the production of services, manufacturing, banking, agricultural, and oil sectors in Iraq and EG. The research provides policymakers with suggestions for formulating policies relating to achieving high EG through a productive economy's effective structure.

Keywords: Productive economy structure, services sector, manufacturing sector, banking sector, agriculture sector, oil sector, economic growth

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1. INTRODUCTION

Governments throughout the world prioritize providing their citizens with a good level of living. The standard of living is determined by variables such as per capita income. The per capita income of a country is determined by its economic prosperity. The countries commit their best efforts to put the economy on the path to sustainable development. The country's economy comprises many industries like finance, manufacturing, and services. All sectors' performance is the ultimate indicator that the country's economy is on the correct road.

Each economic sector has its particular value. This study explores the coupling of many industries, including service, industry, agriculture, finance, and oil, with EG in Iraq. Oil is Iraq's true source of strength. The nation is one of the largest oil-producing nations in the Middle East. In 2021, Iraq produced 4.1 million barrels of oil (Jassim, 2021). In 2021, about 92% of Iraq's foreign earnings came from oil exports, illustrating the significance of the oil industry. Similarly, Iraq's manufacturing industry plays a major role. In 2020, the manufacturing industry contributed \$4.27 billion to the economy's GDP, or \$14.45. (Shamkhi et al., 2022). Similarly, the services industry contributes to the economy; according to 2017 figures, 45.8% of the Iraqi GDP was derived from the services sector (Singh, 2019). Agriculture is another important area. This sector is responsible for 3.3% of Iraq's gross domestic product. Another essential industry is banking. This industry is connected to all other industries in the country. The contribution of the banking industry to the economy is 7.7%. Figure 1 illustrates Iraq's GDP.

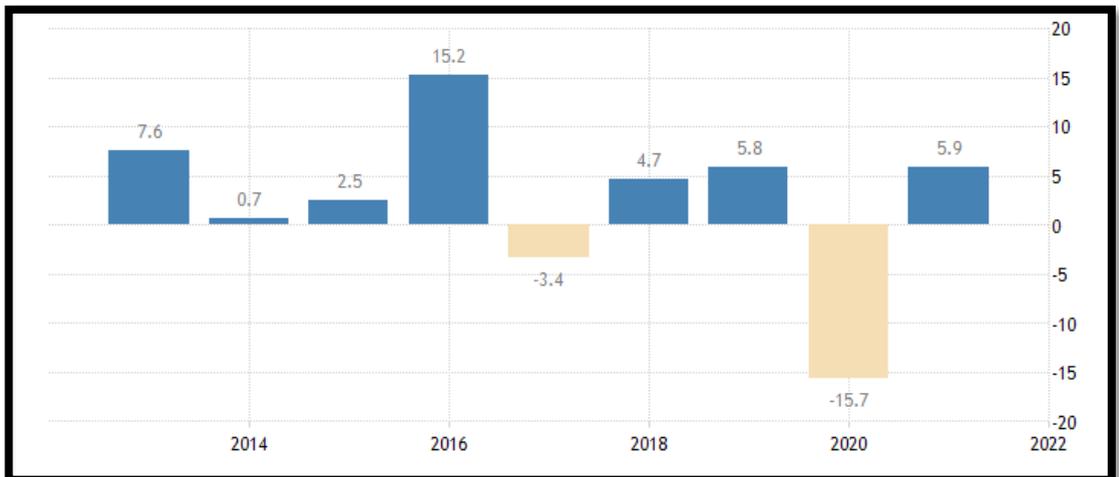


Figure 1. GDP of Iraq

Source: Statista

Similarly to other studies, the current study addresses multiple gaps, namely: 1) there is a wealth of literature on the EG, particularly in Iraq, but the combination of different

