

The Difference in Differences Model Analysis of Efficiency in Bank Mergers

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Abstract

In Nigeria, bank consolidations as a monetary policy gave rise to mergers. Prior to the consolidation policy, banks witnessed several crises that led to the distress of many. Much of the crisis was caused and fueled by high loan loss, provisioning lending to capital erosion, and liquidity impairment, poor asset quality, and dissipation of profit. The distress necessitated monetary policy through the introduction of banking sector reform such as consolidation to address the problem. The idea behind the financial sector's monetary policy is to make the sector more competitive and provide services that impact the welfare of citizens through cost savings and improved efficiency. In this article, the Difference in Differences model is positioned to determine the efficiency effect of mergers in the banking sector of Nigeria from 2000 to 2020. Data from 14 banks were analyzed, with separation between the merged (treated) and non-merged groups (non-treated) to take account of the contrafactual. Difference-in-differences models are used for estimating the effect of exposure by using changes over time in a treatment group relative to a control group. The result indicates efficiency is not significant in the bank merger from the increased capital base of Nigerian banks, within the years considered.

Keywords: Difference in Differences, Efficiency, Merger, Consolidation, Monetary Policy

JEL classification: G21, G34, E4, E5, E6

1. INTRODUCTION

Using monetary policy as part of the overall banking reform intended to foster a comprehensive healthy financial system to support economic development and avoid systemic distress, the CBN in 2004 directed all banks to shore up minimum paid-up capital from 2 billion to 25 billion of Naira prior to the end of 2005. Leaders of banks were encouraged to prospect mergers to meet policy adjustments. By the end of the capitalization exercise, the number of banks in operation reduced from 89 to 25. As expressed in the Financial System Strategy, this reform was intended to consolidate the gains of the previous reform and reposition the sector to play a leading role in assuring Nigeria was one of the top twenty economies globally by the year 2020 (Oyewo, 2022). The bank consolidation was expected to improve efficiency, enhance synergy, induce investor focus, and trigger productivity and welfare gains. Berger et al. (1997) and Pilloff and Santomero (1997) emphasized bank consolidation is for improved economies of scale, increase in the efficiency of the consolidating banks, and stimulated market competition. The motive behind consolidation is to maximize shareholders' value. However, maximizing shareholders' value requires the participating firms to improve their market power by improving market prices and efficiency. A study by Adeyemi (2010) identified eight reasons firms consolidate a business, which are cost saving, revenue enhancement, risk reduction, new development, the advent of deregulation, globalization, financial stability, and shareholders pressure. According to Berger et al. (2008) and Ezu (2020), bank consolidation helps the banking industry become stronger and maximize efficiency. The most important synergies derived through the consolidation of banks stems from economies of scale, earn increased revenue, and the potentials for tax gains (Cevik & Teksoz, 2012). Consolidation is achieved through mergers, which combines two or more separate firms into a single firm (Gaughan, 2013). Before any bank leader consolidates through a merger in the Nigerian industry, bank leaders must first seek and obtain approval from the Security and Exchange Commission (SEC). Before granting approval, the SEC considers the effect of the proposed transaction on the competitive environment as a means of ensuring

there is no monopoly creation. According to Izu (2020), the procedure or process for obtaining approval for mergers includes filling a premerger notification, filling a formal application for approval, holding court order meetings, and complying with post-approval requirements.

2. LITERATURE REVIEW

Studies conducted by scholars proved that a well-functioning financial sector can improve allocating capital resources, encourage savings, and lead to more capital formation through efficiency. Efficiency involves how well resources are implied as well as the how effective the utilizing of resources economically lead to customer satisfaction. The majority of studies done in this subject stressed the changes of quantity, yet assumed that no qualitative changes occurred in inputs, processes and outputs, or the changes of quality might be omitted from existing studies. X-efficiency and scale economies are two critical elements governing productivity in banking. Studies in this field employ the parametric or non-parametric method to estimate the productivity change without using other techniques. Some research aligns with the definition of efficiency and presents the productivity measures through effectiveness and efficiency together.

