

EXPORTS AND IMPORTS MERCHANDISE OF DEVELOPING ECONOMIES IN WEST AFRICA

¹Enahoro A. John PhD, FCA. ²Mohammed R. Samuel
^{1&2}Department of Accounting
Babcock University, Ilisan-Remo, Nigeria.

Abstract

The study investigates the effect of exports merchandise on imports of developing economies in West Africa. The study focuses on the imports and exports merchandise of six West Africa Countries from 2001 – 2011. Panel secondary data for this study was obtained from World Trade Organization's International Trade Statistics 2012. In analysis of data, the study employed ordinary least square regression (OLS) and the test of the hypothesis used was F – test statistics. Pearson Product Moment Correlation Coefficient was applied to determine the strength of the relationship between the variables. To complement the analysis, we used panel data estimations because in the case of cross-country and time series estimations, the correlation between the error term and the regression in time series leads to simultaneity and omitted variables. The correlation between the exports and the imports merchandise of the selected West Africa economies was strongly positive. Also, box plot revealed the existence of extreme values in imports and exports especially in Nigeria. The overall percentage contribution of FDI in emerging developing economies in West Africa was very significant. It was revealed that the foreign investors are encouraged to invest in these economies because of the high degree of openness and investment friendly policies. It is concluded that FDI play a vital role in economic development making these countries to gain access to international markets and production networks while technology and knowledge not available to the host countries' investors are brought into the countries. The West Africa economies should increase domestic investments to accelerate and maintain more global growth opportunities and market integration. The countries should provide more conducive and attractive environments for foreign investments as well as investment friendly policies while the foreign investors should diversify their investments to the area of power, energy, oil and gas, and agricultural sectors. The study also recommends that the sub-region economies should develop codes of conduct on imports, exports and investments to regulate business practice of multinationals.

Keywords: *Foreign Direct Investment, Emerging Economies, Merchandise, Economic Growth.*

Introduction

Franklin, Isaac and Lemma (2011) observed that Africa is a continent made up of 53 countries. The continent is economically and culturally diverse, with different regional economic blocs (Akinlo 2004). The financial systems in these countries are as diverse as the countries. Reviewing the financial systems of such a heterogeneous group of countries presents a challenge (Cheung and Lai, 1993; Borensztein, De Gregorio & Lee, 1995; Bekaert, Harvey & Lumsdaine, 2002;

Dungey and Martin 2004; Alfaro, Arendam, Sebrem, 2006). Therefore, to make the review more concise, we categorize the countries along geographic lines into four groups, namely, Arab North Africa, West Africa, East and Central Africa, and Southern Africa. This review covers, among others, a brief consideration of the economies, central banks, deposit-taking banks. For least-developed countries (LDCs), two-thirds of which are in Africa, an assessment of their data availability from 2000 to 2011 reveals that 40 out of the total number of 48LDCs have reported detailed trade data to the UN Commodity Trade Statistics (Com trade) database for at least one year and one trade flow (export or import). In addition, data reported by some countries do not necessarily comply with the international standards detailed in the United Nations International Merchandise Trade Statistics (IMTS). Data also vary in coverage as, some countries report only domestic exports (Franklin, Isaac & Lemma 2011). Bekaert and Harvey (2000) opined that a growing concern is many developing countries do not provide estimates of unrecorded trade, such as cross-border and illicit trade. Some of them do not include processing zones in their merchandise trade statistics.

