

Entrepreneurial Orientation and Competitive Advantage in the Egyptian Banking Sector

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Abstract

With the increasing competition in today's dynamic environment, entrepreneurship can be of great importance to achieve better performance and better profits eventually. This research aimed at studying the impact of entrepreneurial orientation on achieving competitive advantage in the Egyptian commercial banks. The researcher applied a complete census method that included top management representatives from the commercial banks in Egypt. A questionnaire was developed and modified from previous literature to measure the dimensions of the variables. SPSS version 23 is used in the analysis of the collected data and presented through descriptive statistics, frequencies, means, validity and reliability measures and correlation analysis for hypothesis testing. This study has contributed to existing literature by providing evidence regarding entrepreneurial orientation in public and private commercial banks in Egypt. Recommendations for the top management of these banks have been provided and also recommendations for future research.

1. Introduction

The banking industry occupies a significant position in the global economy. It provides basic financial services to a large segment of people; financing the commercial enterprise and make credit and liquidity available to the market. In this contemporary business world, organizations have to keep themselves competitive against their industry rivals by incorporating effective strategies at all corporate and functional levels.

Entrepreneurial activity represents one of the major sources of economic growth, business development and job creation. There are different concepts to entrepreneurial activity, mainly entrepreneurship and entrepreneurial orientation. Entrepreneurship means new entry or "going into business" while entrepreneurial orientation is concerned with the processes, methods, and decision-making styles that managers use to act entrepreneurially. New entry explains 'what' entrepreneurship is while entrepreneurial orientation describes 'how' new entry is undertaken (Lumpkin & Dess, 1996).

In this study, the researcher focuses on entrepreneurial orientation (EO) which refers to the willingness of an organization to create, find and accept new ideas in order to create competitive advantage that will stand out and add value to the enterprises (Tang et al., 2009).

Competitive advantage has a wide range of definitions, it is apparent that a firm achieves a competitive advantage over its competitors by providing a product/service perceived by the customer to yield greater benefits and value than that of the competitors (Dirisu et al., 2013).

Competitive advantage can best be achieved by creating superior customer value through competitive products and services which cannot only out class the competition, but also build a unique brand identity of the organization in the marketplace (Venter, 2014).

2. Theoretical Background

Conducting business transactions face lots of complexity and that's why, entrepreneurial orientation (EO) can be regarded as a significant factor to ensure the success of businesses. At the same time, organizations have to be involved in seeking new opportunities. Organizations have to be creative regarding innovations of products, services and processes. They have to be more proactive in comparison with competitors in all aspects and be risk-oriented.

Entrepreneurial orientation is important to the growth of a company and also to the development and growth of the economy. In fact, few scholars agreed that EO is a significant contributor to a firm's success and contribute to a healthier business performance (Mahmood and Hanafi, 2013; Zainol and Ayadurai, 2011).

Walter, Auer and Ritter (2006) pointed out that EO is much needed especially in hostile and technologically sophisticated environments. It has been agreed by Rodrigues and Raposo (2011) that firms with a high EO have a superior performance where the market share showed improvements and the number of new products, services and processes has shown some growth. Firms need to be entrepreneurial in order to survive and successfully compete, especially within fast-changing industries (Teece, 2007). As mentioned by Lindelof & Lofsten (2006), rapid technological progress strengthens competitive pressure and creates a rich pool of technological opportunities that encourage entrepreneurial behavior of firms.

Despite the many studies linking entrepreneurial orientation with firm performance (Covin et al., 2006; Wiklund and Sheperd, 2003; Lucky et al., 2011) less attention has been paid to the effects of entrepreneurial orientation on competitive advantage. Therefore the purpose of this research is to study the relationship between entrepreneurial orientation and competitive advantage in the commercial banks of Egypt.

3. Literature Review

The researcher found that there is great emphasis on the importance of entrepreneurial orientation as a main factor for the success of organizations generally and the banking sector specifically and also its effect on enhancing competitive advantage, this can be seen from the previous studies which varied in their illustration of dimensions of entrepreneurial orientation, some dividing them into two, three or five dimensions:

Kitau et al. (2016) conducted a study about entrepreneurial orientation and competitive advantage in the mobile service providers sector, and came with the results that showed statistically significant difference in the influence of EO on competitive advantage among the mobile service providers in Kenya; $t = 25.517$, $p < .001$, with confidence interval 99%. The conclusion of the study supported the claim that EO among mobile service providers in Kenya has an influence on their competitive advantage.

