

The Impact of the Expansion in Electronic Services on the Growth of the Banking Deposits: Case Study on the Islamic Banks in the Jordan

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Abstract

The problem of the study that there is a failure in some Jordanian banks to expand significantly in the provision of electronic services and the researchers will shorten our study on the most important services offered through online banking and ATM machines and SMS service. The study found that there is significant statistical impact the expansion in electronic services (Internet bank, ATM machine and SMS) on the growth of the banking deposits in the Islamic banks in the Jordan, and the study has recommended that the Islamic banks should expand in electronic services, and the Islamic banks should expand in electronic services through the internet and increase the marketing for the internet banking to the customers.

Keywords: Electronic services, Banking deposits, Islamic banks of Jordan, Electronic channels

1. Introduction

The Banks are considered in any country is the heart of the economy, thus the progress that is happening with the banks is reflected in the economy, and the banks are considered most financial institutions that take advantage of the recent developments within the field of information and communication technology, thus banks have expanded to provide electronic banking services, which relieve the client and shorten the time, effort and cost. This was scope for competition between banks.

As a result of big competition into the banking sector, the banks have expanded such electronic services, especially the Internet bank and small message service (SMS) and the Automated Tellers Machine (ATM), where popularized the concept of 24/7 where the bank already works all the time through electronic channels, and the expansion of banks in those electronic services are a response to recent trends that relate to the desire of the client access to banking services remotely and in person, and this is possible if the bank's expansion in electronic services.

The problem of this study there is a failure in some Jordanian banks to expand significantly in the provision of electronic services and the researchers will shorten our study on the most important services offered through online banking and ATM machine and SMS service, Despite the importance of these services to the promotion of competitive advantage for banks, which leads to attracting new customers and increase the Banking deposits, thus increasing the bank's profits.

2. Objectives of the Study

The objectives of the study to answer the following questions:

- 1. What is the reality of electronic banking services in Jordan?
- 2. Are there advantages of the expansion of banks in electronic services?
- 3. What is the size of banking deposits in Islamic banks operating in Jordan?
- 4-What are the electronic banking services offered by Islamic banks operating in Jordan.
- 3. Study Framework and Hypotheses

To study the impact of the expansion of electronic services on the growth of the banking deposits the model was constructed as follows:



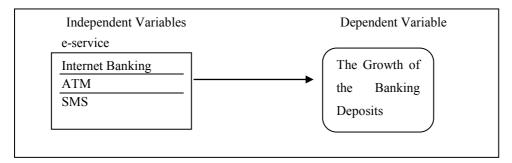


Figure 1. Research model .Developed by authors

For studying the impact of the expansion of electronic services on the growth of the banking deposits was built the following hypotheses:

H01 - There is no significant statistical impact of the expansion in electronic services of (Internet bank, ATM machine and SMS) on the growth of the banking deposits in the Islamic banks in the Jordan at $p \le 0.05$.

And it consists of the following sub-hypothesis:

- H01-1 There is no significant statistical impact of the expansions in electronic services of Internet banking on the growth of the banking deposits in the Islamic banks of the Jordan at $p \le 0.05$.
- H01-2 There is no significant statistical impact of the expansions in electronic services of ATM machine on the growth of the banking deposits in the Islamic banks of the Jordan at $p \le 0.05$.
- H01-3 There is no significant statistical impact of the expansions in electronic services of SMS on the growth of the banking deposits in the Islamic banks of the Jordan at $p \le 0.05$.

4. The Theoretical Framework

The number of banks in Jordan is a twenty-six bank, broken down as follows: 13 Jordanian commercial banks, 9 foreign commercial banks, three Jordanian Islamic banks (the Islamic International Arab bank, Jordanian Dubai Islamic bank, Jordanian Islamic bank) and foreign Islamic bank is AL-Rajhi bank (Central Bank of Jordan, 2013).

A Jordanian Central Bank Act passed in 1959, and in 1962 the Council of Ministers asked the Council of monetary to prepare for the establishment of the Central Bank, and in 1963 was the central bank's founding and was appointed governor and his board of directors, but the central bank started in 1964, where he has been resolved Monetary Council (Ramadan and Goda 2013).

Islamic banks offer traditional banking services, but in line with Islamic law where Islamic banks don't deal with debt interest and credit interest but other formats, such as speculation and Murabaha, share where Islamic Bank does not guarantee a profit for the client. The emergence of Islamic banks back to the beginning of 1960 in Egypt, and then Islamic banks spread all over the world (Wadi and Samhan 2008).

