Sub-Sahara African Academic Research Publications
September, 2020 Editions

JHSS
Journal of Humanities and Social Science.
Vol.16, No.6, ISSN:2316-7989

REFORMING AFRICA FINANCIAL SYSTEM: AN ISSUE FOR ECONOMIC GROWTH

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Abstract

In Africa, almost after a decade of adopting the World Bank and IMF policies, financial reform appears to have affected the economies of some Africa countries. In this regard, the study aim at investigating into the extent of which the drivers of economic growth specifically the financial sectors have been able to improve the present level of economic growth. The study used secondary data sourced from World Development Indicators (WDI) for the period of 37 years which span from 1980-2017. The research investigate the link between financial system and economic growth with emphasis on selected 46 sub-Saharan African countries. The data obtained were subjected to Harris-Tzavalis panel unit-root test for the identified variables and also standard deviations and means of the variables were examined. The findings revealed that broad money supply (BMS), number of commercial bank branches (NCBB), bank deposits (BD), interest rate spread (IRS) and stock market capitalization (SMC) present very high deviations from their average values. Bank credit to private sector (BCPS), economic growth index (EGI), the indicator of financial system (FS) and that of financial liberalization are not too spread or far away from their average values as their deviations are small. The study recommended that there is need for policy reforms in the context of the financial system and this should be implemented along with other strategic policies towards reducing and curb down unemployment, policy towards curbing inflation rates and policy to reduce budget deficits.

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Keywords: *Economic growth, Financial system, Financial stability, M-S model, Pagano model*

Background of the Study

Against an unfavourable fast changing financial and economic conditions, a lot of Africa countries took decisions on economic reforms. Base on the World Bank and IMF policies, these countries were expected to restructure their economies so as to gain private sector led growth, through a market based system. Today, almost a decade after their initiation, financial reforms appear to have affected the economies of Africa (Bayoumi, 1993). Whether the blame is to fall on their initial design itself, or on the partial nature and difficulties experienced during implementation, the policy of deregulation seemed to be insufficient in inculcating the habit of savings, deepening intermediation through the financial sector, or raising investment. Yet, Africa needs properly functioning financial sector badly. Both for a more efficient allocation of resources and perhaps more importantly, for a more efficient and growth inducing risk diversification. How can African government correct, refine and invigorate their approach towards financial policy reform? How can they enhance the effectiveness of their interventions and measure? This study aim at investigating into the extent to which the drivers of economic growth with emphasis on financial sectors have been able to improve the present level of economic growth in Africa.

Literature Review

Financial Stability

Onah (2002) noted that rapid changes in the financial system in various countries, increasing technological innovations in banking and globalization of trade and other forms of businesses have exposed the world of banking to potential risks and all forms of factors tending to financial instability globally as well as Africa low level of financial system development. Financial stability implies that the financial system particularly the banking sector is stable and thus able to consistently provide financial system intermediation such as credit financing, funds mobilization and channeling same to financially deficit units of economic activities. Nwanna and Chinwudu (2019) are of the view that financial deepening indicates the depth and width of the provision and availability of access to financial services including the sources of financing,

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range of financial products and services, financial information flow, speed and efficiency of markets. The rate of inflation indicates the rate at which the composite price level of goods and services fluctuate within a given time benchmark. It affects the purchasing power of a given local currency and determine the rate at which the real value of money depreciates within a measureable interval and thus can influence the financial stability of the economy and its financial system.

Economic Growth

Meadows and Randers (2014) "defined economic growth as the increase in the inflation adjusted market value of the goods and services produced by an economy over time". It is conventionally measured as the percent rate of increase in real gross domestic product. It is calculated from the data on Gross Domestic Product estimated by countries' statistical agencies in the country. The rate of growth of GDP per capital is calculated from data on GDP and people for the initial and final periods included in the analysis of the analyst. Orwell (2012) noted that economic growth is a complex, long-run phenomenon, subjected to constraints like: excessive rise of population, limited resources, inadequate infrastructure, inefficient utilization of resources, excessive governmental intervention, institutional and cultural models that make the increase difficult, among others. It is easier to redistribute the income in a dynamic growing society, than in a static one. There are situations when economic growth is confounded with economic fluctuations. The application of expansionist monetary and tax policies could lead to the elimination of recessionary gaps and to increasing the GDP beyond its potential level. Economic growth supposes the modification of the offer of factor (labour and capital) or of the increase of the productivity of factors (output per input unit). When the rate of economic growth is big, the production of goods and services rises and consequently, unemployment rate decreases, the number of job opportunities rises, as well as the population's standard of life.

