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The Impact of E-Banking Services on Financial Resources Mobilization (A Case Study of Tehran branches in Agricultural Bank of I.R. Iran)

¹ Mousa Ahmadi

² Mohammad Jalili

³ Hossein keshani

⁴ Ali Valipour

¹⁻⁴ Islamic Azad University, Iran

³ E-mail: keshani@agri-bank.com

⁴ E-mail: a-valipour@agri-bank.com

Abstract

As information technology has developed, electronic banking has become accepted as part of daily life. In particular, it has significantly affected internal banking processes.

The present study aims to survey the effect of electronic banking service quality on funds, consumers' time deposit & loan bona mobilization. This research is an applied, survey & correlational studying. After studying literature and considering models which presented about the electronic banking service quality, consumers' time deposit & loan bona, formation theoretical framework, major variables identified and the conceptual model and hypotheses were identified. Questionnaire for the measurement of research variables were used. Content validity was confirmed by experts and Cronbach's alpha coefficients were calculated 0.861. The sample included 384 customers of Agricultural Bank branches in Tehran, which selected using simple random sampling. Testing hypotheses using the Structural equation modeling (SEM) showed electronic banking (service quality, customer trust, ease of use, accountability, quality of access) affect significantly consumers' time deposit & loan bona. At the end we present herein implications and suggestions for Agricultural Bank and further research.

Keywords: electronic banking; service quality; customer trust; ease of use; accountability; quality of access; time deposit & loan bona.

Introduction

Financial resource attraction is extremely important in the activities of a bank because success in this area can be a factor for success in other areas. Financial resource attraction for banks and banking system are concerned both external factors and internal factors, so understanding these factors and level of their effectiveness are essential and important for success in this field (Aftabi et al; 2013).

Given that economic development is one of the most important factors in the development and transformation of institutions, therefore, financial institutions and financial entities can be formed to facilitate economic progress and it can be stated that existence of advanced financial institutions and markets with the use of modern methods are directly related to the degree of development of a country. So, more funds attraction and effective competition in the conditions of absorption of resources by the bank are the topics that have always been regarded by credit and

financial entities. However, immediately after the removal of the private banks, all banks were run by the government, but more or less have competed with each other to attract more funds. Today, except the competition between public and private banking groups, the creation of new private banks, new credit and financial institutions and as well as expanding the scope of activities are added to reasons and therefore is competing in the financial resources of country's banking system (Razani, 2003).

The Bank abides certain principles in attracting financial resources it needs to finance investment projects and to achieve its own strategic goals:

- To use all available means of attracting financial resources (including bilateral and multilateral bank loans, issuing debt securities denominated in different currencies including national currencies of its Member states) necessary to ensure the Bank's successful operation and to maintain competitiveness of its products;

- To reduce the Bank's cost of capital by diversifying sources and terms of financing in combination with derivatives and structured instruments currency exchange hedging and interest risk;

- To optimize existing borrowings;

- To develop the Bank's investment projects, market co-financing and to enhance the Bank's role as the organizer of project financing by combining sources of financing and financial instruments to ensure Bank's clients are offered the most attractive terms whilst minimizing their exposure to risk.

The key element in monetary and banking system is the manner of financial resource mobilization and its allocation and distribution among the various economic sectors and economic activities as well as routes which the amount of money available enters to the economic systems and circulates. Given to banking job in mobilizing financial resources and optimized allocation in the economy, the efficient banking system operate in the mobilization and allocation of financial resources in a competitive environment, the reduction of production costs and improvement of production and employment can be observed, otherwise economic growth, and the inefficiency of the banking system in mobilization and allocation resources leads to waste of resources and adding to the economic downturn (Ramzani, 2006).

Given the importance of electronic banking services in banks financial resources mobilization process and their customer's satisfaction, identifying factors in this context are very important.

Mobilization of resources is the main activities of financial institutions and banks that included attract money and capital of wisdom, huge and customer's extra and their maintenance as current and saving loan accounts, deposits of short- term investments, and variety of deposits of long term investments in bank financial statements (Gholizadeh et al, 2013).

Literature Review

In the current competitive market, bank customers will provide the necessary resources for banks when they receive satisfying and qualified services. One of the important factors of satisfaction, is quality of service. Today's electronic banking service as well as new tools in the world is one of the most important element.

Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a products perceived performance (or outcome) in relation to expectation, if the performance or expectations fall short, the customer is dissatisfied, if the performance matches the expectations, the customer is satisfied if the performance exceeds expectation, the customer its highly satisfied or delighted. The customers satisfaction will be obtained if the marketing performance needs the customers' expectations and they will be disappointed if the marketing performance is below the expectations or values supplied by a company to its customers is very low (inferior customer value). Customers will be satisfied if the marketing performance exceeded the expectations or provides more value than the competitors (superior customer value), if the company provides more superior value than the competitors, if means the company has a competitive excellence (Hasnelly & yusuf; 2012).

