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Trends of Trade Credit Use among Quoted Firms in Nigeria

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Abstract

Use of trade credit is considered an essential part of successful businesses all over the world. This study examines the trends of trade credit use by quoted firms in Nigeria for the sample period 2000-2009. The results reveal a variation and gross inconsistency in the use of trade credit by Nigeria quoted firms. The finding suggests the possible reason for low financial status of most Nigeria firms as indicated by their low utilization of alternative source of financing. The study indicates a need for overall motivational drive by stakeholders to encourage the use of trade credit by firms and establish a concrete alternative source of financing.

Key words: Trade credit, Trends, Quoted firms, Nigeria

1. Introduction

Trade credit is an essential element of business life for most firms in the world, so important that it even has macroeconomic repercussions. In countries where financial markets malfunction, contract enforcement is insecure, and information is scarce, unreliable and asymmetric, trade credit is even more important (Ojenike & Olowoniyi, 2012). For instance, Fisman & Love (2001) find that firms in industries with higher rates of trade credit grow faster in countries with relatively weak financial institutions. Many Sub-Saharan African (SSA) economies may be described in such a way.

In the face of companies experiencing tight financial constraints from the conventional and specialized financial institutions, companies have devised alternative ways and means of accessing finance to either shore up their working capital, acquiring inventory and/or expanding their productive capacity to meet their delivery targets. For most firms in this category, trade credit is an essential element of their finance sourcing strategies. As a result, lack of bank credit induces companies in developing economies to rely on trade credit as a significant source of financing. Indeed, trade credit has been observed to play an important role in the external financing of companies in developed countries (Elliehausen &Wolken, 1993; Ng et al., 1999; Summers &Wilson, 2002). In particular, trade credit appears as a substitute to bank credit for companies credit-rationed by banks (Nilsen, 2002; Marotta, 1997). Therefore, in developing economies, the current limited access to institutional finance may favour the generalized use of trade credit to mitigate problems of financing.

In developed countries, majority of firms rely heavily on trade credit extension as a source of finance. In a Federal Reserve Board study, Ellienhausen & Wolken (1993) noted that in 1987, accounts payable constituted 20% of all non-banks, non-farm small business liabilities and 15% of all large firms' liabilities. On the other hand, accounts receivable represent one of the main assets on most corporate balance sheets. Therefore, an important aspect of trade credit is the two-way nature of the transaction. Many companies, particularly those at the intermediate points in the value chain use trade credit as customers and provide it as suppliers. Thus trade credit represents a substantial component of both corporate liabilities and assets.

In a financially inefficient working environment, and tightened credit and monetary policies, firms may have to seek alternative sources of external financing and, trade credit constitutes one of such alternative sources. But despite the potential importance of trade credit, limited attention has been paid to its role, the clarity of which is expressed by its trend especially in developing countries such as Nigeria.

Financing decision becomes more difficult when the economic conditions of the country where the firm operates are typically uncertain. Specifically, in the Nigerian case, the presence of two aggravating factors is observed. They are the high interest rates practised in the financial institutions and the instability of the economy. The effects of high interest rates on the firms take various forms. On one side, the rising cost of financing and, on the other hand, inhibiting sales, thus resulting in fall in the economy's activities, producing a combined effect of aggravating the degree of uncertainty (Salawu, 2007).

Lending rate in many industrialised nations is firmly below 2%. In Nigeria in particular, it is as high as 30% which is one of the problems bedevilling the Nigeria oil dependent economy. The soaring interest rates either at 30% or 24%, which Soludo (2009) claimed will subsist till December, 2009 still remain a major obstacle to doing business in Nigeria till today. All previous efforts to keep the interest rate low has been futile. The failure has not supported the growth of the real sector. There has been no prospect of progress in the productive sector with the current rates of interest charged by financial institutions (commercial banks). For firms and companies that find the borrowing facilities available from financial institutions unaccessible or insufficient or tied with stringent terms to provide the necessary margin of working capital resources, there is the alternative possibility of trade credit.

2. Literature Review

2.1. The Concept of Credit in Business Finance

In finance, the word 'credit', ' loan', ' borrow' are often used interchangeably in referring to the process of obtaining control over the use of money, goods and services. In the present, it is an exchange for a promise to repay at a future date (Olagunju, 2003). Credit and loan are frequently used as synonymous, however, Rosenzweig et al (1993) made a clear distinction between the two words. He defined credit as an asset or a financial reserve, which the firm (business) can call upon when needed, and provided it has not used its credit "asset" by exchanging it for another loan.

