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EFFECTS OF PRE AND POST CONSOLIDATION POLICY IN NIGERIAN BANKS ON AGRIBUSINESS SECTOR PERFORMANCE (1995-2014): A COMPARATIVE ANALYSIS

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Abstract

This study is a comparative analysis of the effects of pre and post-consolidation policy in Nigerian banks on agribusiness sector performance which covered 1995-2014 periods. Secondary data from CBN annual reports and statement of accounts, CBN bulletin and National Bureau of Statistics were used for the study. The data were analyzed by the use of t-students distribution. This paper used agribusiness output, number of agribusiness entrepreneurs that accessed the credits, government credit allocation to agribusiness and value of banks' credit allocation to agribusiness as indices to determine agribusiness sector performance by comparing the pre-mergers and acquisition consolidation policy with the post-merger and acquisition consolidation policy for the period under review. Findings shown that the purposes for credit allocation among agribusiness sub-sectors in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions were mainly for the production of crop, livestock, fishery, mixed farming and others. In the post-merger and acquisition consolidation policy era, number of agribusiness farmers that accessed the credit through Agricultural Credit Guaranteed Scheme Fund (ACGSF), government credit to agribusiness enterprises, value of banks' credit to agribusiness, agribusiness output was higher than the pre-merger and acquisition consolidation era of Nigerian banking institutions. The study concluded that consolidation policy in the Nigerian banking institutions influenced the agribusiness sector performance. It was recommended that efforts must be made by the Central Bank of Nigeria to see that such policy is sustained.

Key words: *agribusiness sector performance, Nigerian banks, pre and post-consolidation, policy*

INTRODUCTION

The primary objective of Nigerian banks' consolidation policy was to guarantee an efficient and a sound financial system. The policy was designed to enable the banking sector develop the required capacity to support the economic development of the nation by efficiently performing its functions as the head of financial intermediation [21]. In 2004, the CBN announced a new 13 point reform agenda which was intended to promote soundness, stability and efficiency of the Nigerian banking institutions and to enhance its competitiveness in the African regional and global financial system. The attempt to meet the minimum capital base triggered the merger and acquisition in the banking industry. Merger and acquisition, which are divisions of consolidation are commonplace in developed countries of the world but are just becoming prominent in Nigeria especially in the banking sector [22]. The issue of merger and acquisition in the banking institution started in October, 2003 under the past CBN Governor, Prof. Soludo. Though, most of the feeble banks were unwilling to comply until the new order on July 6, 2004. The situation changed from July 6, 2004 as many banks had either merged with or acquired other banks. Thus, merger and acquisition as consolidation tools has become a near permanent feature of our financial system after July 6, 2004. The policy of ₦25billion minimum capital base forced banks to enter into merger and acquisition to meet the requirement [24, 11, 4].

Since agriculture is dependent on finance, Nigerian agricultural policy should provide among others, for adequate financing of agriculture. The role of finance in agriculture, just like in the industrial and service sectors, cannot be over-emphasized, given that it is the oil that lubricates production. Public expenditure on agriculture has, however, been shown not to be substantial enough to meet the objective of the Government agricultural policies. The objective of agricultural financing policies in Nigeria is to establish an effective system of sustainable agricultural financing schemes, programmes and institutions that could provide micro and macro credit facilities for the Since agriculture is dependent on finance, Nigerian agricultural policy should provide among others, for adequate financing of agriculture. The role of finance in agriculture, just like in the industrial and service sectors, cannot be over-emphasized, given that it is the oil that lubricates production. Public expenditure on agriculture has, however, been shown not to be substantial enough to meet the objective of the Government agricultural policies. The objective of agricultural financing policies in Nigeria is to establish an effective system of sustainable agricultural financing schemes, programmes and institutions that could provide micro and macro credit facilities for the micro, small, medium and large scale producers, processors and marketers [18].

