The Impact of Economic Diversification on Economic Growth in the Sultanate of Oman during the Period (1991-2021)

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Abstract

Purpose: The purpose of the study was to provide a comprehensive overview of economic diversity and economic growth in Oman by measuring the degree of economic diversity and its development, analyzing and measuring the impact of diversification of government revenues, and diversification of gross domestic product on economic growth in Oman during the period (1991-2021).

Theoretical framework: Studies have shown mixed results, as some largely agree with Ricardo's theory of comparative advantage, which sees specialization (reducing economic diversity) as a stimulus and a source of economic growth. On the other hand, there are many studies that have shown that reducing economic diversity has a negative impact on economic growth.

Design/methodology/approach: The methodology used descriptive and analytical methods to cover the theoretical aspect, and standard methods were used to analyze the data to find the effect of independent variables on the dependent variable.

Finding: The study showed that Oman was able to achieve two goals together, namely achieving progress in economic diversification in conjunction with achieving an increase in economic growth rates. The study also showed a significant impact of economic diversification on the growth of Oman's gross domestic product, and that (83.69%) of the changes in economic growth are attributable to changes in the degree of economic diversification.

Practical and Social Implications: The research, scientific, and social implications suggest continuing to work on increasing economic diversification in order to ensure economic stability and increase economic growth rates.

Originality/value: The study on provides insight for authorities in Oman and researchers on the importance of continuing to achieve and implement economic diversification programs and strategies. It is necessary for Oman to adopt more policies to increase economic diversification and reduce the contributions of the oil sector.

Keywords: *Omani economy, economic growth, economic diversification, income and production diversification, Herfindahl-Hirschman index.*

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INTRODUCTION

The economy of countries that rely on a single resource is characterized by instability, especially if that resource is a rentier resource, meaning it is obtained without any effort in production other than the costs and effort of extraction. Depending on a single resource makes their economy susceptible to fluctuations that occur within the economy, such as an increase in population with a decrease or stability in productive capacity, which can result in price increases or outside the economy, such as an increase in global production of that resource, causing prices to drop.

Oil is the main resource and major supporter of the economy in several countries around the world. The rise in oil prices and its increased importance in global markets has led some countries to rely entirely on oil revenues, and these economies are referred to as "rentier oil economies" that rely on exporting raw materials. However, oil prices usually do not stabilize in the global market. When prices rise, it leads to an increase in the revenue of the producing country and, consequently, an increase in the rate of economic growth. The opposite happens when prices drop to lower levels, and the deficit occurs when supply exceeds demand at record levels.

Most countries, especially oil-producing ones, have realized the importance of economic diversity and increasing the contribution of economic sectors to the gross domestic product (GDP) in order to avoid risks and fluctuations that their economies may face as a result of relying on a single resource. Many countries have been diversifying their sources of income and maximizing the comparative advantages of their available resources for decades in order to achieve economic stability.

Oman, like other oil-producing countries, heavily relies on oil revenues, which are the main pillar of the general budget, the cornerstone of exports, and the engine of economic activity and growth. According to data from the National Center for Statistics and Information for the year 2019, oil revenues represent about 64% of export revenues and about 76.2% of government revenues. This means that Oman relies heavily on oil revenues as a primary source of income. As it heavily relies on oil production and export, an increase in oil revenues inevitably leads to an increase in the economic growth rate and financial surpluses, which ensure economic stability. However, at the same time, an increase in oil revenues leads to an increase in the importance of the oil sector compared to other economic sectors, resulting in a decrease in economic diversity. Conversely, reducing reliance on oil revenues and exports in order to raise the level of economic diversity leads to a decrease in revenues and, consequently, a decrease in economic growth.

The Study Problem:

Oman is one of the countries that witnessed an oil boom in the 1970. It is one of the rentier states that heavily rely on oil revenues for its economy. The oil products sector is considered one of the most important sectors for the Omani economy. Therefore, any fluctuations in oil prices directly affect the Omani economy. As this wealth is susceptible to depletion, Oman's oil and gas reserves are expected to run out in 25 years. It is undoubtedly unwise to continue relying solely on oil as the only source of income, without economic diversification, as it does not lead to sustainable economic growth.

The sharp decline in oil prices in the international market, which reached less than $30 per barrel in 2016, had a significant impact on Oman's revenues and economic growth. This forced Oman to take austerity measures such as canceling fuel subsidies, increasing taxes, and reducing annual salary increases for employees. The unexpected drop in oil prices also sounded the alarm in Oman, and was a strong incentive to accelerate the implementation of economic diversification plans and enhance non-oil productive sectors to achieve high levels of economic growth. This was achieved through the adoption of a set of diversification policies aimed at diversifying the state treasury resources, income

sources, restructuring the economy, and raising the contribution of non-oil economic sectors to the gross domestic product. Oman also faced a dual economic crisis in 2020, represented by the repercussions of the spread of COVID-19 and the decline in oil prices in the global market. This was another incentive that made Oman realize the importance of accelerating economic diversification programs, making it a necessary option to ensure economic stability.

We will try through this study to measure the degree of economic diversification in Oman and measure the impact of economic diversification on economic growth in Oman. Therefore, the following problem is raised: What is the impact of economic diversification on economic growth in Oman during the period (1991-2021)? To answer this question, a set of the following sub-questions are asked:

- What are the limits and level of economic diversification in Oman?

- To what extent has Oman succeeded in diversifying its economic base?

- What is the nature of the relationship between economic diversification and economic growth in Oman during the period (1991-2021)?

Importance of the study:

Studying this subject is very important in the Omani economy, and it is also one of the most important topics that top the list of economic priorities in most oil-producing countries. Considering that oil is a depleted material, it was necessary to search for other supportive sources. This study shows how economic diversification affects economic growth in Oman through several quantitative indicators used to measure the degree of diversification that can change the structure of the Omani economy. It also achieves economic growth by:

- Building a stable economy that focuses on a broad and diverse economic base.

- Not relying mainly on oil production and export.

Study goals:

The study aimed to highlight the importance of economic diversification in ensuring economic stability, and to identify the degree of economic diversification in Oman and clarify and measure the impact of economic diversification on economic growth. This was done by measuring the degree of diversity in income and production (government revenues and gross domestic product) and measuring the impact of the variables on the growth of gross domestic product in Oman during the period (1991-2001).

LITEATURE REVIEW:

Many studies have examined the relationship between economic diversification and economic growth, and the studies have shown different results and opinions about the impact of economic diversification on economic growth. Some see specialization (reduced diversification) as a stimulus and source of growth, while others see reduced economic diversification and concentration of production and exports as having a negative impact on economic growth.

For example, a study by Ali et al (1991) showed that diversification involves changing the mix of a country's exports, which is a development strategy that relies on expanding the export base with a focus on materials or products that have a positive price trend, which inevitably leads to growth. And a study by Agosin (2006) suggests that export diversification does not necessarily require the export of manufactured goods, but can be achieved by developing primary goods that can develop into industries based on natural resources, where some countries can benefit from a strong comparative advantage in

several sectors related to natural resources, such as secondary metals, forests, and tree crops, which may not necessarily be related but provide good opportunities.

Additionally, a study by Sinnott, Nash et de la Torre (2010) suggested that technological changes in the manufacturing sector are not necessarily more important than primary sectors, and producing some basic goods can be just as beneficial due to links with other products.

