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THE INFLUENCE OF ECONOMIC DIVERSIFICATION AGENDA ON THE ECONOMIC GROWTH OF THE SULTANATE OF OMAN

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Abstract: The purpose of this paper is to present a study on the relationship between the economic diversification agenda and economic growth of the Sultanate of Oman. As one of the oil-exporting countries that are heavily dependent on it for income, Oman believes that the state's policy should be geared towards creating an effective economic diversification agenda that serves the economic growth of Oman away from the increasingly volatile oil prices. As a result, Oman initiated a national programme called *Tanfeedh*, as a catalyst for the development of economic diversification agenda that helps to reduce its over-reliance on oil and gas. In the present study, the impacts of both the economic diversification and the *Tanfeedh* Programme and coupled with another factor, industrial development, on the economic growth are examined using pilot data. This is operationalised through the development of a research model that represents the inter-relationships between the strategic factors. The preliminary analysis from the pilot study indicates that the enablers of economic diversification together with the *Tanfeedh* Programme and Industry development are the right strategic factors for the progress of Oman.

Keywords: Economic diversification, Economic growth, Industry development, Oman, *Tanfeedh* Programme.

1. Introduction

Petroleum is the biggest source of income in Oman and over 80% of its Gross Domestic Product (GDP) is generated from this crude oil. The economic growth of Oman is measured through the exports of oil and gas that accounted for sales of 62.7% and 51% of its GDP. The volatility of Oman's oil price tends to be rather obvious in recent years since the price has dropped to USD 42.83 as reported by the Dubai Energy Market (Times of Oman, July 31, 2020). Given the fluctuations in oil prices over the past 10 years, the Government of Oman has embarked on some audacious efforts to reduce its dependence on oil and is setting its ambitious goal of decreasing its current GDP by 37.2 to 9% in 2020 (Al-Mubeen, Kumar & Nazneen, 2017). Oman's oil and natural gas reserve-to-production (R/P) ratio is only 15 and 18.5 years, respectively. At current production levels, they are relatively low compared to other Gulf economies (Mohseni-Cheraghlou, 2020). Given this situation and without new oil and gas discoveries, moving into future development strategy, Oman cannot and must not depend on oil and gas export revenues, and these energy reserves will have to be safeguarded to meet growing domestic needs for decades to come.

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Economic diversification has historically been used as a strategy to move the economy from one source to several sources of revenue distributed across the primary, secondary and tertiary markets, with a large population. Oman initiated a national program, *Tanfeedh*, for the development of the economic diversification agenda in 2016, to reduce its over-reliance on oil and gas. The *Tanfeedh* programme is an accelerator that creates an easy business environment in the country and the government has chosen five strategic industries: *manufacturing, transport, and logistics, tourism, fishing,* and *mining* (*Tanfeedh Handbook, 2017)*. *Tanfeedh* was created as an urgent response to increasing burdens on the government that is currently going through financial constraints. *Tanfeedh* plan was formulated in cooperation with the Performance Management and Delivery Unit (PEMANDU) of Malaysia. The cooperation is only possible because of the close political relationship between the two governments and the successful model of the Malaysian government in implementing the 5-year plans (*Tanfeedh Handbook, 2017)*.

Tanfeedh is unique in the sense that its formulation involves the participation of a diverse group of around three (300) people from the private sector and government, nationals, expatriates, and the public. It focuses on the economic matter and they are meant to identify challenges from the people involved in the sectors themselves to develop workable and practical solutions to achieving the targets. *Tanfeedh* is neither a new plan nor a strategy, rather it is an accelerator to create a climate of ease of doing business in the country. It paves the way towards a reduction in bureaucracy and creating a better understanding between the government and private sector, and civil society. The traditional economic diversification policies and recipes may not be able to successfully address the urgency facing Oman, especially given the added challenges presented by COVID-19 and low oil prices (Mohseni-Cheraghlou, 2020). Due to this, the government has chosen five sectors that it sees as the best potential to improve the economic conditions of Oman that consist of manufacturing, transport, and logistics, tourism, fisheries, and mining. The findings of this study provide useful information for the formulation of strategies, which would enhance Oman‘s economic diversification programme. It also serves as additional information as to whether it needs to realign the existing policies to promote a more favourable environment and sustainable development in Oman.

2. Problem Statement

The Sultanate of Oman has to focus on non-oil activities and must try to increase the contribution of non-petroleum activities to GDP within its plan to diversify sources of the national income. *Tanfeedh* Programme was created as a national catalyst in creating a conducive business climate that helps the economic diversification agenda of Oman. However, its effectiveness in enhancing economic growth has not been measured objectively by any agency in a formal manner. Nevertheless, there are only a few studies at present on the benefits of *Tanfeedh* and its role in driving Oman’s economic growth. Oman is endowed with many natural, historical, and cultural treasures. Given the Sultanate’s rich and diverse set of natural, historical, and cultural attractions and its status as one of the MENA region’s safest destinations, it is certainly feasible for tourism as part of industry development to account for 10-15 percent of the country’s GDP (Mohseni-Cheraghlou, 2020). Another

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strategic issue is the lack of information on the success of industrial development such as the drive for the imports of modern technology and machinery by the industries, on the economic growth (Al Mubeen et al., 2017; Al Wahaibi, 2016).

While a rapid diversification strategy is inevitable, the Sultanate must also be mindful of the employment needs of its growing young population. Therefore, any economic diversification and industry development strategy must ensure the sustained creation of tens of thousands of jobs per year for the next several decades. This will require labour-intensive projects to play a significant role in economic diversification and development efforts (Tasie, 2009). However, the objective assessment of the impact of industrial development, apart from the *Tanfeedh* programme on economic growth has been limited to certain sectors such as the tourism industry. Wider coverage of the impact of other sectors such as technological and heavy industry on economic growth needs to be addressed in an objective manner (Al Mubeen et al., 2017). The purpose of this study is to examine the impacts of the strategic factors, comprising economic diversification, *Tanfeedh* Programme, and Industry Development, on the economic growth of the Sultanate of Oman.

