
MACROECONOMIC AND FINANCIAL PERFORMANCE: AN EMPIRICAL ANALYSIS OF AIRBUS COMPANIES IN UNITED KINGDOM

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Abstract

This study examined the effect of macroeconomic on financial performance of Airbus companies in United Kingdom using money supply as the independent variable while return on assets financial performance of Airbus companies in United Kingdom. Ex Post Facto and time series data were adopted for the study. Data were extracted from the annual accounts of the company, World Bank and OECD indicators from 1999 to 2022. Multiple regression analysis was used to test the hypotheses. From the analysis, the study found that money supply has a positive and significant effect on the financial performance of Airbus companies in United Kingdom. Based on the finding, the study proffers that financial institutions should pay special attention to the broad money supply by manipulating, among other things, instruments such as the liquidity ratio and the reserve ratio, which directly affect the monetary aggregate, in order to improve the performance of companies.

Keywords: Money supply, return on assets and Firm leverage

INTRODUCTION

Macroeconomic factors affect the company's performance; Companies need to be aware of these factors to minimize the impact on future cash flow and profitability. Microeconomic factors such as demand and factors of production are controllable and their effects are easy to predict and manage, but macroeconomic variables such as the unemployment rate and the corporate tax rate are beyond the control of the organization, so it is necessary for companies to anticipate the heterogeneous effects of these macroeconomic factors.

Fluctuations in macroeconomic variables affect the optimal performance of listed companies. These elements are external to the organization and not under the control of management. Political-environmental variables, suppliers, government regulations and competitors all affect this (Issah and Antwi, 2017). A number of external factors affect the growth of a company's profits (Obeng-Krampah, 2018). Despite the existence of the aforementioned variables, many researchers consider the exchange rate, public spending, unemployment, population, interest rate, inflation, money supply and gross domestic product (GDP) as the most important and established factors (World Bank Report, 2019; Haider et al., 2018; Issah and Antwi, 2017). When assessing the importance of disclosing to the government, the stock market, listed companies and investors the impact of macroeconomic factors on the performance of listed companies, it is important to remember that these variables are not independent (Epaphra and Salema, 2018).

With the increase in demand and supply of quality goods and services, international trade has grown, including commercial banks to meet the growing demand for quality financial services (Ally, 2022). Exchange rates, interest rates and inflation must be taken into account when making investment decisions. Commercial banks are interested and conduct analyzes to find out the impact of the smallest changes in these variables on their business (Vines, 2017). Exchange rates, inflation and interest rates deserve special attention in developing countries, because small increases in interest rates are very sensitive and controversial, due to the need for structural adjustments and changes necessary to remove economic uncertainties in the system; Idaka, Ugwoke, Ajuh and Edith, 2021). Countries around the world try to maintain a good economic policy, because the manufacturing sector is very key, which makes economic development a developing economy, because the manufacturing industry has a positive effect on economic activity both in terms of job creation and the added value of the gross domestic product and export.

Many previous researches prove that macroeconomic factor have an impact on company's financial performance. In existing studies, the effects of macroeconomic factors were mainly analyzed for the banking system, stock market, and profitability of companies. However, majority of the studies did not look at the effect of macroeconomic variables on specific industry and also most of these studies use stock returns instead of absolute accounting variables to measure performance. This work attempts to evaluate a specific macroeconomics variable (money supply) to determine the effect on financial performance of Airbus Company in United Kingdom.

Conceptual Review

Macroeconomics derived from the Greek prefix macro, meaning "large" and economy, the word "macroeconomics" is the branch of economics that deals with the operative, construction, behavior and decision-making of the economy as a whole. The macro environment looks at the forces surrounding the company. The existing studies analyzed the effects of macroeconomic factors mainly on the banking system, the stock market and the profitability of companies. The following macroeconomic factors were selected: exchange

rates, interest rate, inflation, money supply, price of cocoa and gold, level of economic activity, default premium, maturity premium, yield curve slope, gross domestic product, unemployment, foreign direct investment, government. Debt, harmonized consumer price index, industrial production index, volume of trade, bank loans. Although there is a consensus that the cycles of several macroeconomic factors have an important impact on microeconomic behavior, there are not many studies comparing the importance of these macroeconomic factors. Financial performance is often measured using financial ratios such as return on equity (ROA), return on equity (ROE), earnings before interest (EBIT), or sales growth. These measurements have the advantage of being widely available, but creative accounting, manipulation of numbers and choices of calculation methods make it difficult to compare the financial performance of companies (Chenhall and Langfield-Smith, 2007). A commonly used performance measure such as ROA or EBIT is open to financial compromises, especially due to leverage, which can obscure the fundamentals of the business. On the other hand, ROA is less vulnerable to the short-term creativity or manipulation that can occur in income statements, because many assets involve long-term asset decisions that are difficult to change in the short term.