According to [2], research on consolidation exercise in Nigeria employed capital adequacy asset quality liquidity and management. 2004-2005 was regarded as the pre consolidation period while 2006-2009 was regarded as the post consolidation period, she concluded that consolidation improved the overall performance of banks in terms of assets size, deposit base, capital base and capital adequacy, however it did not contribute to the profit efficiency of those commercial banks. Using the dynamic panel GMM method on a cross sectional data from 2000-2010, [6] came to a conclusion that consolidation specifically reduced foreign ownership of commercial banks and also through merger and acquisition banks were more cost efficient. The investigation carried out by [10] on the effects of mergers and acquisitions on the efficiency of financial intermediation in the Nigerian banking industry had evidence that the consolidation programme induced mergers and acquisitions in the banking industry and improved competitiveness and efficiency of the borrowing and lending operations of the Nigerian banking industry. [17] Investigated the efficiency of the Nigerian banking system between 1999 and 2005. Bank efficiency was evaluated using Data Envelopment Analysis (DEA). The results indicated that efficiency fluctuated during the first part of the period and improved during the recent years, a period associated with the increase in minimum capital requirement, differences in banks' efficiency was explained by problematic loans and their size. [9] Investigated the impact of the consolidation on banking industry in the Nigerian Capital Market between 2004 and 2008 using primary (questionnaires) and secondary data from the Nigerian Stock Exchange. When the data was analyzed with the chi-square test and ANOVA, it was found that bank consolidation affected the industry significantly as most of the banks had to go to the capital market to raise the required amount by issuing securities. They submitted that banks' consolidation had increased public awareness and operations of the Nigerian capital market just as the capital market had continued to be an easy and cheap source of funds for banks in the post-consolidation era. Based on their findings, it was recommended that the banks and capital market regulatory authorities should continue to monitor and institute reforms program that would better reposition the banking industry as a major player in the Nigerian Capital Market and the economy. [1] Evaluated the impact of mergers and acquisitions on performance of banks in Nigeria. Pre-merger and post-merger financial statements of two consolidated banks were obtained, adjusted, carefully analyzed and compared. The result revealed that all the two groups produced in addition to operational and relational synergy, financial gains far more than the 2+2=5 synergistic effects. Ratio technique and inferential statistical tools were used to highlight synergistic effects on the merging banks. [8] used 1980-1988 as its study scope and the Thick Frontier Approach (TFA) method. The study found out that deregulation of deposit rates caused an increase in average cost in US banks especially the smaller ones, hence it led to reduced efficiency while during post deregulation periods, and their average cost fell owing to the structural change. [23] employed data envelopment analysis (DEA) to study the efficiencies of banking institutions in Nigeria under the privatization policy, the study showed that the efficiency of the Nigerian banking system declined significantly during period of financial deregulation compared to its levels before consolidation, they also discovered that privately owned banks operated more efficiently than government owned banks.

MATERIALS AND METHODS

This study used 25 consolidated Nigerian banking institutions, precisely commercial banks operating in the country some of which were merged and acquired as a result of the consolidation policy by CBN in order to strengthen the financial system of the banks. The study used secondary data, mostly time series. Data on bank's credit allocation to agribusiness sector, agribusiness output, and government credit allocation in agribusiness sector of the economy, merger and acquisition consolidation policy in the Nigerian banking institutions were collected from the publications of development finance and research department of the CBN, National Bureau of Statistics (NBS). Descriptive statistics and t-students distribution were employed in analyzing the data. The various models that were used to analyze the data for the study are specified below:

$$t=\frac{\bar{X}_1-\bar{X}_2}{\sqrt{S_P\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} \quad \text{..............................} \ (1)$$

Where S_P = pooled variance and is given as:

$$S_p=\frac{(n_{1-1})S_1^2-(n_{1-1})S_2^2}{n_{1+}n_{2-2}} \quad \text{……….…..} \ (2)$$

Where:

$\overline{X_1^4}$ = The mean value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector pre-merger and acquisition consolidation policy era in the Nigerian banking institutions.

$\overline{X_2}$ = The mean value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector during post-merger and acquisition consolidation policy era in the Nigerian banking institutions.

S_1^2= Variance of the value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector in the pre-merger and acquisition consolidation policy era in the Nigerian banking institutions.

S_2^2= Variance of the value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector during post-merger and acquisition consolidation policy era in the Nigerian banking institutions.

n_1 = number (years) of sampled value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector in the pre-merger and acquisition consolidation policy era in the Nigerian banking institutions.

n_2= number (years) of sampled value and growth in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector during post-merger and acquisition consolidation policy era in the Nigerian banking institutions.

$n_{1\,+}\,n_2 - 2$ = degree of freedom.

RESULTS AND DISCUSSIONS

Table 1 showed the purpose for which credit was allocated and utilization percentage share of the number of agribusiness enterprises in the pre-merger and acquisition consolidation policy in the Nigerian banking institutions.

Table 1. Purpose for credit allocation and utilization percentage share of number of credit granted among agribusiness sub-sectors in the pre-merger and acquisition consolidation policy (2005-2014) in the Nigerian banking institutions