3. Literature Review

Studies that investigate pertinent issues related to the drive for economic diversification that contributes towards the country's economic growth especially in the context of Oman are scarce. Kasem and Alawin (2019) confine their scope of study on the enablers of the economic diversification agenda and did not extend their focus on the impact of the agenda on the economic growth of Oman. They concluded their findings by showing that the key enablers that can drive economic diversification include trade, GDP per capita, industry development, and labour force. Boosting trade through removing trade barriers and enhancing non-oil exports will encourage more diversification. While several studies connecting the impact of economic diversification on economic growth, the investigation on how other strategic factors like the *Tanfeedh* programme and industry development that influence the economic growth of Oman was not clear. According to Kasem and Alawin (2019), the non-oil-based industries such as mining (e.g., minerals), manufacturing, and construction industries are the ones that should be focused on as they may contribute significantly to the economic growth of the country.

An earlier and related study by Belwal and Belwal (2010) investigated economic growth and tourism in the post-oil Omani economy with three major techniques of strategic analysis viz. PESTEL (Political, Economic, Social, Technological, Environmental, Legal) framework, Porter's diamond model and SWOT (Strength, Weakness, Opportunities, Threat) and revealed through analysis that Oman is at the cross-roads where there is a need to find out areas that will contribute to the economic development and growth. The previous studies in countries outside Oman tend to support the relationship between economic diversification and economic growth. Several empirical studies including Love (1986) show evidence of export diversification contributing to higher per capita income growth. Al-Marhubi (2000) found that export diversification promotes robust economic growth under different model specifications. Agosin (2007) asserted that export diversification has a stronger effect on per capita income growth when a country's exports grow faster. Lerderman and Maloney (2007)

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in a dynamic cross-country panel model also found evidence in support of diversification-led growth. Feestra and Lee (2004) found that a 10 percent boost in export diversification in all industries would result in a 1.3 percentage point increase in a country's productivity growth, using a sample of 34 countries for the period 1984-1997. Considering the previous studies and in the context of Oman and other countries, the present study addresses the following matters;

- The relationship between economic diversification and industry development
- The relationship between economic diversification and the *Tanfeedh* programme
- The relationship between the *Tanfeedh* programme and economic growth

4. Conceptual Framework

Based on the arguments presented earlier and a comprehensive review of previous studies, a conceptual framework displayed in Figure 1 is proposed to model the relationships between the drivers of economic diversification and economic growth.

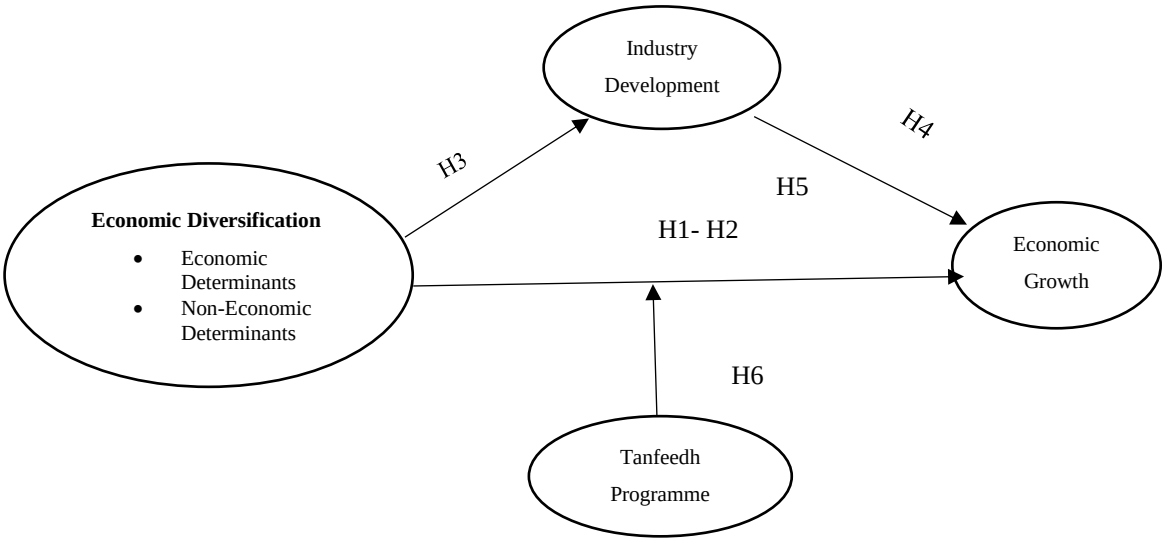

Figure 1: The Conceptual Framework

Based on the interrelationships between the variables or constructs in the conceptual framework in Figure 1a, the following hypotheses statements are formulated.

H1: Economic determinants have a significant influence on the economic growth
H2: Non-economic determinants have a significant influence on economic growth
H3: Economic diversification has a significant influence on industrial development
H4: Industrial development significantly influences economic growth
H5: Industrial development significantly mediates the relationship between economic diversification and economic growth.
H6: *Tanfeedh* programme significantly moderates the relationship between economic diversification and economic growth.

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5. Method and Analysis

In the process of gathering the relevant data, this study adopts a cross-sectional design, quantitative, and correlational research approach. The units of sampling in this study are the personnel or staff who are involved directly and have ample experience and information with regards to the economic diversification agenda. More specifically, the sampling units comprise members or staff of government agencies and ministries that are involved directly with the *Tanfeedh* programme, and members of industry partners who come from the selected industry sectors involved in the programme. During this process (pilot study collection), approval was first taken from the National Center for Statistics and Information (NCSI) under the regulations specified by the Ministry of Higher Education of Oman before conducting any study or survey research to document the data as well as to ensure that the purpose of collecting these results is for research and educational aspects. The approval came two weeks after the application was submitted and the collection of samples took approximately four months from July 2020 to November 2020. The questionnaire was distributed in several ways to ensure that it reaches the target sample, direct link has been used as well as e-mail in addition to manual distribution.

The study utilises survey research and the instrument consists of questionnaires that are administered to collect quantitative data from the respondents. The preliminary data analysis explains how the various data cleaning and descriptive statistics techniques work, and how they are applied to the instruments of the study. This analysis also includes Cronbach's alpha to maintain consistency. The data analysis for this pilot study was carried out by utilising SPSS software version 20.0. A pilot study was implemented to verify whether the content and format of the study instrument are clear, logical, and not ambiguous in terms of achieving the objectives of the study. A sample of forty-two (42) respondents has been selected, comprising of managers/ head of department/unit/section, and to identify questions that might be resisted (Cooper & Schindler, 2014). This paper presents the initial pilot study data analysis. The analysis begins with a brief overview of the sample respondents and their responses. This is followed by diagnostic data analysis that involves checking for the normality of the data and the existence of potential outliers in the data. The summary statistics for each variable are presented. The reliability measurement of each of the variables is evaluated using Cronbach Alpha.