The Economic Community of West African States (ECOWAS) has the mission to promote economic integration. However, the West African region constitutes two distinct language zones, namely French speaking and English speaking. These two blocks also constitute the main economic groups in the region (Franklin, Isaac & Lemma 2011). The French speaking block which comprises Niger, Benin, Cote d'Ivoire, Mali, Senegal, Togo, Burkina Faso, Chad and Gabon has combined GDP of \$75.947 USD billion in 2007 and a per capita GDP of \$913 USD in 2008 estimates (IMF, 2009). Among the Franco-phone countries, Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal, and Togo form the West African Economic and Monetary Union (WAEMU) whose aim is to promote economic integration among the member countries. Franklin, Isaac & Lemma (2011) in their study established that the Anglo-phone countries in West Africa consist of Sierra Leone, Gambia, Ghana, Liberia and Nigeria. They said the combined GDP of these countries is \$189.321 USD billion as of 2007 and a per capita GDP of 1308USD. They further confirmed that the GDP growth rate for these countries ranges from 3.33% for Guinea Bissau to 7.16% for Ghana according to 2008 data. Unlike the French speaking countries, the English speaking countries do not have a single monetary union. The countries in this region, like most countries in Africa, have been affected by the global economic crisis and their growth rates could be affected in the future and could have detrimental effect on efforts to reduce poverty. Remittances in these countries may dwindle demand for commodity exports, and therefore prices of exports will in turn affect the external current account deficit and reserves of the WAEMU countries (Hubert 2012).

The countries in the French West Africa zone have a common central bank, namely the Central Bank of West African States (BCEAO) located in Dakar, Senegal. The Central Bank regulates partners of the CFA zone on reform of insurance, social security provisions, savings mobilization, business law, regional training centers, and the Franc Zone Monitoring Office (Observatoire Economique de la Zone Franc), which monitors economic trends. The West African Economic

and Monetary Union (UEMOA) financial markets are administered through the institutions. The Conference of Heads of State, which decides on the accession of new members, the Council of Ministers, which defines, among others, the monetary and credit policy of the Union to safeguard the value of the CFA Franc. The UEMOA Commission, as delegated by the Council of Ministers, is in charge of the day-to-day administration of the Union and the Central Bank of West African States (BCEAO) controls the Banking Commission responsible for overseeing and supervising banks and financial institutions (Franklin, Isaac and Lemma 2011).

The Nigerian stock market, the most liquid stock market in West Africa, was established in 1960 as the Lagos Stock Exchange. In December 1977 it became The Stock Exchange has eight branches located in Lagos in 1961, Kaduna branch in 1978, Port Harcourt in 1980, Kano in 1989, Onitsha in 1990, Ibadan in 1990, Abuja in 1999, Yola in 2002, and Benin in 2005. Many of the listed companies have foreign/ multinational affiliations and represent a cross-section of the economy, ranging from agriculture through manufacturing to services. With the abrogation of the Exchange Control Act 1995, foreign nationals can participate in the Nigerian capital market both as operators and investors. There are no limits to the percentage of foreign holding in companies registered in the Nigerian Stock Exchange. As a consequence of the financial crises, the Nigerian stock market capitalization fell 44% in 2008 from \$82.7bn in 2007. The total market value of the 301 securities listed by the Exchange dropped in value by 28.1% from N13.295 trillion to N9.563 trillion at the end of 2008. The decline in market capitalization resulted mainly from price depreciations of equity values, the delisting of 19 companies and the maturing of outstanding bonds. The Nigerian Stock Exchange (NSE) All Share Index was one of the worst-performing equity markets in Sub Saharan Africa (SSA) in 2008 falling 43% in local currency and 50% in dollars. Total market turnover was \$19.6bn in 2008, an increase of 24% over the prior year (\$15.8bn in 2007).

According to Economist Intelligence Unit Survey London (2011) currently, London is home to the largest number of foreign listings globally (20.4% of listings are international as at March 2011). This reveals the dominance of the market. London and New York are perceived to be the exchanges companies are most likely to consider for a cross-border listing. However, both are expected to lose some of their dominance by 2025 as other exchanges grow in prominence. It is perceived that London will suffer because of its reliance on foreign listings, which will naturally diminish as other financial centers grow in sophistication (Geert et al 2007). On the other hand, it is believed that the UK's ties to the EU, with its continuing economic problems and what is perceived to be an increasingly strict regulatory regime which will make it harder for London to compete internationally. The New York Stock Exchange is not expected to lose out, to the same extent, owing to the inherent size of the US market and dominance of its economy. It is believed that it will continue to play a global role with 39% suggesting it will still be a key listing destination in 2025 (Economist Intelligence Unit Survey London, 2011).

