The Impact of Adopting E-banking on Branches Operations Strategy in Developing Economies: The Case of Jordan

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Abstract— The aim of this study is to identify the impact of adopting e-banking on branches operations strategy during the period 1999 to 2008, 15 local banks in Jordan were surveyed by using 3 questionnaires, one was directed to account operations officer, another to tellers and last one to branches managers. Annual reports and banks websites were revised to identify the changes in performance indicators and e-banking adoption. The study revealed that; branches are still the main channels of conducting banking transactions, and e-banking is working in parallel with branches. This paper is the first paper reports this issue in developing economies.

Keywords- ***E-banking, Branches, Operations Strategy, Jordan***.

I. INTRODUCTION

Banks in developing economies directed toward adopting e-banking channels during the last decade, banks in Jordan directed toward adopting a lot of e-banking channels, about 18 out of 23 banks adopted internet banking, 8 banks adopted telephone banking, 15 adopted mobile banking, and 6 banks adopted ATMs.

This adoption left questions: what is the impact of adopting e-banking in the branches operations?, and to what extent these changes affected the performance of banks?, so answering these questions help the managers in developing economies to identify the effective role of branches in the era of e-banking.

Despite the significant adoption of e-banking over the universe, limited previous studies reported this issue in developed economies as the study of [40, 25], and no evidence about this issue in developing economies, so this study will bridge this gap by reporting this issue in Jordan. Accordingly the objectives of this study are:

1. Identifying the degree of change in adopting e-banking in Jordan during the period 1999 to 2008.
2. Identifying the degree of change in branches operations strategy actions and capabilities in Jordan during the period 1999 to 2008.
3. Identifying the degree of change in banking performance indicators during the period 1999 to 2008.
4. Identify the impact of significant adopting of e-banking on branches operations and performance in Jordan during 1999 to 2008.

II. OVERVIEW OF BANKING SECTOR IN JORDAN

Jordan is officially known as Hashemite Kingdom of Jordan, it is a small country located in the Middle East, it shares boarders with Iraq, Saudi Arabia, and Syria. Jordanian economy is service oriented, and the banking sector plays a dynamic role in the Jordanian economy, it acquiring 56.4% of the total capital invested in the Amman Stock Exchange [2], further, the banking sector of Jordan is leader in comparison with its counter parts in other countries in the Middle East and North Africa region [15], the number of licensed banks in Jordan is 23 banks (15 local and 8 foreign), the banking sector is controlled by Central bank of Jordan [3].

During the last decade the banking sector in Jordan had been reformed, so new banking was launched by mid. of 2001, electronic banking transaction law was launched by 2002, and the banks were directed toward compliance with Basel Accord II by the end of 2008 [24] The banks in Jordan provide personal and corporate service, the banks' branches cover the majority of Kingdom regions. During the last decade a lot of banks in Jordan have adopted more e-banking service, more ATM Kiosks have been lunched, 23 banks have lunched internet banking during [31], also 13 banks provide telephone banking and 15 banks have lunched mobile banking.

III. LITERATURE REVIEW

The purpose of literature review is to identify the branches operational issues that affected by e-banking, further, identify the banking performance indicators to be used in evaluating the branches operations strategy.

Limited previous studies tracing of impact of e-banking on the branches operations in developed economies as the study of [40, 25], however, no studies envisaged this issue in developing economies.

Identifying the Operations Actions and Capabilities Affected by E-banking

A- Branches Location and Accessibility

At the beginning of 1980s, the international trend was toward decreasing the number of branches as a result of

investing in alternative delivery service channels as automatic teller machines, and which reduced the operating costs, for example the Bank of America closed one third of their overall branch network, while increasing the automatic banking machines networks, and Barclay's of the UK closed 100 of their 3000 full service branch [8].

Generally speaking the number of bank branches operating in the UK (excluding North Ireland) has declined by over 11% from 37,761 in 1983 down to 33,511 in 1993, and building society branches have similarly declined by over 9% from 6,480 in 1983 down to 5, 876 in 1993 [17].

Despite the direction of banks during the last few years toward using remote access distributions channels, and expansion use of ATM's over the last two decades to deal with their customer; the number of commercial bank branches network have been expanded in developed countries as USA [19, 27, 18], accordingly the banks during the era of e-banking will concern about the convenient site location more than past [5].