5.1 Data Analysis

The preliminary data analysis in the pilot study examines the profiles of the respondents participating in the study. The analysis involves diagnosing the characteristics of the data including detection of outliers and checking for normality. Descriptive analysis for each of the variables in the research framework is an important part of the preliminary analysis since it is a prerequisite to further analysis of the data such as relationships analysis. It explains the basic data analysis that involves data the cleansing process, demographic analysis, checking of outliers, testing for normality, and descriptive analysis for the study instruments. This preliminary analysis also includes the reliability measure using Cronbach’s alpha.

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5.2 Demographic Analysis

Tables 2(a)-(b) presents the details of the education level of the respondents and years of experience. Of the total of 42 respondents, 35 (83.3%) respondents possess postgraduate degrees. Meanwhile, 6 (14.3%) respondents have undergraduate qualifications. Next, there are 11 (31.0%) respondents having managerial experience between 6 and 10 years, while 11 (26.2%) having 5 years of experience at a managerial level, and 18 (42.9%) have 16 years or more of experience at the managerial level.

Table 2(a)
Level of Education

Diploma	2.38%
Undergraduate	14.29%
Postgraduate	83.33%

Table 2(b)
No. of years in Managerial Position

5 years or less	26.19%
6-10 years	30.95%
11-15 years	11.90%
16-20 years	11.90%
18-20 years	0.0%
21 years or more	19.05%

In Tables 2(c)-(d), 26 (61.9%) of the 42 respondents are involved for 1 year in the *Tanfeedh* programme, while 13 (31.0%) had 2-3 years of experience in the programme. The rest have more than 3 years' involvement in the *Tanfeedh* programme. Figure 2(d) of the total of 42 respondents participating in this pilot study, the majority (57.1%) are government officials, while 8 (19%) of them are from SMEs in Oman. Only 3 (7.1%) of the respondents are foreign companies' representatives while the organisations which belong to the rest of the respondents are unidentified.

Table 2(c)
No. of years in *Tanfeedh* Programme

1 year	61.90%
2 – 3 years	30.95%
3 – 4 years	7.14%

Table 2(d)
Type of Organisation

Government	57.14%
Oman SMEs	19.05%
Foreign	7.14%
Others	16.67%

Tables 2(e)-(2f) demonstrate that about half (50.3%) of the companies have between 70 to 500 employees, while only a small number of companies have either less than 5 employees or more than 500 employees. Figure 2(f) shows the type of business involvement of the companies where 13 (31%) of them operate using their investment, while 10 (23.8%) of them operate as consulting companies. However, reasonably a big number (12 or 28.6%) of the companies are unknown in terms of their involvement in the business.

Table 2(e)
No. of Employees' Involvement

Less than 75	14.29%
75 - 200	19.05%
201- 500	26.19%
More than 500	40.47%

Table 2(f)
Type of Business

Government	57.14%
Oman SMEs	19.05%
Foreign	7.14%
Others	16.67%

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Table 2(g) shows that there is 57.2% (25) of the companies that have been operating their business for 6 years or more. Only a small proportion (4.8%) of the companies are operating their business for 5 years or less. Most business operations of the companies participating in this study are in Muscat, the capital city of Oman. However, 23.8% (10) of the companies have not stated the location of their business operations (Table 2[h]).

Table 2(g) Years of Operations		Table 2(h) Location of Business Operations	
Less than 75	14.29%	Muscat	59.52%
75 - 200	19.05%	Duqm	7.14%
201- 500	26.19%	Salsalah	2.38%
More than 500	40.47%	Others	30.96%

Table 2(i) shows that 50% (21) companies belong to Omanis, while 16.7% (7) belong to both Omani and other non-Omani partners. Only a small number (2 or 4.8%) of the companies belong to foreign (non-Omani) owners. The owners of another 28.6% (12) companies are not identified. Half (50%) of the companies focus their product orientation towards domestic/local as well as for export markets. However, 23.8% (10) of the companies do not state the market orientation of their products (Table 2[j]).

Table 2(i) Ownership of Companies		Table 2(j) Product Orientation	
Omanis	50.00 %	For Local	19.05%
Non-Omanis	4.76 %	For Export	2.38%
Both	16.67%	For Both	50.00%
Others	28.57%	Others	28.57%

Table 2(k), indicates that it is not clear about the kind of certifications adopted by the companies. While there are 40.5% (17) companies that have not stated the type of certifications that they adopt in their organizations, 35.7% (15) of them have adopted Quality Management System (ISO 9001) and only a handful of them are certified with Environmental Management System, and Food Safety Management System (ISO 22000). Table 2(l) shows that 38.1% (16) of the total number of companies are in Service Sector, 21.4% (9) of them are in both Service and Manufacturing sector, and the remaining are totally in the manufacturing sectors.

Table 2(k) Type of Certification Adopted		Table 2(l) Industry Sector	
Quality	35.71 %	Manufacturing	11.90%
Environmental	4.76 %	Services	38.10%
Food Safety	4.76%	Both	21.43%
Others	54.77%	Others	28.57%

Table 2(m) depicts the type of industry of each of the companies participating in this study. Of the total companies, 57.1% indicate that the industry is unknown. However, 23.8% of them are in manufacturing, followed by 7.1% in the transportation industry, and a small number of

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the companies identify themselves as belonging to energy, food, and transportation industries, respectively.

Table 2(m) Industry Type	
Manufacturing	23.81%
Transportation	7.14%
Food	4.76%
Agriculture	2.38%
Energy	2.38%
Mining	2.38%
Unknown	57.15%

5.3 Checking for Outliers

This section identifies the potential outliers in the data set using a Box plot (Tukey, 1977). The diagnosis for the presence of outliers in the data is crucial for several reasons. Extreme outliers are bad data points that require special attention. This is because the presence of extreme outliers can cause non-normality of the data and most likely will distort the results of the analysis. Therefore, extreme outliers have to be excluded from the data set, and only good data are used for further analysis. Mild or not-so-extreme outliers are also retained in the data. The box plot is a well-known simple graphical tool to exhibit information about continuous univariate data, such as the median, lower and upper quartile as well as lower and upper extreme of a data set by constructing a boxplot. Figures 3(a) to 3(f) depict the boxplots for the six (6) constructs, namely, Economic Determinants, Non-economic Determinants, Economic Diversification, Industry Development, *Tanfeedh* Programme, and Economic Growth, with each respective set of indicators, respectively.