Furthermore, the term credit is frequently used similarly in commercial circle or trade, as 'trade credit' to refer to the approval for delayed payment for purchased goods. Sometimes, credit is granted to a person or firm who has financial instability or difficulty, hence companies frequently offer credit to their customers as part of the terms of a purchase agreement. Credit is often denominated by a unit of account. Unlike money, credit itself cannot act as a unit of account; however, many forms of credit can readily act as a medium of exchange. As such various forms of credit are frequently referred to as money and are included in estimates of the money supply. Credit is also traded in the market. The purest form is the credit default swap market which is essentially a traded market in credit insurance.

A credit default swap represents the price at which two parties exchange this risk – the protection "seller" takes the risk of default of the credit in return for a payment, commonly denoted in basis points (one basis point is $^{1}/_{100}$ of a percent) of the notional amount to be referenced, while the protection "buyer" pays this premium and in the case of default of the underlying (a loan, bond or other receivable), delivers this receivable to the protection seller and receives from the seller the par amount (that is, is made whole).

Credit as a form of short-term financing is a source of up to one year duration which are flexible in nature and usually used in financing short-term working capital needs. They include borrowing from friends and relatives, borrowing from cooperatives, trade credits, accruals, bank borrowing, factoring of debts, acceptance of credit etc. Of particular importance to this study is trade credit as a source of short-term business financing.

Atanasova (2007) argues that trade credit is a more expensive financing alternative to conventional loans because suppliers have a high direct cost of funds. For example, for suppliers, these higher costs can take the form of inefficiencies in the collection of payments, but financial intermediaries enjoy cost advantages due to specialization. A firm should always be on the lookout for suppliers who offer not only the lowest prices, but also fast, dependable delivery. Care should be taken not to be too committed to one vendor because they offer credit term to your firms. Such trade credit is best used as a short-term solution for managing cash flow and should not be used for long term.

However, if the use of trade credit for an extended period becomes inevitable, plan to avoid unnecessary costs through forfeiture of cash discounts or delinquency penalties should be put in place. Usually, late payment penalties run between 1 to 2% on a monthly basis. This means that missing the net payment date for an entire year can cost as much as 12 to 24% in penalty interest. Other costs associated with trade

credits can be identified as pressures from suppliers, reduction in credit rating if payment is delayed till the final due date.

One of the best tools for delaying cash outflow of any cash-trapped or new retail business is the trade credit available from suppliers. Trade credit is one part of the process to build up business credit worthiness. It is an open account with a vendor who lets a retailer buy now and pay later. Many suppliers may require the first order to be paid by credit card or COD (Cash/Cheque on Delivery) until the business has been deemed credit worthy. Once its established that a business can pay its bills on time, it is possible to negotiate trade credit and terms with suppliers. The importance of trade credit, namely reliance of suppliers to fulfill their need for additional finance, increases for developing markets, where alternative sources of finance are almost unavailable and the development of stock and bond market is modest (Demirgue-Kint & Maksimovic, 2001)

As indicated in Cunat (2007) although the implicit interest rates in trade credit are commonly very high as compared with the rates in bank credit, trade credit is widely used by firms due to its advantages. Firstly, obtaining a trade credit cause less transactions costs for firms compared with bank credits. Furthermore, it is less costly for firms to postpone trade credit payments than negotiable bank loans. Finally, being in the same value chain there is a mutual dependence between suppliers and firms. Suppliers may finance the growth of small customers to assure growth of their own sales and capture future profitable business from the firms. Therefore, owing to stronger communication between supplier and firm, trade credit allows firms to better match the timing of cash outlays and cash receipts from sales.

However, the various benefits of trade credit is beset with some problems, for example, moral hazard problem which refers to the case when the credit is diverted to non-value maximizing projects by borrowers, emanates from the asymmetric information between the creditors and firms. On the other hand, trade credit is believed to decrease the moral hazard problem because in case of default, suppliers are entitled to cease the supply of goods to the firms. In accord with this, Biais & Gollier (1997) show that trade credit increases the availability of bank credit, particularly for small firms that are typically affected by asymmetric information problems.

2.2. Types of Trade Credit Terms and Variations

To understand the concept of trade credit, it is important to know the range of alternative credit arrangements that can occur in trade. Depending on credit policy, payment can be made at different times. It can occur before delivery, on delivery or after delivery. In the last case, the seller can offer discounts for prompt payment or not depending on trade arrangements. When payment does not occur before delivery or at delivery time, trade credit is being extended and the seller assumes the credit risk. Otherwise, trade credit is not being offered and the buyer assumes the risk.

