THE IMPACT OF MACROECONOMIC FACTORS ON FINANCIAL PERFORMANCE OF SELECTED AIRLINES OPERATING INTO KENYA

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Abstract

Purpose: The growth of economy is argued to have a positive impact on financial performance of various key sectors. Economic growth is measured using indicators such as the GDP growth rate, inflation rate, interest rates, exchange rates, money supply among others. This study focused on investigating the impact of global and origin countries GDP growth, Inflation rates and interest rates on net income of selected airlines that operate into Kenya.

Methodology: Data on macroeconomic factors was collected from World Bank website for the period of between 2005 and 2014. Data on airlines net income was collected from the published financial statements for the period 2005 to 2014. The published financial statements were audited and as such their use increased the reliability and validity of the findings and conclusions. Audited statements of comprehensive income, statements of financial position, of the selected airlines were collected from their respective websites. Statistical methods correlation and regression analysis were used to test the relationship between the macroeconomic indicators and net income of airlines.

Results: The results revealed a negative significant relationship between origin inflation and net income of airlines. The results further revealed a negative and significant relationship between origin interest rates and net income of the airlines. The relationship between origin GDP growth and net income of the airlines was insignificant at 5% significant level.

Unique contribution to theory, practice and policy: This study recommends that investors in aviation industry should heavily invest when the macroeconomic fundamentals such as interest rates and inflation rates of origin countries are strong to be able to reap high profitability from airlines. Again, investors should invest more when the global economy is performing well so as to reap maximum profits from airlines destined to Kenya. That the key indicators and determinants for investment decision making in the aviation industry are the Global GDP, Global inflation, Country of Origin interest rates and inflation rates.

Keywords: *GDP growth, inflation, interest rates, net income, airlines*

1.0 INTRODUCTION

The aviation sector is probably the most important mode of transport intermediary in the economy because of the role it plays as the quickest mode of transport for both passengers

and freight (ICAO, 2006). The aviation industry plays a significant role in economic development of any country. The major contribution is the provision of air transport services to passengers, cargo and mail. The aviation industry in Kenya has for the past decade, undergone many regulatory reforms. These reforms have brought about many structural changes in the sector and have encouraged many operators to enter into the industry. Functioning on a business cycle and being run by individual companies, there are many factors which come into play trying to differentiate amongst the airline, some of these factors include the macroeconomic variables which affect performance.

A country such as Kenya which relies heavily on foreign earnings through the export of agricultural produce is a direct beneficiary of airline services (Omondi, 2006). The Kenyan economy has experienced mixed macroeconomic performance over the years. Likewise the aviation industry has undergone a series of reforms to measure up with emerging markets in the world. The Kenyan government has been providing good regulation through the Kenya Civil Aviation Authority in order to boost the aviation sector. Since cyclical fluctuations are sometimes unexpectedly extreme, macroeconomic variables might well deliver good indictors for the likelihood of mounting stress within the aviation sector. Therefore, this study sought to determine the effect of selected macroeconomic variables such as exchange rate, GDP growth, interest rate and inflation on financial performance of airlines in Kenya.

Macroeconomic variables are variables that control the macro-economy, that is, the whole economy (Olukayode & Akinwande, 2009). These variables include interest rates, economic output, employment and unemployment, population size, inflation, government budget balances and finance, international trade balances and finance, and productivity (Muchiri, 2012). The investments that promote economic growth and development require long term funding, far longer than the duration for which most savers are willing to commit their funds. In most countries commercial aviation provides essential transport services that facilitate economic growth. Given the contribution they make, it is possible for the discerning mind to feel the impulse of such an economy. The external shocks are the macroeconomic fundamentals or indicators that are expected to cause variation in the financial performance in the aviation industry.

1.1 Statement of the Problem

Gross domestic product (GDP) is the most commonly used macroeconomic indicator to measure total economic activity within an economy (Kosmidou, Tanna, & Pasiouras, 2005; Hassan & Bashir, 2003). The growth rate of GDP reflects the state of the economic cycle and is expected to have an impact on the demand for the aviation industry services. The economic conditions and specific market environment affects the mixture of assets and liabilities in companies in the aviation industry. The aviation industry growth and profitability is limited by the growth rate of the economy. Economic growth can enhance the aviation industry profitability by increasing the demand for services offered thus increasing the financial gain. An interest rate is a price that relates present claims on resources relative to future claims on resources. Interest rate is the price a borrower pays for the use of money they borrow from a lender or fee paid on borrowed assets (Crowley, 2007). Inflation is the rate measured by changes in the consumer price index (CPI). Inflation is an important determinant of aviation industry performance. In general, high inflation rates are associated with high loan interest rates and high income. Bashir (2003) stated that the anticipated inflation affects positively while unanticipated inflation affects negatively the profitability of the banks. Performance can be defined as an approach to determining the extent to which set objectives or goals of an

organization are achieved in a particular period of time (Illo, 2012). The objectives or goals can be in financial or non-financial terms; therefore, performance can also be financial or non-financial (Van Beurden & Gössling, 2008). There exists a gap in literature as far as the study on the effects of macroeconomic variables on financial performance of aviation industry in Kenya. This paper sought to fill this research gap by answering the following question: How do macroeconomic variables affect the financial performance of selected airlines operating into Kenya?

1.2 Research Objective

To investigate the impact of macroeconomic factors on financial performance of selected airlines operating into Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Schumpeter Economic Cycle Theory

Schumpeter Economic Cycle Theory was advocated by Schumpeter (1939). The theory indicated that economic change consists of two distinct phases, "prosperity" and "recession" which he called business cycle. Under prosperity phase, the impulse of entrepreneurial activity draws away from an equilibrium position, and under recession, it draws toward another equilibrium position. According to the theory, certain macroeconomic variables typically display unique pattern of boom and recession in a business cycle. A crisis is said to occur at the peak of expansion when growth in real GDP and domestic demand decline leading to acceleration in inflation. During periods of economic expansion, firms and their respective sectors profits increases, asset prices rises aggregate sectoral demand for credit facilities expands leading to growth in bank lending resulting to increased interest income. Banks may underestimate their risk exposures, relaxing credit standards and reduce provisions for future losses while the economy indebtedness rises. As the downturn sets in individual's, firms and sector profitability deteriorates (Bikker & Hu, 2002).