During 2001 to 2006 brought about the greatest increase in the bank branches construction in US history, with nearly 3,000 new branches opening in 2005 [35]. According to Federal Deposit Insurance Corporation, the number of bank branches increased about 38% to just less than 70,000 between 1990 and 2004, in 2005 alone the banking industry had a 3% annual growth rate adding 2,255 net branches offices [16].

The Urban based banks in USA follow their customers into developing sub-urban, they opened branches in new retail centers along major highways, creating advantage over older established competitors which established their branches in a declining main street, down town or courthouse square area [35] more concern about the availability of parking in the front of the branch, easy to see, low traffic area, and low physical barriers [13].

However, in Canada the clicks-and-mortar banks' density in Urban areas is more than sub-urban or rural area, with closer occurring in urban areas and opening occurring in sub-urban areas [33], also the direction of banks to open branches in-store as a part of banks direction toward more convenience focused delivery strategy [37].

B- Branches Layout and Human Resource Management

During the era of e-banking the banks operations manager should start to overhaul branches with a high percentage of premium customer first, and focus more in developing the customer experience [21], the branches will adopt the retail mall layout or the high-touch high-tech strategy [10], the focus on this type of layout is on marketing, or combining better customer service with expanded opportunity to sell financial products and improve the relation with customers [13].

External parking area in the front of branch as malls or restaurants is available, the branch is generally open, the majority of space will be used for selling and marketing purposes, further the use of meter or greeting station in the front of lobby, this station will assess the customer needs and direct traffic based on those need, or help customers specially the old customers to use online banking [26, 13].

In order to create an environment that encourages extended interaction between consumers and bank employees; the bank should move toward more open teller stations, free standing teller tower that gives customers the option by standing side by side with the teller to view information on waist high computer stand, or seated teller stations; which designed for the customers who cannot stand at regular teller windows, or for opening a new account if all closing rooms are occupied [13], also create area for private conferences a part from the traffic [6].

The reception area is very comfortable with large chairs and view into street, current newspapers and magazines, and a large TV turned to news and financial programming, further marketing on specially designed marketing walls and displays, each branch has internet coffee with fresh coffee or internet kiosks, digital signage and computer and printer for customers' uses, also some banks should consider creating a living room in at least some of their branches [38, 13].

Also the branches will have extensive warm and natural lighting, natural colours and materials, the lighting should draw attention to the teller lines, this lighting system should support productivity and impact how colours are perceived and how inviting an environment is, the lobby or branch hall includes some plants pictures, and the concerns also on availability of central heating system air conditions venerations, CCTV and Bandit screens, carpeted floor, the hard service area used in the front of teller stations, and easy visible signs [6].

C- Branches Capacity Strategy

The capacity of branches that measured by the number of employees and teller station could be affected by adopting E-banking; if the number of branches will be reduced the same as made by banks in the UK the capability of branches will be reduced, however, if the number of branches increased the capacity will be extended.

D- Transaction Cost and Customers Waiting Time

Using different routes in the branches as ATMs will reduce the transaction cost [24]; since the number of employees will be reduced. increasing the process routings as using e-banking channels in the branches will reduced the customers waiting time [41], since the reasonable number of customers will use e-channels so the number of customers using traditional banking channel will reduce, so less waiting time in accordance.

Identifying the Performance Indicators of Banking Operations

A- Financial Indicators

The widely adopted financial indicators in the banking industry are ROA (return on assets) and ROE (return on equity) [39], and are widely evaluated by previous studies as the study of [29, 34]. However, the previous indicators have

income from interest and non-interest, so in order to reflect the core banking operations non-interest income as a percentage of total revenue can be used [17].

B- Marketing Indicators

The marketing performance can be evaluated to have better insight about the impact of operations, the widely adopted indicators by previous studies are 1) market share [9, 1], 2) growth rate [9], and 3) perceived quality [36, 29], Firms in recent years have focused more on tracing retention. Customer retention is a pivotal strategic issue, and in the 1990s several streams of research focused on this [11].

IV. RESEARCH METHODOLOGY

Analytical survey methodology is adopted by this study as a result of small sample size which is 15 local banks. The unit of observation is the bank, all banks in Jordan are the population, however, the local banks (15 banks) were surveyed since the locals are outperform the foreigners, also, the local banks have larger branches networks [3]. The time frame of this research is set at ten years, from the beginning of 1999 to the end of 2008. During this period the majority of banks started to adopt certain e-banking elements.

