

Impact Assessment of Credit Policy and Medical Credit Facility (MCF) on Nigerian Private Sector Health Market: Evidence from Eight Nigerian States

Chimaobi V. Okolo, Kenneth A. Okpala, Johnbull S. Ogboi

Abstract—A teeming set of doctors that graduated from various universities within and outside Nigeria with the hope of practicing in the country, has their hope shattered because of poor financing, lack of medical equipments and a very weak healthcare systems. Such hydra headed challenges, allows room for quackery which increasingly contributes to the cause of mortality in Nigeria. With a view of reversing the challenges of healthcare delivery and financing in Nigeria, African Health Market for Equity (AHME), a project funded by the Bill and Melinda Gates foundation [With contribution from Department For International Development (DFID)] and currently implemented in three African Countries (Nigeria, Kenya and Ghana) over a Five (5) year period supports the healthcare sector via Medical credit fund (MCF). The study examines the impact of credit policy and medical credit funding on Nigerian health market. Ordinary least square analysis, correlation and granger causality tests were employed to measure the extent to which the Nigerian healthcare market has been influenced. Medical credit fund significantly and positively influenced average monthly turnover of private healthcare providers and Commercial bank's lending rate had a weak relationship with access to credit/approved loans (13.46%). The programme has so far made 13.91% progress, which is very poor, considering the minimum targeted private health care providers (437.6) and expected number of loan approvals (180.4) for the two years. Medical credit policy in Nigeria should be revised to include private healthcare providers in rural area for more positive impact and increased returns. Good brand advert and sensitization of the programme to stakeholders and health pressure group, and an extension of the programme beyond five years is necessary to better address the issues raised in the study.

Keywords—Credit, health market, medical credit facility, policy.

I. INTRODUCTION

HEALTHCARE expenditure in Nigeria is funded by various stakeholders such as government, private sector, international donor agencies and NGOs [6]. However, there still remains a major gap in both supply and demand side financing of the health sector. Private medical practitioners believe that government ought to be more involved in supporting the sector. On the contrary, evidence from the budgets show that annual allocations of funds to the health sector is far from what is needed to fully develop the sector.

C. V. Okolo is with department of Economics, Enugu State University of Science and Technology, Enugu, Enugu State, Nigeria (phone: +234-803-778-6912; e-mail: iparconsult@gmail.com).

K. A. Okpala is with Society for Family Health, Nigeria (e-mail: kendo24@yahoo.com).

J. S. Ogboi is an independent consultant with Jedima International Health Consult Ltd, Nigeria (e-mail:ogboijb@yahoo.com).

Regardless of the bank's contribution to the funding need of the sector, there needs a total revamp of service delivery of health providers in Nigeria in order to meet the millennium development goals.

In 2012, total health expenditure as percentage of GDP stood at 5.3%, ranking Nigeria 153rd out of 187 countries and territories [6], resulting in high medical tourism, which is now a topic of discuss, considering that Nigeria spend millions in dollars seeking succor which it can provide with optimal support and investment. Furthermore, a teeming set of doctors that graduated from various universities within and outside Nigeria with the hope of practicing in the country, has their hope shattered due to poor financing, lack of equipments and very weak health care system. Such hydra headed challenges, allows room for quackery which increasingly contributes to the cause of mortality in Nigeria.

Justifying Nigeria's need for investment in health research and innovation, [6] explained that if people were a nation's main asset, their health status defines the course of development, and their health characteristics determine the nature and direction of sustainable human development. Furthermore, [8] advise that Government intensify more effort in making public, health care providers more efficient and humane in their delivery of healthcare services considering that private healthcare providers charge higher even when they don't have necessary resources in place.

Considering the setbacks in financing private health care providers and the need to further liberalize Nigerian economy, [8] further advised government to adopt the conspiracy theory which involves a joint force of government, banks and health entrepreneurs for a successful healthcare delivery. In the same vein, [15] proposed a review of Nigeria's revenue distribution formula, with emphasis given to the Local Government Areas (who are the principal institution responsible for primary health care in Nigeria), while [6] advocated for a universal health care coverage, such that it is easily accessed by the populace. Furthermore, the availability and cost of finance are regarded among quantifiable factors militating against the growth of SMEs (including healthcare SMEs) [14]. The study continued that although access to finance does not by itself guarantee growth and sustenance of small business, it has been shown that the absence of adequate level of finance can frustrate the formation or growth of SMEs. Reference [1] says that if the Nigeria has limited capacity to invest in capital, productivity is restricted, incomes are inhibited, and domestic savings remain low. Most Private healthcare providers in

Nigeria are small and medium enterprises and as such require micro credit to improve their service delivery. However, [2] explained that regardless of decades of public provision of microcredit, policy reorientation, entry of new players and supply of microfinance in Nigeria is still inadequate in relation to demand.