2.1.2 The Macroeconomic Theory

The Macroeconomic theory was advocated by Friedman (1963). It views interest rates as always and everywhere a monetary phenomenon (Friedman, 1963). It further assumes that growing the money supply in excess of real GDP growth causes interest rates to rise. This is also the result from the Harberger (1963) model, which assumes that prices adjust to excess money supply in the money market. It is on the basis of this assumption that it is possible to invert the real money demand and control interest rates. According to the theory, an increase in interest rates emanates from three main sources that include excess money supply, foreign prices which also entails exchange rate and cost push factors which leads to inflation (Were et al., 2013). In relevance to the study, macroeconomic theory views growing money supply in excess of real GDP growth as the cause of interest rates to rise. Interest rate volatility is seen by the theory as emanating from three main sources that include excess money supply, foreign prices entailing exchange rate and cost push factors entailing inflation. Interest rates volatility will also results from different disequilibria in many markets specifically, the domestic money market, external/foreign markets and the labour market. High interests rate have different implications on the performance of the domestic financial market.

2.2 Empirical Review

According to Oliver (2000) macroeconomic variables are such factors that are pertinent to a broad economy at the regional or national level and affect a large population rather than a few select individuals. It is often argued that financial performance are determined by some fundamental macroeconomic variables such as the interest rate, gross domestic product (GDP), exchange rate, inflation and money supply which are closely monitored by the government, businesses and consumers.

Kipngetich (2011) did a study on the relationship between interest rates and financial performance of commercial banks in Kenya and found that there is a positive relationship between interest rates and financial performances of commercial banks. Thus companies should therefore prudently manage their interest rates to improve their financial performance. Interest rate was found to be negatively correlated with the profitability of companies in aviation industry.

Anecdotal evidence from the financial press indicates that investors generally believe that monetary policy and macroeconomic events have a large influence on the volatility of financial performance (Muchiri, 2012). Economic factors that impact on changing investment opportunities; the pricing policies; and factors which affect dividends theoretically, affect pricing and financial performance in aviation industry. As Muchiri (2012) revealed, is that prior studies argue that consumer prices index (CPI) is such a specific factor representing several macroeconomic variables such as discount rate, inflation and goods market (Nasseh & Strauss, 2000).

2.3 Conceptual Model

From the proposed conceptual model, the independent variables are GDP growth, Inflation, and Interests rates. The dependent variable is the financial performance of the organization, which shall be measured by net operating income.

Independent variables   **Dependent variable**

Global macro-economic factors

- Global GDP
- Global Interest rate
- Global Inflation

Local   (Kenya)   macro-economic factors

- Local GDP
- Local Interest rate
- Local Inflation

Origin macro-economic factors

- Origin GDP
- Origin Interest rate
- Origin Inflation

Financial Performance of airlines
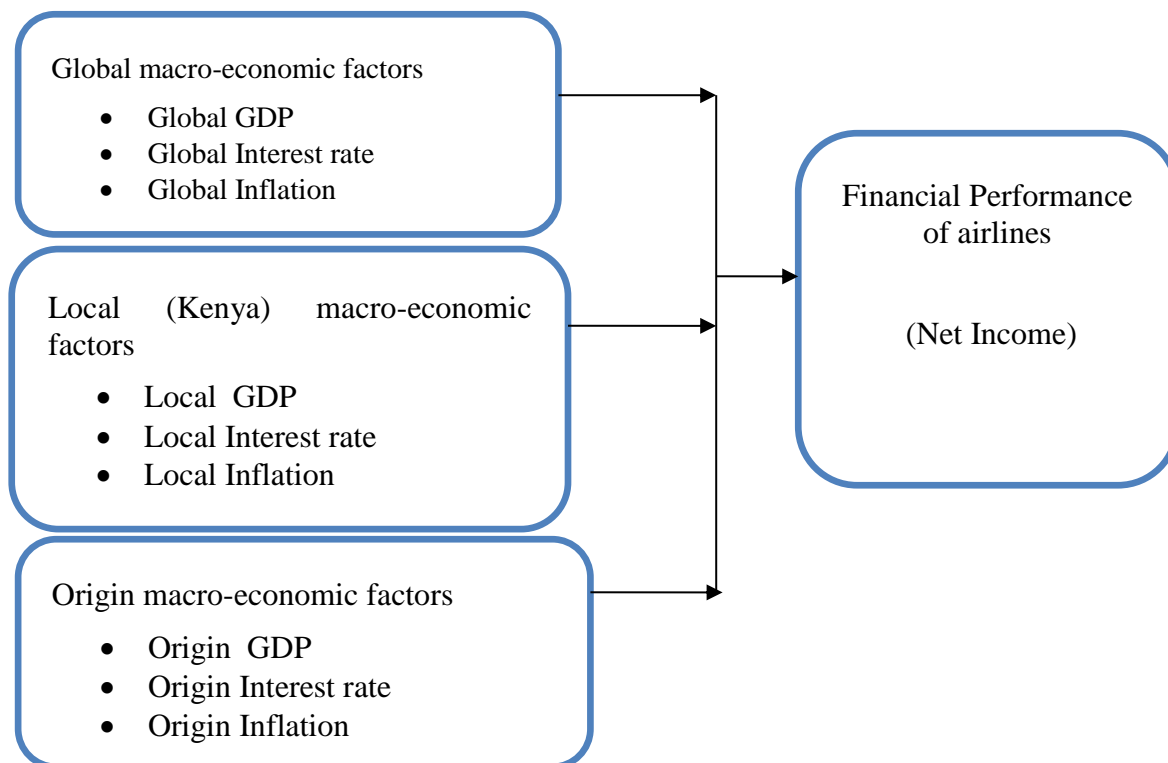
(Net Income)

Figure 1: Proposed Conceptual Model

3.0 RESEARCH METHODOLOGY

The study sought to establish the relationship between the macro-economic factors and the financial performance of selected airlines that operates into Kenya. Data on macroeconomic factors was collected form world bank and Central Bank of Kenya websites for the period between 2005 and 2014. Data on airlines net income was collected from the published financial statements for the period 2005 to 2014. For this study, Global macroeconomic variables are taken as those of the United States of America, while domestic macroeconomic variables refer to those of Kenya- the destination country. Origin country macroeconomic variables were taken as those of the country of origin of each carrier in this study. The period of study is from 2005 to 2014. The Airlines in this study are Air France, Kenya Airways, British Airways, Ethiopian Airline, Emirates, Qatar, Turkish Airline, South African Airways, China Southern Airline and Egyptair.

