

Effect of Diaspora Remittance on Stock Market Performance: Evidence from Nairobi Securities Exchange

Wanyoike Njoroge

University of Nairobi, Kenya

Abstract

Stocks market is an important component of a market economy and provides companies with access to capital and vital information to investors. Additionally, stock market plays an important role on liquidity creation and economic growth. It acts as a major channel through which the savings of the surplus unit is transformed into medium and long term investments in the deficit unit of the economy. Diaspora remittances on the other hand are vital to economic performance especially in developing countries. The relationship between Diaspora remittances and stock market performance has been highly neglected by scholars with minimal empirical evidence available. This is notwithstanding the fact that Diaspora remittance to developing world has been on the rise with World Bank (2015) expecting the remittance to reach \$440 billion in 2015, an increase of 0.9 percent compared to 2014. Therefore this study sought to determine the effect of Diaspora remittances on stock market performance using evidence from the Nairobi Securities Exchange. The study used secondary data collected from the Central Bank of Kenya and Nairobi Securities Exchange. Stock market performance was measured by Nairobi Securities Exchange All Share Price Index (NASI). Inflation, interest rates and exchange rates were used as control variables. Descriptive analysis design was applied by the study and data analyzed on monthly basis. The study found that Diaspora remittance has strong and significant positive effect on stock market performance. Increase in Diaspora remittance will significantly improve the performance of stock market. Further, the study found that inflation, lending interest rates and exchange rates have significant negative effect on stock market performance. The study recommends that the government to take measures to boost investor confidence to encourage the Diaspora population to invest more in Kenya. This can be done by elimination of corruption, having stable political environment, formulation of policies that ensures macroeconomic environment and generally having the right governance systems. Campaigns should be run by the government and nongovernmental organizations to educate the Kenyans in Diaspora the importance of investing in Kenya in growth and development of the country.

Background

The concept of Diaspora remittances is not a new to discussion of migration and development. Recently, however, an upward trend of migrant's monetary flows has led to a resurgence of focus on the topic more so in Kenya. According to Ratha et al., (2011) Diaspora remittances have grown significantly to become a primary source of foreign inflow in Africa to an extent of exceeding foreign aid and foreign direct investments (FDI). This has led to the topic's prominence among donors, international financial institutions, commercial banks, money transfer operators, microfinance institutions, and policy makers hence the debate on the influence of remittances on performance of key sectors of the economy. Theoretically a positive relationship exists between stock market development and economic development (Alajekwu, 2012). However, there is little evidence to confirm any causal relationship between the inflows of remittances and

performance of various key segment performances that includes the Nairobi stock exchange.

Unlike other sources of external finance, remittances tend to be more stable making them a reliable source of financing for developing countries (Biller, 2007). This is due to the fact that remittances are person-to-person flows, well targeted to the needs of the recipients, and do not typically suffer from the governance problems that may be associated with official aid flows. Since they are sent directly to the recipient, they are less susceptible to bureaucratic bottlenecks and corruption (Ratha & Mohapatra, 2007). Remittance inflows to Africa therefore, on average are now roughly equal to official development assistance. For this reason, Diaspora remittance has become a key driver in economic growth in Kenya and is a major source of foreign exchange in the economy only rivaled by tourism, horticulture and tea export. Remittances have led to economic boom and have resulted in improvement of both economic and social welfare of direct and indirect beneficiaries. World Bank (2010) indicates that remittances have become an important source of external finance for developing countries and its role cannot be ignored even though the benefits of remittances for development are conditional upon the broader economic and political context (Biller, 2007). The Central Bank of Kenya (CBK) conducts a survey on remittance inflows every month through the formal channels that include commercial banks and other authorized international remittances service providers in Kenya.

The stock market is also known as the equity market and is one of the important areas of a market economy as it provides access to capital to companies, provides access vital information about companies and the potential of gains based on the firm's future performance for secondary investors (Osoro, 2013). Moreover, stock market plays a key role in the development of emerging market economies. It acts major channel through which the savings of the surplus unit is transformed into medium and long term investments in the deficit unit of the economy (Adenuga, 2010). Better savings mobilization may increase the savings rate, and which in turn spurs investments and earns investment income to the owners of those funds. All these factors have contributed to an immense interest in the links between migration and development as attributed by Bakewell (2008).

