



## THE IMPACT OF FUEL PRICE ON SMES IN OMAN

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### AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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### ABSTRACT

Fuel is one of the commercial commodities in Oman as it is the main country income and affect both the macro and micro economy of a country. The decrease in fuel prices in Oman resulted in the increases in charges imposed by the government in various services. Small and medium-sized enterprises (SMEs) are essential for creation and generation of new employment opportunities. Higher priority has been given on government project as they are more secured and various companies handling government project are receiving delayed payments. This has increased the challenges facing the SMEs in Oman and the research has aimed to examine these factors to identify the impact on the performance of the small and medium scale organizations.

**Keywords:** Fuel price ; SMEs; employment opportunities; Oman market.

### 1. INTRODUCTION

Small scale and medium scale organization contribute to the 90% corporate sector in Oman and has a reasonable contribution to the GDP of Oman [1]. However, this contribution is quite less when compared to SMEs in developed countries such as in United States [2]. SMEs are essential for the development of the economy as it facilitates in creating employment opportunities, increase in wealth and competition of the country. It also enables new entrepreneurs to shape their ideas into realities. Small and medium scale organizations have been facing various challenges but the falling oil prices have been one of the major concerns for the firms such as operation cost [3]. In the year of 2015, the oil prices decreased significantly where the GCC countries were impacted by the sharp fall in the oil prices [4]. The boom in US shale oil production, Libya's increased in

production and the increase in production of OPEC raised the global output of oil significantly. The GCC countries were heavily affected by the fall in the oil prices where countries like Oman were forced to remove subsidy from oil which resulted in the change in the small and medium scale enterprises which reflects negatively in Oman market [5].

#### 1.1 Research Problem

The decrease in fuel prices in Oman resulted in the increases in charges imposed by the government in various services. The companies have to renew their commercial register which is one type of a company register every 5 years and increased the charges on inclusion of new activities in the commercial register [1]. The financial associations and banks increased the interest rates on services such as funds provided to the small scale organizations and there has been reduction

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in the financial facility. SMEs are affected as financial institutions are important fund sources to companies [2]. Moreover, higher priority has been given on government project as they are more secured and various companies handling government project are receiving delayed payments. This has increased the challenges facing the SME's in Oman and the research has aimed to examine these factors to identify the impact on the performance of the small and medium scale organizations.

### 1.3 Research Objectives

Objectives should be followed:

- To measure the impact of fall in oil prices on the performance of SME in Oman
- To identify the sectors that are highly impacted due to fluctuation and decrease in oil prices
- To recommend preventive measures for managing the sustainability of small and medium scale organizations.

## 2. LITERATURE REVIEW

### 2.1 Introduction

This chapter evaluates past literature on instability in fuel prices to understand its impact on oil prices in Oman. Fuel is one of the commercial commodities in Oman as it is the main country income and affect both the macro and micro economy of a country. Fuel price change refers in Oman to the consistent change in fuel prices in global market which results decrease or increase in global oil price fluctuations. The change in fuel prices affects the global market in whole but its impacts on the other business within the national limit also very noticeable [4]. Various businesses in Oman (Omani entrepreneurs or out board investors) suffer from the frequent changes in fuel prices where the SMEs are highly affected by this fluctuation which affects their productivity, turnover and profitability, which reflects the employments and individual's income as well.

### 2.2 Fuel Prices Volatility

According to Serletis and Xu [6], small and medium scale businesses are defined as the organizations that independently operated, owned (non-government) and are not determinate in the process field. As stated by Asane-Otoo and Schneider [7], the small and medium scale organizations can be measured quantitatively by the sectional differences and employee numbers. On the contrary, Apergis and Vouzavalis [8] stated that

SME can also be measured qualitatively by indicating the group operating locally or the independent managers. Dikova *et al.* [9] states that small organizations play a significant role as a safety in net in improving poverty. Asane-Otoo and Schneider [7], stated that policies are aimed to arouse efficiency in allocation of resources but the major consequences results in effect which is unequal distributive. The major impact of the fuel price fluctuation is that the consumers and the business entities have to take up some of its costs. Serletis and Xu [6], states that even though the large organizations are able to weather the impact of fuel price adjustments, the small scale organizations face challenges while dealing these fluctuations. Small and medium scale organizations have faced immense difficulties in dealing with these challenges and have struggled to maintain their sustainability [10]. SME's are essential for creation and generation of new employment opportunities. However, literature on the contribution of small scale organizations to the economy is blurred. There have been few firms that have been able to cater to niche markets and gain profitability but the majority of the business entities face challenges due to the increase in the cost of raw materials and equipment resulting due to the higher fuel prices [11].

The fluctuation in oil prices is normal and keeps happening all the time due to political issues and the activities of the small scale organizations are always being affected which affects their growth. Krane and Hung [12] studied the different factors that have limited the growth of small scale organization at the global level and the results showed a considerable amount of limiting factors for the organizations. The results have been categorized into external and internal factors where the internal factors consisted of the inability of the entrepreneurs to understand the business principle dynamics [8]. The external factors are driven by policies and these factors are definitely acting as limitation of the growth of the small scale organizations. Crude oil can be considered as the single most driving factor for the global economy and changes in the oil prices have significant impact on the economic growth and welfare of a nation [12]. There are various channels through which oil prices shocks are transmitted into the economy which results in increase in production costs due to a positive oil price shock which limits the output. This involves that the small scale organizations from different areas of their operation which makes it difficult for them to cope up with the market dynamics. Moreover, as the fall of fuel prices directly impacts the economy and income of the government, it changes the spending pattern of the government and development of new policies that affect the changes [7].

The sharp drop in the oil prices in the previous years have experienced a significant change in the organizational policies in Oman. Oman, being the country having one of the least oil and gas reserves among the GCC countries have turned to other sectors for the growth of the economy [4]. The turned to the debt market and have taken bold steps such as subsidy cuts, increase in fees and reduction of benefits for the workers in the public sector. The subsidy cuts amounted to more than 50% of the original subsidy which means that the small and medium scale organization will not receive similar amount of financial support and there will increase in cost of other commodities in the market [12]. This has resulted in an increase in the inflation rate and the small and medium scale organizations are not in positions to negotiate the prices concessions. Moreover, they cannot pass on inflationary to the consumers as fall in oil prices and reduction in income of the population affects their consumer spending.

### 2.3 Organizational Performance

Fuel price reduction or fall not only affects the oil and gas companies but also other commodities in the market. Boughanmi and Khan [4] stated highlights that small scale organization are faced with challenges in obtaining credit loans for normal business operations and project expansion. This effects the performance of companies due to the increase in interest rates. The increase in tax rates and lack of financial assistance results in managing productivity of small scale organizations. Aryee et al. [13] states that organizational performance is the central area focusing on management of private and public organizations. The majority of the empirical studies on organizational performance has been defined differently due to the diverse perspective of authors in different studies. Kucukaltan, Irani and Aktas [14] conducted an in depth analysis of organizational performance to identify five integrative models classified as per the level of complexity, performance measurement matrix, performance pyramid, stakeholder approach, balance scorecard and organizational effectiveness model.

