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An empirical investigation of process innovation outputs on market capitalization listed of Muscat Security Market

Abstract

This study aims to explain the impact of process innovation outputs on market capitalization in three sectors (industry, service, financial) listed of Muscat Security Market from 2009 to 2013. The innovation phenomenon of growth firms means finding new products, markets and ideas as a competitive advantage on the international or local level. The results indicate the contextual variables that are measured by total assets and share capital, and internal competence variables measured by cash flows and net worth, and external communication variables measured by volume of trading have significant impact at 1% and 5% on market capitalization. The multiple regression test is used and the results show that industry sector is at significant level of 5% of all financial innovation variables on market capitalization compared to low significant level of 10% of service and financial sectors. The person correlation matrix shows a significant relationship between contextual variables, internal competence variables, economic variables and external communication variables and market capitalization. The researcher recommends the need to diversify products of industrial sector and promote interest in the tourism sector and attention to factors innovation business in firms, labor working, and to encourage them constantly about creating innovation opportunities, markets, and new ideas to increase the revenues of firms and government especially in light of the fluctuation of oil prices.

Keywords: innovation outputs, market capitalization.

JEL Classification: G28, O32.

Introduction

The innovation plays a vital role in all economic areas and the business sector, which could affect the competitive advantage of firms in the market where many of the metrics to measure innovation, including what is tangible or intangible, although it is difficult to measure, but innovation is reflected on the performance of firms, and the value of the firms have emerged. Innovative variables play an important role in asset growth and profitability of the firm, where the first stage of innovation begins to find new ideas and development so that does not always mean innovation is to find new markets or new products, but also how these products can compete in the market and continue to develop ideas and sequence about innovation which may be reflected on economic growth (Cooper, Gulen and Schill, 2008). The financial management well encourages savings, investment and increased productivity, which may affect the investment decisions and, thus, the financial innovation.

The financial system includes several stages, starting from the provision of resources distributed and allocated to the firm concerned departments. These stages include that the costs of administration must be properly, in addition, providing accurate and fast payments system may require the company to a broker to do the business so that the flow business is orderly and consistent with the objectives of the firm to lead a reduction in risk to a minimum. From this perspective, we see that

financial innovation has become a requirement in order to reduce costs, reduce risks and improve the products and services so as to convince the customer. Financial innovation classified into several groups may be in providing new products and services, improving products and services list has different competitive advantage over competitors and may be in the form or content of the product, improving and introducing new ways of producing more speed or accuracy in the production process, which gives the customer loyalty to this product, the establishment of new branches of the firms in the different places, improving the input process productivity, improving financial systems in the firm (Furst, Lang, and Nolle, 2000).

Financial innovation appears in a lot of financial institutions on how to achieve customer satisfaction with the services provided in banks, for example, ATM services, credit cards, electronic payment of bills and services online guide to financial innovation, so there's focus on non-interest income compared to income from interest (Sullivan, 2000).

In this study, I will try to analyze the impact of process innovation outputs of six variables of financial and two variables of economic on market capitalization of the three business sectors in the Muscat Securities Market. This paper is structured in four sections after introduction: section one: theoretical framework explains the innovation portfolio in business sector environment and literature review related to subject. Section two: research methodology includes the population, variables, model of the study and hypotheses. Section three: empirical results include discussion of financial and statistical results and, finally, the last section: conclusion & recommendations.

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1. Theoretical framework

1.1. Innovation portfolio in business sector environment. The manifestations of innovation factors are different in many firms based on internal and external levels, including financial and non-financial variables. The innovation system includes numerous costs in order to get a product unique characteristics and this can be diagnosed innovation by reducing costs, reduce risks, to provide a new product or improve an existing product, which can give the satisfaction of the customers. Also there is considered innovation in the form and method of rendering the final product or services (Merton, 1992).

