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## MEETING THE MILLENNIUM DEVELOPMENT GOALS IN THE PRESENCE OF THE GLOBAL FINANCIAL CRISIS: THE CASE OF NIGERIA

*Joseph A.I<sup>1</sup> and Oke M.A<sup>2</sup>*  
*Department of Economics*  
*Ajayi Crowther University, Oyo, Oyo State*

### **ABSTRACT**

This study examines the implications of the economic crises in the achievement of the MDGs in Nigeria. The paper begins with a survey of theoretical issues relating to the origins of the crisis and ends by suggesting policy proposals that would facilitate the attainment of the goals. Result shows that the global economy is facing a crisis of monumental proportions which no doubt will refrain the economy from achieving the goals. The financial crisis cum economic meltdown put under threat not only the prospects for achieving the Millennium Development Goals (MGDs) but raises a real possibility of reversing some of the progress already made in chasing these goals. The study therefore recommends the need to make economic growth more broad-based and employment inducing so as to make a dent on poverty, and for the world trading system to guarantee trade justice such that the world's poorest countries will stand the chance, with the right support, to set themselves on a sustainable path if the economy must enjoy the basic reasons for the formulation of the MDGs.

**Key Words:** MDGs, Financial Crisis, Global, Economic growth and VAR.

### **INTRODUCTION**

The current global economic crisis started as a financial crisis in the United State of America in 2007. It has its root in credit contraction in the banking sector due to certain laxities in the US financial system. According to Ogeager (2009) the crisis later spread to Europe and now has become a global phenomenon. The crisis, brewing for a while, really started to show its effects in the middle of 2008. The early stage manifested strongly in the sub-prime mortgages because households faced difficulties in making higher payments on adjusted mortgages (Soludo, 2009). This development led to the use of credit contraction by financial institutions in the US to tighten their standards in the light of their deteriorating balance sheets. In addition, financial institutions stopped lending and recalled their credit lines to ensure capital adequacy (Aluko, 2009). This crisis and economic meltdown make this a difficult time for development not least the realisation of the Millennium Development Goals (Chete, 2009). As a result, the prospects for achieving the MDGs is under severe threat, as the slowdown undermines progress in developing countries, reducing per capita growth rates and causing severe budget problems. Optimistic predictions that developing countries would be insulated from the worst of the financial turbulence have proved fatally wrong. Aside undermining progress toward the MDGs, the effects of the financial crisis and economic slowdown may also in addition, put at risk the gains to date in relation to these goals which no doubt has put the nation to a state of runaway inflation. According to Obi (2009), in

Nigeria at the moment, the banks are unable to carry out their statutory function in the Nigerian economy. In addition, the crisis has eroded the confidence of the general public in the entire Nigerian banking industry. In view of this development, the question that one may ask is that come 2015 will the country be able to achieve its aim in the presence of this crisis? This calls for this paper in other to draw up possible solutions if the country will not be able to meet its aim come five year time. Hence, the objective of this paper is to explore the channels through which global financial crisis act as an impediment towards the achievement of the MDGs in Nigeria come 2015. The study however will be limited to only three of the goals: goal 1, goal 2 and goal 6. Apart from the introduction of this paper, the rest of the paper is divided into four sections. Section two provides the literature review. Section three will be used for the methodology while section four presents the analysis of result. Section five concludes and provides possible recommendations.

### **Conceptual Framework**

Financial crisis is a situation in which the supply of money is outpaced by the demand for money. This means that liquidity is quickly evaporated because available money is withdrawn from banks, forcing banks either to sell other investments to make up for the shortfall or to collapse. According to Abubakar (2008) financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. However, in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults (Kindleberger and Aliber, 2005, Laeven and Valencia, 2008). On the other hand, MDGs refers to series of eight time bound development goals consisting of eighteen targets and forty-eight indicators that seek to address issues of poverty, education, gender equality, health, environment and global partnership for development, endorsed by the international community to be achieved by the year 2015.