Customer satisfaction is likely to be even more important online, since it is harder to keep online customers loyal (Beheshti et al; 2012).

Customer satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment. Customer

satisfaction is an attitude change resulting from the consumption experience. An interaction orientation can improve customer satisfaction, strengthening repurchase behavior and leading customers to become a firm's trusted advocates. (Daliang & Zhang; 2011)

Bank customers in Iran are largely influenced by advertising, word of mouth and satisfaction of existing customers of the bank. They have a significant impact on the presence or absence of new customers and their loyalty.

An interaction orientation increases positive word of mouth by encouraging and enabling customers to refer the organization to new customers and new customers to the organization. Therefore, an interaction orientation is both specific and actionable, and can be adopted by firms to achieve superior performance with regard to factors such as loyalty. It is generally believed that satisfaction leads to repeat purchases and positive WOM - Word Of Mouth recommendations, which are the main indicators of loyalty (Da liang & Zhang ; 2011).

Customer satisfaction, the feeling of customers using a product or service, is one of most popular research topics in marketing and e-commerce studies, including its positive effects on customers' repurchase and 'word-of-mouth' behaviors. Recent online banking studies, including have found that customer satisfaction with previous online banking interactions have had a positive effect on both customer loyalty and positive word-of-mouth. Highly satisfied online bankers are more likely to purchase additional products and services from their bank than dis satisfied online banking customers.

Thus, identifying the antecedents of customer satisfaction with online banking is an important research subject in practice. Also, customers' attitudes and behaviors may vary according to individual characteristics such as age, gender and experience. It has been proposed that experience, in particular, influences consumer (or user) behaviors in marketing, e-commerce and information systems studies (Yoon, 2010).

Strategy of product and services with high-value-perception strategy is needed by the product or service to remain to be enthused the customer and even can grad competitor market, so it's needed to recognize existing perception of the customer and these are realizing with offering the goods or service with appropriate value. Strategy which creates high valuable product or service has to be supported by effectiveness and cost efficiency. Management has to be principled of released cost have to come up with precise target (cost effectiveness), that is create value customer which has meaning that the released cost is truly will be enjoyed by customer and the company have to eliminate all activities which do not add product value (non-value added activities) (Hasnelly&yusuf; 2012).

According to the above one of the important factor in mobilizing resources, is the bank's customer's satisfaction. Today's an appropriate service providing in banking world is providing easy access, low cost and high quality to the world of electronic banking services.

Methodology

Tehran branches of Iran agricultural bank was considered to perform this experiment. Customers of Tehran branches underlying this sampling community. This research was done on 2014. A structured questionnaire was used based on the attributes derived from previous researches of other scholars. The survey was pre-tested with 30 customers and experts for content validity before the survey was carried out. Consequently, the final survey was conducted at various bank customers of Tehran branches of Iran agricultural bank. A five-point scale was used to describe the items listed in the dimensions ranging from "quite agree" to "quite disagree" for all the questions involved in the study. 384 questionnaires were distributed and all 384 were collected, giving a response rate of 100 %. 65.6 % of the respondents were male and 34.4 % were females. 43.8 % of them were resourceful & less educated; 37.5 % were bachelor and 18.8 percent were master & over (Table 1-4). We used questionnaire for collecting literacy, area under cultivation of agricultural bank electronic services and its impact on financial resource mobilization. Then we have analyzed data by SPSS to factor analysis an LISREL for Confirmatory Factor Analysis (CFA). Also we have presented models involve critical factors affecting bank financial resource mobilization using Structural Equation Model (SEM) techniques .

Results and Discussions

4-1: descriptive statistics of respondents

Table 1: Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Resourceful & less	168	43.8	43.8	43.8
Bachelor	144	37.5	37.5	81.3
Masters & over	72	18.8	18.8	100.0
Total	384	100.0	100.0	

Table 2: Employment Status

Employment Status	Frequency	Percent	Valid Percent	Cumulative Percent
Public sector employees	92	24.0	24.0	24.0
Private sector employees	96	25.0	25.0	49.0
Occupation	180	46.9	46.9	95.9
Other	16	4.2	4.2	100.0
Total	384	100.0	100.0	Total

Table 3: Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
male	252	65.6	65.6	65.6
female	132	34.4	34.3	100.0
Total	384	100.0	100.0	

Table 4: The period of using bank services

period	Frequency	Percent	Valid Percent	Cumulative Percent
less than 10 years	86	22.4	22.4	22.4
10 to 20 years	227	59.1	59.1	81.5
over 20 years	71	18.5	18.5	100.0
Total	384	100.0	100.0	

4-2: Factor analysis

The analysis were conducted through firstly, exploratory factor analysis and secondly, confirmatory factor analysis. Consequently, the sequence of analysis took the following order: firstly, exploratory factor analysis (EFA) was performed on each measurement model to assess uni dimensionality in terms of the parameter estimates, the statistical significance of the parameter estimates and overall fit. Upon inspecting the results, at this point the researcher then decided whether to retain or delete any ill-fitting item. Secondly, CFA was performed on those measurement models that were comprised of purified measures derived from the first step. Finally, all pertinent results on the measurement models were reported.

