**Competition and Credit Sales in the Nigerian Flour Market: Evidence from Master Bakers in Ondo State**

**Abstract**

Selling on credit is an old tradition in the Nigerian flour market. The practice helps to ensure competitiveness and increase sales turnover. However, in recent years, credit sale has become a source of bad debt and business failures in the market. Despite this, the literature relating credit sales with competition in product markets is lacking. The focus has majorly been on the credit and financial markets. This study attempts to relate how competition impacts on credit sales and survival in Nigerian flour market. Using a two-stage model and numerical evaluations from sales representatives of 5 leading flour brands, the findings shows that credit sales does not guarantee competitiveness and that it threatens business survival. The study observed a declining link between selling on credit and competitiveness. Flour dealers need consider business survival as more important goal than sales turnover as default risks rises in the market

Keywords: credit, dealers, market, sales turnover

**Introduction**

Credit sale is a veritable sales strategy in competitive markets. In the flour markets, firms are pushed to selling on credit for three main reasons. Firstly, flour by nature has a short shelf life. As a result, there is the need to secure steady large stream of customers who will continually clear the stocks as they are being produced. This requires that every avenue to make sales must be explored. Large continuous flour milling requires that there is a steady streams of loyal customers (especially bakers) who will continually be lifting the products off the stores. In order not to lose such customers to competitors, selling on credit becomes a veritable option. Secondly, credit sales have a way it creates a form of bound and loyalty between firms and their customers. It helps the two parties to keep themselves in minds continually. The creditor continually thinks of the debtors. In the same way, the debtors are continually hunted by the debt owed their creditors in mind. This form of bonding is a major reason why flour dealers sell on credit (Fisman & Raturi, 2004). Credit sale has a way of fixating customers’ loyalty to a particular supplier. This occurs even when the seller’s price is higher than the average market price (Nash & Sinkey, 1997). Thirdly, most bakers are rarely financially literate (Chang et al., 2024). As a result, they like to buy on credit from any seller even when it comes with higher costs and limited choices. The bakers in fact see credit sales as a form of support and goodwill from the flour distributors. On the other side, a typical flour dealer will always be willing to reduce price for a cash buying customers than those who buy on credit because of the default risks involved. In most instances, a cash buying customers could get at least N1000 off the prices of flour offered to the credit customers (Zhang et al., 2024). In addition, cash-buying customers are usually revered and exercise greater choice on the type of flour brand and other decisions about their purchases than the credit customers. But the mindset of an average baker is skewed towards buying on credit. Selling on credit therefore constitute an avenue to sell more and increase customer confidence on the firm.

Despite the benefits of credit selling, the fear of default in flour business is real and underline most of the major business failures in the industry. Huge bad debts arising from credit sales of the late 1990s account for the major reason why most flourmills closed down between 2000 and 2015. Being a food business, recovering money after consumption is always very difficult. The extant Nigeria litigation and legal system have proved very ineffective in preventing people from default. In fact, it provides loopholes for moral hazards and default risks which many of the defaulting customers are already used to. The rising credit risks and chances of adverse selection in the market have also make selling on credit to be risky. This study examined how firms who majored on credit sales have fared over the last decades and the impacts on their survival in the market. The study is motivated by the practical challenges encountered in the flour business as it is fundamental to the stability of the industry. The rest of this paper is sectioned as follows. Section 2 presents the literature review and stylized facts on the relevant literature on the role of credit sales in the market growth and business expansion. In section 3, the supporting findings were presented. Section 4 contained the conclusion.