### **Theoretical Framework**

Economic theories that explained financial crises includes the World systems theory which explained the dangers and perils, which leading industrial nations will be facing (and are now facing) at the end of the long economic cycle, which began after the oil crisis of 1973. While Coordination games, a mathematical approach to modelling financial crises have emphasized that there is often positive feedback between market participants' decisions (Krugman, 2008). Positive feedback implies that there may be dramatic changes in asset values in response to small changes in economic fundamentals. The second is the Minsky's theory. The theory theorized that financial fragility is a typical feature of any capitalist economy and financial fragility levels move together with the business cycle, but the Herding and Learning models explained that asset purchases by a few agents encourage others to buy too, not because the true value of the asset increases when many buy (which is called "strategic complementarity"), but because investors come to believe the true asset value is high when

they observe others buying (Avery and Zemsky, 1998, Chari and Kehoe, 2004, Cipriani and Guarino, 2008). The MDGs in the other hand have their foundation in the model of the neo – classical theory, which states that: long term poverty reduction requires sustained economic growth, which in turn depends on technological advanced and capital formation’ ( UN 2002a; Oduola 2006). Towards achieving economic growth, the MDGs can effectively play two key roles: first as ‘ends’ and secondly as ‘means to the ends’ (UN 2002a). For example, the MDGs are ‘ends’ in achieving economic growth, simply because they are ‘societal goals’ set to reduce the various forms of poverty, including ‘reduced hunger, gender equality, good health and sound education, and broader access to safe water and sanitation’. And as such all the MDGs have direct impact on achieving economic growth.

### **Empirical Framework**

There have been several attempts to trace the impacts of external shocks such as the global financial crisis on national poverty profiles in developing countries. For the impact on monetary poverty, see Friedman and Levinsohn (2001), Robilliard *et al.* (2001), Bourguignon *et al.* (2003), and Weeks (2009). For the impact of economic crises on nutritional status and welfare in general, see Block *et al.* (2004), Chapman-Novakofski (2009), and Chen and Ravallion (2009). Vaqar and Cathal (2010) adopted a macro-micro framework in order to evaluate the impact of the current global crisis on the Pakistan economy their results suggest that between 2007 and 2009 the poverty headcount ratio is likely to have increased by almost 80 percent, from 22 to 40 percentage points. According to them, this increase is attributable in part to the fuel and food crisis that preceded the financial crisis and also the differential impact, with wage increases for farm workers and a decrease in wages for skilled labour.

### **OVERVIEW OF NIGERIAN MILLENNIUM DEVELOPMENT GOALS**

The aftermath of Millennium Development Goals (MDGs) declaration by the world leaders in September 2000 at the United Nations Millennium Summit, pave the way for the creation of MDG office in Nigeria. It was established as a secretariat charge with the responsibility of executing MDGs affairs in the country, headed by Senior Special Assistant to the President on MDGs (SSAP-MDGs). Since then it is commonly known as the MDG office, subsequently, other offices were opened in all 36 states and they have been operating on projects and programs down the ladder to local government. The MDG office functions as secretariat to the presidential committee, which guides the nation towards the achievement of MDGs. The structure of presidential committee consist of; the president, vice president, secretary to the government, head of civil service, representatives from ministries and agencies, six governors, one member each from upper and lower house of assembly, private sector, civil society, international partners, SSAP-MDGs and special adviser to the president on projects and programs. In order to intensify effort and demonstrate government commitment, virtual poverty fund (VPF) was established to house debt relief gains. In the year 2007, two innovative mechanisms for achieving the MDGs were put in place; first, conditional grants scheme (CGS) to states and subsequently to local governments to execute projects and

programs. Second, social safety nets scheme. This scheme provides cash or in-kind transfer to the poorest in the society (see MDG Office, 2008). Since then MDG office has been coming up with one scheme or the other to galvanize effort to achieve the MDGs by 2015.