Table 5: Reliability Statistics

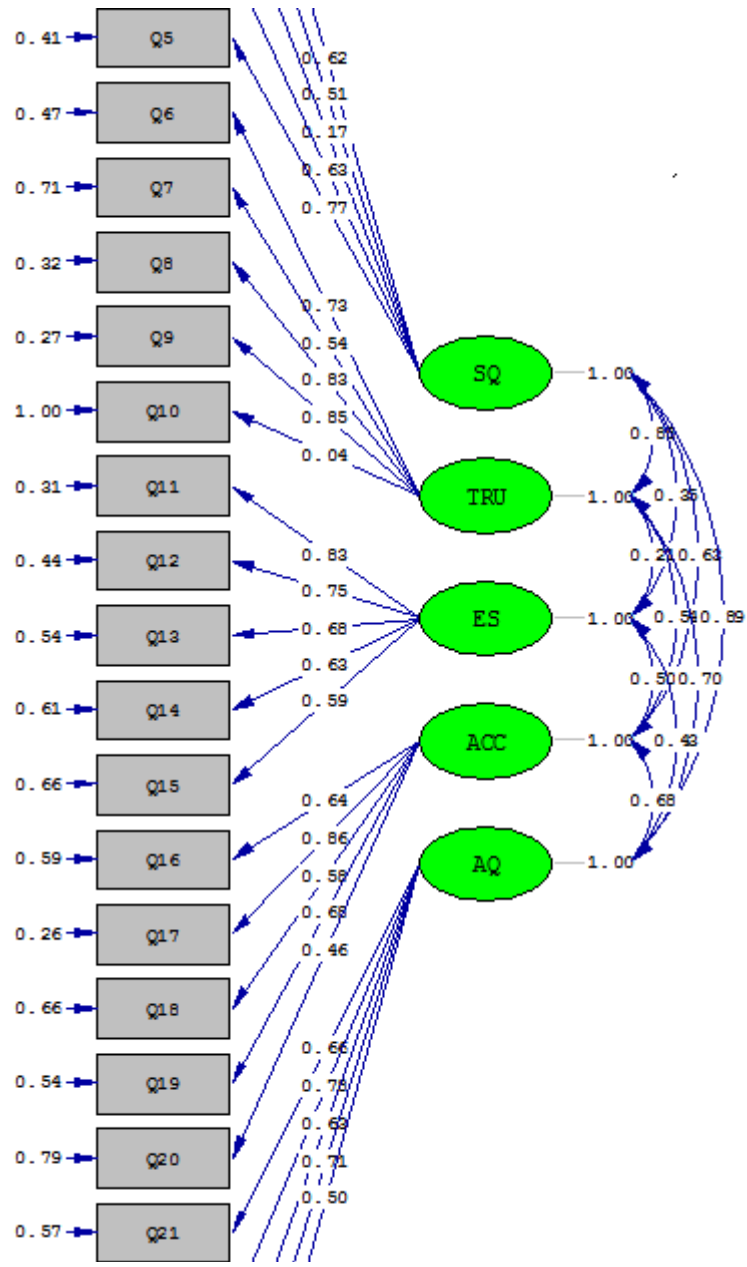
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.861	0.861	26

Table 6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.775
Bartlett's Test of Sphericity	Approx. Chi-Square	7478.189
	df	351
	Sig.	0.000