The three previous studies largely agree with Ricardo's theory of comparative advantage, which sees specialization (reduced economic diversity) as a stimulus and source of economic growth. The relative advantages resulting from specialization in production in general and export in particular are found in Ricardo's theoretical framework, and it provides strong justifications for specialization. However, in developing countries, these advantages may not necessarily stimulate economic growth due to their dependence on raw material and extractive exports, the prices and returns of which are subject to violent fluctuations due to the control of multinational corporations in most markets for these materials and their prices. This limits stable financing for development plans in these countries, and even oil and gas markets are not exempt from this reality, as producing countries do not control the markets for their products, and their prices and export revenues are subject to violent shocks and fluctuations in international markets. This leads to the belief that the crisis of developing countries in general and oil-producing countries in particular lies in their inability to succeed in diversifying their economies due to the concentration of economic activity around the extraction and export of oil and gas.

On the other hand, there are many studies that show that a decrease in economic diversification and concentration of exports and production negatively affects economic growth. Therefore, proponents of this view call for increasing economic diversification and avoiding concentration of production and exports in a few products, sectors, and activities, as they see economic diversification leading to economic growth.

According to a study Killian and Hady, (1988), diversification is expected to increase the stability of local economies and enhance their ability to grow. Additionally, based on the model introduced by Romer (1990), which introduced the positive impact of input diversification on growth, diversification can be considered an important factor in improving productivity efficiency, and thus benefiting growth. Some experimental studies, such as the study by Demetrios Moschos (1989), which was conducted on different samples of countries and concluded that growth or factor productivity is positively, not negatively, related to economic diversification. Furthermore, the study by Leiderman et Maloney (2007), showed a negative relationship between export concentration and per capita GDP growth, indicating that industrial production leads to a dynamic process of improving productivity and income. Diversification also provides the producer with more information, especially in foreign markets, and improves their ability to develop their own capabilities. A study by Gershon and Feder (1983), also found that export diversification has a positive impact on growth, through positive external effects on non-trading sectors that are associated with more efficient management patterns and better production techniques. Therefore, export-diverse countries will benefit from external effects and incentives to accumulate capital, leading to higher growth.

Despite the strong justifications for opinions that contradict the theory of comparative advantage and call for the need for diversification to ensure stability and increase economic growth rates, the matter is more complicated in the case of oil economies. A study by Mamdouh Al-Khatib in (2014), which examined the impact of economic diversification on Saudi economic growth, showed a positive impact of diversification on GDP growth. However, the achieved economic growth in Saudi Arabia has not been accompanied by significant diversification in the overall economic base. Diversification of the economic base is still considered an unattainable strategic goal, as oil exports still

represent the largest share of total exports, and government revenues still depend almost entirely on oil revenues. Despite frequent talk about promising economic sectors such as agriculture, industry, and tourism, these sectors have not yet succeeded in making significant changes in increasing Saudi economic diversification while maintaining the momentum of growth achieved by the oil sector. A study by Freyal Kaboush (2017), which examined the impact of economic diversification on economic growth in Algeria, found a long-term relationship between diversification and economic growth, but it is weak due to the economy's continued reliance on oil .

Oman, like other oil-dependent countries, relies heavily on oil revenues. It is considered the pillar of the general budget, the cornerstone of exports, and the engine of economic activity and growth, representing about 64% of export revenues and about 76.2% of government revenues, according to the National Center for Statistics and Information for the year 2019. This means that Oman relies on oil revenues as a primary source of income. Since it depends heavily on oil production and exports, an increase in oil revenues inevitably leads to an increase in the economic growth rate and financial surpluses that ensure economic stability. However, at the same time, an increase in oil revenues leads to an increase in the importance of the oil sector compared to other economic sectors, resulting in a decrease in economic diversification. Conversely, reducing reliance on oil revenues and exports to increase economic diversification may lead to a decrease in revenues and economic growth.

STUDY METHODOLOGY

The descriptive and analytical methods were used to cover the theoretical aspect of the study, and standard methods were used to analyze the data. The study relied on descriptive statistical measures (mean, standard deviation, minimum, and maximum values) to describe the data of the study variables. Additionally, simple linear regression was used to determine the effect of each independent variable on the dependent variable separately. Multiple linear regressions were used to determine the combined effect of the independent variables on the dependent variable.

The first axis: The basic concepts of economic diversification and economic growth.

1. The concept of economic diversification:

For economic diversification, there are various concepts that differ depending on the perspective through which it is viewed. Some link diversification to production and sources of income, while others link it to the structure of commodity exports. Often, economic diversification is believed to be only a diversification of the export sector, while the diversification of the basket of exported goods is actually a part of the concept of economic diversification and a fundamental part of diversifying production structures. Therefore, economic diversification does not necessarily mean only increasing non-oil exports, but it can also include the substitution of imports (Mohammed Amin Al-Azhar, 2014).

On the other hand, the term economic diversification is seen as a process of utilizing all local production resources and capacities that ensure the achievement of accumulation in self-capabilities capable of generating renewable resources and to reach the stage of local production dominance in the domestic market, in a sequence of export diversification where diversification is a priority that reflects the interest in bridging the gap of underdevelopment, excessive subordination, and continuous dependence on foreign sources (Ahmed Dhaif &Ahmed Azouz, 2018).

The United Nations experts have defined economic diversification as reducing reliance on a single sector and finding new exports and different sources of revenue other than the traditional known sources, abandoning the leading role of the public sector, and

enhancing the role of the private sector in all economic sectors to ensure obtaining permanent and stable revenues (Nizar Assad, 2014).

Oil-producing countries mainly define economic diversification in their economies as a process that aims to reduce the contribution of oil to the GDP and public revenues, by developing non-oil sectors, reducing the role of the government sector, and enhancing the contribution of the private sector in economic activity (Asmaa Bellama, 2018).

Economic diversification is also defined as reducing heavy reliance on oil sector exports and revenues, and creating non-oil exports, including the necessity of developing the private sector and giving it a leading role (Shukri Sidi Mohammed, 2012).

Can be said that economic diversification is the use of oil money to create a sustainable base for a post-oil economy by establishing heavy industries, developing infrastructure, and investing in areas of real production. It also means finding additional non-oil sources for foreign currency and general budget revenues, while at the same time creating sustainable sources for use in productive and service sectors to accommodate the growing numbers entering the labor market away from government use.

Through the above definitions, it can be said that economic diversification is a goal pursued by countries that rely on a single economic resource, especially oil-producing countries, by diversifying production and income sources and creating room for the private sector to participate in all economic sectors.

Concept of Economic Growth:

Economic growth is considered a significant part of economic theory and one of the most important goals in any economic plan. It includes the rate of growth in the real national income of the economy, which individuals in the community can produce in a specific period of time and is estimated in money (Ibrahim Al-Masri, 2014). It reflects an increase in wealth and the level of prosperity achieved by members of society. Economic growth is considered one of the most prominent indicators that reflect the economic performance of a country. The economic disparity between developing and advanced countries has attracted the attention of specialists, economists, researchers, and many others to understand the causes and determinants of economic growth. Many scholars have moved towards the most important topic, which is why developing countries have not turned into advanced countries except for a few.

Due to the important role played by economic growth in the economic process at the international level, economists across various schools of economic thought have focused on the topic of growth and its interpretation, and identifying its determinants. The results of various economic theories and in-depth studies have been used to explain the occurrence of growth and the variables affecting it, as well as the factors associated with this growth.