sectors such as service, manufacturing, agriculture, banking, and the oil sector has not been tested; the current study addresses this gap; 2) there is a lack of literature on the EG outside of Iraq; the current study addresses this gap; 3) there is a lack of literature on the EG outside of Iraq 2) [Lee et al. \(2018\)](#) and [Singh \(2019\)](#) examined the relationship between the service sector and EG at different times and in different locations; however, the current study will add the effects of the manufacturing, banking, agriculture, and oil sectors in Iraq using a new data set. 3) Although academics have extensively studied the EG, the equation relating EG variables to Iraq's service, manufacturing, agricultural, banking, and oil sectors has not been tested in recent years. 4) [Attiah \(2019\)](#) and [Olufayo \(2019\)](#) studied the effect of the manufacturing sector on the EG at different times and in different locations; however, the current investigation will also focus on it, along with the effect of the service, manufacturing, agriculture, banking, and oil sector in Iraq with a new sample set. 5) [Puatwoe et al. \(2017\)](#) and [Guru et al. \(2019\)](#) examined the relationship between the banking sector and EG. In contrast, using a new data set, the current study will examine the relationship between the banking sector and other sectors, including the service, manufacturing, agriculture, and oil sectors. 6) [Sertoglu et al. \(2017\)](#) and [Epaphra et al. \(2017\)](#) examined the impact of the agriculture sector on the EG. In contrast, the current study will examine the impact of the service, manufacturing, agriculture, and banking sectors on the EG in Iraq using a new data set. 7) [Elheddad et al. \(2021\)](#) and [Udibe et al. \(2018\)](#) researched the nexus between the oil industry and EG. Still, the current study will additionally examine the effect of the service, manufacturing, agriculture, and banking sectors on EG in Iraq using a new data sample. The significance of the current investigation includes the following: 1) the current study will shed light on the significance and necessity of exploring the EG of Iraq with the combination of different sectors; 2) the current study will also result in the addition of EG literature, particularly from an Iraqi perspective; 3) the current study will also aid economy-related professionals in updating their policies to support the economy; and 4) the current study will provide assistance to economy-related professionals in updating their policies to support the economy.

2. LITERATURE REVIEW

The economy is comprised of numerous sectors. All industries are considered economic pillars. The importance of the service sector to the economy is demonstrated by its central role in EG. According to the literature, there is a strong connection between the service industry and EG. In this regard, [Lee et al. \(2018\)](#) examined the possibility of a relationship between service sector productivity and EG. The research was conducted throughout Asia. The investigation was empirical. The chosen industry was the service-providing industry. According to the findings, the service sector's productivity is a clear indicator of economic growth. In addition, Asian countries place great emphasis on improving the performance of their service sectors. In Asia, there is a connection between the services industry and EG.

Similarly, [Singh \(2019\)](#) examined whether the service sector contributes to economic growth. The research was conducted in India. The chosen industry is service providers. The investigation was empirical. The results indicated that India's service industry is a vital component of the economy. Although there is a substantial connection between the services sector and EG, it also serves as an EG instrument. In addition, [Degu \(2019\)](#) examined whether the service and agriculture sectors contribute to economic development. The research was conducted in Ethiopia. The sample for the study was the 42-year data collection. The selected sample data span the years 1975 to 2017. According to the analysis's findings, Ethiopia's service sector plays a crucial role in economic development by constituting a substantial share of the economy. In addition, the agriculture industry is a significant contributor due to its connections with other industries. To maximize productivity, the study also suggests increasing expenditures to raise the standards of both sectors.

The manufacturing sector of every nation is crucial since it is interconnected with numerous other industries. This link also benefits the economy. According to the literature, there is a strong connection between the industrial sector and EG. In this context, [Attiah \(2019\)](#) investigated whether the manufacturing and service sectors play a role in EG. The research was conducted in developing nations. The 65-year-old data set was used as a sample for the study. The selected sample data span the years 1950 to 2015. According to the investigation's conclusions, the manufacturing sector is the engine of EG.

Moreover, the proportion of manufacturing GDP to EG is positively correlated. Similarly, [Olufayo \(2019\)](#) examined the importance of manufacturing in economic development. The research was conducted in Nigeria. The sample for the study was the 35-year data collection. The selected sample data span the years 1981 through 2015. The collected material was examined using the ARDL technique. The analysis suggested that a 1% increase in manufacturing sector performance results in a 0.28 increase in GDP, a low percentage but a positive reflection. As a result, the study recommended that the government intervene more in the manufacturing sector to improve its performance, thereby increasing its contribution to the company's economic prosperity. In addition, [Almosabbeh et al. \(2018\)](#) investigated the possibility of a relationship between the manufacturing sector and EG. The research was conducted in Saudi Arabia. The sample for the study was the 35-year data collection. The selected sample data span the years 1980 to 2014. The collected material was evaluated using a bound test. According to the analysis's findings, there is a definite connection between manufacturing sector performance and EG. The sector contributes positively to the nation's gross domestic product. In addition, the research suggested intensifying efforts to improve sector performance.