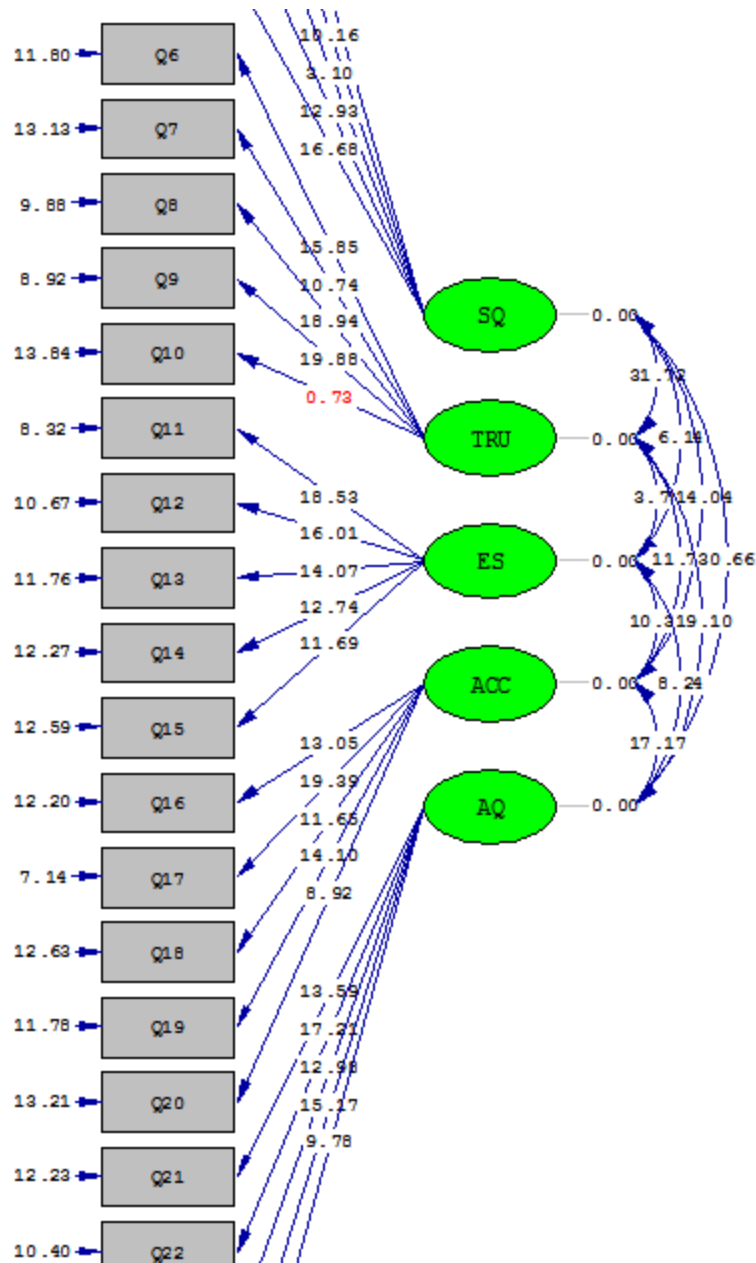
Table 7: One-sample t-test

Test Value = 3					
t	df	Sig. (2-tailed)	Mean Difference	95 % Confidence Interval of the Difference	
				Lower	Upper
-34.375	383	.000	-1.51563	-1.6023	-1.4289
3.734	379	.000	.69474	.3289	1.0606
-2.657	383	.008	-.16094	-.2800	-.0418
-16.456	383	.000	-.55104	-.6169	-.4852
17.234	383	.000	.58177	.5154	.6481
-9.710	383	.000	-.36458	-.4384	-.2908
-11.154	383	.000	-.41406	-.4871	-.3411



Chi-Square=956.72, df=265, P-value=0.00000, RMSEA=0.160

Figure 1: LISREL output on the standard model, the estimated coefficients of exogenous variables measuring



Chi-Square=956.72, df=265, P-value=0.00000, RMSEA=0.160

Figure 2. LISREL output about insignificant coefficients for the exogenous variables measuring

The results of hypotheses:

1. E-banking service quality has direct, positive and significant influence (0.60) on attracting deposits and loan customers. Thus the first hypothesis is confirmed.
2. The quality of electronic banking services has direct, positive and significant influence (0.32) on attracting term deposits of customers. Therefore, the second hypothesis is confirmed.
3. The level of consumer confidence in electronic banking has direct, positive and significant influence on attracting deposit loan customers (0.52). Therefore, the third hypothesis is confirmed .
4. The level of consumer confidence in electronic banking clients has direct, positive and significant influence on attracting term deposits (0.49). Therefore, the fourth hypothesis is confirmed.
5. Ease of use of electronic banking services has direct, positive and significant (0.62) influence on attracting loan deposit (Gharzolhasaneh – kind of Islamic deposit. Therefore, the fifth hypothesis is confirmed.