ENTERPRISES	NUMBER OF LOANS GRANTED BY PURPOSE			PERCENTAGE SHARE (%)		
	PREMAP	DMAP	DIFFERENCE	PREMAP	DMAP	DIFFERENCE
CROPS	**181,074**	**372,520**	**-191,446**	**90.6**	**87.5**	**3.1**
CASH CROPS	3,686	6,584	-2,898	1.8	1.5	0.3
OIL PALM	345	2,554	-2,209	0.2	0.6	-0.4
RUBBER	21	119	-98	0.0	0.0	0.0
COCOA	291	1,932	-1,641	0.1	0.5	-0.3
COTTON	1,367	539	828	0.7	0.1	0.6
GROUNDNUTS	1,662	1,415	247	0.8	0.3	0.5
GINGER	0	24	-24	0.0	0.0	0.0
FOOD CROPS	177,388	365,937	-188,549	88.7	85.9	2.8
VEGETABLES	0	14,734	-14,734	0.0	3.5	-3.5
BEANS	0	3,449	-3,449	0.0	0.8	-0.8
SOYA BEANS	0	321	-321	0.0	0.1	-0.1
GRAINS	135,505	263,699	-128,194	67.8	61.9	5.9
ROOTS AND TUBER	41,883	83,735	-41,852	21.0	19.7	1.3
LIVESTOCK	**9,513**	**27,884**	**-18,371**	**4.8**	**6.5**	**-1.8**
POULTRY	5,989	18,199	-12,210	3.0	4.3	-1.3
CATTLE	1,734	6,050	-4,316	0.9	1.4	-0.6
SHEEP/GOAT	1,070	969	101	0.5	0.2	0.3
OTHER LIVESTOCK	720	2,667	-1,947	0.4	0.6	-0.3
FISHERY	**1,470**	**12,067**	**-10,597**	**0.7**	**2.8**	**-2.1**
MIXED FARMING	**350**	**8,637**	**-8,287**	**0.2**	**2.0**	**-1.9**
OTHERS	**7,471**	**4,702**	**2,769**	**3.7**	**1.1**	**2.6**
GRAND TOTAL	**199,878**	**425,810**	**-225,932**	**100.0**	**100.0**	**-**

Source: Computed by the author from CBN (2014) Annual Report and Statement of Accounts for the year Ended 31st December, 1995-2014. PreMAP = Pre-merger and acquisition consolidation policy of Nigerian banking institutions; DMAP = During the post-merger and acquisition consolidation policy of Nigerian banking institutions

Evidence from the sectoral allocation of loans by Nigerian banking institutions shows variation in the number of loans granted to different agribusiness enterprises. The purposes for credit allocation among agribusiness subsectors in the pre (1995-2004) and post (2005-2014) merger and acquisition consolidation policy in the Nigerian banking institutions were mainly for the production of crop, livestock, fishery, mixed farming and others. The crops of interest for which loans were granted in the crop subsector include oil palm, rubber, ginger, cotton, cocoa, groundnut, vegetables, beans, soya beans, grains, roots and tubers. The livestock of interest for which loans were granted in the livestock subsector include poultry, cattle, sheep, goats and other livestock as given in CBN annual reports and Statement of Accounts.

A cumulative number of 199,878 agribusiness entrepreneurs of different categories benefited from loans allocated by Nigerian banking institutions in the pre-merger and acquisition consolidation policy era (1995-2004) while a cumulative number of 425,810 agribusiness entrepreneurs of different categories benefited from loans allocated by Nigerian banking institutions during the post-merger and acquisition consolidation policy era (2005-2014). During the post-merger and acquisition consolidation policy of Nigerian banking institutions (2005-2014), about 225,932 agribusiness entrepreneurs were granted loans by Nigerian banking institutions than was witnessed in pre-merger and acquisition consolidation policy era of Nigerian banking institutions. This implies that merger and acquisition consolidation policy of the Nigerian banking institutions led to an increase in the number of agribusiness entrepreneurs granted credit in Nigeria. Between 1995 and 2004 (pre-merger and acquisition consolidation policy era of Nigerian banking institutions), Nigerian banking institutions under the Agricultural Credit Guarantee Scheme financed 181,074 crop projects; 9,513 livestock projects and 1,470 fisheries projects, 350 mixed farming projects and 7,471 other projects. Within the crop subsector, about 3686 cash crop projects were financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme while 177,388 food crops projects were financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme. Cash crops enterprises that were purposely financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme include oil palm enterprise (345 financed projects); rubber enterprise (21 financed projects); cocoa enterprise (291 financed projects); cotton enterprise (1,367 financed projects) and groundnut enterprise (1,662 financed projects). Food crops enterprises that were purposely financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme include grains enterprise (135,505 financed projects) and root and tubers enterprises (41,883 financed projects). Similarly, livestock enterprises that were purposely financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme includes poultry enterprise (5,989 financed projects); cattle enterprise (1,734 financed projects); sheep/goats enterprise (1,070 financed projects); and other livestock enterprise (720 financed projects). Between 2005 and 2014 (During the post-merger and acquisition consolidation policy era of Nigerian banking institutions), Agricultural Credit Guarantee Scheme financed 372,520 crop projects, 27,884 livestock projects and 12,067 fisheries projects, 8,637 mixed farming projects and 4,702 other projects. Within the crop subsector, about 6,584 cash crop projects were financed while 365,937 food crops projects were financed. Cash crops enterprises that were purposely financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme include oil palm enterprise (2,554 financed projects); rubber enterprise (119 financed projects); cocoa enterprise (1,932 financed projects); cotton enterprise (539 financed projects); ginger enterprise (24 financed projects) and groundnut enterprise (1,415 financed projects). Food crops enterprises that were purposely financed by Nigerian banking institutions under the Agricultural Credit Guarantee Scheme include vegetables enterprises (14,734 financed projects); beans enterprises (3,449 financed projects); soya beans enterprises (321 financed projects); grains enterprise (263,699 financed projects) and root and tubers enterprises (83,735 financed projects). Similarly, livestock enterprises financed under the Agricultural Credit Guarantee Scheme includes poultry enterprise (18,199); cattle enterprise (6,050); sheep/goats enterprise (969); and other livestock enterprise (2,667). The difference column in table 4.6 indicated that more agribusiness entrepreneurs involved into different crop enterprises such as oil palm enterprise, rubber enterprise, cocoa enterprise, ginger enterprise, vegetables enterprise, beans enterprise, soya beans enterprise, grains enterprise, and root and tuber enterprise were granted loans by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme during the post-merger and acquisition consolidation policy era except for crops like groundnut and cotton which received more number of loans granted by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme in the pre-merger and acquisition consolidation policy era of the Nigerian banking institutions. In the livestock subsector, more poultry, cattle and other livestock enterprises were financed by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme during the post-merger and acquisition consolidation policy era of the Nigerian banking institutions except for the sheep/goats enterprise which received more number of loans granted by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme in the pre-merger and acquisition consolidation policy era of the Nigerian banking institutions.