Economic growth is defined as an increase in the productive capacity of the economy, which can be achieved by increasing production factors such as capital and technological level. (Ben Ali, M, 2016). It is also defined as achieving an increase in real income or national output over time, (Fayez Al-Habib, 1994).

The definition of economic growth is also linked to the population growth rate to provide a clearer picture of the growth process by reflecting on the level of welfare and individual income. Economists have indicated that if the economy grows, it will achieve levels of welfare greater than what the individual expects, and rural communities will turn into industrial ones, and individual income will rise in line with this growth, (Case, K.E. Fair, R. C. & Oster, S. M. , 2021) .

The definition of economic growth is an increase in Gross Domestic Product (GDP), provided that the output grows faster than the population. As a result, per capita income will increase, leading to better living conditions and higher levels of welfare, (Case, K.E.

Fair, R. C. & Oster, S. M. , 2021) . GDP is considered as a measure of economic growth and the most popular indicator to measure economic performance, (Todaro, M., & Smith, S. 2012). It is also the main indicator to measure economic development. GDP is defined as the total market value of all final goods and services produced in a country by its residents during a specified period of time, using the country's resources, (Yamarone, Richard. 2012). It is the sum of incomes of all factors of production that contributed to the production process during one year and produced from locally available resources, (Ibrahim Al-Masri, 2017). GDP is also defined as the total market value of all final goods and services produced, regardless of their place of production, by factors of production owned by citizens of the country during a specified period of time. (Case, K.E. Fair, R. C. & Oster, S. M. , 2021)

The previous definitions highlight that economic growth is an indicator that reflects progress or decline in economic activities, as economic growth is linked to the per capita Gross Domestic Product (GDP) which reflects the well-being index. This is achieved through an increase in the average per capita income, which focuses on goods and services that an individual can obtain from the average income.

The second axis: measuring the degree of economic diversity in Oman during the period (1991-2021):

There are many statistical indicators for measuring diversity, which vary in their efficiency and suitability for measurement purposes. This difference is due to the fact that each indicator is characterized by measuring a specific property. Some of them depend on measuring the phenomenon of dispersion, such as the coefficient of variation, and some rely on measuring the property of concentration, such as the Gini index, and others on the degree of diversity, such as the Herfindahl-Hirschman index, which is considered one of the most commonly used indicators in measuring the degree of economic diversity (Belkacem Ben Allal, 2021). These indicators give convergent measures in their directions and variations when quantifying the economic diversity phenomenon. Therefore, in this study, we will suffice with applying the Herfindahl-Hirschman index for two variables. The first variable represents government revenues, while the second variable represents Oman's Gross Domestic Product (GDP). In addition, an estimated composite index of economic diversity in Oman will be added by taking the arithmetic mean of the Herfindahl indices for both government revenues and GDP, which are the variables for which detailed statistical data are available for the period (1991-2021). The Herfindahl-Hirschman index is defined by the following formula:

$$H = \frac{\sqrt{\sum_{i=1}^{N}(\frac{x_i}{X})^2} - \sqrt{\frac{1}{N}}}{1 - \sqrt{\frac{1}{N}}}$$

Where: (N) represents the number of activities, (Xi) represents the output of activity I, and (X) represents the total output of all activities.

The value of the Herfindahl-Hirschman coefficient ranges from zero to one, $(0 \leq H \leq 1)$. If it is zero, there is complete diversity in the economy (shares of activities equal to their proportions in the total output of all activities), while if it is one, the degree of diversity is zero, meaning that the output is concentrated in one economic activity, while the rest of the activities do not contribute any share of the Gross Domestic Product (GDP). High values of the Herfindahl coefficient indicate a weak economy in terms of distributing its activities equally across a large number of sectors or products, and thus limiting them to a few, (Mamdouh Al-Khatib, (2011). In this context, we will use the Herfindahl-Hirschman index to measure the degree of diversification of both government revenues and GDP in Oman during the period (1991-2021).

Measuring the diversity in Oman's GDP and its development during the period (1991-2021):

Oman's GDP is distributed across four main sectors, which branch into eighteen sectors. The main productive sectors are represented in the petroleum activities sector, industrial activities sector, agricultural activities sector, and services activities sector. Table (1) and Figure (1) show the degree and development of diversity among the four main sectors that make up Oman's GDP, based on the results of the Herfindahl-Hirschman index.

Table (1): Development of diversity in Oman's GDP during the period (1991-2021)

Million Omani rials

Years	Petroleum Activities	Industrial Activities	Agricultural Activities	Service Activities	Total Activities	Diversification of Gross Domestic Product (GDP), (H)
1991	6397.7	1077.2	238.7	5446.5	13160.1	0.28786
1992	7036.7	1230.4	224.9	5751.9	14243.9	0.28814
1993	7924.4	1388.2	259.5	5557.5	15129.6	0.29301
1994	8355.7	1422.6	289.0	5679.4	15746.7	0.29638
1995	8513.1	1572.5	257.5	6241.8	16584.9	0.28740
1996	8352.6	1746.1	221.0	6571.6	16891.3	0.27552
1997	9037.1	2000.2	264.3	6561.8	17863.4	0.27062
1998	9260.4	2100.3	216.1	6515.5	18092.3	0.27325
1999	9344.3	2030.7	234.4	6557.6	18167.0	0.27674
2000	10117.8	2167.4	232.0	6749.3	19266.5	0.28265
2001	10305.3	2507.2	243.6	7104.5	20160.6	0.26661
2002	9807.1	2758.0	242.3	7210.7	20018.1	0.24722
2003	9052.9	2798.4	237.7	7498.5	19587.5	0.23404
2004	8789.5	2919.0	240.4	8025.3	19974.2	0.22730
2005	8791.4	3272.3	235.3	8262.3	20561.3	0.21613
2006	8598.9	3779.3	230.5	8922.3	21531.0	0.20357
2007	8264.2	4250.6	240.2	9883.0	22638.0	0.19870
2008	8831.6	4983.1	253.1	10642.0	24709.8	0.18996
2009	9457.4	5625.7	266.7	10874.5	26224.3	0.18005
2010	9942.9	5763.4	295.0	11079.2	27080.5	0.17915
2011	10128.2	5777.0	295.1	11766.5	27966.8	0.18481
2012	10498.6	6394.8	293.6	13230.9	30417.9	0.18762
2013	10779.1	6659.9	340.3	14215.5	31994.8	0.19055
2014	10529.1	6706.8	346.0	14938.0	32519.9	0.19746
2015	10993.4	7220.5	465.8	15546.5	34226.2	0.19026

| 2016 | 11402.0 | 7900.4 | 504.1 | 16052.4 | 35858.9 | 0.18361 |
2017	11106.9	7768.3	534.2	16550.9	35960.3	0.19015
2018	11435.0	7526.9	650.7	16714.8	36327.4	0.19002
2019	11135.4	7388.2	678.4	16772.3	35974.3	0.19284
2020	10884.9	7108.0	775.4	15964.7	34733.0	0.18635
2021	11327.4	7159.5	785.5	16427.4	35699.8	0.18848

Source: Prepared by the researcher based on data from the Omani Ministry of Economy

Exchange rate: 2.6 US dollars per Omani rial, according to constant prices for the year 2010.

Diversity in GDP "(H) Herfindahl index" was calculated by the researcher.

figure (1): Herfindahl-Hirschman index for gross domestic product in Oman during the period (1991-2021) .