### **UN Millennium Development Goals adapted for Nigerian**

The Millennium Development Goals (MDGs) system was proposed by the UN to evaluate the efficiency of promoting the Human Development Policy in various countries. The UN MDGs adapted for Nigeria were presented in the 2005 NHDR and the national goals and task are set as follows:

Goal 1. Reduce Poverty and Eradicate Hunger. The aim of the first goal is to halve by 2015 the general poverty level and eradicate extreme poverty among non-marginal groups of the population and to provide access to food for the poor. Goal 2. Increase Access to Education. The goal involve vulnerable groups of the population in education and socialization, ensure participation in pre-school education of children from low-income families and children residing in rural areas, reduce the gap in funding and access to general secondary and primary vocational education between and within regions, update the content of general secondary education towards developing practical skills and application of knowledge. Goal 3. Ensure gender equality and improve the situation of women. The goal was set up to eliminate gender inequality in primary and secondary education and at all levels of education by 2015 and also to ensure equal access to political institutions for women and men. Thereby, eliminating discriminatory practices in labor and employment and Reduce the impact of unfavorable socioeconomic factors on health and life expectancy, especially male. Goals 4 & 5. Reduce maternal mortality and mortality among children under five. The goal was set to increase life expectancy and reduce mortality from major causes, promote changeover in society to a healthier life style and Reduce the mortality rate of children under five by at least 50% by 2015, as compared with 1990 (from 21.5 to 11 per 1000). Also reduce maternal mortality by at least 50% in the period 1990-2015. Goal 6. Combat HIV/AIDS, Tuberculosis and other diseases. The sixth goal was to halt and begin to reverse the spread of HIV/AIDS. Halt the spread and significantly reduce incidence of Tuberculosis (TB) and other socially-based infectious diseases. Goal 7. Ensure Environmental Sustainability. The goal was set to integrate the principles of sustainable development into country policies and programmes and prevent losses of natural resources, Provide the population with sustainable access to safe drinking water and hence, improve people's living conditions. And Goal 8. Participation in Global Development Partnership adequate to Nigeria National Interests. The goal was set for the creation of favorable international conditions for elimination of internal obstacles to human capital development and achievement of the MDGs in Russia. The analysis of MDG8 according to Luis (2007), follows the pattern of MDGs in previous issues:

Most poor women suffer both poverty and patriarchal abuse (MDG1)

The largest fraction of the poorly educated are girls and women (MDG2)

Fertility rates are higher in regions of virulent gender inequality (MDG3)

Child mortality rates are higher in regions of virulent sexual violence (MDG4)

Maternal health is poorest in regions of virulent gender violence (MDG5)  
 HIV/AIDS is rooted in the patriarchal abuse of human sexuality (MDG6)  
 Attaining sustainability requires human solidarity and, specifically, cross-gender solidarity (MDG7) Sustainable development requires human solidarity, and cross-gender solidarity is the foundation for all forms of human solidarity. Therefore, cross-gender solidarity is crucial for building a global partnership for development (MDG8)

**METHODOLOGY (Model Specification and Data Source)**

This paper is based on the model used by Barro (1990) and Mauro (1995). Additional variables are added to take into cognizance recent literature. For the purpose of testing the effects of financial crisis on some of the MDGs, the vector autoregression is used along with the impulse response functions and the variance decomposition. The variables of interest are ordered as follows, index of stock price as a proxy for financial crisis ( FC) since the effects of financial crisis was felt indirectly through the stock market. People with HIV (HIV), Primary School enrollment rate a proxy for Education (EDU). All data are sourced from CBN statistical Bulletin and NGA\_Country data.

However, the prevalence of the financial crisis can be a by-product of economic growth as well as its cause creates an endogeneity problem and this justifies the use of the autoregression technique. Following Barro (1990) and Mauro (1999)

The VAR model is presented below

$$y_t = c + \sum_{i=1}^4 \Phi_i y_{t-i} + E_t \text{-----(1)}$$

Where  $y_t$  is (4 x 1) vector of endogenous variables  $c$  is the (4 x 1) intercept vector of the VAR,  $\phi_i$  is the (4 x 4) matrix of autoregressive coefficients, and  $E_t$  is the (4 x 1) generalization of a white noise.

