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Impacts of bank coalitions and acquisitions on private venture loaning

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Abstract

Merger and Acquisition (M&A) is one of the instruments of the recent banking reforms in Nigeria. One of the implications of the reform is its effect on the lending to small businesses, which was divided into static and dynamic effect (restructuring, direct and external) in this study. Data were collected by cross-sectional survey research design and were subsequently analyzed by the ordinary least square method. The analyses show that bank size, financial characteristics and deposit of non -merged banks are positively related to small business lending, while for merged banks the reverse is the case. From the above result, it is evident that M&A have not only static effect on small business lending but also dynamic effect, therefore, given the central position of small businesses in the current government policy on industrialization of Nigeria, policy makers in Nigeria should consider both the static and dynamic effects of M&A on small business lending in their policy thrust. JEL: G21.

Keywords: Bank lending, small businesses, mergers and acquisition.

INTRODUCTION

Nigerian banking reform is a product of the global efforts at revamping the world economy. First it was a Millennium Development Goals (MDG), next it was New Partnership for African Development (NEPAD) strategy before the National Economic Empowerment and Development Strategy (NEEDS). All these have one thing in common: the economic development of Nigeria. For a long time in the history of policy reforms in Nigeria, developing the banking sector was given priority attention. Various directives were given to the banking sector with the aim of developing other sectors; thus propelling the entire economy. The directive of raising the minimum capital for each bank to twenty five billion naira (₦25 billion) was mostly achieved through banks consolidation by the instrumentality of mergers and acquisition (M&A). Implicit in the capitalization directive is the belief that stronger banks would act as spring board for the growth and development of the other sectors of the economy especially cottage industries and other Small and Medium Scale Enterprises (SMSE)

According to Berger and Udell (1996) the importance of small businesses in the promotion of economic development in any economy cannot be over emphasized. Small businesses play important role in the process of industrialization and economic growth. Apart from increasing per capita income and output, small businesses create employment opportunities, enhance regional economic balances through industrial disposal and generally promote effective resource utilization considered critical to the engineering of economic development and growth.

Apart from the anticipated benefits of consolidations to small businesses, M&A have contributed to a dramatic increase in the average size of banking institutions in Nigeria. There are a number of potential benefits from the lifting of geographic barriers to competition in the Nigerian banking sector and the associated wave of M&A activity. These include, but are not limited to mobilization of domestic savings, deepening, and broadening of intermediation, improved allocation of resources, geographic diversification and the elimination of entrenched inefficiency or self serving bank managers, mobilization of foreign savings and above all enhanced accessibility of small scale funding. What is less clear, is the effect of bank M&A on the supply of credit to small businesses in Nigeria.

Consequently, the purpose of this paper therefore is to examine the relationship of bank M&A and credit to small businesses in Nigeria. Why did we choose to examine the relsation of M&A to credit to small business? Most

industrialized economies, such as England and Germany, attained industrialization through cottage industries and small business. Nigeria can only go through the same path to industrialization. Therefore, the specific objective of this study is to examine the relationship of Banks Merger and Acquisition and small business leading in Nigeria.

Literature reviews

Berger et al. (1998) suggest that the larger, more organizationally complex institutions that are created from M&A, may be less predisposed than smaller, less complex institutions to supply credit to small, less informed borrowers. These borrowers who are most dependent on banks for credit and whom the bank borrowers relationship is important do not get credit facilities. Larger institutions according to them may be less predisposed to extend loans that demand intimate knowledge of the small business, its owners, and its local market because of diseconomies associated with producing such loans along with other financial service products.

This diseconomies might arise because lending to small, less informed borrowers and lending to large, informational transparent borrowers may be distinctly different in their activities, that require the use of different technologies and entirely different credit cultures (Berger et al., 1998; Berger et al., 2000) The policies and procedures associated with screening and monitoring small informational opaque borrowers and transmitting the relevant information within the banking institution may be very different from those associated with providing transaction-driven loans to large, informational transparent borrowers. In addition to a financial institutions size, its organizational complexity, may also affect its small business lending.

Cole et al. (1996) postulate that prior research has established a fairly strong link between banking institution size and the supply of small business credit, with large institutions devoting lesser proportions of their assets to small business lending than small institutions (Berger et al., 1995).