$(0 \leq H \leq 1)$

Herfindahl-Hirschman index (H)
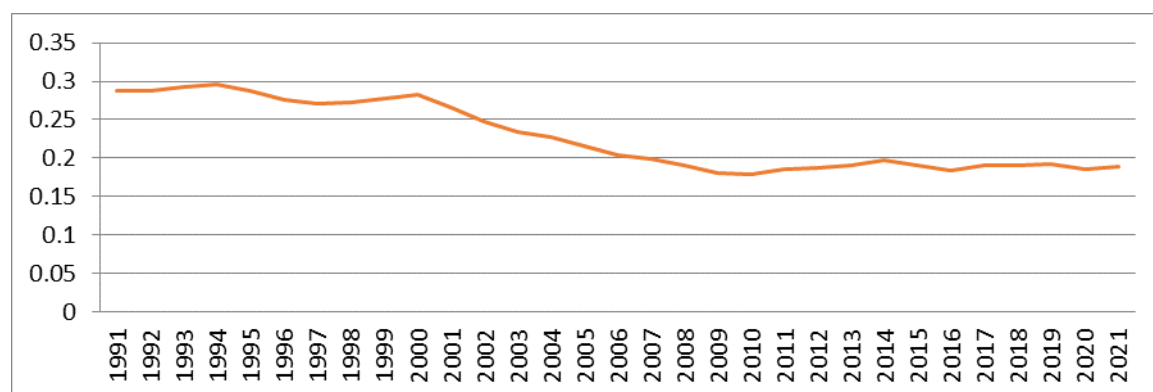
Source: Prepared by the researcher based on data from Table (1) .

The results of estimating the Herfindahl-Hirschman index for the four main sectors of the gross domestic product in Oman, as shown in figure (1), indicate that the Herfindahl-Hirschman index results were relatively low, meaning closer to zero than to one. We note a decrease in the Herfindahl-Hirschman index, meaning an increase in the degree of economic diversity overall during the period (1991-2021) with some increases in the index during some years. Thus, there was an increase in the degree of economic diversity in Oman, albeit to a lesser extent than expected in the gross domestic product, where the increase in the degree of economic diversity was measured by a decrease in the Herfindahl-Hirschman index of (0.07813) during the period (1991-2021).

2. Diversification in government revenues:

Government revenues play an important role in economic diversification, and Oman relies heavily on its oil revenues in its government expenditures and revenues. Therefore, diversification must be accompanied by an increase in the proportion of non-oil general revenues to its total revenues. Table (2) and figure (2) illustrate the degree and development of diversification in government revenues in Oman during the period (1991-2021), based on the results of the Herfindahl-Hirschman index.

Table (2): Development of Diversification in Government Revenues for Oman during the period (1991-2021). Omani Rial million.

Years	Net oil revenues	Gas revenues	Current revenues	Capital revenues & capital recovery	Total government revenues	Diversification of government revenues (H)
1991	1240.7	48.8	274.9	20.7	1585.1	0.60481
1992	1275.8	63.1	315.6	25.7	1680.2	0.56650
1993	1302.8	57.9	342.6	20.6	1723.9	0.56447
1994	1311.5	52.5	367.0	26.4	1757.4	0.55132
1995	1372.7	60.6	398.9	19.4	1851.6	0.54558
1996	1473.0	56.0	438.8	22.4	1990.2	0.54572
1997	1748.9	56.7	438.0	23.6	2267.2	0.59135
1998	1240.2	63.3	522.7	20.1	1846.3	0.45966
1999	1201.6	57.6	519.8	17.1	1796.1	0.45937
2000	1721.0	73.4	455.3	40.2	2289.9	0.55655
2001	1875.0	74.0	567.0	24.0	2540.0	0.54362
2002	2200.0	77.0	675.0	57.0	3009.0	0.53088
2003	2316.0	87.0	876.0	26.0	3305.0	0.49942
2004	2905.0	251.0	850.0	34.0	4040.0	0.50365
2005	3162.0	394.0	888.0	67.0	4511.0	0.46688
2006	3226.0	614.0	1073.0	67.0	4680.0	0.47667
2007	3678.0	811.0	1345.0	87.0	5921.0	0.35120
2008	5093.0	910.0	1554.0	82.0	7639.0	0.41448
2009	4490.0	731.0	1493.0	34.0	6748.0	0.41907
2010	5470.0	930.0	1464.0	53.0	7917.0	0.44969
2011	7798.0	1173.0	1597.0	57.0	10625.0	0.51454
2012	9831.0	1584.0	2034.0	26.0	13475.0	0.50848
2013	10429.0	1495.0	1931.0	52.0	13907.0	0.54040
2014	10205.0	1688.0	1984.0	231.0	13981.0	0.50700
2015	5656.0	1485.0	1865.0	62.0	9068.0	0.35381
2016	3651.0	1537.0	2113.0	307.0	7608.0	0.18299
2017	4682.0	1524.0	2174.0	134.0	8514.0	0.26475
2018	6536.0	2031.0	2233.0	149.0	10949.0	0.31535
2019	6099.0	1901.0	2331.0	258.0	10589.0	0.28534
2020	3938.0	1860.0	2087.0	619.0	8504.0	0.14508
2021	5613	2629.0	2874.0	79.0	11195.0	0.22064

Source: Prepared by the researcher based on the final accounts data of the Omani Ministry of Finance.
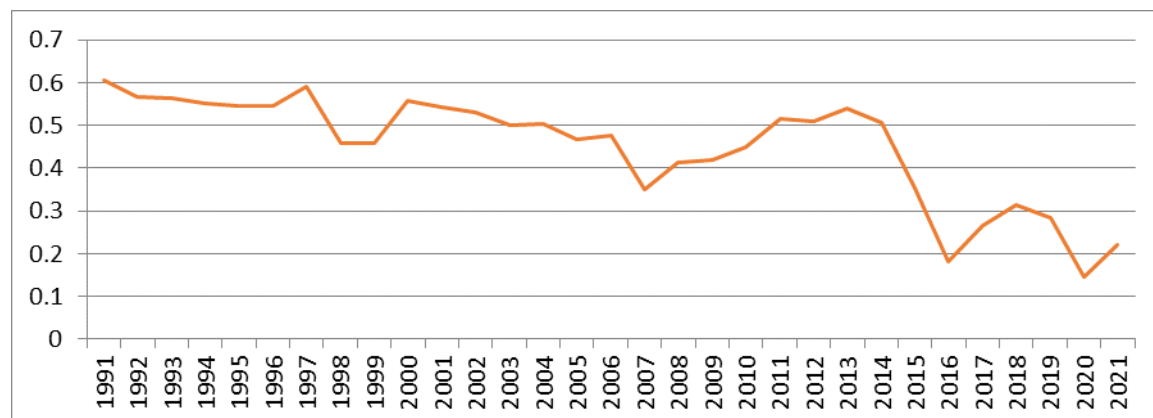
Exchange rate: 2.6 US dollars per Omani rial, according to constant prices for the year 2010.

Diversity in GDP "(H) Herfindahl index" was calculated by the researcher.

Figure (2): Herfindahl-Hirschman Index for Diversification of Government Revenues in Oman during the period (1991-2021)

$(0 \leq H \leq 1)$

Herfindahl-Hirschman index (H)

Source: Prepared by the researcher based on data from Table (2) .

