

Research Article

Working Capital Management Practices In Agricultural/Agro-Allied Quoted Firms

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ABSTRACT

This study investigated the working capital practices of quoted agricultural/Agro-allied firms listed on the Nigerian Stock Exchange (NSE) from 2000-2014. Quantitative approach was used to find the working capital practices of the firms. The study discovered that in days-period the sector as a whole was a net credit receiver in time but some of the individual firm ended up in some years as net extenders of credit in time. On monetary value terms the Livestock feeds was the most receiver of net credit with most conservative credit policy, Presco was the most extender of net credit thereby operating the most liberal credit policy. While FTN could be said to have being operating matching credit policy on the average to smoothen the policy over the years, Okomu operated a moderate policy interspersed with aggressive policy. The agricultural/agro-allied sector firms operated a mixture of net credit extenders and receivers in time and value. In all the firms except in Livestock feeds the aggressive working capital investment practices were followed by aggressive working capital financing policy. That is the lower the investment in working capital the lower the amount of current liabilities.

Keywords: Working Capital, management, credit extender, credit receiver, credit policy, total asset.

1.INTRODUCTION

There are two concepts of working capital. One is the accountant view which defines working capital as current assets minus current liabilities, which in other words is called net working capital. The second one is the financial view which defines working capital as the total amount of investment in current assets of a business, which in other words is called gross working capital. Though the accountant takes working capital as the surplus of the total amount of investment in current assets of a business over the current liabilities incurred, in this study, working capital is defined as the total amount of investment in current assets available for the daily operations of the business or for conversion of raw materials into finished goods which the business sells to generate cash flows. The necessary components of a firm's working capital depend on the type of business and industry but basically stocks, debtors, prepayments; short term marketable securities Cash at hand and bank constitute the common components of firm's working capital. On the other hand, working capital management is the regulation, adjustment and control of investment/divestments in current assets and increases/decreases in current liabilities of a firm such that maturing obligations are met and the fixed assets are properly serviced. That is

regulation of current assets levels and provision of short-term funds to finance investments in current assets. It also involves the determination of optimum level of working capital to keep, monitoring and controlling the level of individual components of working capital to ensure that the optimum level is not exceeded. The optimum working capital level is that which avoids both over-capitalization and under-capitalization taking the nature of the firm's business and the level of operations into consideration.

It can be observed that in many firms the amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there exist evidences that some firms are not very good at managing their working capital upon the fact that management of working capital is important to the financial health of business of all sizes. Poor management of working capital results to liquidity problems which might lead to bankruptcy in very severe cases. The inability of financial managers to understand and establish a suitable working capital management policy can lead the firm to bankruptcy. This inability can be witnessed by the existence of under-capitalization/over-trading or over-capitalization/under-trading in some firms. A

firm can be very profitable but if this is not translated into cash from operations within the same operating cycle, it would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Excessive working capital results in unnecessary accumulation of inventories which in turn increases the dangers of obsolescence, deterioration, pilfering, mishandling, high insurance and carrying cost, idle assets which are barren of income, accounts receivable, poor profitability among others. Unnecessarily increasing accounts receivable indicates a defective credit policy which can lead to higher incidence of bad debts and loss of profits. Insufficient working capital makes difficult the implementation of operating plans and achievements of profit targets. Other demerits include stunted growth or growth stagnation and sluggish rate of return on investment as a result of non-availability of working capital to undertake profitable investments. The organization also loses its reputation, trust and confidence when it is not in position to honor its short-term maturing obligations. Operating plans suffer due to insufficient resources and this can result in operating inefficiency. Nwude (2004) submits that poor returns on investments can result from inefficient utilization of fixed assets due to insufficient working capital to oil the fixed assets. Islam and Rahman (1994) opine that optimum working capital enables a business to have its credit standing and permits the debts payments on the date of its maturity and helps to keep itself fairly in liquid position which enables the business to attract borrowing from the banks. It also helps to maintain all-round efficiency in operations. Of all aspects of financial management, working capital is one of the most vital.