There are two main types of credit terms under which trade credit can be given (Ng et al 1990; Walker & Petty II, 1986; Pike et al; 2005). One type is called net credit term or net period. Net period refers to the trade credit period given to customers without a discount (Wilson, 2008). In this type of credit term, a buyer is required to pay for the goods delivered within the agreed date (e.g. 30 days after delivery). A debt which is not paid within that agreed date is known as overdue debt, and the debtor might be charged interest on the amount due.

Another type of credit term involves the credit period with discount. In this case, a buyer obtains a certain discount on the total bill if he/she pays before or on the due date (Ng et al; 1999; Pike et al, 2005). Credit period with discount can be quoted like this: "2/10, net 30 days – which means that a discount of 2% of the total bill will be given if a buyer pays within ten days. On the other hand, if a buyer pays after the discount period, (he/she pays within 30 days but after ten days), no discount is given. In this case, a buyer pays the full amount of the debt and incurs the cost of using trade credit for the period beyond the discount

date. If the buyer in this example does not pay within the discount period of ten days, he/she incurs the cost of using trade credit for 20 days (30 minus 10 days).

Credit terms are usually expressed with a discount for prompt payment. The two most common forms of trade credit are simple net terms and two-part terms that include a discounted price or credit option. Net terms (e.g. Net 30 and Net 10 accounts) specify that payment is due within a stated time period and interest is charged if payment is made by the net date after which the buyer is in default. Thus, payment is expected to be made in full 30 (net 30) or 10 (net 10) days after the goods are delivered to the buyer. Some vendors/supplier offer cash.

The two-part offers consist of an option to pay a discounted price if payment is made within a specified short period of time or pay the full price on the net date (e.g. $^{2}/_{10}$ Net 30 means the buyer can claim 2% discount payment within 10 days; otherwise the full amount is due in 30 days). An implicit interest charge is incurred if the buyer elects to forgo the discount and pay later. For instance, if an invoice is N5,000.00 and "$^{2}/_{10}$ Net 30" is noted, the buyer can take a 2% discount (N5000 x 0.2 = N100.00) and make a payment of N4900.00 within 10 days.

These two kinds of trade credit give different signals. A company being offered on net term form of trade credit is considered financially solid, because the business offering trade credit is confident that their creditor will still be in business when payment is due. On the other hand, a company accepting (paying on the 30th day) a 2/10 net 30 trade credit offer however, must be in a very difficult situation to have to finance itself at an implicit annualized interest rate of 43.9 per cent.

Wilson and Summers (2002) keep this distinction, but add questions concerning the reasons given by small businesses for granting trade credit. Through their analysis of postal questionnaires filled by 500 American businesses, they find that the decision between two-part and net terms depends on product and market characteristics. First, when it takes time to determine the quality of products, net terms are offered instead of cash to enable an easy return of merchandise, which supports the finding of Ng, Smith and Smith (1999). Second, small firms feel obliged to adopt industry practices and grant trade credit to remain competitive. However, the rates defined by credit term can be quite high and frequently much higher than funds obtained from financial institution. In spite of this, the use of trade credit is widespread and represents the largest simple source of short-term financing for firms in market economies.

The body of empirical research which explores the connection between investment and finance has developed with the theme that financial structure of firm is relevant to its investment decisions when financial markets are imperfect (Adelegan and Ariyo, 2008). This is in contrast to Modigliani and Miller's (1958) irrelevance theorem. They have argued that in a perfect financial/capital market, a firm's investment decisions are independent of its financing decisions because the financial structure would not affect the costs of investing. Under such assumption, they conclude that a firm's financial structure is irrelevant to its value (retained earnings, debt and equity) as sources of investment finance are assumed equivalent to one another.

However, recent research argues that, in an imperfect financial market, internal and external finance are not perfect substitutes for each other. Investment financing may consequently depend on such financial factors as availability of internal finance, ease of access to debt (bank credit) or new equity finance, or the functioning of particular credit markets. This may be due to imperfect information about the quality or riskiness of the borrower's investment project. Information asymmetries are costly contract enforceability generate agency costs that result in outside investors demanding a premium on debt and therefore cause external funds to be an imperfect substitute for internal fund (Hu and Schianjavelli, 1998).

The economic importance of trade finance was alluded to and restated by Davis and Yeoman (1974) when they evidenced that large U. K. firms used trade credit to cushion themselves from tight monetary policy in

the late 1960s. It therefore, suggests that trade finance should be considered by policy makers because of its ability to affect the outcome of policy interventions.