Waheed and Younus (2010) determined bank efficiency relaxes credit constraints and increases the growth rate for financially dependent industries during a crisis. The researchers used quantitative research to determine that the financial sector's development is crucial to economic growth and the efficiency of the financial industry is essential to the long-term growth performance of countries. In the analysis of financial reforms and economic growth in Pakistan using the data of thirty-six years between 1973- 2008 and examining economic growth by exploring a correlation among economic growth, deposits, lending, real interest rate, savings, and inflation, there was a positive impact of financial reform on growth (Rehman et al., 2011). Linder and Crane (1993) examined the impact of mergers on the net income ratio using a profit analysis and determined neither income nor non-interest expenses were affected

by merger activity. In contrast, Mwenda and Mutoti (2011) investigated the effect of market-based financial sector reforms on the efficiency and competitiveness of commercial banks and economic growth in Zambia, the result shows that the determined reforms in phases II and III had significant positive effects on bank cost efficiency, financial depth, phase II and III financial sector reforms, and degree of economic growth. Phase II policies and inflation rates have adverse effects, while the rest of the variables positively affect economic growth. Research on the effect of business combination on financial performance using six financial ratios a) Gross Profit Margin, b) Net Profit Margin, c) Operating Profit Margin, d) return on Capital Employed, e) return on Net Worth, and f) Debt Equity Ratio data was extracted from the annual report of 10 commercial banks that faced merger and acquisition during the period 1999 to 2010. In the analysis paired T-Test was deployed and the result indicated a negative impact of merger on bank efficiency (Fatima, & Shehzad, 2014). Umoren and Olokoyo (2007) examined the impact of mergers on the performance of banks within the pre-and the post-consolidation periods. In particular, the focus of the research was on liquidity and solvency. A performance ratio analysis of a sample of 13 megabanks was used. Umoren and Olokoyo (2007) determined on average, that bank consolidation resulted in improved performance. However, simple ratios and descriptive statistics did not allow the study to control for intervening factors, thereby making it impossible to isolate the 'pure' impacts of mergers on bank efficiency. Similar results were obtained by Adegboyega (2012) after evaluating the impact of mergers on the performance of two consolidated banks. Though Adegboyega (2012) split the impact into respective pre and post-consolidation parts, the author could not control for intervening variables thus making the findings spurious and conclusions superfluous. Maimako and Oladele (2012) evaluated the impact of bank restructuring on creating shareholders' value using a combined survey with secondary data in a descriptive statistical analysis. The researchers concluded mergers and capital restructuring had significant impacts on value creation though capital restructuring exerted greater influence. Although there is greater influence the mergers suffered from not providing a platform for isolating the pure effect of mergers on bank

efficiency. Omah et al. (2013) attempted to split the impact of mergers on the efficiency of banks into pre- and post-consolidation components by conducting a comparative analysis of the two and isolating the pure effect of mergers on bank efficiency. The authors reviewed literature to determine post-merger studies follow either the following two approaches: a combination of efficiency improvement or shareholders value analysis. The researchers also observed that studies on mergers in Nigeria, especially those conducted before 2012, were relatively few. In addition, the previous researchers did not compare pre and post-merger efficiency performance using a case-by-case approach or general description of mergers and accounting framework.

3. BANKING IN NIGERIA

The origin of institutionalized banking in Nigeria started sometime in 1883 with the establishment of the African Banking Corporation and was quickly followed by establishment of the British Bank of West Africa in 1884. The African Banking Corporation failed shortly after formation, while the British Bank of West Africa evolved into the oldest bank in Nigeria known as The First Bank of Nigeria (Cowen & Shenton, 1991). Over the years, the British Bank of West Africa changed names at different periods; initially to the standard bank of west Africa, the standard bank of Nigeria and, presently, First Bank of Nigeria PLC. Other financial institutions followed suit soon, including the precursors of the present-day union bank of Nigeria PLC. Since these banks were established to protect the interest of their foreign owners, the policies were somewhat discriminatory against the indigenes who, being denied credit advances in these banks, became effectively excluded from the mainstream economy. The resultant alienation ignited the protagonist of the nationalist of the wholly indigenous banks in Nigeria. Thus, for the periods spanning 1929 and 1960, about 26 of such banks were formed, out of which only four survive till the present day (Uche, 2010). They are the national bank of Nigeria, Wema bank, formerly known as Agbonmagbe bank and African Continental Bank of the north.