Berger et al, (1995) opine that this simplistic analysis assumes that lending propensities are static and determined solely by size of a bank. It neglects the fundamental nature of M&A as dynamic event that may involve significant changes in organizational behaviour beyond the simple static aggregation of the merging institution. Such conclusions also ignores the reactions of other lenders in the same local market that might pick up any profitable loans that are no longer supplied by the consolidated institutions, or may react with their own dynamic changes in behaviour that either increase or decrease their supply of small business loans. Berger and Udell (1996) state that there are other factors beyond institution's size and organizational complexity, such as changes in market competitiveness or changes in the degree of ownership control, theoretically may affect small business lending either positively or negatively. Levonian and Soller, (1995) opine that some of the literature had focused on the association between small business lending and banking institution size and organizational complexity. Berger et al. (1995) and Berger and Udell (1996), Peek and Rosengren (1996) and Strahan and Weston (1996) found that small banking institutions tend to invest much higher proportions of their asset in small business loans than large institutions.

Berger et al. (1998) suggest that the impact of M&A on bank lending behaviour is quite complex, with one static effect and at least three dynamic effects. Disentangling the four effects makes it possible to identify more precisely how M&A affect small business lending. The static effect as postulated by Berger et al, (1998) is simply the result of the banking institutions combining their pre-M&A asset, into a larger institution with a combined balance sheet and competitive position. The static effect might be expected to result in a decreased supply of small business lending, since (as discussed above) large banking institutions tend to lend to fewer small business loans per naira of asset. For example, if a bank with N600 million in assets merge with a N400 million bank. The static effect on small business lending captures the predicted differrences in lending between a typical N1billion bank and the two smaller banks. The N1billion bank that resulted from simply adding together the pre-M&A balance sheets of the merging parties is referred to as the pro-forma bank. The static effect also brings to bear the impact from combining the financial condition or other exogenous variables of the two smaller institutions.

Furthermore, according to Berger et al. (1998) the restructuring effect is a dynamic effect of the M&A due to a change in focus in which the institution changes its size, financial condition, or competitive position from their pro-forma values after consummating M&A. In the simple example as stated above, the merger of the N600 million bank and the N400 million bank might eventually result in a merged bank of only N800 million, rather than the N1billion bank. This could occur, for example, if the purpose of the merger was to reduce excess banking capacity in the local market. This reduction in bank size from the N1billion pro-forma bank to the N800 million actual bank would likely increase its proportion of asset devoted to small business lending since smaller institutions tend to have higher proportion of these loans.

Moreover, Berger et al. (1998) say that direct effect is the change in lending attributable to a direct refocusing of attention toward or away from small business lending, net of any of the static and restructuring effect already discussed. That is, the direct effect of M&A is the difference between a banks lending after consolidation and the lending of another institution of the same size, financial condition, local market competitive position, and econo-

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Model 1. SBL =f (BDEP) for Pre merged UBA (Static effect)

Regressor	Coefficient	t-ratio	Standard Error
INTERCEPT	-2171.75	-0.93	2340.90
BDEP	0.32	12.87	0.03

Dependent Variable- SBL, R^2= 0.92, Adjusted R^2 =0.92, F-Statistic=165.00, SER=5981.52, DW=1.26.

mic environment as the restructured bank that has not undergone a M&A in terms of our example in which the N600 million and N400million banks merge and becomes a N800 million bank after restructuring the effect is how the bank lending differs from another N800million bank that is the same in every respect as the restructured bank except that it did not engage in a recent M&A.

Finally, Berger and Udell (1996) in their work captured the reactions by other lenders in the local market to the change in competitive conditions created by the M&A. For example, if a consolidated institution reduces its small business lending it may create opportunities for other local banks to pick up loans with positive net pre-sent values. Goldberg and White (1998) consistent with this possibility found that *de novo* banks tend to lend more to small businesses as a percentage of assets than other small banks of comparable size.

MATERIALS AND METHODS

The data collection method is the cross-sectional survey research design. The choice of the cross-sectional survey research design is because data were collected at a particular point in time (2004, 2005 and 2006) from the sampled banks (UBA, STB, CTB and GTB). Secondary data were employed in this study and were gathered from annual reports and statement of account of the banks sampled for this study, as well as the statistical bulletin of the Central Bank of Nigeria (2004, 2006). The population of study is all the twenty-five banks making up the Nigerian banking sector. In this study the merged United Bank for Africa Plc (which comprises Standard Trust Bank Limited, United Bank for Africa Plc, and Continental Trust Bank limited) and one of the un-merged banks that came out of the consolidation exercise in Nigeria, Guaranty Trust Bank Plc, were sampled by way of judgmental sampling technique, given the researchers clear knowledge of the population. Data collected were analysed by the Ordinary Least Square (OLS) method of data analysis using E-views software.