Pre-merger and acquisition consolidation policy era of the Nigerian banking institutions (1995 – 2004), the utilization percentage share of loans to different enterprises by number shows that crop based projects accounted for approximately 90.6% in cumulative number of loans, livestock based projects accounted for 4.8% in total number of loans, fisheries based project's total share was just a paltry 0.7% in total number of loans, mixed farming based projects accounted for a paltry 0.2% in total number of loans while others based projects accounted for 3.7 % in total number of loans guaranteed. In the crops subsector, food crops based projects accounted for 88.7% in total number of loans while cash crop based projects accounted for a paltry 1.8% in total number of loans. Grains based projects were the most financed projects in the crop subsector and accounted for 67.8% in total number of loans while as in the livestock subsector, poultry based projects were the most financed projects and accounted for 3.0% in total number of loans guaranteed by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme.

During the post-merger and acquisition consolidation policy era of the Nigerian banking institutions (2005-2014), the utilization percentage share of loans to different enterprises by number shows that crop based projects accounted for approximately 87.5% in cumulative number of loans, livestock based projects accounted for 6.5% in total number of loans, fisheries based project's total share was 2.8 % in total number of loans, mixed farming based projects accounted for 2.0% in total number of loans while others based projects accounted for 1.1 % in total number of loans guaranteed. In the crops subsector, food crops based projects accounted for 85.9% in total number of loans (reduced by 2.8% from its percentage share in the pre-merger and acquisition consolidation policy era) while cash crop based projects accounted for a paltry 1.5% in total number of loans (reduced by 0.3% from its percentage share in the pre-merger and acquisition consolidation policy era). Grains based projects were the most financed projects in the crop subsector and accounted for 61.9% in total number of loans (reduced by 5.9% from its percentage share in the pre-merger and acquisition consolidation policy era) while as in the livestock subsector, poultry based projects were the most financed projects and accounted for 4.3% in total number of loans guaranteed by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme (increased by 1.3% from its percentage share pre-merger and acquisition policy era). Livestock, fishery and mixed farming enterprises increased by 1.8%, 2.1% and 1.9% from their utilization percentage share in the pre-merger and acquisition consolidation policy era respectively while as crops and other enterprises reduced by 3.1% and 2.6% from their utilization percentage share in the pre-merger and acquisition consolidation policy era during the post-merger and acquisition policy era of the Nigerian banking institutions (2005-2014). The result suggested that merger and acquisition consolidation policy of the Nigerian banking institution has a reallocation effect on the total number of loans granted to different agribusiness subsectors of the Nigerian economy. This might not be purposive on the part of the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme but however, established the fact that most poorly financed agribusinesses in Nigeria were made better off by the introduction of merger and acquisition consolidation policy in the Nigerian banking institutions.

Evidence from the sectoral allocation of loans by Nigerian banking institutions presented in Table 2 shows variation in the value of loans granted to different agribusiness enterprises. A cumulative value of loans of ₦12, 675,809.90 was granted to agribusiness entrepreneurs of different categories by Nigerian banking institutions in the pre-merger and acquisition consolidation policy of Nigerian banking institutions (1995-2004) while a cumulative value of loans of ₦106, 492,321.19 was granted to agribusiness entrepreneurs of different categories by Nigerian banking institutions during the post-merger and acquisition consolidation policy of Nigerian banking institutions (2005-2014).

Table 2. Purpose for credit allocation and utilization percentage share of value of credit granted among agribusiness subsectors in the pre (1995 -2004) and post-merger and acquisition consolidation policy (2005-2014) in the Nigerian banking institutions.