Furthermore, when products are purchased, trade credit can also play a role in a firm's quality control efforts. Smith (1987) and Long, Melitz & Ravid (1993) argue that the use of trade credit allows a firm to verify product quality before paying. Burkat & Ellingsen (2004) opined that it is typically less profitable for an opportunistic borrower to divert inputs than to divert cash. Therefore, suppliers may lend more liberally than banks.

Cook (1999) also finds evidence for the facilitating role of trade credit, through its curbing the adverse selection problem. He shows that trade credit provides a positive signal for firms, hence increases the probability of acquiring bank credit. Love, Preve & Sarria-Allande (2007) however find for six emerging-market-countries that firms that experience a sharper decline in bank credit also experience a sharper decrease in trade credit. This complementary relationship is due to the fact that a credit crunch that affects financial lenders also affects trade credit lenders.

Trade credit is an important element of the balance sheets of many firms especially small business. Results of a national survey conducted in Chicago shows that it accounted for 31.3% of the total debt of small business in 1993, and 60.8% of firms had outstanding credit from suppliers (NSSBF, 1993). Previous studies offer numerous examples of how, for some firms, finance market imperfections may create dependence on trade credit as a source of fund. Peterson and Rajan (1997) and Nilsen (2002) argue that firms that have no access to markets for traded long-term securities or commercial paper rely on trade credit for financing during economic downturns and monetary policy contractions.

Deloof and Jegers (1999) provide empirical evidence that the amount of trade credit used is determined by the availability of internal funds (retrained earnings, depreciation provision, deferred taxation) and is an important alternative not only for short-term bank debt but also for long-term financial debt. Antov (2005) and Alphonse, Ducret and Severin (2004) on the other hand, argue that the availability of institutional finance increases with the level of trade credit. Antov (2005) examines firms' choice to use trade credit and in particular the way in which the availability and level of institutional loans affect that choice. His finding that higher levels of trade credit are associated with higher levels of conventional loans suggests that there exists synergy from combining supplier credit and bank credit.

Alphonso et al (2004) provide similar evidence when they argue that trade credit is a quality signal that helps firm acquire reputation and improve their access to institutional finances. However, the two lines of research are not mutually exclusive: firms use trade credit because they are denied access to institutional finance (a demand effect), but also trade credit granted by suppliers facilitates access to institutional loans (a supply effect).
Antov (2005) however find it difficult to separate the supply and demand effects on a cross-sectional data analysis. In the context of panel data, he observes that over time, a certain class of borrowers systematically increases its use of trade credit when the level of institutional finance declines. This finding suggests a strong demand side effect.

Habib & Johnson (1999) suggest suppliers have repossession advantages when redeploying the asset sold while Wilner (2000) argues that restructuring debt advantage explain why trade credit is being offered. Empirical studies conducted in Germany on the financing motive theory of trade credit provide mixed evidence. For instance, Long, Malitz and Ravid (1993) find no support for the financing motive: less creditworthy non-financial firms do not apply to more creditworthy firms for financing due to credit constraints.

Ng, Smith & Smith (1999) obtain similar results, but Antov (2005) shows that firms with high levels of trade credit have high levels of institutional loans. In contrast, Nilsen (2002) in the case of the U. S. observe

that small firms which are more likely to be credit rationed, rely heavily on trade credit when credit market conditions deteriorate.

A survey of manufacturing firms by State Bank of New South Wales (1992) reported that the average proportion of credit sales to total sales was 88.9%. Of the firms surveyed, 73.4% reported that the most common period over which credit was extended was 30 days while the average time taken to pay was 50.6 days. This confirms that most sales by firms are credit sales given rise to accounts payable by the firms taken advantage of suppliers' credit. If the financial institutions are perfect, firms should be indifferent between trade and bank credits. Imperfections in the financial institutions often remove this indifference.

In their survey of the reasons for the existence of trade credit, Schwartz & Whitcomb (1979) identify two such imperfections. The first is the existence of ceilings on interest rates, and the second, is the fact that information is costly to collect and that the cost differs between providers of finance. Once there are ceilings on the interest rates which financial intermediaries can charge, and those of ceilings are binding, then there must be disequilibrium in credit rationing. When some firms that require funds are unable to obtain them from a financial intermediary, it may be optimal for suppliers to extend finance to buyer firms through trade credit. However, Cunat (2007) outlined that the interest rate of trade credit is more expensive than that of bank credit due to its insurance premium and default premium.