Statistical methods such as mean, standard deviation, correlation and regression analysis were used to establish the relationship between the variables. Post estimation tests were conducted to adhere to the assumptions of regression analysis. The research process used SPSS for empirical analysis of the data. A multivariate regression model was used to establish the joint influence of independent variable on the variation of dependent variable.

4.0 RESULTS AND DISCUSSIONS

4.1 Descriptive Statistics

The results indicate that the mean for net income for all the 10 airlines in this study was $9098.411 while the maximum and minimum values were $38184.00 and $396.00 respectively. On average the GDP growth of the origin countries was 5.67%. The origin country with the highest GDP growth was Qatar in 2006 which had a GDP growth of 26.2%. UAE had the minimum GDP growth of -5.2 in 2009. The standard deviation in GDP growth was 5.144 which imply the variation in GDP growth of the countries was not very large. The mean of origin country inflation was 7.56% while that of origin interest rates was 8.62%. This implies that inflation and interest rates of the origin countries was significantly low. The maximum inflation was 34% which was reported in Ethiopia in 2009 while the minimum inflation was -24% reported in Qatar in 2009. The country with the highest interest rates within the study period was Kenya at 20% in 2012. The variation in interest rates was low as shown by the value of standard deviation.

Table 1: Descriptive Statistics Results-Origin

	N	Minimum	Maximum	Mean	Std. Deviation
Origin GDP growth	100	-5	26	5.67	5.144
Origin Inflation	100	-24	34	7.56	7.905
Origin interest rates	65	0	20	8.62	4.457
NET Income	100	396	38184	9098.411	9918.12
Valid N (listwise)	65				

The mean for net income was 9098.411 while the maximum and minimum values were 38184.41 and 396.24 respectively. The mean for global interest rates was 4.72% while that of domestic interest rates was 15.12%. Global inflation had a mean of 1.99% while the domestic inflation had a mean of 9.82%. Global GDP growth had a mean of 1.35 while domestic GDP growth had a mean of 5.28.

Table 2: Descriptive Statistics Results-Global and Domestic

Statistics	Net Income	Global Interest Rates	Global Inflation	Global GDP Growth	Domestic Interest Rates	Domestic Inflation	Domestic GDP Growth
Mean	9098.411	4.72	1.99	1.35	15.12	9.82	5.28
Median	3369.345	3.3	1.9	2	14.6	8.7	5.8
Maxi	38184.41	8.1	3.2	3.4	19.7	23.7	8.4
Min	396.2452	3.3	0.8	-2.8	12.9	2.1	0.2
Std Dev.	9918.117	1.923171	0.7633	1.749	2.0369	5.8744	2.1356

4.2 Trend Analysis

4.2.1 Trend in GDP Growth of the Airlines Origin Countries

The results in the figure below show the plot of average GDP growth of origin countries. The trend shows that GDP growth increased from 6.4 to 9 between 2005 and 2006 and later drop

to 1.9 between 2006 and 2009. In 2010 average GDP growth of the selected airlines origin countries increased to 7.5. From 2011 GDP growth has since been decreasing reaching 4.1 in 2014.
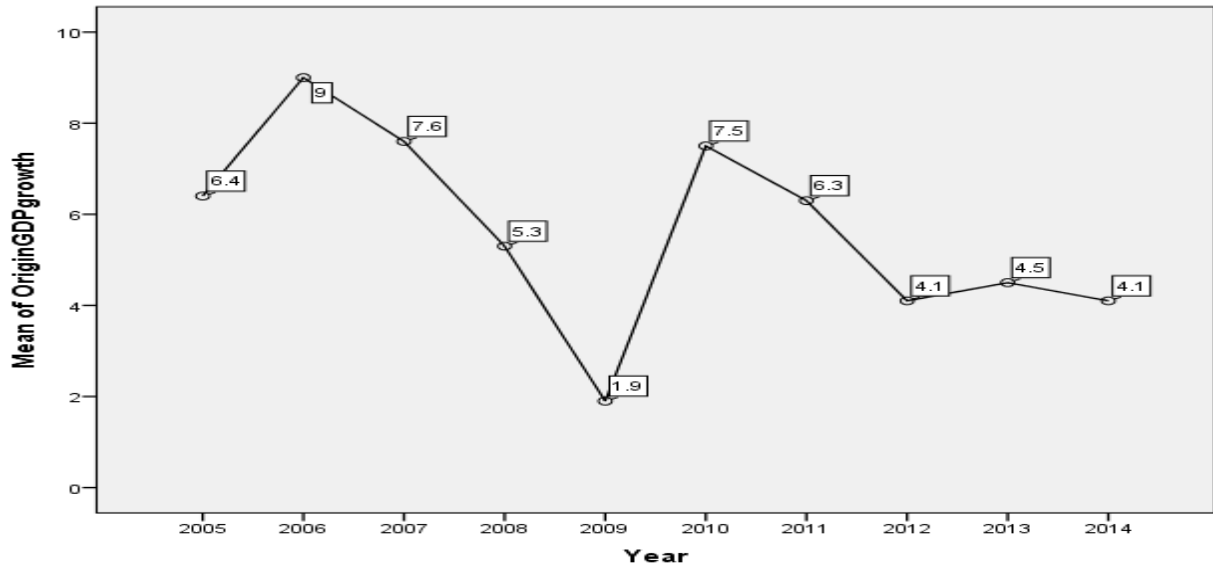