The widespread public concern occasioned by the spate of the collapse of indigenous banks warranted the government to set up Paton's commission to look into the collapse of one of such banks. The commission's report laid the foundation they needed to enact the banking ordinance of 1952 (Fadare, 2011), which heralded the commencement of banking legislation in Nigeria. The 1952 ordinance brought about the first-time legal prerequisites for the formation and running of banks. It disallowed the operation of any banking business in the country without a license granted by the financial secretary. With this and some other executive powers vested by the ordinance, the financial secretary became the pioneer regulatory and supervisory authority in this country's banking industry. Notwithstanding, the concern of the nationalists seemed to be just the formation of a Central Bank, which would play a more wide-ranging role in the economy and be better established to take over and practice the regulatory and supervisory powers then vested in the financial secretary. After a series of debates and similarly following the reports of J.B Loynes in 1957 (Uche, 2000), the colonial government eventually passed the central bank of Nigeria ordinance in 1958, which came with the functions of issuance of a legal tender currency in Nigeria, maintenance of external reserves to safeguard the international value of the currency, promotion of monetary stability and a robust financial system, banker and financial adviser to the federal government and banker to other banks in Nigeria and Abroad. The central bank of Nigeria ordinance of 1958 came into force in 1959, and since then, the bank has passed a series of legislation which assumed broader powers and similarly increased prominent loans focused on developing Nigeria's banking industry.

Between 1960 and 1980s witnessed the establishment of several banks, however, not without the 1952 Banking Ordinance and, similarly, the Banking Amendment Act. The era marked the commencement of banking regulation in the country. It also saw the formation of some specialized banks namely Development Banks and Merchant Banks, which are named the Nigerian Industrial Development Bank (NIDB), the Nigerian Bank for Commerce and similarly the Industry (NBCI) and the Nigerian Agricultural and Credit Bank. The Nigeria Industrial Development Bank was formed in 1964 through a

reconstruction of the then Investment Company of Nigeria Limited (ICON), which was initially incorporated in 1959 as one industrial development finance company (Oluduro, 2015). In the same vein, Nigeria Acceptances Limited (NAL), which underwent a merger, became Nigeria Acceptances Limited in 1969 and subsequently Merchant Bank Limited. Similarly, between 1973 and 1975, about four merchant banks were formed, namely: Continental Merchant Bank Limited, International Merchant Bank Limited by First National Bank of Chicago, through the merger of First National Bank of New York, Chase Manhattan Bank, Nigeria Merchant Bank PLC and ICON (Merchant Bankers) Limited. The timeframe between 1959 and 1985 saw consolidated growth in the banking sector (Enyioko, 2012). In 1970, there were 14 commercial banks which rose to 29 in 1980. In 2007, there were 24 capitalized commercial megabanks, 12 arising out of a series of mergers and acquisitions in the banking industry were presumed to restore public and investors' confidence and forestall a total collapse of the sector. In 1991, about one hundred and twenty-one commercial and merchant banks were already in existence in Nigeria. The figure was made up of sixty-six commercial and fifty-five merchant banks. Only in 1991, twenty new banks were licensed, from the whole idea of deregulation of the then economy by the federal government of Nigeria and this brought a free-market enterprise and similarly liberalization of the whole banking licensing scheme. Deregulation of the economy at that time and the proliferation of financial institutions since 1986 came with attendant consequences. The banking sector experience distress for several reasons, such as mismanagement in the form of grants, bad loans, and advances in the ownership structure, which means the owner's direct intervention in the banks. Among the long list of reasons for the distress includes inappropriate corporate governance, inadequate regulatory and supervisory capacity; asymmetric information; undercapitalization, among others. The distress led to the crisis and erosion of public confidence, diminution of trust and relationship commitment, which, once betrayed, do not return easily. At that time, nothing less than twenty-seven banks failed and were wound up from the resultant effects of the distress in the banking sector. This led to the loss of wealth, public confidence in the system, and more

challenging monetary management. It is worthy of note that bank failure was not peculiar to the first era alone but cuts across all other periods as well. There were quite significant cases of failure, which is indeed more pronounced in the period 1986- 2003 (Oluduro, 2015), which thus necessitated drastic regulatory measures to be taken in the succeeding years to stem the tide of failure, which was on the high side and, to restore public confidence in the banking sector. Owing to the bank's failing harvest, the Nigerian Deposits Insurance Corporation (NDIC) was established by Decree 22 Of 1988 to insure deposit liabilities of licensed banks, provide financial and technical assistance to banks and contribute to the quest for a safe and sound banking environment in Nigeria (Ezeagba, 2014). In essence, it was created to carry out the final mortality process of ailing banks whose licenses were revoked by the Central Bank of Nigeria. The period from 2004 to the present has been one of mixed feelings in the sector, as the CBN in late 2004 issued a directive ordering banks to jerk up their capital base to N25 billion by December 2005. Nigeria's recapitalization policy provoked vehement protests from the bankers, but the order was irreversible. By 2006, twenty-five banks remained in existence resulting from the mergers and acquisitions.