These models take performance indicators into account to measure the performance of organizations of various types. The Fitzgerald model considers six performance indicators, out of which four are factors leads to effective results [15]. Flexibility, quality of service, economy of resources and innovation are four factors that leads to results such as financial and competitive performance. The Fitzgerald model is a conceptual model but it has not been tested empirically. Similarly, another model proposed by

Cross and Lynch, (1989) includes factors and results; the performance pyramid model consists of strategic indicators at the top and the operational indicators at the bottom factors [16]. The strategic indicators consist of financial and market indicators. The operational indicators consist of factors such as service / product quality, transformation delay, cost and delivery delay. The mid-level indicators consist of factors such as flexibility, productivity and customer satisfaction. The models used in examining the organizational performance consists of financial and non-financial indicators along with factors that shows the results.

### 2.4 Literature Gap

The majority of the literature has failed to conduct a quantitative analysis to establish the relationship among fuel price fluctuation and organizational performance. There is lack of empirical analysis and in depth data. Moreover, very few of the literature have assessed the issues in GCC countries so the research would provide better results which could be used in future research.

## 3. RESEARCH METHODOLOGY

### 3.1 Introduction

Research methodology consists of assumptions, concepts and frameworks that assists in knowledge development. In this research, Saunders study onion has been used to define the various research methods, instruments and assumptions. This research has used a mono method research design which is based on quantitative data collection and analysis (Mackey and Gass 2015). The main purpose of the current research is establishing the relationship between fall in fuel prices and performance of the small and medium scale organizations. It implies that explanation and measuring the causal link between the variables is the purpose which means that the research will use an experimental research design.

### 3.2 Research Philosophy

As stated by Saunders et al. [17], research philosophy is the system of hypothesis and beliefs essential for knowledge development. Research consists of assumptions at every stage even if the researcher is not aware of it. These consists of assumptions that are influenced by values (axiological assumptions), about the come across realities (ontological assumptions) and assumptions on human knowledge (epistemological assumptions) [17]. There are mainly four types of study viewpoints, positivism,

interpretation, realism and pragmatism. Pragmatism focuses on using different methods to address a research question. It is used for conducting a mixed method analysis. This method uses both positivist and interpretation views to address a research question. Used for interpretation to integrate human interest into the research and it facilitates in leading qualitative analysis of data. On the contrary, realism focuses on the idea that reality is independent of the human mind. In this research, positivism has been chosen as the research philosophy as it has facilitated in conducting quantitative analysis. Positivism relates to natural scientific philosophical stance which aims to work with social reality that are observable to develop generalisations [18]. Positivism strictly focuses on the scientific empiricist methods which aims to yield pure data which is unaffected by the human interpretation. This would facilitate in discovering facts and realities that are observable and measurable which can predict events and behaviours. The research questions aim to measure the relationship between decrease in fuel prices and organizational performance is SMEs. Moreover, it also measures the sectors affected mostly due to the decrease in fuel prices. Therefore, the research aims to gather results that are observable and measurable necessary for predicting future behaviours and events so positivism is the most suitable philosophy.

### 3.3 Research Approach

There are mainly two types of approaches in research, inductive and deductive approach. Research approach comprises of two aspects collecting data and reasoning. The difference between the inductive and deductive approach can be understood by the meaning of the hypothesis in the given research [19]. Deductive approach is used to test existing theories discussed in the literature review section by using quantitative methods. On the contrary, inductive approach is used for developing new theories and models from subjective studies to provide meaning. In this research, deductive approach has been used as every stage of the research onion is linked with each other and positivism facilitates deductive approach for conducting quantitative analysis of data.

### 3.4 Research Design

Research design has been defined differently by different authors where it has been considered as the method of choosing between qualitative and quantitative data. On the other hand, it has also been described as the method of collecting data and analysing it effectively. There are generally three styles of investigation designs, exploratory, explanatory and descriptive research design [20]. In this research, explanatory research design will be used

to analyse the cause and effect relationship between the two variables. On the other, it would facilitate in performing descriptive study as well. The mono method design will focus on collecting quantitative data and analyse it using statistical techniques.

### 3.5 Data Collection and Analysis

There are two types of data collection method, primary and secondary. This research has secondary data collection method to gain data on past literature in similar topics by evaluating the peer review journals and articles. Primary data has been collected for testing the hypothesis developed in the first chapter [21]. The primary data has been collected using a survey questionnaire which includes close ended questions developed on 5 point Likert scale and other demographic questions on multiple choice options so that quantitative data can be collected and analysed to depict behaviour and phenomenon.

The collected data has been analysed using SPSS (statistical tool for social sciences). The research has used inferential statistics to examine the impact of fall in fuel prices on the performances of the small scale organizations. The responses collected has been represented into frequency tables and charts. These response frequencies have been analysed to understand the opinion of the participants on various questions. Pearson's correlation has been utilized to establish the direction and nature of relationship among the variables [22]. Regression analysis has been used to develop a predictive model that explains the relationship between the variables.

### 3.6 Sampling Method

Sampling is the method of selecting elements from the total population [23]. In this research, the population of the Oman are the target population and management employees working in the SMEs is the sampling frame. The research has used a stratified sampling to randomly select respondents so that each element in the population has the equal opportunity of being chosen in the research. In this research, stratified sampling has been used to select sample elements from each sector so that all sectors have representation without any bias. This means that different sectors are the strata and elements from each strata has been chosen. The sample size of the research is 100 management employees working in small and medium scale organizations in Oman.

### 3.7 Reliability and Validity

Reliability is the capability of the research to replicate the results using different data set. However, as this

study is a cross section research, data has been collected at once to reduce the time of the research. Cronbach’s alpha has been used to measure the reliability of the collected data which measures the internal consistency and scale reliability [24]. The validity of the data has been measured by conducting a pilot study where the questionnaire has been sent to 10 respondents to evaluate the appropriateness of the research instruments.

**3.8 Ethical Consideration**

This research has followed to all the ethical aspects by developing an informed consent to provide adequate knowledge to the respondents regarding the purpose of conducting the research. The research has maintained the privacy of the respondents by keeping their secrecy. The data collected has not been used for any other purposes in the research. This research has ensured that plagiarism, falsification and fabrication has been avoided [25]. The questionnaire has not used any abusive or discriminatory languages that may hurt the sentiments of the participants. The participants have made voluntary participation in the research and they had the option of leaving at any point. None of the respondents have been harmed while conducting the survey.

**4. FINDINGS AND ANALYSIS**

**4.1 Introduction**

This chapter has performed the data analysis based on the data collected by using statistical tools and techniques. The results have been developed by taking into account the objective of the research. This chapter has performed reliability analysis to measure the scale reliability of the collected data. Pearson’s correlation and linear regression has been used to evaluate the relationship between the variables and

develop an analytical model.