Figure 2: Trend in GDP Growth of Origin Countries

4.2.2 Trend in Inflation of the Airlines Origin Countries

The plot for average inflation of origin countries indicates that inflation was highest in 2008 at 13.3% while it was lowest in 2009 at about 3.1%. The plot indicates that inflation was very volatile for period between 2005 and 2014.
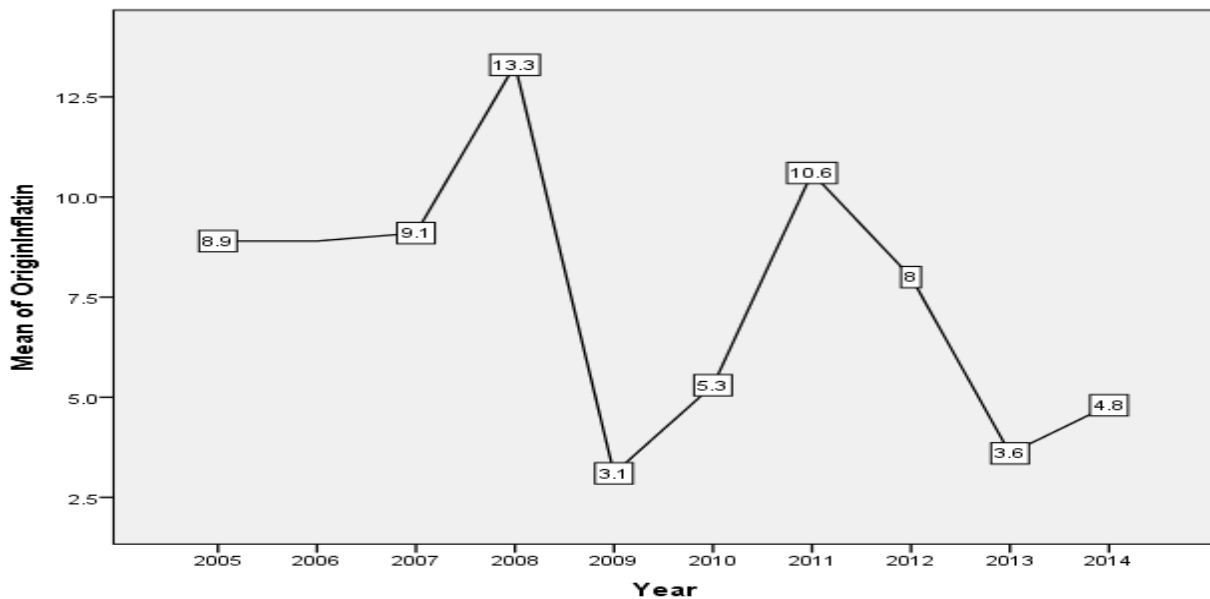

Figure 3: Trend in Inflation of Origin Countries

4.2.3 Trend in Interest Rates of the Airlines Origin Countries

The trend indicates that average interest rates have been decreasing since 2007. The highest interest rate was recorded in 2007 having increased from 8.85% to 9.6%. The periods 2010/2011 and 2013/2014 had the lowest interest rates in the origin countries of the selected airlines.
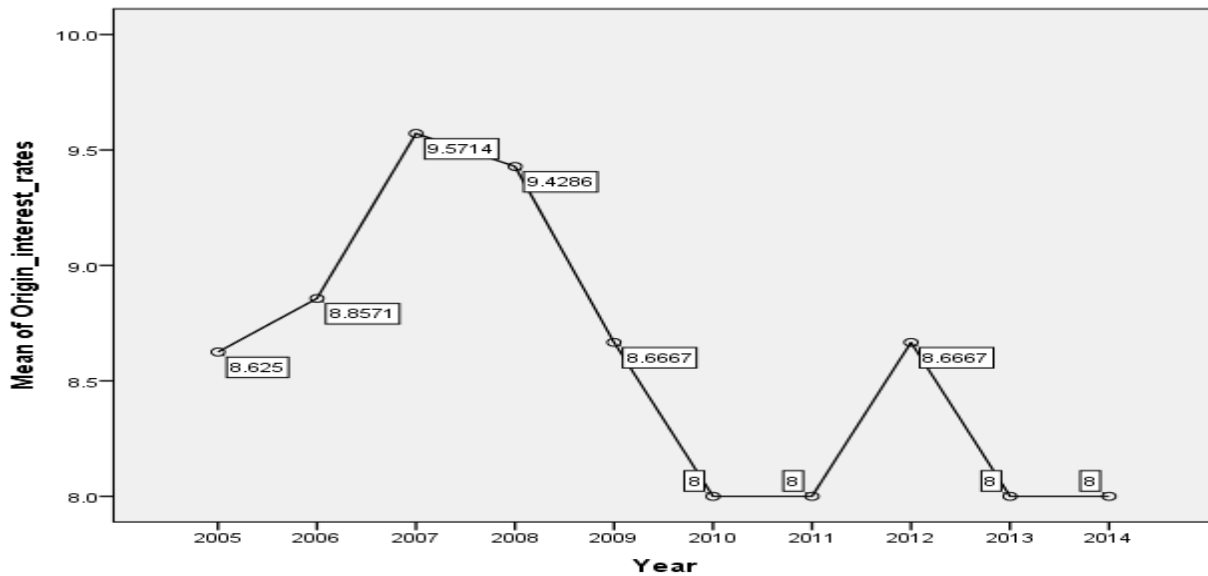

Figure 4: Trend in Interest Rates of Origin Countries

4.2.4 Trend in Net Income of Selected Airlines

The plot below indicates that average net income of the airlines has been increasing across the study period. The net income experienced a major shock in 2008.
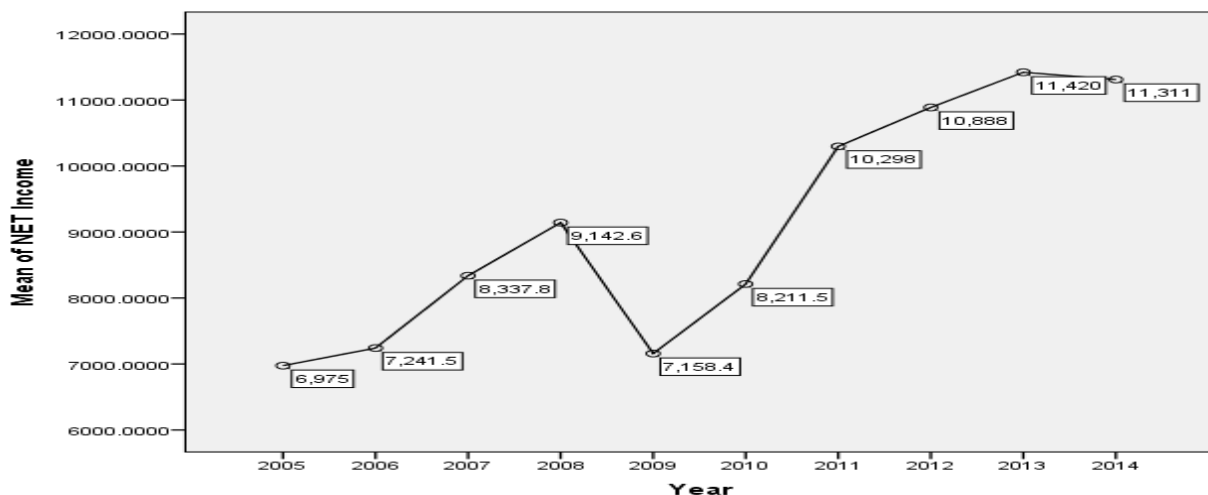