Innovation is important in all industrial, financial and service sectors of the economy where innovation focuses in economic terms on the distribution and allocation of resources to the production process is to achieve efficiency, which may be reflected in the performance on an ongoing basis and there are many aspects that fall within the concept of innovation. The innovation includes two perspectives: first, innovation from an economic perspective and this appears in growth of GDP, CPI, fluctuations in product prices and the interest rate, where are the big fluctuations in the economy, the appearance of the innovation in the business sector. Second, innovation from a financial perspective is concentrated on the firm's characteristics and financial performance, such as of cash flows, the size and profits as the company is constantly working on product improvement in reducing the cost this is achieved in research and development has been the standard that requires trial and error, and this could call this process of innovation. Innovation leads to conflict between owners and managers who are trying to maximize their wealth so that innovation leads to reduce of the wealth of the owners so that because its includes in the first stage presence of machinery, equipment, systems, technology and the labor of a skilled. All this includes the costs could lead to reduced profitability. Innovation also may potentially risk on a local and international levels, which may not be approved by owners (Levine, 1997).

In my opinion, the perspective for profit must be in a long-term not short term so that if found innovation now will be reflected on the firm at future in a positive effect.

1.2. Economic growth of Sultanate of Oman. Sultanate of Oman adopted an expansionary budget in order to stimulate economic activity in the country, with a focus on spending on capital projects, as well as adoption of a greater role for the private sector through privatization plan over three years.

Annual statistical bulletin (2014) shows that oil production is expected to be close to the barrier million barrels, or, specifically, 980 thousand barrels per day during 2015 through the conclusion of the partnership in production and sales. The oil sector, including the gas, substantially contributes about 79 percent of the general budget revenues. The projections indicate the real growth of the national economy rate of 5.5% in 2015, compared to 4.4% in 2014. The Ministry of Finance approved the budget the size of RO 14.1 billion, up 4.5 percent over the approved budget expenditures in 2014, despite the challenges of the decline witnessed in global oil prices, it represents the first part of current expenditure item, which accounts for about 68% or amounted to 9.6 billion Omani riyals of the total budget. It is known the difficulty of moving in this area because it represents the salaries and wages of workers. The second part of it is capital spending, which is a key driver in the development process, has been budgeted in 2015, it amounted to RO 3.2 billion or 23% of total public spending, especially they generate jobs and raise economic growth.

The 2015 budget included, on a large number of capital projects is also directed the Ministry of Finance, towards the implementation of budget programs and performance. In terms of revenue there has been estimated total public revenues by about 6.11 RO billion, a decline of 1% compared to revenue approved for the year past, and, therefore, the estimated 2015 deficit of 2.5 billion RO representing 21% of revenues and 8% of local production. It is, thus, the figures and analysis, some of the options available to meet the deficit is expected to postpone the implementation of projects that require high spenders or resorting to internal and external loans to finance investment projects and increasing the dimension of some taxes.

The site "numbers" on the performance report of the Gulf markets shows the Oman ranked 59 among 160 economies in the world. In turn, the UAE has achieved 27 internationally ranked the best among any of the Gulf Cooperation Council (GCC) and Standard & Poor's sovereign credit rating to reduce the Sultanate of Oman as one of the repercussions of the deterioration of oil prices in the global markets. , Where the credit was reduced level of Bahrain and Saudi Arabia and based on the Index of Economic Freedom for 2015 issued by the Heritage Foundation and the Wall Street Journal. According to Report in 2015, the Oman was ranked 56 internationally and ranked fourth in Gulf after Bahrain, the UAE and Qatar.

1.3. Development of Muscat Security Market. The key indicators of public joint stock companies show that Muscat Securities Market established

since its inception in 1989, after achieving by the Muscat Securities Market the highest level of gains on an annual basis and of 141% at the end of 1997 and the financial market collapsed at the beginning of 1998, dropping the index to the level of 2.284 as Point (-52.5% on an annual basis), due to the very low and the sharp collapse of world oil prices.

In the years 2002-2007, MSM index has seen a steady rise and was the only indicator within the region markets indicators that achieved gains in six consecutive years during the period. In 2007, the Muscat Securities Market was able to attract the interest of foreign investors, which led to a rise in circulation and number of trading. MSM index has achieved the best performance among stock indicators of financial markets in the region, an increase of 62%. It was in 2008 and after that the market index rose to its highest level, the index returned to retreat influenced by the global financial crisis and rapid exit of foreign investment, which reached its highest level in March of 2008 at a level of 30% of the market value, and to support the stability factors after the global financial crisis, the government of Oman to launch the first fund to balance investment in February 2009 between all countries in the region. The Fund has contributed to the restoration of confidence to investors. In the years 2009-2012, the market fluctuated as a result of many political events which affected the region.