Quite alright investments in current assets are inevitable to ensure delivery of goods and services to the ultimate customers but proper management of the same should give the desired impact on profitability and liquidity. If resources are blocked at the different stages of the supply chain, this will prolong the cash operating cycle. Although this might increase profitability (due to increase sales), it may also adversely affect the profitability if the costs tied up in working capital exceed the benefits of holding more inventory and/or granting more trade credit to customers. Another component of working capital on the liability side is the accounts payable but it is different in the sense that it does not consume resources; instead it is often used as a short-term source of finance. Thus, it helps firms to reduce its cash operating cycle but it has an implicit cost where discount is offered for early settlement of invoices.

2. LITERATURE REVIEW

2.1 Theoretical Concepts

Submissions for various researchers give the road map for the determination of net extenders and net receivers of credit in time period. Collections from Nwude (2004 and 2010) show that payable period less receivable period indicates whether the firm is net extender or net receiver of credit with respect to time period. If the difference is positive it shows that the firm is granted longer period to pay up its debts than it grants to its own debtors hence the firm is a net receiver of credit in time. If the difference is negative it shows that the firm grants longer period to its own debtors to pay up their debts than the time it is granted by its creditors hence the firm is a net extender of credit in time. This indicates liberal credit policy by the net extender of credit firm and conservative credit policy by the net receiver of credit in time. Payable amount less receivable amount measures the amount by which the firm is net extender or net receiver of credit on monetary value. If the difference is positive it shows that the firm is granted higher amount of credit than it grants to its own debtors hence the firm is a net receiver of credit. If the difference is negative it shows that the firm grants higher amount of credits to its own debtors than the amount granted to it by its creditors hence the firm is a net extender of credit. Again this indicates liberal credit policy by the net extender of credit firm and conservative credit policy by the net receiver of credit firm.

Some researches for instance by Peel and Wilson (1996), Zhao and Wijewardana (2012) show that a firm can adopt any of the three working capital management (WCM) strategies namely, matching, aggressive, and conservative approaches. Moderate or Matching WCM policy calls for moderate investment in current asset, though with forecast of low risk and low return. Aggressive WCM policy calls for less investment in current asset, though with forecast of high risk and high return. Conservative WCM policy calls for high proportion of capital in liquid assets though with lowest risk and lowest return or profitability. According to Zhao and Wijewardana (2012:697), an empirical investigation carried by Afza and Nazir (2007) revealed that the ratio to identify in which working capital policy (WCP) a firm belongs is current asset/total asset, that is CA/TA. The lower the ratio the more it tends to aggressive working capital management policy (AWCMP). The higher the ratio the more it indicates conservative working capital management policy (CWCMP). A moderate ratio shows matching working capital management policy (MWCMP). Tufail (2013) sees working capital management as an accounting approach that emphasize on maintenance of proper levels of both current assets and current liabilities. Pauraghajan,

Rekabdarkolaei and Shafie (2013), Nzioki et al. (2013), Reheman and Nasr (2007) agreed that working capital management is the determination of volume and composition of source and expenditure of working capital so that it increases shareholders wealth. Mamoun (2011) views it as the quality of current asset items that takes into consideration the trade-off between risk and return. Lazaridis and Tryfonidis (2006) harped that effective working capital management consists of applying the methods which remove the risk and lack of ability in paying short term commitments, prevent over-investment in current assets, planning and controlling current assets and liabilities.

Raheman and Nasr (2007) submit that the current assets of a typical manufacturing firm account for over half of its total assets and that distribution companies account for even more. Abdul and Mohammed (2007) claim that the current assets of a typical manufacturing firm accounts for over half of its total assets. Weinraub and Visscher(1998) observed a tendency of firms with low levels of current assets to have low levels of current liabilities. The study undertaken by Peel et al (2003) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows and a high reliance on short-term debt. They suggest that small companies tend to focus on some areas of working capital management where they can expect to improve marginal returns. Peel and Wilson (1996) assert that smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure as well as to enhance business performance. Given these peculiarities they stressed that efficient management of working capital and more recently good credit management practices as being pivotal to the health and performance of firms in the manufacturing sector. They further assert that for small and growing businesses, an efficient working capital management is a vital component of success and survival in terms of both profitability and liquidity.

