

THE RELATIONSHIP BETWEEN INFLATION AND STOCK PRICES: A CASE OF THE NIGERIA STOCK EXCHANGE MARKET

Mukolu, M.O and Ilugbemi, A.O

Department of Banking and Finance Federal Polytechnic, Ado Ekiti
Ekiti State, Nigeria

ABSTRACT

The study examined the effect of inflation on stock prices of firms quoted in the Nigeria Stock Market by using data that curled between 1987 to 2018 from the Central Bank of Nigeria statistical bulletin and National Bureau of statistics, while Ordinary least square were employed to analyze the data. The result shows that there was a significant relationship between inflation and stock prices. Consequently, it was recommended that, the government should ensure inflation stabilization that takes into cognizance the technical patterns of stock market activities and that monetary policies should be aimed at finding a more realistic price level that will be beneficial to investors in the Nigerian stock market.

KEYWORDS: Inflation, stock price, all share index and market capitalization

INTRODUCTION

The stock market has fundamental part in raising capital for private and Government entities and in order to support the growth in their projects, savers are attracted to the stock market by the opportunities available for returns in terms of value increase and bonuses (Solomn, 2003). Inflation reduces the actual return on investments, hence raises fear of investors, when its level increases, (Schofman and Schweitzer, 2000). Inflation has an opposing outcome on the budget with its influence extending from optimistic to destruction. The undesirable things are still more obvious and include a reduction in the actual worth of cash as well as extra financial variable over time. Earlier lessons have resolved that price rises and stock markets are diligently associated with inflation rate manipulating the market for stock hazard and instability, (Pan, Fok and Liu, 2004).

The relationship between the stock market and macroeconomic forces has been widely analyzed in the finance and macroeconomic literature. The relationship between stock prices inflation and industrial production are of crucial importance not only in analyzing share prices, but also in understanding how stock prices affect the economy. The connection between stock market price and inflation is imperative for investors because stocks are expected to provide protection from the effects of inflation. According to the Fishers (1930) hypothesis shares can act as a hedge against inflation. During the period of high inflation investors acquire more of real than financial assets. Investors are interested in the real as opposed to the nominal value of their investment. During the period of high inflation the rise in the nominal value of shares is a form of compensation for continuous increases in prices which helps to maintain the real value of stocks. The nominal prices of shares will fully

incorporate the expected inflation such that the relationship between stock prices and inflation will be positive. Thus, shares can act as a good protection to investors from the negative effects of inflation in the long term. But the hypothesis by Fama (1981) shows that the relationship between stock market performance with inflation is inverse which was also supported by Yeh and Chi (2009).

This study is of importance to investors in Nigeria as there's test the applicability of the Fisher's hypothesis and the findings assist investors in coming up with balanced decisions on how to allocate their assets. One of the major questions that still need to be examined is whether or not the known relationship between stock market and inflation held during the period under review. There's still need to know the impact of inflation on the stock market performance and to check whether or not inflation was a key driver of the stock market index in Nigeria and vice versa. The direction of causality is still questionable between the two variables which are helpful in detecting the possibility of a short run and long run relationship. Literature provides evidence of both a negative and positive relationship between the two variables and direction of causality is not clearly defined. For example literature shows that stock market provides a hedge only in the short term, others say that the stock protects investors from effects of inflation in the long term, while others found a positive or negative relationship (Maku and Atanda (2010), Ibrahim and Agbaje (2013), Omran and Pointon (2010), Emenike and Nwankwegu (2013), Yeh and Chi (2009), Baekaert and Engstrom (2009).