ENTERPRISES	VALUE OF LOANS (N' MILLION)			PERCENTAGE SHARE (%)		
	PREMAP	DMAP	DIFFERENCE	PREMAP	DMAP	DIFFERENCE
CROPS	**5,635,299.90**	**41,570,480.84**	**-35,935,180.94**	**44.5**	**39.0**	**5.4**
A)CASH CROPS	**111,679.00**	**1,288,626.06**	**-1,176,947.06**	**0.9**	**1.2**	**-0.3**
OIL PALM	26,223.80	768,682	-742,457.80	0.2	0.7	-0.5
RUBBER	1,230.00	14,351	-13,121.00	0.0	0.0	0.0
GINGER	0.00	3,840	-3,840.00	0.0	0.0	0.0
COTTON	39,372.50	58,330	-18,957.50	0.3	0.1	0.3
GROUNDNUTS	30,437.70	80,866	-50,428.20	0.2	0.1	0.2
COCOA	14,415.00	362,558	-348,142.56	0.1	0.3	-0.2
B)FOOD CROPS	**5,523,620.90**	**40,281,854.78**	**-34,758,233.88**	**43.6**	**37.8**	**5.8**
VEGETABLES	0.00	956,838	-956,838.10	0.0	0.9	-0.9
BEANS	0.00	261,259	-261,258.66	0.0	0.2	-0.2
SOYA BEANS	0.00	68,566	-68,566.47	0.0	0.1	-0.1
GRAINS	3,887,329.50	24,326,453	-20,439,123.01	30.7	22.8	7.8
TUBERS/ROOTS	1,636,291.40	14,668,739	-13,032,447.64	12.9	13.8	-0.9
LIVESTOCK	**557,003.00**	**9,157,584.56**	**-8,600,581.56**	**4.4**	**8.6**	**-4.2**
POULTRY	439,974.90	6,516,907	-6,076,932.24	3.5	6.1	-2.6
CATTLE	59,733.80	1,507,393	-1,447,658.97	0.5	1.4	-0.9
SHEEP/GOATS	19,229.60	257,374	-238,143.90	0.2	0.2	-0.1
OTHERS LIVESTOCK	38,064.70	875,911	-837,846.45	0.3	0.8	-0.5
FISHERIES	**75,025.50**	**2,200,817**	**-2,125,791.39**	**0.6**	**2.1**	**-1.5**
MIXED FARMING	**28,108.00**	**1,337,374**	**-1,309,265.50**	**0.2**	**1.3**	**-1.0**
OTHERS	**188,070.60**	**1,498,000**	**-1,309,929.41**	**1.5**	**1.4**	**0.1**
TOTAL	**12,675,809.90**	**106,492,321.19**	**-93,816,511.29**	**100**	**100**	

Source: Computed by the author from CBN (2014) Annual Report and Statement of Accounts for the year Ended 31st December, 1995-2014. PreMAP = Pre-merger and acquisition consolidation policy of Nigerian banking institutions; DMAP = During the post-merger and acquisition consolidation policy of Nigerian banking institutions

During the post-merger and acquisition consolidation policy of Nigerian banking institutions (2005-2014), about ₦93,816,511.29 loans was granted to agribusiness enterprises by Nigerian banking institutions than was witnessed in the pre-merger and acquisition consolidation policy era of Nigerian banking institutions. This implies that merger and acquisition consolidation policy led to an increase in the value of loans granted to agribusiness enterprises in Nigeria.

Between 1995 and 2004 (pre-merger and acquisition consolidation policy era of Nigerian banking institutions), Nigerian banking institutions under the Agricultural Credit Guarantee Scheme financed crop projects to the tune of ₦5, 635, 299.9million; livestock projects to the tune of ₦557, 003.00 million; fisheries projects to the tune of ₦75, 025.50 million; mixed farming projects to the tune of ₦28, 108.00 million; and other projects to the tune of ₦188, 070.60 million. Within the crop subsector, the value of loans granted for cash crop projects and food crop projects by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme were ₦111,679.00 million and ₦5, 523,620.90 million respectively. The value of loans granted to different cash crops enterprises include oil palm enterprise (₦26,223.80 million); rubber enterprise (₦1,230.00 million); cocoa enterprise (₦14,415.00 million); cotton enterprise (₦39,372.50 million) and groundnut enterprise (₦30,437.70 million). The value of loans granted to different food crops enterprises include grains enterprise (₦3,887,329.50 million) and root and tubers enterprises (₦1,636,291.40 million). Similarly, the value of loans granted to different livestock includes poultry (₦439, 974.90 million); cattle (₦59,733.80 million); sheep/goats enterprise (₦19,229.60 million); and other livestock (₦38,064.70 million). Between 2005 and 2014 (During the post-merger and acquisition consolidation policy era of Nigerian banking institutions), Nigerian banking institutions under the Agricultural Credit Guarantee Scheme financed crop projects to the tune of ₦41,570,480.84 million; livestock projects to the turn of ₦9,157,584.56 million; fisheries projects to the tune of ₦2,200,817 million; mixed farming projects to the tune of ₦1,337,374 million; and other projects to the tune of ₦1,498,000 million. Within the crop subsector, the value of loans granted for cash crops and food crop projects by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme were ₦1, 288,626.06 million and ₦40, 281,854.78million respectively. The value of loans granted to different cash crops enterprises include oil palm enterprise (₦768,682 million); rubber enterprise (₦14,351million); ginger enterprise (₦3,840 million); cocoa enterprise (₦362,558 million); cotton enterprise (₦58,330 million) and groundnut enterprise (₦80,866 million). The value of loans granted to different food crops enterprises include vegetable enterprise (₦956,838 million); beans (₦261,259 million); soya beans (₦68,566 million); grains enterprise (₦24,326,453 million) and root and tubers enterprises (₦14,668,739 million). Similarly, the value of loans granted to different livestock enterprises include poultry enterprise (₦6,516,907 million); cattle enterprise (₦1,507,393 million); sheep/goats enterprise (₦257, 374 million); and other livestock enterprise (₦875, 911 million).