A- How to Achieve First Objective

The adoption of e-banking was traced by revising banks websites (website archive used for this purpose: www.archive.org) and annual reports.
Table (1) shows the definition and scales of banking adoption dimensions. The adoption was measured by subtracting the adoption points of last period (2008) from the beginning period 1999 for every bank (Microsoft Excel was used for this purpose), then, the result was divided by the adoption during the first period; the result was the percentage of adopting e-banking.

TABLE (1) THE MEASUREMENT OF ADOPTING E-BANKING

E-banking Channel	Adoption alternatives	Scale
Adoption of ATMs	ATM Urban Accessibility. ATM Suburban Accessibility. ATM Rural Accessibility. Number of ATM Models.	Accessibility: Number of ATM/10,000 People. Models: each models 1 point.
Adoption of Internet Banking.	Number of Transactional Services.	1 point each service
Adoption of Mobile Banking	SMS Push SMS Pull Mobile Internet Banking.	1 point each service
Adoption of Telephone Banking	IVR (Interactive Voice Response) Call Centre. Contact Centre.	1 point each service
General E-banking Adoption	ATM Internet Banking SMS Push SMS Pull Mobile internet banking IVR Call Centre Contact Centre	1 point each service

B- How to Achieve Second Objective:

B-1 Changes in branches accessibility:

TABLE (2) BRANCHES ACCESSIBILITY ALTERNATIVES AND SCALES

Branches Accessibility	References	Scale
Branches urban accessibility	[32, 14]	Number of branches /10,000 people
Branches suburban accessibility		
Branches rural accessibility		

The data required to compute the branches accessibility was collected from bank annual reports and websites, the number of branches in urban, suburban and rural areas of every bank was identified from annual reports. However, the population numbers in urban, suburban and rural areas were identified from the website of the department of statistics. After collecting data accessibility was computed as summarized in table (2), then, the changes was identified by subtracting the last period accessibility from the beginning period by using Microsoft Excel for every bank and every action, then, the result was divided by the accessibility scores during the first period; the result was the percentage of change in branches accessibility.

B-2 Changes in branches layout design and number of tellers stations

Primary data was collected from branch managers' in-branch, since they have direct contact with branch layout daily, and so are capable to provide historical data about layout design. Branch managers in different geographic regions were surveyed, since branch-layout design may be change from region to region; therefore multiple respondents from different geographic regions increased the reliability of data.

Data was collected using a questionnaire developed by the researcher, and the items were developed according to literature, the number of items in this questionnaire was 57 (see table (3)). Data was collected from convenient sample of branches managers of 15 banks, who have been appointed in this position since 1999, the total number of participated managers in this survey was 236 (response rate 68%). After collected the facts the data was coded by using competency score presented in table (3), for each bank, and the data was aggregated for every bank by computing the average responses.

The changes in each sub-dimension for every bank were identified by subtracting the competency score of the last period from the beginning period (Microsoft Excel was used for this purpose) then, then, the result was divided by the layout scores during the first period; the result was the percentage of change in layout design.

B-3 Changes in Tellers Flexibility, Account Customers Waiting Time:

TABLE (4) TELLERS FLEXIBILITY: QUESTIONNAIRE'S ITEMS AND SCALES

Flexibility Dimensions	Number of items	Items References	Scale
Promotion	1	[22, 23,30, 28]	Yes: 1
Making Decisions	2		solve problems: 1, making interest decision: 2
Cross Trained	2		Do back office: 1, do front office: 1

Tellers were surveyed to identify whether there is a change in their role (directing toward selling and promoting products), and customers waiting time. Tellers were source of these facts since they are in direct interaction with operations. Data was collected from convenient sample of tellers of 15 banks, who have been appointed in this position since 1999, the total number of participated tellers in this survey was 241 (response rate 70%). Questionnaire was developed by researcher, after collecting data the responses were coded as presented in table (4). The customers waiting time was measured by minutes. However, tellers flexibility was measured as summarized in table (4).