With a view to reversing the challenges of health care delivery and financing in Nigeria, African Health Market for Equity (AHME), a programme funded by Bill and Melinda Gates foundation and the UK Department For International Development (DFID) is currently implemented in three African Countries (Nigeria, Kenya and Ghana) over a Five (5) year period to support the health sector via Medical credit fund (\$60million). Over the five (5) year period, the programme is expected to reach out to 1,094 healthcare providers in Nigeria, out of which 451 providers should get approval for MCF loan and at least 215 should receive safe care certificate of improvement. The programme is further expected to make grow by 132% over the 5 year period. The study, therefore assesses both the impact of medical credit funding on eight (8) states (Abia, Akwa Ibom, Anambra, Benue, Cross river, Ebonyi, Enugu and Imo) in Nigeria and credit policy relationship with access to medical credit funding over two (2) years (April, 2013 - March, 2015). Section two presents the literature review, section three, the methodology, section four and five, the discussion and conclusion.

II. LITERATURE REVIEW

A lot of countries strive to keep pace with delivery of quality health care because sustaining a country's economic and social growth depends on the healthcare sector [5]. They explained that what is required to meet up with this much needed health in Nigeria are either too few or altogether absent. Reference [4] discussed one way government can improve healthcare delivery is to increase funding of public healthcare infrastructure.

Reference [11] revealed that government expenditure on health is positively related to economic growth and therefore advised that government should increase its expenditure on health sector development because it boosts productivity and economic growth. Explaining the major reason for healthcare expenditure, [3] noted that it rests on the expectation of improved health status, which is governed by health investment. The study continued that demand for health care is derived from the demand for health itself and that both healthcare expenditure and improved health status are means to an end, which is increased productivity and national development.

"Health care financing therefore does not only involve how to raise sufficient resources to finance health care needs of countries, but also on how to ensure affordability and accessibility of healthcare services, equity in access to medical services as well as guaranteed financial risk protection" [15]. Furthermore, [17] noted that healthcare consumers most likely choose health centers that offer customized services and programs which correspond to their particular need, implying that health centres need to

emphasize on satisfying patients and improving functionally [15]. On the other hand, [10] showed that management service is a major determinant of health outcomes in Nigeria. The study argued that the nature of the Nigerian economy reflected in the weak management commonplace in the public sector has serious implications for health service delivery and currently poses a major challenge to the health sector and the government of Nigeria. Reference [14] however discussed that after the 2004 banking sector consolidation, the surviving bank's quest for profit increased and as a result, the interest rate, which is a major source of profit for banks increased. The study continued that though bank deposit increased drastically, making available funds for lending to investors, SMEs (including healthcare providers) shy away from bank sources of funding because of soaring interest rate.

Reference [12] argued that finance alone is not enough. Continuing, the study stated that other complementary strategies must be adopted to realize the goal of poverty reduction in Nigeria, such as the type and size of the project, the credit history of the borrower, prevailing economic conditions, the level of competition in the industry and the judicial processes in credit recovery. Nevertheless, [13] still insisted that a Nigerian public health system is poorly financed and equipped to meet the needs of patients, and invariably, creating opportunity for good quality private providers, who likely charge higher than the poor can afford. Explaining its significance, [8] stated that developing nations devote much of their expenditure on security at the expense of health, education, and other areas. Furthermore, as reported in [8], various estimates put private healthcare providers' expenditure at three or four times the amounts spent by public healthcare providers [9].

The current provision of healthcare facilities in Nigeria is not at all in its best condition, leaving countless Nigerians vulnerable and increasingly exposed to the risk of death [5]. Continuing their argument, public office holders make misleading statements that healthcare facilities would be made available and accessible to everyone in the country. Therefore, worried by the overwhelming situation, Medical, Credit Fund (MCF) via the African Health Market for Equity (AHME) is being implemented to solve the funding challenge of private health sector and invariably boost healthcare service delivery in Nigeria. The Medical Credit Fundan international fund international fund dedicated basically to the private health sector, through selected commercial banks (Diamond Bank Plc and First City Monument Bank Plc) in Nigeria. This paper therefore attempts to investigate the extent of the influence Medical Credit Fund has had on private healthcare service delivery in eight Nigerian states and the credit policy influence on access to medical credit funding.