The financial market performance in 2013 is successful and profitable for all types of investors in the stock market as opposed to the bond market, which has suffered and continues to suffer from low yield as a result of lack of visibility to the cause interest rates on currencies. As for the future look of the financial market, the MSM ability to maintain the gains increased due to the ability of the state and its success to return to the crude oil production rates but increased it to more than one million barrels per day and linking Gulf financial markets through a unified clearing system to facilitate the movement of Gulf investors from one market to another on the same day and at no cost with the development of many new investment tools which are used by many Arab and international financial markets.

1.4. Comparison between the MSM of Oman & Gulf Markets Performance. The site “numbers” on the performance report of the Gulf markets shows the Gulf markets indices have achieved great heights during 2013, and issued the Dubai Financial Market Winning markets by more than 108%, after first two important events upgrade UAE markets to emerging markets during the month of June, and the second Dubai win to host the exhibition “Expo 2020” during the month of November, which reflected positively in the performance of the index.

And the rest of the market has made considerable heights, Abu Dhabi market by 63% and 27% market Kuwait and Saudi market 26% and 24% market Qatar and Muscat and Bahrain 19% and 17%, respectively.

The markets were mixed in terms of trading value, compared to the same period during the previous year, with the total value of trades in the Saudi market reached 365.2 billion dollars by the end of 2013, compared to 513.1 billion dollars by the end of 2012, and increased trading in Dubai to \$ 43.5 billion by 230% compared to \$ 13.2 billion during the same period of the previous year, followed by Abu Dhabi market, up by 290% and achieved Muscat Securities Market last place and achieved \$ 5.9 billion by the end of 2013 compared to \$2.9 billion by the end of 2012.

The report of performance of the Gulf indicators was mixed during 2014, between high and low where topped the Qatar Exchange list of high Gulf indicators rose by 18%, followed by Bahrain market by 14% and then “Dubai” and “Abu Dhabi”, while the Saudi market, the largest market in the region fell by 2%, followed by the Kuwait market by 13%, and MSM by about 7%.

1.5. Literature review. Loof and Heshmati (2000) examine the knowledge capital as the ratio of innovation and performance and found a significant impact on the performance and also found that firms have labor and capital are more innovative than firms have knowledge. Akbar and Stark (2003) found that dividend financial fairly have a positive impact on process of innovation. Ramb and Reitzig (2005) examined innovation through attention to a factor of research and development so that the company found that R&D expenses of an effect on the market value of the firm. Cooper et al. (2008) found that innovation contributes to increase revenue, investments and affects positively the investment portfolio of the firm. Malloy et al. (2009) found there is a relationship between the growth value firms, which could contribute positively affect the property to the companies as one of the manifestations of innovation. According to Hjalager (2010) the study was applied in the service sector and found that innovative factor in the decisions that add value to the investments and create new opportunities. Walker et al. (2011) found that financial innovation is important to the performance of specific factors and there are many productive activities related to innovation, such as cost of control and product quality and new markets

Hall (2011) explains the effect of innovation on earnings productivity factor and the results show a positive impact but the process innovation is unclear

because many factors in the market and completion affecting on innovation process. Kocoglu et al. (2011) explain the impact of organizational learning measured by roles of innovation and total quality management on performance that was measured through the market performance and employee satisfaction and found a relationship between organizational learning and firm performance and the study explains the effect of roles of innovation and TQM without ignoring the changes from employee satisfaction. Beck et al. (2012) found that financial innovation contributes to the improvement of productivity and increases the advancement of technology, but is not an effective contribution to the economy. According to Boldrin and Levine (2013), this study does not succeed in highlighting the image of financial innovation and give clear and precise connection between academic innovation and increased productivity factors.

2. Research methodology

For the population of the study data were collected through reliance on published annual financial and statistical reports.