4. BANKING EFFICIENCY

The concept of efficiency as a general performance benchmark for all types of businesses was, in the first instance, formulated in the early works of Edgeworth (1881) and Pareto (1927) and recorded its practical implementation (Alber, Elmoftly, Kishk, & Sami, 2019). Efficiency is interpreted as the maximum potential ratio between the output and the input of the product development process, which shows the optimal distribution of available resources that would allow achieving the full potential (Cvilikas & Jurkonyte-Dumbliauskiene 2016). Meanwhile, Drucker (1963) defined Efficiency as the ability of an organization to achieve output from the minor input level. In other words, Efficiency is defined as the measure of effectiveness capable of producing the minimum waste of time, effort, and skill regarding the banking sector, efficiency supports the fruitfulness of implemented macroeconomic policies, which

generate economic growth, durable development, and welfare for society (Chinyere & Ikoromasoma, 2021).

Two main methods are widely used in the banking efficiency theory literature. Namely, the production and intermediation approach: The production approach presumes that financial institutions serve as producers of services for account holders; that is, they should perform transactions on deposit accounts and process documents such as loans (Jouadi & Zorgui 2014). The intermediation approach assumes that banks act as financial intermediaries whose central role is to collect revenues from savers in exchange for their liabilities, and the banks, in turn, will provide loans to others for profit-making (Aghimien et al, 2016). The intermediation approach: also known as the asset approach, is a situation whereby the financial firms are assumed to act as an intermediary between the savers and borrowers. Banks are seen as purchasing labour and materials and depositing funds that produce outputs of loans and investments. In comparison, Berger & Humphrey (1997) argues that neither of these two approaches is perfect because they cannot fully capture the dual role of financial institutions as providers of transactions processing services and financial intermediaries. They point out that the production approach may be somewhat better for evaluating the efficiencies of bank branches, and the intermediation approach may be more appropriate for assessing financial institutions as a whole.

Banking efficiency types are scale efficiency and was first introduced by Farrell in 1957, which is the relationship between a bank's per unit average production cost and volume; the second type is the Xefficiency and was introduced in 1966 (Kraft, & Tirturoğlu, 1998). It represents deviations from the costefficient frontier that depicts the lowest production cost for a given output level differently. Farrell (1957), was the first to measure efficiency empirically by dividing it into two components, technical Efficiency (TE) and allocative Efficiency (AE).

5. METHODOLOGY

The study used quantitative analysis and secondary data from a financial statement from banks that participated in a merger (treatment group) and those that did not participate in a merger (control group). The population for the study is Access, First, FCMB, Sterling, UBA, Ecobank, and Stanbic IBTC for the treatment group. The GT, Zenith, Union, Citibank, Fidelity, WEMA, and Standard Chartered bank for the control group. Currently, the banks are ranked among the top banks in Nigeria and operate with a universal banking license. The time frame considered for this study is 2000 to 2020. The 20-year period allows for a significant lag period for banks to have reviewed and implemented the recommendations by the CBN pre and post-consolidation policy. The secondary data obtained are analyzed and discussed using an intermediary bank approach. Furthermore, the variables used are calculated for ten years before the merger and ten years immediately after the merger. The calculated variable was generated to assist in determining the efficiency of banks under examination after the mergers before integrating into Difference in Differences (DID) regression model. The data used as proxies for measuring performance is return on assets (dividing net income by total assets), efficiency (dividing a bank's expenses by net revenues), fixed assets (Total Fixed Asset Purchase Price + capital improvements) – (Accumulated Depreciation + Fixed Asset Liabilities), customer loans (are assessed directly from customers' investments in banks), profit after tax (subtracting all expenses and income taxes from the revenues the business has earned), customer deposits (are assessed directly from customers' investments in banks).