**4.2 Reliability Analysis**

Reliability analysis has been used to measure the scale reliability and internal consistency of the collected items within the research. Cronbach’s Alpha has been performed to check the internal consistency and the value greater than 0.6 is acceptable. The reliability statistics shows that the value of alpha is .933 which implies that the internal reliability among the items is high. The evaluation of the item total figures highlights the value of alpha when one of the items are deleted. The value of alpha decreases in majority of the cases but in case of two items the value of alpha as those variables are nominal variables and are not scale variables. These two variables are factors affecting the performance of SMEs and most affected sector due to the fall in fuel prices.

**Table 1. Reliability statistics**

Reliability statistics	
Cronbach's Alpha	N of Items
.933	12

**4.3 Quantitative Analysis**

The purpose of the question is to highlight the age of the participants in the research. The results show that 30% of the respondents are below the age of 24, 20% respondent are between the age group of 25-34, 18% respondents are between the age group of 35-44, 17% respondents are between the age group of 45-54 and remaining participants above the age of 55. This shows that there is diversity in the age group of the respondents which means that variety of perspective is expected from both new and experienced employees.

**Table 2. Item statistics**

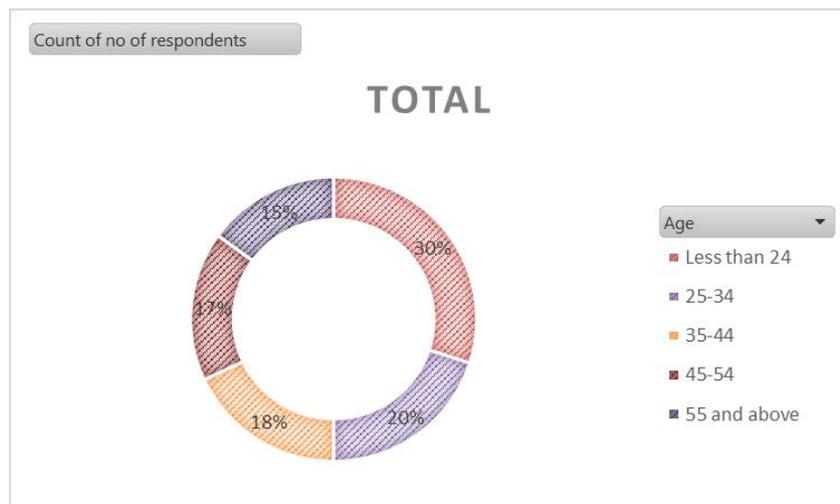
Item statistics			
	Mean	Std. deviation	N
High interest rate	1.93	1.075	100
government service charges	1.93	1.130	100
Flexibility in providing loans	1.94	1.099	100
Government is supporting SMEs	1.93	1.103	100
Timely payments	1.94	1.043	100
Removing subsidy	1.91	1.138	100
Increase in visa fees	1.92	1.079	100
Factors affecting SMEs performances	2.55	1.104	100
Service quality	1.98	1.110	100
Flexibility of operations	1.93	1.130	100
Cost of operations	1.87	1.070	100
Most affected sector	2.87	1.353	100

**Table 3. Item total statistics**

Item-total statistics				
	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's alpha if item deleted
High interest rate	22.77	85.916	.861	.921
government service charges	22.77	84.947	.864	.921
Flexibility in providing loans	22.76	85.558	.859	.921
Government is supporting SMEs	22.77	85.229	.873	.921
Timely payments	22.76	86.467	.860	.922
Removing subsidy	22.79	84.612	.875	.920
Increase in visa fees	22.78	85.850	.861	.921
Factors affecting SMEs performances	22.15	98.371	.212	.945
Service quality	22.72	85.194	.869	.921
Flexibility of operations	22.77	84.442	.891	.920
Cost of operations	22.83	86.345	.842	.922
Most affected sector	21.83	104.506	-.076	.960

**Table 4. Age**

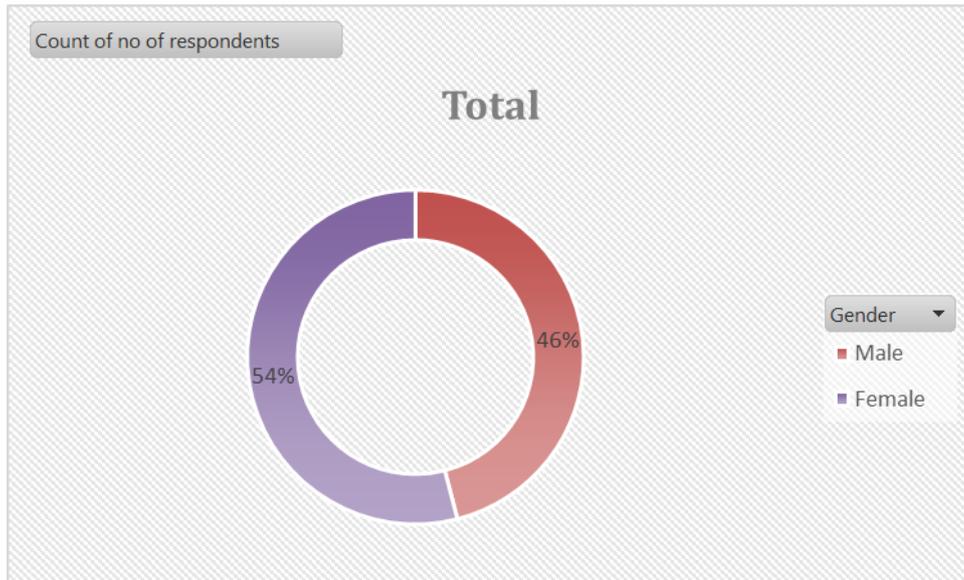
Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 24	30	30.0	30.0	30.0
	25-34	20	20.0	20.0	50.0
	35-44	18	18.0	18.0	68.0
	45-54	17	17.0	17.0	85.0
	55 and above	15	15.0	15.0	100.0
Total		100	100.0	100.0	



**Graph 1. Age**

**Table 5. Gender**

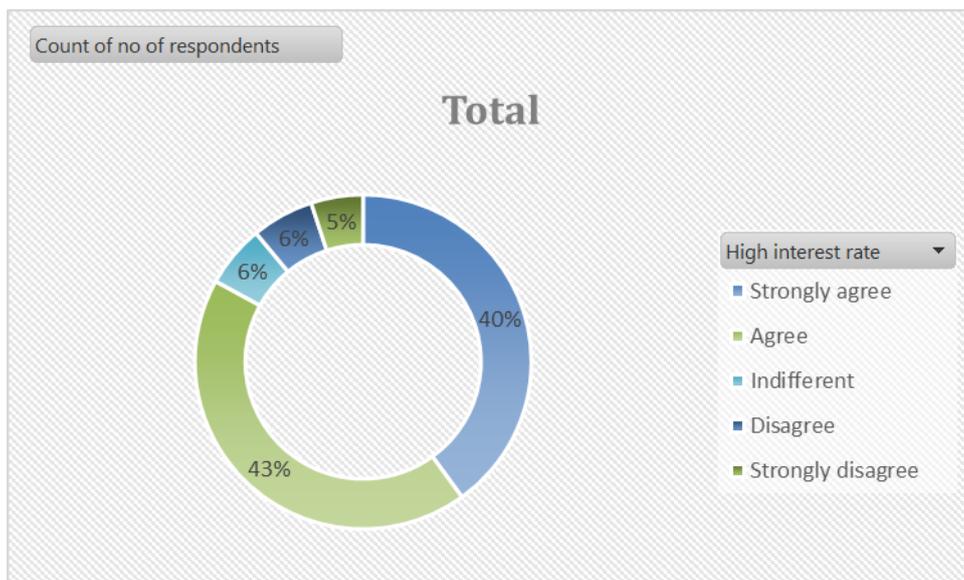
Gender					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Male	46	46.0	46.0	46.0
	Female	54	54.0	54.0	100.0
Total		100	100.0	100.0	