2.1. Data population & variables of the study.

The population of this study includes 3 sectors in Muscat Security Market (MSM) and the researcher takes all these sectors of MSM. This market starts and continues rise in the number of annual public shareholding, financial instruments, and investment funds listed companies, and financial brokerage companies operating in the market. This will reverse the important during the twenty-five-year-old marked improvement in investment, legislation and legal levels and standards of transparency and disclosure enjoyed by the market compared to other financial markets, particularly in general and the Gulf. The sectors are: industry, financial and service sectors during the study period from 2009 to 2013. The data collected from the annual guide of firms listed in MSM for three sectors that include 48 firms in industry, 35 firms in service sector and 36 firms in financial sector. Many researchers such as Tidd et al. (1997), Souitaris (2002) studied and wrote in innovation in various fields, where the researcher identifies some of the financial and economic variables as a sign of the process innovation outputs of firms. Based on previous literature and theories, I designed the dependent and independent variables of this study:

Contextual variables. CONV measured by innovative factor include a large of size through total assets (TA) and share capital (SC). These variables are the content of the strategies that affect the firm's performance, such as the size of assets, sales and foreign capital that reflect the institutional innovation.

External communication variables. ECV measured by innovative factor include the trades

(TRD) and volume of trading (VOL). These variables express about the firm's ability to interact with the external environment and take advantage of foreign information's for excellence and innovation and attract foreign investors to investment and market.

Internal competence variables. ICV measured by innovative factor include the cash flow (CF) and net worth (NW). These variables express about the internal skills and experiences accumulate at the firm, which is working to employ them to have for internal competitive advantage to reflect the innovation.

Economic variables. ECOV measured by innovative country factor include the gross demotic product (GDP) and consumer price index (CPI). They are the variables that reflect the economic performance and growth at the country level so that they enhance productivity of firms and innovation and keep the survival of firms in the market

But the dependent variable of the study is the market capitalization (MC) of each sector in every year and is calculated by multiplying a firms share outstanding by the current market price of one share.

2.2. Model of the study.

Market Capitalization (MC) = $a + \beta_1 CONV + \beta_2 ECV + \beta_3 ICV + \beta_4 ECOV + e_i$.

2.3. Hypotheses. After a scan of previous studies, literature research and diagnosis of the goal of this study I can summarize in the following hypotheses:

Hypothesis 1: There is no statistical significant impact of each CONV, ECV, ICV and ECOV on market capitalization of MSM sectors.

Hypothesis 2: There is no statistical significant impact of all innovation variables on market capitalization of each sector (industry, financial and service) sector in MSM.

Hypothesis 3: There is no statistical significant relationship between each of innovation variables and market capitalization in MSM sectors.

3. Quantitative results and discussion

3.1. Descriptive financial and economic variables.

Table 1 shows the results of descriptive analysis of independent and dependent variables in all sectors (service, financial and industry sector). The dependent variable is market capitalization (MC) at mean 6.338 and standard deviation is 0.1744. The high mean related to contextual variables (CONV) 6.658 on total assets and low mean of internal competence variables (ICV) 1.415 on cash flow variable. High standard deviation related to internal competence variables 4.5144 on cash flow and low value on external communication variables 0.0188 on consumer price index. The data numbers are in thousands and selected in company guide in MSM.

Table 1. Descriptive analysis of independent and dependent variables in all sectors

Dependent & independent variables	Type of variable	Variables	Min.	Max.	Mean	Std. dev
Dependent variables	MC	MC	6/06	6.63	6.338	0.1744
Independent variables	CONV	TA	6.14	7.36	6.658	0.4539
		SC	5.45	6.18	5.706	0.2533
	ECV	TRD	4.81	5.67	5.186	0.2545
		VOL	5.66	6.87	6.102	0.3690
	ICV	CF	-4.69	5.58	1.415	4.5144
		NW	5.85	6.56	6.155	0.2294
	ECOV	GDP	4.27	4.49	4.401	0.0843
		CPI	1.96	2.00	1.983	0.0188

This explains that firms have the huge numbers of assets and the share of capital in the financial market well be employed in the profitability of investment projects and trading in the financial market and reflected on the economic variable by increase of GDP, while the cash flows is low contrast, increasing net wealth as equity for firms to meet any crisis or future financial emergencies.

3.2. Simple and Multiple Regression Tests and Discussion. In this study I used simple regression test as show in table No. 2 to examine the impact of four independent variables (contextual variables, economic variables, internal competence variables and external communication variables) on market capitalization of Muscat Security Market, including all sectors (service, financial and industry sector). The table results show the impact statistically significant for each contextual variables, internal competence variables on market capitalization at the significant level of 1%, and the t-value = 5.009, 5.496, 4.448 and 7.459, respectively, as was the R coefficient = 0.812, 0.836, 0.777 and 0.900, respectively, but the R² was 0.659, 0.699, 0.604 and 0.811, respectively.

