The Effect of Working Capital Management on Market Value of Quoted Food and Beverages Manufacturing Firms in Nigeria

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Abstract
The main objective of this research was to examine the effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. Working capital management was proxied by Account Collection Period (ACP), Inventory Conversion Period (ICP), Account Payment Period (APP), Cash Conversion Cycle (CCC) and Aggressive Investment Policy (AIP) while market value was proxied by Tobin Q. Survey research design was employed using primary data. Pearson Product Moment Correlation and multiple regression analysis were used to determine the effect. The study found out that working capital management had significant positive effect on market value of food and beverages manufacturing firms in Nigeria. Also, the outcome of this study shows that Cash conversion cycle, Account Collection Period, Inventory Conversion Period, Account Payment Period, and Aggressive Investment Policy had significant effect on market value of food and beverages manufacturing firms in Nigeria.

Keywords: Market Value, Tobin Q, Aggressive investment Policy, Working capital components.

1. Introduction
The platform on which business operates is asset. This asset is broadly classified into fixed and current assets. Fixed assets are: Land and Building, Machinery, Motor Vehicle, Equipment etc. while current assets are: cash (both in Bank and on hand), marketable securities, receivables, inventory and prepayment. Both categories of assets are dependent on one another and are necessary for smooth running of a going concern. Fixed assets cannot stand in isolation of current assets and vice versa. The ratio of current assets to fixed assets varies from one sector of the economy to another. For instance, current assets needed in a manufacturing firm are more than half of the total assets. While in retail business it is even more. The size and relative volatility of current assets makes it necessary for such assets to be monitored closely (Appuhami, 2008)

Working capital is an important concept in financial management. It is a trading capital that is required to meet the short term financial obligations of a firm. In the opinion of AL Shubiri (2011) working capital refers to current assets minus current liabilities.
Current assets consist of cash, receivables and inventory while current liabilities comprise trade creditors, bank overdraft, and other debt obligations due within one year. In a nutshell, working capital is the difference between current assets and current liabilities in one accounting year.

For all firms, in both developed and developing economies, one of the fundamental objectives of working capital management is to ensure that they have sufficient, regular and consistent cash flow to fund their activities (Agyei and Yeboah, 2011).

In many Nigerian manufacturing firms, cash is unnecessarily tied up in stock and receivables due to the inability of finance managers to put in place measures that will ensure optimal combination of the various components of working capital. The problem of satisfying the conflicting requirement of corporate liquidity and profitability has remained a source of major concern to financial managers in the face of high level of competition, increasing cost of capital and hyperinflation (Salawu, 2007).

According to Jinadu (2010), some promising investments with high rate of return had turned out to be failures and were frustrated out of business because of inadequacy of working capital. In the light of this, working capital management of food and beverages manufacturing firms which is a growing and dynamic sub-sector of the Nigerian manufacturing sector should be given proper attention so that profitability and shareholders wealth can be maximized.

What informed the choice of Food and Beverages Firms in Nigeria was the fact that all components of working capital management as measured by cash conversion cycle (i.e. account receivables, inventory, and account payables) were readily available in this sector of Nigerian economy. Also, Food and Beverages firms are essential to life and growth of any economy (Nigeria inclusive).

Searching through the existing literature, there is deearth of works as regards the relationship between working capital components (account receivables period, inventory conversion period, and account payment period) and firm's market Value of quoted food and beverages manufacturing firms in Nigeria. This is the gap that this research seeks to fill in the body of literature.

The main objective of this study is to analyze the correlation between working capital management and market value of food and beverages firms listed on the Nigerian Stock Exchange. The research question is: what is the correlation between working capital management and market value of quoted food and beverages manufacturing firms in Nigeria? and the hypothesis is – There is no significant relationship between working capital management and market value of quoted food and beverages manufacturing firms in Nigeria.