A stable legal and regulatory framework and consistent government policy are seen as prerequisites for the shift towards gaining traction in foreign jurisdictions in terms of listings (Kabir 2012). Almost one-third of survey respondents cited the legal and regulatory environment as the most likely development to derail the rise of emerging market stock exchanges.

This was followed closely by political uncertainty, cited by 29% of respondents (Dow 2011). In Brazil, according to the Dow Jones Newswires, in UN report of 2011; investors have indicated government meddling in markets. The recent and abrupt increases in tax on foreign investments in the equity market have sparked fears of an unstable regulatory regime and many have argued that such moves could reduce faith in Brazilian markets. As Johansen (1988) pointed out: "whether FDI can be deemed to be a catalyst for output growth, capital accumulation, and technological progress seems to be a less controversial hypothesis in theory than in practice" (Feldstein & Charles 1980; Johansen 1990; Chatrath, Rarnchander and Song 1996; Borensztein, De Gregorio and Lee 1998). Moreover, Lamba (2005), after surveying the macro empirical research, claimed that a consistent relation between the size of inward FDI stocks or flows relative to GDP and growth did not exist. He further argued that there was need for more consideration of the different circumstances that obstructed or promoted spillovers.

The primary objective of the study is to assess the effect of exports on the imports merchandise of the selected developing economies in West Africa. This study is very significant in providing a new insight into economic growth and development of these nations. In furtherance of its contribution, this study will have practical importance because its econometric results may support the application of appropriate regulatory and financial policies. More importantly, it will also add to the existing body of knowledge in the area of exports and imports merchandise of developing and under-developed nations.

Conceptual Framework and Theoretical

Concept of International Trade

International trade is the exchange of goods and services between countries. Goods sold to other countries are referred to as exports and goods bought from them are dubbed as imports, It also involves movement of capital between countries (ABWA 2009).

Concept of terms of trade

There are various terms of trade and this include; the commodity or net barter terms of trade, income terms of trade, single factorial terms of trade double factorial terms of and trade (ABWA 2009). The commodity terms of trade are the rate at which a country's exports are exchanged for its imports for a given period. It is the ratio of the price index of nation's exports (P_x) to the price index of imports (P_m) multiplied by 100.

Concept of balance of payments

This is an account that summarizes a country's total payments and total receipts from international economic transactions with a specific period usually a year (ABWA 2009).

Accounts of the balance of payments

The balance of payment has three main parts namely; the current account, the capital account and the official reserves account. The current account is subdivided into three main items; merchandise imports and exports, services imports and exports and unilateral transfers. Merchandise imports and exports are also referred to as visible trade while services imports and exports and unilateral transfers dubbed as invisible trade (ABWA 2009).

Merchandise Account or Visible Trade

This records trade in merchandise, involving export and import goods. The difference in merchandise exports and imports is known as the Balance of Trade. If merchandise exports exceed visible merchandise import, the country is said to have trade surplus while the country will have a deficit if imports exceed exports.

Services Accounts or Invisible Trade

This involves transactions on current and capital accounts. The total current accounts is the sum of merchandise trade account, services account and unilateral transfers while the capital account deals with long and short- term capital movement. The movement in capital represents an inflow of foreign capital and there is a corresponding outflow when such funds are withdrawn. An inflow of funds represents credit while an outflow indicates debit. This study is based on the theory of Internalization, Absolute advantage and comparative cost advantage theories. However, Sharma (2003) investigated the impact of foreign investment on Indian's export performance and finds that foreign investment does not statistically affect the export performance. Lamba (2005) using data from July 1997 to December 2003, reports that the Indian market is becoming increasingly influenced by the US and the UK equity markets, and their impact has been persistent since the 11 September attack in the US.