Based on the earlier theoretical expositions on the way and manner bank M&A affect credit availability to small businesses; where it was stated that the effects of bank M&A on lending to small businesses can be categorized into static and dynamic effect. The dynamic effect is further divided into restructuring, direct and external effect. Given this background, the models for the analysis were specified as follows.

Model 1: SBL =f (BDEP) for pre-merged UBA
Model 2: SBL =f (BDEP) for pre-merged STB Static Effect

Model 3: SBL =f (BDEP) for merged UBA/STB
Model 4: SBL =f (BDEP) for pre-merged GTB
Model 5: SBL= f (BSIZE, BFC, BMS, UBDEP, GBDEP, ELSB) Dynamic Effect

Note: In the above model, Continental Trust Bank (CTB) making up the third bank in UBA and STB merger was omitted in the analysis because, CTB was acquired by STB and ceases to exist as a separate legal entity prior to the merger between UBA and STB. Where:

BDEP= Bank Deposit which represents bank size under static effect.
BSIZE = Bank size which is explained by bank gross total asset
BFC = Bank financial characteristics which is explained by bank's equity divided by gross total asset
BMS = Bank market share which is explained by the ratio of the bank deposit to total deposit of the banking sector.
UBDEP = Merged-bank Deposit (UBA/STB) . GBEP = Bank deposit for non-merged bank (GTB).
ELSBL = External loan to small businesses.
SBL= Small Business Lending
BSIZE, BFC and BMS represent the restructuring effect, UBDEP and GBDEP the direct effect while ELSB represent the external effect.

RESULTS AND DISCUSSION

(1.) The result of the regression of small business lending on bank deposit using the pre-merged data of UBA is presented in a tabular form below. The result confirms the *apriori* expectation that there is a positive relationship between small business lending and bank deposit, such that the higher the bank deposit, the higher the proportion of the deposit that will be earmarked for small business investors (Appendix 1).(Model 1) The result in model 1 can be linearly expressed as follows:

SBL = -2171.75 + 0.32BDEP
(-0.93) (12.87)

And can be further interpreted to mean that for every ₦1 deposit UBA received the bank gave out ₦0.32k as loans to small business lending. The result cannot however be admitted on the face of it without first confirming the goodness of fit of the model used to produce the result. In doing so, the following test statistics was conducted: R^2 statistic is overall predictive power of the model. The R^2 shows 0.92. This means that the independent variable of BDEP explain 92% variation of changes in small business lending. The remaining 8% is attributable to error term.

Model 2. SBL =f (BDEP) for Pre merged STB (Static effect)

Regressor	Coefficient	t-ratio	Standard Error
INTERCEPT	935.25	0.58	1613.35
BDEP	0.33	11.14	0.03

Dependent Variable- SBL, R^2= 0.95, Adjusted R^2 =0.95, F-Statistic=124.09, SER=2854.88, DW=1.63

Model 3. SBL =f (BDEP) for consolidated UBA/STB (Static effect)

Regressor	Coefficient	t-ratio	Standard Error
INTERCEPT	-3436.15	-0.82	4207.85
BDEP	0.33	12.12	0.03

Dependent Variable- SBL, R^2= 0.95, Adjusted R^2 =0.95, F-Statistic=146.87, SER=6450.60, DW=1.63

T-statistics is used to test the significance of each independent variable in a given model. It is normally examined at a chosen level of significance. A t-ratio of greater than 2 is normally significant at both 5 and 1%. From the above result the t-ratio is 12.87. This ratio is called the observed t-ratio or the calculated t-ratio. If compared with t-ratio at 5% level of significance; $t_{5\%,\ 16}$ which gives t table value of 1.746, it means that the calculated or the observed t is greater than the critical value of t. Therefore we reject the null hypothesis and accept alternative hypothesis and conclude that the BDEP as the independent variable is significant in the model. If a further test is conducted at 1% level of significance, the result is still the same as the critical value of t at 1% is 2.583. Therefore bank deposit is a very strong determinant of small business lending.