The results of estimating the Herfindahl-Hirschman index for the diversification of government revenues in Oman, as shown in Figure (2), indicate that the period (1991-2021) witnessed fluctuations in the degree of diversification of government revenues. It appears that the years with an increase in the degree of diversification of domestic government revenues corresponded to a decrease in the Herfindahl index for the diversification of government revenues. These years were (2007, 2016, 2020). Regarding the increase in the degree of diversification of government revenues during the year 2007, it was due to a significant increase in current revenues and gas revenues, coinciding with a slightly lower increase in oil revenues. As for the reason for the significant increase in the degree of diversification of government revenues in 2016 and 2021, it was due to the significant decrease in oil prices in the global markets. In 2016, oil prices decreased significantly, with the price of a barrel of oil losing around 100 dollars of its value compared to the years preceding 2014. And in 2020, as a result of the repercussions of the spread of the "Corona pandemic" and the impact on international economies and global trade movement, which affected all public revenue sources for Oman in general and oil revenues in particular.

Despite the link between the increase in government revenue diversification and the decrease in oil revenues, the relatively low level of diversification after the period (2014-2016) compared to previous years of that period, despite the return of oil prices to rise during the years (2017-2019) and during the year (2021), reflects Oman's success in achieving diversification of government revenues. This is due to Oman's realization of the necessity of reducing the dependence on oil revenues in financing government revenues and its success in increasing the contribution ratio of non-oil revenues to the total government revenues.

3. The composite index of economic diversification in the Sultanate of Oman during the period (1991-2021).

will be measured based on the multiple perspectives through which economic diversification is viewed. Economic diversification is considered to be the diversification of income and production. Therefore, the study will benefit from the available statistics to reach a comprehensive index of economic diversification, based on taking the arithmetic mean of Herfindahl-Hirschman coefficients for both gross domestic product and government revenues, which are the variables for which detailed statistical data is available for the period (1991-2021).

This composite index is considered a satisfactory measure of economic diversification because it does not rely on a single dimension of economic diversification, but rather includes two interrelated aspects. The first aspect is productive activity and sectoral sources of GDP, while the second is the structure and distribution of government revenues. Table (3) and Figure (3) show the development of the composite index of economic diversification in Oman during the period (1991-2021).

Table (3): Development of the composite index of economic diversification in the Sultanate of Oman during the period (1991-2021)

Herfindahl coefficient (H)

Years	Diversification of government revenues (H)	Diversification of Gross Domestic Product (GDP), (H)	The composite index of economic diversification (Arithmetic mean)
1991	0.60481	0.28786	0.44633
1992	0.56650	0.28814	0.42732
1993	0.56447	0.29301	0.42874
1994	0.55132	0.29638	0.42385
1995	0.54558	0.28740	0.41649
1996	0.54572	0.27552	0.41062
1997	0.59135	0.27062	0.43098
1998	0.45966	0.27325	0.36645
1999	0.45937	0.27674	0.36805
2000	0.55655	0.28265	0.41960
2001	0.54362	0.26661	0.40515
2002	0.53088	0.24722	0.38905
2003	0.49942	0.23404	0.36673
2004	0.50365	0.22730	0.36547
2005	0.46688	0.21613	0.34150
2006	0.47667	0.20357	0.34012
2007	0.35120	0.19870	0.27495
2008	0.41448	0.18996	0.30222
2009	0.41907	0.18005	0.29956

| 2010	0.44969	0.17915	0.31442
2011	0.51454	0.18481	0.34967
2012	0.50848	0.18762	0.34805
2013	0.54040	0.19055	0.36547
2014	0.50700	0.19746	0.35223
2015	0.35381	0.19026	0.27203
2016	0.18299	0.18361	0.18330
2017	0.26475	0.19015	0.22745
2018	0.31535	0.19002	0.25268
2019	0.28534	0.19284	0.23909
2020	0.14508	0.18635	0.16571
2021	0.22064	0.18848	0.20456

Source: Prepared by the researcher based on data from tables (1) and (2).

The composite diversity is the average of Herfindahl indices for both GDP and government revenues.

Figure (3): The composite economic diversity index in the Sultanate of Oman during the period (1991-2021)

$(0 \leq H \leq 1)$

Herfindahl index (H)
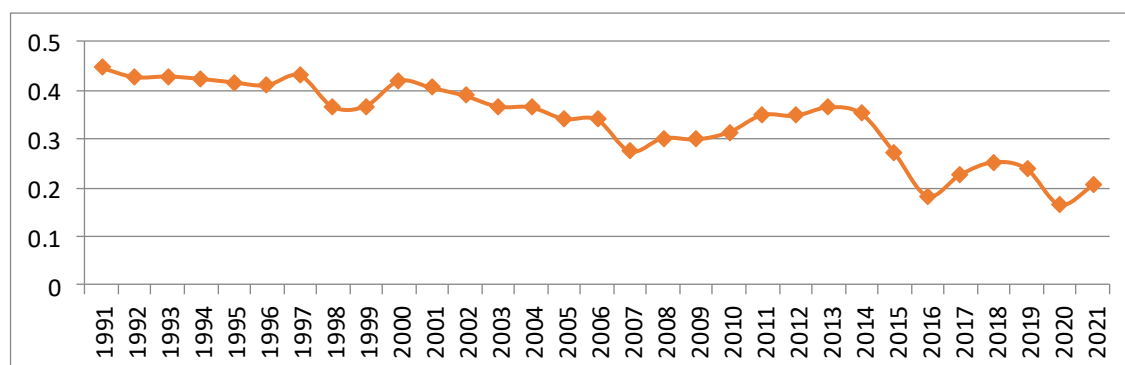
Source: Prepared by the researcher based on data from Table (3) .

The estimations in Figure (3) show that the composite diversity coefficient has decreased during the period (1991-2021) by (0.24177) points, which reflects the significant progress achieved by the Omani economy in terms of economic diversification, as reflected in the decrease in the Herfindahl index for composite diversity, which represents the degree of income and production diversification during the period (1991-2021).

It is clear that the years in which economic diversification in Oman increased significantly, as reflected in the decreasing Herfindahl coefficient, were the years (2015, 2016, 2020). The years (2015, 2016) were the period in which oil revenues decreased due to the decline in oil prices in the global market. The year 2020 witnessed the spread of the COVID-19 pandemic and its impact on the Omani economy, especially since the pandemic had a significant negative impact on oil prices. Therefore, the increase in economic diversification reflected in the decreasing Herfindahl coefficient in these years

was due to the decline in oil prices. However, in the year 2021, despite the return of oil prices to rise in the global market, and despite the fact that the degree of diversification witnessed a decrease reflected in the rise of the Herfindahl coefficient, the degree of the coefficient is relatively lower compared to the years preceding the year 2015. This reflects the beginning of real progress towards increasing economic diversification in Oman.

Third axis: Development of Gross Domestic Product in Oman during the period (1991-2021).

Oman achieved continuous growth in its Gross Domestic Product over the past five decades, where its economy grew and doubled in size from 106.8 million Omani riyals in 1970 to 34,667.5 million Omani riyals in 2021 according to the National Centre for Statistics and Information for 2021. However, this growth was accompanied by disparities in the size and contribution rate of productive sectors to the Gross Domestic Product. Oman's productive sectors consist of four main sectors, and the petroleum activities sector accounted for 32.6% of the Gross Domestic Product, while the industrial activities sector accounted for 20.6%, and the agricultural activities sector accounted for 2.2%. The services activities sector accounted for 47.3% of the Gross Domestic Product in Oman in 2021. To clarify the development of the Gross Domestic Product and the contribution of productive sectors, the following table number (4) will be presented:

Table (4): Development of Gross Domestic Product and the contribution of productive sectors in Oman during the period (1991-2021)

Omani Rial million.