Hubert (2012) in his study observed that, providing timely and comparable merchandise trade statistics for some developing countries, especially in Africa and the Middle East, has often been a challenge because of their lack of regular reporting of consistent and comparable data over time and across countries based on international standards and guidelines. Furthermore, compiling data on commercial services has been even more challenging.

Hypothesis

One hypothesis has been formulated as thus:

H_{01} : There is no significant relationship between the exports and the imports merchandise of the selected economies in West Africa Economies.

Methodology

The researcher adopted descriptive research design method and using the import and export merchandise of six West Africa countries ranging from 2001 – 2011 for three French speaking countries namely Côte d'Ivoire, Senegal, and Togo while three English speaking countries

comprises Nigeria, Ghana and Gambia. These countries were selected because they all belong to the West African Economic and Monetary Union (WAEMU) whose aim is to promote economic integration among the member countries. (WAEMU) region has been attracting a growing number of general partners (GP) due to its stable macroeconomic climate: relatively controlled inflation and foreign exchange risk, favourable investment climate, and trend towards regulation and privatization. The study employs empirical analysis approach of Panel secondary data obtained from World Trade Organization International Trade Statistics 2012. Hence, analysis of the data was carried out by employing ordinary least square regression (OLS). The testing of the hypothesis was done using F – test statistics while Pearson Product Moment Correlation Coefficient was used to determine the strength of the relationship between the variables. To complement the analysis, we used panel data estimations because in the case of cross-country and time series estimations, the correlation between the error term and the regression in time series leads to simultaneity and omitted variables.

Model specification

The model for this study is specified thus:

$$IMP = \hat{\alpha}_0 + \hat{\alpha}_1 EXP + \hat{\alpha} \dots \dots \dots (1)$$

The model is used in gauging and assessing the relationship between exports and imports merchandise where IMP equals imports, EXP equals exports, $\hat{\alpha}$ is the beta factor and $\hat{\alpha}$ is the error term. If we assemble or add a linear relationship (logarithm), then the model becomes thus:

$$\log IMP = \hat{\alpha}_0 + \hat{\alpha}_1 \log EXP + \hat{\alpha} \dots \dots \dots (1)$$

Result of the study

The correlation between the exports and the imports merchandise of the selected West Africa economies revealed a strong relationship with correlation coefficient of 0.982 and about 96.4% variation in import was caused by export. The model is: IMPORTS = 0.486 EXPORTS + 2894.725 (See tables 1 and 2).

Table 1.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.982 ^a	.964	.963	2808.641	1.012

a. Predictors: (Constant), EXPORT
 b. Dependent Variable: IMPORT
 Source: output from STATA.

Table 2.

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2838.04	59328.81	10756.39	14375.955	36
Residual	-4911.335	6908.564	.000	2768.227	36
Std. Predicted Value	-.551	3.379	.000	1.000	36
Std. Residual	-1.749	2.460	.000	.986	36

a. Dependent Variable: IMPORT

Source: Output from STATA.

The model is adequate in formulating the relationship between imports and exports with P-value 0.000. Also, export is having P-value of 0.000 which means export is also significant. The variance inflation factor (VIF) IS 1.00 which shows that there is no existence of multi- co linearity between the variables under consideration (See table 3). The correlation between the exports and the imports merchandise of the selected West Africa economies was strongly positive. The box value revealed existence of extreme values in imports and exports (see tables 4 and 5). These extreme values for imports and exports could be observed in Nigeria from 2005-2011 which might have been the result of government policies on exports. The overall percentage contribution of FDI in emerging developing economies in West Africa was very significant.

Table3.

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	7233382793.933	1	7233382793.933	916.957	.000 ^b
	Residual	268207774.623	34	7888463.959		
	Total	7501590568.556	35			

a. Dependent Variable: IMPORT

b. Predictors: (Constant), EXPORT

Source: Output from STATA

Table 4:Box plot.