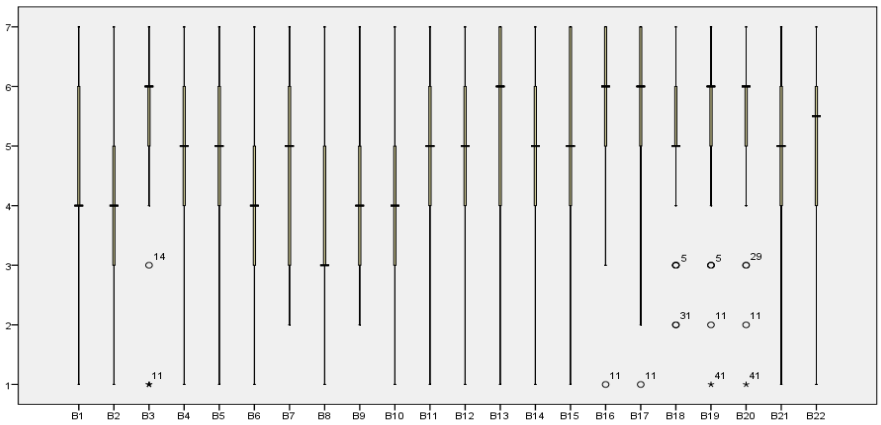

Figure 3(a): Boxplot for the Economic Determinants indicators

Figure 3(a) shows that there are several indicators of the Economic Determinants, i.e., B3, B16, B17, B18, B19, and B20, respectively, that indicate the existence of outliers in the data. Some of the outliers are 'extreme' and the others are only 'moderate' outliers. It is shown that B3, B19, and B20 have two outliers (one extreme and another moderate), B16, B17, and B18 have only moderate outliers. To conduct further analysis such as correlation and relationship analysis, the extreme outlier (observation 41) in B19 and B20 and the corresponding data points in row 41 in the data set have to be excluded.

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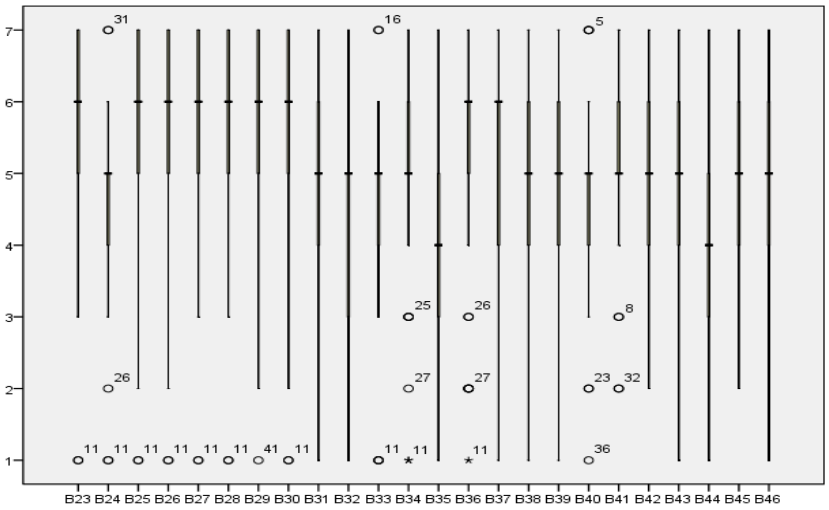

Figure 3(b): Boxplot for the Non-Economic Determinants indicators

Figure 3(b) shows that there are only nine (9) indicators of the Non-Economic Determinants, i.e., B31, B32, B35, B37, B39, B43, B44, B45, and B46, respectively, that have no outliers in the data. The other indicators seem to indicate the existence of outliers with some are 'extreme' outliers and the others are only 'moderate' outliers. It is shown that only B34 and B36 have two outliers (one extreme and another moderate), while the other indicators have only moderate outliers. To conduct further analysis such as correlation and relationship analysis, the extreme outlier (observation 11) in B34 and B36 and the corresponding data points in row 11 in the data set have to be excluded.

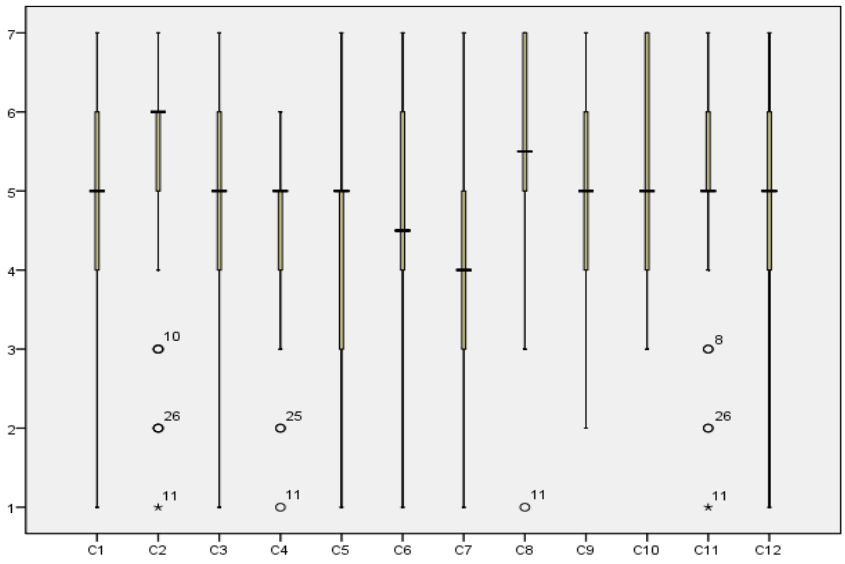

Figure 3(c): Boxplot for Economic Diversification Indicators

In Figure 3(c), there are eight (8) indicators of the Economic Diversification, i.e., C1, C3, C5, C6, C7, C9, C10, and C12, respectively, that have no outliers in the data. The other indicators seem to have potential outliers with some (C2 and C11) being 'extreme' outliers

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and the others are only 'moderate' outliers. To conduct further analysis such as correlation and relationship analysis, the extreme outlier (observation 11) in C2 and C11 and the corresponding data points in row 11 in the data set have to be excluded from the data set.