Years	Petroleum Activities	Industrial Activities	Agricultural Activities	Service Activities	gross domestic product
1991	6397.7	1077.2	238.7	5446.5	13160.1
1992	7036.7	1230.4	224.9	5751.9	14243.9
1993	7924.4	1388.2	259.5	5557.5	15129.6
1994	8355.7	1422.6	289.0	5679.4	15746.7
1995	8513.1	1572.5	257.5	6241.8	16584.9
1996	8352.6	1746.1	221.0	6571.6	16891.3
1997	9037.1	2000.2	264.3	6561.8	17863.4
1998	9260.4	2100.3	216.1	6515.5	18092.3
1999	9344.3	2030.7	234.4	6557.6	18167.0
2000	10117.8	2167.4	232.0	6749.3	19266.5
2001	10305.3	2507.2	243.6	7104.5	19881.0
2002	9807.1	2758.0	242.3	7210.7	19725.1
2003	9052.9	2798.4	237.7	7498.5	19292.2
2004	8789.5	2919.0	240.4	8025.3	19676.6
2005	8791.4	3272.3	235.3	8262.3	20223.5
2006	8598.9	3779.3	230.5	8922.3	21167.9
2007	8264.2	4250.6	240.2	9883.0	22222.2
2008	8831.6	4983.1	253.1	10642.0	24211.1

2009	9457.4	5625.7	266.7	10874.5	25659.4
2010	9942.9	5763.4	295.0	11079.2	26293.7
2011	10128.2	5777.0	295.1	11766.5	27054.8
2012	10498.6	6394.8	293.6	13230.9	29452.7
2013	10779.1	6659.9	340.3	14215.5	30992.4
2014	10529.1	6706.8	346.0	14938.0	31392.9
2015	10993.4	7220.5	465.8	15546.5	32967.9
2016	11402.0	7900.4	504.1	16052.4	34631.6
2017	11106.9	7768.3	534.2	16550.9	34736.9
2018	11435.0	7526.9	650.7	16714.8	35184.0
2019	11135.4	7388.2	678.4	16772.3	34786.7
2020	10884.9	7108.0	775.4	15964.7	33673.2
2021	11327.4	7159.5	785.5	16427.4	34667.5

Source: Compiled by the researcher based on data from the Ministry of Economy, Sultanate of Oman.

Exchange rate: 2.6 US dollars per Omani riyal, according to constant prices for the year 2010.

Through table number (4), we notice that the gross domestic product achieved a growth rate of (163.4%) during the period (1991-2021), where it rose from about (13,160.1) million Omani riyals in the year (1991) to about (34,667.5) million Omani riyals in the year (2021). This growth is attributed to the growth of the petroleum activities sector by (77%), which rose from about (6,397.7) million Omani riyals in the year (1991) to about (11,327.4) million Omani riyals in the year (2021), the industrial activities sector grew by (565%), which rose from about (1,077.2) million Omani riyals in the year (1991) to about (7,159.5) million Omani riyals in the year (2021), the agricultural activities sector grew by (229%), which rose from about (238.7) million Omani riyals in the year (1991) to about (785.5) million Omani riyals in the year (2021), and the services activities sector grew by (201%), which rose from about (5,446.5) million Omani riyals in the year (1991) to about (16,427.4) million Omani riyals in the year (2021).

Axis 4: Measuring the impact of economic diversification on economic growth in Oman during the period (1991-2021)

1. Descriptive statistics of study variables:

Table number (5) shows the results of the descriptive statistics for the independent and dependent variables under study.

Table (5): shows the results of the descriptive analysis of the study variables.

Variable category	Variable name	Code	Arithmetic mean	Standard deviation	Minimum value	Maximum value
Independent variables	Degree of economic diversity of public revenue	X1	0.4497	0.1250	0.1451	0.6048
	Degree of	X2	0.2276	0.0437	0.1792	0.2964

	economic diversity of gross domestic product					
	Composite diversity index	X3	0.3386	0.0787	0.1657	0.4463
Dependent variable	Gross Domestic Product (natural logarithm of Y)	Y	23969	7311.43	13160	35184

source: of these results is based on the outputs of the EViews program.

The table displays statistical measures such as the mean, standard deviation, maximum and minimum values of both independent and dependent variables. These measures are used to determine how reliable they are as a good basis for reaching the parameters of the community, and to test their statistical suitability using significant tests.

2. Regression analysis:

Is applied by meeting certain conditions such as the absence of duplication or linear interference between independent variables, the natural distribution of study data and residuals, the absence of self-correlation between residuals, and the stability of the random error variance.

3. Linear correlation between independent variables:

Before starting data analysis and interpreting the results, the validity and suitability of the data for statistical analysis were tested through tests of linear interaction to ensure that there is no problem of linear interaction in the study data.

One of the methods used to detect the problem of linear interaction is to find the correlation coefficient between the independent variables, and the results were as follows, as shown in Table (6).

Table (6): Shows the Pearson correlation matrix between the study variables.

	Diversification of Gross Domestic Product (x1)	Diversification of government revenues (x2)
Diversification of government revenues (x1)	-	0.663
Diversification of Gross Domestic Product (x2)	0.663	-

source: of these results is based on the outputs of the EViews program.

Through the previous table (6), it is clear that all correlation coefficients between the independent variables were less than (0.8) and therefore it can be concluded that there is no linear interaction between the independent variables. To confirm this result, we calculated the Variance Inflation Factor (VIF) as follows:

Table (7): Illustrates the linear redundancy between the independent variables

Variable	Variance Inflation Factor VIF
Diversification of government revenues (x1)	1.785
Diversification of Gross Domestic Product (x2)	1.785

source: of these results is based on the outputs of the EViews program.

It is evident from Table (7) that the VIF equals (1.785) which is less than (5) and therefore it can be concluded that there is no problem of linear interdependence between the independent variables.

4. The normal distribution moderation of the study data:

This condition is necessary when the sample size is small (less than 30) and the study sample includes more than 30 observations. It can be assumed that the data is approaching its normal distribution according to the central limit theorem, and thus it can be said that the normal distribution condition for the data is fulfilled. The Jarque-Bera test was used to determine if the data follows a normal distribution due to the sensitivity of the data. The results in Table (8) showed that the probability value of the study variables is greater than (0.05) and thus we accept the hypothesis that the data follows a normal distribution.

Table (8): Shows the normal distribution test.

Study Variables	Test Value Jarque–Bera test	Level of Significance Probability
Diversification of government revenues (x1)	5.138	0.076
Diversification of Gross Domestic (x2) Product	4.041	0.132
Composite diversity index (x3)	2.497	0.286
gross domestic product (Y)	2.927	0.231

source: of these results is based on the outputs of the EViews program.

5. The autoregression between the residuals :

To verify the presence or absence of an autoregression between the residuals, the (Durbin Watson) test shown in Table (9) was used.