Graph 2. Gender

Table 6. High interest rate

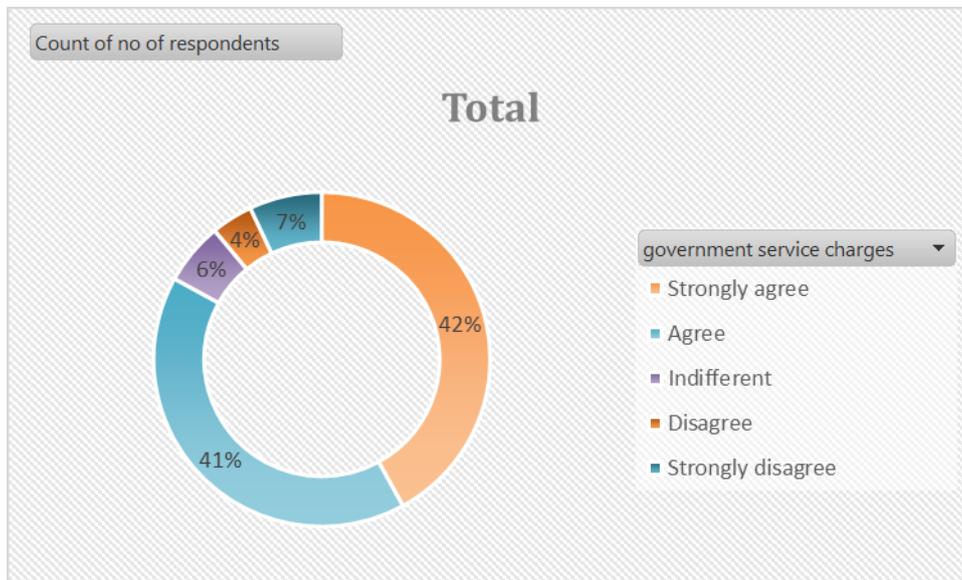
High interest rate					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	40	40.0	40.0	40.0
	Agree	43	43.0	43.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	6	6.0	6.0	95.0
	Strongly disagree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	



Graph 3. High interest rate

**Table 7. Government service charges**

		Government service charges			
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Strongly agree	42	42.0	42.0	42.0
	Agree	41	41.0	41.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	4	4.0	4.0	93.0
	Strongly disagree	7	7.0	7.0	100.0
Total		100	100.0	100.0	



**Graph 4. Government service charges**

The purpose of the given question is to identify the gender of the participants in the research. This result shows that 54% respondents are female and remaining are male. This shows that there is equal contribution from both the genders.

The purpose of the question was to evaluate whether the financial companies are charging high interest rate after the fall in fuel prices in Oman. The results have shown that 43% have agreed and 40% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 6% have disagreed to the research question and 5% have strongly disagreed to the research question. This shows that majority of the small and medium scale businesses have to face high interest rates from the financial institutions as they require funding while operating in the market.

The objective of the question was to evaluate whether there has been increases government service charges after the fall in fuel prices in Oman. The results have shown that 41% have agreed and 42% have strongly agreed to the question. On the other hand, 6%

respondents are indifferent to the research question, 4% have disagreed to the research question and 7% have strongly disagreed to the research question. This indicate that SMEs were forced to pay high services charges to the government which has resulted in sustainability challenges for the business entities.

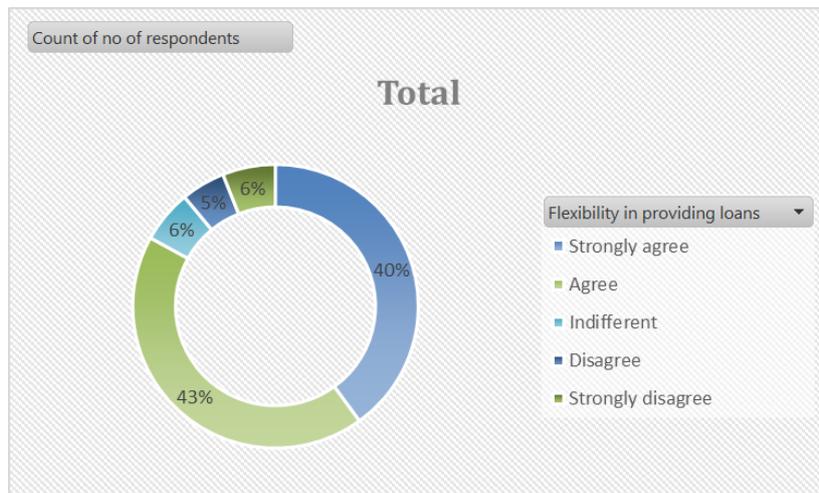
The purpose of the question was to evaluate whether the financial companies have not been flexible in providing loans after the fall in fuel prices in Oman. The results have shown that 43% have agreed and 40% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 5% have disagreed to the research question and 6% have strongly disagreed to the research question. This shows that the companies in the financial sector have been cautious about providing loans to the small scale organizations due to the current market conditions and increase in inflation rate. There has been decreasing in consumption rate of the population so the financial companies are reluctant in taking risks and are aiming to hedge their funds.

The purpose of the question was to evaluate whether the government is supporting the small and medium scale organizations by providing training and development programs after the fall in fuel prices in Oman. The results have shown that 42% have agreed and 41% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the

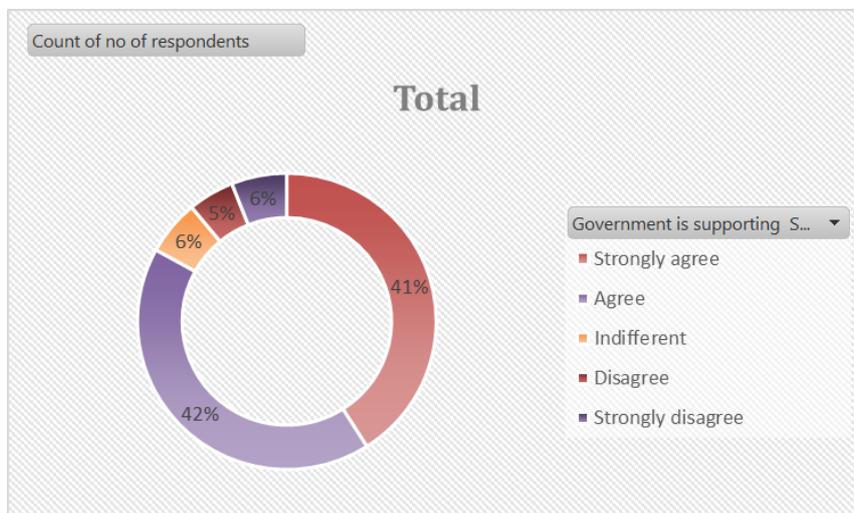
research question, 5% have disagreed to the research question and 6% have strongly disagreed to the research question. This indicate that government have been trying to improve the sustainability conditions for the small-scale organizations by reducing the dependency of the economy of Oman on oil and gas sector.