III. METHODOLOGY

The study employed ordinary least square regression method and graphic trend analysis to measure the influence medical credit facility has had on private healthcare service delivery in eight (8) states (Abia, Akwa Ibom, Anambra,

Benue, Cross River, Ebonyi, Enugu, Imo) in Nigeria and credit policy influence on access to medical credit funding.

Nigerian Private Sector health market was measured by Private healthcare provider's average monthly turn over. The rationale follow that improved service delivery will increase clientele and in turn the income (turnover). Medical Credit funding (MCF) was measured by approved loans to private healthcare providers under the African Health Market for Equity (AHME) and finally, the ability of the people to access health care service delivery was measured by Nigerian per capita income (average income level). It follows the a priori expectation that as access to medical credit increase, newer medical equipment is acquired and better services are rendered. Increasing quality service delivery most likely might result to increase in price of healthcare service, which will have negative effect on demand (consumer's willingness and ability to pay) for private healthcare services, given that an increase in price will lead to a decrease in the demand for private healthcare services, all things being equal. However, where the income level of the people (measured by per capita income) is high, their demand for healthcare service will also be high. Therefore, income and price are major determinants of demand for healthcare services. For the purpose the study, average income level of the people is factored in as per capita income while price is considered to have been factored in the average monthly turnover. Furthermore, variables such as commercial bank lending rate still play huge role in accessing the medical credit. Lending rate has an inverse relationship with access to credit (a priori expectation). It is therefore expected that high lending rate will discourage access to medical credit. Lending rate determines private healthcare provider's access to credit, which in turn influence their service delivery and income.

Data was sourced from financial statements of private healthcare providers, Trading Economics and Central Bank of Nigeria (CBN) Statistical Bulletin. Specifically, average monthly turnover and approved loan under AHME was sourced from financial statements of private healthcare providers, Nigeria's per capita income was sourced from [16], Approved loans was sourced from Society for Family Health (SFH), while commercial bank lending rate was sourced from the Central Bank of Nigeria (CBN) statistical bulletin.

The paper hypothesizes that;

- Medical credit funding under African Health Market for Equity have not impacted significantly on Private healthcare service delivery in selected states in Nigeria.
- Credit policy (lending rate) had no significant relationship with accessing medical credit fund.

The basic models for the study follow;

$$AMT_{hp} = f(AL_{MCF}, PCI, CBLr)$$

Therefore,

$$AMT_{hp} = B_0 + B_1 AL_{MCF} + B_2 GDP/POP + B_3 CBLr + \mu \quad (1)$$

where; AMT_{hp} = Average Monthly Turnover of private; AL_{MCF} = Approved Loan (MCF); PCI = Per capita income;

$CBLr$ = Commercial bank Lending rate; μ = error term; B_0, B_1, B_2, \dots = unknown parameters to be estimated.

IV. DISCUSSION

A Unit Root

TABLE I
AUGMENTED DICKEY-FULLER TEST FOR UNIT ROOT AND STATIONARITY

Variables	t*	5%	10%	URT in;
AMT	-6.583162	-2.8925	-2.5831	Level
Lr	-4.574527	-2.8925	-2.5831	Level
AL	-5.424525	-2.8925	-2.5831	Level
PCI	-2.953975	-2.8925	-2.5831	Level

Source: computed using e-views statistical software

The Augmented Dickey-Fuller (ADF) unit root test for stationarity conducted at level showed that observed t-statistics are all greater than the 5% and 10% critical values. Therefore, we conclude that there is no unit root problem with the data.