Peterson and Rajan (1994, 1995) find that firms that are less likely to be bank credit constrained tend to rely less on trade credit. It is possible that the ambiguous empirical evidence on the financial motive theory of trade credit use is due to the static and dynamic misspecifications caused by the conventional classifications used to split sample firms into constrained and unconstrained (e.g. small versus large firms). A survey by the International Chamber of Commerce (2009) however reveals the extent of damage to the trade credit market. It discovers that 47% of the 122 banks in 59 countries reported lower volume of trade credit, and 43% in the letter of credit transactions in the last quarter of 2008. Over 40% of firm's respondents reported higher fees they have to pay for commercial letters of credit standbys and guarantees. At the same time, the cost of trade credit increased dramatically.

Boissary and Gropp (2007) using a unique data set on trade credit defaults among French firms to investigate whether and how trade credit is used to relax financial constraints discovered that firms that face idiosyncratic liquidity shocks are more likely to default on trade credit, especially when the shocks are unexpected, while firms with little liquidity are likely to be credit constrained or are close to their debt capacity. The study also found that the chain of defaults stops when it reaches firms that are large, liquid, and have access to financial markets. This finding, therefore, suggests that liquidity is allocated from large firms with access to outside finance to small, credit constrained firms through trade credit chains.

Neeltje (2005) discover that statistics show that the sale of goods on credit is widespread among firms even when they are financially constrained and thus face relatively high costs in providing trade credit. A possible explanation for this is the use of trade credit as a competitiveness tool. By analyzing both the impact of customer as well as producer market power on a firm's decision to provide trade credit, he examined whether trade credit is indeed used as a way to lock in customers by firms in developing countries. Using a new data set containing a large number of firms in 42 developing countries, he found strong evidence that an important driving force behind the decision to provide trade credit is the urge to be competitive. This finding particularly holds true for those firms that still have to establish a solid market reputation and for firms located in countries with an underdeveloped banking sector.

Burkart & Ellingsen (2002) hypothesized that the availability of trade credit increases the amount that banks are willing to lend, for a given bank loan, additional trade credit permits the borrower higher levels of diversion as well as investment. However, due to the relative illiquidity of trade credit, the borrower's return from investing increases by more than the return from diversion.

Anticipating that available trade credit boosts investment rather than diversion, banks are willing to increase their lending, hence, bank credit and trade credit are complements for firms whose aggregate debt capacity constraints investment. By contrast, for firms with sufficient aggregate debt capacity, trade credit is a substitute for bank credit. As for variation in trade credit across cities, it was further discovered within Burkart and Ellingsen (2002) model that in countries with perfect legal protection of creditors, trade credit loses its edge because it becomes as difficult to divert cash as to divert inputs.

2.3. Trade Credit Period

Closely linked and associated with trade credit terms is trade credit period. Trade credit period means the length of time (measured in days) after the delivery date before a customer has to pay for the goods. Trade credit period is an important issue concerning cash management as it has a significant impact on the firm's cash flow. A longer trade credit period reflects the length of time that the capital (finance) provided by the supplier remains with the buyer before it is returned to the supplier. To that effect, a longer trade credit period may enable firms to properly match the expected inflow and outflow of cash. Conversely, a longer trade credit period may negatively affect a supplier's cash flow. In particular, a longer trade credit period may tie up the supplier's capital and thus reduce the firm's profitability. As such, the length of the trade credit period is something which firms have to consider with respect to trade credit transactions.

However, trade credit period varies widely among firms even for firms of the same supplier (Iglesias et al., 2007). Few studies have been carried out which directly or indirectly investigated the determinants of trade credit period include Paul and Boden (2008), and Wilson and Summers (2002) for U.K firms; Giannetti et al (2008) for U.S. firms; Ge and Qui (2007) for Chinese firms; Iglesial et al (2007) for Spanish firms, and Fafchamps (1997 and 2000) for Zimbabwean manufacturing firms.

Trade credit periods are likely to be influenced by a number of factors which includes the business characteristics of the buyer and seller (Giannetti, et al, 2008); volume of transactions (Arnold, 2002); ethnicity (Fafchamps, 2000); length of the relationship of the trading partners (Iglesias et al, 2007); product characteristics (Wilson, 2008, Paul and Boden, 2008); whether a transaction is domestic or export (Neale and Schmidt, 1991); and frequency of transaction (Wilson and Summers, 2002, Summers and Wilson, 2003).

3. Methodology

Secondary data were sourced for this study. The data were sourced from the Annual Reports and Accounts of the sampled firms and annual publication of the Nigeria Stock Exchange for the period 2000-2009. A random sample of 70 non-financial quoted firms listed on the Nigeria Stock Exchange (NSE) was selected for this study. Data collected were analysed descriptively.