6. MODEL SPECIFICATION

To analyze the effect of merger on the efficiency of Nigerian Banks using DID model, the dependent variables will be transposed to reflect the empirical analysis of having efficiency as the regressand. The DID model will be deployed as follows:

Treatment effect for unit i at time t is

$$Y1i(t)-Y0i(t).....(1)$$

Observed outcomes $Yi(t)$ are realized as

$$Yi(t) = Y0i(t)(1-Di(t)) + Y1i(t)Di(t).....(2)$$

Since the treatment occurs only after $t = 0$, we define

$$Di = Di(1)$$

It follows that,

$$Yi(0) = Y0i(0),.....(3)$$

$$Yi(1) = Y0i(1)(1-Di) + Y1i(1)Di(4)$$

Let

$$\alpha ATET = E[Y1(1)-Y0(1)|D = 1].....(5)$$

If the treated and non-treated would have exhibited the same trend in the absence of the treatment

$$E[Y0(1)-Y0(0)|D = 1] = E[Y0(1)-Y0(0)|D = 0](6)$$

Then:

$$\alpha ATET = [E[Y(1)|D = 1]-E[Y(1)|D = 0] - [E[Y(0)|D = 1]-E[Y(0)|D = 0](7)$$

The regression version of the DID with the covariates, will be the model to investigate efficiency as follows:

$$Y_{eff} = \beta_0 + \beta_1 D^{post} + \beta_2 D^{Tr} + \beta_3 D^{post} D^{Tr} [+ \beta_4 X] + \varepsilon(8)$$

Y_{eff} = Efficiency

D^{post} = Time Dummy (1 = after merger)

D^{Tr} = Treatment group Dummy

$D^{post} D^{Tr}$ = Time x Treatment interaction

B_3 = DID estimate

X = Vector of control variables

$$DID\ estimate = (\bar{Y}_{B,2} - \bar{Y}_{A,2}) - (\bar{Y}_{B,1} - \bar{Y}_{A,1})(9)$$

$(\bar{Y}_{B,2} - \bar{Y}_{A,2})$ = the difference across types after treatment

$(\bar{Y}_{B,1} - \bar{Y}_{A,1})$ = difference before treatment

The justification for adopting the DiD analytical technique is based on the best linear unbiased estimate of OLS regression.

Descriptive statistics

Variable	eff	cloan	roa	cdeposit	pat	fassets
Mean	.6992792	144.5102	.0228185	433.6224	144.8401	143.9456
Std. Dev	.2336397	83.71167	.141387	83.32627	83.2512	82.99001
Min	.05	1	-1.9	289	1	1
Max	1	288	.6	578	288	288
Variance	.0545875	7007.643	.0199903	6943.267	6930.763	6887.342
Skewness	-1.089014	.0103308	-10.51505	-.0042481	-.0034287	.0058465
Kurtosis	3.964817	1.795669	13.73613	1.821347	1.807877	1.807594
obs	294	294	294	294	294	294

Table 1: STATA output by author

The descriptive statistics explain the data deployed for the analysis. The normality test preceded the DiD analysis. The standard deviation values showed the extent to which the observations are dispersed around their respective means and the standard deviation to mean of the variables greater than 0.5 suggesting a high coefficient of variation or high dispersion. The skewness measures the degree of asymmetry of the series; for the efficiency data, the -1.089014 implies a negative skewness with a long left tail because of lower values. Skewness for the customer's loan is 0.0103308 and signifies symmetry around its mean. The return of assets is -10.51505, showing a negative skewness with a long left tail and lower values. Profit after-tax skewness, customers' deposit, and profit after tax skewness are -0.0042481, and -0.0034287 signifies negative skewness with a left long tail. The fixed assets skewness has 0.0058465, representing

an average skewness with symmetry around its mean. The Kurtosis pictures the peakedness or flatness of distribution. The efficiency figure is 3.964817 is mesokurtic, which is a normal distribution. The customer loan is 1.795669 depicts platykurtic because it has a lower value than the sample. Meanwhile, the return on assets kurtosis figure is 13.73613, a normal mesokurtic distribution. Also, customer deposit and fixed assets have kurtosis data of 1.821347 and 1.807594, representing platykurtic kurtosis. The data and standard error are reliable having been controlled for heteroscedasticity.