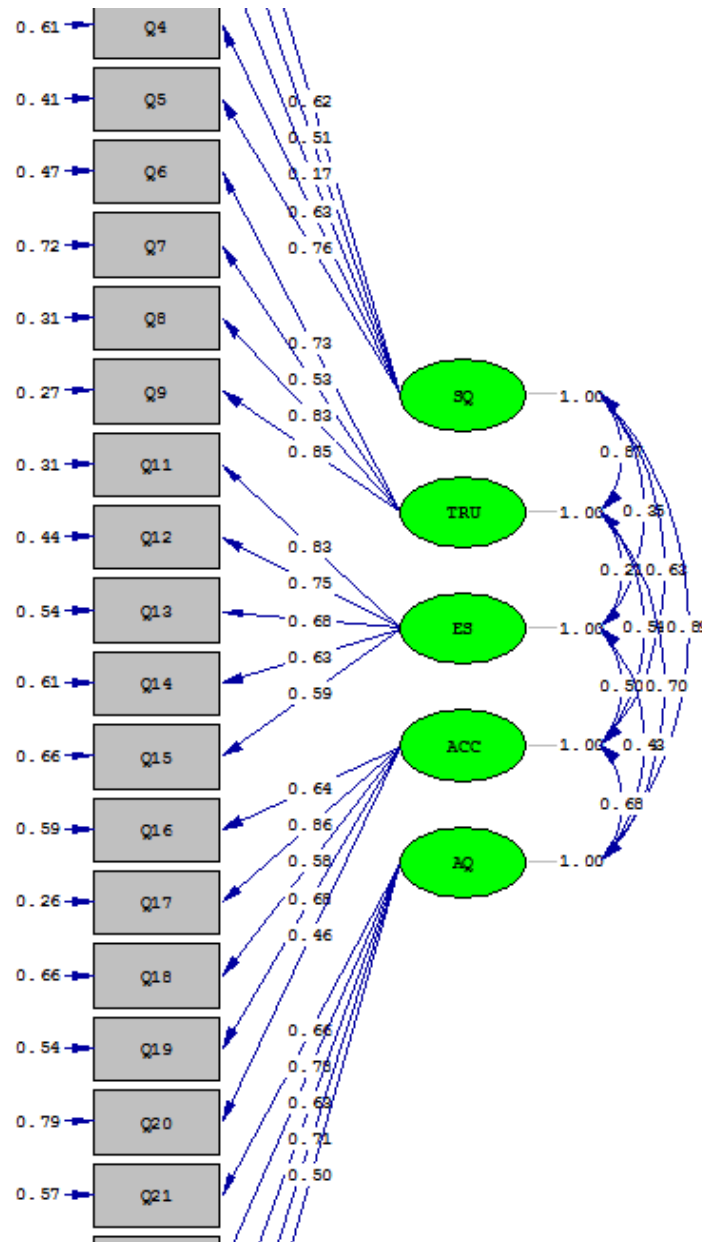
6. Ease of use of electronic banking services has direct, positive and significant influence on attracting term deposits of customers (0.54). Therefore, the sixth hypothesis is confirmed.

7. Accountability of Electronic Banking has direct, positive and significant influence on attracting loan deposit customers (0.46). Thus the seventh hypothesis is confirmed.

8. The electronic banking meet customer on attracting time deposits direct influence is positive and significant (0.31). Therefore, the eighth hypothesis is confirmed.

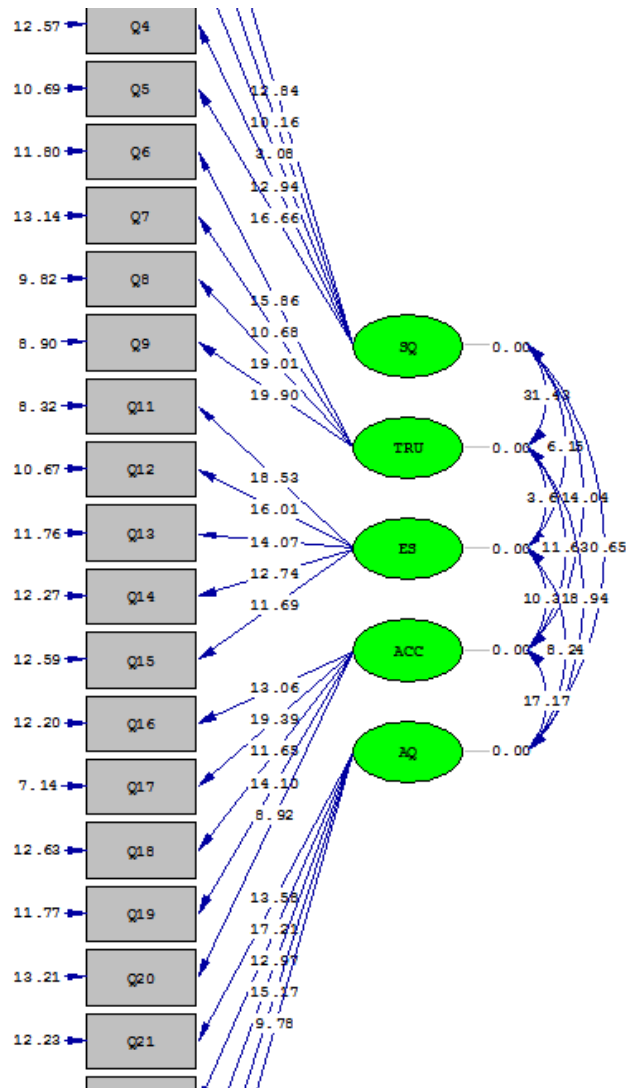
9. Quality on attracting deposit loan customers have access to electronic banking information direct influence is positive and significant (0.37). Therefore, the ninth hypothesis is confirmed.