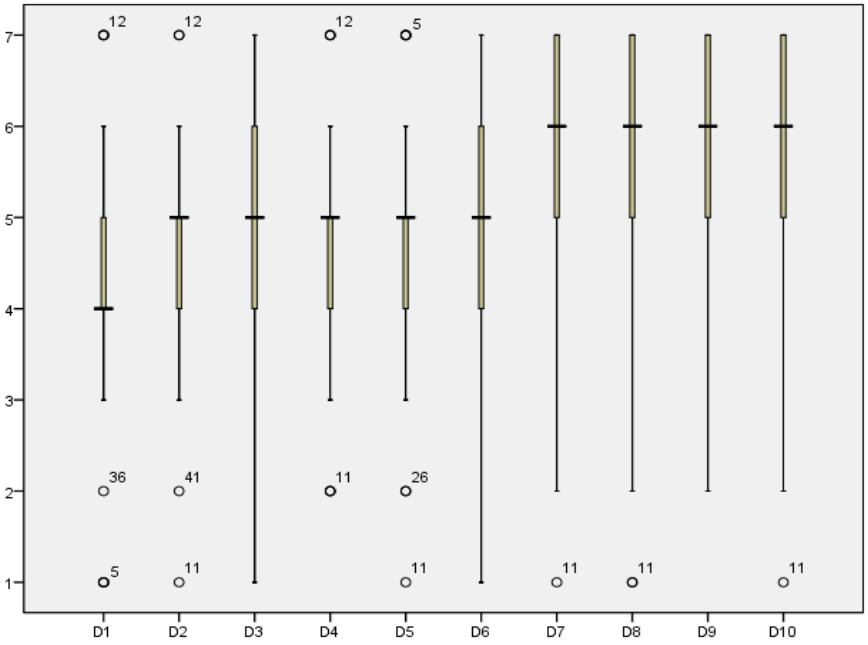

Figure 3(d): Boxplot for Industry Development indicators

In Figure 3(d), only one indicator of the Industry Development, i.e., D9, does not indicate any outlier in the data, while the rest of nine (9) indicators have only 'moderate' outliers. For conducting further analysis such as correlation and relationship analysis, the moderate outliers are retained and not omitted from the data set.

In Figure 3(e) below, only one indicator of the *Tanfeedh* Programme, i.e., E8, indicates the existence of an extreme outlier in the data, while the rest of eight (8) indicators have only 'moderate' outliers. For conducting further analysis such as correlation and relationship analysis, the extreme outlier (observation 41) and the corresponding data points in row 41 in the data set have to be excluded from E8. In conducting further analysis such as correlation and relationship analysis, the extreme outlier (observation 41) in E8 and the corresponding data points in row 41 in the data set have to be excluded.

In Figure 3(f) below, four (4) indicators of the Economic Growth, i.e., F3, …, F8, do not indicate any outliers in the data, while the other two (2) indicators have only 'moderate' outliers. For further analysis such as correlation and relationship analysis, the moderate outliers are retained and not omitted from the data set.

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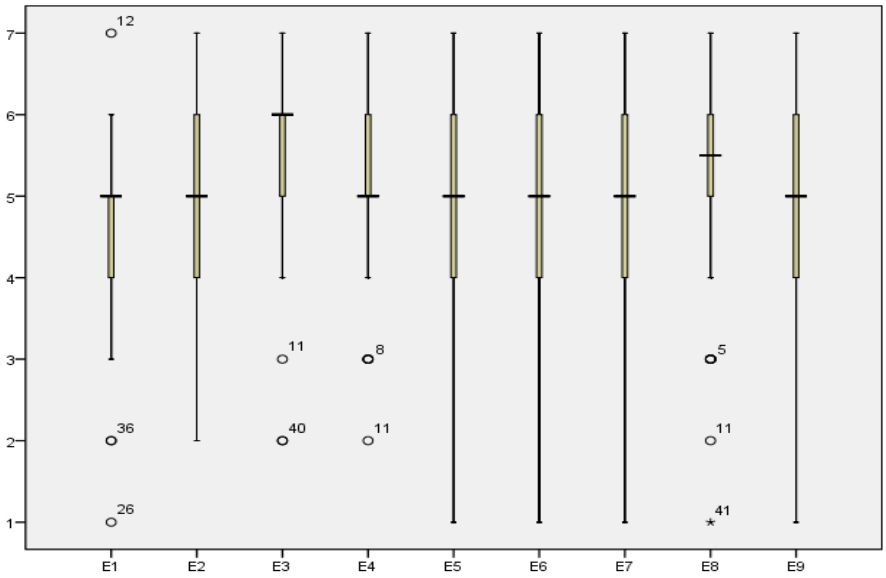

Figure 3(e): Boxplot for *Tanfeedh* indicators

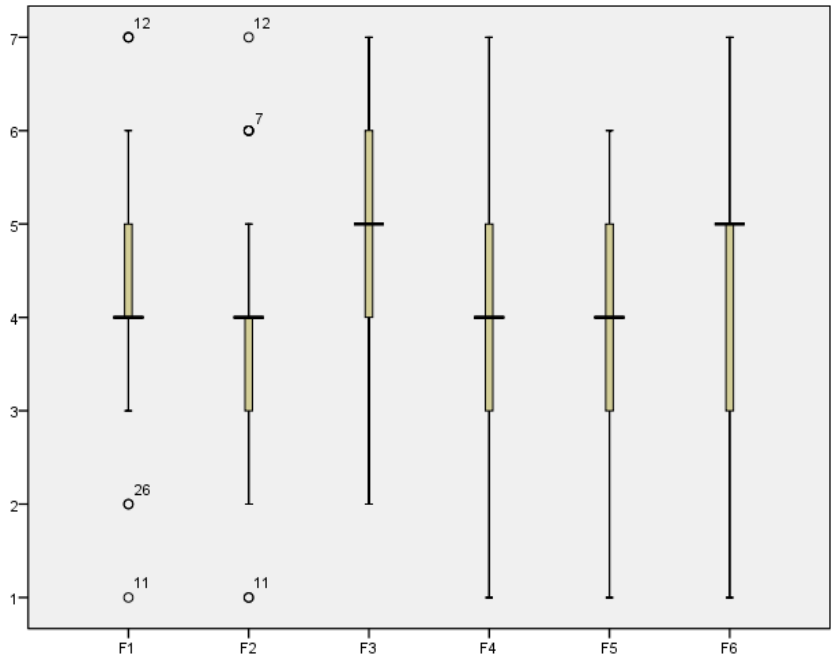

Figure 3(f): Boxplot for Economic Growth indicators

5.4 Descriptive Statistics and Normality Checking

This section presents the summary statistics of the data from the indicators of each of the constructs. Descriptive statistics consist of the number of data, the minimum values, the maximum value, the means, and the standard deviations of the data. The skewness and kurtosis statistics are used to check for the normality of the data. Tables 4(a) – 4(g) illustrate the descriptive statistics result and diagnostics for normality, respectively. To check for the