**Literature Review and Stylized Facts**

The literature is well documented with evidences of relationship between competition and credit sales (Mu, Kang and Zhang, 2022). In the main, the presence of competition helps sellers to expand their sales, as well as relieving the customers from the pressures of cash flow. Competition seriously impacts on the dynamics of manufacturer-retailer relationships such that firms now adopt far reaching strategies to remain in business (Nematollahi, Hosseini-Motlayh and Pazari, 2024) In the credit market competition may harm mutually beneficial relationships between firms and their creditors (Petersen and Rajan, 1995). In fact, increased competition may cause credit risks to migrate outside the traditional supervisory threshold. Customarily, trade credit is a common practice in competitive markets. On the sale of the wholesalers and dealers, they need to push into markets and sustain high level of demands that companies need for continued running of operations. On the other side, flour firms are built with huge idle capacities such that the pressure is always there for increasing production and outputs (Ma, 2005; Ofonyelu 2014, 2020, 2023)

This is because credit sale on its own is a risk. As a result, competitive firms will not likely want to indulge in it. The purpose of indulging in such risk is essentially to garner more sales. In the case of the flour market, selling on credit to bakers has become a culture. An average baker sees a flour dealer as cruel and difficult if he doesn’t sell on credit. Due to the level of education and financial literacy among the bakers, buying flours on credit is a norm that should not be done away with. The bakers’ minds are conditioned in such a way that in every batch of flour used in production, what is done is to make provision for the value of the items collected on credit and once they are paid off, the rest are profits. An average baker thereby depends on the flour seller as a source of working capital. But unwilling to build capital base outside buying on credit. There are several implications from this. One, during the period of product scarcity, bakers who buy on credit may not likely be able to get supplies because the sellers at that point would not be willing to sell on credit. Given the nature of bakery market, no reasonable baker will want to close shop for days without producing. Otherwise, the customers would have been lost to the competitors by the time they resume production. Two, credit sales confer on the bakers a kind of additional funding for their business. In some situations, bakers who have not been disciplined in managing large capital may misuse such opportunity and leading to bad debts for the creditors and ultimately to the close of the business. The third factor is a psychological issue. The average mind of a bakers seemed to be wired for default. Once a credit line is opened for one. The next thing will be that the baker would want the size of credit to continue to increase. Instead of using the profits from the productions to defray past credit and migrate to buying on cash. No, an average bread baker will want to buy more on credit and continue in credit.

**Table 1:** **Wholesale/Retail Sales trends among flour distributors in Ondo state**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Flour brand | 2021 | 2022 | 2023 | 2024 | 2025 |
| Cash (%) | Credit (%) | Cash (%) | Credit (%) | Cash (%) | Credit (%) | Cash (%) | Credit (%) | Cash (%) | Credit (%) |
| Mamagold Crown FlourIRS premium flourGolden penny prime flourHoneywell superfine Flour | 80--------9596 | **20****----****----****5****4** | 78--------9395 | **22****----****----****7****5** | 82--------9296 | **18****----****----****8****4** | 9298999598 | **8****2****1****5****2** | 7995999798 | **21****5****1****5****2** |
|  |  |  |  |  |  |  |  |  |  |  |

 Source: compiled

If the seller should insist not to continue giving the baker more on credit, the customer will switch to another seller and continue the same act. So overtime in the market, one will notice that over a particular time, a baker would be owing almost all flour sellers and with no reliable means or sincere intention of repayment. This is the major source of bad debts and the contagion effect in the market. A premeditated moral hazard but adversely selected. In fact, only flour distributors who sell on credit escape from the credit trap. The case of the bakers in Ondo State is very unique. Majority of the bakers buy flour of credit. In fact, more than 50% of the daily sales of flour within the state is on credit. As a result, a prospective flour dealer must join the trend if he wants to make large sales.

A look at table 1 shows the profile of flour distributors in selected local governments in Ondo state and the survival over the years. In the main, crown flourmills, as represented by mamagold flour pushed the highest form of credit sales over the periods. The year 2024 has the lowest forms of credit sales. Two main factors accounted for this. First, there was a major food scarcity in that year, as a result the demand for flour during the year remained perpetually high. Since credit sale is tailored towards promoting sales, the high demand implied that there was not necessarily any major need to sustain high credit sales during the year to drive sales. Second, there was a major entrance of new flour brands from the south-south and northern markets into the south-west markets. Before 2023, IRS flour (also known as Bua flour) and crown premium flour were not popular in the south western markets of Nigeria. Within the last two years however, these firms had made significant and aggressive push and penetration into the market. These penetrations were done mainly by pushing lower priced flour. This development goes to show that credit sales, after all can no longer seen as the core means of endearing customers to their suppliers. Apart from the fact that it risks the working capital, loyalty from a customer in debt is always doubtful. A look at table 2 shows the size of flour distributors in the last 5 years in selected towns in Ondo state. The major reason for the change in the number of distributors is bankruptcy arising from credit sales. Except in Ikare Akoko, the number of flour distributors reduced drastically over the years. In fact, the impact was highest in Ore and Akure where huge bad debts caused many to quit flour selling. What is more painful in the situations is that when such business fails, customers rarely come forward to repay their debts. They rather abscond and look for a new supplier to continue buying from.