10. Access to information quality of e-banking customers on attracting term deposits direct influence is positive and significant (0.44). Therefore, my hypothesis is confirmed.



Chi-Square=657.19, df=242, P-value=0.00000, RMSEA=0.085

Figure 3. LISREL output on the standard model, the estimated coefficients of exogenous variables measuring



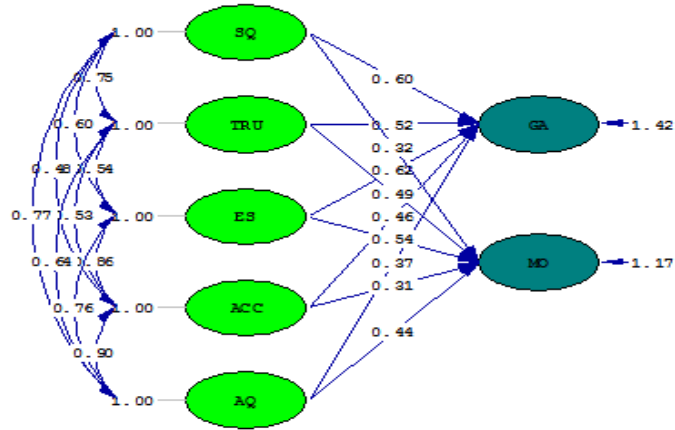
Chi-Square=657.19, df=242, P-value=0.00000, RMSEA=0.085

Figure 4. Output LISREL measurement model is significant coefficients on exogenous research variables

Table 8: Output confirmatory factor analysis research exogenous variables

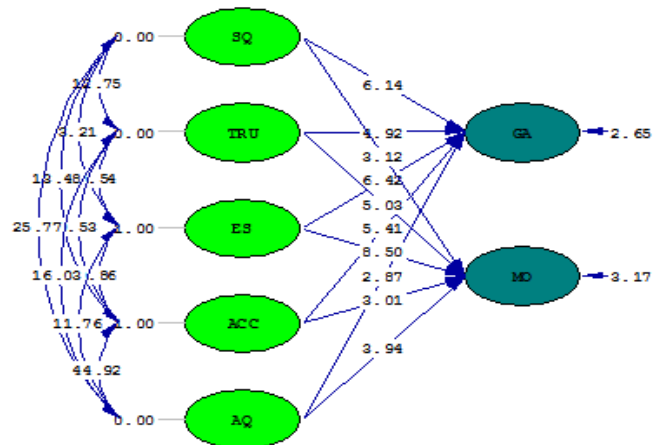
exogenous variables	Questions	t-Value	Factor impact
Service Quality	Q1	12.84	0.62
	Q2	10.16	0.51
	Q3	3.08	0.17
	Q4	12.94	0.63
	Q5	16.66	0.76
Trust	Q6	15.86	0.73
	Q7	10.68	0.53
	Q8	19.01	0.83
	Q9	19.90	0.85
	Q10	eliminated	eliminated
Ease of Use	Q11	18.53	0.83
	Q12	16.01	0.75
	Q13	14.07	0.68
	Q14	14.74	0.63
	Q15	11.69	0.59
	Q16	13.06	0.44
	Q17	19.39	0.86

Accountability	Q18	11.63	0.58
	Q19	14.10	0.68
	Q20	8.92	0.46
Access Quality	Q21	13.58	0.66
	Q22	17.22	0.78
	Q23	12.97	0.63
	Q24	15.17	0.71
	Q25	9.78	0.50