2. Literature Review

2.1 Concept of Working Capital

In the opinion of Umara, Sabeen, & Qaisar (2009) Working capital refers to the lifeblood of any organization. It is lifeblood of business, in the sense that without it, there is no business. In support of this fact, Nwankwo and Osho (2010) opined that working capital is the amount of funds that a company needs to finance its day-to-day operations. Thus, working capital is required essentially to meet the daily financial needs of a business enterprise in order to ensure smooth operations.

In an attempt to define working capital, Ramachandran and Janakiraman (2009) refer to it as funds invested in current assets, which in the ordinary course of business can be turned into cash within a short period without being devalued and without disruption in the operation of the organization. They further assert that current liabilities are debts which are intended to be paid in the ordinary course of business within a short time.

2.2 Working Capital Management

Working capital management has to do with using the fund that is needed to run the day-to-day operations of an organization efficiently in order to achieve the aims and objectives of the organization (Nwankwo and Osho, 2010). According to kehinde (2011), Working Capital Management is the totality of management of cash, debtor, prepayments, stocks, creditors, short term loans, accruals, etc. to ensure profitability of the firm. From the assertions made above, it could be said that it is possible to have enough working capital but not making maximum profit from it because of poor management of its components.
In a simple form, working capital management can be referred to as the administration of both current assets and current liabilities components (Uremadu, 2004; as cited in Egbide, 2009). The point here is that optimal balance should be maintained in the management of working capital. There should not be over investment or under investment in working capital. The main objective of working capital management is to maintain an optimal mix of inventories, receivables and payables (Bellouma, 2010). To achieve optimal mix, Egbide (2009) opines that rash decision due to urgency should be minimized in the management of working capital.

Working capital management is important in business because of its impact on a firm’s profitability and risk, and consequently its value (Sonia and Pedro, 2010). Efficient management of working capital is crucial to the growth and survival of firms.

As cited in Umara et al. (2009), Padachi (2006) states that management of working capital is important to the financial health of business of all sizes because the amounts invested in working capital are often high in proportion to the total assets employed. In light of the largest percentage that working capital form in relation to the overall assets of a manufacturing company in particular, proper attention should be given to the management of current assets, current liabilities and the relationships that exist between them.

2.3 Factors Determining Working Capital

In working capital management, there are many factors to be considered in determining the working capital required by a business. As identified by Nwankwo and Osho (2010), factors such as: industry practice, corporate size, current assets, market share, nature of business, and business environment are significant determinants of working capital management in an organization. As cited in Valipour and Moradi (2012), (Horrigan1965; Luo 1984; Liu 1985; Zhou, 1995; and Su, 2001) found in their various studies that: growth of the firm, size, leverage among other factors affect the working capital of a company.

2.4 Measurement of Working Capital

Many researchers have used proxies such as current ratio, quick ratio, cash ratio, net trade cycle, cash conversion cycle and relative solvency ratio for working capital management. The first three proxies are commonly referred to as traditional measurement of working capital; net trade cycle/ cash conversion cycle were later used as a dynamic measurement of working capital. Cash conversion cycle is one of the important measures of liquidity than the current ratio that affects profitability (Ramachandran and Janakiraman, 2009).

In 2005, a sophisticated proxy for working capital management was developed by Enyi. As cited in Singh and Asress, (2011), Enyi (2005) believes that the traditional and dynamic measures of working capital as mentioned above are incapable of predicting the financial crisis that may likely occur in the foreseeable future of a business enterprise. The model he developed is called Relative Solvency Ratio (RSR), this model has the capability of predicting future financial crisis.

2.5 Financing and Investing in Working Capital

In the opinion of Appuhami (2008) working capital management has to do with finding the various sources of short term finance and investing in short term assets. From the concept of working capital as discussed above, it is imperative that finance manager of any business must know where to invest that will yield quick returns whenever working capital reaches certain level compare to the operational level of such business. In the same vein, the finance manager must know where to get finance when working capital is below the operational level of such business.