Figure 5: Trend in Net Income of Selected Airlines

4.2.5 Trend for Mean of Macro-Economic Indicators for All the Airlines

The results in the figure below show the trend for mean of macroeconomic indicators and the average for net income for all the airlines. The results indicate that macroeconomic indicators

were very volatile during the period of this study. The findings also indicate that the mean of the net income remains almost constant during the same period.
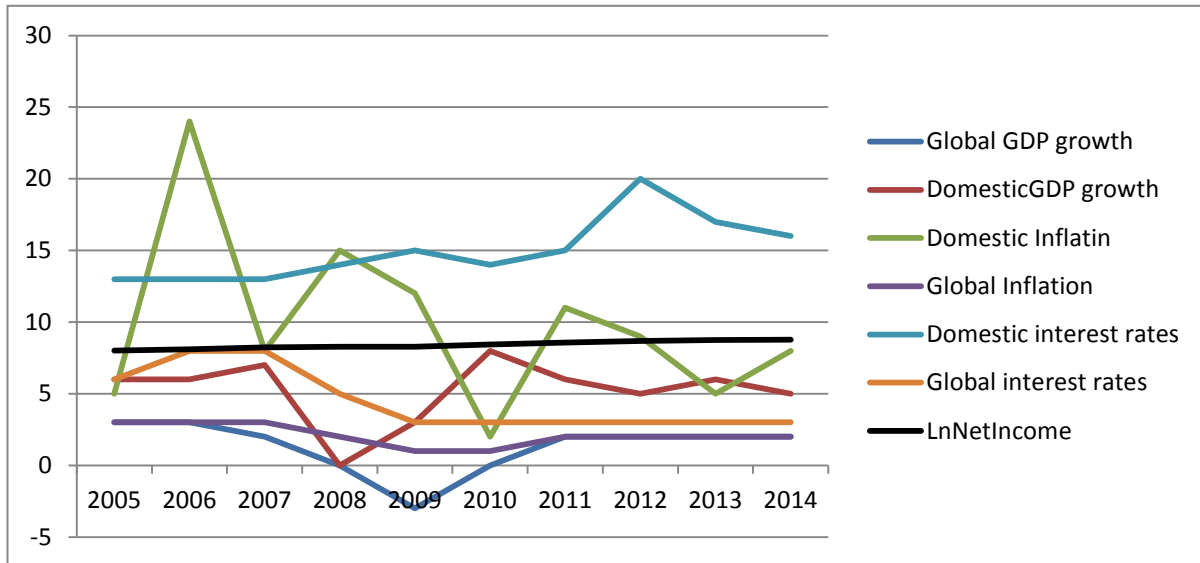

Figure 6: Trend for Mean of Macro-Economic Indicators for All the Selected Airlines

4.2.6 Trend for Mean of Macro-Economic Indicators for All the Airlines

The results in the figure below show the trend for mean of origin country macroeconomic indicators and the average for net income for all the airlines. The results further indicate that macroeconomic indicators for origin countries were very volatile during the period of this study. The findings also indicate that the mean of the net income had an increasing trend during the same period.
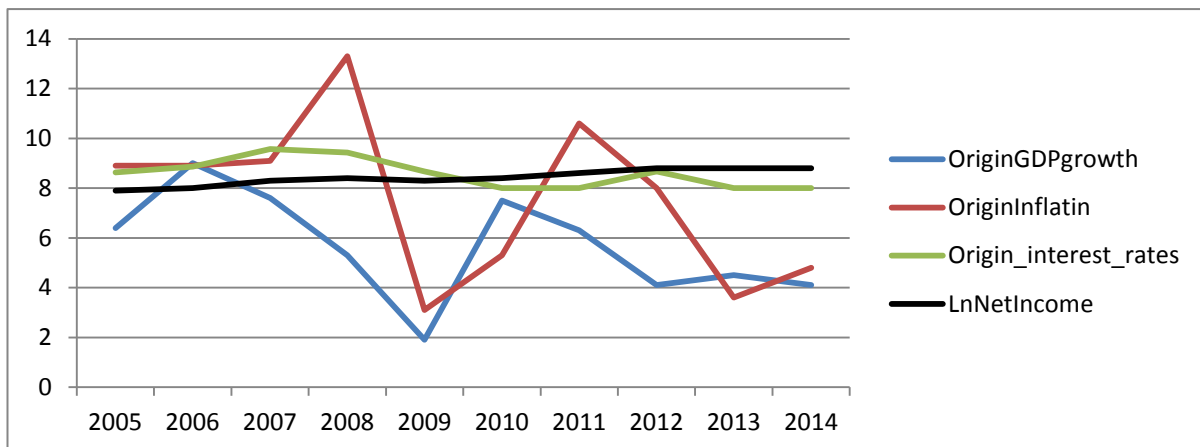

Figure 7: Trend for Mean of Origin Country Macro-Economic Indicators for All the Airlines