7. RESULTS AND DISCUSSION

Table 2: Result of regression analysis with efficiency as the dependent variable

Number of Obs =	294
F(6, 287) =	2.21
Prob > F =	0.0507
R-squared =	0.0185
Root MSE =	.23387

eff	Coef.	Robust Std. Err.	t	p> t	[95% Conf. Interval]	
did	0.0072641	0.029672	0.24	0.807	-0.0511376	0.0656657
fassets	0.0002407	0.000178	1.35	0.177	-0.0001093	0.0005906
cloan	0.0000733	0.000149	0.49	0.623	-0.0002199	0.0003466
cdeposit	0.0000246	0.000153	0.16	0.873	-0.0002773	0.0003264
roa pat	0.0662594	0.037422	1.77	0.078	-0.0073978	0.1399167
_cons	0.0002009	0.000156	1.29	0.199	-0.0001064	0.0005083
	0.6103809	0.082940	7.36	0.000	0.4471324	0.7736293

Table 2: STATA Output by author

Table 2, shows the efficiency model as the dependent variable and therefore refers. The constant coefficient of 0.6103809, indicate that as the value of the Fassets, cloan, cdeposit, ROA, and PAT increases, the mean of eff tends to increase by same amount. Also, the constant indicates that if none of the regressors increase by one unit, eff will be 0.6103809. Merger of 0.0072641, is an indication of the effect of the rise in the regressor variables on eff. Although a positive figure, yet minimal to generate marginal efficiency increase. Absence of efficiency generates increase cost of services rendered by the

banks, no wonder the cost of bank transactions has increased following the bank mergers. An increase in banks assets will increase eff by 0.0002407, meaning that banks fixed assets is reductant in improving efficiency, hence efficiency is retarded. Banks need to consider shake up of manpower and not just increasing business physical assets but efficiency in the running of business. Increased banks assets without proper utilization makes it redundant and negatively affect efficiency. While other regressors merger effect are positive and indicating a correlation with the eff, a naira increase in customer deposits will increase eff by 0.0000246, the amount is negligible to efficiency and shows that customers' investments in banks are not deployed to improving lower cost of production and economies of scale in the banks after the mergers. A naira increase in profit improves the merger effect of eff by 0.0002009. Banks profit is meaningless in generating efficiency for the banks, a pointer of irregular banking activities because as profit grows efficiency should be improving. The merger of 0.0072641, falls outside of the lower band -0.0511376 and upper band 0.0656657, an indication of no significance pvalue of the bank efficiency in the merger effect, implying that the merger exercise has not generated required economies of scale and reduced cost of banking. Therefore, the merger effect of eff to ROA is zero. A t-value of 0.16 shows that customer deposit is the most important variable in the regression model and because the t-values of the regressors' are not up to 1.96, they are insignificant at 5% in the model, but at 1.77, ROA is more than 1.64 and as such significant at 10%. Although the merger coefficient and other independent variables coefficients are positive, the values are not substantially important after the merger exercise. However, the positive merger coefficients suggest a robust trend in the future, which is not supported by the data at present. Therefore, merger has no significant effect on efficiency, because at 0.807 p-value, bank efficiency is not significant to mergers, the result is in consonant with Berger, A.N. (1998), that merger has no significant effect on efficiency.

8. CONCLUSION AND RECOMMENDATIONS

Banks are considered to be the backbone of the financial system; they play an important role in economic development and that of fund transfer from surplus units to deficit units. So, the efficiency of a bank is essential and needs to be paid more attention. Continued inefficiency of bank mergers might rob essential efforts of the resources required by banks to be entirely successful. However, focusing on cutting costs alone is not a formula for long-term success. A balanced approach that enables a bank to improve operating efficiency and upgrade its capabilities to respond to the market's needs and prepare for the future is imperative to the success of a bank's operations and profitability. For example, changes in customer expectations and preferences, new competition, and new technologies are equally transforming the nature of banking. The banking business is moving toward technology while keeping essential aspects of the traditional person-to-person transaction model. To remain competitive, banks should invest in marketing, technology, automation, and self-service capabilities and optimize their legacy investments in branches and traditional systems.

Efficiency aims to assess how customers interact with a bank to create a cost-effective combination adapted to each bank's specific customer base. But given the rapidly changing nature of customer preferences, efficiency process requires branches to be aggressively in dynamic operations as banks adjust their geographic presence. Many banks resulting from mergers are significantly reconfiguring duties, roles, and staffing within the branches and employing new benchmarks for analyzing branch performance and value. There is no one-size-fits-all approach is solving inefficiency issues in merged banks. Some banks assertively promote remote deposit capture, electronic account openings through intelligent devices, and accounts that are designed to be virtually paperless. Banks with large commercial customers pursue a fundamentally different approach by focusing on personal service with a relationship manager or account manager and a support team assigned to each bank account. The high-value business generated by this approach can offset the added costs, in addition, minimizing cost ratio of banking activities.

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