4. Results and Discussion

Table 1 presents the results of mean, median and aggregate trade credit use by sampled firms for the period 2000-2009. The results indicate that average trade credit use is highest in the period 2004 (0.619), 2007(0.574), 2008(0.517) and 2009(0.501) respectively. Table 2 and Figure 1 present the results of the sectoral pattern of trade credit financing across twelve (12) sectors of manufacturing companies for a period of ten (10) years (2000 – 2009). The figures represent the mean value of trade credit used by firms in each sector.

In year 2000, the result indicated that trade credit usage in the Conglomerates sector is the highest at a mean value of 0.535569 or 53.56%. This is closely followed by Textile sector which stood at mean value of 0.517838 or 51.78%. Automobile and Tyre recorded the lowest value of 0.028169 or 2.8% while Printing/Publishing and Chemical/Paints followed at percentages values of 6.0% and 5.9% respectively. In the same period, apart from Textile and Conglomerates sectors that recorded the value above 50%, all other sectors such as Food and Beverages (28.02%), Printing and Publishing (6.8%), Chemical and Paints (5.9%), Industrial/Domestic Products (18.04%), Brewery (33.12%), Building Materials (35.11%),

Healthcare (7.3%), Agriculture/Agro-allied (33.4%), Footware (22.18%), Automobile and Tyre (2.8%) stood at values below 50 percent. This indicates that trade credit activities in these sectors are much lower compared to Textile and Conglomerates. Overall, the period 2000 is characterized by low usage of trade credit by the sampled quoted firms in Nigeria.

In the period 2001, there was a general increase in the value of trade credit used by quoted manufacturing firms in Nigeria compared to the previous period. However, unlike period 2000, account payable in the Conglomerates sector is lower with a value of 33.20%, while the value of Textile rose to 88.49% about 3.7% higher than the previous period. The value also represents the highest among sample sectors in the period under consideration. Healthcare sector which recorded a value of about 7.0% in the previous period 2000 dropped to 2.82% in period 2001, indicating a decline in the supplier's credit available to the sector at the time. This lowest record in this period is closely followed by Automobile and Tyre (9.88%). Although the value of Automobile sector is comparatively higher (2.81%) than the previous period 2000, the account payable of the sector stands and rank among the lowest in the period 2001. Surprisingly, Industrial/Domestic Products sector which recorded a low value of 18.04% in the previous period represents the second largest in the current period with a value of 76.59%. Chemical/Paints and Brewery come into lime light in the current period with high dose values of 63.5% and 63.96% respectively. The increase in the value of Chemical/Paints in the period 2001 is more than 100% over the previous period, while Brewery also recorded close to 100% increase over the accounts payable available in the previous period of 2000. Agriculture/Agro-allied recorded a value of 58.09% of accounts payable which shows an increase over the past period and next to Textile, Industrial/Domestic Products, Brewery and Chemical/Paints respectively. Food and Beverages has an increased value of 33.18%, while Printing/Publishing has accounts payable value of 19.62% representing over 100% increase over the previous period. Building Materials has a value of 15.46%. An increase in accounts payable was also recorded for Footware (33.56%).

The overall pattern of trade credit in the period 2001 shows an increase in the aggregate account payable over the previous period. Although the accounts payable patterns in the period indicates variations across sectors, implying inconsistency of some sectors in the two periods. At period 2002, there seems to be decline in the overall trade credits usage by quoted firms compared to the period 2001. For example, the highest accounts payable is noticeable in Agriculture/Agro-allied with a value of 70.63% which is comparatively lower than the highest value obtained – 88.49% - in period 2001. Brewery recorded average accounts payable of 43.79% to occupy second position in this period. Conglomerates which had a value of 33.20% in the previous period recorded a slight decrease in trade credit value with an average of 32.13%. Textile was dose with trade credit value of 31.07% while Building Materials, Chemical/Paints, and Printing/Publishing recorded accounts payable of 30.92%, 30.20% and 30.00% respectively. With the exception of Chemical/Paints sector, Building Materials and Printing and Publishing sectors recorded substantial increase in the trade credit compared to the previous period. Food and Beverages sector recorded a decline in the value of trade credit with an average of 29.43%. Other sectors such as Footware had an average of 20.20%, while Automobile/Tyre recorded an average of 10.51% which is slightly higher than the previous year trade credit value. The lowest value of trade credit during this period is observed with Healthcare sector with a low average value of 9.8%, which represent the highest over the previous periods of 2000 and 2001 respectively. In all, most quoted firms in this period 2002 have a reduced value of trade credit compared to the observed value in the previous periods.