4.3 Average Net Income of Selected Airlines

The findings reveal that airlines with high net income originate from countries with stable and stronger economies. This results imply that the stronger the economy of the origin country the higher the financial performance of airlines in that country.
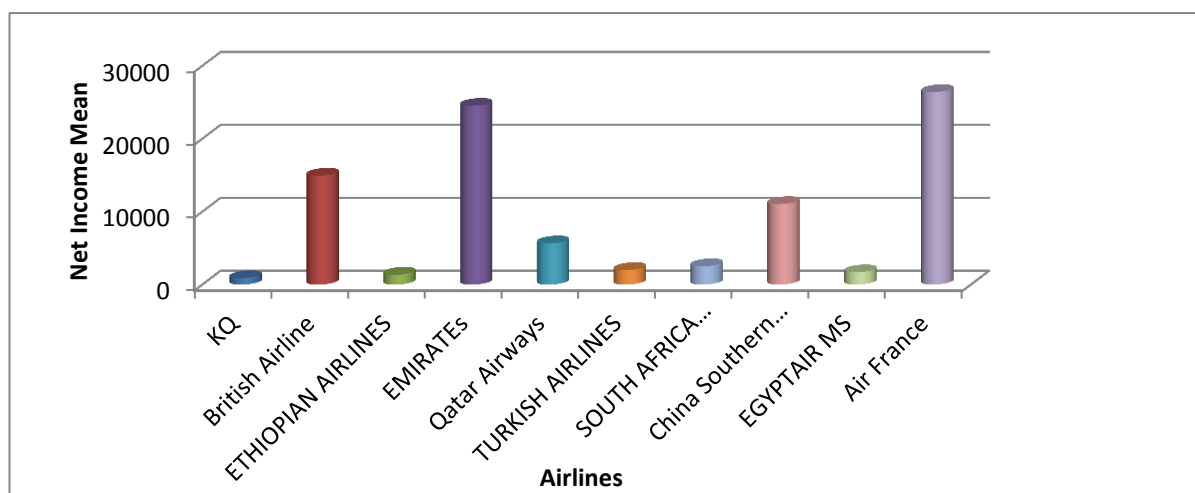
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Figure 8: Net Income of Selected Airlines

4.4 Correlation Results

The correlation results indicate that there was an association between the origin countries macroeconomic indicators and net income for the selected airlines. The results further revealed a significant association between macroeconomic indicators and the net income of airlines. The results indicated that there is a negative association between global interest rates, global inflation, domestic inflation and financial performance of airlines that operates into Kenya. The results show that domestic interest rates, global and domestic GDP growth have a positive association with financial performance of airlines that operates into Kenya. Table 2b below indicates the correlation results. The results further show that there was Multicollinearity between global interest's rates and global inflation therefore global interest rates was excluded in the computation of regression coefficients.

Table 3: Correlation Results

		Origin GDP growth	Origin Inflation	Origin interest rates	NET Income
Origin GDP growth	Pearson Correlation	1			
	Sig. (2-tailed)				
Origin Inflation	Pearson Correlation	.293**			
	Sig. (2-tailed)	0.003			
Origin interest rates	Pearson Correlation	-0.061	.273*		
	Sig. (2-tailed)	0.63	0.028		
NET Income	Pearson Correlation	-.306**	-.370**	-.727**	1
	Sig. (2-tailed)	0.002	0	0	

Table 4: Correlation Results

Variables	Ln Net Income	Global GDP Growth	Domestic GDP Growth	Global Interest Rates	Domestic Interest Rates	Global Inflation	Domestic Inflation
Ln Net Income	1	0.02	0.01	-0.16	0.17	-0.13	-0.07
Global GDP Growth	0.02	1	0.44	0.34	0.11	0.68	-0.06
Domestic GDP Growth	0.01	0.44	1	0.14	-0.11	0.18	-0.39
Global Interest Rates	-0.16	0.34	0.14	1	-0.66	0.84	0.46
Domestic Interest Rates	0.17	0.11	-0.11	-0.66	1	-0.5	-0.23
Global Inflation	-0.13	0.68	0.18	0.84	-0.5	1	0.36
Domestic Inflation	-0.07	-0.06	-0.39	0.46	-0.23	0.36	1

4.5 Post Estimation Tests

Post estimation test conducted indicate that the assumptions of regression model were adhered to. The white test for Heteroskedasticity indicate that the residual were Homoskedastic. This implies that regression estimates in this study are not biased. A normality test was conducted on the residuals to tests whether the residuals were normally distributed. The assumptions of regression require that the residuals are normally distributed. The results in the histogram below shows that the residuals were normally distributed therefore the regression results are not spurious.

Table 5: Heteroskedasticity Tests Results

Heteroskedasticity Test: White			
F-statistic	1.734304	Prob. F(9,55)	0.0031
Obs*R-squared	14.36887	Prob. Chi-Square(9)	0.0098
Scaled explained SS	52.01892	Prob. Chi-Square(9)	0

Series: Standardized Residuals	
Sample 2005 2014	
Observations 100	
Mean	-1.33e-17
Median	0.004502
Maximum	0.553669
Minimum	-0.528113
Std. Dev.	0.226332
Skewness	-0.067792
Kurtosis	2.585881
Jarque-Bera	0.791156
Probability	0.673291

Figure 9: Normality Test

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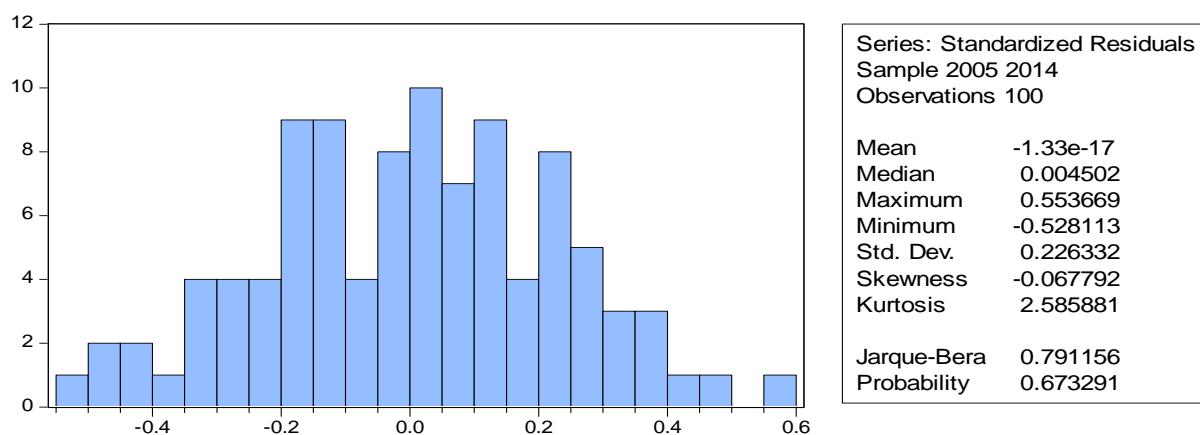
4.6 Regression Results of Influence of Global and Domestic Macro-Economic Factors on Financial Performance of Selected Airlines

A regression model was used to test the relationship between macroeconomic factors and financial performance of selected airlines that operate in Kenya. The results are presented in Table 5 and 6 below. The R-squared in the model was 0.51 which implies that independent variables accounted for 51.5% of the variation in dependent variable. The p-value of F-statistic was below 0.000 which is below 0.05 implying that the model was statistically significant.