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normality of the data, any skewness values that lie within the interval [-3,+3] indicate that the data are normally distributed. Similarly, any kurtosis values that fall within the interval [-3,+3] indicate the normality of the data. From Tables 4(a)-4(f), it can be observed that all the indicators of each of the constructs have the skewness and kurtosis values fall within the interval [-3, +3]. This strongly indicates that all the indicators and subsequently the constructs are normally distributed.

Table 4(a): Descriptive Statistics of the Economic Determinants and Normality Checking

Economic Determinants	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
B1	42	1	7	4.45	1.533	**-.311**	.365	-.087	.717
B2	42	1	7	4.29	1.367	**-.307**	.365	.307	.717
B3	42	1	7	5.26	1.578	**-1.355**	.365	1.814	.717
B4	42	1	7	4.69	1.703	**-.639**	.365	-.142	.717
B5	42	1	7	5.00	1.361	**-.670**	.365	.646	.717
B6	42	1	7	3.55	1.517	**-.139**	.365	-.426	.717
B7	42	2	7	4.52	1.435	**-.076**	.365	-1.023	.717
B8	42	1	7	3.64	1.575	**.589**	.365	-.252	.717
B9	42	2	7	4.26	1.345	**.063**	.365	-.502	.717
B10	42	1	7	3.98	1.490	**-.469**	.365	-.199	.717
B11	42	1	7	4.98	1.675	**-.746**	.365	.062	.717
B12	42	1	7	4.50	1.566	**-.861**	.365	-.020	.717
B13	42	1	7	5.26	1.754	**-.963**	.365	-.113	.717
B14	42	1	7	5.07	1.629	**-.938**	.365	.405	.717
B15	42	1	7	5.10	1.750	**-.783**	.365	-.088	.717
B16	42	1	7	5.74	1.466	**-1.374**	.365	1.593	.717
B17	42	1	7	5.57	1.579	**-1.269**	.365	1.110	.717
B18	42	2	7	5.21	1.353	**-.720**	.365	.068	.717
B19	42	1	7	5.48	1.401	**-1.374**	.365	2.010	.717
B20	42	1	7	5.29	1.384	**-1.065**	.365	1.298	.717
B21	42	1	7	4.64	1.635	**-.864**	.365	.224	.717
B22	42	1	7	5.31	1.490	**-1.075**	.365	1.505	.717

The scales have a maximum score of 5.57 for 'B17: *Transportation costs and availability of good infrastructure may attract foreign direct investment*' for the sample. This gives a strong indication that minimizing transportation costs and providing good infrastructure would be able to attract FDI to Oman.

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Table 4(b): Descriptive Statistics of the Non-Economic Determinants and Normality Checking

Non-Economic Determinants	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
B23	42	1	7	5.69	1.473	-1.691	.365	3.291	.717
B24	42	1	7	4.50	1.274	-.818	.365	1.647	.717
B25	42	1	7	5.62	1.481	-1.806	.365	3.485	.717
B26	42	1	7	5.57	1.610	-1.534	.365	2.107	.717
B27	42	1	7	5.79	1.490	-1.795	.365	3.503	.717
B28	42	1	7	5.55	1.580	-1.415	.365	1.695	.717
B29	42	1	7	5.88	1.418	-1.721	.365	3.204	.717
B30	42	1	7	5.57	1.548	-1.506	.365	2.280	.717
B31	42	1	7	4.86	1.372	-.921	.365	.528	.717
B32	42	1	7	4.36	1.495	-.422	.365	-.537	.717
B33	42	1	7	4.52	1.435	-.803	.365	.786	.717
B34	42	1	7	5.02	1.473	-1.100	.365	1.263	.717
B35	42	1	7	4.14	1.705	-.110	.365	-.753	.717
B36	42	1	7	5.07	1.504	-1.301	.365	.712	.717
B37	42	1	7	5.05	1.652	-.897	.365	.120	.717
B38	42	1	7	4.90	1.394	-.844	.365	.494	.717
B39	42	1	7	4.81	1.518	-.672	.365	.562	.717
B40	42	1	7	4.60	1.345	-.466	.365	.357	.717
B41	42	2	7	5.21	1.260	-.810	.365	.480	.717
B42	42	2	7	4.74	1.398	-.575	.365	-.233	.717
B43	42	1	7	4.86	1.354	-.905	.365	1.649	.717
B44	42	1	7	3.95	1.724	-.133	.365	-.986	.717
B45	42	2	7	5.17	1.324	-.454	.365	.009	.717
B46	42	1	7	4.64	1.495	-.451	.365	-.305	.717

The scales have a maximum score of 5.88 for 'B29: *Ability to innovate new working practices/products enhance the human capital capability* for the sample. This gives clear evidence that creating a culture of innovation in a working environment or in developing products or services would enhance peoples' capability.

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Table 4(c): Descriptive Statistics of the Economic Diversification and Normality Checking

Economic Diversification	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
C1	42	1	7	4.60	1.363	-.362	.365	-.209	.717
C2	42	1	7	5.12	1.517	-1.091	.365	.548	.717
C3	42	1	7	4.67	1.633	-.595	.365	-.128	.717
C4	42	1	6	4.33	1.183	-.788	.365	.336	.717
C5	42	1	7	4.29	1.274	-.496	.365	.097	.717
C6	42	1	7	4.52	1.435	-.440	.365	.280	.717
C7	42	1	7	4.17	1.413	-.255	.365	-.312	.717
C8	42	1	7	5.38	1.413	-.834	.365	.757	.717
C9	42	2	7	4.76	1.543	-.249	.365	-.918	.717
C10	42	3	7	5.21	1.474	-.053	.365	-1.437	.717
C11	42	1	7	5.07	1.332	-1.176	.365	1.765	.717
C12	42	1	7	4.81	1.671	-.572	.365	-.626	.717

The scales have a maximum score of 5.38 for 'C8: *Oman respects for free markets, property rights, and rule of law*' for the sample. This indicates strongly that another important factor that would be able to attract FDI to Oman is by providing a conducive business environment whereby there exists policies for free markets, property rights to business owners, and effective enforcement of rule of law by the government.

