Acta Universitatis Danubius

ŒCONOMICA

Does the Growth in Non-Banking Financial Institutions Signal the Death of a Bank as a Brand: A View from The South African Banking Market?

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Abstract: The banking sector has undergone considerable changes since the Global Financial Crisis (GFC) as the countries no longer operate in isolation, owing to globalization (Viegi, 2008). In the past, banks were easily recognizable as a brand. Today brand bank is wanning, and benefits from the brand are wanning. Using South Africa's banking market as a unit of analysis this paper examines whether the emergency of Non-Banking Financial Institutions is threatening the brand of a bank. Through a guided questioner, this paper asserts that the emergency of Non-banking institutions has eroded the banks' brand and has impacted on patronage and loyalties to traditional models of banking. Based on Cronbach's alpha criterion, results from the study reveal that the survey instrument used to collect data from participants was statistically reliable. Overall, results on frequency statistics and factor loadings computed based on the exploratory factor analysis technique reveal that respondents largely concurred with the assertion that brand bank is wanning due to the emergence and growth in non-banking financial institutions in South African banking market. The results will benefit banks 's efforts in re-aligning their products with market trends and assist policy makers and regulatory authorities in tracking banking practices in their economies

Keywords: Brand; patronage; charges; non-Banking institutions; South Africa

JEL Classification: F38

1. Introduction

Banks are key drivers of economic growth and effect economic transformation (Djoumessi, 2009).Conventionally, the theory of financial intermediation maintains that banks' primary function is to collect deposits from surplus units and on-lend those funds to deficit units - borrowers, usually the enterprise sector and government (Gurley and Shaw, 1960; Schmidt et al, 1997).

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The banking sector underwent considerable changes since the Global Financial Crisis (GFC) as the countries no longer operate in isolation, owing to globalization (Viegi, 2008).

Changes in consumer tastes, technology and demands has seen an upsurge in Non-deposit Taking Institutions (NDTIs). As a result, banks are now facing huge challenges from the growing number of non-financial firms that offer similar services.

Strategically responding, banks must provide a variety of products and their approach to information dissemination to the public about their activities must be revamped (Jayaraman & Kothari, 2013; Patson, 2013).

2. Problem Statement

The banking industry is in transit in both scope and mode of operations. There is a sharp rise in Non-Deposit Taking Institutions a development that is threatening the very existence of a bank as a brand.

Does the emergency and growth in NDTIs have a cleansing effect in the banking industry?

2.1. Literature Review

Research on the impact of a bank's brand and its effects on profitability and therefore its intermediation role or disintermediation in emerging economies has not received reasonable coverage from researchers and remains subjective. Most studies in banking focus on the effects of the financial crisis of 2007-2008.

Early studies, looking at economic recessions (Bresnahan and Raff, 1991, Caballero and Hammour, 1994), supports the cleansing view and asserts that firms that do not keep abreast of innovations will eventually fail. Another group of studies (Hallward-Driemeier and Rijkers, 2013, Nishimura et al., 2005), by examining financial shocks, shows that financial crises destroy firms, regardless of their degree of productivity, and lead to a scarring effect (see Barlevy, 2002, Barlevy, 2003, Blalock et al., 2008, Ouyang, 2009, for a related argument).

A three-year study by Scratch, an in-house unit of Viacom in 2014 found that a third of millennia aged 18-33 believed they would not need a bank in the future. The 2014 report pointed out that while banks spent time improving the online banking experience, millennia have already moved to mobile devices for communication and transactions.

According to the report, the challenge for banks was to continuously revamp what banking meant to consumers. Though many younger consumers have embraced primarily electronic means of banking, the most profitable segments, including small businesses, affluent consumers, and seniors, continue to ascribe value to nearby branch convenience. Recent developments in technology seem to suggest that going forward however, banks will cut the number of their branches due to the growth in Non-Deposit Taking Institutions (NDTI)

Mpako (2007) conducted a preceding research investigation on whether the significance of South African banks as financial intermediaries was declining based on growth and substitutability of bank deposits by money market mutual funds.

Mpako (2007) concluded that bank deposits as a ratio of total bank assets had been declining over the period 1997 to 2007, but mainly due to currency crisis as opposed to shifts in consumer behavior.

However, the research did not empirically validate if disintermediation was taking place in the South African banking market, although the regression relationships shown had provided as a strong tool for analyzing trends of bank deposits. The study specifically focused on bank deposits and thus did not test whether the traditional intermediation role of banks was declining due to an increase in the number of non-banking institutions.

