

FINANCIAL MARKET INTEGRATION AND ECONOMIC GROWTH: AN EXPERIENCE FROM NIGERIA

Abstract

This study examines the effect of financial integration on economic growth in Nigeria. Using time series data from 1981 and 2012, the study employs autoregressive distributed lag (ARDL) bounds testing approach proposed by Pesaran et al., (2001) to estimate the long run and short run effect of financial integration and development on economic growth. The result from cointegration test showed presence of long run relationship between dependent and all explanatory variables. The regression results show that, while financial integration has no short run effect on economic growth, its long run effect on growth is negative and significant. Financial development was found to have both short run and long run positive effect on economic growth in Nigeria. Hence, for Nigeria to benefit from financial integration, the government has to increase the level of competition, improve the quality of financial information and reduce corruption in the financial system.

Keywords: Integration, liberalization, unit root, Autoregressive, economic growth

Introduction

The advancement in information and communication technology coupled with growing financial deregulation and liberalization in international capital markets has made financial markets throughout the world steadily become more open to foreign investors. This development has also made a number of

countries, including Nigeria, initiate reforms to foster financial market development and attract foreign portfolio flows.

One of the most enduring debates in finance during the last decade is whether financial market integration causes economic growth. This issue had been widely studied by scholars (see Akdogan, 1995; Levine, 2001; Emiris, 2002; Klein and Olivei, 2006; Armanious, 2007). Financial market integration is believed to affect the real economy through at least two broad channels. First, the size of the financial sector and the volume of available credit are seen as a proxy indicator for how effectively the sector manages to collect savings and allocate them to productive investments. This transfer of funds not only raises productive capacity but should also enhance the efficiency of the economy by reallocating funds from least to most productive investments. A second channel relates to the capacity of the financial sector to absorb shocks. An effective financial sector will raise the possibilities for households and enterprises to hedge against risks and systemic shocks (Bloch and Tang, 2003).

Notwithstanding these theoretical benefits of financial integration for trend growth and inequality, empirical studies have so far produced mixed evidence, particularly regarding the impact of financial market integration on financial development and economic growth in developing countries. The dismal condition of the financial system in the developing countries post financial globalization has also received a great attention since the last quarter of 20th century. Authors such as Rodrik (1998) and Stiglitz (2002) argue that financial integration has remained a curse to developing countries since it is a major cause of financial crises. However, Mishkin (2005) contends that financial integration promotes growth but it is the bad policies of these developing countries that hinder the promotional effect of financial globalization. It was also contended that financial market integration entails several risks in terms of capital flight which could lead to balance of payment disequilibrium through

currency fluctuations and high inflation rates which engender current account deficit and unemployment (Boyle, 2009).

Several reasons have been put forward as the causes of lack of significant impact of financial market integration and financial development on economic growth in developing countries. According to Stulz (2005), financial market integration remain ineffective in developing countries due to lack of strong property rights, weak legal system, corruption, lack of quality financial information, poor corporate governance, and government overbearing interference with the financial sector. Although, most developing countries have liberalized their financial sector, there are still some elements of financial repression in their financial sector. For instance in Nigeria, having liberalized her financial sector in 1986, government still intervened in the determination of exchange rate. The central bank was controlled by the government especially during the military regime. Some banks have the majority of the deposits from federal, state or local government and its parastatals (Nnana, 2001).

In summary, part of the difficulty in finding a definite relationship between financial market integration and growth may lie in the fact that financial market openness interacts with the overall regulatory environment in any particular country. A supporting business environment with efficient governance, productive industrial relations and predictable labour regulation helps foreign investors to identify business opportunities quickly and channel funds towards their most productive use.

Capital market integration could be made effective if developing countries could develop strong property rights, strengthen the legal system, reduce corruption, improve the quality of financial information, improve corporate governance, and get the government out of the business of directing credit.

To our knowledge, there is paucity of studies on the effect of financial market integration on economic growth in Nigeria. Most of the studies in this area focus on the importance of financial market development. This study, therefore, fills this gap by empirically providing evidence of the effect of financial market integration on economic growth in Nigeria between 1981 and 2012.