Research Problem

Diaspora remittance is vital to economic performance especially in the developing countries (World Bank, 2005). Various theories like Altruism theory (Chami, Fullenkamp, & Jahjah, 2005) and Base Broadening theory (Merton, 1987) indicate that Diaspora remittance have direct link to stock market performance. However, other theories like Pure Self Theory (Brown, 2006) hold that there is minimal or opposite relation between remittances and market performances. This is notwithstanding the fact that Diaspora remittance to developing world has been on the rise with World Bank (2015) expecting the remittance to reach \$440 billion in 2015, an increase of 0.9 percent compared to 2014. The 2015 remittance growth rates are the slowest since the global financial crisis in 2008/09. In sub-Saharan Africa region, Kenya in 2014 received the highest share of growth in remittances at 10.7% (World Bank, 2015) to hit Ksh. 128.6 Billion (\$ 1.4 Billion) (CBK, 2015).

Various studies have been done locally and globally on relating to Diaspora remittance and stock market performance. Globally, a study done on the effects of foreign remittance and market volatility on the stock exchange of Thailand by Haithaipat and Chaiyuth (2013) found out that remittance to play a stabilizing role in stock markets. Seyyed (2012) studied the effect of Karachi stock market on the economic development of Japan. These studies majorly show a positive effect of remittance on market performance either directly or indirectly. In Kenya, Kimani and Mutuku (2003) did a study on the effect of factors of the economy and market performance in Kenya and found out a negative relationship existed. Masila, Aduda and Onsongo (2012), on their study on the factors affecting stock market performance found that foreign capital had no relationship to the market performance. Songole (2012) examined the relationship between selected macroeconomic variable and stock market return and found that remittance among other variables had a negative effect towards the performance of the market and stock return. Ochieng (2013) studied the impact of exchange rate on Diaspora remittances in Kenya and found that exchange rate indeed has a positive impact on Diaspora remittances. Kariguh (2014) studied the relationship between foreign investment activity and market return at the Nairobi Securities Exchange and found that increased foreign investor participation in the stock market is likely to push up share prices and result in increased returns.

From the studies, it is clear that empirical evidence on the effect of Diaspora remittances on stock market performance remains scarce with majority of them concentrating on Diaspora remittance and economic growth. Further, from the relevant studies, empirical findings indicate no consistent linkage between remittance and market performance in this case being NSE. As result of the contested literature; it is difficult to establish the exact effect of Diaspora on the stock market performance. Therefore this study sought to determine the effect of Diaspora remittances on stock market performance and hence answering the question; what is the effect of Diaspora remittances on the performance of Nairobi Securities Exchange?

Research Objective

To determine the effect of Diaspora remittance on stock market performance using evidence from Nairobi Securities Exchange.

Theoretical Review

The theoretical section has tried to uncover whether or not existing theories suggest that there exists a relationship between Diaspora remittances and the performance of the NSE. The literature identifies five main theories, mainly; Theory of Altruism, Self Interest theory, Tempered Altruism theory, Base-Broadening theory and Random Walk Model. These theories are critical in providing a framework for the understanding of the relationship between Diaspora remittances and performance of the stock exchange market, in this case being the Nairobi Securities Exchange.

Theory of Altruism

This theory was proposed by Chami et al, (2003) and holds that the Diaspora remittances increase during unfavorable economic situations in the home country. The emigrant worker's decision to remit is based mainly on the income needs of the relatives and not necessary to improve the economy. There is no expectation of reciprocation on the part of the member of Diaspora. This implies that motivation of the migrant worker to remit increases when the family faces economic constraints; if it weren't for economic constraints of the family, no remittance would have been made. Remittances are therefore, a form of compensatory transfers which compensate households faced by economic disruptions thus enabling them smoothen their consumption (Chami et al, 2003). As a result, the compensatory nature of remittances under the Pure Altruism model implies that remittances are countercyclical, that is, they increase during times when there is deterioration in economic conditions in the business cycle (Vargas-Silva, 200; Chami et al., 2003).

Altruistic remittances can be countercyclical to GDP patterns possibly because migrants tend to remit more during periods of economic disturbances in order for their families in the home country to smoothen their consumption. This indicates that remittances do not have a positive relationship with the performance of the stock exchange market. They are mainly for consumption. In this study therefore, remittances cannot be said to influence the performance of NSE directly, however it may influence it indirectly and improve its performance during unstable economic situations.