However, finance manager should be aware that financing working capital has its own risks which should be properly considered in management of working capital. According to AlShubiri (2011) financing working capital involves two main factors and they needs to be considered very well. These factors are: the risk of the finance used and the cost of finance. Whether you use own capital or borrowed capital, there is cost for it. This risk of using borrowing capital is that if such capital is not judiciously used and all terms and conditions of such finance are not complied with, the going concern of such business may be threatened. In the management of working capital, adequate attention should be given to ratio of current liabilities to total assets and ratio of current asset to total assets. This will help to know the degree of aggressiveness of investment in working capital and degree of aggressiveness in financing working capital.
2.6 Concept of Market Value

One of the corporate objectives of any firm is to maximize the wealth of its shareholders by maximizing the market price of its shares. In other words, performance on the stock market is an index of corporate success. Any corporate entity experiencing a rise in the market price of its stocks is considered a good bet by the investors. However, profitability of an enterprise is a prerequisite for its performance in the stock market (Pandya and Parmar, 2011).

Tobin Q is a popular measure of market value. Tobin’s Q was introduced by Tobin as an appropriate measure of performance in 1969. Market Value of Firm is calculated as the firm closing price times the number of shares outstanding. Tobin’s Q is defined as Market value of equity plus book value of debt divided by book value of assets. The decision rule for the Tobin’s q value is as follows; if the Tobin’s q value is between 0 and 1, this means that the firm assets value is higher than the value of the firm stocks, this implies that the firm stock price is undervalued and if the value is higher than 1, this means that the firm assets value is lower than the value of the firm stocks, this implies that the firm stock price is overvalued.

2.7 Empirical Review

Salawu (2007) examined the relative relationship between the aggressive/conservative working policies of forty-two (42) quoted companies in fifteen (15) different industries in Nigeria over a period of ten years (1994–2003). He found that there is a significantly negative correlation between industry asset and liability policies. He suggests that a firm pursing aggressive working capital investment policy should match it with a conservative working capital financing policy and that firms should consider the policies adopted in its industry in adopting its working capital policies.

Nazir and Afza (2009) investigated the relationship between working capital management policies and firm’s market value of 204 non-financial firms listed on the Karachi Stock Exchange (KSE) in Pakistan using the panel data set of 1,632 year-end observations for the period 1998-2005. The outcome of their study demonstrates a negative relationship between the degree of aggressiveness of investment policy and firm’s Market Value (Tobin’s q). Also, it was found that there is a significant positive relationship between Tobin’s q and working capital financing policy.

NorEdi and Noriza (2010) carried out an empirical research on the associations between working capital management with firm’s performance using 172 randomly selected listed companies in Bursa Malaysia for the period of 2003 to 2007. They found significant associations between working capital variables with firm's market value. Specifically, the current asset to total asset ratio (CATAR) shows positive significant relationships with firm’s value (Tobin Q), whereas, cash conversion cycle (CCC), current asset to current liability ratio (CACLR), and current liability to total asset ratio (CLTAR) reveal negative significant relationship with firm’s value (Tobin Q).

ALShubiri (2011) investigated the relationship between aggressive/conservative working capital practices and profitability as well as risk for 59 industrial companies and 14 banks listed at Amman Stock Exchange in Jordan for a period of 2004-2008. Return on Assets (ROA) and Return on Equity (ROE) as well as market value (Tobin’s Q) were used as dependent variables while independent variables used were: Aggressive Investment Policy (AIP) and Aggressive Financing Policy (AFP). He found that aggressive investment policy is negatively related to market value (Tobin Q) and aggressive financing policy is positively related to Tobin Q.

Palani and Mohideen (2012) explored the impact of aggressive working capital management policy on firm’s profitability of 204 non-financial firms listed on the Bombay Stock Exchange (BSE) in India using a panel data of 1,632 year-end observations for the period 2002-2010. They found a negative relationship between aggressive investment policy (AIP) and Market value (Tobin’s Q). Furthermore, they found significant positive relationship between aggressive financing policy (AFP) and Tobin’s Q.

