

INVESTIGATING THE EFFECT OF ELECTRONIC BANKING ON FINANCIAL RESOURCES OF MELLI BANK BRANCHES ACROSS URMIA

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ABSTRACT

The present study aims to investigate the effect of electronic banking on banks financial resources among Melli Bank branches of Urmia. In so doing, electronic banking is defined according to Dr. Kahzadi's point of view and is categorized by three aspects i.e. transaction, communications and informing. Two questionnaires are at work in this study including electronic banking and financial resources questionnaires categorized by 30 and 20 items, respectively. Having determined the reliability and validity of the questionnaires, they were distributed among 214 employers working at Melli Bank branches of Urmia. In order to make the analysis on the obtained data, descriptive and inferential statistics methods (Pearson and regression tests) were employed.

KEYWORDS: banks financial resources, electronic banking, equipping banking resources, transaction

INTRODUCTION

Banks and financial institutes used to attract the financial resources through doing banking operations. Currently, banks make transactions like other organizations. The development of technology and industrialization has led to massive changes in attraction of financial resources so that banking automation networks and internet banking have turned out to be the important ways of equipping financial resources for banks and financial institutes. Nowadays, banks provide different electronic financial services to increase the attraction of financial resources, to increase liquidity power, to develop their service quality and to compete in financial markets. Dominating effective indexes on equipping financial resources has gone public in recent years (Yazdani Dehnavi, 2008).

Equipping financial resources was initiated by the time humankind stepped in social life and began to make transactions. So, banks collected the additional deposits which were available for people and played the role of intervention through determining loans for indigents. Financial institutes and banks require fundamental changes in their produces and services for equipping their financial resources and they fail to equip the resources through focusing on simple and traditional service providing. Considering novel banking, banks provide non-financial services to their clients and offering novel services such as investment banking, doing insurance-related affairs and real estate has led to new resources for banks. In other words, a large portion of resources is obtained through non-banking activities in novel banking (Zaribaf, 2003).

Review of literature

Electronic banking:

Electronic banking is described by several levels each of which can be defined differently. What is visible in each level is using computer-based software and hardware. The more one progresses to higher levels, manual operations are lowered, computer systems get focused, and time and place limitations are lessened and banking information security increases (Alaghe band, 2006). Electronic bank is the institute which lacks any physical branch and does not require any paper-based affairs. In addition, the center is not limited to specific geographical areas and provides 24 hours services. In fact, it is a type of bank which makes use of electronic environment to provide the services for clients. All banking operations such as cash flow or paying, signature authentication, balances checking and other similar operations are done electronically. The most important type of electronic banking is that of internet-based which are assumed integrated (Shahrestani, 2008).

Transaction: is defined as all operations which are done by users though the reception system as well as subordinate systems and the relevant characteristics are as follows:

Rate: the rate of doing operations and transactions

Variety of operations: variety in methods of doing banking operations and diversity of profitable services.

Accuracy: the accuracy in doing the operations and transactions, the correct amount and bank account number.
 Ability to follow: the ability to follow the documents and banking operations
 Clarity: clarity and ability to understand on the part of the client
 Security: security of doing banking operations and transactions
 Client cooperation: client cooperation in doing banking operations
 Cost of use: costs of doing operations and transactions for client (Rasol, F. 2011).

Equipping resources in bank

There are several factors in banks that contribute to the trend of equipping cash-based resources. Today, banks are not similar to each other in terms of the conditions and situations and it is possible that the affective factors are different for each bank branch (Maghoiinejad, 2006). Information and communication technology, skills, employed human resource in banks, diversity and quality of bank services, client satisfaction of employers, internal optimum environment and the place of bank branch establishment are among the tools to be used for attracting financial resources in an optimum way. Nowadays, banks require fundamental changes and dynamics to equip their financial resources and it is not possible to equip the resources through making use of traditional simple services. In novel banking, a large portion of resources are obtained through non-banking activities in addition to attracting delegated resources which are described below:

Attracting financial resources through establishing secondary branches in foreign countries

Providing non-banking activities such as brokerage, insurance, retired center, capital management, building-related affairs (Subhash and Abhiman Das, 2009).

The place of resource equipment from banking management point of view

As one of the important financial mediator centers, banks play a great role in establishing the relationship between owners of additional financial resources and indigent groups for developing and leading their economic activities. In fact, banks collect the additional resources and then distribute them to different resources. The main section to provide the income for banks is the way of consuming the resources and the paid facilities. In order to obtain such an income, one needs the availability and possessing appropriate financial resources. Since the size of resources in economic financial market to achieve higher levels of this share is determined, a competitive-like context has been the resulting case (Mishkin and Schmidt, 2002).

Bank financial resources:

The fact that is suggested not to be overlooked by banks and financial institutes is that financial resources either as banking or non-bank activities are not easily accessed. Banks and financial resources require institutionalizing and fundamental reforming in their frameworks in order to do non-banking affairs. Currently, the dominance contributive factors to equip financial resources are of great importance due to the existence of competitive atmosphere among banks (Yazdani Dehnavi, 2008, 66). Attracting financial resources is taken into account as important goal and leading solution for banks and credit financial institutes. This is regarded as the key to evaluate the level of success on the part of the banks (Yazdani Dehnavi, 2005).