Another study conducted by Zeebaree and Simon (2017) in the SMEs sector in Iraq. It tested the impact of EO on competitive advantage moderated by financing support. This study only considered three dimensions of EO (innovativeness, risk-taking and proactiveness).

Findings show a positive relationship between each of these dimensions with competitive advantage.

While Kiyabo and Isaga (2020) studied the influence of EO on competitive advantage in SMEs in Tanzania, using the five dimensions of EO which are (innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness). The results showed that entrepreneurial orientation positively and significantly influences competitive advantage.

According to Lee and Chu (2011), firms with entrepreneurial orientation are likely to enhance their competitive advantage by reducing costs or differentiating products or services through the combinations of resources and capabilities.

With regard to entrepreneurial orientation, (O. Mohammed, 2017; K. Callaway and B.Jagani, 2015) considered EO with its two dimensions: innovativeness and risk-taking, while (Liu, H. et al. 2011; and Mohammad, N. et al. 2016) illustrated the dimensions of entrepreneurial orientation to be innovativeness, risk-taking and proactiveness. While (Zafer et al. 2013; Mohammad, N. et al., 2016) considered the five dimensions of entrepreneurial orientation which are: innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness.

Through the extensive review of the previous studies concerning entrepreneurial orientation, the researcher selected the last approach of defining entrepreneurial orientation five dimensions which are (innovativeness, risk-taking., proactiveness, autonomy and risk-taking). The researcher adopts this perspective because it is more comprehensive, and although it is not the most commonly used but it suits the nature of the application sector.

Also, the previous studies showed a variety of dimensions to competitive advantage (Abou-Moghli et al. 2012) used these dimensions: cost, time, quality and flexibility, while (H. Edris, 2014) studied three

dimensions (cost, quality and flexibility). The majority of researchers (H. Mustapha et al., 2015; Mohammad, N. et al., 2016; O. Mohammed, 2017) agreed on the three dimensions: cost leadership, differentiation (also called quality) and focus (also called flexibility).

In the light of these findings, the researcher adopted the last perspective of competitive advantage which includes: (cost leadership, quality and flexibility) as it is the most common approach and in consensus with (H. Mustapha et al., 2015; Mohammad, N. et al., 2016; O. Mohammed, 2017).

The previous studies showed that there are different sectors for application, some studies were applied on the banking sector (S. Atiku et al., 2016; O. Mohammed, 2017; K. Callaway and B.Jagani, 2015; Zafer et al. 2013; Abou-Moghli et al. 2012), others applied on telecommunications (H. Edris, 2014), or small and medium enterprises (Mohammad, N. et al., 2016; T. Riyad, 2015; Liu, H. et al. 2011).

Although there were many studies covering competitive advantage and entrepreneurial orientation individually (Zafer et al., 2019; H. Mustapha et al., 2015; K. Callaway and B.Jagani, 2015; T. Riyad, 2015; H. Mustapha et al., 2015; S. Atiku et al., 2016; O. Mohammed, 2017), there is a shortage -as far as the researcher knows- in studies that illustrate the relationship between both variables together in the Egyptian banking sector.

In conclusion, this research will study the impact of entrepreneurial orientation on competitive advantage in the Egyptian commercial banking sector.

4. Problem Statement

The banking sector is considered as one of the most important service-providing sectors. It has a great impact on the national economy. Recently, banks are facing many challenges due to the intense competition. The

technological revolution in the field of information and communication is forcing banks to continuously improve and enhance the services they offer. Not only that, but banks are required to exert more effort to attract new customers and maintain current customers by presenting them with advanced and convenient services.

So, the research problem is reflected in the following questions:

- 1. Is there a significant difference between entrepreneurial orientations in the Egyptian commercial banks (public and private)?*
- 2. Is there a significant relationship between entrepreneurial orientation and achieving competitive advantage in the Egyptian commercial banks?*

5. Research Hypotheses

In the light of the previous studies, the clear definition of the research problem and its aspects and the research questions, the researcher can conclude that the hypotheses of the study are as follows:

H1: There is a significant difference in entrepreneurial orientation in the Egyptian commercial banks.