B. Impact Assessment of Medical Credit Fund on Nigerian Private Health Market

TABLE II
REGRESSION RESULT OF AVERAGE MONTHLY TURNOVER, APPROVED LOANS, COMMERCIAL BANK LENDING RATE, AND PER CAPITA INCOME

Variable	Coeffici	Std. Err	t-Statistic	Prob.
C	38.68045	89.59963	0.431703	0.6683
LNAL	0.503834	0.065791	7.658089	0.0000
LNLR	-3.307073	3.623164	-0.912758	0.3670
LNPCI	-2.973213	7.445795	-0.399314	0.6918
R-squared	0.618396	Mean dep var		0.723058
Adj R-squared	0.589041	S.D. dep var		0.610434
S.E. of regress	0.391325	Akaike info crit		1.049852
Sum square res	5.972280	Schwarz crit		1.213685
Log likelihood	-18.57182	F-statistic		21.06669
Durbin-Wat stat	2.587269	Prob(F-statistic)		0.000000

Source: computed using e-views statistical software

Observing the detailed estimation, it is evident that Approved loan has a positive and significant impact on average monthly turnover of private healthcare providers. It further contributes 50.38% to the growth of healthcare provider's income (AMT). This implies that the approved loans positively contribute to service delivery, which in turn increases patronage and turnover. Credit policy (Lr) and average income level (PCI) has negative and insignificant effect on income of private healthcare providers. While commercial bank lending rate follows the a priori expectation, per capita income (PCI) fails the a priori expectation. The result shows that the lending rate which is the prevailing market rate negatively impacted on the income of private healthcare providers. It can easily be explained with evidence from the result that while increased funding (100%) could boosts income (50.38%), high cost of fund reduces the income which would have been enjoyed by private health care providers. A 100% downward revision of the lending rate

could increase average monthly turnover of Private healthcare entrepreneurs by 330.7%. Literally explaining the result; a 1% increase in approved loans (AL) increases average monthly turnover (AMT) by 0.50% and a 1% increase in lending rate reduces average monthly turnover by 3.30%.

The average income level (PCI), which should positively contribute to income of private healthcare entrepreneurs could makes -297.32% (1% : -2.97%) contribution to the average monthly turnover of private healthcare providers in Nigeria. This in no small way can be attributed to inequitable distribution of income, mismanagement of funds and corruption that has deprived the masses the means to a healthier living. The adjusted R^2 implies that variations in credit policy (lending rate), available fund (approved loans) and average income level (Per capita income) cause 58.9%

variation in private healthcare provider's income (average monthly turnover). Therefore, the model is a good fit. Furthermore, there is no autocorrelation present in the model.

C. Relationship between Credit Policy and Access to Medical Credit Fund

A closer look at credit policy effect on accessing medical credit fund, firstly, it is interesting to note that the medical credit fund operates on prevailing market interest rate. There is no private health sector focused credit policy. However, credit policy (lending rate) has very weak but positive relationship (13.46%) with loan approval. This fails the a priori expectation and could mean that borrowers paid less attention to the lending rate due to the huge funding need.

TABLE III
CORRELATION MATRIX TEST OF APPROVED LOAN, AVERAGE MONTHLY TURNOVER, LENDING RATE AND PER CAPITA INCOME IN NIGERIA

	LNAL	LNAMT	LNLR	LNPCI
LNAL	1	0.779401885597	0.13458396144	-0.201494643736
LNAMT	0.779401885597	1	0.00898696561938	-0.208655158722
LNLR	0.13458396144	0.00898696561938	1	0.109080922678
LNPCI	-0.201494643736	-0.208655158722	0.109080922678	1

Source: computed using e-views statistical software

TABLE IV
CORRELATION MATRIX TEST OF MICROFINANCE BANK CREDIT, LENDING RATE AND COMMERCIAL BANK CREDIT TO SMALL AND MEDIUM ENTERPRISES

	MFBC	CBCSME	LR
MFBC	1	-0.733713009082	-0.386212406521
CBCSME	-0.733713009082	1	0.538823755337
LR	-0.386212406521	0.538823755337	1

Source: computed using e-views statistical software

It is clear from the correlation test that lending rate had a negative relationship with Microfinance bank credit in Nigeria. This is not so with commercial bank credit to small and medium enterprises in Nigeria. While credit policy (lending rate) passed the a priori expectation with Microfinance bank credit, it failed the same expectation with commercial bank credit to small and medium enterprises in Nigeria. Lending rate had 53.88% positive relationship with commercial bank credit to small and medium enterprises in Nigeria. On the order hand, the same lending rate has negative and weak relationship (-38.62%) with microfinance bank credit to small and medium enterprises in Nigeria. Understandably, microfinance bank credit has a negative and strong relationship (-73.37%) with Commercial bank credit to small and medium enterprises in Nigeria. This only implies that as small and medium entrepreneurs turn to microfinance banks for credit, the number of small and medium borrowers from commercial banks dwindle and vice versa.