Concept of Financial Integration

The concept of financial integration has been perceived differently by various authors. Financial integration is said to encompass domestic financial market deregulation and capital account liberalization (McKinnon, 1973). Financial integration is defined as the integration of a country's local financial system with international financial markets. It usually requires liberalization of domestic financial sector and the capital account. Financial integration, thus, entails increase in cross-country capital movement, which involves an active participation of local borrowers and lenders in international markets and a widespread use of international financial intermediaries and instruments (Bussiere, 2004).

Emiris (2002) argues that assets with similar risk characteristics will have the same price if financial markets in the world are completely integrated even if these assets are traded on different markets. To him, "in completely integrated financial markets, investors face common and country-specific or idiosyncratic risk, but price only common risk factors, because country-specific risk is fully diversifiable. When markets are partially integrated, investors face both common and idiosyncratic risks and price them both. However, if markets are completely segmented, investors face and price only country-specific sources of risk".

Theoretically, financial integration promotes development of the financial system and economic growth (McKinnon and Pill, 1997). Financial integration

advances the working of the financial system through two main channels. First, financial integration increases the flows of funds and enhances financial infrastructure through reduced asymmetric information which, consequently, decreases adverse selection and moral hazard and enhances the availability of credit (Unite and Sullivan, 2003 and Mishkin, 2006). Secondly, financial integration leads to more comprehensive, stable, and effective financial markets and, as a result, increases economic growth and development (Levine, 2001).

Financial integration improves macroeconomic policy-making and encourages the implementation of pro-growth reforms by imposing discipline on governments (Goldberg, 2004). It strengthens corporate governance through a more competitive market for corporate control (Unite and Sullivan, 2003 and Goldberg, 2004); improves country risk-sharing (Boyle, 2009); enhances product market competition through the inflow of new, internationally operating enterprise and portfolio diversification (Armanious, 2007 and Boyle, 2009) and directs capital flows to the most efficient and productive use and ensure that executives are performing at their best (Akdogan, 1995 and Mishkin, 2003).

Through financial integration, foreign financial institutions bring to domestic financial markets best corporate practices and experiences that which are likely to encourage technology transfer to domestic financial institutions (Goldberg, 2004). Entry of foreign financial institutions helps improve domestic prudential supervision because supervisors are now able to see what risk management practices are successfully used in foreign institutions and insist that they be adopted by domestic institutions (Mishkin, 2003).

However, despite its notable advantages, financial integration has been claimed to expose a country to capital flight and financial crisis and financial malpractices (Boyle, 2009). Rogoff *et. al.*, (2006) note that financial market integration can heighten a country's vulnerability to macroeconomic instability

and financial crisis if a country's financial market is imperfect. The imperfections in financial market can generate speculative attacks' bubbles, and herding behavior among others. Imperfections in international financial markets may also lead to financial crises even in countries with sound fundamentals. It was also pointed out that inadequate financial infrastructure during the process of integration can weaken the health of the local financial market and increase its vulnerability (Obstfeld, 1998; Demirguc-kunt and Detragiache 1999 and Lane and Milesi-ferretti 2006).

Hence, for countries to benefit from financial integration, Mishkin (2006) points out some prerequisites which include: developing strong property rights, strengthening the legal system, reducing corruption, improving the quality of financial information, improving corporate governance, and getting the government out of the business of directing credit.

Empirical Review on the Effect of Financial Integration on Economic Growth

There are several studies on the role and importance of financial market integration in economic development. Bekaert *et al.*, (2005) using a sample that covers 95 countries over the period 1980–97, conclude that financial market integration increases GDP growth by about 1 percentage point. Using a longer sample with different methodology, Li (2003) finds that such integrations lead to a 0.6 percentage increase in GDP growth. Hammel (2006) reveals that industries that are more dependent on external finance grow faster in countries with relatively higher stock market capitalization rates.

Chinn and Ito (2005) focus on the links between financial market integration, legal and institutional development, and financial development. In their panel data analysis encompassing 108 countries and time span from 1980 to 2000, they found that a higher level of financial integration contributes to the development of stock markets only if a threshold level of general legal

systems and institutions is attained and that trade openness is a precondition for financial market integration. They also found that in developing economies a higher level of institutional framework, effective law and order, as well as the lower levels of financial corruption increase the impact of financial integration on the development of stock markets”.