H2: There is a significant relationship between entrepreneurial orientation dimensions and achieving competitive advantage in the Egyptian commercial banks.

H2a: There is a significant relationship between innovativeness and achieving competitive advantage in the Egyptian commercial banks.

H2b: There is a significant relationship between risk taking and achieving competitive advantage in the Egyptian commercial banks

H2c: There is a significant relationship between proactiveness and achieving competitive advantage in the Egyptian commercial banks.

H2d: There is a significant relationship between competitive aggressiveness and achieving competitive advantage in the Egyptian commercial banks.

H2e: There is a significant relationship between autonomy and achieving competitive advantage in the Egyptian commercial banks.

6. Research Objectives

The researcher seeks to achieve the following objectives:

1. Identifying the level of entrepreneurial orientation of the banks under study.
2. Determining the relationship between entrepreneurial orientation and achieving competitive advantage in the Egyptian commercial banks
3. Studying the impact of entrepreneurial orientation on achieving competitive advantage in the Egyptian commercial banks.

7. The Research Gap and Main Contribution of the research:

From the previous comments on the literature, the researcher found some research gaps which require more study, and this will be illustrated as follows: There are few studies which have been conducted in the Egyptian environment in the field of entrepreneurial orientation in the banking sector. Therefore, the main contributions of this research is studying the impact of entrepreneurial orientation on achieving competitive advantage in the Egyptian commercial banks.

8. Research Importance

There is increasing interest in the research field on entrepreneurial orientation and its relationship with competitive advantage, and stated below is the importance of this study:

8.1 The scientific importance:

- Add to the literature related to entrepreneurial orientation, its definitions, dimensions, and present it to researchers and academics interested in the field of entrepreneurship.

- Also, the importance of this study comes from its flow with the trend to find new creative ideas to improve the Egyptian banking sector.

8.2 The practical importance:

- Add alternative interpretations to entrepreneurial orientation and competitive advantage with evidence from the Egyptian banking sector which will have a direct and strong effect on the prosperity of Egyptian economy and offering employment opportunities.

9. Research Model

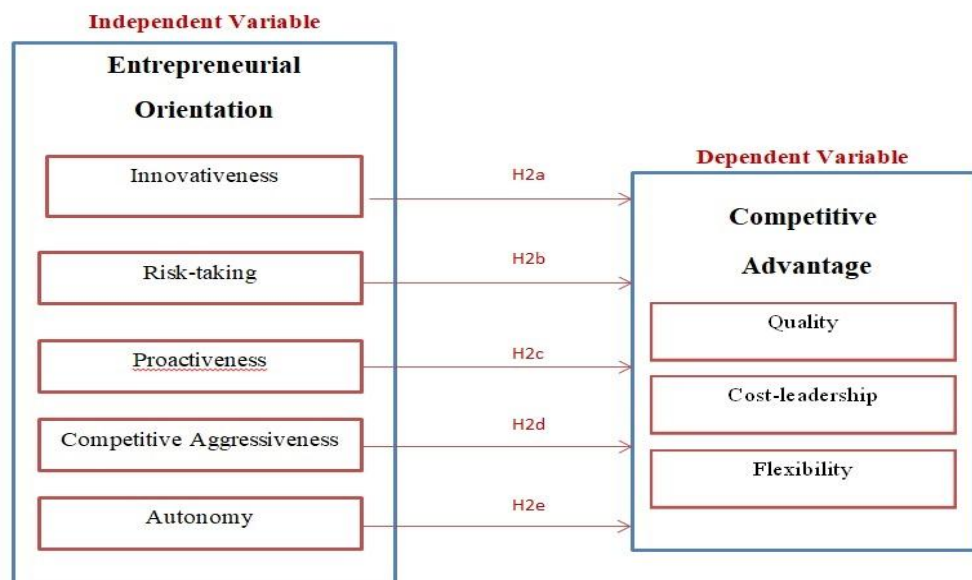


Figure (3.1): Research Model

Prepared by the researcher in the light of research hypotheses

10. Research Limitations

This research is limited to the following:

- The data for this research was collected from the commercial banks in Egypt; thus, the findings cannot be generalized beyond the Egyptian commercial banks.