Table 5: Model Summary

Model Summary	
R-squared	0.515519
Adjusted R-squared	0.484263
S.E. of regression	0.24571
F-statistic	16.49303
Prob(F-statistic)	0

The findings in Table 6 show that Global GDP and Global Inflation have a statistical significance relationship with financial performance of airlines that operate into Kenya.

Table 6: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Global GDP Growth	0.132192	0.041113	3.215359	0.0018
Domestic GDP Growth	-0.00858	0.016499	-0.52018	0.6042
Global Interest Rates	-0.01012	0.030937	-0.3271	0.7443
Domestic Interest Rates	0.020306	0.024427	0.831303	0.4079
Global Inflation	-0.3813	0.123792	-3.0802	0.0027
Domestic Inflation	0.006196	0.005792	1.069709	0.2875
C	8.722268	0.660623	13.2031	0

The result shows that a unit increase in Global GDP growth will cause 0.132192 units increase in net income of airlines. The implication of these findings is that global GDP growth is positively related to financial performance of airlines that operates into Kenya. Further, the result revealed that a unit increase in Global inflation will cause a decrease of -0.3813 units in net income of airlines that operates into Kenya. These findings imply that Global inflation has a negative significant relationship with financial performance of airlines that operates into Kenya.

The findings also show that domestic GDP growth, Global and domestic interest rates and domestic inflation rates have no statistical relationship with financial performance of airlines that operates into Kenya. Favourable economic conditions affected the demand and supply of companies in aviation industry. Aviation industry growth and profitability is limited by the growth rate of the economy. Economic growth can enhance the aviation industry profitability by increasing the demand for services offered thus increasing the financial gain. Thus there is a positive relationship between the growth rates and gross domestic product and the profitability of the companies in the aviation industry. In this study net income was found to be positively correlated with global GDP growth and negatively related with inflation rates.

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The positive impact of GDP growth supports the argument of the positive association between growth and financial sector performance and is also confirmed by Kosmidou (2006) and Hassan & Bashir (2003). GDP was expected to have impact on the demand for airline services, whereby increase in consumption of the services provided would increase the aviation industry profitability.

4.7 Regression Results for influence of Origin Countries Macroeconomic indicators on Financial Performance of selected airlines operating in Kenya

A regression model was used to test the relationship between origin country macroeconomic factors and financial performance of selected airlines that operate into Kenya. The results are presented in Table 7 and 8 below. The R-squared in the model was 0.614 which implies that independent variables accounted for 61.4% of the variation in dependent variable. The p-value of F-statistic was 0.000 which is below 0.05 implying that the model was statistically significant.

Table 7: Model Summary

Model Summary	
R-squared	0.614
Adjusted R-squared	0.595
F-statistic	32.283
Prob(F-statistic)	0

The results revealed a negative significant relationship between origin inflation and net income of airlines. A unit change in origin inflation would result to negative change of 180.58 units in net income of the airlines. The results further revealed a negative and significant relationship between origin interest rates and net income of the airlines. A unit change in origin interest rates would result to negative change of 924.66 units in net income of the airlines. The relationship between origin GDP growth and net income of the airlines was insignificant at 5% significant level. The findings imply that impact of origin interest rates on net income of airlines is significant higher than that of inflation rates. A change in interest rates of origin country would significant impact on the net income of the airlines. Performance of airlines heavily relies on the performance of other industries which raises the need for air transport in the course of business transactions. Therefore, increased interest rates slow down the demand for travel and cargo which consequently affects the aviation industry. According to IATA (2015) a strong economic cycle is unambiguously good for airline profitability in that, even when fuel prices are high (as in 2010), a strong economy will allow airline to generate improved profits and returns on capital. However, the results in this paper do not seem to find significant statistical evidence linking country of origin economic growth and airline profitability measured through net income.

Table 8: Regression Results

	B	Std. Error	Beta	t	Sig.
(Constant)	16585.28	1238.334		13.393	0
Origin GDP growth	-178.324	93.172	-0.157	-1.914	0.06
Origin Inflation	-180.583	69.065	-0.222	-2.615	0.011
Origin Interest Rates	-924.669	113.999	-0.676	-8.111	0

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The growth of the global economy is argued to have a positive impact on financial performance of various key sectors. Economy growth as measured by GDP growth while other macroeconomic indicators such as inflation rate, interest rates, exchange rates, money supply among others can be used to predict economic growth. This study focused on investigating the impact of global, country of origin and domestic GDP growth, Inflation rates and Interest rates on financial performance of selected airlines that operates into Kenya.

Based on the findings, the study concludes that financial performance measured by net income of airlines that operates in Kenya was influenced by global GDP growth and Global Inflation during the study period. This conclusion is derived from the statistical significant relationship that was established to exist between this macroeconomic factors and net income of selected airlines that operate in Kenya. The finding implies that globalization and the increase in income in developed economies boosts the profitability of airlines. However, global interest rates drive down the profitability of airlines by increasing cost of financing and this is passed on to passengers in form of high air fare.

The study used regression model to test the relationship between origin country GDP growth, origin country inflation rates and origin country interest rates and net income of selected airlines that operate into Kenya. Based on the findings, statistical significant relationship between macroeconomic factors of origin countries (origin interest rates, origin inflation) and net income of selected airlines was found to exist. Therefore, the higher the interest rates and inflation in country of origin, the lower the net income of selected airlines operating into Kenya. A comparative analysis between the two models indicates that the global GDP matters more than the GDP of origin country. In both cases, the GDP of Kenya (destination) does not matter as far as airline net income is concerned. An explanation would be to note that the origin GDP as well as the Kenyan GDP (destination) is too small compared with global GDP to have an effect on airline net income.

Based on the findings it can also be concluded that volatility of domestic GDP growth, domestic Inflation and domestic interest rates have no relationship with financial performance of airlines that operates into Kenya. Financial performance of airlines is affected by the variation of global macroeconomic variables but not the variation of these variables in the destination countries.