Pure Self Interest theory

This theory holds that remittances are not always linked to economic conditions in the recipient country (Brown, 2006). Further, the theory holds that remittances are not always countercyclical and that there are instances that they reduce during poor economic conditions. This is oppositional to what is expected; that is the migrant to increase their remittances in order to improve the welfare of the family. In point of fact, the remittances somehow have a positive correlation with the market performance of the home country where bad economic volumes may result in low volumes of remittances. The migrants' remittance can be due to purely self-interests theory (Lucas & Stalk, 1985). Therefore they remit in order to invest in their home country.

During unfavorable economic conditions, its unfavorable for them to invest hence they shun away from remitting money. This causes a more decrease in the performance of the NSE. According to this theory, the performance of the NSE is directly linked to the Diaspora remittance in that, good economic conditions will result in increased remittance and improved performance of NSE, and vice versa.

Base Broadening theory

This theory indicates that foreign investment activities resulting from remittances cause the market to returns to rise hence increasing stock exchange performance. According to this theory, by broadening the investor base, diversification and risk sharing is increased thereby lowering the risk premium. Merton (1987) provides an intuitive and tractable model for illustrating how broadening the investor base for a given stock and by

extension for an emerging equity market may raise the market returns through risk pooling.

Merton (1987) argues that, the assumed barriers to foreigners' investments from holding fully diversified portfolios, are informational in that; investors will fail to invest in stocks if they are not fully informed about them. Therefore according to this theory, if both the domestic and informed foreign investors of the Diaspora have the same information sets they will invest equivalently. Migrants net purchases creates substantial shocks to net investor demand as foreign inflows maybe based on foreign inflows based on foreign investors' perception that the shares are undervalued or that there are other portfolio benefits that may be derived by investing in emerging markets (Richards, 2004).

This indicates that if the migrants are made more aware of the stocks, they will increase their amount of remittances in investments. This will positively affect the performance of the NSE. The base-broadening hypothesis hereafter holds that (as the coefficients of expected flows are positive), hence, the amount of foreign investment in the market drives up returns and hence performance of the market. The implication is that foreign portfolio flows push stock prices up when they come in which may be due to increased demand. Prices also respond more to previous periods expected flows.

Random Walk Model

The random walk hypothesis was introduced by Kendall (1953) and later advanced by Fama (1965). The theory holds that the performance of the stock market is completely independent of fundamental variables. It states that the stock returns are independent and identically distributed over time, that is, the stock prices follow a random walk (Fama, 1965). This means that not even the Diaspora remittance will have influence in the performance of NSE. This is because the stock markets are efficient. This form of efficiency exists when security prices reflect historical price information, that is, an investor cannot generate an abnormal profit by trading based on historical price information and that future prices cannot be predicted by analyzing prices from the past prices. Therefore, the time path of stock prices is more appropriately specified by a random walk plus drift model, under the random walk hypothesis, there is no seasonality in stock prices, because the stock prices are completely random. Hereafter, the performance of the NSE is completely independent on its own and it's not pre-determined by Diaspora remittances.

Research Methodology

This study applied descriptive research. This study used secondary data collected from the Central Bank of Kenya and Nairobi Securities Exchange. Data on stock market performance was collected from the Nairobi Securities Exchange for seven years period from February 2008 to May 2015. Diaspora remittances statistics, inflation, interest rates and exchange rates were collected from the Central Bank of Kenya from February 2008 to May 2015. The data was collected on monthly basis. Correlation and regression analysis was conducted using the statistical package for social sciences to achieve the study objectives.

Correlation Analysis

To determine the nature of the relationship between study variables, correlation analysis was used. Correlation coefficient determines the strength of a linear association between two variables and is denoted by r which can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicates a negative association, that is, as the value of one variable increases the value of the other variable decreases.

As shown in table 4.3 below, Diaspora remittance has a Pearson correlation of 0.6743 and a p-value of 0.0000. This means that Diaspora remittance has a strong positive effect on stock market performance as measured by NASI. The effect is significant at 95% and 99% confidence level since the p-value is less than 0.05 and 0.01 respectively. This means that increase in Diaspora remittance will significantly improve the performance of stock market. This finding relate to that of Kariguh (2014) who found that the NSE stock market return was driven up by the amount of foreign investment in the market and hence affected market performance.