- The researcher applied a hypothesis testing and cross-sectional research design, with the research conducted over a single period of time. Because the data was collected at a single point in time, it does not allow the determination of cause and effect or the impact of changes over time (Todd, 2006). A longitudinal study would allow the firm to be studied overtime and give a clearer picture of the failure rates and the reasons for success or failure. Also, a longitudinal study would capture the impact of changes in the business environment and the results of modification of managerial strategy. A longitudinal research design would possibly overcome the impacts of current environmental changes facing the participating banks and may add value to the findings.
- It is well known that competitive advantage can be measured using various dimensions. In this study, the researcher measured competitive advantage using three dimensions which are cost leadership, quality and flexibility.
- Findings cannot represent all top management representatives in the banking sector as the results would be better if a larger sample was considered.

11. Research Population

The researcher has chosen the Egyptian banking sector due to its big role in developing the Egyptian economy as well as it considered one of the most important sectors which play a vital role in the Egyptian economy as well as it deals with a large number of retail and corporate customers therefore entrepreneurial orientation seems necessary for succeeding and growing.

The population of this study is all the Egyptian commercial banks registered in the Central Bank of Egypt and whose head offices are located in Cairo. The following table displays the commercial banks registered in the Central Bank of Egypt official website for the date June 2020.

	Name	Top Management Representatives*
1	BanqueMisr	7
2	National Bank of Egypt	9
3	Egyptian Arab Land Bank	8
4	Egyptian Agricultural Bank	8
5	Industrial Development Bank	6
6	Banque du Caire	7
7	The United Bank	8
8	Bank of Alexandria	8
9	MidBank	8
10	Commercial International Bank	9
11	AttijariWafa Bank	7
12	SAIB	10
13	Blom Bank	8
14	Credit Agricole Bank	5
15	Emirates NBD	9
16	Suez Canal Bank	8
17	Qatar National Bank AlAhli	7
18	Arab Investment Bank	7
19	AlAhli Bank of Kuwait	7
20	Bank Audi	5
21	Ahli United Bank	9
22	Faisal Islamic Bank	7
23	Housing and Development Bank	9
24	Al-Baraka Bank	11
25	National Bank of Kuwait	7
26	Abu Dhabi Islamic Bank	7
27	Union National Bank	5
28	Egyptian Gulf Bank	10
29	Arab African International Bank	10
30	HSBC	9
31	ABC Bank	9
32	Export Development Bank	9
33	Arab International Bank	11
34	First Abu Dhabi Bank	10
35	CitiBank	11
36	Arab Bank	9

37	Mashreq Bank	7
38	National Bank of Greece	6

*The top management representatives include: Chairperson, Vice chairperson, Chief Executive Officer, Managing Director and Board Members of the Bank. This data was collected by the researcher from each bank's official website in June 2020.

12. Response Rate

One hundred and ninety (190) questionnaires are distributed among the thirty-eight banks (public and private). The returned questionnaires were one hundred and sixty-seven (167). Twelve questionnaires were not fully completed. So the total number of questionnaires qualified for the study is 155. The response rate reached 81.57% which is quite good for the research putting in mind the nature of the research and the sector surveyed.

13. Research Sampling Technique

In this study, the researcher will use a complete census technique in attempt to cover the entire population of top management representatives. The total population size for the following reasons:

1. Top management representatives are most knowledgeable individuals about the bank's operational and strategic activities.
2. They have the most expertise and knowledge in terms of operation and direction of the firm.
3. They are small in number, maximum nine respondents from each bank.

14. Sources of Data Collection

For the purpose of achieving the research objectives, there are two main sources from which data is collected by the researcher in this research. They are primary sources and secondary sources.

i. Primary Sources of Data Collection

Primary data of this research is obtained from the Egyptian bank top management through the distribution of questionnaires during the empirical work. It is developed according to the number of scales which have been previously used in previous studies.

A survey is a method of primary data collection based on communication with the research population or a representative sample of it (Al-Aasi, 2018). The questionnaire used in this research is the self-administered questionnaire. Self-administered questionnaires are distributed to the respondents in hard copies.

ii. Secondary Sources of Data Collection

Library or documentary research means collecting secondary data which can be found in company records, library, internet and other documents (Al-Aasi, 2018).

Literature obtained from secondary sources regarding entrepreneurial orientation is reviewed to identify factors that cause differences in performance and competitive advantage in various sectors. Secondary data is crucial and of vital importance for any researcher because it allows the researcher to know what has been done in the area of interest and the procedures that are used to come out with those findings.

