Impact of Economic Meltdown on Performance of Manufacturing Companies in Nigeria

Professor Olowokure, T.O
Department of Accounting, Joseph Ayo Babalola University, Ileje – Arakeji.P.M.B, 5006. Ilesa, State of Osun, Nigeria

Dr. Adetoso, J.A
Department of Financial Studies, Redeemer’s University. Ede, P.M.B 230, Ede, state of Osun, Nigeria

Abstract
The study is about impact of economic meltdown on performance of manufacturing companies in Nigeria. It is based on secondary data obtained from annual financial report and central bank of Nigeria statistical bulletin of 2015. The variables considered by the study are economic meltdown and performance of manufacturing companies which were represented by gross domestic product, return on equity and return on asset. The statistical analysis for this study was done using multiple regression analysis, and the hypotheses for the study were tested at a significance level of 5%. The findings of the study shows that there is a significance positive relationship between gross domestic product, return on equity and return on asset, and this was shown statistically in the result of the regression analysis which confirms that the (. P=0.002 < 0.05 and F=12.735 > 0.05). Also, the findings of the study demonstrated that (P=0.001 < 0.05 and F =21.221 > 0.05). Hence, the Null hypothesis is rejected, which confirmed that a positive relationship exist between gross domestic product and return on asset. Based on this findings the study recommend that stakeholders in quoted companies should ask their managers questions immediately they find out that there is instability in the statistics of the organization’s return on the asset and return on equity of their companies.

Keywords: Meltdown, Manufacturing companies, gross domestic product, unemployment

1.1 Introduction
In economics, a meltdown is a business cycle contraction, a generally downturn in economic activity (Meriam-Webster, 2008). During downturn, many macro-economic indicators change in a similar manner. Production, Gross domestic product(GDP), occupation, investment spending, capacity use, household income, business gain and inflation will all fall, while bankruptcies and unemployment rate rise. The National Bureau of Economic Research (2008) defines an economic downturn as a substantial decline in economic activity spread across the economy, lasting more than just a couple of months, normally visible in real GDP, real income, employment, industrial manufacturing. The global financial crises began in the United State of America and the United Kingdom when the international credit market came to a standstill in July 2007 (Avguoleas, 2008). The crisis, brewing for a while, actually begun to show its impact in the center of 2008. Around the world stock markets have fallen, large financial institutions have collapsed or been bought out and authorities in even the weakest nation have needed to come up with rescue packages to bail out their financial procedures (Abdul, 2009). Nigeria businesses were in shambles as a result of financial meltdown which bedeviled the economy of United States of America in 2008. Till date some of our businesses, more notably from the Textile industry haven't recovered from the effect of economic meltdown inspite of this bailout fund given to them from the government. The ripple effect of economic meltdown in our industries includes, low power usage, horrendous nosedive in the stock exchange prices, higher production costs as a consequence of general collapse of infrastructure; especially electricity, labour turnover, factory finishing, incredible shrinkage in investments and investors shifting their productive cases to neighbouring nations (Akin, 2010, Avguoleas, 2008). The collapse of the current infrastructure has enormous effect on the production businesses which uses, diesel industrial oil to power their plants during power outage. This higher cost of production led to low capacity utilization and also made our industries increasingly less competitive in the global economy (Lyman, 2004). Economic recession generated harsh economic climate in Nigeria, that is evidenced by high energy cost, higher bank interest rate, in excess of 30% to buy dollar in foreign exchange market (N154 to $1US) which subsequently catapulted to N500 to $1US and later dropped to N360/US$. Some of the Multinational companies such as Dunlop plc and Michelin plc relocated to neighboring countries because of harsh economic climate. The horrendous nosedive in stock exchange prices reduced level of investment in inventories in manufacturing industries. Many of the manufacturing businesses were delisted from the stock exchange due to poor performance and closing and investors no longer acquire their shares. The dilemma of expansion was also made difficult in manufacturing businesses by low stock prices and delisting of businesses at the stock exchange. There were enormous labour turnover (Layoffs) as a consequence of reduced capacity utilization and factory closure. Textile sector was the hardest hit with roughly 80% of its factory closed down. Most industries were producing blow 50% potential utilization. The dwindling condition of this market made naira speed of exchange
into US dollar very unstable and tremendously high. It introduced difficulty on importation of spare parts, equipment and raw material for production businesses economic meltdown which later turned to economic recession is a period of economic downturn including reduced output, illiquidity and unemployment. It is characterized by its length, abnormal increases in unemployment, falls in the access to credit, decreasing output and investment, a lot of bankruptcies, reduced levels of trade and commerce, in addition to highly volatile relative currency value changes, largely devaluations, monetary crises and bank collapse. (Chukwu, Liman, Enudu and Ehiaghe, 2015).