But the external communication variables measured by the volume of trading variable show the impact statistically significant at 5% where the t-value = 2.561 as was the R coefficient = 0.579 while the R² was 0.335. Finally, there is no any impact statistically significant for economic variables measured by GDP and CPI on market capitalization.

These results show that firms listed on the MSM are affected by internal variables which firms can control, such as the size of assets, share capital, cash flows and net wealth either external variables, whether economic or that rely on competition where the result does not have a significant effect on the market capitalization. In this area note that government support for companies in the financial market so that the Omani government presents long-term financial support to the firm's private sector by loans and this support size depends on the type and cost of the investment.

Annual statistical bulletin (2014) refers to maximum ceiling amount of the loan provided to the public shareholding of companies are between million RO to three million RO, as the Ministry of Trade and Industry offers many incentives and benefits to industrial projects through organizing and encouraging industry law. Presumably, the budget of government for 2014 that the country recorded a deficit with low oil prices, and considering the Sultanate ways to reform costly subsidy system with the construction of a strategy to develop Omani tourism plans were contracted the Ministry of Tourism with the (THR firm) Spanish to study ways to develop the tourism potential in the country to attract the largest number of tourists from around the world.

The contribution of the tourism sector does not exceed the GDP of the country's rate of 2.5 percent, and the government is seeking to raise it to up to 10 percent over the next ten years. Thus, we see that all of these benefits of government support market capitalization in the financial market.

Table 2. Simple regression of each variable of independent variables on market capitalization in all sectors

Type of variable	Variables	R	R ²	T	Sig.	Un standardized coefficient	
						St-error	B
CONV&MV	Total Assets	0.812	0.659	5.009	0.000***	0.019	9.627E-02
	Share Capital	0.836	0.699	5.496	0.000***	0.357	1.964
ECV&MV	Trades	0.187	0.035	0.688	0.503	2.224	1.530
	Volume	0.579	0.335	2.561	0.024**	0.104	0.265
ICV&MV	Cash flow	0.777	0.604	4.448	0.001***	1.056	4.699
	Net Worth	0.900	0.811	7.459	0.000***	0.125	0.932
ECOV&MV	GDP	0.217	0.047	0.800	0.438	54.055	43.223
	CPI	0.223	0.050	0.825	0.424	61042.1	50356.1

Notes: * Significant at p < 0.10. ** Significant at p < 0.05. *** Significant at p < 0.01.

The results of Table 3 used multiple regression test to present the impact of all financial independent variables (contextual variables, internal competence variables and external communication variables) on market capitalization of Muscat Security include service, financial and industry sector and except the economic variable because the numbers of variables in economic is the same of each sector. The Table results show the impact statistically significant for

industry sector on market capitalization at the sig. level 5%, but the value $F = 7.951$ as was the $R = 0.930$ and the $R^2 = 0.864$.

But low impact statistically significant for financial and service sectors at the significant level 10%, and the value $F = 3.703$ and 4.185 , respectively, as was the $R = 0.865$ and 0.877 , respectively, and the $R^2 = 0.748$ and 0.770 , respectively.

Table 3. Multiple regression of all of financial independent variables and market capitalization in each sector

Type of sector	R	R ²	F-value	Sig.
Financial sector	0.865	0.748	3.703	0.092*
Service sector	0.877	0.770	4.185	0.074*
Industry sector	0.930	0.864	7.951	0.022**

Notes: * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

3.3. Person correlations matrix statistics and discussion. The Table 4 used person correlations matrix testing to analyze the relationship between all financial and economic independent variables (contextual variables, internal competence variables, economic variables and external communication variables) on market capitalization of Muscat Security include service, financial and industry sectors.

The results of the study show the positive statistically significant relationship is between TA and

MC at significant level of 1%, SC and MC, TA at at significant level of 1%, VOL and TA, SC at significant level of 1% but at VOL and MC significant of level 5%, CF and MC, TA, SC at significant level of 1% but at CF and VOL at significant level of 5%, NW and MC, TA, SC, VOL and CF at significant level of 1%, negative relationship between GDP and TRD at significant level of 1%), negative relationship between CPI and TRD and positive relationship between CPI and GDP at significant level of 1%.