5.2 Recommendations

This paper recommends that investors in aviation industry should heavily invest when the macroeconomic fundamentals such as interest rates and inflation rates of origin countries are strong to be able to reap high profitability from airlines. Again, investors should invest more when the global economy is performing well so as to reap maximum profits from airlines destined to Kenya. That the key indicators and determinants for investment decision making in the aviation industry are the Global GDP, Global inflation, Country of Origin interest rates and inflation rates.

REFERENCES

Amihud, Y., (1994). Exchange rates and the valuation of equity shares. In *Exchange Rates and Corporate Performance,* eds. Y. Amihud & R. Levish. Illinois: Business One Irwin.

Bashir, A. (2003). Determinants of profitability in Islamic banks: Some evidence from the Middle East. *Islamic Economic Studies, 11,* 31-57.

Bikker, A., & Hu, H., (2002).Cyclical Patterns in Profits, Provisioning and Lending of Banks and Procyclicality of the New Basel Capital Requirements. *BNL Quarterly Review, 221,* 143-175.

Bodie, Z., (1976). Common stocks as a hedge against inflation. *Journal of Finance, 31,* 459-470.

Boudoukh, J., & Richardson, M. (1993). Stock returns and inflation: A long-horizon perspective. *The American economic review,* 1346-1355.

Choi, J. J., Elyasiani, E., & Kopecky, K. J. (1992). The sensitivity of bank stock returns to market, interest and exchange rate risks. *Journal of banking & finance, 16*(5), 983-1004.

Crowley, J., 2007. Interest Rate (2007). Interest Rate Spreads in English- Speaking Africa. IMF Working paper. April 2007.

Ehrhardt, M. C. (1991). Diversification and Interest Rate Risk. *Journal of Business Finance & Accounting, 18*, 43–59. doi: 10.1111/j.1468-5957.1991.tb00578.x.

Ehrmahh, M., & Fratscher, M., (2004). Taking stock: Monetary policy transmission to equity markets, *Journal of Money, Credit and Banking, 36*,719-737.

Evans, M. D. (1998). Real rates, expected inflation, and inflation risk premia. *Journal of Finance,* 187-218.

Friedman, M., (1963). *Inflation, Causes and Consequences.* Bombay: Asia Publishing House

Geske, R. and Roll, R., (1983). The fiscal and monetary linkage between stock returns and inflation, *Journal of Finance, 38,* 1-33.

Goddard, J (2004). Dynamics of growth and profitability in banking. *Journal of Money, Credit and Banking,* 1069-1090.

Harberger, C., (1963). The Dynamics of Inflation in Chile. In *Measurement of Economics: Studies in Economics and Econometrics in Memory of Yehunda Grunfield*, edited by C. F. Christ. Stanford, Calif.: Stanford University Press.

Hassan, M. K., and Bashir A. H. M., (2003). Determinates of Islamic banking profitability. Paper presented at the Economic Research Forum (ERF) 10th Annual Conference, Marrakesh, Morrocco, 16-18 December.

ICAO, (2006). Convention on International Civil Aviation Doc 7300 Ninth Edition ICAO Montreal Canada.

Illo A. D., (2012). *The effect of Macroeconomic Factors on Financial Performance of Commercial Banks in Kenya.* (Unpublished MSC project, University of Nairobi, 2012).

Kalam Azad, A., McKinley, S., & Pearce, C. M. (2010). Factors influencing the growth and survival of larval and juvenile echinoids. *Reviews in Aquaculture, 2*(3), 121-137.

Kaul, G. (1987). Stock returns and inflation: The role of the monetary sector. *Journal of financial economics, 18*(2), 253-276.

KCAA, (2013). Statistical Bulletin, 2013.

Kipngetich, K. M. (2011). *The relationship between interest rates and financial performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).

Kosmidou, K., Tanna, S., & Pasiouras, F. (2005, June). Determinants of profitability of domestic UK commercial banks: panel evidence from the period 1995-2002. In Money Macro and Finance (MMF) Research Group Conference (Vol. 45).

Levine, R. (2010). An autopsy of the US financial system: accident, suicide, or negligent homicide. *Journal of Financial Economic Policy, 2*(3), 196-213.

Li, L., Narayan, P. K., & Zheng, X. (2010). An analysis of inflation and stock returns for the UK. *Journal of international financial markets, institutions and money, 20*(5), 519-532.

Lintner, J., (1975). Inflation and security return, *Journal of Finance, 30,* 259-280.

Muchiri. H. G. (2012), The impact of macroeconomic variables on the performance of the Nairobi securities exchange.(Unpublished MBA project, University of Nairobi, 2012).

Nasseh, A. & Strauss, J. (2000). Stock prices and domestic and international macroeconomic activity: A co-integration approach, *Quarterly Review of Economics and Finance, 40,* 229-245.

Ndung'u, N. S. (2000). The exchange rate and monetary policy in Kenya. *African Development Review, 12*(1), 24-51.

Ngugi, R. W. (2001). An empirical analysis of interest rate spread in Kenya.

Oliver B., (2000). *Macroeconomics,* (2nd ed.). Practice Hall New York.

Olukayode, E. M., & Akinwande, A. A. (2009). Does Macroeconomic indicators exert shock on the Nigerian Capital Market? MPRA paper No. 17917 posted 17 October 2009/ 03:36.

Omondi, E. M. A. (2006). Competitive strategies adopted by airlines in Kenya. Unpublished MSC project, University of Nairobi, 2006.

Opati, B. J. D. (2009). *A study on causal relationship between inflation and exchange rates in Kenya* (Unpublished MBA project, University of Nairobi, 2009).

Reilly, F. (1997). The impact of inflation on ROE, growth and stock prices. *Financial Services Review 6* (1), 3–17.

Schumpeter, J. A. (1939). *Business cycles* (Vol. 1, pp. 161-74). New York: McGraw-Hill.

Van Beurden, P., & Gössling, T. (2008). The worth of values–a literature review on the relation between corporate social and financial performance. *Journal of business ethics, 82*(2), 407-424.

Were, M., Kamau, A., Sichei, M., & Kiptui, M., (2013). A theoretical framework for Kenya's central bank macro econometric model. Africa growth initiative working paper