The present economic crisis is thought to have arisen from over reliance on marketplace mechanism from the George Bush administration of the United State of America by means of unregulated credit growth in the fiscal industry, especially credit to house owners. The World Bank and the International Monetary Fund (IMF) in the 1980s provided the free market philosophy to a lot of African countries throughout the Structural Adjustment Programmes (SAP) introduced and enforced on these countries. Though the collapse of the SAP in the majority of African countries is still visible till today, in form of growing poverty, its free market philosophy persists in the kind of flexible exchange rates; market determined interest rates in the monetary industry and continuing privatization of hitherto public owned enterprises Elumelu (2011). For over three years now, the global economy has experienced the most traumatic moments in several decades. Although in certain quarters, there seems to be a glimmer of hope, the measurements in which the crisis manifested itself have made analysts to describe the situation as possibly the worst economic recession since the Great Depression of the 1930s. Really, for the very first time, the world market has witnessed stagnation or minimum growth since over seven decades. In the root of the new financial crisis was the "look for yield" by financial institutions and investors. The increasing integration of financial markets and the obvious relative stability of innovative economies, led investors and financial institutions to begin to search for profitable investment opportunities which led to over optimism, leverage and speculation. (Chukwu, Liman, Enudu and Ehiaghe, 2015).

Since the 1970s, Nigeria has neglected its production base, choosing instead to depend on the revenues from the oil & gas reserves to drive its economy. Nigeria's most important manufacturing industries include; beverages, cement, cigarettes, food processing, textiles and detergents. Manufacturing is increasingly significant to the Nigerian market, as the government tries to enlarge the non-oil sector to reduce its dependence on oil. The manufacturing sector in Nigeria accounted for 4.02 percent of GDP in 2007, up from 3.91% in 2006; it has also contributed to about 4.2 percent GDP in 2009, up from 3.6% in 2008. The businesses' contribution to GDP has changed a bit in the last one decade. Even as industries like cement and beverages attract investments from home and abroad, other industries are shutting up shops; between 2000 and 2010, more than 850 manufacturing industries have either been shut down or have temporarily stopped production. (Chukwu, Liman, Enudu and Ehiaghe, 2015).

One of the key reasons behind industrialization is the expansion and generation of employment. According to Oladokun (1979), the proportion of the labor employed in the manufacturing sector has slowed down considerably, which arose as a result of the under-utilization of power. In the manufacturing sector, the potential utilization in 1980 has been 70.1%, and by 2000, it was under 35%. Kayode (1978), expressed that made us to feel that the industrial sector and particularly, the production sub-sector is the heart of any market. He went further to affirm that faulty or poor industrial development policies have long been recognized as important factors that adversely affect the well-being and socioeconomic improvement of the people in the developing nations. He argued that such policies are the significant factors contributing to decline value added and reduced economic development.

Uzaoga (1981) also threw more light on the functioning of the manufacturing industry in Nigeria. He made us to believe that Nigeria being a colony of Britain had to focus on the production of raw materials while Britain served as the primary provider of fabricated goods. According to him, this unfortunate pattern of investment promoted the concept based on a static theme of comparative advantage. Consequentially, diverting the Nigerian economy into actions that offered little opportunity for technical advancement. The couple industries established relied upon foreign inputs. All these distortions according to him influenced the performance of the industrial sector concerning its contribution to the gross domestic product, employment creation, capacity utilization; value added and export that are indices for measuring the performance of the manufacturing sub-sector. Investment construction in the manufacturing sector also impacts the operation of the sector, looking at it from aggregate investment behavior in the sector. Value added is a critical index in measuring the significance of the manufacturing industry in the economy.

1.2 Statement of Problem
Economic meltdown has lead to the sectoral decline, of most aspect of the Nigeria economy, infact, the manufacturing sector were seriously affected because they were denied assesses to the working capital, since, most banks preferred giving short term loans to importers at high interest rate than to manufacture who banks preferred giving short term loan to importers at high interest rate than to manufacturer who require long term loan to
importers at high interest rate than to manufacturer who require long term loans at low interest rate. These problems made it difficult for manufacturing organization to obtain raw materials for their production and also made it difficult for consumer product distributors inability to access loan, which resulted to unsold inventories wasting in warehouses across the country. To reduce these problems, different administration have tried to introduce and implement different social, economic and political reforms. These reform programmes could neither be described as success nor failure because they were abandoned halfway, calling into question the real intention of the government of the day that might have introduce them. The problem of this study is therefore to consider why most reform put in place by the government to reduce the effect of economic meltdown/recession on manufacturing companies have not had much impact on the performance of the manufacturing sector.