Ogundipe, Idowu, and Ogundipe (2012) observed the relationship between Working Capital Management and Firms’ Performance as well as Market Valuation in Nigeria using annual reports of fifty four non-financial quoted firms on the Nigerian Stock Exchange for the period 1995-2009. The results show working capital management (CCC) has a negative relationship with market valuation (Tobin Q). However, they found that Debt ratio (leverage) is positively related to market valuation (Tobin Q).
Furthermore, they found that current liability to total asset (CLTA) reveals an insignificantly relationship with Tobin Q. Finally, current ratio (CAACL) and current asset to total asset (CATA) were found to have no significant relationship with Tobin Q.

3. Methodology

Survey research design was adopted in this study using primary data via questionnaire administered on staff of audit and finance departments of the selected firms. Pearson Product Moment Correlation and multiple regression analysis were used to ascertain relationship between working capital management and market value of quoted food and beverages manufacturing firms in Nigeria. The sampling technique adopted in this study was simple random sampling. The total number of accountants and auditors in the 12 chosen firms was 171, out of which 120 were selected randomly. The staff in the Finance and Audit Departments of the 12 food and beverages manufacturing firms were 171. Using Yaro Yamane’s formula, the sample size arrived at was 120. Hence, 120 copies of questionnaire were administered on accountants and auditors of the chosen firms.

The computation is as follows:

\[
    n = \frac{N}{1 + Ne^2}
\]

Where \( n \) = Sample size

\( N \) = Population of Study

\( e \) = Tolerable error (5%)

Therefore:

\[
    n = \frac{171}{1 + 171(0.05)^2}
\]

\( n = 120 \)

3.1 Reliability of Research Instrument

<table>
<thead>
<tr>
<th>Construct</th>
<th>No of Questionnaire Items</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Investment</td>
<td>5</td>
<td>.788</td>
<td>.781</td>
</tr>
<tr>
<td>Inventory Conversion Period</td>
<td>7</td>
<td>.730</td>
<td>.732</td>
</tr>
<tr>
<td>Cash Conversion Period</td>
<td>12</td>
<td>.835</td>
<td>.849</td>
</tr>
<tr>
<td>Account Receivable Period</td>
<td>6</td>
<td>.777</td>
<td>.781</td>
</tr>
<tr>
<td>Economic Value Added</td>
<td>8</td>
<td>.724</td>
<td>.697</td>
</tr>
<tr>
<td>Market Value</td>
<td>4</td>
<td>.754</td>
<td>.761</td>
</tr>
<tr>
<td>Account Payment Period</td>
<td>5</td>
<td>.747</td>
<td>.762</td>
</tr>
<tr>
<td>Net Operating Profit</td>
<td>4</td>
<td>.724</td>
<td>.721</td>
</tr>
</tbody>
</table>

3.2 A priori Expectation

Market Value

\[
    \frac{\Delta MV}{\Delta AIP} > 0, \quad \frac{\Delta MV}{\Delta ACP} > 0, \quad \frac{\Delta MV}{\Delta ICP} < 0, \quad \frac{\Delta MV}{\Delta APP} > 0 \quad \frac{\Delta MV}{\Delta CCC} < 0
\]

Where \( MV \) is Market value, \( AIP \) is Aggressive investment Policy, \( ACP \) is Account Collection Period, \( ICP \) is inventory Conversion Period, \( APP \) is Account Payment Period and \( CCC \) is Cash Conversion Cycle.
3.3 Economic model of Variables

The variables for this study were categorized into two: Dependent variables and independent variables. The dependent variable for this study was Market value (Tobin Q). On the other hand, the independent variable for this study was working capital management which had its proxies as Account collection period (ACP), Inventory conversion period (ICP), Account payment period (APP), Cash conversion cycle (CCC), and Aggressive investment policy (AIP).