B-4 Transaction Cost and number of tellers

Account transaction cost and number of tellers were identified from account operations unit in the headquarter by surveying account executive officer who have been appointed in this position since 1999 (one officer in each bank) so 15 executives were surveyed, since this unit has records about this fact, further, the branches managers and tellers do not have idea about such facts. Data was collected by using a questionnaire. The scale of transaction cost was currency unit (JD) and for number teller (number). The changes were identified in all of these dimensions by subtracting the score of the last period from the beginning period by using Microsoft Excel for every bank then, then, the result was divided by the score during the first period; the result was the percentage of change in transaction cost and number of tellers.

a- How to Achieve Third Objective:

The source of all of these indicators was banks' annual reports except customer satisfaction and retention which were collected from headquarter by surveying account operations officer. Then the change over the study period were identified by subtracting the results of last first period from last period, then the relative performance of each bank according to each performance indicators was identified by dividing the banks' change in performance indicator over the best performed bank.

D. How to Achieve Fourth Objective

K-means cluster analysis was used to cluster banks according to degree of adopting e-banking, all clustering trial were generated until reach the maximum number of clustering trial, since the number of clusters were not known, then, the clusters that adopted significant e-banking practices were identified by using Kruskal Wallis H test, since data is not normally distrusted and sample size is small. The significant branches operations strategy actions, capabilities and performance indicators of each clustering trial adopted significant e-banking practices were identified by using Krukal Wallis H test. The level of significance was 0.05.

TABLE (3) BRANCHES LAYOUT DESIGN: QUESTIONNAIRE'S ITEMS, SCALES AND COMPETENCY SCORES

Dimensions of Main Actions	Sub-dimension	Number of items	Item References	Competency Score (Items in Questionnaire)	Max. Score
Visual	------	3	[4, 7, 13, 15]	Window: 1 teller stations: 3, lighting: 5	9
Convenience	Isolation	2	[4, 7, 13, 15]	Yes: 1 No: 0	1
	Air conditioning	5		Ventilation: 1, entrance air conditioner: 3, hall air conditioner: 5, teller station air conditioner: 7, credit offices air conditioner: 9	25
	Central heating	2		Central heating: 1 Heating thermostat: 2	3
	Seats and disks	3		Seats in the front of teller stations: 1, VIP halls: 5, disks: 7	13
	Parking	1		Yes: 1 No: 0	1
Aesthetic	Colours	3	[15]	Warm colours: 3, cool colours: 2, subdued colours: 1	3
	Floor	2		Carpeted floor: 1, hard surface: 2	3
	Pictures and plants	1		Yes: 1, No: 0	1
Safety and security	CCTV	2		CCTV in the branch: 1, outside: 2	3
	Alarms	3		Entrance: 1, front of teller stations: 3, offices: 5, connected: 7	16

……..CONTINUE TABLE (3)

Dimensions of Main Actions	Sub-dimension	Number of items	Item References	Competency Score (Items in Questionnaire)	Max. Score
Social responsibility	Recycling	3	[13, 7]	Solar panel: 5, collecting water: 3, recycled rubber floor: 1	15
	Walls	2		Changed colours: 1, classed walls: 2	
	Community	2		Children's playing area: 1, community meeting halls: 2	
Information factor	Signs and labels	5	[4, 6, 13, 15]	Dept. title signs: 5, direction signs: 3, teller station title and number signs: 1 Digital signs: 2, traditional: 1	9+2
	Promotional leaflets and facilities	3		Leaflets at the entrance: 1, leaflets in the hall: 3, TV screens: 5	5
	Badges and uniforms	2		Uniform: 2, badges: 1	3
	Customer service	2		Electronic kiosks: 2, staff: 1	3
	Departmentalisation	2		Departmentalisation: 1, customer service unit: 2	3
E-banking channels	Internet banking	2	[4, 13]	Wireless laptop area: 2, Internet café: 1	3
	ATM	2		Wall ATMs: 1, inside ATM: 2	3
Teller stations	Type of teller stations	3	[4, 13]	Stand-up: 1, seat: 3, tower: 5	9
	Number	1		Number	Relative number > Average + standard deviation