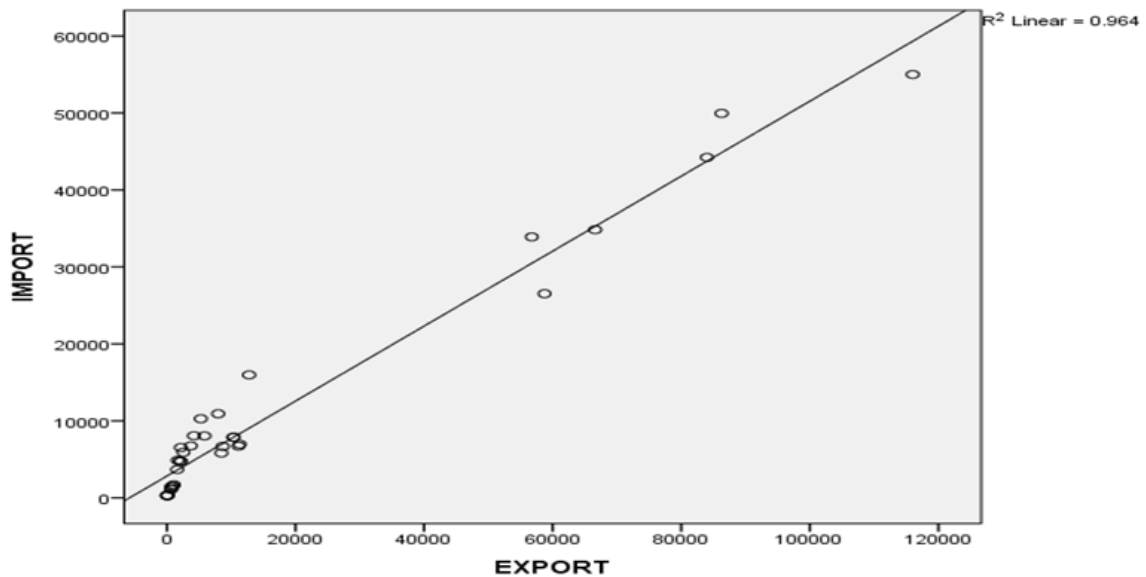
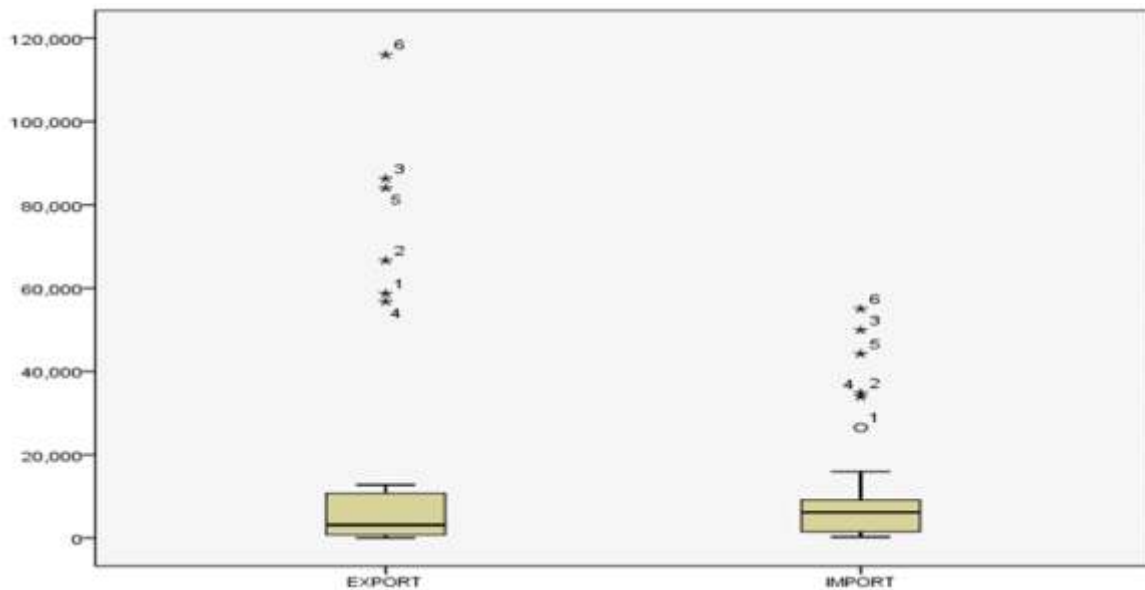


Table 5: Box Plot



Sources: output from STATA.