Klein and Olivei (2001) examine a cross-section of 87 industrialized and less developed countries between 1976 and 1995. In their study, financial integration was proxied by capital account. They found a positive relationship between capital account liberalization and financial development. However, the identified positive relationship is only associated entirely with developed countries, while there is no detectable relationship between financial integration and development for the less developed countries

Using firm-level data in a sample of 11 emerging market countries, Chari and Henry (2005) find that financial market integration reduces the cost of capital and increases investment. They also find that financial integration reduces the systematic risk associated with holding equities in developing countries. Using a sample of 12 developing countries and an event study approach, Henry (2000) shows that, on average, equity price indexes register a substantial increase in the months preceding capital market liberalizations, implying that these liberalizations are associated with a fall in the cost of equity capital. Also, using industry-level panel data from the manufacturing sectors of 31 emerging market economies over the period 1981– 98, Gupta and Yuan (2005) conclude that, in capially integrated economies, industries that are technologically more dependent on external finance experience higher growth.

In other studies, Levine and Zervos (1998) find that financial integration and liquidity rates in stock markets are positive and significantly correlated with present and future rates of economic growth, capital accumulation and an increase of productivity growth. Milton (2006) finds that firms with stocks that are open to foreign investors register higher levels of returns on investment, higher efficiency and lower leverage ratios. Alfaro and Hammel (2006) find

that financial market integration boost imports of machinery going into domestic equipment investment. Edison *et al.*, (2004) confirmed the positive association between financial market integration and output growth but they find that this relationship disappears when a measure of government reputation was introduced as a regressor.

Model Specification

The transmission mechanism from financial intermediation to economic growth is an open question in the literature. In this study, the neoclassical growth model was employed to build a model that gives financial market a role in economic growth. The standard neoclassical growth model seeks to explain the growth rate of aggregate output from various factors, such as labour, capita and technological progress also known as the Solow residual. The standard neoclassical model relating these factors to output is given as follows:

$$Y(t) = A(t) f [K(t), L(t)] \quad (1)$$

where $Y(t)$ represents output in time (t) , $K(t)$ capital input in time (t) and $L(t)$ labor input in time (t) . $A(t)$ denotes the technology level in the economy or its stock of knowledge and total factor productivity.

Given the significance of technological factors in economic growth, measures of financial development and integration were introduced into equation (1) to capture the effect of technological change on economic growth. Since, according to Schumpeter (1911), well-functioning financial system boosts technological innovation by funding entrepreneurs with the best chances of successful innovation and technological breakthrough. Exchange rate and interest rate were also introduced into equation (1) to serve as control variables.

Hence, based on the argument above, equation is rewritten as follows;

$$Y_t = \alpha_0 + \alpha_1 K_t + \alpha_2 L_t + \alpha_3 FIN_t + \alpha_4 CI_t + \alpha_5 EXR_t + \alpha_6 INT_t + \mu_t \dots\dots\dots 2$$

Where:

Y= log of industrial value added

FIN= measure of financial deepening (ratio of money supply (M2) to GDP)

CI= measure of Financial integration

EXR= exchange rate

INT= interest rate

K= log of capital

L= log of labour force

α_i and μ are parameters and error term respectively.

Data Source and Measurement

Secondary data are used for this study spanning 1981 to 2012. All variables are sourced from Central Bank statistical bulletin 2013. Financial integration is represented by ratio of capital account to GDP (Glick *et al.*, 2004 and Hernán, 2007). Financial development is represented by ratio of broad money supply to GDP. Capital and labour are captured by gross fixed capital formation and total labour force respectively. Interest rate and exchange rate are represented by lending rate and effective US to naira exchange rate. Income is represented by industrial value added instead of GDP since it is used in the computation of financial development and financial integration.

Method of Analysis

To empirically estimate the long-run and short-run impact of financial integration on economic growth in Nigeria, equation (2) was estimated using

the bounds testing (or autoregressive distributed lag (ARDL)) cointegration procedure, developed by Pesaran *et al.*, (2001). The ARDL procedure can be used when the regressors are integrated of order zero or one unlike the strict requirement of Johansen approach which required all variables to be purely integrated of order one, that is, stationary at first difference (Fosu and Magnus, 2006). The ARDL procedure is also relatively more efficient in small or finite sample data sizes as is the case in this study (Kakar *et al.*, 2010). The ARDL, however, is not efficient in the presence of variables that are stationary at second difference.