At period 2003, Agriculture/Agro-allied sector took the centre stage in trade credit activities with a high average value of 91.23%. Building Materials trailed closely with an average value of 83.20%, the highest over the last three periods. Industrial/Domestic products sector also recorded a high average value of 63.22%, a substantial increase over the immediate past period of 2002. Brewery rose slightly above the previous value with current average of 43.67%. Printing/Publishing sector recorded the highest trade credit value since the beginning of the sampled period 2000. It has average value of 42.03%. Chemical/Paints sector recorded a higher value of 35.32% compared to the previous period. Textile sector recorded the

lowest decrease in trade credit value since the start of the study period. A value of 30.17% was observed for the sector. Food and Beverages also recorded its lowest values since period 2000 with an average of 17.07%. Footware declined by 50% and stood at an average of 15.32%. Trade credit value in the Healthcare sector increased to 10.51%, the highest since the beginning of the sampled periods. Automobile and Tyre recorded a trade credit value of 9.99% while the lowest trade credit value since the beginning of sampled period is 0% in the Conglomerates sector.

At period 2004, an unprecedented increase in trade credit was observed for Footware and Chemical/Paints with a value of 148.90% and 148.88% respectively. Brewery sector recorded a trade credit value of 97.36%, Footware and Beverages sector (55.35%), Printing and Publishing (50.14%), Industrial/Domestic Products (53.91%), Building Materials (45.41%), Healthcare (9.99%), Agriculture/Agro-allied (46.44%), Textile (35.73%), Congomerates (39.64%), and Automobile and Tyre (10.52%). At period 2005, Food and Beverages Sector recorded trade credit value of 36.02%, Printing and Publishing (58.17%), Chemical/Paints (69.64%), Industrial/Domestic Products (52.59%), Brewery (39.74%), Building Materials (21.45%), Healthcare (10.52%), Agriculture and Agro-allied (44.09%), Textile (42.98%), Footware (69.64%), Automobile and Tyre (3.60%) and Conglomerates (87.04%).

At period 2006, Food and Beverages had a trade credit value of 45.45%, while Printing/Publishing (44.50%), Chemical/Paints (87.05%), Industrial/Domestic Products (37.11%), Brewery (65.27%), Building Materials (51.02%), Healthcare (3.63%), Agriculture/Agro-allied (44.56%), Textile (32.18%), Footware (77.05%), Automobile and Tyre (21.02%) and Conglomerates (75.57%). At period 2007, Food and Beverages recorded a trade credit value of 62.34%, Printing/Publishing (80.76%), Chemical/Paints (79.47%), Industrial/Domestic Products (62.42%), Brewery (74.87%), Building Materials (26.01%), Healthcare (21.02%), Agriculture/Agro-allied (95.43%), Textile (42.98%), Footware (74.95%), Automobile and Tyre (13.60%), and Conglomerates (54.39%).

During year 2008, the value of accounts payable for Food and Beverages is 51.42%, Printing and Publishing (103.65%), Chemical/Paints (55.88%), Industrial/Domestic Products (62.15%), Brewery (70.48%), Building materials (45.10%), Healthcare (13.61%), Agriculture/Agro-Allied (70.64%), Textile (7.7%), Footware (35.88%), Automobile and Tyre (72.40%) and Conglomerates (31.36%). In year 2009, average value of trade credit used for Food and Beverages Sector is 62.33%, Printing and Publishing (1.07%), Chemical/Paints (53.55%), Industrial/domestic products (71.32%), Brewery (34.54%), Building materials (73.09%), Healthcare (72.40%), Agriculture/Agro-allied (97,45%), Textile (20.53%), Footware (43.55%), Automobile and Tyre (21.32%) and Conglomerates (50.01%).

5. Conclusion

This study examines the trends of trade credit use in Nigeria between period 2000-2009 The results reveals a variation and gross inconsistency in the use of trade credit by Nigeria quoted firms. The finding suggests the possible reason for low financial status of most Nigeria firms as indicated by their low utilization of alternative source of financing. The study indicates a need for overall motivational drive by stakeholders to encourage the use of trade credit.