However, the modern approach to working capital financing increasingly shows that the permanent band of current assets should be financed by a longer-term sources of finance, as shown in the works of Brealey et al (1995:438-459), ACCA (2003:2.4), Corman (1998:30-48), Deloof (2003:573-587), Farrgher et al (1999:137-150), Fink (2001:54-64), Greg et al (2005:20-35), Harris (2005:52-62), Howorth and Westhead (2003:14,26-35), Islam and Rahman (1994), Kennedy (1980:78-98), Myers (2000:59-82), Mohiuddin(1983:10-23), Md (2006:78-84), Van Horne (1977), Weinraub and Visscher (1998:39-46), Weisel, Harm and Bradley (2003:29-33).

2.2 Empirical review

A number of researchers had carried out studies on working capital management strategies and some of their findings are as follows. Nazir, Iqbal, Akram (2012) found that 66.3, 28.8, 4.8 percent of the Pakistani firms have a formal, informal, and none working capital policy, in terms of management of their working capital (WC). The responsibility for setting the WC policy in Pakistan lies at the top level of chief executive officer (CEO) followed by the director/General Manager finance and by chief financial officer (CFO). In the alternative the policy is set by the board of directors, management committee and in some cases they mutually decide on the WC policy. Nazir, Iqbal, Akram (2012), Belt and Smith (1991) find that the working capital implications are included in the long term capital budgeting decisions using either the firm's short term borrowing rate or the average cost of capital as the discount rate. Gentry et al(1979) compares the working capital practices in France, United States, India and Belgium. The main objective of the study was to compare the working capital objectives in the four countries. They found that the most important short run objective of the managers in these countries is to support the sales with the short term credit, receivables, cash and inventories. They also find that the short run objectives of the firms don't corresponds with the long term objectives, even though the theory has focused on the long term financial management. The result indicates that the firms are more focusing on the short run objectives.

Smith and Sell (1980), Belt and Smith (1991), Khoury et al (1999) used the survey method to investigate the working capital practices in different countries. The study that was conducted by Smith and Sell (1980) investigates the WC practices of the United States. The survey consists of 35 close ended questions for a sample of 653 of the larger U.S firms. The response rate in this survey was 32.2%. They founds greater differences in the WCM polices in the different firms. Belt and Smith (1991) used the same survey that was used by the Smith and Sell (1980), but they modified the survey to 38 questions. The response rate in this survey was 23.4%. The survey was conducted for the industrial firms in the United Sates. As compared to the previous survey the results indicates that the firms are more formal and sophisticated in terms of the management of its WC (Current assets and current liabilities). Belt and Smith (1991) replicate the same survey in Australia. The response rate in this survey was 27.1%. Then they compare their results with the Smith and Sell (1980) to make a comparison between the Australia and the United States. They found some similarities and also some differences in the WC practices in the two

countries. They found that the US firms are better in terms of inventory management, Marketable securities and credit collection.

The national banking system in Australia also helps the firms in more efficiency in payments. They also found that the Australian firms use more short term financing than the US firms. Generally they find that firms in both countries are more or less facing the same problems and responds in more or often the similar ways. Khoury et al (1999) conducted the same survey in Canada. They modified the survey to 45 questions. The 350 firms were selected from the 10 industrial groups. The response rate in this survey was 15.8% and only 57 useable responses were received for analysis. The comparison was made between the Canada and the result of previous surveys results in the Australia and United States. The comparison was made on the basis of WC policies, inventory management, and accounts receivable, managing WC and accounts payables. The results indicate that only 7% of firms in Canada had a formal WC policy. In inventory management the Canadian firms used old methods for managing inventory as compared to Australian and United States firms, which are using computerized methods. The differences that exist are due to the small response rate and the cultural differences in different countries.