The banking industry is the fulcrum of economic development since it is interconnected with every other sector. According to the literature, there is a close connection between

the financial sector and EG. In this context, [Puatwoe et al. \(2017\)](#) investigated whether the financial industry (particularly the banking sector) is associated with EG. The research was conducted in Cameron. The study used the data set of 34 years as a sample. The selected sample data span the years 1980 to 2014. The collected material was examined using the ARDL technique. According to the investigation results, there is a clear connection between the financial sector (particularly the banking sector) and EG. In addition, all financial sector indicators (including banking) have a beneficial impact on the country's economic success over the long term.

Similarly, [Guru et al. \(2019\)](#) examined if a relationship exists between financial development (including banking and associated sectors) and EG. The research was conducted on the BRICS economies. The sample for the study was the 21-year data collection. The selected sample data span the years 1993 through 2014. The collected sample was analyzed using the SYS-GMM estimator. According to the investigation results, there is a direct relationship between financial growth (including banking and other associated industries) and EG. In addition, all indices of financial development, such as the size of financial intermediaries, CDR, and CPS, are positively correlated with economic growth. In addition, [Sekmen \(2021\)](#) investigated the possibility of a connection between the Islamic banking sector and EG. The research was conducted in Turkey. The thirteen-year data set was used as a sample for the study. The selected sample data span the years 2005 to 2018. The collected material was examined using the ARDL technique. According to the investigation results, there is a clear connection between the Islamic banking sector and EG. In addition, the data indicated that conventional banking contributes more to the GDP of Turkey than Islamic banking.

Agriculture is one of the industries in the country responsible for providing the necessities of life. This industry is essential for providing food and financial assistance to the economy. According to the literature, there is a strong connection between the agriculture industry and EG. In this context, [Sertoglu et al. \(2017\)](#) examined the possibility of a relationship between the agriculture industry and EG. The research was conducted in Nigeria. The sample for the study was the 32-year data collection. The selected sample data span the years 1981 through 2013. The collected sample was examined using regression analysis. According to the investigation results, there is a definite connection between the agriculture industry and EG. In addition, the report recommended that the government and officials develop more supporting policies to improve the sector's performance.

Similarly, [Epaphra et al. \(2017\)](#) investigated the possibility of a relationship between the banking industry and EG. The research was conducted in Tanzania. The sample for the study was the 35-year data collection. The selected sample data span the years 1990 to 2015. The collected material was examined using the ARDL technique. According to the investigation results, there is a significant connection between the banking industry and EG in Tanzania.

Similarly, [Moussa \(2018\)](#) investigated whether a relationship exists between the financial sector and EG. The research was conducted in Nigeria. The sample for the study was the 33-year data collection. The selected sample data span the years 1981 through 2014. The collected sample was examined using regression analysis. According to the investigation results, there is a clear connection between the banking sector and the EG of Nigeria. In addition, [Adetunji \(2019\)](#) investigated whether there is a connection between the financial industry and EG. The research was conducted in Nigeria. The sample for the study was the 14-year data collection. The selected sample data span the years 2000 to 2014. Using VECM regression, the collected sample was evaluated. The investigation results suggested that Nigeria's banking sector plays a crucial role in the country's development.

As a result of globalization, certain industries, such as oil, have become indispensable. Globalization has intensified the energy demand, necessitating the oil demand. According to the literature, there is a clear connection between the oil industry and EG. In this context, [Elheddad et al. \(2021\)](#) examined whether foreign direct investment and EG are associated. The oil industry also plays a part in this interaction. The research was conducted on Gulf economies. The sample for the study was the 10-year data collection. The selected sample data span the years 2003 to 2013. The collected sample was analyzed using LILM estimators. The results of the investigation suggested that there is a connection between FDI and economic growth.

Moreover, the oil industry plays a crucial role in investment, particularly in GCC nations. The governments should pay greater attention to FDI in the oil sector to foster economic growth. Similarly, [Udibe et al. \(2018\)](#) did a critical assessment to determine whether or not there is a connection between the oil industry and EG. The research was conducted in Nigeria. The sample for the study was the 18-year data collection. The selected sample data span the years 1999 to 2017. The investigation utilized the elite hypothesis to examine the downstream. According to the findings, the high level of corruption in the Nigerian oil sector leads to poor EG. To increase the oil industry's contribution to Nigeria's economic development, the research also advised that the government combat corruption in the oil industry.