Money supply refers to the total stock of monetary exchanges that are available to society for use in connection with a country's economic activities (Ahuja, 2010). According to the standard concept of money supply, it consists of two parts: Currency to the public and Demand deposits to the public (Uduakobong, 2014). There are two things to consider regarding the money supply of an economy. First, the money supply refers to the total amount of money available to the public in the economy at a given time. In other words, money supply is a concept of stock, which is completely opposite to national income, which represents the value of goods and services produced in a unit of time, usually taken as a year, secondly, money supply always refers to the amount of money held from the public (Ahuja, 2010). Money supply affects economic growth to a greater or lesser extent, positively or negatively. Since 1959, there have been two main phases in the conduct of monetary policy, namely: the phase of direct monetary policy and the phase of market mechanism (Uduakobong, 2014). All these steps sought to optimally regulate the supply and price of money to achieve certain desired national goals (such as increased and sustainable production). It has been observed that the amount of money offered in the economy affects the gross domestic product, or overtime income. For example, Sanusi (2001) argues that economic growth will remain.

Financial performance includes elements of accounting literature, and for decades researchers have considered sub-elements or variables suitable metrics to evaluate the performance of small, medium and large companies/organizations (Kaguri, 2013). The financial indicators of the company, which are clearly visible in the financial statements, are: EPS, NASP, ROA, DPS, etc.; market performance metrics include: sales, market share, etc.; and shareholder return as measured by ROE, dividend payout ratio, dividend coverage, etc. (Richard, Devinney, Yip, and Johnson (2009) all of which are performance measures linked to different variables in financial statements.

The economic result is the value according to the financial statements included in the annual and quarterly reports of the company. The economic performance of a company can be seen through financial indicators such as liquidity ratio, solvency, activity ratio, profitability and market value (Aruan et al., 2022; Razak et al., 2020; Thamrin and Sembel, 2020).

Alfred (2023) analyzed the influence of those internal macroeconomic factors that can be used to formulate strategies to develop the financial efficiency of banks, and how much these

factors affect the financial efficiency of banks. The data used in this study is secondary data obtained from; financial statements of selected banks. Inflation, interest rates, composite stock price index, exchange rates and gross domestic product (GDP), capital adequacy ratio (CAR) has effect on return on assets (ROA). The impact of macroeconomic conditions variables on banking activity is 76.9%, while the remaining 23.1% is the impact of other variables not included in this study. Okoye (2022) investigated the impact of selected macroeconomic variables on the performance of savings banks in Nigeria. Data were analyzed using econometric methods using Augmented Dickey Fuller tests to determine stationarity and ordinary least square (OLS) regression analyses. The regression result shows that money supply and interest rate have a positive and significant effect on return on assets (ROA), while exchange rate and inflation have a negative and insignificant effect on return on assets (ROA). Umar, Jaleel and Shamshair (2020) conducted a study on "Do Macroeconomic Factors Affect Firm Investment Decisions?" the study employed generalized method of moments (GMM). The researchers studied 12 Asian countries, where the study covered 10 years, and the analysis method is the GMM approach, which was used to find out the relationship between macroeconomic factors and capital investment of companies. Based on the results of the study, it was concluded that an increase in inflation leads to a decrease in investment due to an increase in future investment costs. Ruhomaun, Saeedi and Nagavhi (2019) examine the impact of selected macroeconomic and microeconomic variables on firm performance in the Malaysian manufacturing sector. The effect of variables was investigated using panel data and generalized methods of moments (GMM). All variables were found to have a negative and insignificant effect on the result, except for the derivative, which has a significant effect on the result. Khan, Ullah, Ali and Khan (2018) have empirically investigated the relationship between the interest rate, inflation rate, exchange rate, GDP growth rate and the unemployment rate with the dividend payout ratio. The study used OLS model. Form the analysis of the data it was concluded from his result that there is a positive relationship between the exchange rate and the unemployment rate and negative relationship with the interest rate, inflation rate and GDP growth rate with the dividend payout ratio. Pacine (2017) empirically investigated the macroeconomic determinants of UK firm performance using data from the UK's 100 largest firms from 2000 to 2014. The results show that the gross domestic product (GDP), the interest rate of the domestic debt has a positive effect on the income tax and the inflation rate with stable productivity. Rao (2016) conducted a study on the relationship between interest rate and financial performance in Nairobi from 2004 to 2015. Descriptive research was used to collect and analyze secondary data. Economic performance was measured by EPS. The research revealed that the interest rate has a significant negative impact on economic activity. However, the focus of this study is on Kenyan DTMFIs. Gado (2015) investigated the impact of inflation on the performance of the 20 most capitalized companies in Nigeria. Return on assets was used as a measure of the dependent variable. The study introduced a retrospective research design. Correlation and OLS were also used in the study. The results show that the inflation variable has a significant and positive effect on the result. Ahmed, Muhammad, Sehrish, Sana, and Muhammad (2014) investigated the effect of financial variables on the performance of Pakistani firms. This study used secondary data covering the years 2002 to 2012 and covering twenty companies out of 26 listed companies. Panel data was used and the statistical technique was ordinary least square multiple regression. The variables used to measure performance are: leverage, sales growth, size, and age. The panel data analysis, the parameters used as proxies for microeconomic indicated that there is significant effect on ROA. Leverage has positive effect on the performance of the firms when ROA is analyzed. Size age and growth have a positive impact on return on ROE. Kwakwa (2014) conducted a study on the performance indicators of commercial banks in Ghana. The effects of money supply, inflation and bank size on the