Noreen et al (2009) study on the international WC practices using a questionnaire in the Pakistan. The response rate in their study was 83%. The four sectors that were used for the study are financial institutions (banks), petroleum and gas, telecommunication and service providers. The three areas that were discussed in the international WC practices are international sales, foreign exchange activities and international cash management. The results indicate that only 29% firms in Pakistan have the international operations (international sales) and that the decisions about the WCM are taken at the corporate levels, which shows the centralization of decision making about the WCM instead of at local or regional level. They find that the electronic funds transfer and wire transfer are the most popular used techniques in the international cash management because they are cost effective and speedy. The documents that were most used to make foreign payment are letter of credit, open account and documentary collection. In the foreign exchange the most used modes are spot market and forward market. Generally the methods that the firms used for international WCM were depending on the low cost and efficient methods.

Padachi and Howorth (2014) investigated into working capital management (WCM) practices of small to medium sized manufacturing firms operating in six industry groups of the Mauritian economy using a survey based approach. They

found non-homogenous group of WCM practices. Firms which experience severe late payment focused more on credit management and pay more attention to working capital financing while the smaller firms could not adopt formal analysis of WCM due to lack of need for it. Pieterse (2012) used a sample of 199 firms to study the working capital management practice of small and medium scale enterprises in the Western Region of Ghana. The results showed that 46.1% received credit from suppliers and the average credit period given by SMEs to their credit customers ranged between seven to sixty days (7- 60days). Talonpoika (2012) studied the relationship between advance payment and profitability of 108 companies listed in Helsinki stock exchange. Using statistical analysis like histogram the result indicated that 68 percent of the studied companies are receiving advance payments and the average cycle time for received advanced payments is 13 days and there is negative correlation between profitability and advance payments. Jafari, Salahinezhad and Jalili (2014) with 54 firms listed in Tehran Stock Exchange from 2002-2010 examined the effects of working capital management on firm's bankruptcy probability. CCC was used as a measure of working capital management while Altman model was used to measure the probability of bankruptcy. Using regression and ANOVA the results indicated that, there is a negative relationship between working capital management and the risk of bankruptcy which means that whenever a firm's cash conversion cycle is longer, it will be in a worse situation of bankruptcy risk. Using a 2-year (2011-2012) data set on 35 manufacturing companies listed on the Nigeria stock exchange Ajibolade (2013) shows a significant negative relationship between firm's working capital composition and their debt structure choice. The study found a positive significant relationship between debt structure, capital composition and profitability. Ramana, Ramakrishnaiah and Chengalrayulu (2013) studied the impact of receivables management on profitability using data of 4 cement companies in India for the period from 2001 to 2010. The ratios which highlight the efficiency of receivables management include receivables to current assets ratio, receivables to total assets ratio, receivables to sales ratio, receivables turnover, average collection period, working capital ratio and profitability ratio to know the impact on working capital and profitability. The investigation revealed that the receivable management across cement industry is efficient and showed significant impact on working capital and profitability. Gomes (2013) findings showed that there was a concave relationship between working capital management and profitability in the Portuguese firms indicating that firms have an

optional working capital level where firms should stand to maximize profitability.

In summary, some research studies have been undertaken on the WCM practices of both large and small firms in India, UK, US, Australia, New Zealand and Belgium as equally pointed out by Padachi and Howorth (2014) using either a survey based approach (Burns and Walker, 1991; Peel and Wilson, 1996) to identify the push factors for firms to adopt good working capital practices or econometric analysis to investigate the association between WCM and profitability (Shin and Soenen, 1998; Anand, 2001; Deloof, 2003; Singh and Pandey, 2008; Falope and Ajilore, 2009; Gill et al, 2010; Afza and Nazir, 2011). Furthermore it is noted that many of the studies in the area of working capital have tended to focus on the management of individual assets such as cash (Grablowsky, 1976), accounts receivable (Lewellen and Johnson, 1972; Hubbard, 1991), late payment and credit management (Peel et al., 2000; Drever and Armstrong, 2005), accounts payable (Walker, 1980) and inventory (Grablowsky, 1984). But not much had been done on the overall WCM practices that reflect on the investment and financing practices of working capital management. In literature, there was long debate on the different working capital policies (Pinches 1991, Brigham and Ehrhardt 2004, Moyer et. al. 2005, Gitman 2005). More aggressive working capital policies are associated with higher return and higher risk while conservative working capital policies are concerned with the lower risk and return (Carpenter and Johnson 1983, Gardner et al. 1986, Weinraub and Visscher 1998).