LITERATURE REVIEW

Shilee (2009) views inflation as a macroeconomic variable that has a constant growth in the overall changes level for merchandises and services. It occurs when changes of properties escalate or when it desires additional cash to obtain similar substances,(Saleem, Zafar and Rafique,(2013).Influence burden can be essentially accredited to essential features such as, actual revenue decrease triggered by variation in oil income, high minimal earnings and liability responsibility in the method of expansionary financial shortage,(Taofik and Omosola,2013).Other causes of inflation are attributed to fluctuations in the demand of goods and services, as well as changes in available supplies of product,(Ariss,2012).Inflation is determined commonly by computing the consumer price index (CPI) movement,(Mohan and Chitradevi,2014).Consumer price index, Ahmad and Naseem (2011) argued that inflation in price is evaluated by the rate of inflation. This is computed using the general price index charge percentage annually (consumer price index) over the period. Salkeem, Zafar and Rafique, (2013) explain that the rate of inflation is signified by the consumer prices index that essentially shows a rise in goods price and services price overall.

The market price of a share is the price at which a willing buyer and seller agree to trade in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably and assuming the price is not affected by undue stimulus. An investor speculates on the basis of fundamental and technical analyses. Fundamental Analysis

analyzes relevant data (cash flow, return on assets, history of profits, etc.) associated with the company, which could have an effect on the intrinsic or face value of the stock. This analysis helps in predicting the price movement of the stock based on its fundamental strength. Fundamental Analysis is generally relevant for the long-term. Technical Analysis tries to evaluate the future trend of stock prices by using various statistical tools, charts, etc. Technical analysts focus on the historical price movement of a stock and predict accordingly. They consider that the price movements are repetitive in nature because the psychological setups of the investors are seen to follow a certain pattern.

According to Karolyi (2001), stock price volatility is higher when stock price decreases than when price increases. Fama (1981) states that stock prices are the reflector of various variables such as inflation, exchange rate, interest rate and industrial production. Generally, Engle and Rangel (2005) provided evidence of effect of overall health of the economy on unconditional market volatility. They concluded that countries with high rates of inflation experience larger expected volatilities than those with more stable prices.

THEORETICAL REVIEW

Fisher Hypothesis

Fisher (1930) hypothesized that shares are hedged against inflation in the sense that an increase in expected inflation leads to a proportional change in nominal share returns (The two variables are positively correlated). This imply that investors are fully compensated for increases in the general price level through corresponding increases in nominal stock market returns. Thus, the real returns remain unaffected. In other words, the argument is that the real value of the stock market is immune to inflation pressures. However, the Fisher hypothesis has not gone unchallenged. Using data for the postwar period, several authors have found that share returns are not hedged against inflation and use these results as evidence against the Fisher hypothesis. Following the seminal paper of Fama (1981), it has been generally acknowledged that share returns are not simply a function of expected inflation but also of expected income growth. Fama (1981) regressed expected inflation proxies" and share returns without income growth, thus leading to an omitted variable bias. Accommodating expected income growth in the estimates of share returns, Fama (1981) found out that the Fisher hypothesis cannot be rejected.

Inflation Illusion Hypothesis

The inflation illusion hypothesis of Modigliani and Cohn (1979) point"s out, that the real effect of inflation is caused by money illusion. According to Bekaert and Engstrom (2007), inflation illusion suggest that when expected inflation rises, bond yields duly increase, but because equity investors incorrectly discount real cash flows using nominal rates, the increase in nominal yields leads to equity under-pricing and vice versa.

The Efficient Market Hypothesis

According to Fama (1970), under the „efficient market hypothesis“ (EMH), stock market prices must always show a full reflection of all available and relevant information and should follow a random walk process. Successive stock price changes (returns) are therefore independently and identically distributed (iid). Based on the information set, Fama (1970) categorizes the three types of efficient markets as weak-form, semi-strong-form, and strong-form efficient if the set of information includes past prices and returns only, all public information, and any information public as well as private, respectively. The implication here is that all markets can be weak-form but the reverse cannot be the case. Ross (1987) states that a market is efficient with respect to a set of information if it is impossible to make economic profits by trading on the basis of this information set and that consequently no arbitrage opportunities, after costs, and after risk premium can be tapped using ex ante information as all the available information has been discounted in current prices. Müslümov, Aras and Kurtuluş (2004) noted that capital markets with higher informational efficiency are more likely to retain higher operational and allocational efficiencies.