profits of commercial banks were analyzed. ROE and ROA parameters were used in the analysis of the performance of banks. The measured results of ROE and ROA concluded that inflation does not have a significant positive effect on bank performance. However, the study focused on commercial banks in Ghana, so its market size and economic level is different from that of Kenya, so the results cannot be generalized to Kenya, as this study focuses on DTMFIs in Kenya. Özlen and Ergun (2012) investigated the impact of macroeconomic factors on stock returns. Using the ARDL approach for inference, the authors argue that the exchange rate and interest rate have significant effects on stock price volatility, and that stock prices are highly sensitive to exchange rates and interest rates.

Methodology

Ex-Post Facto exploration was used in this design. By analyzing events or past information for potential counterproductive factors, *Ex-Post Facto* identifies factors related to certain conditions, situations, events, or behaviors. This is applicable because the purpose of the study is to determine the effect of one variable on another without the experimenter manipulating the variables.

However, this study is quantitative in nature, so it involves the collection of data from the International Monetary Fund, World Bank and OECD indicators, as well as the annual financial reports of the Airbus Company in United Kingdom (UK). The data to be extracted are money supply and return on assets, while firm leverage for control variable from 1999 to 2022.

The study employed descriptive statistics, and regressions analysis with the aid of E-Views 9.0.

Decision

The study's hypotheses were tested with a 5 percent margin of error. Therefore, when the p-statistic appeared at or equal to the critical level of 0.05, we accepted the alternative hypothesis and confirmed that a significant association existed.

Model Specification

The study applied the model of Muftaudeen and Hussainatu (2014) which looked at macroeconomic variables and performance of commercial banks in Nigeria.

The Model was modified as follows:

$ROA = f(M2,)$

$ROA_{it} = \beta_0 + \beta_1 M2_{it} + \beta_2 LEV_{it} + \mu_i - - - - - i$

ROA_{it} = Return on Asset of firm i in period t

$M2_{it}$ = Money supply growth% i in period t

LEV_{it} = Leverage of firm i in period t

β_0 and μ are the constant and error term respectively

$\beta_1, \beta_2,$ are the coefficient of macroeconomic variable on the performance

Data Analysis

Table 1: Descriptive Statistics

	ROA	M2	LEV
Mean	0.011140	6.721440	0.029761
Median	0.012363	8.471781	0.028631
Maximum	0.038992	17.80344	0.095368
Minimum	-0.021933	-4.418050	-0.005455
Std. Dev.	0.016324	5.895886	0.025724
Skewness	-0.230132	-0.081301	0.623324
Kurtosis	2.113508	2.239766	3.007883
Jarque-Bera	0.997712	0.604395	1.554193
Probability	0.607225	0.739192	0.459739
Sum	0.267349	161.3146	0.714271
Sum Sq. Dev.	0.006129	799.5139	0.015220
Observations	24	24	24