International studies

A number of professors working at Dubai University conducted a research; the focus of their study was to investigate the internet banking through making comparison of Jordan and USA banking systems and highlighted the differences between the two banks. The study is a good indicator of how the banking systems differed in developing and developed countries. It was reported in this study that the difference in the systems had to do with the quality of service providing involved in their websites. American banks' websites provide the conditions of investment, purchase of stocks, financial statement and balances payment in addition to banking services in their websites while Jordan banks fail to develop such operations (Evans et al., 2004).

Another study was carried out by a number of professors in Malaysia University. Development of communication and telecommunication technologies has been defined as the apex of changes in Malaysia bank center. This has led to the change in use of novel banking services such as ATM, telephone bank and domestic banking. Such changes have been appeared due to attracting the satisfaction of banks' clients. Among the aforesaid services, the most and the least uses have been ATM and telephone bank, respectively. According to the results this study, internet banking has not been established in Malaysia however, it is possible to say that the government tries to offer solutions in this regard (Krishnan Grew *et al.*, 2004).

Local studies. Razani (2003) conducted a research entitled "investigating and introducing new methods of attraction in financial resources among Tejarat Bank branches in Lorestan". The focus was to examine the affective factors on attracting financial resources in Tejarat Bank of Lorestan such as providing easy-accessed facilities, optimum physical environment, reconsidering the method to providing , giving value to client, new principles and acts and attracting long-term resources. Also, it was tried in this study to explore the level of competition among banking groups, the trend of financial variables in the years 1995-2001 and the performance of above-mentioned banks compared to other banking groups (Razani, 2003).

The role of providing banking services in attracting client and improving the efficiency of banking system was investigated by Nazemi, Mortazavi and Rahati (2005). This was explored in relation to cost and time of employers in Mashhad Sepah Bank branches. Both clients and managers were considered as the statistical population and the sample size were chosen as 416 and 39, respectively. Questionnaire was the main instrument to collect the required data. The validity and reliability of the questionnaire were estimated as 84% and 92% respectively. The findings revealed that new methods of providing banking services increased the level of client satisfaction in Sepah Bank branches of Mashhad, however, these services failed to increase the efficiency (Nazemi, Mortazavi and Rahati, 2005).

Khezra (2006) indicated in the study that information and communication, skills of employed human resources, diversity and quality of banking services client satisfaction and optimum condition of internal context and establishing place were the important instruments to attract optimum financial resources (Khezra, 2006).

Study design

The statistical population comprises of 485 employers working at Melli Bank branches across Urmia among which 214 were determined as the sample size using Cochran formula. It is worth noting that 214 questionnaires were distributed and analyzed. The questionnaire involves two types of questions. The first type is categorized by alphabets to determine the statistical characteristics such as gender, age, level of education and the second type is developed to test the research hypotheses. The first section included the questions of electronic banking based on Dr. Kahrzadi's point of view to be used based on Likert-five scale measure. The second section is related to financial resources questions to be developed by researcher including 20 items.

Inferential analysis of statistical data

It is observed that the sample includes 75.8% male and 24.2% female. Also, the ratio of subjects age below 25 years, 25-35, 36-45 and higher than 55 years is 2.6%, 39.6%, 44.8%, 0.11% and 0.6%, respectively. The level of education is categorized by diploma, associate degree, bachelor of art, master of art and PHD as 22.7%, 23.4%, 40.9%, 12.3% and 0%, respectively.

Testing the normality of banks financial resources:

Table 1. Statistic of normality tests for financial resources of bank

Variable	Z statistic of Kolmogorov-Smirnov	Level of significance
Financial resources of bank	1.028	0.241

As it is seen from the above table, the level of significance is greater than 0.05, so one would say that there is no reason to reject the null hypothesis at 0.05% level. That is to say that normality hypothesis of banks financial resources variable is accepted.

Testing the normality of transaction:

Table 2. Statistic of normality tests for transaction

Variable	Z statistic of Kolmogorov-Smirnov	Level of significance
transaction	1.098	0.18

As it is seen from the above table, the level of significance is greater than 0.05, so one would say that there is no reason to reject the null hypothesis at 0.05% level. That is to say that normality hypothesis of transaction variable is accepted.

Table 3. Statistic relevant to main hypothesis

Variable	Financial resources of bank	Test statistic
transaction	0.199	Spearman coefficient
	0.013	Level of significance

Electronic banking has an effect on financial resources of banks. As it is seen in the above table, the value of statistic of Spearman coefficient is 0.199 and level of significance is 0.013 and the null hypothesis is rejected at 0.05%. So, one would say that electronic banking has an effect on financial resources of bank.