EMPIRICAL REVIEW

Omotor (2010) investigated the linkage between stock prices and inflation using monthly and quarterly data of Nigeria for the period 1985 to 2008 while Ordinary Least Squares, Co-integration and Augmented Dickey-Fuller (ADF) test was applied. The findings of this seem to suggest that stock market returns may provide an effective hedge against inflation in Nigeria.

Jawaid and Haq (2012) in their research paper using GARCH model and monthly data from 2004 to 2010 for Pakistan studied effects of volatility in interest rate and exchange rate on share price. They discovered that the exchange rate effect was more complex than that of interest rates.

Daferighe and Charlie (2012) examined the impact of inflation on stock market performance in Nigeria using time series data for twenty years from 1991 to 2010. The regression analysis was used to evaluate the influence of inflation on various measures of stock market performance; market capitalization (MCAGDP), total value traded ratio (TVMS), percentage change in All-share index (% Δ ASI) and turnover ratio (TOR). It was revealed that this measure was negatively related to inflation in convergence to a priori expectation expect for TOR which showed a positive relationship. This seemingly low level of influence of inflation ranging between 14.6% and 0.3% revealed that stock market investments are regarded as a good hedge against inflation in Nigeria.

Taofik and Omosola (2013) assessed the long run relationship and dynamic interaction between stock returns and inflation in Nigeria using monthly data of the all share prices index from the Nigeria Stock Exchange and Nigerian Consumers price index from January 1997 to 2010. The analytical technique of Autoregressive Distributed Lag (ARDL) bound test as proposed by Pesaran and pesaran (1997);

and pesaran et al. (2001) was exploited. From the results, it is evident that there is the existence of a long run relationship between stock returns and inflation. The short run dynamic model also reveals that the speed of convergence to equilibrium is moderate implying that there is a short run relationship between stock returns and inflation. This is attributable perhaps to the instability of prices of stocks noticed over time.

Daniel and Johannes (2013) investigated a relationship between inflation and stock prices over the period 1999 to 2011, using monthly all share stock prices and inflation rates. The study employed Augmented- Dickey-Filler and Philip-Perron for testing the stationarity of the series, Granger-Causality test is used to determine the short run and long run relationship respectively between the two variables. The unit root test results show that the series are non-stationary at level form but after differentiating they become stationary, the causality test results show a one-way causal relationship running from inflation to stock prices and not vice versa. There was no co-integration found among the variables meaning that there exists only a short run relationship. In general, the results support the economy theory which suggests a negative relationship between inflation and stock prices.

Vena (2014) analyzed the effect of inflation on stock returns for the Kenyan Nairobi stock exchange for the period 1998 to 2013 using GARCH to analyze the impact of inflation and EGARCH to analyze the effect of asymmetric shocks. From the study it was established that inflation has a negative impact on share price.

Adusei (2014) used monthly data from Ghana spanning 1992 to 2010; using the Granger Causality and Co-integration tests in the Error Correction Model to show that in the short-run inflation has a negative an significant relationship with stocks returns, while in the long run, the relationship is seen to be significant positive.

Ahmed and Igbिनovia (2015) assessed the impact of inflation rate on stock returns in the Nigeria stock market. Using monthly data covering the period 1995 to 2010 while Ordinary Least Square Regression Model was used. The result indicates that the inflation rate has a negative but weak impact on stock returns. Hence, inflation is not a strong predictor of stock returns in Nigeria.