Similarly, [Kalyuzhnova et al. \(2016\)](#) examined the relationship between the oil sector and EG and concluded that the oil sector had a major impact on EG. In addition, [Mohamed et al. \(2020\)](#) investigated whether there is a correlation between the oil industry's revenue and EG. The research was conducted in oil-producing nations. The sample for the study was the 25-year data collection. The selected sample data span the years 1995 through 2015. The collected material was examined using the GMM technique. According to the analysis, the oil industry significantly contributes to the country's gross domestic product (GDP), leading to economic growth. Moreover, private investment has a detrimental effect on economic growth. The research also

recommended that oil-producing nations pay special attention to the proportion of oil rent allocated to the public sector.

3. RESEARCH METHODS

The research explores the effect of Iraq's service, manufacturing, banking, agricultural, and oil sectors on the country's economy. The researchers gathered secondary data from the WDI database between 1986 and 2021. The article has created the following equation:

$$EG_t = \alpha_0 + \beta_1 EPSR_t + \beta_2 EPWR_t + \beta_3 CT_t + \beta_4 CF_t + \beta_5 PG_t + \beta_6 IND_{it} + e_{it} \quad (1)$$

Where;

- EG = Economic Growth
- t* = Period
- SSP = Services Sector Production
- MSP = Manufacturing Sector Production
- BSP = Banking Sector Production
- ASP = Agricultural Sector Production
- OSP = Oil Sector Production

The study employed the EG as the dependent variable and GDP growth as proxies (annual percentage). In addition, the structure of the productive economy was used as a predictor, along with proxies such as services value added (% of GDP), manufacturing value added (% of GDP), depositors with commercial banks (per 1000 adults), agriculture, fishing, and forestry value added (% of GDP), and oil rent (% of GDP). These proxy servers are listed in [Table 1](#).

Table 1. Variables with Measurements

S#	Variables	Measurement	Sources
01	Economic Growth	GDP growth (annual percentage)	WDI
02	Structure of the Productive Economy	Services value added (% of GDP)	WDI
		Manufacturing value added (% of GDP)	WDI
		Depositors with commercial banks (per 1000 adults)	WDI
		Agriculture, fishing, and forestry value added (% of GDP)	WDI
		Oil rent (% of GDP)	WDI

Using descriptive statistics that provide the average values, standard deviation, number of observations, and minimum and maximum values, the research explores the specifics of the variables. In addition, a correlation matrix is utilized to investigate the correlation

between the variables. In addition, the researchers analyzed the unit root among variables using the Phillips-Perron (PP) and Dickey–Fuller (ADF) tests. The equation is given as follows:

$$d(Y_t) = \alpha_0 + \beta t + \gamma Y_{t-1} + d(Y_t(-1)) + \varepsilon_t \quad (2)$$

In addition, the research also analyzes the co-integration with the help of the (Westerlund et al., 2008) approach. The equations for the co-integration test are given below:

$$LM_\varphi(i) = T\hat{\varphi}_i (\hat{\tau}_i/\hat{\sigma}_i) \quad (3)$$

$$LM_\tau(i) = \hat{\varphi}_i/SE(\hat{\varphi}_i) \quad (4)$$

The above-equations shows $\hat{\varphi}_i$ That exposed the estimate beside standard error, while $\varphi_i(L) = 1 - \sum \varphi_{ij}L^j$ exposed the scalar polynomial with L lag length, and ρ_i exposed the factor loading parameters vector.

Also, the ARDL was utilized to study the relationship between the constructions. Since constructs I(0) and I(1) lack unit roots, it is regarded as the proper method for examining the relationship between variables (Zaidi et al., 2018). In addition, it controls the impact of autocorrelation and heteroscedasticity on estimations (Zaidi et al., 2018). Below is the equation for the ARDL model:

$$\Delta EG_t = \alpha_0 + \sum \delta_1 \Delta EG_{t-1} + \sum \delta_2 \Delta SSP_{t-1} + \sum \delta_3 \Delta MSP_{t-1} + \sum \delta_4 \Delta BSP_{t-1} + \sum \delta_5 \Delta ASP_{t-1} + \sum \delta_6 \Delta OSP_{t-1} + \varphi_1 EG_{t-1} + \varphi_2 SSP_{t-1} + \varphi_3 MSP_{t-1} + \varphi_4 BSP_{t-1} + \varphi_5 ASP_{t-1} + \varphi_6 OSP_{t-1} + \varepsilon_t \quad (5)$$