**Table 8. Flexibility in providing loans**

		Flexibility in providing loans			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	40	40.0	40.0	40.0
	Agree	43	43.0	43.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	5	5.0	5.0	94.0
	Strongly disagree	6	6.0	6.0	100.0
Total		100	100.0	100.0	



**Graph 5. Flexibility in providing loans**



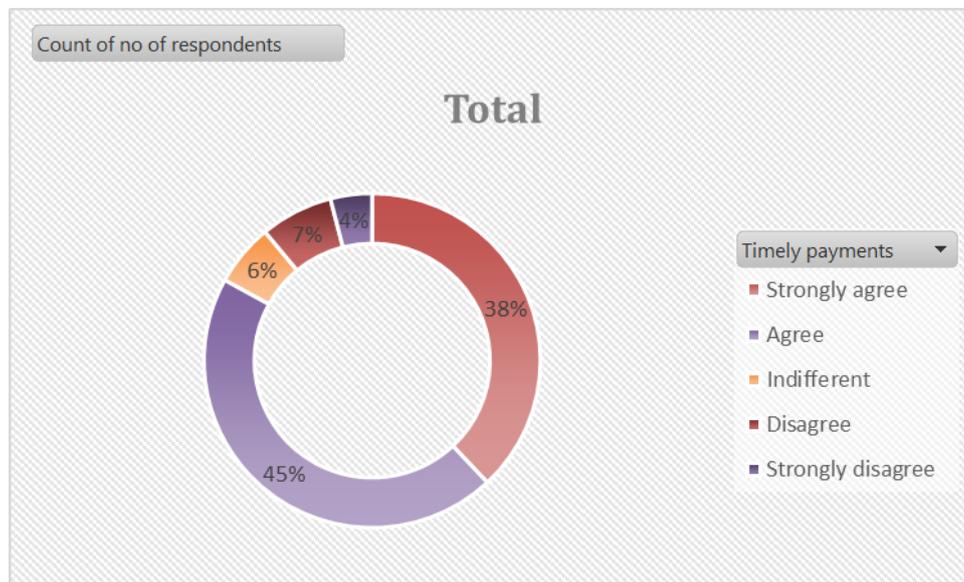
**Graph 6. Government is supporting SMEs**

**Table 9. Government is supporting SMEs**

Government is supporting SMEs					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Strongly agree	41	41.0	41.0	41.0
	Agree	42	42.0	42.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	5	5.0	5.0	94.0
	Strongly disagree	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

**Table 10. Timely payments**

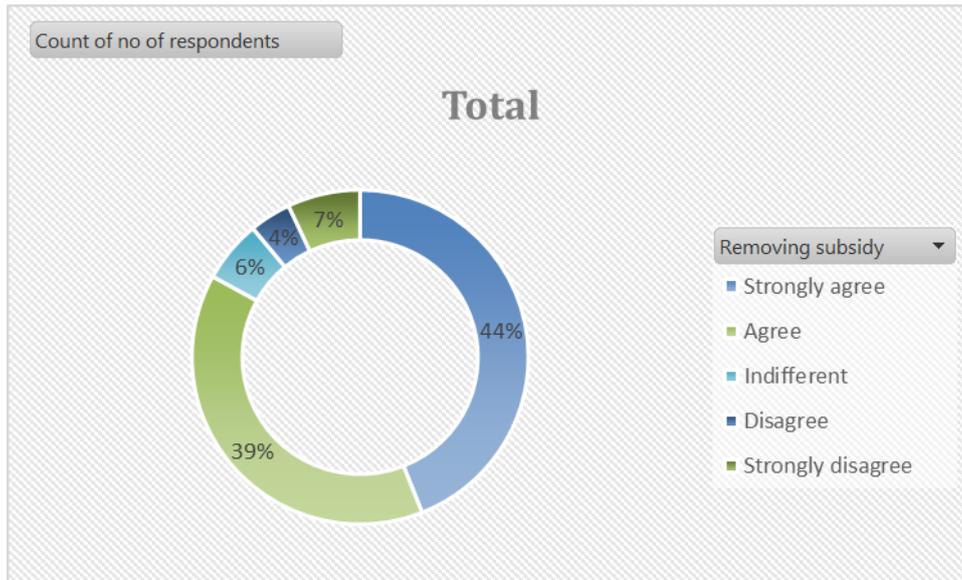
Timely payments					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	38	38.0	38.0	38.0
	Agree	45	45.0	45.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	7	7.0	7.0	96.0
	Strongly disagree	4	4.0	4.0	100.0
	Total	100	100.0	100.0	



**Graph 7. Timely payments**

**Table 11. Removing subsidy**

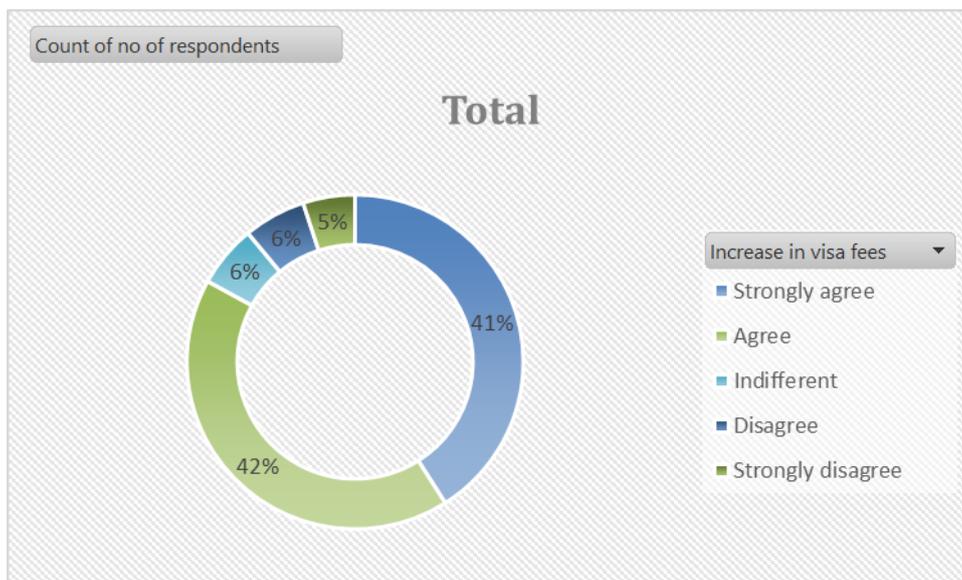
Removing subsidy					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	44	44.0	44.0	44.0
	Agree	39	39.0	39.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	4	4.0	4.0	93.0
	Strongly disagree	7	7.0	7.0	100.0
	Total	100	100.0	100.0	



Graph 8. Removing subsidy

Table 12. Increase in visa fees

Increase in visa fees					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Strongly agree	41	41.0	41.0	41.0
	Agree	42	42.0	42.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	6	6.0	6.0	95.0
	Strongly disagree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	



Graph 9. Increase in visa fees

The question aims to evaluate whether the debtors are making timely payments after the fall in fuel prices in Oman. The results have shown that 45% have agreed and 38% have strongly agreed to the question. On the

other hand, 6% respondents are indifferent to the research question, 7% have disagreed to the research question and 4% have strongly disagreed to the research question. This shows that majority of the small scale organizations are not receiving their payments on time due to the fall in the market conditions and slow progress in the trade conditions.