Tamunosiki and Ebiware (2017) studied analytically the relationship between inflation and stock prices of firms quoted in Nigeria Stock Market by using data that spanned 1986 to 2014 curled from Central Bank on Nigeria and National Bureau of Statistics. Ordinary Least Square, Unit Root (Stationarity) Test, Johansen Co-integration and Granger Causality Test were employed to analyse the data to reveal that money Supply and Exchange Rate portray statistically significant relationships with stock prices. It also revealed that all but Interest Rate shows positive relationship with stock prices and no long relationship were observed between any of the endogenous variables and the exogenous

variable. Furthermore, uni-directional causal relationship from All Share Price Index to Interest Rate and Exchange Rate to All Shares Price Index.

Türsoy (2017) studied causality between the stock price and exchange rate for Turkey using ARDL bounds test and combined cointegration. Using monthly data from 2001-2016 the study found a long-run bidirectional causality and a short-run unidirectional causality while the error correction mechanism indicated a long-run relationship between the two.

Njogo, Inim, Ohiaeri and Ogboi (2018) focused on determining between the relationship between inflation rate and stock returns using the Consumer Price Index and the All Share Index on the Nigerian Stock Exchange covering the period 1995-2014. The data were analyzed for evidence of co-integration and causality using Errors Correction and Granger co-integration Model. The Pearson Correlation result shows that, there is significant negative relationship between Stock Returns and Inflation rate in Nigeria. Augmented Dickey-Fuller result shows that the series are not stationary in there level form and are Integrated of order one. Johansen Co-integration test result shows evidence of Co-integration implying that there is a long run relationship between Stock market Returns and Inflation rates in Nigeria. Furthermore, there is significant negative impact of Inflation rates on stock market returns in Nigeria. The pair-wise Granger causality test shows that there is a strong unidirectional causality. Also, result from the Error correction model suggest that about 43% of the variations in stock returns are accounted for by inflation rates.

METHODOLOGY

Method of data Analysis

It analyzed by the multiple Linear Regression Model, Johansen Co-integration and Granger causality test. The data consists of end of year values for All share price index, inflation rate, and moderating variable such as market capitalization.

Model Specification

The multiple linear equation model used is specified thus:

$$ASPIR = f(INFR, MKC) \quad \text{-----} \quad (1)$$

The above equation is deterministic, thus prone to invalidation, therefore it is transformed to a probabilistic model by the inclusion of the constant, parameters and stochastic term. Therefore, the constant, Parameters and error term is included as below:

$$ASPIR = \beta_0 + \beta_1INFR + \beta_2MKC + \mu_t \quad \text{-----} \quad (2)$$

Where:

ASPIR = All Share Price Index Rate
 INFR = Inflation Rate
 MKC = Market Capitalization
 β_0 = Constant Parameter
 $\beta_1 - \beta_2$ = Estimation Parameters
 μ_t = Error Terms

Data Presentation and Analysis

Table 1
Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.802637	0.474540	12.22793	0.0000
INFL	-0.048475	0.022432	-2.160965	0.0391
LMCAP	0.561288	0.035039	16.01906	0.0000
R-squared	0.932962	Mean dependent var	8.969734	
Adjusted R-squared	0.928338	S.D. dependent var	1.672882	
S.E. of regression	0.447825	Akaike info criterion	1.320233	
Sum squared resid	5.815876	Schwarz criterion	1.457645	
Log likelihood	-18.12372	Hannan-Quinn criter.	1.365781	
F-statistic	201.7942	Durbin-Watson stat	0.267502	
Prob(F-statistic)	0.000000			

Source: Author’s computation 2019

From the regression output on Table 1, the Durbin-Watson Statistics of 0.2675 shows that there is positive serial correlation in the estimated result which rendered the estimated model result biased. As a result of this, no meaningful economic and standard inference can correctly be made. The standard as popularly settled in the literature is that the D.W statistic must be 2.0 or lying between 1.5 and 2. The auto-correlation-corrected estimates were depicted in Table 2 below:

Table 2: Newey-WestHAC-corrected OLS Estimates

Dependent Variable: LASI
 Method: Least Squares
 Date: 06/26/19 Time: 11:10
 Sample: 1987 2018
 Included observations: 32

HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.802637	0.454792	12.75887	0.0000
INFL	-0.048475	0.022934	-2.113711	0.0433
LMCAP	0.561288	0.048617	11.54518	0.0000
R-squared	0.932962	Mean dependent var	8.969734	
Adjusted R-squared	0.928338	S.D. dependent var	1.672882	
S.E. of regression	0.447825	Akaike info criterion	1.320233	
Sum squared resid	5.815876	Schwarz criterion	1.457645	
Log likelihood	-18.12372	Hannan-Quinn criter.	1.365781	
F-statistic	201.7942	Durbin-Watson stat	0.267502	
Prob(F-statistic)	0.000000	Wald F-statistic	71.88546	
Prob(Wald F-statistic)	0.000000			

Source: Author’s computation using (2019)

Table 2 showed the correction of the auto-correlation problem in the estimates earlier displayed on table 4.1 by using Newey-West HAC covariance estimator as indicated by on Table 2 by Wald F-stat of 71.88; hence, the results are good for interpretation. From the above multiple linear regression results, the regression equation predicting the linear relationship between stock prices proxies with the All share price index (ASI), capital market capitalization (MCAP) and Inflation rate (INFL) could be stated as:

$$\log ASI = 5.8026 - 0.0485 \log INFL - 0.5613 \log INFL \dots\dots\dots Eq.(1)$$

From the equation 1, while inflation rate (INFL) maintains negative relationship with the All share price index (ASI), capital market capitalization (MCAP) maintains positive relationship with stock prices. Therefore, since MCAP maintains positive relationship with ASI, it follows that 1% increase or decrease in MCAP would cause about 56% increase or decrease in the average or mean value of stock prices. On the contrary, 1% increase in inflation rate is associated with about 5% decrease in the average or mean value of All share price index and vice versa. Thus, while market capitalization to conform to apriori expectation in relationship with stock prices, the relationship exhibited by inflation is contradictory to apriori expectation. This is because, increase in the general level of prices in the economy is expected to equally fuel increase in the stock market prices and vice versa; which means that a positive relationship is expected between inflation and stock market prices. Similarly, increase in the trading activities fuelled by increase in the investors demand in the stock market is expected to shore up market capitalization and bring about increase in stock prices as an offshoot from the increase in investment demand. The intercept of the model which was 5.8026 represented the value

of the stock prices (ASI) in naira should the capital market activities and inflation remain unchanged.

The multiple correlation co-efficient (R) which is the square root of R² is 0.93 indicates that there is a strong linear positive relationship between the inflation (INFL, MCAP and VST) and the dependent variable which is the stock prices proxied by All share price index (ASI) since the value approaches 1. Also, the coefficient of determination (R²) of 0.93 indicates that about 93% of the variation in the stock prices (ASI) could be explained by the inflation while the remaining 7% is caused by other factors not captured in the model but represented by stochastic term. The R² value increased the goodness of fit of the fitted regression model to the set of time series data collected for this study. The R² as adjusted for the degree of freedom (n-k) associated with the sums of squares entering into the specified model was 0.92 which is close to R² value, which connoted that the model was unaffected by the addition or subtraction of variables from the estimated model. Furthermore, the standard error of 0.4478 was the standard deviation of the sampling distribution of the estimator which measured the accuracy of the estimated coefficients of the model and this is relatively low as expected.

T-ratios determines how large the estimated coefficients will vary if carried out on repeated sampling of the observations. INFL has the highest t-ratio compared to market capitalization during the period of this study. It therefore means that INFL would have very little variation in from the sample mean repeated sampling of the observations than MCAP. F-stat of 201 with probability of 0.0000 as depicted on table 2 is very high and support the overall performance of the model. It thus revealed that jointly, the included independent variables consistently and significantly explained variation in the dependent variable; that is, the percentage of variation in the stock prices, accounted for by both capital market and industrial sector output was never due to chance or error. From the Table 2, MCAP has p-value of 0.0000 which was less than critical value of 0.05, there was no enough reason to accept H₀₁, and therefore, stock market capitalization has significant effect on the Nigerian stock prices. However, the economic significance of the foregoing is that since MCAP is positively related to the Nigerian stock prices, it means increase in the market capitalization triggered by increase trading activities increases the level of stock prices as MCAP is one of the prominent indicators of capital market growth any nation.