Discussion of Findings

Discussing the hypothesis formulated that, there is no significant correlation between the exports and the imports merchandise of the selected West Africa Economies. Syriopoulos(2007) summarized that evidence of positive spillovers of FDI had been found by researchers in some countries and some industries, though, country-specific and industry-specific factors seemed so be crucial that these results did not support the overall conclusion that FDI brought about substantial spillover effects for the entire economy. In addition, the industrial organization theory brought forth by Engle and Granger 1987; Obstfeld and Kenneth (2000); Lane and Milesi-

Ferreti (2003); Sharma (2003) and Richards (2005) concluded that FDI is an aggressive global strategy by MNEs to advance monopoly power over and above indigenous firms of the host economy. Sunil and Chandra (2010) confirmed that the particular advantages of multinational corporations (such as advanced technologies, management know-how skills, transaction cost minimizing and other intangible advantages) could be transformed into monopoly power, which could be further strengthened by the other two advantages of multinational corporations: the market internalization advantage and the location-specific advantage. These different views brought about the Gap in literature that this study has filled.

In line with the submission of Otepola (2002), who opined that FDI contributes significantly to growth especially through exports while those factors that may discriminate between positive and negative experiences of FDI include trade policy regime followed by the host countries, this study however, reveals that the foreign investors are encouraged to invest in these economies because of their high degree of openness and investment friendly policies. However, Balasubramanyam, Salism and Sapsfold (1999) opined that the impact of FDI flows is significantly positive in economies which pursue an “export promotion (EP) strategy and insignificant in countries which are characterized by an Import Substitution (IS) policy while FDI play a vital role in economic development making these countries to gain access to international markets and production networks while technology and knowledge not available to the host countries' investors are brought to them.

Conclusion.

This study concludes that both differences in development level and trade policy strategy may theoretically help to explain how the influence of foreign direct investment (FDI) on host country may vary. To the extent to which factors like the available stock of infrastructures, the market size, and the presence of skilled labour and so on are recognized to be fundamental determinants of foreign capital inflows to developing countries.

The study recommends that these sub-region economies should develop codes of conduct on imports, exports and investments to regulate business practice of multinationals which might have restricted rapid growth in local industries. The West Africa economies should increase domestic investments to accelerate and maintain more global growth opportunities and market integration. ECOWAS should provide more conducive and attractive environments for foreign investments as well as investment friendly policies while the foreign investors should diversify their investments to the area of power, energy, oil and gas, and agricultural sectors.