3. METHODOLOGY

The study analyzed the working capital management practices of Nigerian firms for a period of 2000 to 2014, a 15-year period. The total population of the study is the all non-financial firms listed in Nigerian Stock Exchange (NSE) but with particular interest in the agricultural stocks. Therefore the sample consists of all quoted firms in the Agricultural/Agro-Allied firms with consistent financial statements. The data set for the study was obtained from the audited annual reports of the subject-firms listed on the NSE from 2000-2014 as approved by the regulatory authority. Selection of the subject-firms was based on the companies that remained listed for the period of study and provide up to date financial statements. The firms which did not operate or with missing data during the period of study were not counted into the sample. As at the time of this study only three out of four firms namely Livestock feeds, Okomu oil palm and Presco oil palm satisfied the consistency test form 2000-2014. Equally they are the most active firms in the

sector in terms of trading on the exchange, making positive earnings and attractive firm value. The companies under investigation belong to agricultural/agro-allied sector of the NSE.

Following the footsteps of Padachi and Howorth(2014), Padachi (2006), Nazir, Iqbal and Akram (2012), Aggressive Investment Policy (AIP) results in minimal level of investment in current assets versus fixed assets. In contrast, a conservative investment policy places a greater proportion of capital in liquid assets with the opportunity cost of lesser profitability. In order to measure the degree of aggressiveness of investment policy, Total Current Assets (TCA)/Total Assets (TA) was used where a lower ratio means a relatively aggressive policy.

Aggressive Financing Policy (AFP) utilizes higher levels of current liabilities and less long-term debt. In contrast, a conservative financing policy uses more long-term debt and capital. The degree of aggressiveness of a financing policy adopted by a firm was measured by, Total Current Liabilities (TCL)/Total Assets (TA) where a higher ratio means a relatively aggressive policy. In this study, in identifying the nature of the working capital investment practices the companies were segregated into three classes namely, the aggressive, the matching, the conservative working capital investment approaches based on the proportion of current asset to total asset (CATA) using the following classifications: CATA of 0-0.49 represents aggressive working capital investment policy (AWCIP), CATA of 0.50-0.59 represents matching working capital investment policy (MWCIP), CATA of 0.50-1.00 represents conservative working capital investment policy (CWCIP). Similarly, to identify the trend in the working capital financing practices the companies were segregated into three classes namely, the aggressive, the matching, the conservative working capital financing approaches based on the proportion of current liabilities to total asset (CLTA) using the following classifications: CL/TA of 0-0.49 represents aggressive working capital financing policy (AWCFP), CL/TA of 0.50-0.59 represents matching working capital financing policy (MWCFP), CL/TA of 0.50-1.00 represents conservative working capital financing policy (CWCFP). According to Zhao and Wijewardana (2012:697), an empirical investigation carried by Afza and Nazir (2007) revealed that the ratios to identify in which working capital policy (WCP) a firm belongs are as follows: current asset/total asset of which higher ratio shows conservative working capital policy (CWCP) and lower ratio shows aggressive working capital policy (AWCP) and marginal ratio shows matching working capital policy (MWCP).

Furthermore, to identify the nature of the area of liberality or conservatism in extending or receiving credit the debtors and creditors periods were used to gauge time duration while the amount of debtors and creditors were used to measure the monetary value. In time duration, the net extender of credit has higher debtors' period than the creditors' period while the net receiver

has higher creditors' period than the debtors' period. In monetary value the net extender of credit has more amounts of debtors than the amount of creditors while the net receiver has higher creditors amount than the amount of debtors. In summary the calculation of each of the variables is shown below.