Here, INFL has p-value of 0.0485 which was less than the critical value of 0.05; thus, there was no enough evidence to accept the H₀₂, hence, inflation rate has significant effect on the Nigerian stock prices. The significant negative effect of inflation on stock market prices in reality however, contradicts expected relationship.

CONCLUSION

The focal objective of this paper is to examine the relationship between inflation and stock prices for the period of 1987-2018. The findings of this study seems to suggest that stock market returns may

provide an effective hedge against inflation in Nigeria. This is explained by the significance and positive relationship between inflation and stock prices as the Fisher (1930) hypothesis postulates. This also implies that investors in making good portfolio decisions should perhaps view equities as long term holdings against inflation erosion of purchasing power. This is with caution as recent development in the Nigeria capital market may have suggested that equities may not necessarily be the best performing asset class over the short term. Considering the importance of the stock market to economic development, the Securities and Exchange Commission (SEC) and the Nigerian Stock Exchange (NSE) should strive to improve on market capitalization of the stock market by attracting listing and increased trading activities. The present state of the Nigerian stock market is not unconnected with low literacy level and poor corporate governance issues. The issue of public enlightenment to encourage investment and transaction in stock should be given attention; while appropriate corporate governance framework should be put in place and enforced a restoration of confidence in the market. The problem of double digit inflation rate should be tackled and the Central Bank of Nigeria should formulate and use policy instruments.

RECOMMENDATIONS

The role of government is to stabilize inflation that takes into cognizance the technical patterns of stock market activities. A stable price system is a veritable instrument in that government can use to improve the domestic investment climate both in the real sector and in the capital market in general. Monetary policy should aim at finding a more realistic price level that will be suiting to investors in the stock market. Such policies geared at controlling inflation should take into cognizance the role of monetary and real variables especially as these will go a long way in further deepening of the stock market.

REFERENCES

- Adisei, M. (2014). The Inflation-Stock Market Returns Nexus: Evidence from the Ghana Stock, *Journal of Economics and International Finance*. 6(2):38-46.
- Ahmed, V. and Igbinovia, E. (2015) Inflation Rate and Stock Returns; Evidence from the Nigeria Stock Market. *International Journal of Business and Social Science*. 6, (11), 155-165
- Ahamad, M.L and Naseem, M.A.(2011).Does Inflation Hunt the Stock Market Returns?
<http://www.researchgate.net/publication/228311038>.
- Ariss, R. (2012). *Understanding Inflation and Revising National Price Data*, Lebanese Economic Association, Beirut-Lebanon.
- Baekaert, G. and E.C. Engstrom (2009), Inflation and the Stock Market: Understanding the 'Fed Model'(June 2009). NBER Working Paper No. w15024. Available at SSRN:
<http://ssrn.com/abstract=1413588>.
- Daferighe, E. E. and Charlie, S. S.(2012). The Impact of Inflation on Stock Market Performance in Nigeria. *American Journal of Social and Management Sciences*.