Steven Reider**,** (The Financial Brand 2014) noted that as electronic channels gained popularity for banking transactions, which led to banks reducing their branches in the USA over the period 2010-2012, many branches have seen a reduction in teller transaction demand. This has led to prediction of widespread branch closures in the USA. This prediction is further fueled by declines in branch openings in the United States (USA) and in absolute branch counts in 2010 – 2012. Several factors could be attributed to this decline; and the emergency and growth in NDTI seem to be one of the main factors for the cut in branch networks.

Evidence from Mauritius through The Financial Services Commission (FSC) of Mauritius seem to suggest that the Non-Bank Deposit-Taking (NBDT) sector is relatively small, representing around 5.6 per cent of banking sector assets at end-March 2012 compared to 5.7 per cent a year earlier. Total assets in that sector represented 16.8 per cent of GDP.

2.2. Research Objectives

This paper examines whether brand bank, based on customers' perceptions, is on the wane or is still a major factor affecting patronage in the context of the South African economy.

2.3. Contributions

The establishment of the effects of the emergence of non-deposit taking institutions on bank brand will help the banking market in redirecting their efforts towards customer satisfaction and the retention of patrons an activity that was lacking in the current banks' customer retention strategies.

3. Methodology

3.1. Survey Population

The survey population of this research comprised of public participants who conduct banking with different banking institutions. Participation by respondents was voluntary and selection of participants was anonymous. Participants had the right to participate or withdraw from participation during the data collection process.

3.2 Sampling Approach and Sample Size

The sample units of the survey comprised of members of the public who conduct banking with different banking institution in the country. Based on simple random sampling approach, eighty participants (n=80) who expressed willingness to fully participate in the entire study were selected to provide responses to the structured questions. The study was conducted in Tshwane region of Gauteng province, South Africa.

3.3. Data Collection

A self-administered structured questionnaire anchored on a 8-point Likert scale (1=yes, 2=no, 3=partially, 4=strongly agree, 5=agree, 6=not important, 7=disagree, and 8=strongly disagree) was used to collect data from the respondents.

3.4. Statistical Data Analysis

The Statistical Package for Social Sciences (SPSS) program for windows was used to conduct data processing and statistical analysis. For purposes of ensuring standard practices in survey data statistical analysis, the scale reliability of collected data was examined prior to conducting both exploratory factor analyses.

3.5. Scale Reliability

The Cronbach's alpha coefficient was computed to determine the scale reliability (homogeneity of internal consistency) of questionnaire items. Following Cronbach (1951), a Cronbach's alpha coefficient is a statistical measure used to assess the extent to which if same questions are asked to the same group of respondents under several conditions, similar responses can be obtained. The higher the coefficient value, the higher the reliability of the responses. The Cronbach's alpha was computed based on the function:

$$\alpha = \frac{K}{K-1}\left(1-\frac{\sum_{i=1}^{K}\sigma_{Y_i}^{2}}{\sigma^{2}_{X}}\right) \quad ; \qquad (1)$$

$K = number of\ items$

Where: $\sigma^2{}_X \ = \text{var}\,iance of\ observed\ total\ scores$

$\sigma^2{}_{Y_i} = \text{var}\,iance of\ item\ i\ for\ the\ current\ sample$

Exploratory Factor Analysis

In order to determine and select questionnaire items that demonstrated statistical significance in confirming the notion that brand bank on the wane due to the emergency and growth in non-banking financial institutions in South African banking market, the exploratory factor analysis multivariate statistical method was used to analyse the dimensionality of a set of items; for which latent items were unobserved constructs referred to as factors (Beavers et al, 2013). Operationally, the technique explored dimensionality of a measurement instrument by finding the smallest number of interpretable factors that explain the correlations among a set of items, based on the function:

$$\begin{bmatrix} X_1 \\ \dots \\ X_n \end{bmatrix}_{nx1} = \begin{bmatrix} \lambda_{11} & \dots & \lambda_{1m} \\ \dots & \dots & \dots \\ \lambda_{n1} & \dots & \lambda_{nm} \end{bmatrix}_{nxm} \begin{bmatrix} F_1 \\ \dots \\ F_m \end{bmatrix}_{mx1} + \begin{bmatrix} e_1 \\ \dots \\ e_n \end{bmatrix}_{nx1} \qquad (2)$$