The purpose of the question is to examine whether the removal off subsidy by the government has increased the pressure on the SMEs after the fall in fuel prices in Oman. The results have shown that 39% have agreed and 44% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 4% have disagreed to the research question and 7% have strongly disagreed to the research question. This clearly indicate that the small-scale companies have been struggling after the government has stopped aiding the SMEs.

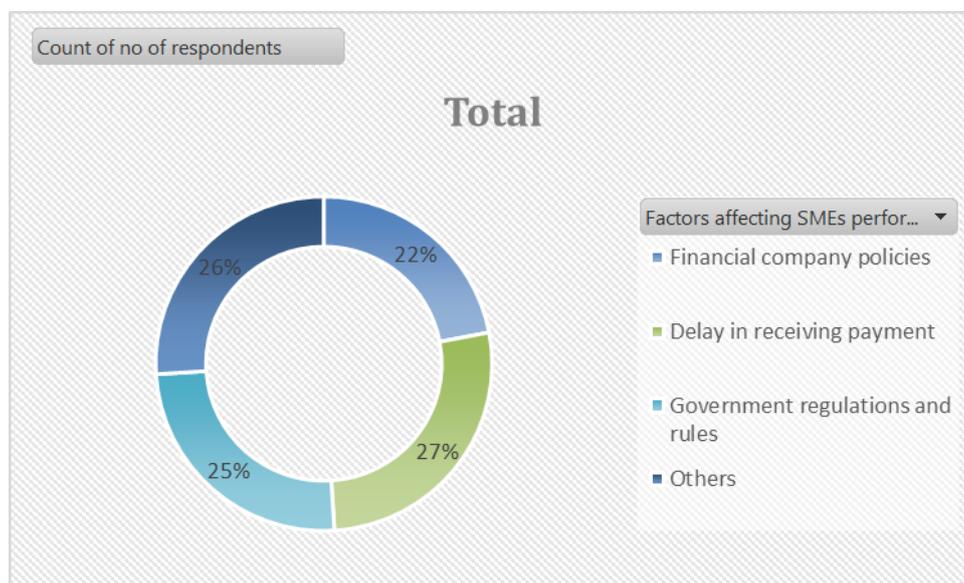
The purpose of the question is to examine whether the increase in visa fees for the non-Omani workers have affected the SMEs after the fall in fuel prices in Oman. The results have shown that 42% have agreed

and 41% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the study question, 6% have disagreed to the study question and 5% have strongly disagreed to the research question. The respondents have been facing issues as it has been difficult to manage their workforce and reduce the overall cost of operations.

The purpose of the question is to analyse the factors affecting the performances of the SMEs after the fall in fuel prices in Oman. The results have shown that 22% have considered financial policies of companies as a significant factor and 27% have considered delay in receiving payments as a significant factor. On the other hand, 25% have considered government rules and regulations as significant factor and remaining have considered other factors to be significant. In this question, it can be seen that there is all round impact of the above mentioned factors on the performances of the SMEs. The companies have been impacted by government policies, delay in debtor payments and financial company’s policies almost equally which have increased the risk within the organization.

**Table 13. Factors affecting SMEs performances**

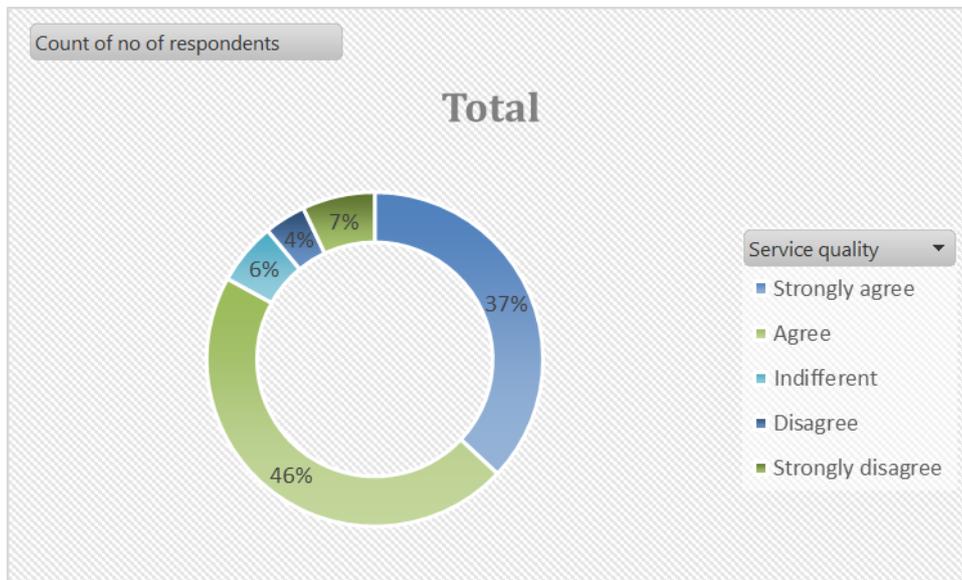
Factors affecting SMEs performances					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	22	22.0	22.0	22.0
	2	27	27.0	27.0	49.0
	3	25	25.0	25.0	74.0
	4	26	26.0	26.0	100.0
	Total	100	100.0	100.0	



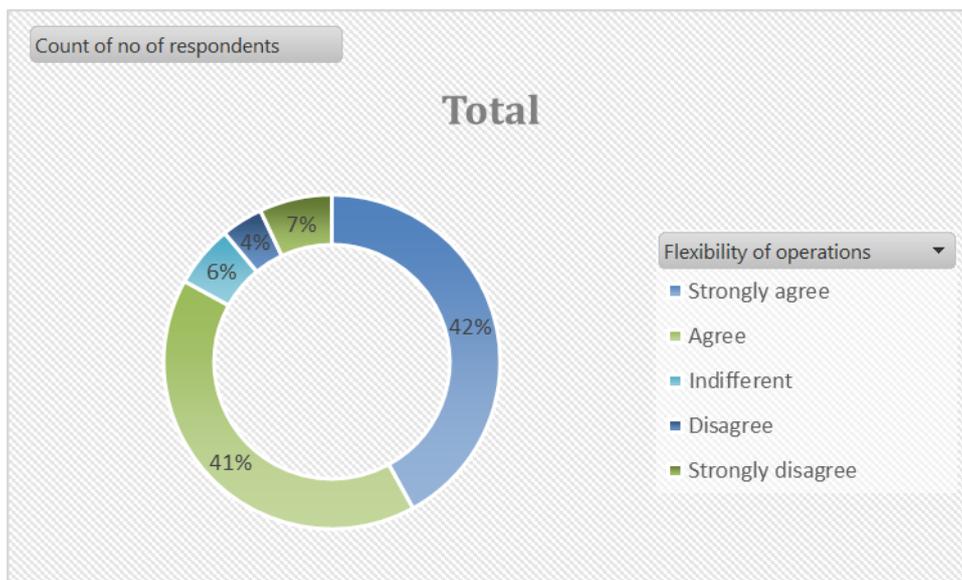
**Graph 10. Factors affecting SMEs performances**