**Market Value** = f (account collection period, inventory conversion period, account payment period, cash conversion cycle, aggressive investment policy, aggressive financing policy)

**Market Value (Tobin Q)**

Tobin q is a market measure of a firm’s performance. It is calculated as (Market Value of Equity plus Book Value of Liability) divided by Total Assets

4. Presentation, Analysis and Discussion of Findings

The questionnaire was divided into three parts as stated below:

1. Bio-data section: Which comprises demographic data of respondents
2. Section B - Part I: Where closed ended questions on dependent and independent variables were asked. This section was divided into eight (8) sub headings with relevant questions under each of them.
3. Section B - Part II: Consist of open ended questions where respondents were free to make comments and contributions.

4.1 Correlation Analysis result of Working Capital Management and Market Value

Table 4.1: Correlations Analysis between Market Value and Working Capital Management

<table>
<thead>
<tr>
<th></th>
<th>CCC</th>
<th>AIP</th>
<th>ACP</th>
<th>ICP</th>
<th>APP</th>
<th>TobinQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIP</td>
<td>.385**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACP</td>
<td>.325**</td>
<td>.391**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICP</td>
<td>.318**</td>
<td>.593**</td>
<td>.154</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APP</td>
<td>.282**</td>
<td>.231**</td>
<td>.304**</td>
<td>.302**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TobinQ</td>
<td>.292**</td>
<td>.303**</td>
<td>.207*</td>
<td>.378**</td>
<td>.319**</td>
<td>1</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Computer Computation Using SPSS version 17

Table 4.1 shows correlation results between Market Value as indicated by Tobin Q and working capital management as indicated by CCC, AIP, ACP, ICP and APP. The correlation coefficient between Tobin Q and CCC is 0.292 which shows that there is an evidence of positive relationship between Market Value and Cash Conversion Cycle of food and beverages manufacturing firms in Nigeria. The relationship is significant at 0.01 level. The value of correlation coefficient between Tobin Q and AIP is 0.303 which shows that AIP has a positive relationship with Market Value. The relationship is equally significant at 1% level. The correlation coefficient between ACP and Tobin Q is 0.207, this implies that the relationship is positive; it is also significant at 5% levels. The correlation coefficient between ICP and Tobin Q is 0.378; this implies that the relationship between Inventory Conversion Period and Market Value of food and beverages manufacturing firms in Nigeria is positive and significant at 1% level. The correlation co-efficient between APP and Tobin Q i.e. 0.319 suggests that there is an evidence of positive relationship between Account Payment Period and Market Value of quoted food and beverages manufacturing companies in Nigeria, the relationship is significant at 1% level.
Table 4.2: Model Summary for Tobin Q

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.462(^a)</td>
<td>.213</td>
<td>.171</td>
<td>.54702</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Account Payment Period, Aggressive Investment, Cash Conversion Cycle, Account Collection Period, Inventory Conversion Period

**Source:** Computer Computation Using SPSS

From table 4.2 Correlation Coefficient (r) is 0.462 meaning that there is moderately positive correlation between Working Capital management and Market Value of food and beverages manufacturing companies in Nigeria.

**4.2 Regression result of Working Capital Management and Market Value**

The model is as shown below

\[
Tobin Q = \alpha + \beta_1 ACP_{it} + \beta_2 ICP_{it} + \beta_3 APP_{it} + \beta_4 CCC_{it} + \beta_5 AIP_{it}
\]

\[
Tobin Q = 0.247 + 0.099 ACP_{it} + 0.302 ICP_{it} + 0.219 APP_{it} + 0.194 CCC_{it} + 0.039 AIP_{it}
\]