Inflation has a coefficient of -0.6930 and a p-value of 0.0000. This implies that inflation has a significant negative effect on stock market performance. Lending rates and stock market performance has a coefficient of 0.0511 and a p-value of 0.6362. This means that lending interest alone has no significant effect on stock market performance at 95% confidence level since the p-value of 0.6362 is greater than 0.05. Exchange rate and NASI has a coefficient of 0.3277 and P-value of 0.0018. This means that exchange rate has positive effect on stock market performance which is significant at 95%. Thus depreciation of Kenya shilling against the USD will improve performance of stock market. This finding contradicts that of Mongeri (2011) who established that foreign exchange rates had negative significant impact on stock market performance.

Correlation Analysis

		NASI	Diaspora Remittance	Inflation	Lending Rates	Exchange Rate
Diaspora Remittance	Pearson Correlation	0.6743	1			
	Sig. (2-tailed)	0.0000				
Inflation	Pearson Correlation	-0.6930	-0.2755	1		
	Sig. (2-tailed)	0.0000	0.0094			
Lending Rates	Pearson Correlation	0.0511	0.6308	0.3297	1	
	Sig. (2-tailed)	0.6362	0.0000	0.0017		
Exchange Rate	Pearson Correlation	0.3277	0.7193	-0.1626	0.4127	1
	Sig. (2-tailed)	0.0018	0.0000	0.1302	0.0001	
	N	88	88	88	88	88

Regression Analysis

Multiple regression analysis was used to determine the effect of Diaspora remittance on stock market performance. Inflation, lending rates and exchange rates were used as control variables. As shown in table 4.4 below, there is a strong positive relationship between independent (Diaspora remittance, inflation, lending rates and exchange rates) and dependent variable (NASI) with a coefficient of correlation of 0.90218. The coefficient of determination of 0.81393 indicates that the independent variables can explain 81.393% of changes in stock market performance.

Model Summary

R	R Square	Adjusted Square	R	Std. Error of the Estimate
0.90218	0.81393	0.80496		0.05920

Predictors: (Constant), Exchange Rate, Inflation, Lending Rates, Diaspora Remittance
 As shown in the table, the model developed is significant at 95% and 99% confidence level since the p-value of 0.0000 is less than 0.05 and 0.01. This means that the effect of independent variables on the model has significant effect on the dependent variables.

Model Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.2724	4	0.3181	90.7672	0.0000
Residual	0.2909	83	0.0035		
Total	1.5632	87			

Predictors: (Constant), Exchange Rate, Inflation, Lending Rates, Diaspora Remittance
Dependent Variable: NASI

As shown in the model, Diaspora remittances have a coefficient of 0.8719, inflation - 0.0109, lending rates -0.0241 and exchange rate -1.0802. The positive coefficient shows that Diaspora remittance positive effect on performance of stock exchange. This means that increase in diaspora remittance will lead to improved performance of the stock market while increase in other variables, namely inflation, lending rates and exchange rates have a negative effect and hence increase in these variables would lead to reduced performance. All the models except the constant are significant at 95% since their p-values are less than 0.05. These finding compares with that of Jahur *et al.* (2014) who found that in addition to remittances, all the macro-economic variables such as consumer price index, interest rate and exchange rate had significant impact on the stock market performance. The predictive model developed by the study is $Y_s = 0.2847 + 0.8719 X_1 + -0.0109X_2 + -0.0241X_3 + -1.0802X_4$ where Y_s is the stock market performance, X_1 is Diaspora remittance, X_2 is the exchange rate as measured by USD/KES rate, X_3 is interest rates and X_4 is inflation rates.

Model Coefficients

	Unstandardized Coefficients	Std. Error	Beta	t	Sig.
(Constant)	0.2847	0.3403		0.8367	0.4052
Diaspora Remittance	0.8719	0.0844	1.0459	10.3359	0.0000

Inflation	-0.0109	0.0022	-0.3402	-5.0444	0.0000
Lending Rates	-0.0241	0.0056	-0.3597	-4.2984	0.0000
Exchange Rate	-1.0802	0.2250	-0.3315	-4.8004	0.0000

a. *Dependent Variable: NASI*

Policy Recommendations

Stock market plays an important role in economic development and growth by creating liquidity and allocation of resources to deficit sectors of the economy. This study found that Diaspora remittances have strong and significant positive effect on stock market performance. Therefore, this study recommends that the government to take measures to boost investor confidence to encourage the Diaspora population to invest more in Kenya. This can be done by elimination of corruption, having stable political environment, formulation of policies that ensures macroeconomic environment and generally having the right governance systems. Campaigns should be run by the government and nongovernmental organizations to educate the Kenyans in Diaspora the importance of investing in Kenya in growth and development of the country.