A closer look at the time series data of microfinance bank credit, lending rate and commercial bank credit to small and medium enterprises in Nigeria, reveal that microfinance bank credit responded to credit policy (lending rate) more than commercial bank credit to small and medium enterprises in Nigeria. This showed that as lending rate increased,

microfinance bank credit decreased mostly and vice-versa. However, in 2012 as lending rate increased, microfinance bank credit further increased. On the other hand, commercial bank credit to small and medium enterprises in Nigeria continued to decrease regardless of the rise or fall in lending rate mostly. Nonetheless, in 2007 notably, a decrease in lending rate caused an increase in commercial bank credit to small and medium enterprises.

TABLE V
TIME SERIES DATA OF MICROFINANCE BANK CREDIT, LENDING RATE AND COMMERCIAL BANK CREDIT TO SMALL AND MEDIUM ENTERPRISES IN NIGERIA [18]

Year	MFBC	LR	CBCSME
2004	11353.8	19.18	54981.2
2005	28504.8	17.95	50672.6
2006	16450.2	17.26	25713.7
2007	22850.2	16.94	41100.4
2008	42753.06	15.14	13512.2
2009	58215.66	18.99	16366.49
2010	52867.5	17.59	12550.3
2011	67632.4	16.02	15611.7
2012	80127.86	16.79	13863.46
2013	94055.6	16.72	16268.16
2014	82421.1	16.55	17424.3

Confirming the result of the relationship between lending rate, commercial bank credit to small and medium enterprises and microfinance bank credit in Nigeria, the ordinary least square regression conducted at 5% level of significance revealed that both lending rate and commercial bank credit to small and medium enterprises in Nigeria negatively influence microfinance bank credit. However, while Lending rate effect is weak on microfinance bank credit, commercial bank credit

to small and medium enterprises in Nigeria is strong and statistically significant. Evidenced from the result, lending rate contributes 32.67% to the decline of microfinance bank credit and commercial bank credit to small and medium enterprises also made a contribution of 100.52% to the decline of microfinance bank credit in Nigeria.

TABLE VI

REGRESSION RESULT OF MICROFINANCE BANK CREDIT, COMMERCIAL BANK CREDIT TO SMALL AND MEDIUM ENTERPRISES AND LENDING RATE

Dependent Variable: LNMFBFC

Method: Least Squares

Included observations: 11

Variable	Coeffici	Std. Err	t-Statistic	Prob.
C	21.60566	6.132543	3.523116	0.0078
LNCBCSME	-1.005282	0.315512	-3.186193	0.0129
LNLNLR	-0.326666	2.511540	-0.130066	0.8997
R-squared	0.644189	Mean dep var		10.63955
Adj R-squared	0.555237	S.D. dep var		0.708430
S.E. of regress	0.472456	Akaike info crit		1.565256
Sum square res	1.785717	Schwarz crit		1.673773
Log likelihood	-5.608909	F-statistic		7.241932
Durbin-Wat stat	2.188363	Prob(F-statistic)		0.016028

Source: computed using e-views statistical software

The coefficient of determination (R-squared) shows that commercial bank credit to small and medium enterprises in Nigeria and lending rate aggregately contributed to 64.4% to the variations in microfinance bank credit in Nigeria. The regression plane is a good fit.

D. Direction of Causation

TABLE VII
GRANGER CAUSALITY TEST

Pairwise Granger Causality Tests

Lags: 2

Null Hypothesis:	Obs	F-Stat	Prob
LNATM does not Granger Cause LNAL	24	1.917	0.17
LNAL does not Granger Cause LNTM		2.372	0.12
LNLNLR does not Granger Cause LNAL	24	0.672	0.52
LNAL does not Granger Cause LNLNLR		0.514	0.60
LNLNLR does not Granger Cause LNTM	94	0.151	0.85
LNTM does not Granger Cause LNLNLR		0.156	0.85

Source: computed using e-views statistical software

The Granger causality test shows that by a probability of slightly above average (52.23%), credit policy (CBLr) does not cause access to credit and approval of loan. This implies that other factors such as the type and size of the project, the credit history of the borrower, the prevailing economic conditions, the level of competition in the industry and the judicial processes in credit recovery [12] may have taken preference.