The F-ratio is 165.00. The test condition is similar to that of the t-ratio. If we find the $F_{5\%,v1,v2,}$ we have 4.49. Since the observed F value is greater than the critical F value, we conclude that the independent variable of BDEP explains a significant amount of the variation in the model.

The observed value of Durbin Watson (DW) is 1.26. The lower value of DW from the table is 0.84, while the upper value is 1.07 (at 1% level of significance). It therefore means that the model has no autocorrelation problem, since the value of the observed DW is greater than the upper value of the critical DW. We can therefore safely conclude that the above result is unbiased.

(2.) The result of the regression of small business lending on bank deposit using the pre-merged data of STB is presented in a tabular form (Model 2). The result in model 2 can be linearly expressed as follows:

SBL = 935.25 + 0.33BDEP
(11.14)

The above result tows the line of the regression of the UBA reported above. This confirms the apriori expectation of a positive relationship between bank deposit and small business lending (Appendix 2).

The quantitative relationship between the bank deposit and small business lending for pre-merged STB is such that for any increase in bank deposit of ₦1, the bank earmarked ₦0.33k as loans to small scale investors. Reported in parenthesis in the equation above is the t value. With a value of 11.14, the t-ratio is significant at both 5 and 1% levels of significance. This is because the critical values of t at those levels are 1.86 and 2.90 respectively. This therefore means that for STB also, bank deposit is a strong determinant of the lending to small and medium scale investors.

A test of the sufficient condition for the significance of variable was done in the F statistics. The F value of 124.09 is bigger than 5.32 and 11.3 for 5 and 1% levels of significance respectively. This therefore confirms the earlier position of the t ratio and indicate that bank deposit explain a significant amount of variation in the model.

The DW of 1.63 is equally bigger than the upper DW of both the 5 and 1% levels of significance. The values for those levels from the table are 1.36 and 1.07 respectively. This means that the model is devoid of auto correlation problem and the result herein is very suitable for policy purposes.

(3.) The result of the regression of small business lending on bank deposit using the merged data of UBA/STB is presented in a tabular form (Model 3). The result I model 3 can be linearly expressed as follows:

SBL = -3436.15 + 0.33BDEP
(-0.82) (12.12)

The result above is the M&A result of UBA and STB. The aim of the regression is to investigate the static effect of the M&A on small business lending. The static effect of merged UBA/STB shows in clear term the positive relationship between bank deposit and small business lending (Appendix 3). The quantitative relationship shows that for an increase in bank deposit for the merged bank by ₦1, small business lending will increase by ₦0.33k. Every other test statistic as conducted on the pre-merged banks is in line with the consolidated data.

(4.) The result of the regression of small business lending on bank deposit using the pre-merged data of GTB is presented in a tabular form (Model 4). The result in model four can be linearly expressed as follows:

SBL = -2258.523 + 0.322BDEP
(-0.96) (12.88)

The results of this regression are more of an exact replica of the pre-merged UBA. With the exception of approximation error, the result would have been the carbon copy

Model 4. SBL =f (BDEP) for Pre -merged GTB (Static effect).The result of the regression of small business lending on bank deposit using the pre-merged data of GTB is presented in a tabular form as shown below

Regressor	Coefficient	t-ratio	Standard Error
INTERCEPT	-2258.52	-0.96	2343.52
BDEP	0.32	12.88	0.03

Dependent Variable- SBL, R^2= 0.92, Adjusted R^2 =0.92, F-Statistic=166.00, SER=5975.28 DW=1.27

Mode 5. SBL= f (BSIZE, BFC, BMS, UBDEP, GBDEP, ELSBL)

Regressor	Coefficient	t-ratio	Standard Error
INTERCEPT	-31704.27	-1.44	21974.00
BSIZE	0.47	2.81	0.17
BFC	300457.20	3.92	76564.48
BMS	-6694.76	-0.13	51394.87
UBDEP	-1.50	-4.04	0.37
GBDEP	2.13	7.35	0.29
ELSB	-7.95	-7.39	1.08

Dependent Variable- SBL, R^2= 1.00, Adjusted R^2 =1.00, F-Statistic=809.74, SER=1366.18 DW=1.12

copy of each other. This means the trend of bank loan to small business lending is somehow similar in the Nigerian banking sector irrespective of different banking policies regarding the issue of credit to customers. From the above result, there is a positive relationship between bank lending and bank deposit in the pre merged Guaranty Trust Bank (Appendix 4). All other test statistics as conducted on the previous models are in line with the established position on those models. This means the model for GTB also is a very good model for policy purposes.