V.DATA ANALYSIS AND FINDINGS

TABLE (5) SIGNIFICNAT E-BANKING PRACTICES ACROSS CLUSTERING TRIALS

Cluster number	3 clusters trial				4 clusters trial			
	Significant e-banking practices	Kruskal Wallis H test Chi. Sig.	Percentage of change	Actual Change	Significant e-banking practices	Kruskal Wallis H test Chi. Sig.	Percentage of change	Actual Change
Across all clusters	ATM Suburban Accessibility	5.165 0.023	6.39%	1.28 ATMs/ 10,000 people	ATM Suburban Accessibility Mobile Banking Adoption	10.406 0.015 8.775 0.023	5.21% 1.44%	1.19 ATMs/ 10,000 people 0.68: Push SMS
Cluster 1	ATM Suburban Accessibility	-----	0.21%	0.35 ATMs/ 10,000 people	ATM Suburban Accessibility Mobile Banking Adoption	-----	1.78% 0.00	1.78 ATMs/ 10,000 People 0
Cluster 2	ATM Suburban Accessibility	-----	3.34%	3.34 ATMs/ 10,000 people	ATM Suburban Accessibility Mobile Banking Adoption	-----	15.62% 0.00	0.84 ATMs/ 10,000 people 0
Cluster 3	ATM Suburban Accessibility	-----	15.62%	0.84 ATMs/ 10,000 people	ATM Suburban Accessibility Mobile Banking Adoption	-----	3.53% 1.75%	3.21ATMs/ 10,000 people 1.75: Pull SMS
Cluster 4	-------	-----	-----	-----	ATM Suburban Accessibility Mobile Banking Adoption	-----	-0.08% 1.13%	-0.47 ATMs/ 10,000 people 1: push SMS

Table (5) shows significant e-banking practices across clustering trials, it can be seen that; the significant e-banking practices were identified in 3rd and 4th clustering trial only. The significant practices across clusters of 3 clusters trial were; ATM suburban accessibility only, however, no significant practices related to internet banking, mobile banking and telephone banking.

The significant practices across clusters trial of 4 clusters trial were; ATM suburban and degree of adopting mobile banking, no significant practices of internet banking, and telephone banking. The average ATM accessibility across 3 clusters trial was 1.28 ATMs/10,000 people, and the accessibility across 4 cluster trial was 1.19 ATMs/10,000 people. The maximum accessibility of 3 cluster trial was reported by cluster 2 (3.34 ATMs/10,000 people), and the maximum accessibility of 4 clusters trial was reported by cluster 3 (3.53 ATMs/10,000 people). The significant mobile banking practices of 4 cluster trial was adopting push SMS banking, the best cluster was 3rd cluster which adopted pull SMS banking.

TABLE (6) SIGNIFICNAT BRANCHES OPERATIONS ACTIONS ACROSS CLUSTERING TIRALS

Cluster number	3 clusters trial				4 clusters trial			
	Significant branches operations actions	Kruskal Wallis H test Chi. Sig.	Percentage of change	Actual Change	Significant e-banking practices	Kruskal Wallis H test Chi. Sig.	Percentage of change	Actual Change
Across all clusters	Trained front office employees to do back-office job. Reduce account customers waiting time	6.051 0.014 3.710 0.05	61% -63.4%	56% of employees -7.9 minutes	Trained front office employees to do back-office job.	11.345 0.010	70%	66% of employees
Cluster 1	Trained front office employees to do back-office job. Reduce account customers waiting time	-----	-16.7% -41.5%	-16.7% of employees -7.03 minutes	Trained front office employees to do back-office job.	-----	100%	100% of employees
Cluster 2	Trained front office employees to do back-office job. Reduce account customers waiting time	-----	100% -73%	88% of employees -7.72 minutes	Trained front office employees to do back-office job.	-----	100%	100% of employees
Cluster 3	Trained front office employees to do back-office job. Reduce account customers waiting time	-----	100% of employees -76%	100% of employees -9.5 minutes	Trained front office employees to do back-office job.	-----	83%	100% of employees
Cluster 4	-------	-----	-----	-----	Trained front office employees to do back-office job.	-----	-18.8%	18.8-% of employees

Table (6) shows significant branches operations actions across clustering trials, it can be seen that; the significant actions identified in 3rd clusters trial were; trained front office employees to do back-office job and reduce customers waiting time, however, the significant actions identified in 4th clusters trial was trained front-office employees to do back-office jobs, so no significant actions related to branches accessibility, branches layout quality, and transaction cost.