Chi-Square=1030.33, df=356, P-value=0.00000, RMSEA=0.082

Figure 5. Output LISREL estimates of structural model of research at Standard



Chi-Square=1030.33, df=356, P-value=0.00000, RMSEA=0.082

Figure 6. LISREL output in significant research on the structural model

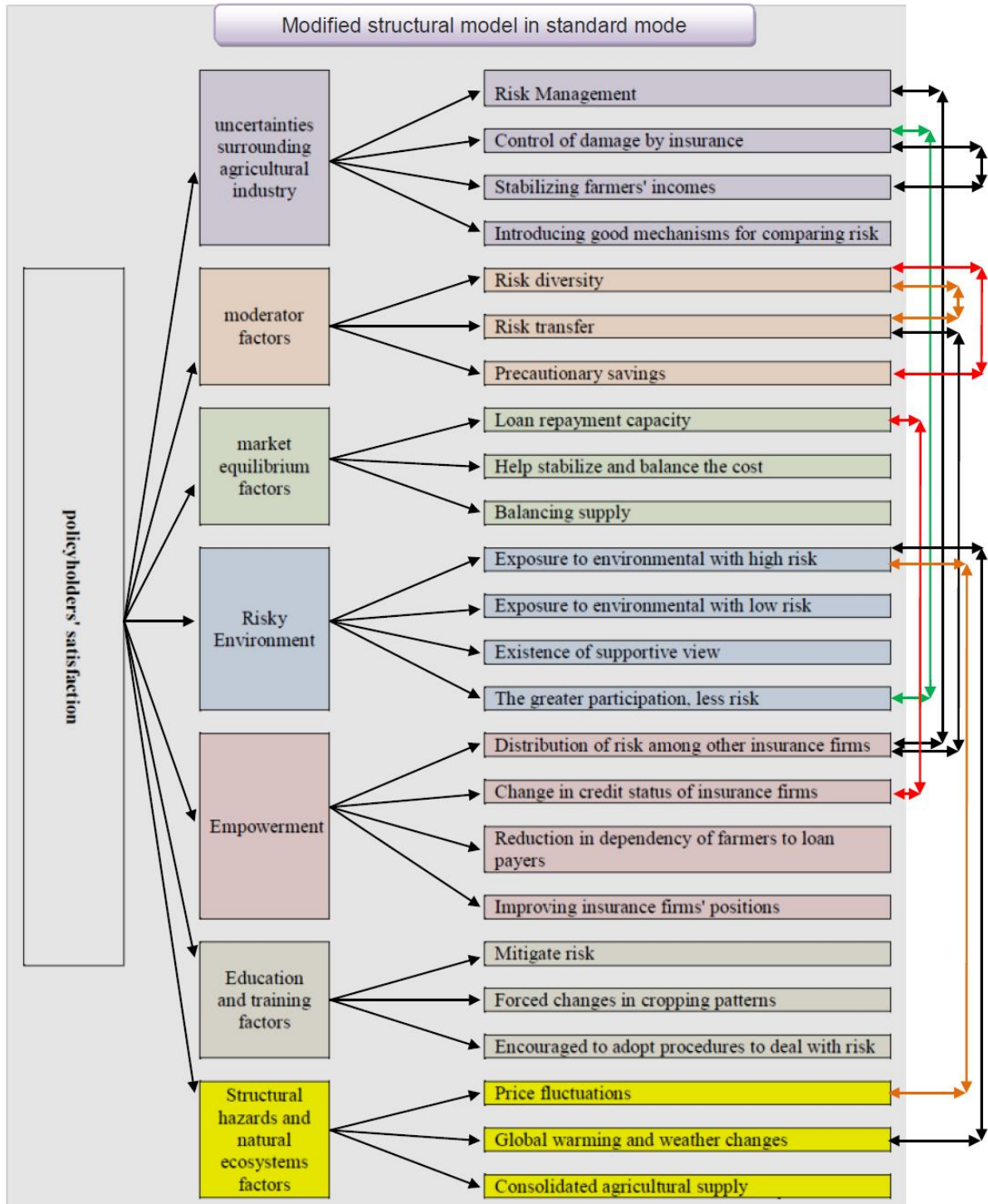


Table 9: Results of testing hypotheses based on regression analysis

Result	R ²	t-Value	Factor impact (regression coefficient)	Path		hypotheses
Confirmed	0.36	6.14	0.60	Loan deposit	Service quality	Hypotheses 1

Confirmed	0.10	3.12	0.32	Time deposit	Service quality	Hypotheses 2
Confirmed	0.27	4.92	0.52	Loan deposit	Trust	Hypotheses 3
Confirmed	0.24	5.03	0.49	Time deposit	Trust	Hypotheses 4
Confirmed	0.38	6.42	0.62	Loan deposit	Ease of use	Hypotheses 5
Confirmed	0.29	8.50	0.54	Time deposit	Ease of use	Hypotheses 6
Confirmed	0.21	5.41	0.46	Loan deposit	Accountability	Hypotheses 7
Confirmed	0.1	3.01	0.31	Time deposit	Accountability	Hypotheses 8
Confirmed	0.14	2.87	0.37	Loan deposit	Access quality	Hypotheses 9
Confirmed	0.19	3.94	0.44	Time deposit	Access quality	Hypotheses 10

Also test the hypotheses using structural equation modeling, firstly output of the software indicates that the structural model and fitted to test the hypotheses that (ratio of χ^2 with df under 3 that are so low and much appropriate value. The p- value less than 0.05 and the RMSEA = 0.082 also indicates that the structural model is fitted and appropriate). The indices of GFI, AGFI and NFI are respectively 0.89, 0.91 and 0.93, which indicates a good fitting model. In the other hand the observed data to a large extent based on the conceptual model.