(5.) The result of the dynamic effect of bank M&A is presented in a tabular form below (Model 5). The result in model 5 can be linearly expressed as follows:

SBL = -31704.27 + 0.472BSIZE +300457.2BFC -6694.762BMS-1.503UBDEP+2.134GBDEP-7.953ELSBL
(-1.44) (2.81) (3.92) (-0.13) (-4.04) (7.352) (-7.39)

The result shows that going by the restructuring and direct effect; bank size, bank financial characteristics and deposit of non-merged banks are positively related to small business lending, given that for every one naira increase in bank gross total asset, loans to small business investors increases by ₦ 0.47k and for every one unit increase in the ratio of equity to gross total asset, small business lending also increases by a whooping ₦300, 457.2. After M&A, for every ₦1 increase in bank deposits the lending to small business lending increases by ₦2.13k. This agrees with the position of Berger, Saunders, Scalise, and Udell (1998). However, going by the direct and external effect for merged banks after M&A the reverse is the case because there is a negative relationship between size of merged banks and their lending to small businesses, given that for every 1% increase in bank market share, lending to small businesses will fall by ₦6, 694.76. On the issue of the deposit of the merged bank, for every one naira increase in their deposit, the lending to small businesses falls by ₦1.50k. And more so, other lenders in the local market (for example, Micro-finance Institutions in Nigeria) do not fill up the gap in lending to small businesses resulting from a change in competitive conditions created by M&A. The relationship is such that, for every ₦1 increase in external loan, there is a fall in small business lending to the tune of ₦ 7.95k.

The R^2 is 1.00, which means the variables account for 100% of Small Business Lending. In technical terms, we are saying the independent variables used above did not leave any room for any error term, as the entire variables chosen adequately represent small business lending. The t statistic for the significance of independent variable shows that with exception of bank market share, every other independent variable is significant at both 5% and 1% levels of significance. This is because the critical t-values of 1.86 and 2.90 for 5% and 1% are less than the observed t-values of all the variables except the bank market share. It therefore means that all the independent variables except bank market share are significant at both levels of significance.

The F- statistics further confirms the significance of the entire variable put together in the model. The standard error of regression of 1366.184 is relatively low to confer high predictive power on the model. The last but not the least is the DW test for auto correlation. With a calculated DW of 1.12 which is greater than the upper value of DW from the table at 1% level of significance. It means that there is no reason to suggest the presence of auto correlation in the model above.

Conclusion

This study attempts to fulfil the great need for evidence on the static and dynamic effect of bank M&A on small business lending in Nigeria. The static effect resulted in a positive relationship between small business lending and bank size because for every ₦1 deposit received about ₦0.33k was given out to small businesses. This position is in agreement with prior research such as Cole, Wolkens, and Woodbum, (1996), Berger, Kashyap, and Scalise, (1995); and Berger, Saunders, Scalise, and Udell (1998). However, the dynamic effect of M&A in the Nigerian banking sector which was reported as restructuring, direct and external effects gave an opposite result. The restructuring and direct effect shows that bank size is

negatively related to small business lending and also there is a negative relationship between external loan by small institutions like Micro Finance Institutions (MFIs) and small business lending.

Following from the above, it is evident that, the larger the size of a bank by way of M&A (static effect), the more it tends lend to small businesses; the government should encourage growth in size of banks operating in the country may be through M&A. Also, it was gathered from the result of this study that, change in banking focus (e.g., cutting down of branches in local areas) otherwise referred to as restructuring effect, resulted in poor lending to small businesses even with M&A. To stem this ugly trend, the Nigerian government through the Central bank of Nigeria should be involved in the restructuring and direct policies of banks towards ensuring national interest (adequate supply of credit to small businesses for industrialization) is put before banks' profit making.

The surprise result of poor reaction of poor reaction of other lenders besides banks (e.g., MFIs) in the local market to opportunities created by the restructuring and direct effects of M&A is not good for the economic development of Nigeria. The government should encourage MFIs in Nigeria towards taking up opportunities created by restructuring and direct effects of M&A. This may be through enlightenment campaign and granting of tax relief.