1.3 Objectives of the Study
The overall of this study is to determine the impact of economic meltdown on performance of manufacturing companies, while the specific objective are to;
- ascertain if there is any significant relationship between gross domestic product and return on asset of the selected quoted manufacturing companies in Nigeria.
- determine if there is any significant relationship between gross domestic product and return on equity of the selected quoted manufacturing companies in Nigeria.

1.4 Research Hypotheses
\[ \text{Ho}_1 \] There is no significant relationship between gross domestic product and return on asset of the selected quoted manufacturing companies in Nigeria.
\[ \text{Ho}_2 \] There is no significant relationship between gross domestic product and return on equity of the selected quoted manufacturing companies in Nigeria.

2.1 Conceptual Framework
2.1.1 Concept of Manufacturing Companies
Manufacturing industries came into being with the occurrence of technological and socio-economic transformations in the Western countries in the 18th-19th centuries. This period was widely known as industrial revolution. It all began in Britain and replaced the labour intensive textile production with mechanization and use of fuels. Manufacturing sector are categorized into engineering sector, construction sector, electronics sector, chemical sector, energy sector, textile sector, food and beverage sector, metal working sector, plastic sector, transport and telecommunication sector.

In recent time, some manufacturing industries in Nigeria have been characterized by declining productivity rate, by extension employment generation, which was caused largely by inadequate electricity supply, smuggling of foreign products into the country, trade liberalisation, globalisation, high exchange rate, and low government expenditure. Therefore, the slow performance of manufacturing sector in Nigeria is mainly due to massive importation of finished goods and inadequate financial support, which has resulted in the reduction in capacity utilization and input of the manufacturing sector in the economy (Tomola, Adebisi and Olawale, 2012).

Furthermore, in Nigeria, the level of growth in manufacturing sector has been affected negatively because of high interest rate on lending and this high lending rate is responsible for high cost of production in country’s manufacturing sector (Adebiyi and Babatope, 2004; Rasheed, 2010). Hence, Okafor (2012) observed that the level of Nigerian manufacturing industries’ performance will continue to decline because of low implementation of government budget and difficulties in assessing raw materials and stiff competition with foreign firms.

From 1982 to 1986, Nigeria’s value added in manufacturing fell considerably partly because of inefficient resources allocation caused by distorted prices and prohibition of importation. Between 1986 to 1988, the World Bank induced Structural Adjustment Program (SAP) in the economy’s economy contributed to larger increase in manufacturing industry contribution to GDP, which grew 8 percent in 1988. The deregulation of foreign exchange market was also reckoned with and made manufacturing industries more competitive by increasing input costs (CBN, 2010). Looking at the manufacturing sector share in the GDP in recent years (1990-2010), it has not been relatively stable. In 1990, it was about 5.5% while it drops to 2.22% in 2010.
2.2 Theoretical Framework

2.2.1 Theory of Competitive Advantage

Even if a nation can create everything, better than another country, there is still scope for commerce. A country can maximize its wealth by putting its assets into its most competitive businesses, irrespective of whether those countries are more competitive in those industries. This is called the Law of competitive edge. The idea of comparative advantage was first mentioned in Adam Smith's Novel; The Wealth of Nations; "If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy them off with some part of the produce of our own industry, employed in a means in which we have some benefit". However, the law of comparative benefits was devised by David Ricardo who investigated in detail, benefits and alternative or relative opportunity in his 1817 book on the fundamentals of Political Economy and Taxation. In an example between England and Portugal. In Portugal, it is possible to produce both wine and cloth with less labour than it would take to produce the same amounts in England. On the other hand, the relative cost of producing those two products are different in the two nations. In England, it is very difficult to produce wine, and only moderately hard to produce fabric. In Portugal, the two are easy to produce. As a result, while it is cheaper to make cloth in Portugal compared to England; it's cheaper still for Portugal to produce extra wine and trade that for English cloth.