The ARDL cointegration procedure involves several stages. In the first stage, the stationary properties of time series variables in equation (2) were examined by implementing unit root test. All variables were tested in levels and in the first difference using the Augmented Dickey-Fuller (ADF) Test and Phillip Perron unit root test.

The second stage involves testing for the existence of a long-run relationship between economic growth, financial integration and all other regressors within a univariate framework. Following Pesaran *et al.*, (2001), the bounds test procedure was adopted by modeling the long-run of equation 3 as a general vector autoregressive (VAR) model of order p as follows:

$$\Delta Y_t = C_0 + \beta_1 Y_{t-1} + \beta_2 K_{t-1} + \beta_3 L_{t-1} + \beta_4 FIN_{t-1} + \beta_5 CI_{t-1} + \beta_6 EXR_{t-1} + \beta_7 INT_{t-1} + \sum_{i=1}^p \phi_{1i} \Delta Y_{t-i} + \sum_{i=1}^p \phi_{2i} \Delta K_{t-i} + \sum_{i=1}^p \phi_{3i} \Delta L_{t-i} + \sum_{i=1}^p \phi_{4i} \Delta FIN_{t-i} + \sum_{i=1}^p \phi_{5i} \Delta CI_{t-i} + \sum_{i=1}^p \phi_{6i} \Delta EXR_{t-i} + \sum_{i=1}^p \phi_{7i} \Delta INT_{t-i} + \mu_t \dots \dots \dots 3$$

where β_i and ϕ are the long run and short-run multipliers respectively, C_0 is the drift and μ_t are white noise errors.

In ARDL procedure, equation (3) is estimated by ordinary least squares (OLS) in order to test for the existence of cointegration or long-run relation among the variables by conducting an F-test for the joint significance of the coefficients of the lagged levels of the variables, i.e

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = 0 \text{ (There exist no long run relationship)}$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7 \neq 0$$

The calculated F-statistic from equation (3) is compared with the critical value tabulated by Pesaran *et al.*, (2001). If the calculated F-statistic exceeds the upper critical value, the null hypothesis of no long-run relationship can be rejected regardless of whether the underlying order of integration of the variables is zero or one (Pesaran *et al.*, 2001).

Once cointegration is established the conditional ARDL ($p_1, q_1, q_2, q_3, q_4, q_5, q_6$) long-run model for equation (2) can be estimated as:

$$Y_t = C_0 + \sum_{i=1}^p \beta_1 Y_{t-1} + \sum_{i=0}^{q_1} \beta_2 K_{t-1} + \sum_{i=0}^{q_2} \beta_3 L_{t-1} + \sum_{i=0}^{q_3} \beta_4 FIN_{t-1} + \sum_{i=0}^{q_4} \beta_5 CI_{t-1} + \sum_{i=0}^{q_5} \beta_6 EXR_{t-1} + \sum_{i=0}^{q_5} \beta_7 INT_{t-1} + \mu_t \dots \dots \dots 4$$

Where, all variables are as previously defined. This involves selecting the orders of the ARDL ($p_1, q_1, q_2, q_3, q_4, q_5$) model in the six variables using Akaike information criteria (AIC).

The last and final step of an ARDL bound procedure is to obtain the short-run dynamic parameters by estimating an error correction model associated with the long-run estimates. This is specified as follows:

$$\Delta Y_t = \lambda_0 + \sum_{i=1}^p \phi_1 \Delta Y_{t-1} + \sum_{i=1}^p \phi_2 \Delta K_{t-1} + \sum_{i=1}^p \phi_3 \Delta L_{t-1} + \sum_{i=1}^p \phi_4 \Delta FIN_{t-1} + \sum_{i=1}^p \phi_5 \Delta CI_{t-1} + \sum_{i=1}^p \phi_6 \Delta EXR_{t-1} + \sum_{i=1}^p \phi_7 \Delta INT_{t-1} + \delta_8 ECM_{-1} + \mu_t \dots \dots \dots 5$$

Where ϕ is short –run dynamic coefficients of the model, δ indicates the speed of the adjustment which restores equilibrium in the dynamic model.

Empirical Result

In this section, the impact of financial integration on economic growth is estimated using the Autoregressive Distributed lag model (ARDL) over the period 1981 to 2012. Before proceeding to the ARDL bounds test, unit root test of the time series variables used in this study were conducted and the

result presented in Table 1. This was to ensure that the variables in our model are not $I(2)$, that is, not stationary at second difference, so as to avoid spurious results. According to Ouattara (2004) in the presence of $I(2)$ variables the computed F-statistics provided by ARDL procedure are not valid because the bounds test is based on the assumption that the variables are $I(0)$ or $I(1)$.