**Table 14. Service quality**

		Service quality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	37	37.0	37.0	37.0
	Agree	46	46.0	46.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	4	4.0	4.0	93.0
	Strongly disagree	7	7.0	7.0	100.0
	Total	100	100.0	100.0	



**Graph 11. Service quality**



**Graph 12. Flexibility of operations**

The purpose of the question is to examine whether the service quality of the SMEs have been affected after the fall in fuel prices in Oman. The results have shown that 46% have agreed and 37% have strongly

agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 4% have disagreed to the research question and 7% have strongly disagreed to the research question. This clearly indicate that the majority of the organization in meeting the quality of service they needed to address.

The purpose of the question is to examine whether the flexibility of the operations have been affected after the fall in fuel prices in Oman. The results have shown that 41% have agreed and 42% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 4% have disagreed to the research question and 7% have strongly disagreed to the research question. This

also shows that the companies are facing issues in managing their operational flexibility.

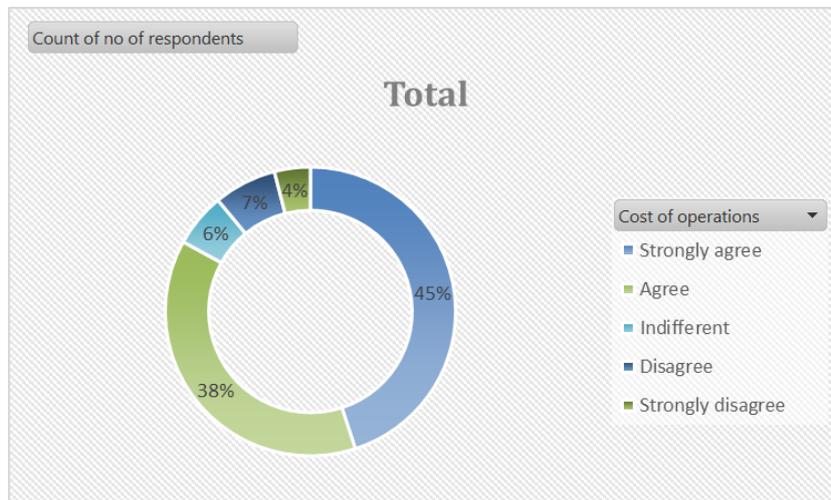
The purpose of the question is to examine whether the cost of operations have affected the fall in fuel prices in Oman. The results have shown that 38% have agreed and 45% have strongly agreed to the question. On the other hand, 6% respondents are indifferent to the research question, 4% have disagreed to the research question and 7% have strongly disagreed to the research question. This indicates that cost of operations have increased significantly due to removal of subsidy, increase in interest rate charged by the financial institutions and other factors.

**Table 15. Flexibility of operations**

		Flexibility of operations			
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Strongly agree	42	42.0	42.0	42.0
	Agree	41	41.0	41.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	4	4.0	4.0	93.0
	Strongly disagree	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

**Table 16. Cost of operations**

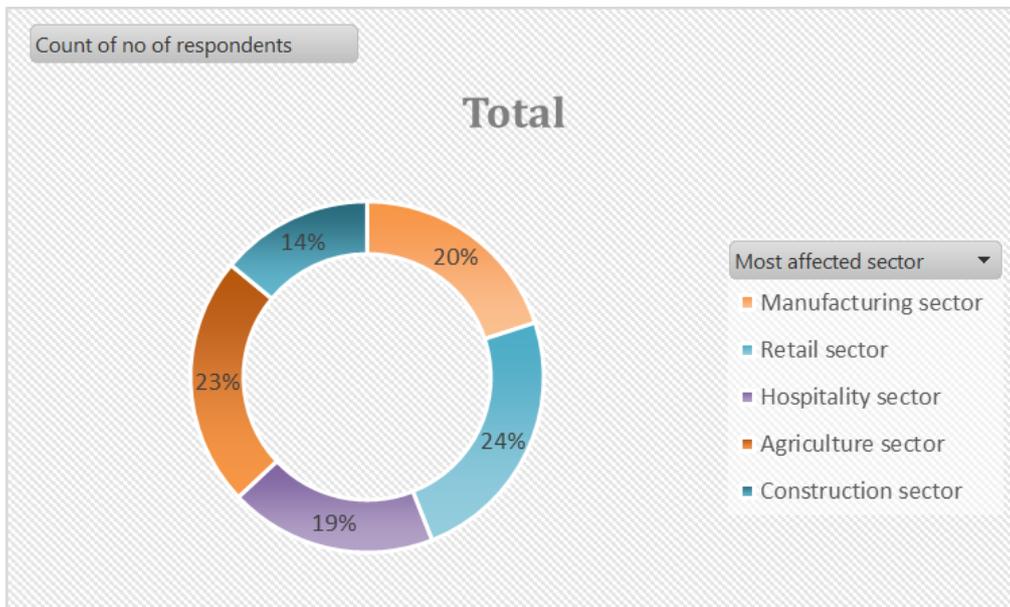
		Cost of operations			
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Strongly agree	45	45.0	45.0	45.0
	Agree	38	38.0	38.0	83.0
	Indifferent	6	6.0	6.0	89.0
	Disagree	7	7.0	7.0	96.0
	Strongly disagree	4	4.0	4.0	100.0
	Total	100	100.0	100.0	



**Graph 13. Cost of operations**

**Table 17. Most affected sector**

		Most affected sector			
		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	20	20.0	20.0	20.0
	2	24	24.0	24.0	44.0
	3	19	19.0	19.0	63.0
	4	23	23.0	23.0	86.0
	5	14	14.0	14.0	100.0
Total		100	100.0	100.0	



**Graph 14. Most affected sector**

The purpose of the question is to evaluate the sector that has been affected the most due to the fall in fuel prices in Oman. The results have shown that 20% have considered manufacturing sector to be the most affected, 24% have considered retail sector as the most affected sector and 19% have considered hospitality sector as the most affected sector. On the other hand, 23% of the employees consider agricultural sector and 14% have considered construction sector as the most affected.

**4.4 Correlation Analysis**

The correlation analysis among all the elements in the research clearly shows that there is significant relationship among the elements. It can be seen that there is strong correlation among the elements ranging from 0.7 to 0.85 at two tailed significances. This shows that these elements are interlinked to each other and fall in fuel prices has affected all these elements simultaneously.