Among the most important electronic channels that offer electronic banking services include:

1. Internet bank

Internet banks are considered the most important area in the provision of electronic services and are considered the field of competition and achieve competitive advantage between Islamic banks and there are informative services and numerous banking services can be implemented through the Internet.

The Internet banking service such as (www.iiabank.com.jo):

A-Query Services:

- -Printed summaries of your accounts and balances. -The financial transactions of your accounts.
- -Exchange rates. -Cheque clearing.
- -Status of the client's cards (Visa Electron / credit cards / online shopping card).

B-Request services:

- -Request to open an account (current saving Term Deposit). -Cheque Book Request.
- -Request for Visa Electron / credit card / internet shopping card.
- -Request money transfer from the clients accounts to an account of another client at another at another bank as a foreign bank transfer.

C-Transfer services:

- -Transfer money between the accounts of the same client.
- -Transfer money from the clients accounts to an account of another client at the bank with the possibility of identifying the beneficiary account number in advance.
- 2-ATM: It is machines that are spread in many places, both adjacent to the wall or independently related to the bank's computer network and its offer of services such as cash withdrawal and deposit of cash and many other services.



ATM services such as (www.alrajhobank.com.jo):

Cash Withdrawing and Cash Deposits.

Change Password of ATM, and Change your PIN ATM card.

Inquire their account balance and card.

Table 1. The numbers of ATM in Islamic banks

The Ratio to total	No. of ATM	Rank	Bank
9.53%	123	1	Jordan Islamic bank
3.18%	41	2	Islamic International Arab Bank
1.32%	17	3	Jordan Dubai Islamic bank
1.24%	16	4	Al Rajahi bank
15.26%	197		Total

(The Association of Banks in Jordan in 2012)

3-SMS service: it is small messages that arrive at the customer in many cases, such as cash withdrawal and deposit in the account or the collection of a check and many of the movements on the customer's account and also with respect to currency exchange rates or interest rates. (Al-Shammari and Abdullat 2008).

SMS Services such as (www.jordanislamicbank.com):

Messages will reach in the following cases

- Cash Withdrawing From ATM
- Cash Deposits from branches ,and other services.

There is growth in deposits of the banks in Jordan, where it stood in 2014 amounted to 30261 million dinars, and this is reflected in the credit facilities granted by banks ,thus increased profits, and the following Table shows the growth in the deposits at banks in Jordan and the size of the credit facilities granted by the Jordanian banks.

Table 2. The growth in the deposits at banks in Jordan and the size of the credit facilities granted by the Jordanian banks.

Banking deposits(m)	Credit facilities	Year
11564.100	6189.200	2004
13119.300	7744.300	2005
14591.900	9761.900	2006
15988.100	11295.600	2007
18102.600	13044.300	2008
20298.400	13317.200	2009
22504.800	14451.400	2010
24377.900	15851.200	2011
24969.700	17829.800	2012
27593.200	18939.700	2013
30261.000	19274.500	2014

(Central Bank of Jordan ,2014)

According to the Islamic banks, the size of deposits in 2012, The table the number (3) shows, where the size of deposits in Islamic banks are 13.93% of the total deposits of banks operating in Jordan.

Table 3. The size of deposits in Islamic banks

The ratio to total assets of banks	Assets	Rank	Bank
8.77%	3275.60	1	Jordan Islamic bank
3.14%	1174.18	2	Islamic International Arab Bank
1.27%	475.22	3	Jordan Dubai Islamic bank
0.74%	274.97	4	Al Rajahi bank
13.93%	5199.97	TOTA	L

(Association of Banks in Jordan, 2012)

5 - Literature Review

There are many studies that addressed the impact of the expansion of electronic services in the growth of the banking deposits, and the most important of these studies are:

5.1 Study (Akhtar et al.2011): entitled " Efficiency and Performance of Islamic Banking: the case of Pakistan". This study aimed to analysis the performance of the Islamic banks compared with traditional banks, the study concluded to the absence of any differences between Islamic banks and traditional concerning the profitability, but there are clear differences with regard to liquidity, the study recommended that the need for attention Islamic



banks as well as the risk of liquidity by the central bank to further liberalization of the market of fostering competition between banks.