Using DARDL, the researchers additionally evaluate the relationship between the factors. Jordan et al. (2018) have developed this new strategy. It is an efficient strategy that overcomes all the drawbacks of the conventional ARDL model. Below is the equation for the DARDL model:

$$\Delta EG_t = \alpha_0 + \sum \delta_1 \Delta EG_{t-1} + \sum \delta_2 \Delta SSP_t + \sum \delta_3 \Delta SSP_{t-1} + \sum \delta_4 \Delta MSP_t + \sum \delta_5 \Delta MSP_{t-1} + \sum \delta_6 \Delta BSP_t + \sum \delta_7 \Delta BSP_{t-1} + \sum \delta_8 \Delta ASP_t + \sum \delta_9 \Delta ASP_{t-1} + \sum \delta_{10} \Delta OSP_t + \sum \delta_{11} \Delta OSP_{t-1} + \varepsilon_t \quad (6)$$

4. FINDINGS RESULTS

Using descriptive statistics that provide the average values, standard deviation, number of observations, and minimum and maximum values, the research explores the specifics of the variables. The results indicated that the average value of EG was 7.171%, the average value of SSP was 34.185%, the average value of MSP was 3.118%, the average value of BSP was 135.628%, the average value of ASP was 8.851%, and the average value of OSP was 39.207%. These results are shown in Table 2.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
EG	36	7.171	20.849	-64.047	57.818
SSP	36	34.185	12.727	10.859	54.291
MSP	36	3.118	3.494	0.652	13.591
BSP	36	135.628	0.452	134.908	136.379
ASP	36	8.851	5.572	2.816	20.585
OSP	36	39.207	15.309	9.833	66.538

In addition, a correlation matrix is utilized to investigate the correlation between the variables. The results demonstrated a good relationship between the production of services, manufacturing, banking, agricultural, and oil sectors in Iraq and EG. These results are shown in [Table 3](#).

Table 3. Matrix of Correlations

Variables	EG	SSP	MSP	BSP	ASP	OSP
EG	1.000					
SSP	0.235	1.000				
MSP	0.079	0.542	1.000			
BSP	0.103	0.320	-0.514	1.000		
ASP	0.034	-0.189	0.378	-0.813	1.000	
OSP	0.050	-0.238	-0.501	0.436	-0.446	1.000

In addition, the study examines the unit root among variables PP and ADF tests. The results indicated that the EG, SSP, MSP, and OSP do not have unit roots at the level. In addition, the results revealed that the BSP and ASP had no unit root difference at first. These results are shown in [Table 4](#).

Table 4. Unit Root Test

Series	ADF		PP	
	Level	First difference	Level	First difference
EG	-3.092***	-----	-2.999***	-----
SSP	-2.922***	-----	-3.121***	-----
MSP	-2.773***	-----	-2.547***	-----
BSP	-----	-5.392***	-----	-5.443***
ASP	-----	-4.739***	-----	-4.393***
OSP	-3.201***	-----	-3.182***	-----

In addition, the co-integration is analyzed with the help of the (Westerlund & Edgerton, 2008) method. Results revealed that t-values are greater than 1.96 and p-values are less than 0.05. These results are shown in [Table 5](#).

Table 5: Co-Integration Test

Model	No Shift		Mean Shift		Regime Shift	
	Test Stat	p-value	Test Stat	p-value	Test Stat	p-value
LM _τ	-5.302	0.000	-4.392	0.000	-5.437	0.000
LM _φ	-5.093	0.000	-4.019	0.000	-5.829	0.000

Using DARDL, the researchers additionally evaluate the relationship between the factors. The results demonstrated a good relationship between the production of services, manufacturing, banking, agricultural, and oil sectors in Iraq and EG. These results are shown in [Table 6](#).

Table 6. Dynamic ARDL Model

Variable	Coefficient	t-Statistic	Prob.
ECT	-2.937***	-3.980	0.001
SSP _{t-1}	3.210***	4.908	0.000
SSP	4.383***	4.876	0.000
MSP _{t-1}	0.436**	2.098	0.022
MSP	1.904**	2.008	0.029
BSP _{t-1}	1.326***	5.865	0.000
BSP	2.956***	5.876	0.000
ASP _{t-1}	0.901***	5.321	0.000
ASP	2.887***	4.765	0.000
OSP _{t-1}	1.878***	3.921	0.002
OSP	0.587**	2.092	0.021
Cons	2.765**	2.453	0.013

R square = 54.893

Stimulation = 5000

5. DISCUSSIONS

The results demonstrated a positive correlation between service sector production and EG. According to [Orhan et al.'s \(2019\)](#) study, if the economy's service sector develops and experiences significant growth in service production, it contributes to the country's total GDP. These services contribute to human capital development and provide structure to other economic sectors. Hence, it adds to EG. These results are also consistent with the findings of [Mohsin et al. \(2021\)](#), who found that a boost in service sector production not only satisfies the demands of final consumers but also benefits other economic sectors and, thus, increases EG.