Table 1: Unit root tests

Variable	Augmented Dickey Fuller Test		Phillip Perron Test	
	Level	First difference	level	First difference
Y	-3.640315*	-5.087816**	-3.640315*	-5.102278**
K	-3.775140*	-3.777678*	-3.596300*	-3.571732*
L	-3.673604*	-13.16627**	-4.650099**	-12.41712**
FIN	-0.013920	-4.496688**	-0.080887	-4.388133**
CI	-3.952330**	-8.236770**	-3.952330**	-11.68681**
EXR	-2.090197	-5.306837**	-2.090197	-5.306770**
INT	-3.011616*	-5.509372**	-2.942210*	-8.901823**

Notes: * *and * denote significance at 1% and 5%, respectively.

The ADF and PP unit root tests results for the variables are reported in Table 1. In the results, all variables are integrated of $I(0)$ based on Phillip Perron test and Augmented Dickey Fuller test except for financial development and exchange rate both of which are stationary at first difference. These results, thereby, justify the use of ARDL method.

Bounds tests for cointegration

The results of bounds testing approach for co-integration long run relationship for equation 2 is presented in table 2. The calculated F-statistic of the model is statistically significant, implying that the null hypothesis of no co-integration

cannot be accepted and, thus, it is concluded that there is indeed a co-integration relationship among the variables used.

Table 2: Cointegration test

Dependent var.	AIC	lagF-statistic	Prob.outcome	
Y	1	3.827123	0.0000	there is cointegration

Having found the existence of long run relationship between financial integration, economic growth and other selected variables, the ARDL method was applied to estimate the long run parameters of equation 2. Table 3 presents the estimated long-run coefficients of equation 2. The lag length of long run model was selected on basis of Akaike Info Criteria (AIC). The R-squared and adjusted R squared of the model are about 0.97, signifying that about 97 percent of variations in economic growth is explained by all the included independent variables. The F-statistic value of the long-run model is also significant and implies that all the independents variables include in the model are jointly significant. The Durbin Watson test statistic shows an absence of autocorrelation in the model.

Table 3: Estimated long run coefficients using the ARDL approach

Dependent variable: Y		
Independent variables	Coefficient	T-ratio (prob.)
Y(-1)	0.410166	2.709615 (0.0125)
K(-1)	0.069242	3.121440 (0.0019)
L (-1)	0.108862	0.632642 (0.5332)
FIN (-1)	0.011826	2.765668 (0.0095)
C1 (-1)	-0.007955	-3.597233 (0.0003)
EXR (-1)	0.001365	2.449363 (0.0223)
INT (-1)	-0.000640	-0.126792 (0.9002)

R ²	0.977884	
Adjusted R ²	0.971153	
F-statistics (P-value)	145.2835 (0.0000)	
DW	2.157172	

The long-run result shows that past income level, capital investment, financial development and exchange rate have significant positive effect on economic growth in Nigeria, while economic labour force and interest rate have an insignificant effect on economic growth in the long run. In the result, financial integration has a significant negative effect on Nigeria. The implication of this finding is that the Nigerian economy has been hindered by financial market integration. This is expected since the country's financial system is still underdeveloped relatively to the world standard. The capital account has been negative for most the periods under review which indicates that capital flight out the country is still substantial.

However, financial development, measured as ratio of broad money supply to GDP, has a significant positive impact on Nigerian economy. This result implies financial intermediation facilitates increased economic activities. This finding is consistent with that of McKinnon (1973), Nnana (2001) and Hernán (2007).