Theoretical Framework

Mckinnon-Shaw Model

This model is known as the M-S model. The model is an instigator of financial repression policy on interest rate, credit allocation, high reserve and some

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induced government distortions known to be widespread during 1960s and 1970s in most of the developing countries. The model particularly focus on undesirable effect of ceilings on deposit and loan rates.

The M-S hypothesis was refined by the model proposed by Edwards and Khan where they opined that liberalized as well as non-autarky factors affect the domestic interest rate of an economy with restricted capital account transactions. They began with specifying the standard Fisherian equation of nominal interest rates;

$i_t = rr_t + \pi_t^e$ ……(2.1)

Where; i = nominal interest rate; rr = real interest rate; πe = expected rate of interest. In contrast to the temporary short-run disequilibrium of the Fisher's equation, the model assumed non-mean-reverting nature of the real interest rate; even in the short- run. As such, we have;

$rr_t = \rho - eM_t^s + \varepsilon_t$ ……(2.2)

Where; eM^s= excess money supply at a given period; ρ = positive parameter value and ε = random error term. Substituting for the real interest rates into equation (1), gives;

$i_t = \rho - eM_t^s + \pi_t^e + \varepsilon_t$ ……2.3)

It is seen that the excess money supply is the excess of the actual stock of real money supply over the desired equilibrium stock of real money balance.

The Pagano Model

The model of Pagano is inspired from the Romer model in analyzing the potential impacts of financial development on economic growth. The model states that financial development is the channel for economic growth and economic performance in the world. The model relies on the assumptions that; there is a closed economy, no government intervention, firms produce a homogenous product, the unique product can be consumed and invested by using technology with constant returns to scale. From the above assumption, the model framework is thus;

$Y = AK_t$ ……(2.4)

Where; Y is the output of the countries, A is the level of technology and K is the amount of capital. Introducing an equation of gross investment to the above function gives

$I_t = K_{t+1} - (1 - \delta)K_t$ ……(2.5)

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In equation (2.5), δ is the rate of depreciation of capital. The model considers that a fraction (1-**β**) of total savings is used in the process of intermediation. The growth rate of the year (t+1) by considering equation (2.5) is thus;

$g = \frac{Y_{t+1} - Y_t}{Y_t} = \frac{K_{t+1}}{K_t} - 1 \ldots\ldots\ldots (2.6)$, generated from the Harrod-Domor growth model.

Equation (2.4) and (2.5) permit us to deduce this growth rate of equations (2.6) which is out to justify the three channels through which the financial system can affect economic growth and economic performance to include;

(i) increase in the proportion of national savings allocated in productive investments will lead to an increase in economic performance,

(ii) the marginal productively (A) will increase as a result of a collection of information and incitation of investors due to more significant repartition of risk by participating countries, and

(iii) the financial system influences growth in this model through the intermediation of rate of savings (S) of the economy.

Therefore, the growth rate of an economy depends on the functioning of the financial system. As well, if the financial system functions in an efficient manner, that is, it proceeds from a good collection of savings to an optimal allocation of the resources. Nonetheless, weaknesses of the model that limits it somewhat applicability hinge on the theoretical assumptions which are unrealistic. Nevertheless, the model has shown the channel through which the financial system promotes the economic performance of countries through savings intermediation and the volume of investment. The model has also presented a tenable leeway for other forms of technology to be generated to promote economic performance.

Research Methodology

The study uses secondary data sourced from World Development Indicators (WDI) for the period of 37years which span from 1980-2017. The study link financial system and economic growth with emphasis on selected 46 African countries. Base on the United Nation Development Program it listed 46 of Africa's 54 countries as "sub-saharan", excluding Algeria, Djibouti, Egypt, Libya, Morocco, Somalia, Sudan and Tunisia.

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The Model Specification

To check the link between financial system and economic growth in Africa. The etusy employ this model;

$EcG_{ti} = \alpha_i + \beta_i FL_{ti} + \gamma_i FS_{ti} + \varepsilon_i$ ……..(3.1)

Where; EcG = Economic growth index

FL = Financial liberalization

FS = Financial system

ε = Error term

Table 4.1: Harris-Tzavalis Panel Unit-Root Test for Variables

Data with time series elements contain unit root due to the stochastic time trend inherent in the data. Test for unit root problem is presented below.