The study also found that inflation has a significant negative effect on stock market performance. Therefore this study recommends that the Central Bank of Kenya through the monetary policy committee to ensure reasonable inflation rates is maintained in the economy. Low inflation is likely to slow down economic growth. However, high inflation rate will negatively affect the economy and negatively affects performance of stock market. The same is true on exchange rates where reasonable exchange rate has to be maintained.

Finally, the study recommends that commercial banks regulator, namely the Central Bank of Kenya to ensure that commercial banks lending rates remain low and affordable. This will ensure that investors have more finances to invest in the stock market which in turn will promote economic growth.

References

- Adams, J., & Cuecuecha, B., (2010). *The Economic Impact of International Remittances on Poverty and Household Consumption and Investment in Indonesia*. ICEG: Working Paper.
- Adams, R., (2005). *Remittances, household expenditure and investment in Guatemala*, Policy Research Working Paper Series 3532, The World Bank.
- Alajekwu, B., (2012). *The role of stock market development on economic growth in Nigeria: A time series analysis*, African Research Review.
- Alile, H., (1984). *The Nigerian Stock Exchange: Historical Perspective, Operations and Contributions to Economic Development*, Central Bank of Nigeria Bullion, Silver Jubilee edition. Lagos: Central Bank of Nigeria print.

- Arize, C., Osang, T., & Slottje, J., (2004). *Exchange Rate Volatility in Latin American and its Impact on Foreign Trade*. *International Review of Economics & Finance*, 17(1): 33-44.
- Bakewell, O., (2008). *Keeping them in their place: the ambivalent relationship between development and migration in Africa*. *Third world quarterly*, 29(7).
- Bekaert, G., & Campbell, R. (2002). *The dynamics of emerging market equity flows*. *Journal of International Money and Finance*, 21, 295-350.
- Bencivenga, R., & Smith, D., (1991). *Financial Intermediation and Endogenous Growth: Review of Economic studies. Applied to Greece, Economic Development and Cultural Change*, 42 (1).
- Biller, S., (2007). *University of Iowa for International Finance and Development Briefing*. No. 3.
- Choe, H., & Rene, S. (1999). Do foreign investors destabilize stock markets? The Korean experience in 1997. *Journal of Financial Economics*, 54, 227-264.
- Cooper, D. R., & Schindler, P. S. (2006). *Business research methods* (9th Edition ed.). New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Dawson, J., (2008). *Financial development and economic growth in developing countries*. *Progress in Development Studies*, 4(8).
- DeHaas, H., (2005). International migration, remittances and development: myths and facts. *Third World Quarterly Journal*, 26, 8, 1269-1284.
- Fama, E. F. (1965). *Short-Term Interest Rates as Predictors of Inflation; the Debt Market*. Cheltenham: Elgar Print.
- Fayissa, B., & Nsiah, C., (2010). The impact of remittances on economic growth and development in Africa. *American Economist Journal*, Vol. 55, pp. 92-103.
- Freud, C., & Spatafora, N. (2005). *Remittance: Transactions Costs, Determinants and Informal Flows*. Washington D.C: World Bank Policy Research.
- Gamlen, A., (2006). *Diaspora engagement policies: What are they and what kinds of states use them?* London: Oxford Printing.
- Garza-Garcia, J., & Yu, Y., (2010). *International Determinants of Stock Market Performance in China: A Cointegration Approach*. University of West of England: Working Paper 03/10.
- Glytsos, P., (1993). *Measuring the Income Effects of Migrant Remittances: A Methodological Approach*.
- Guiliano, P., & Ruiz-Arranz, M., (2005). *Remittance, Financial Development and Growth*. IMF Working Paper.
- Kimani, K., & Mutuku, M., (2013). Inflation Dynamics on the Overall Stock Market Performance: The Case of Nairobi Securities Exchange in Kenya. *Economics and Finance Review Journal*, 2(11), 1-11.