Source: Researcher's computation (2023)

Table 1 shows the average value (mean), their maximum values, minimum values, standard deviation, and Jarque-Bera (JB) statistic (normality test) for each variable. The results presented in table 1 provided some insight into the nature of the Airbus Company used in this study. First, it was found that on average for twenty-four (24) years (1999-2022), the sampled British company had a positive financial performance (return on assets) = 0.011140. Also, the big difference between the maximum and minimum value of macroeconomics; interest rate (ITR), inflation (IFR), exchange rate (EXR), gross domestic product (GDP), money growth (M2) and control variables; firm size (FSZ) and financial leverage (LEV).

However, in Table 4.1, Jarque-Bera (JB), which tests variables for normality or the presence of outliers or outliers, shows that most variables are normally distributed at the 5% significance level. This means that variables with outliers distort our conclusions less and are therefore reliable for making generalizations. This also means that least squares estimation can be used to estimate a pooled regression model.

Test of Hypothesis

Ho₁: Money supply has not positively affected financial of Airbus companies in United Kingdom.

Table 2: ROA Pooled Regression Results

Dependent Variable: ROA

Method: Least Squares

Date: 08/28/23 Time: 17:31

Sample: 1999 2022

Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.075201	0.017263	-4.356096	0.0005
M2	0.000692	0.000328	2.112832	0.0507
LEV	0.598804	0.061710	9.703512	0.0000
R-squared	0.895534	Mean dependent var		0.011140
Adjusted R-squared	0.849830	S.D. dependent var		0.016324
S.E. of regression	0.006326	Akaike info criterion		-7.027096
Sum squared resid	0.000640	Schwarz criterion		-6.634412
Log likelihood	92.32516	Hannan-Quinn criter.		-6.922917
F-statistic	19.59430	Durbin-Watson stat		1.945505
Prob(F-statistic)	0.000001			

Source: Researcher's computation through E-view 9.0 statistical package

In Table 2, the R-squared and adjusted squared values were (0.90) and (0.85). This shows that all independent variables together explain about 85% of the systematic variation in our company's ROA over a 24-year period (1999-2022). The F-statistic (19.594) and its Prob (F-statistic) of 0.0001 indicate that the financial performance regression model is well specified. Autocorrelation Test: Using the Durbin-Waston (DW) statistic, which we obtained from the regression result in Table 4.3, we found that the DW statistic is 1.946, and the information criteria of Akaike and Schwarz criteria, which are 7.03 and 6.63, also confirms this. our model is well defined. However, the control variable, firm leverage (LEV) was positively related to Airbus firm financial performance, while LEV was statistically significant, p-value = (0.000). In addition to the above, specific observations for each explanatory variable are presented as follows:

From Table 2, the coefficient of money supply is 0.000692 with a p-value of 0.051 and it was found to have a positive effect on the financial performance (ROA) of our sampled company and this effect was statistically significant because its p-value is less than 0.05.

Therefore, this result suggests that we reject our null hypothesis and accept the alternative hypothesis (Ho1) that money supply has a significant positive effect on the financial performance of Airbus companies in the UK.

Conclusion and Recommendation

This study examined the effect of money supply on financial performance of Airbus companies in United Kingdom. Data were extracted from the annual accounts of the company, World Bank and OECD indicators. Regression analysis was employed to test the data. From the result, it was revealed money supply growth has a positive effect on financial performance (ROA) of the sample company and this effect was statistically significant as its p-value is less than 0.05. This finding was consistent with the result of Mwenda, Ngollo and Mwasota (2023) who found that money supply has significant positive coefficients and Okoye (2022) who showed that money supply has a positive and significant effect on return on assets (ROA)

Therefore, managers and other relevant stakeholders must know that there is a direct relationship between macroeconomic variables and the financial performance of a company because there is more money in the economy; money supply leads to greater public participation in the stock market, which improves corporate performance. Based on the finding, the study proffers that financial institutions should pay special attention to the broad money supply by manipulating, among other things, instruments such as the liquidity ratio and the reserve ratio, which directly affect the monetary aggregate, in order to improve the performance of companies.

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