References

- ABWA (2009): *Accounting Technicians Scheme West Africa(ATWA) Study Pack for Economics*. Lagos: ABWA Publishers.
- Akinlo, A. E. (2004): "Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation." *Journal of Policy Modeling* (26) 5 627-639.
- Alfaro, L., C. Arendam, K. O., and Sebrem, S. S. (2006): "*How Does Foreign Direct Investment Promote Economic Growth?*" Exploring the Effects of Financial Markets on Linkages. NBER working paper 522.
- Balasubramanyam, V. N., Salism M. and, Sapsfold, D. (1999): "Foreign Direct Investment as an Engine of Growth." *Journal of International Trade and Economic Development* 8(1.) 27-40.
- Bekaert, G. and Harvey, C.R. (2000): 'Foreign Speculators and Emerging Equity Markets', *The Journal of Finance*, 55(2): 565–613.
- Bekaert, G., Harvey, C.R. and Lumsdaine, R.L.(2002): 'The Dynamics of Emerging Market Equity Flows', *Journal of International Money and Finance*, 21(3): 295–350.
- Borensztein, E., De Gregorio, J., and Lee, J. W. (1995): "How Does Foreign Direct Investment Affect Economic Growth?" NBER Working Paper No 5057.
- Borensztein E., ,De Gregorio, J. and Lee, J.W. (1998): "How Does Foreign Direct Investment Affect Economic Growth?" *Journal of International Economics* 45 (1, June) 115-135.
- Chatrath, A., Ramchander, S. and Song, F. (1996): 'Benefits from Portfolio Diversification into the Indian Equity Market', *American Business Review*, 14(1): 1–10.
- Cheung, Y. and Lai, K.S. (1993): 'A Fractional Co integration Analysis of Purchasing Power Parity', *Journal of Business & Economic Statistics*, 11(1): 103–223.
- Dow J.N. and Edemir P.(2011): Reports in the UN's World Economic Situation and Prospects.
- Dungey, M., R and Martin, V.L.(2004): 'Identification of Common and Idiosyncratic Shocks in Real Equity Prices: Australia, 1982–2002', *Global Finance Journal*, 15(1): 81–102.
- Economic Intelligent Unit Data Base(2007): Available at <http://www.eiu.com/index>. retrieved 20/05/13
- Economic Intelligent Unit Data Base(2011): Available at <http://www.eiu.com/index>. retrieved 21/05/13
- Engle, R.F and Granger, C.W.J. (1987): 'Co-integration and Error Correction: Representation, Estimation and Testing', *Econometrical*, 55(2): 251–76.
- Feldstein, M. and Charles H. (1980): Domestic savings and international capital flows, *Economic Journal* 90, 314–329.
- Franklin, A., Isaac, O. and Lemma, W. S.(2011): African Financial System: A review. *Review of development finance*, 1-35.
- Geert, B., Campbell, R. H., Christian, L., and Stephen, S.(2007): Global Growth Opportunities & Integration. *The Journal of Finance*. 62(3).
- Hubert, E. (2012): World trade organization international trade statistics. Retrieved from <http://www.wot.org/sttistics>. 03/05/13

- Johansen, S. (1988): 'Estimation and Hypothesis Testing of Co integration Vectors in Gaussian Vector Autoregressive Models', *Econometrical*, 59(6): 1551–80.
- Johansen, S. and Juselius, K. (1990): 'Maximum Likelihood Estimation and Inference on Cointegration—With Applications to the Demand for Money', *Oxford Bulletin of Economics and Statistics*, 52(2): 169–210.
- Kabir, H. (2012): Foreign Direct Investment and Nigerian Economy. *America Journal of Economics*, 2(3), 33-40.
- Lamba, A.S. (2005): 'An Analysis of the Short- and Long-Run Relationships between South-Asian and Developed Equity Markets', *International Journal of Business*, 10(4): 383– 402.
- Lane, P.R. and Milesi-Ferretti , G.M. (2003): 'International Financial Integration', *IMF Staff Papers*, 50(special issue): 82–113.
- Obstfeld, M. and Kenneth R. (2000): Perspectives on OECD economic integration: Implications for U.S. current account adjustment, Federal Reserve Bank of Kansas City *Global Economic Integration: Opportunities and Challenges*, 169–208.
- Otepolo A. (2002): “Foreign Direct Investment as a factor of Economic Growth in Nigeria.” *Africa Institute for Economic Development and Planning (IDEP)*, Dakar, Seregal.
- Richards, A.(2005): 'Big Fish in Small Ponds: The Trading Behaviour and Price Impact of Foreign Investors in Asian Equity Markets', *Journal of Financial and Quantitative Analysis*, 40(1): 1–27.
- Sharma, K. (2003): 'Factors Determining India's Export Performance', *Journal of Asian Economics*, 14(3): 435–46.
- Sunil, S. P., and Chandra, T. (2010): Foreign Investors and Global Integration of Emerging Indian Equity Market. *Journal of emerging Market Finance*, 9(1), 1-24.
- Syriopoulos, T. (2007): 'Dynamic Linkage between Emerging European and Developed Stock Markets: Has the EMU Any Impact?', *International Review of Financial Analysis*, 16(1): 41–60.