E. Trend Analysis of Credit to Small and Medium Enterprises in Nigeria by Commercial and Microfinance Banks

Evidenced from Fig. 1, commercial bank credit to small and medium enterprises, which include health care small and

medium enterprises, has been on a declining path since 2004; the year that saw to the banking sector consolidation in Nigeria. It is argued that the consolidation of the banking sector due to recapitalization created bigger banks, which focused on bigger customers to the neglect of smaller ones [14]. On the other hand, microfinance bank credit to small and medium enterprises has been on the rise for the period. While commercial bank credit to small and medium enterprises declined from approximately -N-55 billion to -N-17 billion in 2004, microfinance bank credit to small and medium enterprises rose from -N-11 billion beyond -N-82 billion. Interestingly, microfinance bank credit follows the same pattern with the bank's deposit. This implies that the level of microfinance deposit greatly determine its credit to small and medium enterprises. Therefore, any programme that targets small and medium enterprises (including health care small and medium enterprises) for funding must have to consider doing so through microfinance banks.

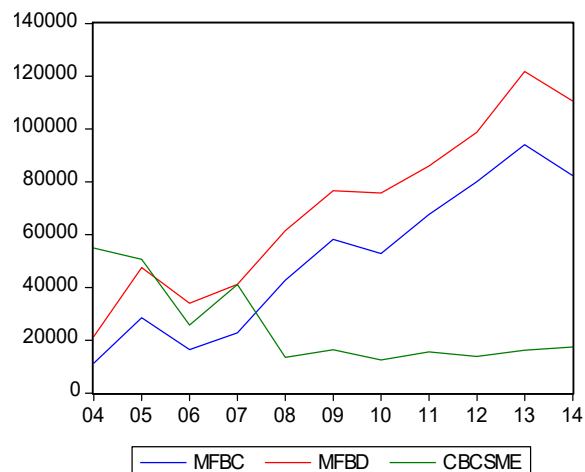


Fig. 1 Graphical Representation of Commercial Bank Credit To SMEs (CBCSME), Microfinance Bank Deposit and Credit To SMEs in Nigeria (MFBD & MFBC) Source: computed using e-views statistical software

F. Test of Hypotheses

1. Hypothesis I

The first hypothesis states that Medical credit funding under African Health Market for Equity have not impacted significantly on Private healthcare service delivery in selected states in Nigeria. Approved loans, which was a proxy for the Medical facility given to private health care providers was positive and statistically significant with regards to average monthly turnover (a proxy for Nigerian Private Health Market) ($0.000 < 0.025$). Therefore, we reject the null hypothesis and conclude that Medical Credit funding has impacted positively and significantly on the Nigerian Private Health market.

2. Hypothesis II

The second hypothesis states that credit policy (lending rate) had no significant relationship with access to medical credit. Following the result of the correlation matrix test ($0.1346 < 0.5000$), we accept the null hypothesis that credit policy has no significant relationship with both access to credit and approval of loan in Nigeria.

V.CONCLUSION

Two basic quantifiable determinants of credit funding are availability of fund and cost of fund. While credit has been made available, to the private sector by the emergence of Medical Credit Fund, high interest (lending) rate can hinder healthcare providers from accessing the available credit. Other determinants may include culture and values of private healthcare provider, their loan habit and history (i.e. whether they are given to accessing loans and paying back) and credit capacity. So far, no Medical Credit Fund policy controls market lending rate in order to encourage private healthcare providers to access funds in Nigeria.

Two (2) years into the programme period, Society for Family Health (SFH) in Nigeria reached over 200 private healthcare providers (less than 437.6 healthcare providers expected to have been reached for the period) and approved MCF loan for only 43 providers (less than 90.2 annual expectation of number of approved loans annually). The programme has so far made 13.91% progress, considering the targeted private healthcare providers and expected number of loan approvals.

African Health Market for Equity (AHME), handled by Society or Family Health (SFH) for the past two years has not yet made an impact in the rural areas, which in 2013 constitutes 54% of the Nigeria's total population [7]. In order to have greater impact, Medical Credit facility should be focused on healthcare providers in rural areas. This will not reduce the fund owner's return on investment, rather, it will increase. Medical credit policy should be revised to include healthcare providers in rural areas. Such credit policy should include micro credit, which should be handled by credible microfinance bank, and will depend on the assessment of the rural private healthcare loan capacity. This should further come with reduced lending rate, such as covers cost of funding and give reasonable returns to investors without discouraging rural healthcare provider's access to medical credit. Urban private healthcare providers could be encouraged by this to extend their services to rural areas, as increasing scope of coverage coupled with affordable pricing could further enhance profitability.