- Levine, R. & Zervos, S. (1998). Stock markets, banks and economic growth. *American Economic Review Journal*, 88, 537-558.
- Mbithi, M., (2013). *The effects of foreign exchange rates on the financial performance of firms listed at the NSE*. Unpublished MBA project, University of Nairobi
- MoneyGram, (2010). *Remittance trends and the role of money transfer organizations*. Presentational materials. Minneapolis: MoneyGram International.
- Mongereri, O. (2011). *The Impact of Foreign Exchange Rates and Foreign Exchange Reserves on the Performance of Nairobi Stock Exchange Share Index*. Unpublished University of Nairobi MBA Project.
- Mugenda, A., & Mugenda, O. (2008). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Africa Centre for Technology Studies (ACTS).
- Nairobi Securities Exchange (NSE), (2015). *History of Organization*. Retrieved on July 3rd 2015 from <https://www.nse.co.ke/about-nse/history-of-organisation.html>.
- Nairobi Securities Exchange (2015). *The History of NSE*, www.nse.co.ke/newsite/inner.asp?cat=ahistory.
- Ochieng, E., & Adhiambo, O., (2012). The Relationship between Macro Economic Variables and Stock Market Performance in Kenya. *DBA Africa Management Review Journal*, Vol. 3 No 1 pp., 3(1), 38-49.
- Ochieng, J., (2013). *Impact of Exchange Rate on Diaspora Remittances in Kenya*. Unpublished University of Nairobi MBA Project.
- Ondiala, O., (2014). *The turn of the month effect at the Nairobi Securities Exchange*. Unpublished MBA project, University of Nairobi.
- Osoro, C., (2013). Investors Perspectives on the NASI AND THE NSE 20 Share Index as Performance Measurement Indicators at the Nairobi Securities Exchange in Kenya. *International Journal of Humanities and Social Science*, 3(18).
- Pavabutr, P., & Hong, Y. (2003). *Foreign portfolio flows and emerging market returns: Evidence from Thailand*. Mimeo: University of Texas at Austin.
- Jumba, S., (2010). *A Project on Capital Market*. Punjab Technical University, Jalandhar
- Pradhan, G., Upadhyay, M., & Upadhyaya, K., (2008). Remittances and Economic Growth in Developing Countries. *European Journal of Development Research*, Vol. 20, No. 3.
- Ratha, D., & Mohapatra, S., (2007). *Increasing the macroeconomic impact of remittances on development*. Development Prospects Group. Washington D.C: World Bank.
- Ratha, D., (2003). *Worker's Remittances: An important and stable source of external development finance*. Global Development Finance, pp.157-172.
- Richards, A. (2004). *Big fish in small ponds: The trading behavior and price impact of foreign investors in Asian emerging equity markets*, research discussion paper No. 2004-05. Reserve Bank of Australia.

- Senbet, L., & Isaac, O. (2010). *African stock markets – Opportunities and issues*, in Marc Quintyn and Genevieve Verdier (eds.), *African Finance in the 21st Century*, Palgrave Macmillan, International Monetary Fund.
- Seyyed, A., (2010). Emerging Stock Market Performance and Economic Growth. *American Journal of Applied Sciences*.
- Songole, K., (2012). *The Relationship between Selected Macroeconomic Variables and Stock Return at the Nairobi Securities Exchange*. University of Nairobi MBA Project.
- Vargas-Silva, C. (2008). Are remittances manna from heaven? A look at the business cycle properties of remittances. *North American Journal of Economics and Finance*, Vol. 19, pp. 290-303.
- Warther, V. (1995). Aggregate mutual fund flows and security returns. *Journal of Financial Economics*, 39, 209-235.
- Woodruff, C., & Zenteno, R. (2007). Migration networks and microenterprises in Mexico. *Journal of Development Economics*, 82, 509–528.
- World Bank, (2009). *Data for workers' remittances, compensation of employees, and migrant transfers, credit (US\$ million)*. Available from: <http://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT>, Accessed on 3rd July 2015.
- World Bank, (2010). *World development indicators & global development finance*. Available from: <http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2010> Accessed on 10 June, 2015.
- World Bank (2015). *Remittances growth to slow sharply in 2015*. Retrieved on July 8th 2015 at <http://www.worldbank.org/en/news/press-release/2015/04/13/remittances-growth-to-slow-sharply-in-2015-as-europe-and-russia-stay-weak-pick-up-expected-next-year>
- Yartey, A., & Adjasi, K., (2007). *Stock Market Development in Sub-Saharan Africa: Critical Issues and Challenges*. IMF Working Paper No. 07/209. IMF.
- Yasin, M., (2005). *Official development assistance and foreign direct investment flows to Sub-Saharan Africa*. London: Blackwell Publishing Ltd.
- Ziesmer, (2008) .*Worker Remittance and Growth*. The physical and human capital chinal. Helsinki: United Nations University.