Conclusion

According to the results of the factor analysis conducted can be concluded that:

With a slight change in the parameters of the variables have been found in each factor, we can modify output effect of any variable in these factors. Banks as well as policy makers can evaluate the impact of the electronic services on financial resources mobilization and the coefficient of performance by focusing on important exploratory factor.

Practical suggestions

All of formulated hypotheses in this study were confirmed and the results show the significant impact of e-banking service quality components with mobilizing financial resources in bank (Attracting deposits and term loan clients). Thus it can be argued that the Agricultural Bank to mobilize financial resources should be adequate for components of each factor, the order in which the bids will follow suit. Suggestions are offered according to the results of hypothesis testing in the target population who have been studied:

Suggestions related to the results of testing hypotheses

6-1- Suggestions relating to electronic banking service quality:

Electronic banking service quality variables, significantly has strong impact on attracting customer's deposits and term loans. The strengthening of these variables leads to the mobilization of financial resources for agricultural banks will therefore be:

1 - Strengthen and increase the accuracy and reduce the error rate of the banking system transactions.

2 - Platform and infrastructure needed to speed up the provision of banking services to be provided.

3- Increasing development of information systems, electronic banking services related to agriculture bank customers.

4- Strengthen and increase the security of electronic banking systems and provide needed platforms.

5- Development and strengthening of substrates for electronic banking services 24 hours a day without interruption.

6-2- Suggestions relating to consumer trust:

Consumer trust variables, has strong and significant effect on the mobilization of financial resources for agricultural bank. Standardized coefficients obtained are indicative of the fact, so strengthening of these variables leads to mobilize more financial resources for agricultural banks. So our suggestions are:

1- Act to all the promises made by bank during encourages customers to use electronic banking services.

2- By strengthening the infrastructures prevent disclosure of Personal Information and assurances required of customers.

3- Increase the security of electronic banking systems and increase customer trust to the safety of system.

4- Strengthen technical knowledge and expertise in this area in order to strengthen the security of electronic banking systems and thereby ensure Agricultural Bank customers.

6-3- Suggestions related to ease the use of electronic banking services:

Variable ease of use of electronic banking services also has a significant and strong effect on the mobilization of financial resources in Agricultural bank. The strengthening of these variables will lead to the mobilizing financial resources in Agricultural Bank. So our suggestions are:

1- Proper attention to the visual appearance and graphics system in order to facilitate the use of electronic banking by Agricultural Bank Customers.

2- Deployment and usage manuals and help customers to increase customer ease of use of e-banking services.

3- Explain phrases and terminology of banking and electronic banking system to strengthen its ease of use by Agricultural Bank customers.

4- Describe steps and procedures for electronic banking services through agricultural banking system in accordance with the information and knowledge of Agricultural Bank customers.

6-4- Suggestions related to Accountability of e-banking:

Electronic banking accountability variable also has a significant and strong effect on the mobilization of financial resources in agricultural bank. The strengthening of these variables will lead to the mobilizing financial resources in Agricultural Bank. So our suggestions are:

1- Assurance system for e-banking services from Agricultural Bank by increasing the system security and inclusion in the contract with the customer that lead to guarantee the services.

2- Support, guidance and assistance to customers in the event of difficulty in using the system of e-banking services.

3- Guaranteeing the offset deficits occurred in the use of electronic banking services for customers.

4- Strengthening infrastructure support for service access opportunities (responding to customer problems) by telephone.

6-5- Suggestions related to Access quality to electronic banking services:

Access quality to electronic banking services variable also has a significant and strong effect on the mobilization of financial resources in agricultural bank. The strengthening of these variables will lead to the mobilizing financial resources in Agricultural Bank. So our suggestions are:

1- Develop and strengthen the infrastructure required to increase the applicability and use of the facilities of online banking system.

2- Strengthening the capacities and capabilities of search engines are available on the electronic banking system web Site.

3- Increase the ease of searching and accessing the needed information when using the Agricultural electronic banking system

4- Recreation or entertainment facilities and options (like Game) apart from providing electronic banking services.

5- Create the infrastructure required to allow customers to communicate with each other through chat and e-banking system of the Agricultural Bank.

6-6- Suggestions for future researches

According to studies conducted in this study, the researchers recommended to further study the following subjects:

- 1- Identify the factors affecting the quality of electronic banking services and financial resource mobilization in banking system.
- 2- Identify the factors affecting customer trust and satisfaction of e-banking services.
- 3- Design a model to increase the mobilization of funds in banks.
- 4- Comparative study in the region (middle east & north Africa) of electronic banking services quality and financial resource mobilization.
- 5- Identify barriers of improving the quality of electronic banking services in the country.
- 6- Comparison of public and private banks in terms of financial resource mobilization category.
- 7- Factors affecting the quality of e-banking services in the public and private banks.
- 8- Study and identify cultural variables influencing the preferences of customers regarding the use of electronic banking services.

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