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APPENDIX 1.

a) Pre – M&A data of SBL on BDEP for United Bank for Africa.

Year	SBL*#'million	BDEP#'million
1990	2,505.4	9,694.08
1991	2,435.48	11,894.45
1992	3,650.19	17,356.19
1993	5,428.59	18,627.5
1994	4,317.85	18,353.99
1995	6,220.11	33,161.59
1996	8,986.92	37,019.23
1997	10,760.82	37,019.23
1998	16,80	48,858
1999	24,614	73,207
2000	17,325	82,518
2001	23,106	133,135
2002	40,135	131,866
2003	46,076	142,427

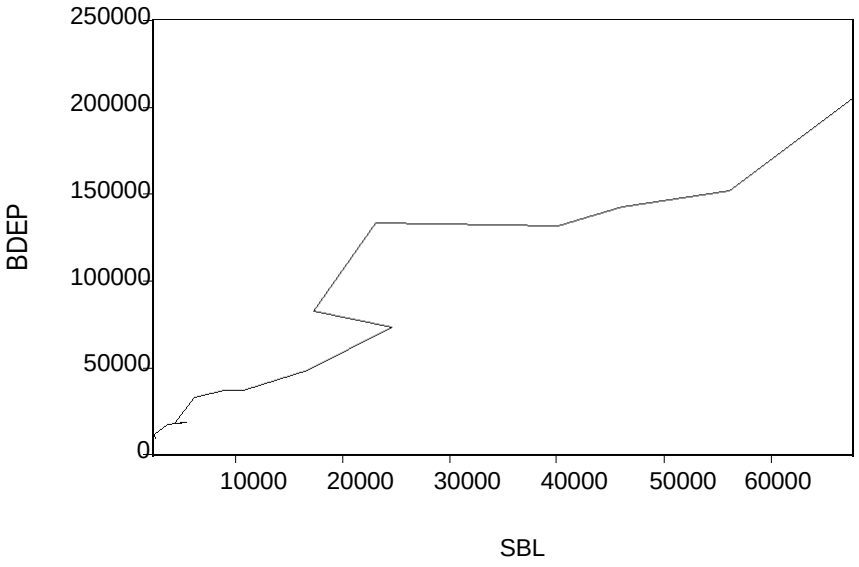
Contd.

2004	56,136	151,929
2005	67,610	205,110

Source: Various annual reports and statement of accounts of the bank. Loans and advances of the bank were used to proxy small business lending. This is based on the premise that commercial banks hardly indulge in giving out long term loans to avoid liquidity problem (except such long term loan is syndicated some in other banks). Since small businesses used short and medium term funds, hence the reasons why bank loans and advances were used to represent it.

b) The result of the regression showing the impact of bank deposit on small business lending using the pre-merged data of UBA. Dependent variable: SBL Method: Least Square Sample: 1990-2005. Included observations: 16

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-2171.75	2340.90	-0.93	0.37
BDEP	0.32	0.03	12.87	0.00
R-squared	0.92	Mean dependent var		21006.46
Adjusted R-squared	0.92	S.D. dependent var		20699.00
S.E. of regression	5981.52	Akaike info criterion		20.35
Sum squared resid	5.01E+08	Schwarz criterion		20.44
Log likelihood	-160.78	F-statistic		165.63
Durbin-Watson stat	1.26	Prob(F-statistic)		0.00

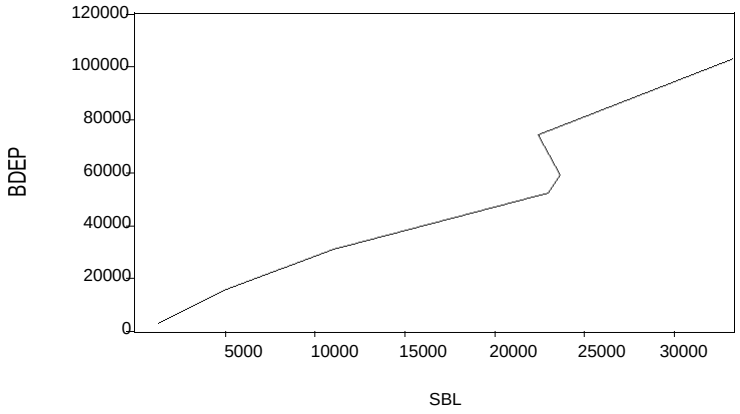


c). The graph of the relationship between small business lending and bank deposit –UBA. Diagram showing the relationship between small business lending and bank deposit for pre-merged UBA. The diagram above is a testimony of the positive relationship between bank deposit and small business lending for pre-merged UBA. The curve is a positively sloped curve which indicates that at a higher deposit in UBA, the share of deposit that is earmarked for small business lending is equally high.