- 5.2 Study (Al-Hajj 2012) entitled: "electronic banking system via SMS and its role in achieving customer loyalty in the Jordanian commercial banks". The study aimed to identify the customers' evaluation of the factors of confidence, perceived value, satisfaction, the quality of the accompanying services for the services provided in the Jordanian commercial banks through short message service, and its impact in determining customer loyalty ,the study found that building the loyalty among customers it depend on the electronic services, the study recommended the importance of focusing on electronic banking services to increase customer loyalty.
- 5.3 Study (Ma, Ma and Zaho 2011): entitled "Evidence an E-banking quality in the china bank sector". The study aimed to determine how customers' judge of the quality of the electronic banking services, especially online banking, the study concluded that online banking is one of the means to reduce costs and increase the bank's market share, the study recommended that there is a need to cares the electronic services by bank managers.
- 5.4 Study (Abo otooq 2009): Factors affecting the growth of banking deposits in Jordan during the period (1998-2007). The study aimed to identify the factors influencing the growth of banking deposits in Jordan through the study of data the Jordanian commercial banks poll data and the opinions of specialists. The study following the descriptive analytical method, the study found the presence of the impact of inflation and income, interest rates and the reputation of the bank and the banking and awareness site on the growth of banking deposits.
- 5.5 Mohamed and Kotb (2011), interest rates and their impact on changing the size of the study on the deposits of Bank of Iraq. The study aimed to measure the impact of interest rates on deposits activate the movement of savings and deposits in the factors affecting the demand for money function, and the most important findings of the study are that the interest rate has a significant impact on attracting deposits.
- 5.6 Kasri (2010):The Determinants of Islamic banking growth in Indonesia. The study aimed to determine the factors that affect the growth of deposits and speculation in the Indonesian Islamic banks have been using the analytical method, the study found a relationship between the interest rate and the rate of return and deposit growth and increase the return on deposits contributes to the growth of the banking industry.

6. Methodology of the study:

For the purposes of testing hypotheses of the study and to answer the questions of study, the study relied descriptive and analytic method, as well as field study, With regard to side the descriptive, the study gave an accurate picture of The impact of the expansion of electronic services in the growth of the banking deposits, and through previous studies, as for the side of the field, the study relied on a questionnaire designed in order to collect the necessary data to test hypotheses.

6.1. The population of study (Scope of the study):

The population of study represents the Islamic banks in the Jordan, which offers various banking services to the customers, where the study distributed a questionnaire to obtain information about the study, and the sample of the study is the upper and middle level of employees in the four Islamic banks been distributing the following:

Table 4. Distributed a questionnaire

No. of obtained questionnaire	No. of questionnaire	Name of bank
100	110	Jordan Islamic bank
60	62	Islamic International Arab Bank
22	22	Jordan Dubai Islamic bank
6	6	AlRajahi bank
188	200	Total

The study, designed a questionnaire to solicit the views of an employee of Islamic banks about the study through Likert scale, the study distributed (200) questionnaire has been recovered (188), and the percentage is 94%.

A tool in the study (a questionnaire) has been shown to a group of arbitrators (6 experts), to ensure the veracity of content resolution and good drafting, and representation of the subject accurately, the reliability coefficient of the questionnaire according to the coefficient (Cronbach alpha) is (85%) through the statistical analysis of the study's sample.



6. 2 The Results of Hypothesis Testing

6.2.1 Descriptive Statistics:

This section contains the results of the study aimed to know The impact of the expansion of electronic services in the growth of the banking deposits, it also includes a description of the personality variables for members of the study sample, and the study used the program of statistical analysis (SPSS), to extract the averages, arithmetic, and standard deviations of the paragraphs of the questionnaire, The following is a presentation of the demographic variables according to Table No. (5).

Table 5. Distribution of study sample according to demographic variables:

Variable	Frequency	Percentage %
1- gender		
Male	136	72%
Female	52	28%
2- job site		
Manager department	10	%5
Assistant manager of the Department	8	4%
Manager branch	120	64%
Head department	50	27%
3-Acadimic Qualifications		
Graduates (Ph.D. Or Master)	35	19%
Bachelor's	123	66%
Diploma or less	30	15%
4-Years of experience		
5 years or less	10	5%
More than 5to10 years	13	7%
More than 10to15 years	145	77%
More than 15 years	20	11%

6.3. Results of testing the hypotheses:

Descriptive Statistics:

Table 6. The results of answers to the questions of the hypothesis

No.	Paragraph	Arithmetic	Standard
		Averages	Deviations
1-	Distribution of ATM contributes to increasing the of banking deposits	3.97	.98
2-	The ATM helps the customer to reduce the time and effort.	3.85	1.03
3-	ATM device provides many diverse services to customers outside the times	3.96	.99
	constantly.		
4-	Withdrawing cash and deposit cash service cash provided by ATM is one of	3.23	1.01
	the services that distinguish this channel, attract many customers		
5-	The ATM provides informational services such as inquiry on the balances.	3.56	.95
	Total	3.714	

the researchers note from the previous table no. (6), which includes paragraphs that test the first hypothesis that the Arithmetic Averages ranged between 3.23-3.97, and the highest average is paragraph No. 1, which states (Distribution of ATM contributes to increasing the of banking deposits) And was the lowest average is for the paragraph No. 4, which states (Withdrawing cash and deposit cash service cash provided by ATM is one of the services that distinguish this channel, attract many customers). And in general, all averages were higher than Class 3, and that the overall average of the paragraph is 3.714.



Table 7. The results of answers to the questions of the hypothesis

Number	Paragraph	Arithmetic	Standard
		Averages	Deviations
	The online banking is one of the more channels for competition	3.91	1.1
6-	between banks, thus increasing the deposits		
7-	The financial services through the Internet have helped in	3.733	2.1
	increase the customer and the competition between banks		
8-	The existence of the security and safety has led to increased	3.78	.99
	confidence in the financial services via the Internet.		
9-	The Customers can get a variety of services online through from	3.20	.98
	anywhere		
10-	The Diversity in the financial and informative services via the	3.10	.78
	online contributes to increasing customer satisfaction.		
11-	The Bank provide small messaging service free contributes to	3.31	.69
	the increase in deposits in the Bank		
Total		3.51	

The researchers note from the previous table no. (7), which includes paragraphs that test the first hypothesis that the Arithmetic Averages ranged between 3.91-3.20, and the highest average is paragraph No. 6, which states (The online banking is one of the more channels for competition between banks, thus increasing the deposits). And in general, all averages were higher than Class 3, and that the overall average of the paragraph is 3.20.

Table 8. The results of answers to the questions of the hypothesis

No.	•	Arithmetic	Standard
	Paragraph	Averages	Deviations
12-	The SMS contributes to customers regarding account movements in	3.10	.89
	increasing the customer satisfaction.		
13-	The sent SMS to the customers regarding the services of the bank is	3.32	1.1
	a competitive advantage to the bank		
14-	SMS contributes about currencies and interest rates in achieving	3.33	.67
	competitive advantage for the bank thus increasing the deposits.		
15-	The SMS contributes to increasing the communication with	3.45	.83
	customers		
16-	The changes of account contribute to increasing customer	3.56	.67
	satisfaction.		
Total		3.352	

The researchers note from the previous table no. (8), which includes paragraphs that test the first hypothesis that the Arithmetic Averages ranged between 3.56-3.10, and the highest average is paragraph No. 16, which states (The changes of account contribute to increasing customer satisfaction.) . And in general, all averages were higher than Class 3, and that the overall average of the paragraph is 3.10.

Table 9. The results of answers to the questions of the hypothesis

Number		Arithmetic	Standard
	Paragraph	Averages	Deviations
17-	The Bank seeks to diversify its electronic services to increase the size of its deposits.	3.20	.99
18-	Increasing the bank deposit increases the bank's profit.	3.10	.78
19-	Increasing of the banking deposits leads to increase the bank's ability to finance.	3.09	.56
20-	Increasing the banking deposits are evidence of customer satisfaction.	3.50	.49
21-	Increasing of banking deposits linked to the ability of the bank to diversify and innovation in electronic services, especially online.	3.29	.98
Total		3.236	

The researchers note from the previous table no. (9), which includes paragraphs that test the first hypothesis that the Arithmetic Averages ranged between 3.50-3.09, and the highest average is paragraph No. 20, which states (Increasing the banking deposits are evidence of customer satisfaction). And in general, all averages were higher than Class 3, and that the overall average of the paragraph is 3.236.

6.1.3 Test of the first hypotheses

In this section of the study, the researchers present analysis the results of study hypotheses. As mentioned



before, for testing Ho1 the researchers also use a sample of an employee of the Islamic banks, the following subsections provide analysis of results of hypotheses testing at the total sample level.