Variable	Abbreviation	Measurement
CATA	Current Asset/Total asset	CA/TA
CLTA	Current liabilities/Total asset	CL/TA
DP	Average Trade Debtors/Sales*365	AD/S*365
CP	Average Trade Creditors/Purchases*365	AC/P*365
CR	Current assets/Current liabilities	CA/CL

CA = current assets, TA = total assets, CL =current liabilities. The total asset here is the sum of net fixed asset and the current asset.

4.0 DISCUSSION OF RESULTS

In this section, the results of the computations which were prepared from the financial statements of the subject-companies, are presented in the tables below and analyzed.

Table 1. Working capital investment and financing practices of firms in Agric/Agro-allied Sector of the NSE

1. FTN	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
CATA								0.38	0.3	0.42	0.32	0.29	0.13	0.19	0.18	0.28
CLTA								0.11	0.04	0.07	0.14	0.17	0.3	0.46	0.35	0.21
2.LVF	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
CATA	0.46	0.32	0.2	0.19	0.22	0.27	0.31	0.44	0.66	0.63	0.66	0.73	0.73	0.79	0.85	0.50
CLTA	0.97	1.4	2.03	2.68	3.48	4.02	1.79	1.65	0.57	0.49	0.58	0.64	0.67	0.51	0.63	1.47
3.OKO	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
CATA	0.19	0.31	0.16	0.2	0.18	0.17	0.2	0.18	0.23	0.2	0.24	0.4	0.18	0.13	0.07	0.20
CLTA	0.35	0.19	0.3	0.29	0.24	0.21	0.21	0.25	0.18	0.14	0.1	0.13	0.06	0.09	0.14	0.19
4. PRE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
CATA		0.12	0.1	0.17	0.17	0.21	0.17	0.15	0.24	0.36	0.19	0.27	0.09	0.13	0.09	0.18
CLTA		0.35	0.29	0.17	0.17	0.13	0.17	0.27	0.33	0.26	0.07	0.23	0.1	0.13	0.12	0.20
AV.CATA	0.33	0.25	0.15	0.19	0.19	0.22	0.23	0.29	0.36	0.40	0.35	0.42	0.28	0.31	0.30	0.28
AV.CLTA	0.66	0.65	0.87	1.05	1.30	1.45	0.72	0.57	0.28	0.24	0.22	0.29	0.28	0.30	0.31	0.61

Source: Author's computations from extracts from the financial statements of the firms

Table 1 presents the analysis of 4 quoted agric firms of NSE from 2000-2014. The CATA and CLTA ratios are averaged for each firm for the fifteen years and then industry means have been calculated out of the firms' data. The mean values of CATA range from 0.15 to 0.42. The proportions of current asset to total asset were below 50% in the agric sector except in Livestock feeds (LVF) which exceeded half of the total asset from 2008 to 2014. The maximum CATA is 42% as provided by FTN in 2009 apart from LVF. Based on our classifications FTN Cocoa processors (FTN) operated aggressive WC investment policy from inception on the NSE in 2007 to 2014, same with Okomu oil palm (OKO), Presco oil palm (PRE) from 2000-2014. Livestock feeds (LVF) practiced aggressive investment policy from 2000-2007 and migrated to conservative investment policy from 2008-2014. On the average all the firms practiced aggressive investment policy except LVF which averaged on matching investment policy as can be seen from table 1. As LVF matched up its working capital investment policy with conservative financing policy, FTN, OKO and PRE operated aggressive investment policy with aggressive financing policy. In FTN part of the working

capital in years 2007-2011 was financed by a portion of the long term capital. This is evidenced by the glaring fact anywhere the CATA exceeds the CLTA from 2007-2014. Also a portion of the long term investments of FTN were financially supported by current liabilities as can be seen in years 2012-2014. In LVF not only that all the current asset requirements were adequately covered by short term credits part of such short term credits were ploughed into long term investments of the firm all through the period under study. Likewise the working capital items were completely financed by current liabilities in 2000-2007 in Okomu, all in Presco except in years 2005 and 2009-2011. On average the proportion of current liabilities to total asset is more than half from 2000-2007 but far less than half from 2008-2014 unlike the proportion of current asset to total asset which was far below half throughout the study period. Except the LVF which is into production of feeds other purely farming firms namely FTN, Okomu and Presco have average CATA and CLTA of not more than 28 and 20 percent respectively. Average CATA for LVF indicates matching investment policy. The variation in financing policies is relatively higher as compared to investment policies.