There should be good brand advert and sensitization of the project to private healthcare providers, stakeholders, pressure groups and associations such as Nigerian Medical Association (NMA) etc.

There should be an extension of the project beyond the five (5) years to better address the issues raised in the study.

The study further recommends an annual (year-end) Monitoring and Evaluation (M&E) and impact assessment of

the progress of the programme for the five (5) year period. It should be handled by a local research organization with good understanding of the urban and rural terrain in Nigeria and report to Dr. Paul Gertler, the lead impact assessor for the programme.

A field study should be carried out in rural areas, assessing the medical facility in place, real income level of rural dwellers and other peculiarities such as the influence of medical credit facility on price of healthcare service to rural and urban dwellers, patient's willingness and ability to pay for medical services and current health condition (susceptibility to malaria, poor reproductive health, acute respiratory infections, diarrhea, nutrition, maternal care, HIV and TB) which would better equip fund owners and facilitators to make informed decision.

The study is delimited to just eight (8) states in Nigeria. The study made assumption such as the use of per capita income of Nigerians rather than peculiar income level (ability) and willingness to pay for medical services in differing rural and urban areas in Nigeria. Furthermore, price of healthcare services was considered to have been factored into the average monthly turnover of private healthcare providers. It is a key variable and needs to be decomposed from the average monthly turnover of private healthcare providers.

REFERENCES

- [1] Abu, I. N., Ezike J. E., (2012), "The Role and Sustainability of Microfinance Banks in Reducing Poverty and Development of Entrepreneurship in Urban and Rural Areas in Nigeria", *International Journal of Business Administration* Vol. 3, No. 3.
- [2] Adeyemi, K. S., (2007), "Banking Sector Consolidation in Nigeria: Issues and Challenges," Paper Presented in a Post-Consolidation Seminar, Union Bank of Nigeria Plc.
- [3] Aranda, P., (2010). The Determinants of Health and the Differences in Healthcare Expenditures among Countries. *J. Health Econ.* 15:103-118.
- [4] Berger, M. C., Messer, J., (2002). Public Financing of Health Expenditures, Insurance and Health Outcomes. *Appl. Econ.* 34:2105-2113.
- [5] Eme O. I., Uche, O. A., Uche, I. B. (2014), Building a Solid Health Care System in Nigeria: Challenges and Prospects, *Academic Journal of Interdisciplinary Studies* MCSER Publishing, Rome-Italy, E-ISSN 2281-4612, Vol 3 No 6
- [6] Eneji, M. A., Dickson, V. J., Bisong, J. O., (2013), Health care expenditure, health status and national productivity in Nigeria (1999-2012), *Journal of Economics and International Finance*, ISSN 2006-9812, Vol. 5(7), pp. 258-272
- [7] Global Finance Magazine (2015), Nigeria GDP and Economic Data, Country Report 2015, Retrieved from: <https://www.gfmag.com/global-data/country-data/nigeria-gdp-country-report>
- [8] Awa, H. O., Eze, S. C., (2013), The Marketing Challenges Of Healthcare Entrepreneurship: An Empirical Investigation in Nigeria, *British Journal of Marketing Studies* Vol.1 No 2, pp.1-16.
- [9] Howard, I., (1984). What are the Financial Resources for 2000? *World Health Forum* 2(1), 23-29.
- [10] Kajang, D. R., (2004), Organization and Management of Health Services in Nigeria: 1960-2004: (A Case Study of the Federal Ministry of Health, Abuja, Nigeria), Ph.D. Dissertation on Health System Management, St. Clements University.
- [11] Nurudeen, A., Usman, A., (2010). Government Expenditure and Economic Growth in Nigeria, 1970-2008; A Disaggregated Analysis. *Bus. Econ. J.* 4(1).
- [12] Odoko, F. O., (2008), "Beyond finance: Strategies for poverty reduction in Nigeria". *Central Bank of Nigeria Bullion*, 31(1), 35-36.
- [13] Ogunbekun, I., Ogunbekun, A., & Orobation, N., (1991), Private Healthcare in Nigeria Walking the Tightrope. *Healthcare Policy and Planning.* 14(2), 174-181.