<table>
<thead>
<tr>
<th>S.E</th>
<th>t-statistic</th>
<th>Significance</th>
<th>F-statistic</th>
<th>( R^2 )</th>
<th>Adj ( R^2 )</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1.023)</td>
<td>(0.242)</td>
<td>(0.810)</td>
<td>4.990</td>
<td>0.462</td>
<td>0.213</td>
<td>2.041</td>
</tr>
<tr>
<td>(0.191)</td>
<td>(0.518)</td>
<td>(0.606)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.146)</td>
<td>(2.072)</td>
<td>(0.041)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.123)</td>
<td>(1.777)</td>
<td>(0.079)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.159)</td>
<td>(1.217)</td>
<td>(0.227)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.113)</td>
<td>(0.344)</td>
<td>(0.732)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the regression result, ACP has positive effect on Market Value (Tobin Q) which means that as Account Collection Period increases, Market Value increases; ICP has positive effect on market value, which means that as Inventory conversion Period Increases, Market value of quoted food and beverages manufacturing companies in Nigeria increases, likewise, APP has positive effect on Market Value (Tobin Q) which means as Account Payment Period of these companies increases, their various market values increase, CCC also has a positive effect on Tobin Q meaning that as the former increases, the latter increases. Lastly, AIP has a positive effect on Market Value; this means that as food and beverages manufacturing companies in Nigeria intensify effort in aggressive investment policy, Market Value increases. Some of the results (relationships of market value with ACP, APP, and CCC) above are not in conformity with a priori expectations but AIP and ICP are in conformity.

The value of \( \alpha \) is 0.247, this means that, if food and beverages manufacturing companies in Nigeria pay less attention to ACP, ICP, APP,CCC and AIP, their Market Values will stand at approximately 25%. This shows that these components are not the only factors that influence Market values of these companies.

The coefficients of the regression equation however show that a day increase in account collection period will increase Market value of food and Beverages manufacturing companies in Nigeria by 9.9%. Also, a day increase in inventory conversion Period will bring about 30.2% increase in Market Value of these companies. Moreover, a day increase in Account Payment Period will increase Market Value of food and beverages manufacturing companies by 21.9%. A day increase in cash conversion cycle will increase Market Value by 19.4% and lastly if aggressive investment Policy is increased by 1%, Market Value of Nigerian quoted food and beverages manufacturing companies will increase by 3.9%.

F-statistic is used to test for overall significance of a model. The F-statistic value for this model is 4.990 and the significance level is 0.000. Since the significance level (0.000) is less than 0.05, the overall model is significant. That is, working capital management, as a whole has a significant effect on Market Value of food and beverages manufacturing firms in Nigeria at significance level of 0.05. This means that we have 95% confidence that working capital has a significant effect on market value of these companies.
The coefficient of determination ($R^2$) is 0.213. This means that, ACP, ICP, APP, CCC and AIP can explain 21.3% variation in Market Value of food and beverages manufacturing firms in Nigeria while the rest 79.6% of the variation will be explained by other factors not accommodated in the model. The adjusted $R^2$ however shows that the model has 17.1% fitness in explaining Market Value of these companies.

To test for first order serial correlation among independent variables, Durbin Watson was employed and since the calculated value, 2.041 is greater than 1.780, we conclude that there is no evidence of positive first order serial correlation among the working capital variables and market value of food and beverages manufacturing firms in Nigeria.

Test Using P-value

Test Results: The calculated P (significance) value is 0.000 which is less than 0.05. Hence, the null hypothesis is rejected and the alternative is accepted. Therefore, it can be concluded that working capital management has a significant effect on Market Value of Food and Beverages Manufacturing firms in Nigeria at significance level of 0.05.

Test Using ‘t’-test

Test Results: since the ‘t’ test of significance of $r$ is 9.34 while the table value is 1.66, it is therefore concluded that there is a significant relationship between Working capital management and market value of quoted food and beverages manufacturing firms in Nigeria, at 5% level of significance.