The difference column in Table 2 indicated that for the value of loans granted to all the subsectors under the Agricultural Credit Guarantee Scheme Fund more loans were granted to different enterprises such as oil palm enterprise, rubber enterprise, cocoa enterprise, ginger enterprise, vegetables enterprise, beans enterprise, soya beans enterprise, grains enterprise, and root and tuber enterprise, poultry, cattle, sheep/goats fishery, other livestock, mixed farming etc were granted loans by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme during the post-merger and acquisition consolidation policy era of the Nigerian banking institutions than pre-merger and acquisition consolidation policy era of the Nigerian banking institutions.

In the pre-merger and acquisition consolidation policy era of the Nigerian banking institutions (1995 – 2004), the utilization percentage share of loans to different enterprises by value shows that crop based projects accounted for approximately 44.5% in cumulative value of loans, livestock based projects accounted for 4.4% in total value of loans, fisheries based project's total share was just a paltry 0.6% in total value of loans, mixed farming based projects accounted for a paltry 0.2% in total value of loans while others based projects accounted for 1.5 % in total value of loans guaranteed. In the crops subsector, food crops based projects accounted for 43.6% in total value of loans while cash crop based projects accounted for a paltry 0.9% in total value of loans. Grains based projects were the most financed projects in the crop subsector and accounted for 30.7% in total value of loans followed by roots/ tubers which accounted for 12.9% in total value of loans. In the livestock subsector, poultry based projects were the most financed projects and accounted for 3.5% in total value of loans guaranteed by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme.

During the post-merger and acquisition consolidation policy era of the Nigerian banking institutions (2005-2014), the utilization percentage share of loans to different enterprises by value shows that crop based projects accounted for approximately 39.0% in cumulative value of loans, livestock based projects accounted for 8.6% in total value of loans, fisheries based project's total share was 2.1% in total value of loans, mixed farming based projects accounted for 1.3% in total value of loans while others based projects accounted for 1.4 % in total value of loans guaranteed. In the crops subsector, food crops based projects accounted for 37.8% in total value of loans (reduced by 5.8% from its percentage share in the pre-merger and acquisition consolidation policy era) while cash crop based projects accounted for a paltry 1.2% in total value of loans (increased by 0.3% from its percentage share pre-merger and acquisition policy era). Grains based projects were the most financed projects in the crop subsector and accounted for 22.8% in total value of loans (reduced by 7.8% from its percentage share in the pre-merger and acquisition consolidation policy era) while as in the livestock subsector, poultry based projects were the most financed projects and accounted for 6.1% in total value of loans guaranteed by the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme Fund (increased by 2.6% from its percentage share pre-merger and acquisition policy era). Livestock, fishery and mixed farming enterprises increased by 4.2%, 1.5% and 1.0% from their utilization percentage share in the pre-merger and acquisition consolidation policy era respectively while as crops and others enterprises reduced by 5.4% and 0.1% from their utilization percentage share in the pre-merger and acquisition consolidation policy era than during the post-merger and acquisition consolidation policy era of the Nigerian banking institutions (2005-2014). The result suggested that merger and acquisition consolidation policy of the Nigerian banking institution has a reallocation effect on the total value of loans granted to different agribusiness subsectors of the Nigerian economy. This might not be purposive on the part of the Nigerian banking institutions under the Agricultural Credit Guarantee Scheme Fund but however, established the fact that most poorly financed agribusinesses in Nigeria were made better off by the introduction of merger and acquisition consolidation policy in the Nigerian banking institutions. This result further suggested that under the scheme, credit was extensively rationed for crop based projects and intensively rationed in livestock, fish, mixed farming and others based projects. This might not be purposive on the part of the scheme but however, established the fact that small-scale individual borrowers dominated the crop based project while medium-scale cooperative and/or company borrowers dominated the livestock and fish subsectors. In credit schemes with extensive rationing, a large value of beneficiaries are targeted but with each beneficiary receiving a small amount [19]. Access to credit is the motive for implementing extensive credit rationing. Increase in access to credit with limited availability of credit will culminate into small loan sizing. According to [19], extensive credit rationing is indicative of poor loan sizing. The decrease in loan size on one hand may be an indication that the scheme wanted to reach more people and might not have reduced loan administration costs for the lending agencies as expected, a reason why most banks will refuse to participate in the scheme and colossal withdrawal of those already participating in the scheme [15]. On the other hand, decrease in loan size may be an indication that most of the crop based borrowers demand for small amount of loans which they can repay willingly because of the subsistence nature of their farming business or could be a predetermined amount for categories of agribusiness enterprises. Repayment of loan is the motive for implementing intensive credit rationing. Increase in loan repayment will culminate into increased returns for the lending agencies [15]. According to [7], lenders would like to identify borrowers most likely to repay their loans since the banks expected returns depend on the probability of repayment. In an attempt to identify borrowers with high probability of repayment, banks are likely to use the interest rate that an individual is willing to repay as a screening device [15]. This is likely to be reflected in higher loan amounts applied for and disbursed by the banks under the scheme to the borrowers after rationing out those who are not qualified, a justification for the larger amount of loan received by fewer loan beneficiaries in the livestock and fish subsectors in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institutions.