The average percentage of employees trained to do back-office job across 3 clusters trial was 56%, and the percentage across 4 cluster trial was 66% of employees. The maximum percentage of trained employees of 3 cluster trial was reported by all clusters except fourth cluster

(100% of employees). The average reduction of customers waiting time of 3 cluster trial was reducing customers waiting time by 7.9 minutes; the best cluster was 3rd cluster, the customers waiting time was reduced by 9.5 minutes.

TABLE (7) KRUSCAL WALLIS H TEST FOR DIFFERENCES IN PERORMANCE INDICATORS ACROSS CLUSTERING TRIALS

Performance Indicators	3 clusters trial		4 clusters trial	
	Chi-square	Sig.	Chi-square	Sig.
Return on Equity	1.900	0.593	0.000	1.000
Return on Assets	2.657	0.448	0.320	0.572
Operating revenue/total revenue	3.244	0.356	2.337	0.126
Deposits Market share	1.250	0.741	0.080	0.777
Customers Satisfaction	4.447	0.217	0.082	0.774
Customers Retention	1.998	0.573	0.139	0.710

Table (7) shows the differences in performance indicators across clustering trial, it can be seen that; no significant differences in performance indicators across clusters in 3 and 4 clusters trials, so, the significant changes in e-banking and branches operations did not lead to significant changed in performance.

VI. DISCUSSION

ATM suburban accessibility was significant e-banking practices since ATM has deployed in Jordan since mid. 1990s, but the majority of banks have ATMs in urban areas, so it is more attractive to launch ATMs in suburban. However, significant mobile banking practice is reasonable since the majority of banks adopted Push SMS so adopting Pull SMS is the significant.

No significant operations related to branches location, branches layout, tellers role in promoting or selling products, number of teller stations and number of tellers which indicates that the branches are still working in parallel with e-banking channels, so the branches are still a channel of conducting transaction rather than a place of promoting and selling products, accordingly, no significant impact on transaction cost.

The significant training of employees to do back-office tasks is reasonable since the direction of customers toward using e-banking channels reduce the work load on front-office employees so they may be have more time to do back office job, further, the reduction of customers waiting time is as a result of using customers e-banking channels which reduce number of served customers by tellers, and reduce customers waiting time in accordance. No significant impact of adopting e-banking on performance, since e-banking practices are still recent in Jordan so the impact could be significant in future.

VII. CONCLUSION

This study investigated the impact of adopting e-banking on traditional banking operations in Jordan. E-banking practices traced were; degree of adopting ATMs, internet banking, telephone banking, mobile banking and e-banking channels. A scale was developed in this study to measure the degree of adoption. Traditional banking operations actions and capabilities were traced in this study; branches accessibility, branches layout quality, tellers flexibility, transaction cost, customers waiting time, and branches capacity.

The practices of 15 local banks in Jordan were reported by using questionnaires directed to tellers, account operations executives, branches managers, further, annual reports were revised. K-means Cluster analysis was used to identify the clusters of banks adopted significant e-banking practices; the significant practices were adopted by three and four cluster trials, Kruskal Wallis H test used to identify significant differences across clusters.

The significant e-banking practices adopted by banks in Jordan were; ATM suburban accessibility and adopt mobile banking, however, the significant traditional banking operations actions and capabilities were; reduce customers waiting time and trained tellers to do back-office job. No significant change in branches accessibility, branches layout design, transaction cost, and branches capability were reported in Jordan which indicates that branches are still the main channels of conducting banking transactions, and e-banking is working in parallel with branches.

VIII. APPLICATIONS AND FUTURE RESEARCHES

The result of this is study is important for decisions makers and academics alike. The decision makers of banks in Jordan are having now facts about the effectiveness of actions they made in era of e-banking, so they can focus on the effective actions made and those not adopted some of these actions can plan now to realize these actions in future. Further, the proposed investors who are concerning about banking in Jordan can now make more rational actions.

Academics now have some facts about the impact of e-banking on traditional banking operations strategy in developing countries, so these facts could be used to develop some propositions and hypothesis, further, academics now have some facts about banking process to be taught to students at universities, which help students in developing countries to have better insight about the actions they should be made in future.

Despite Jordan is one of the developing countries, the results of this study is more applicable for banks in Jordan, so it is recommended to conduct further studies in other

developing countries to find whether the same significant actions and capabilities are adopted by banks and trace the impact of actions on capabilities. The future studies could be more beneficial if it is cross countries or regions studies, since a comparison can be made and better conclusions about the impact of country or region context could be traced.

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