Test Using F-test

Test Results: From the analysis, we obtained the calculated value of $F$ which equals 9.021 and the $F$ – table value is 1.96 with n-k-1 degree of freedom (Berenson, Levine and Krehbiel, 2004) where n is 120, k = 7. Therefore, 120-7-1 = 112.Since 9.021 is greater than 1.96, the null hypothesis is rejected and therefore concluded with 95% confidence that working capital management has a significant effect on market value of quoted food and beverages manufacturing firms in Nigeria.

4.3 Discussion of Findings

Account Collection Period with Market Value: The results of our analyses show that Account Collection Period (ACP) has a significant positive effect on Market Value (Tobin Q) of quoted food and beverages manufacturing firms in Nigeria. The implication of this is that a day increase in account collection period will lead to proportional increase in Market Value of food and beverages manufacturing firms in Nigeria.

Inventory Conversion Period with Market Value: The results of the regression and correlation analyses show that Inventory conversion period has a significant positive effect on market value (Tobin Q). The implication of this is that a day increase in Inventory conversion period will lead to significant increase in Market Value of food and beverages manufacturing firms in Nigeria. Our result is at variance with the a priori expectation previously stated.

Account Payment Period with Market Value: The outcome of our analyses depicts that Account Payment Period has a significant positive effect on market value (Tobin Q). The implication of this is that a day increase in Account payment period will lead to significant increase in Market Value of food and beverages manufacturing firms in Nigeria.

Cash Conversion Cycle with Market Value: The outcome of these analyses depicts that Cash conversion cycle has a positive and significant effect on market value (Tobin Q) of food and beverages manufacturing firms in Nigeria. The implication of this is that a day increase in Cash conversion cycle will lead to significant increase in Market Value of food and beverages manufacturing firms in Nigeria. This result is contrary to the findings of previous researchers such as (NorEdi and Noriza, 2010; and Ogundipe et al., 2012) who found that there is negative relationship between cash conversion cycle (CCC) and market value (Tobin Q).

Aggressive Investment Policy with Market Value: The outcomes of our analyses indicate that Aggressive Investment Policy has significant positive effect on market value (Tobin Q) of food and beverages manufacturing firms in Nigeria. The implication of this is that a day increase in Aggressive Investment Policy will lead to remarkable increase in Market Value of food and beverages manufacturing firms in Nigeria. This is at variance to the outcome of the study of Ogundipe et al.
(2012) who concluded that aggressive investment policy has no significant relationship with market value, but it is in line with the result of the studies of NorEdi and Noriza (2010) who found significant positive relationship with market value (Tobin Q). It is however different from the results of the works carried out by (Nazir and Afza, 2009; ALShubiri, 2011; Palani and Mohideen, 2012) in Pakistan, Jordan, and India respectively where it was revealed that aggressive investment policy (ratio of current assets to total assets) has significant negative relationship with market value (Tobin Q). However, it is worth noting here that our finding is in line with our a priori expectation as earlier stated in this study.

5. Conclusion and Recommendation

In conclusion, working capital management has significant positive effect on market value of quoted food and beverages manufacturing firms in Nigeria. Cash conversion cycle has significant positive effect on market value; Account collection Period has a significant positive effect on market value of quoted food and beverages manufacturing firms in Nigeria; Inventory Conversion Period has significant positive effect on market value of these companies. Account Payment Period has a significant positive effect on market value. Aggressive investment policy has significant positive effect on market value of food and beverages manufacturing firms in Nigeria.

This study therefore concludes that food and beverages manufacturing firms in Nigeria cannot maximise its profit as well as shareholders’ wealth without paying proper attention to the management of the various components of its working capital.

It is suggested that more efforts should be directed at aggressive marketing so as to boost sales and in turn increase profitability as well as market value of food and beverages manufacturing firms in Nigeria. Also, these firms should shift from moderate investment policy to aggressive investment policy. This step will help to improve the performance of firms in this sector.
References


www.meristem.com.ng
www.worldbankdatabase.org.ng