Table 4: Short run result for the selected ARDL model

Dependent variable: Y		
Independent variables	Coefficient	T-ratio (prob.)
Y	0.838226	4.621383 (0.0001)
K	0.086381	2.246171 (0.0318)
L	0.034339	0.336129 (0.7401)
FIN	0.067806	2.986181 (0.0131)
CI	0.004305	0.954060(0.3509)

EXR	0.000301	0.498701 (0.6232)
INT	0.008831	4.362874 (0.0003)
ECM(-1)	-0.871618	-3.316924 (0.0017)
R ²	0.727922	
Adjusted R ²	0.624274	
F-statistics (P-value)	7.022979 (0.0001)	
DW	1.982721	

The results of the short-run coefficients of the relationships between financial integration and economic growth are given in Table 4. As in the long-run model, the lag length of short run model is selected on basis of Akaike Info Criteria (AIC). The signs of the short-run estimates are similar to that of long – run model, except financial integration which has a positive sign and is insignificant at 5 percent critical level and interest rate which is positively related to economic growth. The result shows that there is no significant positive relationship between financial integration and economic growth in short-run. This result is consistent with that of Klein and Olivei (2001) who find no detectable relationship between financial integration and development for the less developed countries.

Previous income level, capital investment, financial development and interest rate have significant positive impact on economic growth in Nigeria. Also the error correction parameter is statistically insignificant at 5 percent critical level. This indicates the existence of stable long run relationship. Also, the coefficient of determination (R-squared) of the model is 72 percent, indicating the about 72 percent of the variations in economic growth is explained by variations in all the independent variables. The F-statistic value of the long-run model is also significant and implies that all the independents variables include in the model are jointly significant. The Durbin Watson test statistic shows an absence of autocorrelation in the model.

Conclusion

This study examines the effect of financial integration on economic growth in Nigeria between 1981 and 2012. Financial integration, measured as ratio of capital account to GDP, was found to have a significant negative impact on economic growth in Nigeria. The sign of coefficient of financial integration, however, raised concern. Opening Nigeria's financial system to the world ordinarily would have led to improvement in the functioning of the financial system through increased competition and funds, enhanced financial infrastructure and capital inflows. However, the situation in Nigeria might be different due to underdeveloped and imperfect nature of her financial market. Financial integration, as Boyle (2009) put it, has exposed Nigeria's financial system to capital flight and imported credit crunches, and has also increased corruption incentives in country. Lack of financial infrastructure in the country has also increased the vulnerability of financial system to global financial crisis as evidenced in 2007. Hence, for Nigeria to benefit from financial integration, it is necessary to increase the level of competition in the financial sector, improve the quality of financial information and corporate governance and reduce corruption in the financial system.

References

- Alfaro, L., & Hammel, E., (2007). Capital flows and capital goods. *Journal of International Economics* 72, 128–150.
- Akdogan, H. (1995). *The Integration of International Capital Markets: Theory and Empirical Evidence*, Edward Elgar, Aldershot.
- Armanious, A. N. R. (2007). Globalization effect on stock exchange integration. *SSRN Working Paper* (<http://dx.doi.org/10.2139/ssrn.1929045>).
- Bekaert, G., Harvey, C. R. & Lundblad C. (2001). Emerging Equity Markets and Economic Development. *Journal of Development Economics*, 66(2), 465–504.
- Bloch, H. & S. H.K. Tang (2003). The role of Financial Development in Economic Growth, *Progress in Development Studies*, 3(3), 243-251.

- Bussiere, M., Fratzscher, M. & Muller, G. (2004). Current Account Dynamics in OECD and EU Acceding Countries - An Intertemporal Approach," *ECB Working Paper*, No. 311.
- Chinn, M. & Hiro, I. (2006). What Matters for Financial Development? Capital Controls, Institutions and Interactions. *Journal of Development Economics*, 81(1), 163-192.
- Chari, A. & Henry, P. B. (2005). *Firm-Specific Information and the Efficiency of Investment*. University of Michigan Working Paper.
- Demirgüç-Kunt, A. & Detragiache, E. (1999). Financial Liberalization and Financial Fragility, in Pleskovic, B. & Stiglitz, J. E. eds, *Annual World Bank Conference on Development Economics 1998*, (Washington: World Bank).
- Edison, H., (2004). Testing the Links: How Strong Are the Links between Institutional Quality and Economic Performance? *Finance and Development*, 40, 35-37.
- Emiris, M. (2002). Measuring capital market integration," *Bank For international Settlements Papers* 12, 200-221.
- Fosu, O. E. & Magnus, J. F. (2006). Bounds Testing Approach to Cointegration: An Examination of Foreign Direct Investment Trade and Growth Relationships. *American Journal of Applied Sciences* 3(11): 2079-2085.
- Goldberg, L. (2004). Financial Sector FDI and Host Countries: New and Old Lessons, *Federal Reserve Bank of New York Staff Reports* No. 183.