- [14] Okolo, C. V., (2015), Impact of Bank Consolidation on Lending to SMEs in Nigeria, World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic and Management Engineering Vol: 9, No: 9.
- [15] Riman, H. B., Akpan, E. S., (2012), Healthcare Financing and Health outcomes in Nigeria: A State Level Study using Multivariate Analysis, International Journal of Humanities and Social Science Vol. 2 No. 15
- [16] Trading Economics (2015), Nigeria GDP Per Capita, 1960-2015, Retrieved From: [Http://www.Tradingeconomics.com/Nigeria/Gdp-Per-Capita](http://www.Tradingeconomics.com/Nigeria/Gdp-Per-Capita)
- [17] Versweyved, L. (1998) Hospital Strategy Put Sharper focus on Care Management instead of cost reduction needs.
- [18] Central Bank of Nigeria statistical bulletin Volume 25, December 2014.

Chimaobi V. Okolo – *B.Sc. [econ], B.Sc. [acc], B.Ed. [econ/mgt], M.Sc., ACE, Ph.D. [in view]* is the managing partner and head of research. He holds Bachelor's degrees in economics/management, economics and accounting, from Enugu State University of Science and Technology and University of Nigeria, Enugu State of Nigeria. The researcher had his Master of Science degree in economics with specialization in monetary economics and quantitative methods in economics, from Nnamdi Azikiwe University, Awka, Anambra State of Nigeria. He has been a member of the Institute of Chartered Economist of Nigeria (ICEN) since 2008 and briefly an editorial board member of the International Journal of Innovative Research in Management (IJIRM), India. He has further reviewed various articles for publication for a number of international journals across the globe.

He has two books published in Germany and sold across the globe. Val excels at applying his skills to conceptualizing applied research projects, designing robust research methodologies, engaging in critical data analysis, preparing technical reports, and managing research teams. He lectures in the department of economics, Enugu State University of Science and Technology and is currently studying for his doctorate degree in economics. Val is a highly experienced researcher, academic and consultant.

Kenneth A. Okpala – *B.Sc. [econ], B.Ed. [econ/mgt], M.Sc., FCIFA, FBS, MCMA, ACE, MNMIN* has over 10 years experience covering Banking, Consulting, Lecturing, NGO and the Telecommunications industry. He successfully managed and grew revenues of the account base and deposits of customers of First Bank Nigeria Plc. In the telecommunication industry, he started as a pioneer Sales Consultant of the northwest region for Econet Wireless Nigeria (now AIRTEL Nigeria) and rapidly rose to the position of senior sales officer spanning six states of northern Nigeria (Kaduna, Katsina, Kano, Sokoto, Kebbi, Zamfara and Abuja).

He was solely in charge of the implementation of the new distribution model a project for the region. This saw the growth of the regions revenue from N 700Million to N1.3Billion Naira monthly. He is the Business Advisory Manager for society for family Health (SFH), overseeing a total of 8 states in South-Eastern Nigeria and Supervising the Medical Credit fund project, in Eastern Nigeria, including Enugu, Imo, Anambra, Ebonyi, Abia, Benue, Akwa Ibom and Cross River States (a project funded by DFID, Bill and Melinda Gates Foundation, worth \$60 Million). He is vast and well experienced in field research. He has a Bachelor and Master's degrees in Economics/ Management and Economics, with specialization in development economics, from University of Nigeria and Enugu State University of Science and Technology, Enugu State, Nigeria.

Johnbull S. Ogboi – *Ph.D* is a highly experienced researcher, academic and consultant. He excels at applying his skills to conceptualizing applied research projects, designing robust research methodologies, engaging in critical data analysis, preparing technical reports and managing research teams. He became an International Brain Research Organization fellow (2007-2008) in Neuroscience and Biology of Behavior with emphasis on cerebral Malaria in Universidad Pablo of Olavide, Seville, Spain and College of America Training Center. He is a scholar with National Laboratory Training Network USA, Association of Public Health Laboratories, US, and U.S Center for Disease control and Prevention (CDC), Atlanta, GA, USA on Malaria and Diagnostic Parasitological Intestinal organisms and Blood and Tissue Organisms. Johnbull has a PhD in Life Sciences & Public Health (Malaria and Human development) from the department of Experimental Medicine and Public Health, University of Camerino, Italy. The scope of background and experience includes various research works in infectious diseases, especially malaria, HIV, TB, monitoring and evaluation etc. He is certified by the Association of Medical laboratory Council of Nigeria among others.