APPENDIX 2

a) Pre-merged data of SBL on BDEP for standard trust bank the result of the regression showing the impact of bank deposit on small business lending using the pre-merged data on STB. Dependent variable: SBL Method: Least Square Sample: 1996-2004. Included observations: 8. Excluded observation: 1

YEAR	SBL	BDEP
1996	5,701	581.6
1997	NA	377.21
1998	1,282	3,109.04
1999	4,891	15,383.48
2000	11,068	31,194.82
2001	22,978	52,158
2002	23,677	58,992
2003	22,427	74,234
2004	33,318	103,231



b. Graph of the relationship between small business lending and bank deposit - STB

Appendix 3.

a). M&A data of SBL on BDEP for UBA/STB. The result of the regression showing the impact of bank deposit on small business lending using the consolidated data of UBA/STB. Dependent variable: SBL Method: Least Square Sample: 1996-2004. Included observations: 9

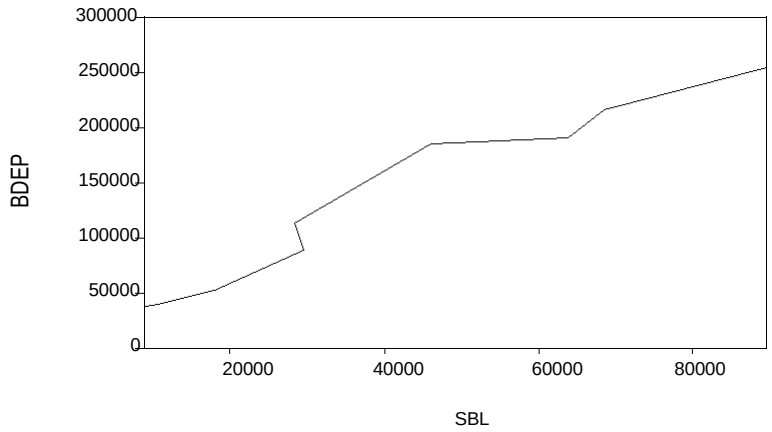
YEAR	SBL	BDEP
1996	8,992.62	37,600.83
1997	10,760.82	39,898.18
1998	18,078	51,967.79
1999	29,505	88,590.48
2000	28,393	113,712.82
2001	46,084	185,293
2002	63,812	190,858
2003	68,503	216,661

Contd.

2004	89,454	255,160

b)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3436.15	4207.85	-0.82	0.44
DEP	0.33	0.03	12.12	0.00
R-squared	0.95	Mean dependent var		40398.05
Adjusted R-squared	0.95	S.D. dependent var		28289.90
S.E. of regression	6450.60	Akaike info criterion		20.57
Sum squared resid	2.91E+08	Schwarz criterion		20.62
Log likelihood	-90.59	F-statistic		146.87
Durbin-Watson stat	1.63	Prob(F-statistic)		0.00



c). Graph of the relationship between small biz lending and bank deposit – UBA/STB.

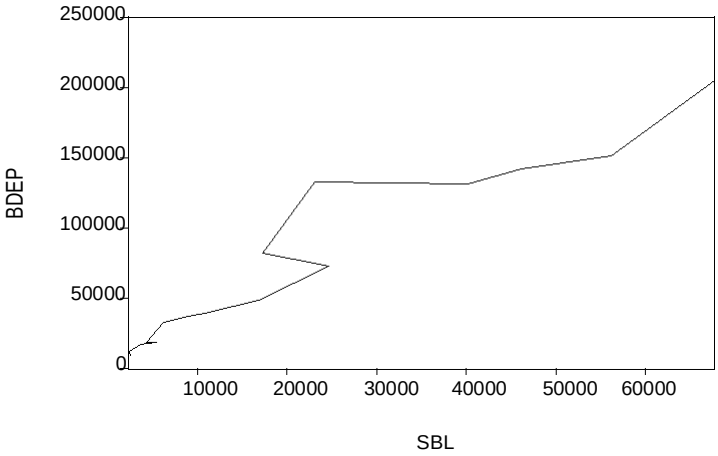
Appendix 4.

a). Pre –M&A data of SBL on BDEP for Guaranty Trust Bank (Static Effect).