Table 4(d): Descriptive Statistics of the Industry Development and Normality Checking

Industry Development	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
					Statistic	Statistic	Std. Error	Statistic	Std. Error
D1	42	1	7	4.36	1.462	-.466	.365	.539	.717
D2	42	1	7	4.64	1.165	-.704	.365	1.790	.717
D3	42	1	7	4.60	1.415	-.366	.365	-.181	.717
D4	42	2	7	4.60	1.270	-.149	.365	-.110	.717
D5	42	1	7	4.57	1.417	-.260	.365	-.062	.717
D6	42	1	7	4.86	1.632	-.679	.365	-.145	.717
D7	42	1	7	5.50	1.486	-1.265	.365	1.419	.717
D8	42	1	7	5.48	1.642	-1.172	.365	1.033	.717
D9	42	2	7	5.45	1.418	-.761	.365	-.399	.717
D10	42	1	7	5.69	1.388	-1.652	.365	3.006	.717

The scales have a maximum score of 5.69 for 'D10: *Shipping and logistics hub as new diversified industry*' for the sample. This presents a good indication for the government to focus on advancing the shipping and logistics industry which will make Oman a new regional hub and another strategic factor for attracting FDI as well as revenue generation for the country.

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Table 4(e): Descriptive Statistics of the *Tanfeedh* Programme and Normality Checking

Tanfeedh Programme	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
					Statistic	Statistic	Std. Error	Statistic	Std. Error
E1	42	1	7	4.60	1.270	-.749	.365	.609	.717
E2	42	2	7	4.86	1.354	-.533	.365	-.398	.717
E3	42	2	7	5.48	1.254	-.995	.365	1.267	.717
E4	42	2	7	5.19	1.234	-.626	.365	-.006	.717
E5	42	1	7	4.93	1.520	-1.010	.365	.722	.717
E6	42	1	7	4.88	1.468	-.901	.365	.803	.717
E7	42	1	7	4.90	1.527	-.997	.365	.640	.717
E8	42	1	7	5.19	1.435	-1.027	.365	.771	.717
E9	42	1	7	4.90	1.635	-1.035	.365	.420	.717
Valid N	42								

The scales have a maximum score of 5.48 for 'E3: *Plenty of strategic and useful information* for the sample. This result should help the management of the *Tanfeedh* to focus and emphasise the acquisition of strategic information regarding the industry's outlook and projects' progress on a timely basis.

Table 4(f): Descriptive Statistics of the Economic Growth and Normality Checking

Economic Growth	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
F1	42	1	7	4.40	1.363	-.124	.365	.034	.717
F2	42	1	7	3.86	1.299	.067	.365	.389	.717
F3	42	2	7	4.79	1.406	-.317	.365	-.669	.717
F4	42	1	7	4.19	1.292	-.373	.365	-.004	.717
F5	42	1	6	4.19	1.401	-.524	.365	-.423	.717
F6	42	1	7	4.38	1.431	-.562	.365	.043	.717

The scales have a maximum score of 4.79 for 'F3: *Improved people's quality of life* for the sample. This gives a strong indication that an important outcome of the economic growth of Oman from economic diversification is for the improvement of Quality of Life (QoL) for the people and citizens of the country.

Table 4(g): The Summary Statistics for the constructs

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	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Economic Determinants	42	1.45	6.23	4.8084	.93911	-1.568	.365	3.727	.717
Non-Economic Determinants	42	1.67	6.67	5.0030	.96765	-1.473	.365	3.365	.717
Economic Diversification	42	1.25	6.50	4.7440	1.03388	-1.163	.365	2.285	.717
Industry Development	42	1.20	6.60	4.9738	1.10830	-1.374	.365	2.370	.717
Tanfeedh Programme	42	2.11	6.56	4.9921	1.12388	-.889	.365	.340	.717
Economic Growth	42	1.33	6.50	4.3016	1.13770	-.518	.365	-.169	.717

From this table, the mean for the variable economic determinants is 4.804, indicating that the majority of the respondent agrees with the statements in economic determinants constructs. The same situation with other variables with a mean of 5.0 (Non–Economic Determinants), Economic Diversification (mean = 4.74), Industry Development (mean = 4.97), *Tanfeedh* programme (mean = 4.99), and Economic Growth (mean = 4.3016).

5.5 Reliability Analysis

The goal of the reliability test is to reduce errors and bias in a study. Saunders and Lewis, (2012) suggest that there are two different methods to measure reliability: a test/re-test, an internal consistency check. This study utilizes an internal consistency check by Cronbach's coefficient (α) alpha (1951). This statistical measure is usually used to measure the internal consistency of the responses to a set of questions to measure a specific concept (Saunders et al. 2012). One way to test the reliability of the measure is to run the Cronbach's alpha (CA) test with upon lower limit is 0.70 (Hair, Ringle, and Sarstedt, 2012). Reliability estimates 0.70 or higher suggests 'good reliability', whereas reliability between 0.60 and 0.70 may be 'acceptable', provided that, the other indicators of a model's construct validity are good. Table 6 summarises the rule of thumb for Cronbach's coefficient (α). The software SPSS 23.0 was used to compute the reliability tests which are presented in Table 4.