Table (9): Shows the test for the presence of an autoregression between the residuals.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	57200.21	3216.8	17.782	0.000
X1	19051044	43006159.0	0.443	0.661
X2	19128919	43007749.0	0.445	0.660
X3	38056375	86011948.0	0.442	0.662
Durbin-Watson stat	2.085			
R-squared	0.8193			
F-statistic	40.798			
Prob(F-statistic)	0.000			

source: of these results is based on the outputs of the EViews program.

Through Table (9), it becomes clear that the Durbin Watson (DW) value is close to (2) and therefore a decision can be made that there is no autoregression between the residuals.

6. The stability of the random error variance:

To verify the stability of the random error variance, the Breusch-Pagan-Godfrey test shown in Table (10) was used.

Table (10): Shows the test for the stability of the random error variance.

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
Obs*R-squared	2.524	Prob. Chi-Square (2)	0.2831

source: of these results is based on the outputs of the EViews program.

Through Table (10), it is evident that the significance level of the test was equal to 0.2831, which is greater than the significance level of 0.05. This means that there is no problem of instability in the random error variance.

7. Unit Root Test:

To verify the stability of the series, the Augmented Dickey-Fuller test statistic was used, and the following results were obtained as shown in Table (11).

Table (11): The results of the Dickey-Fuller test to examine the stability of the time series

		ADF
	In level	In difference
X1	1.360156	***5.986592
X2	-1.274734	***8.178835
X3	1.067133	***5.341713
Note: ADF is the unit root tests.		
*,**, and *** indicate the rejection of the respective null hypothesis at 10%, 5%, and 1% level of significance.		

source: of these results is based on the outputs of the EViews program.

Through the Augmented Dickey-Fuller test results presented in Table (11), it is evident that the series is unstable at the level. After finding the first difference, the series was stabilized at the first difference for all variables.

4. Table (12): Results of estimating the effect of economic diversification on GDP

(Natural logarithm of Y)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.4767	0.12009	95.562	0.000
X1	0.77551	0.24215	3.202	0.0034
X2	4.78393	0.69236	6.9095	0.000
Adjusted R-squared	0.8369			
F-statistic	78.005			
Prob(F-statistic)	0.000			

source: of these results is based on the outputs of the EViews program.

From the table above (12), we notice that the value of the constant limit (C) for the model is significant below the significance level (0.05), because the probability value of the t-test for the constant limit is (0.000) which is less than the significance level (0.05). Therefore, we accept the alternative hypothesis that states the significance of the constant limit.

Also, we infer the significance of the independent variables (Gross Domestic Product diversity and revenue diversity), because the probability value of the t-test for the coefficients is less than (0.05). Therefore, we accept the alternative hypothesis that states the significant effect of economic diversification on the Gross Domestic Product.

Furthermore, the determination coefficient value (R-squared) is (0.8369), which means that the independent variables together explain (83.69%) of the variation in the Gross Domestic Product. Thus, it is clear that economic diversification affects the Gross Domestic Product.

RESULTS:

The study reached several results as follows:

1. The Omani economy was able to achieve progress in the degree of economic diversification for both government revenues and gross domestic product, where the results of the Herfindahl transactions were relatively low, i.e. closer to zero than to one, and the Herfindahl composite index decreased from (0.44633) points to (0.20456) points during the period (1991-2021).

2. The degree of diversification of gross domestic product increased, with a decrease in the Herfindahl index from (0.28786) to (0.18848), and the degree of diversification of general revenues also increased, with a decrease in the Herfindahl index from (0.60481) to (0.22064) during the period (1991-2021).

3. The Omani economy achieved high and semi-continuous growth during the period (1991-2021), where the Omani economy recorded growth by (163.4%), at an annual growth rate of (5.4%), and this growth was due to growth in oil GDP by (77%), at an average annual growth rate of (2.5%), and growth in non-oil GDP by (260.4%), at an average annual growth rate of (8.6%), during the period (1991-2021).

4. The standard study results showed the significant impact of economic diversification on the growth of Oman's gross domestic product during the period (1991-2021). There was a significant effect of economic diversification on gross domestic product, and 83.69% of the changes in economic growth can be attributed to changes in the degree of economic diversification. This indicates that economic diversification affects the growth rate of gross domestic product. Oman was able to make progress in increasing the degree of economic diversification by developing non-oil production sectors and increasing their contribution to gross domestic product.

DISCUSSION:

The current standard study results contradict the theory of comparative advantage by Ricardo, which saw concentration and specialization as a stimulant and source of economic growth. The theory gives strong justifications for concentration and specialization, and therefore for reducing the importance and effectiveness of economic diversification.

The results of the current study agree with multiple studies that have shown that a decrease in diversity and concentration of production and exports have negative effects on GDP growth. This means that economic diversification has a positive impact on GDP growth, which contradicts the theory of comparative advantage. For example, study by Shanzi Ke (1993), found that economic diversification has a positive effect on economic stability and GDP growth, and that diversification and focused employment can positively impact unstable industries and GDP growth rates. This supports the conclusion that urban areas with more diversity have experienced greater growth and stability than less diverse areas.

On the other hand, the results of the current study contradicted some of the previous studies, such as the study conducted by Mamdouh Al-Khatib in (2014), which examined the impact of economic diversification on economic growth in Saudi Arabia. It found that there was no significant progress in creating changes in the economic structure, meaning that there was no progress in increasing the degree of economic diversification. Despite the lack of progress in economic diversification, it did not have an impact on the continuous growth in the Gross Domestic Product (GDP), which continued to achieve high rates. Furthermore, the results of the current study also contradicted those of Ferial Kaboush in (2017), in her study that examined the impact of economic diversification on economic growth in Algeria. She found that there was weakness in the long-term relationship between economic diversification and growth in GDP, and attributed this to the continued dependence on oil as the main resource without activating non-oil sectors and creating integration between them to increase their contribution to the GDP.

The results of the current study can be interpreted as Oman having effectively succeeded in bringing about a change in its economic structure, by successfully reducing its dependence on the oil sector and developing and diversifying several non-oil productive sectors, increasing their contribution to the GDP at much higher rates than the increases in GDP based on the oil sector. Oman also succeeded in diversifying government revenues, by increasing non-oil revenues including a significant increase in natural gas revenues, which contributed to raising the degree of economic diversification without negatively affecting growth in GDP.

Oman achieved an increase in the non-oil GDP growth rate by 260.4% with an average annual growth rate of 8.7%, while the increase in the oil GDP during the same period was 77% with an average annual growth rate of 2.6%, which contributed to a 163.4% increase in GDP with an average annual growth rate of 5.4% during the period from (1991-2021).

Thus, it can be said that Oman was able to make progress in increasing economic diversification while maintaining high rates of GDP growth, and that economic diversification has positively contributed to the increase in GDP growth. The results of the current study indicate that (83.69%) of the changes that occurred in GDP during the period (1991-2021) are attributed to changes in economic diversification during the same period.

The result of the current study is logical since economic diversification in Oman focuses on reducing reliance on the oil sector and developing non-oil sectors. The growth rate of non-oil GDP was much higher than that of oil GDP, and therefore it can be said that economic diversification policies in Oman played a role in developing productive non-oil sectors, which in turn contributed to a significant increase in non-oil GDP and consequently raised the GDP growth rate in Oman during the period (1991-2021).

Despite the fact that major oil revenues serve as a lever for GDP growth in oil economies, focusing solely on the oil sector makes the economy vulnerable to fluctuations and economic crises, especially when oil prices drop in the international market, making oil economies unstable and negatively affecting GDP growth. Diversification of production and income sources by reducing reliance on oil and developing non-oil productive sectors contributes to a more stable economy, and reduces the risks resulting from price fluctuations in international markets.