Table 4. Person correlations matrix between financial, economic variables and market capitalization

VAR	MC	TA	SC	TRD	VOL	CF	NW	GDP	CPI
MC	1								
Sig 2T	-								
TA	0.812**	1							
Sig 2T	0.000	-							
SC	0.836**	0.986**	1						
Sig 2T	0.000	0.000	-						
TRD	0.187	0.379	0.344	1					
Sig 2T	0.503	0.163	0.210	-					
VOL	0.579*	0.809**	0.853**	0.407	1				
Sig 2T	0.024	0.000	0.000	0.132	-				
CF	0.777**	0.929**	0.879**	0.360	0.615*	1			
Sig 2T	0.001	0.000	0.000	0.188	0.015	-			
NW	0.900**	0.973**	0.990**	0.281	0.805**	0.877**	1		
Sig 2T	0.000	0.000	0.000	0.310	0.000	0.000	-		
GDP	0.217	0.176	0.241	-0.670**	0.194	0.083	0.272	1	
Sig 2T	0.438	0.530	0.386	0.006	0.489	0.768	0.327	-	
CPI	0.223	0.179	0.247	-0.646**	0.209	0.078	0.277	0.998**	1
Sig 2T	0.424	0.524	0.374	0.009	0.455	0.783	0.317	0.000	-

Note: * Correlation is sig at the 0.05 level and ** Correlation is sig at the 0.01 level (2-tailed).

These results explain that the best use of assets in firms reflected positively and significantly on the market capitalization so that increase share capital, cash flows and trading volume, these variables are considered a strong relationship between them. But the inflation variable is associated with a strong and negative relationship with securities traded in the

market that means when rise the stock prices, this leads to a decline in the number of trading transactions. Also note that the consumer price index variable is associated with a strong and negative relationship with trading so that the purchasing power of the consumer to purchase goods and services increases and, therefore, less

trading volumes in the financial market and increased gross domestic product, which is linked to a positive relationship with the consumption index.

The results of Tables 3 and 4 show that the industrial sector in the Sultanate of Oman continues to grow so that the government is working with the private sector in terms of its development which is considered an important source of national income, which the government is trying to increase the reliability and reduce dependence on the oil sector, so this is a pot of recruitment and development of national employment. If this happened, so increase the value added of national resources and exports, which reflect a positive effect on the balance of payments.

Where he tried the industrial sector during the ongoing exploitation of natural resources to the development process in accordance with modern production methods and products to support the strengthening of national replace foreign imports. This leads to an increase in consumer spending and the expansion of industrial and consumer products market, and, thus, the necessary intermediates for their production.

The government's attempt to development industrial sector continuously to meet long-term economic development goals, national and find appropriate work in the Sultanate of citizens environment, and the government in 1983 established the first industrial zone in the Sultanate under the name Rusayl Industrial Estate and was opened in 1985, then increased interest and the creation of many of the industrial areas in the Sultanate and the result of the expansion in the industrial zones was the creation of public establishment for industrial areas in 1993. To increase the contribution to the development of local industries, maintain their competitiveness, and the development and promotion of industries that are based on the outputs of scientific research and innovation, it was necessary to find a sponsor for research and innovation.

The public establishment for industrial estates in cooperation with the Scientific Research Council was to establish industrial innovation center in Rusayl Industrial Estate to serve the industrialists through conducting studies and industrial research, and to provide technical advice and develop solutions for

product development and raise the quality and reduce the cost.

This center aims to spread a culture of innovation in the industrial sector, and identify industrial areas that need research and innovation, and to provide scientific studies and research and process consulting, and identify the problems and challenges facing the industry, and help small-scale industries and medium for the development of their products and to find ideas industrial innovations new to them.