The matrix of the factor analysis model shown above indicates that given n items X_1, …, X_n measured on a sample of m subjects was specified based on the following necessary conditions.

a) The measurement error has a constant variance and on average equals zero

$$Var\left(e_j\right) = \sigma_j^2 \quad ; \quad E\left(e_j\right) = 0 \qquad (3)$$

b) No association between the factor and the measurement error

$$Cov(F, e_j) = 0 \tag{4}$$

c) No association between errors

$$Cov(e_j, e_k) = 0 \tag{5}$$

Given the factor, observed items are independent of one another such that:

$$Cov(X_j, X_k \mid F) = 0 \quad 6)$$

4. Results and analysis

Results presented include frequency statistics, scale reliability of the research instrument's items, and exploratory factor analysis (EFA) in terms of total variances explained of and factor loadings of items retained.

Table 1. Frequency Statistics

Item/Response	Yes		No		Partially		Strongly agree		Agree		Not important		Disagree		Strongly disagree		Total
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	N
I no longer consider the bank's brand as a key determinant of who I bank with.	58	73%	0	0%	22	28%	0	0%	0	0%	0	0%	0	0%	0	0%	80
I consider convenience as more important than the bank that I bank with.	70	88%	10	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	80
I enjoy doing my banking from an alternative service point as long as it is convenient to me.	0	0%	0	0%	0	0%	30	38%	22	28%	17	21%	6	8%	5	6%	80
I am loyal to my bank because of its reputation.	0	0%	0	0%	0	0%	50	63%	20	25%	3	4%	2	3%	5	6%	80
There are still others things or services that force me to go into a bank.	0	0%	0	0%	0	0%	45	56%	23	29%	4	5%	1	1%	7	9%	80
I do most of my banking at other service centres other than the bank.	0	0%	0	0%	0	0%	27	34%	30	38%	11	14%	3	4%	9	11%	80
Banks are the same and I get service from any point that offers service that I am looking for.	0	0%	0	0%	0	0%	25	31%	17	21%	9	11%	11	14%	18	23%	80
Because of the increase in non-banking institutions I have cut my trips to a bank.	0	0%	0	0%	0	0%	56	70%	7	9%	7	9%	4	5%	6	8%	80
Because I do not mind or care about the bank brand I am now conducting my business with other institutions.	0	0%	0	0%	0	0%	33	41%	13	16%	9	11%	5	6%	20	25%	80
The availability of alternatives has allowed me to consider other options of banking.	0	0%	0	0%	0	0%	43	54%	11	14%	7	9%	8	10%	11	14%	80
Have you used other banking channels over the last two years?	59	74%	3	4%	18	23%	0	0%	0	0%	0	0%	0	0%	0	0%	80
Do you believe that banks are still benefiting from their brands?	75	94%	5	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	80
Bank branches are still relevant to me and still influence where I do my banking.	30	38%	50	63%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	80
Bank should continue investing in branch networks.	0	0%	0	0%	0	0%	25	31%	5	6%	30	38%	13	16%	7	9%	80
In future I will always consider convenience rather than a particular bank before I choose a bank to bank with.	0	0%	0	0%	0	0%	47	59%	8	10%	7	9%	7	9%	11	14%	80
Do you think bank's brand is diminishing?	53	66%	27	34%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	80
Are there are things contributing in a way to the way you feel about banks.	34	43%	20	25%	26	33%	0	0%	0	0%	0	0%	0	0%	0	0%	80

Results presented in *Table 1* show that 73% (n=58) reported that they no longer consider the bank's brand as a key determinant of who they bank with, and 88%

(n=70) consider convenience as more important than the bank that I bank with, while 74% (n=59) reported they had used other banking channels over the last two years, and 66% (n=53) revealed that they think that banks' brand is diminishing. However, 94% (n=75) of the respondents indicated that they believe that banks are still benefiting from their brands, whereas 59% (n=47) indicated that they strongly agree that in future, they will always consider convenience rather than a particular bank before they choose a bank to bank with. The respective responses provided by participants reveal that brand bank is wanning due to emergency and growth in non-banking financial institutions in the South African banking market.

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
.973	10

The computed Cronbach's alpha coefficient (α = 0.973) for the finally selected ten survey questionnaire items exceeded the statistically minimum acceptable (α = 0.700) scale reliability score (*Table 11*). The result reveals that the research instrument's items designed to examine whether brand bank is diminishing due to emergency and growth in non-banking financial institutions in South African banking market measured a single unidimensional latent construct. Therefore, the research instrument was statistically reliable.