15. Testing Validity of Measuring Scale

For verifying the content validity of the questionnaire, the researcher presented the initial questionnaire with an explanation letter explaining the objectives, hypotheses and variables of the research to a group of experts. This group consists of a number of academics in the field of management and marketing in some Egyptian universities. This group was responsible for verifying that the questionnaire's statements were

properly translated and phrased and they measure what they are intended to measure.

This group illustrated that the statements of the questionnaire indeed express their intended meaning and were not misleading. In addition, they made some minor changes in the wording of the statements and divided the long statements that addressed two dimensions into two separate statements.

16. Testing Reliability of Measuring Scale

The following table shows the results of the reliability and intrinsic validity of the variable scales used in the research survey, all the variables (independent and dependent) are found to be reliable as the values of Cronbach's Alpha Coefficients are all above 0.5. The overall results indicate that every item is measuring the same underlying variable. Thus the questionnaire was reliable tool to use in this research.

Table (1.1) Results of Reliability Test for the variables of the study

	Cronbach's Alpha	Average item correlation
EO Dimensions:		
Autonomy	0.705	0.923
Innovativeness	0.873	0.567
Risk-taking	0.830	0.549
Proactiveness	0.821	0.535
Competitive Aggressivess	0.799	0.570
CA Dimensions:		
Cost leadership	0.744	0.574
Quality	0.720	0.540
Flexibility	0.758	0.574
Competitive advantage	0.740	0.562

Source: Prepared by the researcher in the light of the statistical analysis

17. Descriptive Statistics of Constructs

In this section, the researcher provides detailed descriptive statistics and analyses for each item of the model's independent constructs and the dependent construct in general and for each group. From the following table, it is clear that the averages of all variables are between 4 and 5, this means that the respondents tend to agree and strongly agree to the statements that measure these variables. The variable with highest agreement is the flexibility, while the variable with lowest agreement is the autonomy.

Table (1.2): Descriptive Statistics in general

	N	Minimum	Maximum	Mean	Std. Deviation
Autonomy	155	2.20	5.00	3.81	0.70
Innovativeness	155	3.13	5.00	4.41	0.46
Risk-taking	155	3.00	5.00	4.00	0.49
Proactiveness	155	4.00	5.00	4.46	0.40
Competitive aggressiveness	155	4.00	5.00	4.57	0.41
Cost leadership	155	3.75	5.00	4.55	0.36
Quality	155	3.80	5.00	4.51	0.38
Flexibility	155	4.25	5.00	4.86	0.21
Competitive advantage	155	4.18	5.00	4.64	0.20

18. Testing Research Hypotheses:

18.1 Testing the first research hypothesis:

H1: There is a significant difference in entrepreneurial orientation between public and private Egyptian commercial banks.

The researcher conducts a T- test on the data collected by the questionnaire and results are shown in the following table:

Table (1.3) Comparison between public and private banks

	Public banks	Private banks	P-value
Autonomy	3.95	3.79	.435
Innovativeness	4.64	4.39	.060
Risk-taking	3.46	4.05	.000
Proactiveness	4.54	4.46	.481
Competitive aggressiveness	4.82	4.55	.024
Cost leadership	4.79	4.53	.014
Quality	4.37	4.52	.166
Flexibility	4.96	4.85	.071
Competitive advantage	4.71	4.64	.218

⇒ From the previous table, it is clear that:

1. The average of Autonomy in public banks is almost the same as in the private banks, as the average for the two categories are the same and also this supported by the p-value of the T-test which is greater than 5%. So there is no significant difference between the average of public and private banks regarding Autonomy.
2. The average of innovativeness in public banks is almost the same as in the private banks, as the average for the two categories are the same and also this supported by the p-value of the T-test as it is greater than 5%. So there is no significant difference between the average of public and private banks regarding innovativeness.
3. The average of Risk-taking in public banks is less than in the private banks, also this supported by the p-value of the T-test as it is less than 5%. So there is a significant difference between the average of public and private banks regarding risk taking.
4. The average of Proactiveness in public banks is almost the same as in the private banks, as the average for the two categories are the same and also this supported by the p-value of the T-test as it is

greater than 5%. So there is no significant difference between the average of public and private banks regarding Proactiveness.