There are many reasons that explain the positive results of economic diversification on economic growth. Economic diversification contributes to increasing labor productivity, human capital, financial development, and thus leads to increases in gross domestic product (GDP). Diversification contributes to increasing growth in GDP by increasing investment opportunities and reducing investment risks. Distributing investments across a large number of economic activities reduces the investment risks resulting from concentrating those investments in a few activities. For example, natural disasters, wars, and economic crises may cause severe damage to the production and marketing of some

products, which negatively affects investment returns that are characterized by concentration and lack of diversification. Economic diversification, on the other hand, reduces investment risks and increases their returns and stability.

Where economic diversification leads to achieving multiple benefits by reducing the risks of relying on a few products or a single sector for production. When the performance of the local economy is tied to the production of a specific product, a drop in prices in the market or a decrease in demand for that product for local or external reasons will often expose the production structure to risks. Diversification of production will reduce the negative effects that can occur as a result of relying heavily on a specific product, regardless of the nature and type of that product. The negative effects will be greater when production is highly concentrated in sectors with high degrees of volatility in the external market.

For example, some oil-dependent countries rely on exporting one or a limited number of products. When the prices of these exported products decrease, the returns on foreign currency exports decrease. This leads to a reduction in the country's ability to finance imports, economic development, or even meet its needs through public spending.

Additionally, the decrease in prices of exported products to global markets, while import prices remain stable or increase, can cause a disruption in the level of trade exchange rates. When foreign trade relies on exporting a specific product, a decrease in the price of this product leads to a decrease in export prices compared to import prices. This is due to the importance of the weight of this product in influencing the standard pricing of exports. This means that the country loses due to its foreign trade.

While diversification contributes to reducing the risks of the benchmark for export prices, as production and exports are distributed among a large number of goods and services, this leads to reducing the losses resulting from the volatility of exported goods' prices and thus to an increase in the trade exchange rate, indicating a positive relationship between economic diversification and growth in gross domestic product (GDP).

Also, the economic diversification resulting from increasing the number of productive sectors contributes to strengthening interrelationships between them, resulting in many external effects on production that positively reflect on the growth of GDP. While weak economic diversification and the concentration of production in a limited number of products lead to instability in the levels of GDP, and that the volatility of GDP and its instability have an inverse relationship with the rate of economic growth. It can be inferred that stability in the achieved Gross Domestic Product (GDP) as a result of increased economic diversity will likely lead to an increase in GDP growth rates.

Generally, countries rely on utilizing the comparative advantage of their production elements in their pursuit of economic diversity. For example, when agricultural production elements such as water, fertile soil, and a suitable climate are available, the country can work on expanding the agricultural sector and increasing its contribution to the GDP. Similarly, when expansion and comparative advantage in industrial production elements such as raw materials, technology, and trained labor are available, the country can expand towards developing and increasing industrial production. Some countries work on diversifying the industrial base by expanding support for small and medium-sized enterprises, as well as developing the tourism sector, financial services, and the service industry in general.

Regarding oil-producing countries, they often work on diversifying their economies by expanding into petrochemical industries and energy-consuming industries such as iron, aluminum, ceramics, cement, and high-capital-density industries. This means that countries' experiences in diversifying the economic base vary depending on the available production elements' comparative advantages, (Mamdouh Al-Khatib, 2011).

Regarding Oman, it has worked within the framework of its efforts to diversify the economic base and focus on promising strategic sectors, taking advantage of the relative advantage of some non-oil production elements and working on their development, relying on oil revenues. It has developed the service sector, tourism sector, industry, mining, and petrochemical industries, as well as agriculture and fisheries.

Therefore, it can be said that it is logical for the increase in economic diversity in Oman to have positive effects on the growth of the Gross Domestic Product (GDP), as a result the increase in productivity of human capital, financial development, strengthening of inter-sectoral linkages and their development, and increasing the contribution of non-oil production sectors to the GDP.

CONCLUSION:

The study aimed to provide a comprehensive view of economic diversification and economic growth in Oman by measuring the degree of economic diversification and its development, analyzing and measuring the impact of government revenue diversification, and diversifying gross domestic product on economic growth in Oman during the period (1991-2021). The study relied on descriptive and analytical methods to cover the theoretical aspect, as well as standard methods of data analysis to find the impact of economic diversification on economic growth.

The study found that Oman has made progress in the degree of economic diversification in both government revenue and gross domestic product, where the results of the Herfindahl transactions were relatively low, i.e., closer to zero than to one, and the Herfindahl composite index decreased from (0.44633) points to (0.20456) points during the period (1991-2021). The degree of diversification of gross domestic product increased, as measured by a decrease in the Herfindahl index from (0.28786) to (0.18848), and the degree of diversification of general revenues increased, as measured by a decrease in the Herfindahl index from (0.60481) to (0.22064) during the period (1991-2021).

Oman also achieved high and almost continuous growth during the period (1991-2021), where the Omani economy recorded a growth rate of (163.4%), with an annual growth rate of (5.4%). This growth was due to a growth in oil GDP by (77%), with an average annual growth of (2.5%), and a growth in non-oil GDP by (260.4%), with an average annual growth of (8.6%).

The study showed a conflict between continuing to increase the contribution of oil activities to the GDP and Oman's efforts to reduce its dependence on oil resources. Despite the decrease in the percentage of the total contribution of oil activities to the GDP from (48.6%) in 1991 to (31.7%) in 2021, this decrease was due to an increase in the size of other non-oil sectors, not a decrease in the size of the oil activities sector in the GDP. In fact, the contribution of oil activities to the GDP increased from (6397.7) Omani rials in 1991 to (11327.4) Omani rials in 2021. The continuous increase in the contribution of oil activities to the GDP was mainly due to an increase in production in the petroleum sector, especially in the natural gas sector, in order to finance Oman's rapid development plans and programs.

The standard study results showed the impact of economic diversification on the growth of Oman's GDP during the period (1991-2021), indicating a significant effect of economic diversification on GDP. About (83.69%) of the economic growth changes are attributed to changes in the degree of economic diversification. This implies that economic diversification affects the GDP growth rate. Oman achieved progress in increasing the degree of economic diversification by developing non-oil productive sectors and increasing their contribution to GDP.

The study recommended adopting more integrated policies to increase the degree of diversification in both government revenues and GDP. These policies include:

- Rationalizing current and transfer government spending.

- Enhancing non-oil sectors and reducing the contribution of the oil sector as a size, not as a percentage of GDP.

- Achieving balance in investment activities in different productive sectors.

The previous policies can be implemented through the following:

1.   Linking government spending to efficiency and performance standards in the Sultanate of Oman.

2.   Involving the private sector and helping it take the initiative and lead the economy in the Sultanate of Oman.

{Reducing spending and partnership between the public and private sectors leads to reducing reliance on oil revenues directed to finance the state budget. This allows for a reduction in the proportion of oil exports from total exports, thus the possibility of raising the degree of diversification in both exports and government revenues}.

3.   Adopting standards and indicators to balance investment to ensure balance in investment activities in various productive sectors, ensuring the success of economic diversification programs and strategies.

{The difference in the growth rate of different productive sectors and their contribution to the gross domestic product of the Sultanate of Oman and the unbalanced growth may not serve the goal of raising the level of economic diversification to the desired equal level}.

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