Table 3. Item-total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I enjoy doing my banking from an alternative service point as long as it is convenient to me	90.00	13668.286	.905	.970
I am loyal to my bank because of its reputation	90.00	12236.857	.958	.968
There are still other things or services that force me to go into a bank	90.00	12532.857	.956	.968
I do most of my banking at other service centres other than the bank	90.00	13770.000	.813	.973
Banks are the same and I get service from any point that offers the service that I am looking for	90.00	14177.714	.868	.973
Because of the increase in non-banking institutions I have cut my trips to bank	90.00	12031.429	.933	.970
Because I do not mind or care about the bank brand, I am now conducting my business with other institutions	90.00	13577.714	.925	.970

The availability of alternatives has allowed me to consider other options of banking	90.00	12903.714	.976	.967
Bank should continue investing in branch networks	90.00	14412.286	.600	.979
In future I will consider convenience rather than a particular bank before I choose a bank to bank with	90.00	12660.286	.955	.968

Based on the results presented in *Table 3*, none of the remaining survey questionnaire items could be eliminated from the data set since all the items contributed to scale reliability score or coefficient above the 0.7 minimum acceptable coefficients. Therefore, all the ten items were retained for further use in computation of factor loadings to select items that demonstrated statistical significance in determining whether brand bank is on its way to the grave due to emergency and growth in non-banking financial institutions in South African banking market.

Table 4. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.337	83.370	83.370	8.337	83.370	83.370
2	.702	7.018	90.388			
3	.598	5.976	96.363			
4	.334	3.342	99.706			
5	.029	.294	100.000			
6	1.002E-013	1.022E-013	100.000			
7	1.001E-013	1.009E-013	100.000			
8	-1.000E-013	-1.001E-013	100.000			
9	-1.001E-013	-1.011E-013	100.000			
10	-1.003E-013	-1.029E-013	100.000			

Extraction Method: Principal Component Analysis.

To examine smaller sets of survey questions that varied together (factors) based on responses from the participants, the percentages of total variances explained were computed. The procedure was performed to explore optimal numbers of factors per each dimension to identify items that explained much variance for further use in computing the component matrix. Results presented in *Table 4* show that results from the final iteration reveal presence of one initial eigenvalue greater than 1; hence one factors (group of items) was extracted from the selected items in the data set. As revealed by the extraction sums of squared loadings; approximately 83% of total variance in the dataset of items designed to measure whether brand bank is on its way to the grave due to the emergency and growth in non-banking financial institutions in the South African banking market was accounted for by one factor.

Given that only one factor was extracted in the solution of the final iteration, there was no rationale to examine the pattern of factor loadings to detect if there were retained items that exhibited complex structure in line with the statistical criterion that items with high loadings ($r \geq 0.5$) on more than one factor should be removed from the analysis.

Table 5. Component Matrix[a]

	Component
	1
I enjoy doing my banking from an alternative service point as long as it is convenient to me	.925
I am loyal to my bank because of its reputation	.963
There are still other things or services that force me to go into a bank	.965
I do most of my banking at other service centres other than the bank	.857
Banks are the same and I get service from any point that offers the service that I am looking for	.901
Because of the increase in non-banking institutions I have cut my trips to a bank	.940
Because I do not mind or care about the bank brand, I am now conducting my business with other institutions	.944
The availability of alternatives has allowed me to consider other options of banking	.977
Bank should continue investing in branch networks	.655
In future I will always consider convenience rather than a particular bank before I choose a bank to bank with	.958

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Results presented in *Table 5* indicate that none of the retained survey items presented a complex structure; therefore, there was no basis to eliminate any of the items from the remaining dataset. Based on computed factor loadings, results show that all the selected ten questionnaire items had statistical significance or importance in determining whether brand bank is on its way to the grave due to the emergency and growth in non-banking financial institutions in the South African banking market. In this regard, the survey items which reveal or confirm the respondents' perception to the notion that brand bank is on its way to the grave due to the emergency and growth in non-banking financial institutions in the South African banking market are that "the availability of alternatives has allowed me to consider other options of banking" (loading = 0.977), "there are still others things or services that force me to go into a bank" (loading = 0.965), "in future, I will always consider convenience rather than a particular bank before I choose a bank to bank with" (loading = 0.958), "because I do not mind or care about the bank brand, I am now conducting my business with other institutions" (loading = 0.944), "because of the increase in non-banking institutions, I have cut my trips to a bank" (loading = 0.940), "I enjoy doing my banking from an alternative service point as long as it is convenient to me (loading = 0.925)", "banks are the same and I get service from any point that offers the service that I am looking for (loading = 0.901), and "I do most of my banking at other service centres other than the bank (loading = 0.857)".