5. The average of competitive aggressiveness in public banks is larger than in the private banks, also this supported by the p-value of the T-test as it is less than 5%. So there is significant difference between the average of public and private banks regarding competitive aggressiveness.
6. The average of cost leadership in public banks is larger than in the private banks, also this supported by the p-value of the T-test as it is less than 5%. So, there is significant difference between the average of public and private banks regarding cost leadership.
7. The average of quality in public banks is almost the same as in the private banks, as the average for the 2 categories are the same and also this supported by the p-value of the T-test as it is greater than 5%. So there is no significant difference between the average of public and private banks regarding quality.
8. The average of flexibility in public banks is almost the same as in the private banks, as the average for the 2 categories are the same and also this supported by the p-value of the T-test as it is greater than 5%. So, there is no significant difference between the average of public and private banks regarding flexibility.
9. The average of competitive advantage in public banks is almost the same as in the private banks, as the average for the 2 categories are the same and also this supported by the p-value of the T-test as it is greater than 5%. So, there is no significant difference between the average of public and private banks regarding competitive advantages.

18.2 Testing second research hypothesis:

H2: There is a significant relationship between entrepreneurial orientation dimensions and achieving competitive advantage in the Egyptian commercial banks.

In order to test the relationship between the two variables, the researcher initially uses correlation analysis as follows:

18.2.1 Correlation analysis of the variables of the study

Correlation analysis aims to know the direction and the strength of a relation between two variables. In this research, Pearson correlation coefficient is used to measure the correlation between two numerical variables. It assesses how well the relationship between two variables can be described using a monotonic function.

Table (1.4) Correlation Analysis between the variables of the study
Correlations

		competitive advantage
Autonomy	Pearson Correlation	.381**
	Sig. (2-tailed)	.000
	N	155
Innovativeness	Pearson Correlation	.148
	Sig. (2-tailed)	.066
	N	155
Risk-taking	Pearson Correlation	.272**
	Sig. (2-tailed)	.001
	N	155
Proactiveness	Pearson Correlation	.200*
	Sig. (2-tailed)	.013
	N	155
competitive aggressiveness	Pearson Correlation	.161*
	Sig. (2-tailed)	.045
	N	155

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

From the previous table, it is found that: There is positive correlation between competitive advantage with all the dimensions of the independent variable except for innovativeness; as the p-value of the Pearson correlation coefficients for all independent variable dimensions (except for innovativeness) are less than 5% which is the significance level.

The highest relationship is between competitive advantage and Autonomy, while the least one is between competitive advantage and competitive aggressiveness, and these results are for all the population (public and private banks).

18.2.2 Regression analysis

The next step of testing the second hypothesis is regression analysis, which aims at selecting all the independent variable dimensions that are believed to have significant effect on the dependent variable to be included in the model. The multiple linear regression model is used when the dependent variable is of ratio scale; the multiple linear regression model is used to test the effect of each of the dimensions of the independent variable on the dependent variable. The estimated model provides the direct effect of each independent variable on the dependent variable. Such effect is the net effect after fixing all effects of other independent variables included in the model.

As any model, regression model has assumptions which are:

Normality of dependent variables assumption must be checked before fitting the model. The researcher used One-Sample Kolmogorov-Smirnov test, where p-value is 0.073 which is greater than 0.05 which means that competitive advantage follows normal distribution with confidence level 95%.

18.2.2.1 Regression model to test second hypothesis

1. The researcher used ANOVA to test this hypothesis. The results are summarized in the following table. previous dimensions of

the independent variable in the model. These significant variables are illustrated below:

Table (1.5): Results of ANOVA test

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.394	4	.598	25.871	.000 ^e
Residual	3.470	150	.023		
Total	5.863	154			

According to the listed results, the p-value equals 0.000 which is significant (less than 0.05). This means that the proposed model predicts the dependent variable better than the intercept-only model (model with no predictor). That is there is at least one significant variable that has effect on competitive advantage from the 5 dimensions.

18.2.2.2 Coefficients Summary

The following tables summarize the included and excluded variables listed with significance and coefficients. The significance of the included variables is less than 0.05 which indicates that 4 variables out of 5 have significant influence on the competitive advantage, this with confident 95%. The significance of the excluded variables is greater than 0.05 which indicates that 1 variable out of 5 has no influence on the competitive advantage, with confident 95%.