Conversely, England benefited from this trade because its cost of producing cloth hasn't changed but it could now get wine at a lower price, nearer to the price of fabric. The conclusion drawn is that every country can gain by focusing in the good at which it has comparative advantage, and trading which good for the other. (Satya Dev Gupta, 2015)

2.2.2 Marxist Theory

Many scholars have contributed different theories to describe economic crisis or international financial catastrophe. Kaldor, in 1940 constructed a model of trade cycle based on the Keynesian language of savings and investment. He revealed that trade cycle is the result of anxiety which push the market towards the equality of anticipated, expected, or intended (ex-ante) investment and saving. Kaldor shows the stability and instability conditions in the form of linear diagrams, through the cycle is only possible when savings and investment are non-linear. The forces that bring about reduced turning point are not so sure at the higher degree. A boom left to it is sure to come to a conclusion but depression might get into a position of stationeries and stay there until external fluctuations (the discovery of new niches) come to rescue. Thus the cycle in this model are not necessarily symmetrical, as a matter of fact, they rely upon the slopes of savings and investment curves and the pace at which they shift in each stage of the cycle. (Ojo & Boboye, 2012).

Marxist Theory of Trade Cycle based on market capitalism is intrinsically prone to crisis. In Marx's perspective, profit is the significant engine or the market-economy, but business (capacity) profitability has the tendency to drop, that recurrently creates crisis where mass unemployment occurs, industry fail, the rest of the capital is centralized and concentrated, sustainability is regained. In the long run, these crises have a tendency to be more severe and the system eventually fails. The Chamberlain Oligopoly Model suggested a stable duopoly solution understanding mutual reliance between the two sellers or nations. He asserts that every vendor behave in order to render his gain a max. In order to do this, he will put his total influence upon the purchase price, indirectly as well as directly. When a vendor stays passive to changes in cost or output of his rival, it is an immediate effect.
On the other hand, when a seller reacts to the price or output changes of his competitors and affects his own price or output, the influence is indirect. According to Chamberlain; when interdependence is realized between vendors, both direct and indirect impacts of a change in the purchase price or output of a seller leads to a stable industry equilibrium with monopoly output and price (Ojo & Boboye, 2012).

2.3 Empirical Framework.
Dickson (2007) critically examine the recent trends and patterns in Nigeria’s industrial development using descriptive study. The study indicates that the level of manufacturing industry in Nigeria is concentrated in the southern and some eastern part of the country and that the spatial pattern could change if the industrialists adopt the strategy of industrial linkage. This finding did not support any school of thought as it suggests that policy on privatisation of industry in Nigeria should be enhanced. Ayai (2008) in a study of the collapse of Nigeria’s manufacturing sector, used cross-sectional research design and found out that the main cause of collapse in Nigeria manufacturing sector is low implementation of Nigerian budget especially in area of infrastructure. This means that low implementation of fiscal policy affects the level of growth in Nigerian manufacturing sector.

Rasheed (2010) investigated the productivity in the Nigerian manufacturing sub-sector using co-integration and an error correction model. The study indicates the presence of a long-run equilibrium relationship index for manufacturing production, determinants of productivity, economic growth, interest rate spread, bank credit to the manufacturing sub-sector, inflation rates, foreign direct investment, exchange rate and quantity of graduate employment. This finding has research gap on the area of factors that affect manufacturing sector in Nigeria.

Sangosanya (2011) used panel regression analysis model and Gibrat’s law of proportionate effect in investigating firm’s growth dynamics in Nigerian manufacturing industry. The study observed that the manufacturing firms finance mix, utilization of assets to generate more sales, abundance of funds reserve and government policies are significant determinants of manufacturing industry growth in Nigeria. This result means that the manufacturing sector financial performance and long-term sources of fund option determines the growth of manufacturing sector in Nigeria.
2.4 Methodology
The study is based on an ex-post-facto research approach, and the analyses were done using five manufacturing companies, which were selected using purposive sampling, the companies selected are Cadbury, International Breweries, Wapco, Nigeria Breweries, and Beta glass Plc. The statistical analysis of the study was done using Multiple Regression analysis, this approach was adopted because it has been used by Atoyebi, Okafor, Falana (2014) in a study similar to the one considered in this study.

2.5 Model Specification for Regression Analysis
The model specification used in this study is based on the description of the relationship between the dependent and independent variables of this research work.

\[ Y = f(X) \]  

(i)

Where \( Y \) = Dependent Variable represented by Performance of Manufacturing companies

But \( Y = f(Y_1, Y_2) \)

Where \( Y_1 \) = Gross domestic product

But, \( X = f(X_1) \)

Where \( X_1 \) = Return on asset

\( X_2 \) = Return on equity

The multiple linear regression model for this study is defined as:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + e \]  

(ii)

By substituting the above into the multiple linear regression models above, we have:

\[ Y = \beta_0 + \beta_1ROA + \beta_2ROE + e \]  

(iii)

2.5.1 Hypotheses Testing
Decision Rule: Accept Null hypothesis if the P-Value obtained using SPSS is greater than 0.05 which is the alpha level specified in SPSS for this analysis. But, if, otherwise, reject it and accept the Alternate Hypothesis.