The results demonstrated a positive correlation between industrial sector production and EG. By the findings of [Myovella et al. \(2020\)](#), an economy's manufacturing sector supplies several finished and semi-finished goods to organizations in various industries. Hence, increasing production in the industrial sector improves the business performance of many firms and, consequently, increases EG. These findings are also consistent with [Garg et al.'s \(2022\)](#) assertion that when an economy's manufacturing sector is functioning properly, there is a significant increase in EG. The results indicated that production in the banking industry is positively correlated with EG. These results are consistent with [Zhou and Dev's \(2020\)](#) investigation. According to a prior study, banks' financial services, such as loan facilities and money transfers, encourage enterprises and enable transactions, resulting in an increase in national and international trade. Hence, the increased output of the banking sector raises the EG rate. These results are also consistent with the findings of [Yusof et al. \(2020\)](#), who found that economic investment rises when the banking sector develops and produces more efficiently. So, the economy is likely to expand more.

The results demonstrated a positive correlation between agriculture sector production and EG. Following the findings of [Qiao et al. \(2019\)](#), agriculture is an important economic sector that offers food, energy sources, and raw materials to a variety of industries. The growth of the agricultural sector determines the expansion of the economy. These findings are also consistent with [Chandio et al.'s \(2019\)](#) conclusion that an increase in agricultural output stimulates manufacturing, services, and raw materials trade. It results in increased EG. The results demonstrated a positive correlation between oil sector production and EG. These findings are consistent with [Awodumi and Adewuyi's \(2020\)](#) research, which suggests that growth in the oil sector's output raises the economy's energy reserves and accelerates the EG rate. According to [Van Eyden et al.'s \(2019\)](#) study, the oil sector offers energy resources and commodities to other economic sectors as raw materials. Hence, the economy expands as a result of rising oil industry output.

6. IMPLICATIONS

This study provides scholars with fresh insights for evaluating EG's literary achievements. Only the effects of a productive economy on EG have been studied in previous studies. The current research examines the organization of the economy's productive sectors, including the service, manufacturing, banking, agricultural, and oil sectors, and their significance in the European Union. In addition to contributing to the literature, the current study evaluates the effects of service, manufacturing, banking, agriculture, and oil sector production on Iraq's EG. This essay, which focuses on EG, is vital to all nations wishing to improve their economies and compete in the global market. The study provides economic regulators with guidelines for accelerating EG. According to the study, economic policies should be geared to improve service sector output, and as a result, the nation must have a higher EG. It instructs that efforts must be made to

improve manufacturing sector output because doing so will increase EG. The research provides policymakers with suggestions for formulating policies relating to achieving high EG through a productive economy's effective structure. To improve the EG rate, the study argues that economists should encourage the banking sector and enhance its output. To expedite EG, it is also suggested that agricultural sector production must grow. In addition, the study indicates that oil sector production must be increased to obtain a greater EG.

7. CONCLUSION

The study aimed to analyze the effects of production in the service, manufacturing, banking, agriculture, and oil sectors on EG. Utilizing information from the Iraqi economy, the study experimentally investigates the production and EG of the service, manufacturing, banking, agricultural, and oil sectors. The results revealed that production in the service, industrial, finance, agricultural, and oil sectors positively correlates with EG. The results demonstrated that if the economy's service sector increases its production and services other sectors, it contributes to the country's total GDP. The results showed that an increase in the manufacturing sector's output causes an increase in the production of other economic sectors and stimulates international commerce. Hence, it boosts EG. The findings indicate that as the banking sector produces more efficiently, it increases economic investment and facilitates economic transactions, resulting in a rise in economic growth (EG). Similarly, increased agricultural output supplies food, raw materials, and energy to the economy, contributing to its expansion. The study also stated that the oil industry provides the economy with energy and raw materials, contributing to its growth.

8. LIMITATIONS

There are some limitations to this research. In future studies, however, these constraints can be eliminated. The study examines the relationship between the structure of a productive economy and EG. Several additional aspects, such as financial development, natural resources, green governance, and technological advancement, among others, may impact EG and should be evaluated in a comprehensive study. Furthermore, this study is based solely on Iraqi economic information. It is possible that the evidence from a single economy does not yield reliable results. Hence, scholars must compare the roles of the service, manufacturing, banking, agriculture, and oil sectors in EG production in various economies.

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