VARIABLE	LEVEL		FIRST DIFFERENCE		IMPLIED ORDER OF INTEGRATION
	Statistics	**P-Value**	**Statistics**	**P-Values**	
EGI	**-0.1776**	**0.0000**			**(0)**
NCBB	**0.9698**	**1.0000**	**0.0025**	**0.0000**	**(1)**
BD	**0.9589**	**0.9992**	**0.0194**	**0.0000**	**(1)**
BCPS	**0.9110**	**0.1994**	**0.0150**	**0.0000**	**(1)**
FS	**0.9693**	**1.0000**	**0.0981**	**0.0000**	**(1)**
BMS	**0.4704**	**0.0000**			**(0)**
IRS	**0.5792**	**0.0000**			**(0)**
SMC	**0.8460**	**0.0000**			**(0)**
FL	**0.5325**	**0.0000**			**(0)**

Source: Computed by Authors Using Stata 13.0

The results of the Harris-Tzavalis panel unit root test for the stationarity of variables indicates that economic growth index, Broad Money Supply, interest rate spread, stock market capitalization and the index of financial liberalization are stationary at level as these variables are significant at 1 percent. At the same time, the indicators of financial system such as number of commercial bank branches, bank deposits, bank credit to private sector and the index of financial system become stationary after the first difference. We

therefore reject the null hypothesis and conclude that panels do not contain unit root and are thus stationary.

Table 4.2 Summary of Descriptive Statistics for Variables

VARIABLES		Means	STD. DEV	MIN	MAX	OBSERVATION
BMS	Overall	51.1067	606.7356	.267337	18347.09	N = 1776
	Between		86.70174	25.54437	-415.1476	n = 37
	within		600.6746	361.1236	17983.05	T = 48
NCBB	Overall	6.201925	6.91629	.1320796	53.34775	N = 1776
	Between		.6439639	4.614117	7.510828	n = 37
	within		6.887043	-.6593742	52.22467	T = 48
BD	Overall	511.972	527.6661	1.300208	3166.135	N = 1776
	Between		24.78085	459.2634	580.2386	n = 37
	within		527.0993	-41.52104	3204.089	T = 48
BCPS	Overall	17.83474	15.34565	.1542184	106.2603	N = 1776
	Between		3.111101	13.85592	-24.56445	n = 37
	within		15.0355	4.136638	100.8224	T = 48
IRS	Overall	9.162838	15.65139	-8.854167	457.4583	N = 1776
	Between		2.651912	6.603116	-17.38688	n = 37
	within		15.43112	11.86404	449.2343	T = 48
SMC	Overall	35.53608	35.49157	.0092866	321.9836	N = 1776
	Between		1.658246	30.91753	-38.95926	n = 37
	within		35.45384	1.437249	319.2087	T = 48
EGI	Overall	101.6393	71.90138	-465.3688	2037.67	N = 1776
	Between		9.975084	86.09205	-140.6841	n = 37
	within		71.22458	449.8217	2001.067	T = 48
FS	Overall	-9.47e-08	.9999999	-1.17987	-4.97827	N = 1776
	Between		.1215548	.1768688	.2988767	n = 37
	within		.9927817	-1.343611	5.038661	T = 48
FL	Overall	1.91e-07	.9999999	-3.35653	21.14948	N = 1776
	Between		.1635611	-.1301248	-.5425737	n = 37
	within		.9868921	3.259522	20.63384	T = 48

The Results

Standard and means of variables are the basic statistics examine in this paper. The average values of broad money supply (BMS) is 511067 the overall deviation from this average value in the 46 African countries is 606.7356. The deviation between the countries is 86.70174 while there is a deviation of 600.6746 within the countries. At the same time the number of commercial bank branches (NCBB) is averaged at 6.201925 with deviations of 6.91629,

0.6439639 and 6.887043 for overall, between and within respectively. An overall examination of descriptive statistics reveals that Broad Money Supply (BMS), number of commercial bank branches (NCBB), Bank deposits (BD), interest rate spread (IRS) and stock market capitalization (SMC) present very high deviations from their average values. Bank credit to private sector (BCPS), economic growth index (EGI), the indicator of financial system (FS) and that of financial liberalization (FL) are not too spread or far away from their average values as their deviations are small.

Conclusion

Caution should be taken in reforming the African financial sector hoping to improve economic growth. The extent to which interest rate, bank credit to private sector and the stock market is liberalized should be done with caution. Policy reforms towards refroming the financial sector and financial sector development strategies should take into account the level of economic growth in terms of change in real gross domestic product considering the volume of unemployment, the inflation rate and the budget deficit as a percentage of gross domestic product of the country.

Recommendations

This paper therefore strongly recommends that improvements in the economic growth of Sub-Saharan African countries, policy reforms in the context of the financial system should be implemented alongside other strategic policies towards reducing unemployment, policy towards curbing inflation rates and policy to reduce budget deficits because when there are high rates of unemployment, high rate and high level of deficit might likely retard financial development as more is captured by the economic problems of African states.

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