Table 3 presents a comparison of the mean value and growth rate in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions.

The t-student distribution test result for the mean value and growth rate in government credit allocation to agribusiness activities, agribusiness output, number of agribusiness enterprises and value of bank's credit allocation to agribusiness sector in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions is also presented in Table 3.

The mean value of government capital investment in agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institution were approximately ₦17.70 billion and ₦81.00 billion, respectively. There was a significant difference (t = - 5.148) in the mean value of government capital investment in agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions. The mean value of government capital investment in agribusinesses in Nigeria during the post-merger and acquisition consolidation policy in the Nigerian banking institutions was significantly higher than the mean value of government capital investment in agribusinesses in Nigeria in the pre-merger and acquisition consolidation policy in the Nigerian banking institution. This indicated that more concentration might have been given by government to agribusinesses in Nigeria due to banks' merger and acquisition consolidation policy. Similarly, variations existed in the average rate of growth of government capital investment in agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institution. The average growth rate of government capital investment in agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was -17.47% and -3.78 respectively. The difference in the average mean growth rates of government capital investment in agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was however not significant (t = -0.359).This indicated that the rate of government capital investment in agribusinesses in Nigeria had not been faster in any of the paired periods due to merger and acquisition consolidation policy. Therefore, government capital investment in agribusinesses in Nigeria showed homogeneity in growth. The mean quantity of agribusiness output varied with mean quantity of agribusiness output in the pre-merger and acquisition consolidation policy in the Nigerian banking institutions being about 50.60 billion grain equivalent (GE) while the mean quantity of agribusiness output during the post-merger and acquisition consolidation policy in the Nigerian banking institutions was about 83.20 billion grain equivalent (GE) There were significant differences (t = -9.264) in the mean agribusiness output in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions. The mean quantity of agribusiness output in Nigeria during the post-merger and acquisition consolidation policy in the Nigerian banking institutions was significantly higher than the mean quantity of agribusiness output in Nigeria in the pre-merger and acquisition consolidation policy in the Nigerian banking institution.

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Table 3. Test of significance of the difference between the mean value and growth rate in government credit allocation to agribusiness activities, agribusiness output, number and value of bank's credit allocation to agribusiness sector in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions

SAMPLES	MEAN	STD.DEVIATION	STD.ERROR MEAN	D.F	T-STATISTIC
MEAN VALUE OF GOVERNMENT CAPITAL INVESTMENT IN AGRIBUSINESSES, AGRICULTURAL OUTPUT, AND NUMBER AND VALUE OF LOANS (₦ BILLIONS)					
A GCIAPREMAP	17.70	18.60	5.88		
B GCIADMAP	81.00	26.59	8.41		
DIFFERENCE (A-B)	-63.30	38.88	12.30	9	-5.148***
A AQT PREMAP	50.60	4.43	1.40		
B AQT DMAP	83.20	15.07	4.77		
DIFFERENCE (A-B)	-32.60	11.13	3.52	9	-9.264***
A NUMLOANS PREMAP	2,053.20	584.17	184.73		
B NUMLOANS DMAP	5,247.90	861.88	272.55		
DIFFERENCE (A-B)	-3,194.70	641.70	202.92	9	-15.743***
A VLOANS PREMAP	646.90	622.94	196.99		
B VLOANS DMAP	8,138.90	2,607.24	824.48		
DIFFERENCE (A-B)	-7,492.00	2,186.44	691.41	9	-10.836***
MEAN GROWTH RATE OF GOVERNMENT CAPITAL INVESTMENT IN AGRIBUSINESSES, AGRICULTURAL OUTPUT, AND NUMBER AND VALUE OF LOANS (%)					
A GCIA PREMAP	-17.47	109.79	36.60		
B GCIA DMAP	-3.78	32.65	10.88		
DIFFERENCE (A-B)	-13.69	114.47	38.16	8	-0.359
A AQT PREMAP	2.89	5.10	1.70		
B AQT DMAP	5.93	0.42	0.14		
DIFFERENCE (A-B)	-3.04	5.07	1.69	8	-1.800
A NUMLOANS PREMAP	4.83	19.49	6.50		
B NUMLOANS DMAP	4.12	12.51	4.17		
DIFFERENCE (A-B)	0.71	25.79	8.60	8	0.082
A VLOANS PREMAP	22.29	19.90	6.63		
B VLOANS DMAP	-3.76	47.65	15.88		
DIFFERENCE (A-B)	26.05	53.99	18.00	8	1.447

Source: Computed by the author from CBN (2014) Annual Report and Statement of Accounts for the year Ended 31st December, 1995-2014. PreMAP = Pre-merger and acquisition consolidation policy of Nigerian banking institutions; DMAP = During post-merger and acquisition consolidation policy of Nigerian banking institutions; GCIA = government capital investment in agribusinesses; AQT agribusiness output; Numloans = number of loans and Vloans = value of loans. *** = represents 1% level of significance.