Table 2. Receivables and Payables periods of firms in Agric/Agro-allied Sector of the NSE

1. FTN	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
ARP									31	68	111	134	253	119	119	119
APP									57	30	39	49	91	151	70	70
NET									26	-38	-72	-85	-162	32	-49	-50
2.LVF	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
ARP	13	13	3	1	1	2	6	9	8	16	23	20	9	1	2	8
APP	91	161	151	160	322	340	216	21	23	39	35	26	23	14	29	110
NET	78	148	148	159	321	338	210	12	15	23	12	6	14	13	27	102
3.OKO	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
ARP	15	23	31	32	47	36	36	25	7	15	12	5	5	6	5	20
APP	38	43	58	52	43	19	24	58	50	42	40	16	34	69	105	46
NET	23	20	27	20	-4	-17	-12	33	43	27	28	11	29	63	100	26
4. PRE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	AVE
ARP			17	8	7	8	13	15	17	27	17	16	15	22	22	16
APP			0.98	0.25	0.27	4	6	16	62	133	75	12	11	17	18	27
NET			-16.02	-7.75	-6.73	-4	-7	1	45	106	58	-4	-4	-5	-4	12
AV.ARP	14	18	17	14	18	15	18	16	16	32	41	44	71	37	37	27
AV.APP	65	102	70	71	122	121	82	32	48	61	47	26	40	63	55	67
AV.NET	51	84	53	57	103	106	64	15	32	30	7	-18	-31	26	19	40

Source: Author's computations from extracts from the financial statements of the firms

Table 2 presents the account receivables and payable periods of the sector firms. The receivables period ranged from 31-253 days with an average of 119 days in FTN cocoa processors, 1-23 days with an average of 8 days in Livestock feeds, 5-47 days with an average of 20 days in Okomu oil palm, 7-27 days with an average of 16 days in Presco oil palm. That of payables ranged from 30-151 days with an average of 70 days in FTN, 14-340 days with an average of 110 days in LVF, 16-105 days with an average of 46 days in Okomu, 0.25-133 days with an average of 27 days in Presco. The FTN and Presco were largely giving their debtors length of time higher than the time they were allowed to owe their creditors thereby making them to be net credit extenders most of the study period. The opposite is the case in LVF and Okomu except in 2004-2006 for

Okomu. On the average only FTN was the net credit extender while LVF, Okomu and Presco were net credit receivers in time. The average accounts receivable for the sector ranged between 14 and 71 days with a sector study period average of 27 days and that accounts payable ranged between 32 and 122 days with a sector study period average of 67 days. The average net of average payables less average receivables from 2000-2014 indicate that the sector was net receiver of credit in days except in years 2011-2012 where it became net extender. On the average the agricultural/Agro-allied sector of the NSE was a net receiver of credit in days from 2000-2014. This verdict also confirms the fact that the sector practiced conservative credit policy in the length of time credit facilities are utilized by the firms from 2000-2014.

Table 3. Receivables and Payables amounts of firms in Agric/Agro-allied Sector of the NSE (N'000)