- Glick, R., Guo, X. & Hutchison, M. (2004). Currency crises, capital account liberalization, and selection bias. *Federal Reserve Bank of San Francisco, Working paper*, No. 15.
- Gupta, N. and Yuan, K. (2009). On the Growth Effect of Stock Market Liberalizations. *Review of Financial Studies*, 22, 4715-4752.
- Hammel, E., (2006). *Stock Market Liberalization and Industry Growth*, manuscript, Harvard Business School.
- Henry, P. B. (2000). Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices. *Journal of Finance*, 55(2), 529–64.
- Hernán R. (2007). Financial Globalisation, Economic Growth, and Macroeconomic Volatility; *Borradores de economía working paper* No 430.
- Kakar M. K., Kakar A. Khan W. & Waliullah (2010). The Long-run Relationship among Money, Income and the Price Level in Pakistan. *Journal of Economics and Sustainable Development*, 2(3), 117-128.
- Klein, M. & Olivei, G. (2006). Capital Account Liberalization, Financial Depth, and Economic Growth. *Journal of International Money and Finance*, 27, 861 – 875.
- Lane, P. R., & Milesi-Ferretti, G. M. (2006). The external wealth of Nations mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2003. *IMF Working Paper no. WP/06/69*.
- Levine, R. & Zervos, S. (1998), Stock Markets, Banks, and Economic Growth. *American Economic Review*, 88:537-558.

- Levine, R. (2001). International Financial Integration and Economic Growth. *Review of International Economics*, 9(4), 684–98.
- Li, Z., (2003). *Equity market liberalization and economic performance*. Working paper, Princeton University.
- Mckinnon R.I. (1973). *Money and Capital in Economic Development*. The Brookings Institution) Washington, D.C.
- McKinnon, R., & Pill, H., (1997). Credible Economic Liberalizations and Over borrowing. *American Economic Review*, 87(2), 189-93.
- Mishkin, F. (2003). Financial Policies and the Prevention of Financial Crises in Emerging Market. *NBER Working Paper 11891 Countries*, in M. Feldstein, (ed.), *Economic and Financial Crises in Emerging Market Countries*, University of Chicago Press
- Mishkin, F. S., (2006). *The Next Great Globalization: How Disadvantaged Nations Can Harness Their Financial Systems to Get Rich*, Princeton, New Jersey: Princeton University Press.
- Mitton, T. (2006). Stock Market Liberalization and Operating Performances at the Firm Level. *Journal of Financial Economics*, 81(3), 625-647.
- Nnanna, O.J., (2001). Monetary Policy Framework in Africa: The Nigerian Experience, in *Proceedings: Conference on Monetary Policy Frameworks in Africa*. Reserve Bank of South Africa, Pretoria.
- Obstfeld, M., (1998). The Global Capital Market: Benefactor or Menace? *Journal of Economic Perspectives*, 12, 9-30.

Ouattara, B. (2004). Modelling the Long Run Determinants of Private Investment in Senegal, *Credit Research Paper* No. 04/05, Centre for Research in Economics Development and International Trade, University of Nottingham.

Pesaran, M.H., Shin Y. & Smith R.J., (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16, 289-326.

Rodrik, D. (1998). Who Needs Capital Account Convertibility?, in Peter Kenen, ed. Should the IMF Pursue Capital-Account Convertibility? ". *Princeton Essays in International Finance*, No. 207.

Rogoff, K., Kose, M. A., Prasad, E. & Wei, S. J. (2006). Financial globalisation: a reappraisal, *IMF Working Papers*, no 06/189.

Schumpeter, J.A. (1911). *The Theory of Economic Development*, Leipzig: Ducker and Humblot. Translated by Redvers Opie. Cambridge, MA: Harvard University Press, 1934.

Shin Y. & Smith R.J., (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16, 289-326.

Stiglitz, J. (2004). Capital-Market Liberalization, Globalization, and the IMF. *Oxford Review of Economic Policy*, 20(1), 57–71.

Stulz, R. (2005). The Limits of Financial Globalization. *Journal of Finance*, 60(4), 1595-1637.

Unite, A. & Sullivan M. (2003). The Effect of Foreign Entry and Ownership Structure on the Philippine Domestic Banking Market, *Journal of Banking and Finance*, 27(12), 2323–2345.