This indicated that the mean quantity of agribusiness output in Nigeria increased more between 2005 and 2014 due to merger and acquisition consolidation policy in the Nigerian banking institutions.

Therefore, merger and acquisition consolidation policy in the Nigerian banking institution enhanced agribusiness output performance in Nigeria. Similarly, variations existed in the average rate of growth of agribusiness output in Nigeria in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institution. The average growth rate of agribusiness output in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was 2.89% and 5.93% respectively. The difference in the average mean growth rates of agribusiness output in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was not significant (t = -1.800). This indicated that the rate of growth in agribusiness output in Nigeria had not been faster due to merger and acquisition consolidation policy in the Nigerian banking institutions. Therefore, agribusiness output in Nigeria showed homogeneity in growth in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions. This findings compliment [3] who also reported that growth rate of agricultural output was slow. The non-significance of the difference in the mean growth rates of agribusiness output in the pre and post-merger and acquisition consolidation policy, suggested that the rate of investment in the sectors was not significantly higher as a result of the merger and acquisition consolidation policy. The mean numbers of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institution were 2,053.2 farmers and 5,247.9 farmers respectively. There was a significant difference (t = -15.743) in the mean number of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institution. This indicated that the mean number of loans granted to agribusinesses in Nigeria increased more between 2005 and 2014 due to merger and acquisition consolidation policy in the Nigerian banking institutions. This indicated that more farmers had access to credit from banks in Nigeria during the post-merger and acquisition consolidation policy in the Nigerian banking institution. Therefore, merger and acquisition consolidation policy in the Nigerian banking institution enhanced the number of loans granted to agribusinesses in Nigeria. Similarly, variations existed in the average rate of growth of number of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institution (Table 4.8). The average growth rates in the numbers of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy were 4.82% and 4.12% respectively. The difference in the average mean growth rates of number of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was not significant (t=0.082). This indicated that the rate of growth in number of loans granted to agribusinesses in Nigeria had not been faster due to merger and acquisition consolidation policy in the Nigerian banking institutions. Therefore, number of loans granted to agribusinesses in Nigeria showed homogeneity in growth in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions. The mean value of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institution were ₦ 646.90 billion and ₦8, 138.9 billion respectively. There was a significant difference (t = -10.836) in the mean value of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institution. This indicated that the mean value of loans granted to agribusinesses in Nigeria increased more between 2005 and 2014 due to merger and acquisition consolidation policy in the Nigerian banking institutions. This indicated that more farmers had access to credit from banks in Nigeria during the post-merger and acquisition consolidation policy in the Nigerian banking institution. Therefore, merger and acquisition consolidation policy in the Nigerian banking institution enhanced the value of loans granted to agribusinesses in Nigeria. Similarly, variations existed in the average rate of growth of value of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy of the Nigerian banking institution (Table 4.8). The average growth rate value of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions were 22.3% and -3.76% respectively. The difference in the average mean growth rates of value of loans granted to agribusinesses in Nigeria in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions was not significant (t = -1.447). This indicated that the rate of growth in value of loans granted to agribusinesses in Nigeria had not been faster due to merger and acquisition consolidation policy in the Nigerian banking institutions. Therefore, value of loans granted to agribusinesses in Nigeria showed homogeneity in growth in the pre and post-merger and acquisition consolidation policy in the Nigerian banking institutions.

CONCLUSIONS

The merger and acquisition consolidation policy in Nigerian banking institutions has influenced the participation and accessibility of many smallholder agribusiness operators to credit facilities for production purposes. However, credit rationing characterized credit allocation behaviour of Nigerian banking institutions. This plays a mammoth role in the definition of the pattern of growth in the number and value of loans guaranteed to different sub-sectors in the agribusiness sector. The mean value of government capital investment in agribusinesses, agribusiness output, number and value of loans allocated to agribusiness enterprises was significantly higher during the post-merger and acquisition consolidation policy era in the Nigerian banking institutions than in the pre-merger and acquisition consolidation policy era. We had the same growth rate in government capital investments, agribusiness output, number and value of loans allocated to agribusiness enterprises in the pre and post-merger and acquisition consolidation policy era. More farmers had access to credit from banks in Nigeria during the post-merger and acquisition consolidation policy era in the Nigerian banking institution.

Finally, Merger and acquisition consolidation policy in the Nigerian banking institution enhanced the number of loans granted to agribusinesses in Nigeria.

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