Table 4. Variance analysis of main hypothesis relevant to regression model of bank financial resource variable and electronic banking

Standard error	Coefficient of balanced identification		R ² identification coefficient	R	
0.517	0.039		0.045	0.213	
Level of significance	F	Mean of square	Total square	Degree of freedom	Changes resources regression
0.008	7.147	1.908	1.908	1	residual
Result of the test: rejecting null hypothesis	0.267		40.302	151	residual
	-----		42.209	152	total

As it is seen from the above table in which the level of significance is 0.008, one would claim that the above test is significant by 0.05 errors. Alternative hypothesis is supported and null hypothesis is rejected. Based on 0.045 R²

identification coefficient, which is the ratio of changes described by x variable to total changes, it is possible to say that 4.5% of the financial resources changes of banks is determined by changes in electronic banking.

Table 5. Parameter coefficients of first hypothesis relevant to transaction variable in electronic banking and bank financial resources

Test results	Level of significance	Calculated t	β line slope	variable
Rejecting null hypothesis	0.000	8.728	2.698	intercept
Rejecting null hypothesis	0.008	2.673	0.255	Electronic banking

So, the mathematics of the effect of electronic banking on banks financial resources is as follows:

$$Y = 2.698 + 0.255 X$$

It is possible to demonstrate that one unit of increase in electronic banking increases 0.255 unit in financial resources of Melli Bank branches across Urmia.

In order to make meticulous investigation on the effect of three factors relevant to electronic banking and financial resources of Melli bank branches across Urmia, multivariate regression equation is applied.

Table 6. Variance analysis relevant to regression model of bank financial resource variable and three factors of electronic banking

Standard error	Coefficient of balanced identification		R ² identification coefficient	R	
0.506	0.077		0.095	0.309	
Level of significance	F	Mean of square	Total square	Degree of freedom	Changes resources
0.002	5.225	1.339	4.018	3	regression
Result of the test: rejecting null hypothesis		0.256	38.191	149	residual
		----	42.209	152	total

As it is seen from the above table in which the level of significance is 0.002, one would claim that the above test is significant by 0.05 errors. Alternative hypothesis is supported and null hypothesis is rejected. Based on 0.095 R² identification coefficient, which is the ratio of changes described by x variable to total changes, it is possible to say that 9.5% of the financial resources changes of banks is determined by transaction, communications and informing.

Table 7. Parameter coefficients relevant to three variables in electronic banking and bank financial resources

Test results	Level of significance	Calculated t	β line slope	variable
Rejecting null hypothesis	0.000	5.65	2.182	intercept
Rejecting alternative hypothesis	0.15	1.447	0.14	transaction
Rejecting alternative hypothesis	0.537	-0.618	-0.06	communications
Rejecting null hypothesis	0.001	3.27	0.336	informing

So, the mathematics of multivariate regression equation of three electronic banking factors on banks financial resources is as follows:

$$Y = 2.182 + 0.336 X$$

It is possible to demonstrate that one unit of increase in electronic banking increases 0.336 unit in financial resources of Melli Bank branches across Urmia.

Transaction aspect of electronic banking has an effect on financial resources of Melli Bank branches across Urmia. To test this hypothesis, Pearson coefficient is employed.

Table 8. Statistic of first hypothesis

Variable	Financial resources of bank	Test statistic
transaction	0.17	Spearman coefficient
	0.035	Level of significance

As it is seen in the above table, the value of statistic of Pearson coefficient is 0.17 and level of significance is 0.035 and the null hypothesis is rejected at 0.05%. So, one would say that transaction has an effect on financial resources of bank. In order to test the effect of independent variable on dependent variable of this hypothesis, regression test has been employed.

Table 9. Variance analysis relevant to regression model of bank financial resource variable and three factors of electronic banking

Standard error	Coefficient of balanced identification		R ² identification coefficient	R	
0.521	F	0.023	0.029	0.17	
Level of significance		Mean of square	Total square	Degree of freedom	Changes resources
0.035	4.518	1.226	1.226	1	regression
Result of the test: rejecting null hypothesis		0.271	40.983	151	residual
		-----	42.209	152	total

As it is seen from the above table in which the level of significance is 0.035, one would claim that the above test is significant by 0.05 errors. Alternative hypothesis is supported and null hypothesis is rejected. Based on 0.029 R²

identification coefficient, which is the ratio of changes described by x variable to total changes, it is possible to say that 2.9% of the financial resources changes of banks is determined by transaction.

Table 10. Parameter coefficients of first hypothesis relevant to transaction variable in electronic banking and bank financial resources

Test results	Level of significance	Calculated t	β line slope	variable
Rejecting null hypothesis	0.000	9.852	2.898	intercept
Rejecting null hypothesis	0.15	2.215	0.191	Transaction in electronic banking

So, the mathematics of multivariate regression equation of transaction on banks financial resources is as follows:

$$Y = 2.898 + 0.191 X$$

It is possible to demonstrate that one unit of increase in transaction of electronic banking increases 0.191 unit in financial resources of Melli Bank branches across Urmia.

Suggestions

Introducing additional services for client in advertising and informing

Providing training facility for client

Evoking curiosity and sense of enthusiasm in client in order to use the services in advertising and informing

Increasing client satisfaction in adverting and informing

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