Table 10. To test the first hypothesis have been used multiple linear regression tests and the result as

Dependent Variable	Independent	Regression Coefficient	Value of T	Sig.
	Variables	В	calculated	
The growth of the banking	Internet Bank	0.171	3.01	0.003
deposits				
	ATM	0.101	1.45	0.001
	SMS	0.089	1.56	0.002
R=0.87	R2 = 0.76	F=50.15	Sig.=0.000	

From the table no. (10) there is the impact of independent variables on the dependent variable and this refers to the good relation between the expansion in electronic services and The growth of the bank deposits, the value of Sig. less than 0.005 and The value of the Pearson correlation (R) =0.87, And this refers to the rejection of the null hypothesis and accepts the alternative hypothesis.

H01 - There is no significant statistical impact of the expansion in electronic services of (Internet bank, ATM machine and SMS)in the growth of the banking deposits in the Islamic banks in the Jordan at $p \le 0.05$.

Table 11. To test the sub-hypothesis no. (1) Used simple linear regression test and the result as

Independent Variable	Dependent	Regression Coefficient	Value of T	Sig.
	Variable	В	calculated	
The growth of the banking deposits	Internet Bank	0.123	2.90	0.004
R=0.76	R2=0.601	F=46.1	Sig.=0.004	

From the table no. (11) there is the impact of the independent variable on the dependent variable and this refers to the good relation between the expansion in internet bank and the growth of the banking deposits, the value of Sig. less than 0.05 and The value of the Pearson correlation (R) = 0.78, And this refers to the rejection of the null hypothesis and accepts the alternative hypothesis.

H01-1 - There is no significant statistical impact of the expansions in electronic services of Internet banking in the growth of the banking deposits in the Islamic banks in the Jordan at $p \le 0.05$.

Table .12 Tests the sub-hypothesis No (2) used simple linear regression test and the result as:

Independent Variable	Dependent	Regression	Value of T	Sig.
	Variable	Coefficient B	calculated	
The growth of the banking deposits	ATM	0.126	3.90	0.003
R=0.81	R2=0.656	F=46.1	Sig.=0.003	

From the table no. (12) There is the impact of the independent variable on the dependent variable and this refers to the good relation between the expansion in ATM and The growth of the banking deposits, the value of Sig. less than 0.05 and The value of the Pearson correlation (R) =0.81, and this refers to the rejection of the null hypothesis and accepts the alternative hypothesis.

H01-2 - There is no significant statistical impact of the expansions in electronic services of an ATM machine in the growth of the banking deposits in the Islamic banks in the Jordan at $p \le 0.05$.

Table 13. Test the sub-hypothesis No (3) used simple linear regression test and the result as:

Independent Variable	Dependent	Regression Coefficient	Value of T	Sig.
	Variable	В	calculated	
The growth of the banking	SMS	0.173	2.80	.002
deposits				
R=0.79 R2=0.624	F=46.1	Sig.=0.002		

From the table no. (13) There is the impact of the independent variable on the dependent variable and this refers to the good relation between the expansion in SMS and The growth of the banking deposits, the value of Sig. less than 0.05 and The value of the Pearson correlation (R) = 0.79, And this refers to the rejection of the null hypothesis and accepts the alternative hypothesis.

H01-3 - There is no significant statistical impact of the expansions in electronic services of SMS in the growth of the banking deposits in the Islamic banks in the Jordan at $p \le 0.05$.

7. Summary and Concluding

This study attempts to investigate the impact of the expansion of electronic services in the growth of the banking deposits, and the results (findings):

1- There is a significant statistical impact on the expansion of electronic services of (Internet bank, ATM machine and SMS)in the growth of the banking deposits in the Islamic banks in the Jordan.



- 2-The study rejected of the null hypotheses and accepted the alternative hypotheses for the main hypotheses.
- 3-The study rejected of the null hypothesis and accepted the alternative hypothesis for the three sub-hypothesis.
- 4- There is a statistical relationship between expansion in electronic services of (Internet bank, ATM machine and SMS) and the growth of the banking deposits in the Islamic banks in the Jordan.

The study has recommended the following:

- 1 The Islamic banks should expand in electronic services to increase the deposits.
- 2- The Islamic banks should expand in electronic services through the Internet and increase the marketing for the Internet banking to the customers.
- 3-The Central Bank should encourage the Islamic banks to expand electronic services.

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