YEAR	SBL	BDEP
1990	2,505.4	9,694.08
1991	2,435.48	11,894.45
1992	3,650.19	17,356.19
1993	5,428.59	18,627.5
1994	4,317.85	18,353.99
2003	46,076	142,427
2004	56,136	151,929
2005	67,610	205,110

b). The result of the regression showing the impact of bank deposit on small business lending using the pre-merged data of GTB (static effect). Dependent variable: SBL Method: Least Square Sample: 1990-2005. Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
-2258.52	2343.52	-0.96	0.35	



c). The graph of the relationship between small business lending and bank deposit – GTB (Static effect).

Appendix 5

a). Data on the dynamic effect of M&A on small business lending in Nigeria (1996-2004).

YEAR	SBL	BSIZE	BFC	BMS	UBDEP	GBDEP	ELSBL
1996	17,979.62	63,477.40	0.07	0.36	37,600.83	37,019	2,447
1997	21,521.851	73,512.75	0.09	0.29	39,898.18	39,521	4,000.40
1998	34,874	95,447.58	0.08	0.33	51,967.79	48,858	3,471.60
1999	54,119	139,398.67	0.07	0.37	88,590.48	73,207	2,739.30
2000	45,718	192,362.80	0.06	0.3	11,3712.80	82,518	4,664.40
2001	69,190	288,336.64	0.06	0.34	185,293	133,135	6,915.60
2002	103,947	327,592.40	0.07	0.29	190,858	131,866	4,101.50
2003	114,579	375,754.73	0.09	0.28	216,661	142,427	4,224.50
2004	145,590	464,690.24	0.11	NA	255,160	151,929	NA

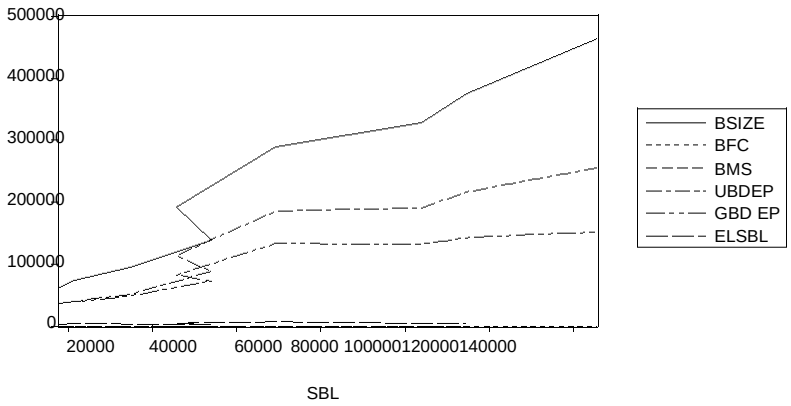
Source: Various annual reports of UBA, STB and GTB. Various CBN Annual Reports and Statements of accounts.

b). The result of the regression showing the dynamic effect of bank M&A on small business lending Dependent variable: SBL Method: Least Square Sample (adjusted): 1996-2003. Included observations: 8 after adjusting end points.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31704.27	21974.00	-1.44	0.39
BSIZE	0.47	0.17	2.81	0.22
BFC	300457.20	76564.48	3.92	0.16
BMS	-6694.76	51394.87	-0.13	0.92
UBDEP	-1.50	0.37	-4.04	0.15
GBDEP	2.13	0.29	7.35	0.09

Contd.

ELSBL	-7.95	1.08	-7.39	0.09
R-squared	1.00	Mean dependent var		57741.06
Adjusted R	1.00	S.D. dependent var		35996.03
S.E.R.	1366.18	Akaike info criterion		16.95
Sum squared	1866458.	Schwarz criterion		17.01750
Log likelihood	-60.79	F-statistic		809.7449
Durbin-W.	1.12	Prob(F-statistic)		0.03



c). Graph showing the relationship between small business lending and other dynamic determinants of small business lending.