The VAR system can be transformed into its moving average representation as

$$y_t = \mu + \sum_{i=0}^{\infty} \psi_i y_{t-i} + E_t \text{-----(2)}$$

Where  $y_t$  is the identity matrix while  $\mu$  is the mean of the process. Equation two is used to obtain the forecast error variance decomposition and the impulse response function. The variance decomposition shows the proportion of the unanticipated change of a variable that is attributed to its own innovations and shocks to the variable in the system. The impulse response functions measure the response of each variable to a shock to itself and other variables. In addition, all data with the exception of net enrolment ratio in primary education, gender parity index, women in national parliament, personal computers and internet users was in natural logarithm form and in real terms. In addition, the data sets vary in terms of their end point period and to deal with this systematically since it is univariate analysis, each indicator’s forecast starts after it data set ends.

## **EMPIRICAL RESULTS**

Results obtained from the vector autoregression in Appendix I indicate that the coefficient of determination  $R^2$  is highest for HIV (approximately 98%), FC (79%), POV (87%) and EDU (approximately 86). The difficulty in interpreting vector autoregression results makes it imperative to move straight to interpreting the impulse response functions and the variance decomposition. The result is shown in Appendix I. From Appendix II, the result from the impulse response result is presented. From the result, EDU, HIV and POV all the other variables respond to one standard deviation (SD) by diverging from equilibrium by the tenth year. This shows that no pro poor policies of the government will be able to solve the problem of corruption in the year 2015. However, all results that converge shows that the convergence is gradually which shows that even if policies will work, it will be gradually which may not be achieved at the set target come 2015. Result from the variance decomposition indicate for indicate that FC accounts for 100% of itself with no other variables explaining it in the first year. However, in the 5<sup>th</sup> year indicating the period for 2015 FC accounts for about 85% while in the 10<sup>th</sup> year it still accounts for about 72% while HIV explain a high percentage of FC in the 5<sup>th</sup> year and 10<sup>th</sup> year. For HIV, the variance decomposition result indicates that HIV account for a high percentage of itself in the first year with about 97% while FC explain about 3% of it. In the 5<sup>th</sup> year representing 2015, it indicates that HIV still account for a higher percentage of itself follow by financial crisis. A further look to five years period after indicate that FC accounts for a higher percentage of about 15.3% while HIV accounts only about 83% of itself. This result proves that financial crisis is a major variable that engender poor health practice in the country. This however was not surprising as fall in the health sector in the presence of this financial crisis becomes high. Result from the table shows that in the first year education explains about 99% Of itself with HIV accounting more. Looking at the 5<sup>th</sup> year, the result indicates that the major variables that accounts for education is poverty and HIV. However, financial crisis also indicate a low percent. This shows that though financial crisis is not a major variable that determine the behavior of education in Nigeria but it affects it. The implication of this is that the 2<sup>nd</sup> MDGs will not be achieved

## **CONCLUSION AND RECOMMENDATIONS**

The Millennium Development Goals forecast is crucial to Nigeria's social and economic development and especially at this time when we have less than five years to the stipulated time of 2015 so as to make adjustments for the future. . Governments around the world are trying to contain the crisis, but many suggest the worst is not yet over as a result of the collapsed in the Stock markets, Investment banks, rescue packages are drawn up involving more than a trillion US dollars, and interest rates have been cut around the world. Consequently, from the result, it is clear that Nigeria will not achieve the MDGs by 2015 as a result of the global financial crisis which have already been causing a considerable slowdown in all the sectors of the economy. Therefore, adjustments in respect of official development assistances, funding from governments, non-governmental organizations, private sector and international organizations is tremendously needed to reach MDG target by 2015. Again,

strategic planning and effective implementation to the latter is needed. Hence, to achieve the MDGs and to scale through the period of global financial crisis, Nigeria need to change the structure of the economy in such a way that the economy is not dependent on only one product but diversified economy and expanding the industrial sector.