Included Variables:

- *Autonomy* has significant positive impact on competitive advantages, this with confident 95%. This is because p value is 0.000 (less than 0.05) and β coefficient equals 0.298.
- *Competitive aggressiveness* has significant positive impact on competitive advantages, this with confident 95%. This is because p value is 0.000 (less than 0.05) and β coefficient equals 0.117.

- *Innovativeness* has significant positive impact on competitive advantages, this with confident 95%. This is because p value is 0.000 (less than 0.05) and β coefficient equals 0.509.
- *Proactiveness* has significant positive impact on competitive advantages, this with confident 95%. This is because p value is 0.000 (less than 0.05) and β coefficient equals 0.336.
- *VIF* for all variables are less than 10 which support that there is no multi-collinearity problem.

Table (1.6): The Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.721	.167		22.216	.000		
Autonomy	.298	.031	1.073	9.589	.000	.315	3.174
competitive aggressiveness	.117	.036	.247	3.278	.001	.695	1.440
Innovativeness	.509	.068	1.212	7.471	.000	.150	6.676
Proactiveness	.336	.060	.694	5.574	.000	.255	3.925

Excluded Variables:

- *Risk-taking* has insignificant impact on the competitive advantages, this with confident 95%. This is because the p-value is 0.369 (greater than 0.05).

Table(1.7): Excluded variables

	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
Risk-taking	-.098 ^e	-.901	.369	-.074	.337	2.971	.147

18.2.2.3 Regression Model Summary

Table (1.8): Summary of the stepwise regression model

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.639 ^d	.408	.392	.152090	2.189

To make sure that the model results are reliable we must check the Linearity assumption, from the graph below it is clear that points are random, which means that linearity condition is satisfied.

18.2.2.4 Regression Model Summary

- As shown in the following Table, using a stepwise multiple regressions on the collected sample resulted in the following:
- Adjusted R²-value of 0.435 indicates the fit of the model. The proposed model could infer 43.5% of the total variance in the competitive advantages.

From the value of Durbin Watson it is clear that there is no serial autocorrelation between residuals, as the value is near to 2. No serial autocorrelation is one of the assumptions of the regression model.

19. Findings Summary

H1: There is a significant difference between entrepreneurial orientation dimensions between public and private banks.

- This hypothesis is accepted for Risk-taking, while it is rejected for the other remaining dimensions.

H2: There is a significant relationship between entrepreneurial orientation dimensions and achieving competitive advantage in public and private banks.

- **Accept that: There is a significant relationship between innovativeness and achieving competitive advantage in public and private banks.**
- **Reject that: There is a significant relationship between risk taking and achieving competitive advantage in public and private banks.**
- **Accept that: There is a significant relationship between proactiveness and achieving competitive advantage in public and private banks.**
- **Accept that: There is a significant relationship between competitive aggressiveness and achieving competitive advantage in public and private banks.**
- **Accept that: There is a significant relationship between autonomy and achieving competitive advantage in public and private banks.**

20. Recommendations for the Surveyed Banks

The research variables might be considered key strategic issues to be addressed in every bank. For businesses to be successful and constantly maintain success, they need to address those particular issues related to entrepreneurship. This move will require every banking management to review its processes and strategies with a strategic approach to address this issue in total. The action plan should be set and implemented by the dual effort of human resource managers and top managers of the surveyed banks. Their tasks and roles should be highlighted clearly and concisely.

The researcher recommends further study to shed more light on the characteristics that make some bank's innovations more popular as compared to those of its competitors. This is a necessary point to address; because the researcher observed that some of the banks' competitive advantage has been driven largely by internet banking or online services

and regardless of its competitors offering similar and maybe even cheaper services, customers favored their current banks.

Clearly the banking sector in Egypt is aware of the importance and value of entrepreneurial orientation, the results of this study are very promising. However, compared to other studies in developed countries, the application of EO dimensions could lead to much better results. Banks can utilize innovativeness to better reduce cost and improve the flexibility as well. Training on using innovation could help bridge the gap. Governmental and Central bank regulations could encourage the adoption of entrepreneurial processes and practices in the working environment. Furthermore, the top management of banks should place additional emphasis on entrepreneurial orientation as it is an important driver for realizing competitive advantage.

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