5. Conclusion

The frequency statistics and factor loadings results reveal that respondents largely agreed with the assertion that brand bank is wanning due to emergency and growth in non-banking financial institutions in South African banking market. The largest proportions of the respondents concurred that they no longer consider the bank's brand as a key determinant of whom they bank with. Therefore, most respondents indicated that they consider convenience as more important than the banks that they bank with, further resulting in the conclusion that banks' brand is diminishing. Moreover, the fact that participants strongly agreed that in future, they will always consider convenience rather than a particular bank before they choose a bank to bank with also concurs to the assertion that brand bank is losing its shine.

The factor loadings result which confirm the respondents' agreement to the notion that brand bank is wanning is the expression by respondents that the availability of alternatives has allowed them to consider other options of banking.

References

*** (2016). *English Oxford Living Dictionaries*

*** (27 January, 2014). *The financial brand*.

*** (March 2015). *Financial Essay*.

Barlevy. Gadi (2003). Credit market frictions and the allocation of resources over the business cycle. *Journal of monetary economics* 50 (8), pp. 1795-1818.

Beavers, A.S.; Lounsbury, J.W.; Richards, J.K.; Huck, S.W.; Skolits, G.J. & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical assessment, research & evaluation*, 18(6), pp. 1-13.

Blalock, G. 7 Gertler, Levine D.I. (2008). Financial constraints on investment in an emerging market crisis. *Journal of Monetary economics*, 55, pp. 568-591

Bresnahan, T.F. & Raff, D. M. (1991). Intra-industry heterogeneity and the great depression: the American motor vehicles. *Journal of Economic. History*, 51, pp. 317-331

Caballero, R.J. & Hammour, M.L (1994). The cleansing effect of recessions. *American Economics Review*, 84, pp. 1350-1368.

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, pp. 297-334.

Djoumessi, E.C.K (2009). Financial development and economic growth: a comparative study between Cameroon and South Africa. *Master of Commerce in the subject of Economics at the University of South Africa.*

Gurley, J.G. &Shaw, E.S. (1960). *Financial intermediaries and the saving-investment Process. The journal of finance, 11(2), 257-276*

Hallward-Driemeier, M. & Rijkers, B. (2013). Do crises catalyse creative destruction? Firm-level evidence firm-level evidence from Indonesia. *Review of Economic Statistics,* 95 (2013), pp. 1788-1810.

Jayaraman, S. & Kothari,S.P. (2013). "The effect of industrial sector transparency on bank risk-taking and banking system fragility". *Working paper.*

Laima Spokeviciute; Kevin Keasey & Francesco Vallascas (2018). Do financial crises cleanse the banking industry? Evidence from US Commercial bank exits. *Journal of Banking & Finance.* Volume 99, February 2019, pp. 222-236.

Levine, R. (2002). Bank-based or market-based financial systems: which is better? *The Journal of Financial intermediation*, 11(2), pp. 398-428.

Mpako, V. M. W. (2007). Money market mutual funds and their impact on bank deposits In South Africa, University of Pretoria.

Nishimura, K.G.; Nakajima, T. & Kiyota K. (2005). *Does the natural selection mechanism still work in severe recessions? Examination of the Japanese Economy in the 1990s" Journal of Economic Behaviour & organization* 58 (1), pp. 53-78.

Ouyang, M. (2009). "The scarring effect of recessions. *Journal of Monetary economics*, 56, pp. 184-199.

Rajan, R.G. &Zingales, L. *(1998).* Financial dependence and growth. *The American Economic Review,* 88(3), pp. 559–586.

Saunders, A. & Cornett, M.M. (2008). *Financial institutions management: A Risk Management Approach (6th edition)*, pp. 9–10.

Viegi, N. (2008). *The impact of the global financial crisis on developing countries like South Africa.* http://www.ids.ac.uk/files/dmfile/southafricanicolaviegi.pdf.

Wheelock, D, C & Wilson, P.W. (2000). Why do banks disappear? The determinants of US bank failures and acquisitions. *Review of economic statistics,* pp. 127-138.