- Daniel, C. and Johannes, P. S. (2013). The Relationship Between Inflation and Stock Prices in Zambia. *Asian Journal of Business and Management*. 1, 185-192.
- Emenike, K. O and Nwankwegu, S. (2013). Does Stock Returns Protect Investors Against Inflation in Nigeria? *Research Journal of Finance and Accounting*, 4, 4. 121-140.
- Engle, R. F. (2004). Risk and Volatility: Econometric Models and Financial Practice. *American Economic Review*, 94, 405-420.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work, *Journal of Finance*, 25, 383-417.
- Fama E. F. (1981). Stock Returns Real Activity, Inflation, and Money. *American Economic Review*, 71, 545-565.
- Fisher I. (1930). *The Theory of Interest*. Macmillan. New York.
- Ibrahim, T. M and Agbaje, O. M. (2013). Relationship Between Stock Return and Inflation in Nigeria, *European Scientific Journal*. 9, 4, ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431.
- Jawaid, S. T and Haq, A. U. (2012). Effects of Interest Rate, Exchange Rate and their Volatilities On Stock Prices: Evidence from Banking Industry of Pakistan, *Theoretical and Applied Economics*, XIX, 8(573), 153-166.
- Karolyi, G. A. (2001). Why Stock Return Volatility Really Matters. Preliminary and Incomplete version.
- Maku, O. E. and A. A. Atanda (2010). Determinants of Stock Market Performance in Nigeria: Long Run Analysis. *Journal of Management and Organizational Behaviour*. 1, 3,
- Modigliani, F. and Cohn, R. A. (1979). Inflation, Rational Valuation and the Market. *Financial Analysts Journal*, 35, 24-44.
- Mohan, C and Chitradevi, N. (2014). Impact of Inflation and Exchange Rate on Stock Market Performance in India, *Indian Journal of Applied Research*, 4(3), 230-232.
- Müslümov, A., Aras, G. & Kurtuluş, B. (2004). Evolving Market Efficiency in Istanbul Stock Exchange. *Social Science Research Network*, SSRN-id 890077.
- Njogo. B.O; Inim V.E., Ohiaer, N.V and Ogboi, C. (2018) The Relationship Between Stock Returns and Inflation Rates in Nigeria. *International Journal of Economics, Commerce and Management United State Kingdom*. 2, 509-523.
- Omotor, O. (2010). Relationship Between Inflation and the Stock Market Returns: Evidence from Nigeria . <https://www.research gate.net/publication/246044757>.
- Omran, M and Pointon, J (2010). Does the Inflation Rate Affect the Performance of the Stock Market? The case of Egypt, *Elsevier: Emerging Markets Review* 2 (2001) 263-279. Retrieved from: [http://dx.doi.org/10.1016/S1566-0141\(01\)00020-6](http://dx.doi.org/10.1016/S1566-0141(01)00020-6).
- Saleem, F; Zafar, L and Rafique, B. (2013). Long Run Relationship Between Inflation and Stock Return: Evidence from Pakistan, *Social Sciences and Humanities*, 4(2), 407-415.
- Shilee, L. (2009). The Impact of Inflation, GDP, Unemployment and Money Supply on Stock Prices, *Arab Bank Syria*.

- Solomon,O. (2016) Stock Market Indicators and Inflation Dynamic in Nigeria.
- Tamunosiki,K. &Ebiware,A.E. (2017) Inflation and Stock Prices: The Nexus. IIARD International Journal of Banking and Finance.3. (1). 49-58.
- Taofik,M.I. & Omosola,M.A.(2013) The Relationship Between Stock Returns and Inflation in Nigeria. European Scientific Journal; 9(4):146-157.
- Tursoy, T.(2017).Causality Between Stock Prices and Exchange Rates in Turkey: Empirical Evidence from the ARDL Bounds Test and a Combined Cointegration Approach, International Journal of Financial Studies, 5, 8; doi:10.3390/ijfs5010008.
- Vena, H. (2014).The Effect of Inflation on the Stock Market Returns of the Nairobi Securities Exchange, Master of Science in Finance, School of Business, University of Nairobi.
- Yeh, C.C and C.F. Chi (2009) .The Co-Movement and Long-Run Relationship between Inflation and Stock Returns: Evidence from 12 OECD Countries. Journal of Economics and Management.5(2): 167-186.
- Zhongqiang,B (2014) Study on the Impact of Inflation on the Stock Market in China. International Journal of Business and Social Science 5 .261-271.