- Statistical Analysis for Hypothesis One

\[ H_0: \text{There is no significant relationship between gross domestic product and return on asset of the selected quoted manufacturing companies in Nigeria.} \]

Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>1</td>
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<td>.636</td>
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<td>.10315</td>
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ANOVA

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<td></td>
<td>Residual</td>
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<td>.010</td>
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<td></td>
<td>Total</td>
<td>2.004</td>
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<tbody>
<tr>
<td>1 (Constant)</td>
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<td>.038</td>
<td>14.878</td>
<td>.000</td>
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<tr>
<td>ROE</td>
<td>.557</td>
<td>.239</td>
<td>-.156</td>
<td>2.330</td>
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</table>
• Interpretation for Hypothesis one
The regression analysis computed for hypothesis one above reveals that the model summary established that the value for “R” also called Pearson Correlation is “0.798” which indicates a positive correlation exist between gross domestic product and return on asset in the selected quoted companies. Furthermore, model summary result shows that the R-square value called coefficient of determination is 64%(0.636) this implies that 64% of the dependent variable can be explained by the independent variable. While the other 36% can be explained by other factors outside the model. The Regression analysis for the hypothesis one also establishes that the result of the ANOVA and Regression coefficient reveals that the P-value obtained (i.e.0.002) was lower than the critical value of 5% specified in SPSS for this analysis.

• Statistical Analysis for Hypothesis two
Ho: There is no significant relationship between gross domestic product and return on equity of the selected quoted manufacturing companies in Nigeria.

<table>
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ANOVA

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Regression Coefficient

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<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<tr>
<td>1 (Constant)</td>
<td>.571</td>
<td>.038</td>
<td>.14.878</td>
<td>.422</td>
</tr>
<tr>
<td>PAT</td>
<td>-.557</td>
<td>.239</td>
<td>.112</td>
<td>2.330</td>
</tr>
</tbody>
</table>

• Interpretation for Hypothesis two
The regression analysis above shows that the model summary values indicates that the value for “R” also called Pearson correlation coefficient is “0.993” which indicate that a strong association exist between gross domestic product and return on equity in the selected quoted companies. This result was also corroborated by the statistical output of R-square also called coefficient of determination which is 99% (0.986) and this implies that 99% of the dependent variable can be explained by the independent variables, while the other 1% can be explained by other factors outside the model. The Regression analysis also reveals that the result of the ANOVA AND Regression coefficient shows that the P-value obtained (i.e. 0.001) was lower than the critical value of 5% specified in SPSS for this analysis.

2.6 Discussion of findings
Economic meltdown which equally transferred to recession has significantly affected the activities of most sectors quoted in the Nigerian stock exchange, this is because the result of the financial indicator of the quoted companies found in this sectors has been continually nose-diving, and unstable in recent times. This shows that the economic meltdown has strong influence on the operation of these organizations. This explanation is corroborated by the result of the operation of this organization. This explanation is corroborated by the result of the statistical analysis of this research work which shows that the impact of the economic meltdown measured using gross domestic has significant influence on the financial parameter, such as return on asset, return on equity of the selected manufacturing company, hence any changes in the value of gross domestic product will also have a proportional influence on the financial indicators.

2.7 Conclusion and Recommendation
The study concluded that economic recession is a serious challenge facing every aspect of the Nigerian economy. It also concluded that gross domestic product has significant positive relationship with return on asset, this is because the output of the regression analysis shows that the P-value obtained (0.002) was lower than the significance value of 5% specified in SPSS for this analysis. The study also concluded that the gross domestic product have significant relationship with return on equity of the selected money deposit banks, since, the
statistical analysis has proven that the P-value obtained (0.002) using regression analysis was lower than the significance value of 5% specified in SPSS for this analysis, based on this conclusion, the following recommendation are suggested.

i. Management of organization should not over estimate its return on asset employed during the period of recession since the statistical analysis above has shown that economic recession has serious impact on it.

ii. Shareholders of manufacturing companies should question the managers of the organizations whenever there is fluctuation in the return on equity during the economic recession period, because the empirical computation has confirmed that the recession has direct proportional impact on the value of return on equity of the selected quoted manufacturing companies in Nigeria.

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