**4.5 Regression Analysis**

The regression analysis between the models shows significant relationship where the F value is .000 which means that there is significant relationship between service quality and the predictors. The value of multiple R is .901 which shows that the correlation among the elements is strongly positive and the model is precise. The value of R square shows a value of .812 which is high and shows that the goodness of fit of the model is very high. The value of Durbin Watson is 1.738 which means that there is no autocorrelation among the elements. In case of establishing the relationship between flexibility of operations and predictors, similar results are shown. The third regression analysis measured the relationship between cost of operation and predictors have shown similar results. This means that the fall of fuel prices have adverse affected the performance of the organizations and the null hypothesis can be rejected.

Model summary <sup>b</sup>					
Model	R	R Square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.901 <sup>a</sup>	.812	.798	.499	1.738

a. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments , government service charges , Flexibility in providing loans, Removing subsidy , High interest rate

b. Dependent Variable: Service quality

ANOVA <sup>a</sup>						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	99.047	7	14.150	56.814	.000 <sup>b</sup>
	Residual	22.913	92	.249		
	Total	121.960	99			

a. Dependent Variable: Service quality

b. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments, government service charges, Flexibility in providing loans, Removing subsidy, High interest rate

Coefficients						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	.028	.111		.249	.804
	High interest rate	.183	.109	.177	1.671	.098
	government service charges	.109	.094	.111	1.166	.247
	Flexibility in providing loans	-.030	.100	-.030	-.301	.764
	Government is supporting SMEs	.055	.100	.055	.554	.581
	Timely payments	.388	.094	.364	4.111	.000
	Removing subsidy	.116	.099	.119	1.173	.244
	Increase in visa fees	.191	.109	.186	1.756	.082

a. Dependent Variable: Service quality

Residuals statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. deviation	N
Predicted Value	1.01	4.92	1.98	1.000	100
Residual	-.813	.960	.000	.481	100
Std. Predicted Value	-.971	2.942	.000	1.000	100
Std. Residual	-1.630	1.925	.000	.964	100

a. Dependent Variable: Service quality

Model summary <sup>b</sup>					
Model	R	R Square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.898 <sup>a</sup>	.807	.792	.515	2.050

a. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments , government service charges , Flexibility in providing loans, Removing subsidy , High interest rate

b. Dependent Variable: Flexibility of operations

ANOVA <sup>a</sup>						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	102.109	7	14.587	54.997	.000 <sup>b</sup>
	Residual	24.401	92	.265		
	Total	126.510	99			

a. Dependent Variable: Flexibility of operations

b. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments , government service charges , Flexibility in providing loans, Removing subsidy , High interest rate

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	-.019	.114		-.169	.866
	High interest rate	.195	.113	.186	1.732	.087
	government service charges	.199	.097	.199	2.050	.043
	Flexibility in providing loans	.194	.104	.189	1.873	.064
	Government is supporting SMEs	.144	.103	.140	1.389	.168
	Timely payments	.149	.097	.138	1.535	.128
	Removing subsidy	.172	.102	.173	1.688	.095
	Increase in visa fees	-.043	.112	-.041	-.384	.702

a. Dependent Variable: Flexibility of operations

Residuals statistics <sup>a</sup>					
	Minimum	Maximum	Mean	std. deviation	N
Predicted Value	.99	4.78	1.93	1.016	100
Residual	-1.000	.860	.000	.496	100
Std. Predicted Value	-.925	2.806	.000	1.000	100
Std. Residual	-1.942	1.670	.000	.964	100

a. Dependent Variable: Flexibility of operations

Model summary <sup>b</sup>					
Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.867 <sup>a</sup>	.752	.734	.552	1.946

a. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments, government service charges, Flexibility in providing loans, Removing subsidy, High interest rate

b. Dependent Variable: Cost of operations

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean square	F	Sig.
1	Regression	85.250	7	12.179	39.930	.000 <sup>b</sup>
	Residual	28.060	92	.305		
	Total	113.310	99			

a. Dependent Variable: Cost of operations

b. Predictors: (Constant), Increase in visa fees, Government is supporting SMEs, Timely payments, government service charges, Flexibility in providing loans, Removing subsidy, High interest rate

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	.095	.123		.772	.442
	High interest rate	.259	.121	.261	2.143	.035
	government service charges	.250	.104	.265	2.411	.018
	Flexibility in providing loans	.079	.111	.082	.715	.476
	Government is supporting SMEs	-.002	.111	-.002	-.018	.985
	Timely payments	.091	.104	.089	.870	.387
	Removing subsidy	.145	.109	.155	1.331	.187
	Increase in visa fees	.098	.120	.099	.811	.419

a. Dependent Variable: Cost of operations

Residuals statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. deviation	N
Predicted Value	1.02	4.51	1.87	.928	100
Residual	-.937	.984	.000	.532	100
Std. Predicted Value	-.921	2.848	.000	1.000	100
Std. Residual	-1.696	1.782	.000	.964	100

a. Dependent Variable: Cost of operations

## 5. CONCLUSION AND RECOMMENDATION

### 5.1 Conclusion and Limitations

The analysis of the research has developed key essential findings that highlight the impact of the fall in fuel prices on the small and medium scale organizations. The key findings show that there has been significant increase in interest rates in financial institutions. This means that the financial organizations are charging more for their services to the SMEs. The frequency loan approvals have decreased and the financial companies have become stringent in providing investment funds to these small scale organizations. Moreover, the removal of subsidy from the government has affected the micro organizations tremendously as they are not getting enough support to flourish. The small-scale organizations having very less employees do not have the capability of adapting to their changes due to their limited capability of resources. Moreover, the cost of visa fees for the non-Omani employees have increased which means that the cost of human resources has increased. This affects the overall operational cost and the profit margin of these organizations. The regression analysis conducted has clearly shown significant values where the null hypothesis has been rejected and the alternative hypothesis has been accepted. Authors have tried to cover different factors causing changes in oil prices however the change in the price of oil is quite a volatile topic. The geographical location also plays an important role, in this area and thus will impact the growth related to SMEs, in a specific region.

### 5.2 Recommendations and Managerial Implications

The research has suggested following strategies and policies that may help the SMEs in addressing the challenges faced by them:

- The government needs to promote the diversification of the domestic sectors by encouraging the SMEs. Top and middle level managers should include diversification in the strategic plan of their respective SMEs.
- The government needs to improve the flexibility of the rules and regulations for the SMEs, which may be modified by the managers at the top level, depending on the various sectors they are operating in.
- SMEs need to develop necessary market skills by and for analysing the market conditions, conduct feasibility analysis and develop

effective strategies to make changes to their organizational strategies. The SMEs must be flexible to adapt to the changes in the market and to address the macro changes, the organization needs introduce innovation into their organizational strategy. This would facilitate in increasing the market adaptability.

- Increase the support of SMEs in Oman by awarding the government projects to these SMEs. Managers should ensure that by leveraging their position to the financial institutions, organizations will be able to manage their liquidity. This will help the SMEs to take better control of contingent situations.

### DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

### CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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