Conclusion & recommendations

The forms of factors innovation are different among firms and sectors based on the level of financial management, economic, marketing and technology. The firms are trying to do through research and development to develop the appropriate tool in the light of available resources and costs. This study aims to investigate the impact of process innovation outputs on market capitalization on three sectors (industry, financial, service) listed in Muscat Security Market from 2009 to 2013. The data used from company financial guide and statistical reports to analyze the hypotheses and they include financial and economic variables. The results indicate the contextual variables measured by total assets and share capital and internal competence variables measured by cash flows and net worth and external communication variables measured by volume of trading have impact significant at 1% and 5% on market capitalization. The multiple regression test used and the result shows that industry sector is significant at 5% of all financial innovation variables on market capitalization compared with low significant at 10% of service and financial sectors. The person correlation matrix shows a significant relationship between contextual variables, internal competence variables, economic variables, external communication variables and market capitalization.

The researcher recommends the need to strengthen the role of the industrial sector and diversify its products and attention to factors innovation business in firms and focus on labor working and encourage them constantly about creating opportunities, markets, and new ideas, which requires it to provide appropriate training for them with the need to support all sectors of the Muscat Securities Market. We also recommend the need to promote interest in the tourism sector of the Sultanate of income, especially in light of the fluctuation of oil prices.

References

1. Akbar, S., Stark, A.W. (2003). Deflators, net shareholder cash flows, dividends, capital contributions and estimated models of corporate valuation, *Journal of Business Finance & Accounting*, 30, pp. 1211-1233.
2. Annual statistical bulletin (2014). National Center for Statistics and Information, Retrieved from <http://www.ncsi.gov.om>, 07-09-2014.
3. Beck, T., Chen, T., Lin, C. and Song, F. (2012). Financial Innovation: The Bright and the Dark Sides, Working Papers 052012, Hong Kong Institute for Monetary Research.
4. Boldrin, M., Levine D.K. (2013). The Case Against Patents, *Journal of Economic Perspectives*, 27 (1), pp. 3-22.

5. Cooper, M., Gulen, H., Schill, M. (2008). Asset growth and the cross section of stock returns, *Journal of Finance*, 63, pp. 1609-1651.
6. Hall, B (2011). Innovation and productivity, Paper prepared for the Nordic Economic Policy Conference on productivity and competitiveness, 29 April 2011, Helsinki, Finland.
7. Hjalager, A.M. (2010). A review of innovation research in tourism. *Tourism Management*, 31 (1), pp. 1-12.
8. Kocoglu, I., Imamoglu, S and Ince, H, (2011). The Relationship between organizational learning and firm performance: the mediating roles of innovation and TQM, *Journal of Global Strategic Management*, 9, June, pp. 72-88.
9. Levine, Ross (1997). Financial Development and Economic Growth Financial Development and Economic Growth: Views and Agenda, *Journal of Economic Literature*, 35 (June), pp. 688-726.
10. Loof, H., Heshmati, A. (2000). Knowledge Capital and Performance Heterogeneity: A Firm Level Innovation Study, SSE/EFI Working Paper Series in Economics and Finance No. 387, July 26, 2000.
11. Malloy, C.J., T.J. Moskowitz, and A. Vissing-Jorgensen (2009). Long-run stockholder consumption risk and asset returns, *Journal of Finance*, 64 (6), pp. 2427-2479.
12. Muscat Security Market reports Retrieved from <https://www.msm.gov.om/> 23-05-2015.
13. Merton, Robert C. (1992). Financial Innovation and Economic Performance, *Journal of Applied Corporate Finance*, 4 (Winter), pp. 12-22.
14. Ramb, F., Reitzig, M. (2005). Comparing the Value Relevance of R&D Reporting in Germany: Standard and Selection Effects, Discussion Paper Deutsche Bundesbank, Series 1: Economic Studies.
15. Report of site of Numbers of performance on Gulf Markets, Retrieved from <http://www.argaam.com/> 25-05-2015.
16. Souitaris, V. (2002). Theological Trajectories as Moderators of Firm level determinants of innovation research policy, 31, pp. 877-898.
17. Sullivan, Richard J. (2000). How Has the Adoption of Internet Banking Affected Performance and Risk in Banks? *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City, 1-16 Saloner.
18. Tidd, J. Bessant, J. and Pavitt, K. (1997). *Managing Innovation, Integrating Technological, Market and Organizational Change*, Wiley Chichester.
19. Walker, R.M., Damanpour, F., Devece, C.A., (2011). Management innovation and organizational performance: the mediating effect of performance management, *Journal of Public Administration Research Theory*, 21 (2), pp. 367-386.