Table 5: Results of Reliability Analysis

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Constructs	Measurement Items	Cronbach's Alpha (CA)	No. of Items
Economic Determinants	• *Real Exchange Rate* (B1-B5) • *Inflation* (B6-B10) • *Net Flow of Foreign Direct Investment* (FDI) (B11-B17) • *Trade and Investment Per Share of GDP* (B18-B22)	.921	22
Non-Economic Determinants	• *Human Capital* (B23-B29) • *Quality of Institution* (B30-B35) • *Infrastructure* (B36-B41) • *Remoteness* (B42-B46)	.942	24
Economic Diversification	• *Stable macroeconomic situation* (C1) • *High security in business climate* (C2) • *Predictable investment climate* (C3) • *Significant Contribution to GDP* (C4) • *Significant Contribution to Export* (C5) • *Significant Contribution to employment* (C6) • *Dependence on exports* (C7) • *Respect for free markets, property rights, and rule of law* (C8) • *Business friendly environment* (C9) • *Easy access to global markets* (C10) • *Intellectual property (IP) rights enforcement* (C11) • *Emphasis being put on public-private partnerships* (C12)	.914	12
Industry Development	• *Conducive industrial policy* (D1) • *Imports of modern technology and machinery* (D2) • *Promotion of high technology and R&D* (D3) • *Joint ventures between local and foreign firms* (D4) • *New protective tariff measures for local firms* (D5) • *Establishment of Free Trade Economic Zone* (D6) • *Cultural tourism as new diversified industry* (D7) • *Fisheries as new diversified industry* (D8) • *Mineral resources as new income generation* (D9) • *Shipping and logistics hub as new diversified industry* (D10)	.925	10
Tanfeedh Programme	• *Effective industry-government coordination* (E1) • *Clear Direction* (E2) • *Plenty of strategic and useful information* (E3) • *Outlined responsibilities and timelines of projects* (E4) • *Regular monitoring of projects' progress* (E5) • *Data Analytics oriented for industry outlook and current situation* (E6) • *Use of empirical evidence on industry's analysis for supply-demand encounter* (E7) • *Trade and industry's analysis is used to identify the implementation priorities* (E8) • *Emphasis on private sector investment* (E9)	.926	9
Economic Growth	• *Increase in the Gross Domestic Product* (GDP) (F1) • *Increase in new employment opportunities* (F2) • *Improved people's quality of life* (F3) • *Improved Environmental quality* (F4) • *Positive performance of diversified industries (non-oil)* (F5) • *Rising revenue from non-oil industries* (F6)	.912	6

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The results in Table 5 shows that the constructs have adequate reliability. The average value of alpha for scale is 0.923, which is considered a substantially high value. This indicates a very good internal consistency of the items on the scale. The scales have scores ranging from 0.912 for the Economic Growth to 0.942 for the Economic Growth for the sample. Based on all the necessary preliminary analysis for this pilot study, such as normality checking and reliability analysis using Cronbach alpha it is confirmed that the questionnaire is reliable and can be further used for inferential analysis to test the research hypothesis.

6. Discussion and Conclusion

The future success of economic diversification and sustainable economic growth of Oman relies on the country's commitment to building strategic economic sectors that do not rely too much on oil and gas. The establishment of the *Tanfeedh* programme is timely for it helps to spur the economic growth of the country. The preliminary analysis from the pilot study indicates that the enablers of economic diversification together with the *Tanfeedh* Programmes and Industry development in niche areas such as tourism and modern technology are the right strategic factors that need serious attention from the Sultanate of Oman. On the quality of the pilot data, the descriptive analysis indicates that the pilot data collected for analysis are acceptable. This is confirmed by the diagnostic checking where the normality assumption on the data is met, and only a handful of extreme outliers are detected. The suggestion for dealing with extreme outliers is to exclude such outliers in subsequent analysis. This is to ensure the results of the analysis will not be distorted by the bad data points. Further analysis of the internal consistencies of the proposed research model shows that the requirements for this aspect are adequately met. A more comprehensive picture from the study will be clearer when data collection with a larger sample size is conducted. This will happen in the next phase of the study which will strengthen the current findings and give more insightful facts about the feasibility of the research model proposed in this study.

References

Agosin, M. R. (2007). Export Diversification and Growth in Emerging Markets, *Serie Documentors de Trabajo* 233, Universidad de Chile.

Al-Marhubi, F. (2000). Export diversification and growth: an empirical investigation, *Applied Economics Letters*, *7*, 559-62.

Al-Mubeen, D.A, Kumar, D.R. & Nazneen, M. (2017). Economic diversification in Sultanate of Oman amidst Oil crises, IOSR *Journal of Business and Management*, 9-12.

Al Wahaibi, M. (2016). Mina Sultan Qaboos Waterfront Development: Gateway to Modernity.

Belwal. R. and Belwal. S. (2010). Economic growth and tourism in the post oil Omani economy: Astrategic analysis. *Journal of Tourism Challenges and Trends*, *3* (1), 165-187.

Cooper, D.R. & Schindler, P.S. (2014). *Business Research Methods*, *12th* edition. McGraw-Hill/Irwin.

Feenstra, R.C. and Kee, H.L. (2004). Export variety and country productivity, National Bureau for Economic Research, NBER Working Paper 10830.

Hair, J. F., Ringle, C. M., and Sarstedt, M. (2012). Partial Least Squares: The Better Approach to Structural Equation Modelling? *Long Range Planning*, *45* (5-6), 312-319.

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(ISSN 2716-5876)

Kasem, A., & Alawin, M. (2019). Exploring the impact of renewable energy on climate change in the GCC countries. *International Journal of Energy Economics and Policy*, *9* (6), 124-130.

Lederman, D., and Maloney, W.F. (2007). *Trade Structure and Growth*, Palo Alto: Stanford University Press.

Love, J., (1986). Commodity concentration and export earnings instability: a shift from cross-section to time series analysis, *Journal of Development Economics*, *24* (2), 239-248.

McGill, R., Tukey, J. W., & Larsen, W. A. (1978). Variations of box plots. *The American Statistician*, *32* (1), 12-16.

Mohseni-Cheraghlou, A. (2020). Linking the past to the future: Economic diversification and tourism in Oman, *Middle East Institute*, https://www.mei.edu/publications/linking-past-future-economic-diversification-and-tourism-oman.

Saunders, M. N., & Lewis, P. (2012). *Doing research in business & management: An essential guide to planning your project*. Pearson.

Tanfeedh Handbook (2017). *The National Program for Enhancing Economic Diversification* (*Tanfeedh*), http://www.tanfeedh.gov.om/.

Tasie, O. G. (2009). Globalization and economic diversification in the Sultanate of Brunei. *African Journal of Business Management*, *3* (10), 511-520.

Times of Oman (2020). Price of Oman Oil drops, https://timesofoman.com/, July 31, 2020.

Tukey, J.W. (1977). *Exploratory data analysis*. Addison-Wesely.

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