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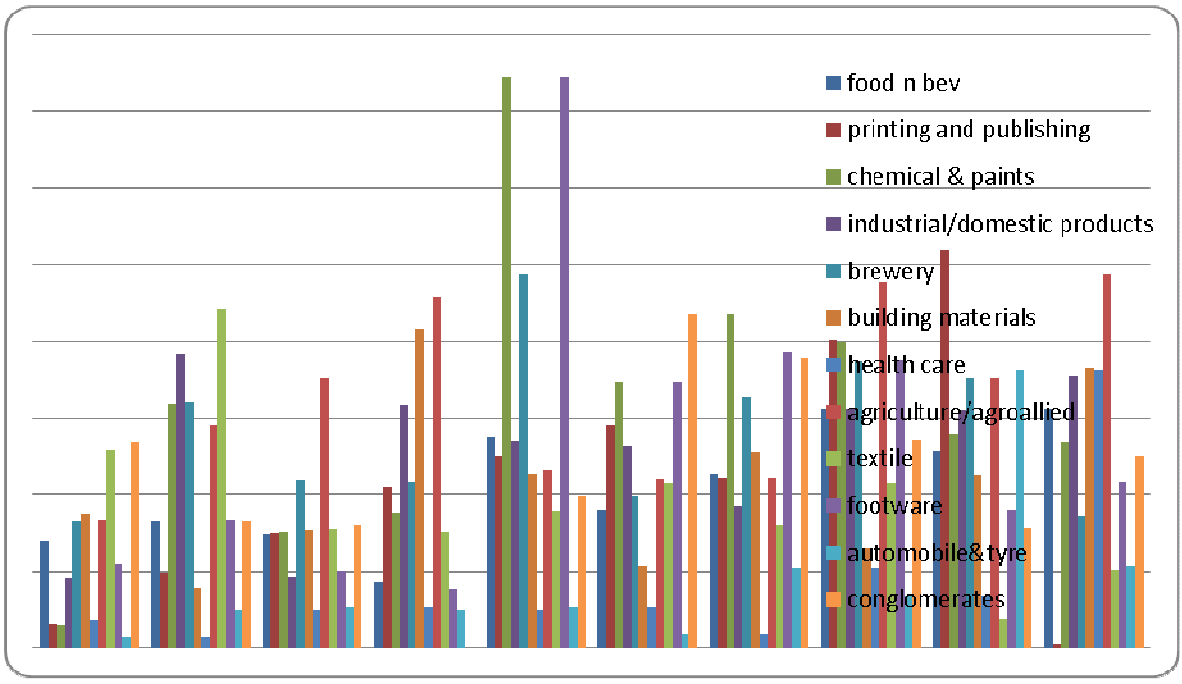
Table 1: Mean Median and Aggregate Trade Credit Use by sampled firms (2000-2009)

Year	Trade credit		
	Mean	Median	Aggregate
2000	0.247822	0	2.973867
2001	0.415343	0.333799	4.984119
2002	0.297584	0.30103	3.571007
2003	0.368127	0.327441	4.417521
2004	0.618577	0.482854	7.422921
2005	0.446275	0.435368	5.355296
2006	0.487003	0.450033	5.844033
2007	0.573536	0.62382	6.882433
2008	0.516882	0.536498	6.202578
2009	0.500974	0.517821	6.011688

Source: Data analysis, 2011

Table 2: Sectoral Mean of Trade Credit Usage: Accounts Payable (APAY)

Sector	Yr 2000	Yr 2001	Yr 2002	Yr 2003	Yr 2004	Yr 2005	Yr 2006	Yr 2007	Yr 2008	Yr 2009
food and beverage	0.280209	0.331847	0.294334	0.170748	0.553452	0.360225	0.454454	0.623438	0.514213	0.623351
printing and publishing	0.060114	0.196223	0.300031	0.420298	0.501355	0.581678	0.445033	0.807558	1.036471	0.010669
chemical & paints	0.059433	0.635569	0.302029	0.353231	1.489021	0.69637	0.870495	0.794692	0.558783	0.535521
industrial/domestic products	0.180458	0.765986	0.183214	0.632221	0.539057	0.525974	0.371058	0.624202	0.621461	0.713179
Brewery	0.331206	0.639597	0.437983	0.436744	0.973626	0.397356	0.652692	0.748698	0.704805	0.345369
building materials	0.351078	0.154568	0.309186	0.832012	0.454142	0.214534	0.510183	0.260121	0.451026	0.730913
health care	0.073697	0.028169	0.098776	0.105111	0.099933	0.105247	0.036312	0.210221	0.136063	0.724041
agriculture/agroallied	0.33431	0.580873	0.706338	0.912342	0.464352	0.440965	0.445612	0.954321	0.706432	0.974472
Textile	0.517838	0.884913	0.310653	0.301651	0.357345	0.429772	0.321786	0.429772	0.076948	0.205319
Footware	0.221786	0.335569	0.202029	0.153231	1.489021	0.69637	0.770495	0.749469	0.358783	0.435521
Automobile & tyre	0.028169	0.098776	0.105111	0.099933	0.105247	0.036312	0.210221	0.136063	0.724041	0.213211
Conglomerates	0.535569	0.332029	0.321323	0	0.39637	0.870495	0.755692	0.543878	0.313552	0.500121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