FTN	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
DR								52,518	112,762	394,654	331,972	282,303	103,527	217,876	213,659
CR								136,887	76,305	111,498	107,327	114,634	149,354	336,963	147,567
NET								84,369	(36,457)	(283,156)	(224,645)	(167,669)	45,827	119,087	-66,092
LVF	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
DR	20,642	5,340	1,940	901	2,299	5,511	13,943	14,087	93,564	93,605	154,073	250,188	18,582	23,412	55,806
CR	175,069	155,907	146,403	218,784	438,766	544,364	31,752	27,108	232,178	177,018	151,107	311,856	299,195	124,807	960,932
NET	154,427	150,567	144,463	217,883	436,467	538,853	17,809	13,021	138,614	83,413	-2,966	61,668	280,613	101,395	905,126
OKO	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
DR	35,089	111,852	92,384	276,413	319,215	168,305	372,113	8,636	164,896	212,448	197,197	103,354	154,277	133,971	105,304
CR	64,061	69,691	135,684	141,913	67,812	51,398	103,178	300,592	226,882	287,865	214,903	161,244	299,827	415,242	772,216
NET	28,972	(42,161)	43,300	(134,500)	(251,403)	(116,907)	(268,935)	291,956	61,986	75,417	17,706	57,890	145,550	281,271	666,912
PRE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
DR		72,391	54,476	38,776	53,093	47,457	102,256	84,196	275,393	327,717	172,384	590,500	350,805	679,053	401,721
CR		2,925	309	679	576	23,376	14,496	106,703	504,263	1,132,203	136,977	139,012	217,491	147,697	176,010
NET		(69,466)	(54,167)	(38,097)	(52,517)	(24,081)	(87,760)	22,507	228,870	804,486	(35,407)	(451,488)	(133,314)	(531,356)	(225,711)

Source: Author's computations from extracts from the financial statements of the firms

Table 3 shows the amount of account receivables and payables of the sector firms. The amount of receivables and payables for each of the firms can be depicted from this table. FTN was net receiver in 2007, 2012, 2013 and net extender in 2008-

2011 and 2014. LVF was net receiver in all the years under study. Okomu received net credit in value in 2000, 2002, 2007-2014 but was net extender in years 2001, 2003-2006. Presco was net extender all the years except in 2007-2009.

Based on our decision rule in the methodology the firms in the sector exhibited a mix of conservative and liberal credit policy except the LVF which maintained conservative credit policy throughout the period. The implications of these results are: FTN was giving its debtors amount of credit facilities higher than what it was allowed to owe its creditors thereby making them to be net credit extenders most of the study period. LVF was receiving more credit facilities from its trade creditors than it allowed its trade debtors. From 2001-2006 Okomu was giving more credit than it was receiving until 2007 when it became a net receiver till 2014. Presco was extending net credit except in 2007-2009. Unarguably it can be said that on monetary value the three firms of LVF, Okomu and Presco were net credit receivers in 2007-2009 while FTN was on the same platform only in 2007. Therefore in monetary value Presco was majorly a net credit extender in 77% of the total number of years of study, FTN was in 50%, Okomu was in 33%, and LVF was in 7%. Consequently LVF was majorly a net credit receiver followed by Okomu while FTN was in matching or moderating and Presco was extensively extending net credit.

5. CONCLUSION

In the light of the above discussion, the study expected a uniform degree of aggressiveness or conservatism in the firms as they operate in the same sector but it turned out as unexpected. There are differences among the working capital investment practices of firms in the agricultural/agro-allied sector. There are differences among the working capital financing practices of firms in the agricultural/agro-allied sector. However, the working capital practices are relatively stable over the period of time. On average the aggressive investment working capital practice was accompanied by an aggressive financing policy. On average the proportion of current liabilities to total asset is 61% while that of current asset to total asset is 28%, obviously showing that on the average a huge portion of the current liabilities was used to finance long term investments in the sector. In all the firms except in Livestock feeds the aggressive working capital investment practices were followed by aggressive working capital financing policy. That is the lower the investment in working capital the lower the amount of current liabilities. However in LVF the excess portion of current liabilities over current assets requirements were used to support long term assets.

As we observed in the literature that if payables period exceeds receivables period the firm becomes a net credit receiver and otherwise it is a net credit extender. In days period the sector as a whole is a net credit receiver in time but some of

the individual firm ended up in some years as net extenders of credit in time as can be seen in table 2. On monetary value terms the Livestock feeds was the most receiver of net credit hence executing the most conservative credit policy, Presco was the most extender of net credit thereby operating the most liberal credit policy. While FTN could be said to have being operating matching credit policy on the average to smoothen the policy over the years, Okomu operated a moderate policy interspersed with aggressive policy. In line with Padachi and Howorth (2014) this study found non-homogenous group of WCM practices..

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