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## Appendix I Vector Autoregression Estimates

	FC	POV	EDU	HIV
FC(-1)	0.691362 (0.10269) [ 6.73239]	-0.263594 (0.17106) [-1.54092]	-3.818809 (4.66684) [-0.81829]	-24966.04 (21170.5) [-1.17928]

POV(-1)	0.037061 (0.02446) [ 1.51496]	0.995041 (0.04075) [ 24.4178]	2.954227 (1.11174) [ 2.65731]	5039.398 (5043.25) [ 0.99924]
EDU(-1)	0.002044 (0.00218) [ 0.93876]	-0.001128 (0.00363) [-0.31102]	0.757808 (0.09896) [ 7.65760]	291.6148 (448.927) [ 0.64958]
HIV(-1)	-6.93E-07 (4.4E-07) [-1.57635]	2.87E-07 (7.3E-07) [ 0.39239]	-2.39E-05 (2.0E-05) [-1.19800]	0.852109 (0.09057) [ 9.40865]
C	-1.569992 (0.95218) [-1.64884]	0.573945 (1.58613) [ 0.36185]	-106.6925 (43.2720) [-2.46562]	-211810.6 (196298.) [-1.07903]
R-squared	0.791267	0.982174	0.871328	0.862394
Adj. R-squared	0.772291	0.980553	0.859631	0.849885
Sum sq. resids	2.428119	6.737632	5014.686	1.03E+11
S.E. equation	0.234914	0.391316	10.67568	48428.88
F-statistic	41.69889	606.0641	74.48874	68.93850
Log likelihood	4.087245	-20.91725	-182.9215	-595.4958
Akaike AIC	0.037255	1.057847	7.670264	24.51003
Schwarz SC	0.230298	1.250890	7.863307	24.70307
Mean dependent	0.387755	43.79592	73.44980	93212.10
S.D. dependent	0.492287	2.806092	28.49439	124994.8
Determinant Residual Covariance		2.16E+09		
Log Likelihood (d.f. adjusted)		-804.6756		
Akaike Information Criteria		33.66023		
Schwarz Criteria		34.43240		

Appendix II: Variance Decomposition Result

Variance Decomposition of FC:

Period	S.E.	FC	HIV	POV	EDU
1	0.237947	100.0000	0.000000	0.000000	0.000000
2	0.321137	95.14155	0.653299	3.773728	0.431420
3	0.352644	93.03521	1.151819	3.699243	2.113727
4	0.371536	88.32626	3.670569	4.218457	3.784713
5	0.381227	85.12378	5.626961	4.519462	4.729798
6	0.389409	81.83866	8.310269	5.039673	4.811402
7	0.395612	79.30869	10.44013	5.588287	4.662891
8	0.402189	76.74423	12.45359	6.163241	4.638934

9	0.408480	74.44338	14.02237	6.677180	4.857071
10	0.414653	72.31244	15.33540	7.107379	5.244778

Variance Decomposition of HIV:

Period	S.E.	FC	HIV	POV	EDU
1	46133.41	2.512761	97.48724	0.000000	0.000000
2	52107.41	5.322220	94.59722	0.078228	0.002334
3	62213.15	7.089579	92.53604	0.080373	0.294007
4	68826.42	8.870635	90.35486	0.134232	0.640270
5	75542.40	10.19893	88.72451	0.130671	0.945888
6	81358.57	11.42335	87.31910	0.126674	1.130878
7	86836.64	12.50650	86.16565	0.112692	1.215155
8	91939.37	13.51344	85.15382	0.100536	1.232204
9	96773.19	14.45067	84.24677	0.092554	1.210006
10	101388.5	15.32718	83.41635	0.089222	1.167242

Variance Decomposition of POV:

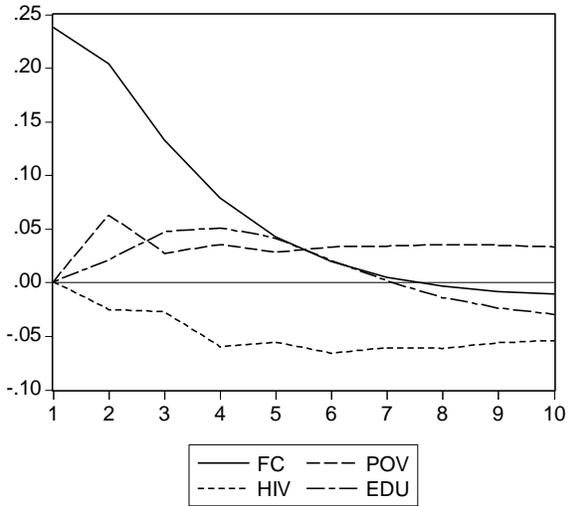
Period	S.E.	FC	HIV	POV	EDU
1	0.332106	0.000936	1.111115	98.88795	0.000000
2	0.395320	6.000031	6.470250	87.46090	0.068817
3	0.496969	15.93566	4.137054	79.04737	0.879909
4	0.590151	26.40604	4.705444	66.71159	2.176933
5	0.687447	33.70845	3.953267	58.26556	4.072722
6	0.781260	38.74208	4.375603	50.99966	5.882662
7	0.868689	42.08614	4.625524	45.79151	7.496823
8	0.949592	44.33130	5.367282	41.61038	8.691031
9	1.022765	45.92800	6.178435	38.36876	9.524801
10	1.089470	47.05614	7.222068	35.70081	10.02098

Variance Decomposition of EDU:

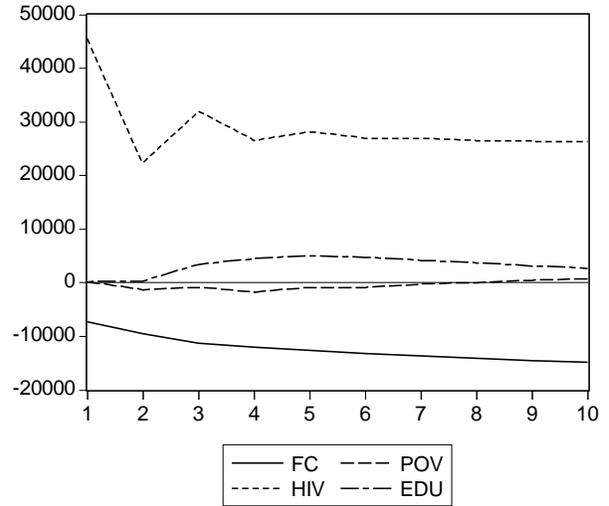
Period	S.E.	FC	HIV	POV	EDU
1	10.58030	0.148313	0.176851	0.701372	98.97346
2	14.81160	0.144658	0.791034	1.069863	97.99444
3	16.28996	0.125171	1.461329	0.951926	97.46157
4	16.67832	0.366957	1.832467	1.392492	96.40808
5	16.88804	1.086164	2.190016	2.574524	94.14930
6	17.15119	2.261959	2.306418	3.904276	91.52735
7	17.48943	3.671846	2.335110	5.177752	88.81529
8	17.84092	5.126405	2.282894	6.206096	86.38460
9	18.17390	6.502905	2.210679	7.010775	84.27564
10	18.47192	7.755620	2.139929	7.620793	82.48366

Cholesky Ordering: FC HIV POV EDU

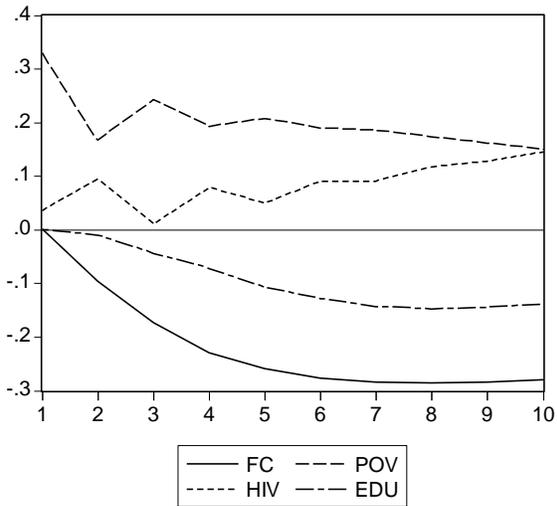
Response of FC to Cholesky  
One S.D. Innovations



Response of HIV to Cholesky  
One S.D. Innovations



Response of POV to Cholesky  
One S.D. Innovations



Response of EDU to Cholesky  
One S.D. Innovations