**Table 2: Size of flour distributors in the study area over the years**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Years** | **2021** | **2022** | **2023** | **2024** | **2025** |
| AkureOndoOreOwoIkare | 113725 | 102616 | 93515 | 82424 | 72415 |
| **Total** | **28** | **25** | **23** | **20** | **19** |

 Source: compiled

Table 2 showed a declining trend in the number of flour distributors among major towns in Ondo state. It showed the incidence of businesses that closed down mainly because of bad debts accumulated over time by non-paying bakers. Being in the food industry, flour once sold out cannot be easily retrieved or recalled in the event of default. This advantage on the side of the bakers makes them susceptible to moral hazard and default. A look at the trend suggest that there may not be many standing flour distributors in the near future should the trend continue. Should the trend continue, more than half of those who currently sell on credit would have closed down. A credit in the bakery market is adjudged to have become bad debt or a risk if it has become unpaid after more than a month. The problems with such debt is that the debtors are most times daily customer. And they are always required to pay for the past credit before new supplies are made. So in any situation where a debtor does not show up for days or weeks, it means the fellow must have secure a new source of supply. As a result, the current creditor is denied the potential gain from the daily patronage and with the working capital being depleted.

**A model of Competition for the Flour Industry**

In this section, attempt was made to simulate a two-stage model, first to deal with the competition issue in the first stage and survival (and/or profitability) in the second stage of decision. This framework is drawn from the works of Roller and Sickles (2000), Dixon (1986) and Ma (2005). The competition in the flour market put pressures on all the flour dealers to pursue market share (large sales turnover) as the main goal in the short run which involves selling on credit and in the long run pursues survival. A flour dealer simultaneously decides the profit margin on a bag of flour based on the perceived default risk of the customer in the first stage and then choose the quantity to sell. Ordinarily, a customer with a default risk is a credit risk. As a result, should not have a space for patronage in the market. However, due to competition to meet sales targets, credit sales is extended to those categories of bakers with potential for default. Default risk thereby becomes endogenous in the profit function of an average seller. A flour dealer in the short run seeks to maximize profit subject to default risks. This can be represented in the following equations.

$Profit \left(π\right)=Q F (default risk$) (1)

Where Q represent the total sales

In other words,

$Profit \left(π\right)=Q\left[cash sales+\left(credit sale x default risk\right)\right]$ – C (2)

Where δ is the default risk. The default risk in a typical flour market is positive. Thus δ > 0 < 1

For the sake of simplicity, and since our major preoccupation not about the cost function, one can assume a costless flour seller. Such that C = 0

From equation (2), we notice that the default risk enters the credit sales multiplicatively. The implication of this is that a bag of flour sold on cash basis is greater same bag sold on credit depending on the size of the default risk (δ).

We can rewrite equation (2) as

Π = Qa + Qb δ (3)

Since Q = Qa + Qb (4)

A higher default risk will impact negatively on the level of profitability. Ordinarily. Profit should be a function of output (Q), such that the higher the sales, the higher the profit. This is not the case in the case of credit sales. Profit now depends on the reduction in the default risk rather than output.

This implication of this is that both the profit function and survival becomes a gamble in the second stage (long run). With competition, flour sellers can choose to collusively pursue market share (quantity) as a short run goal but in the long run, pursue only cash sales as a survival strategy. From equation (3), one can see that only (Qa) relates positively with profitability. The use of the concept of short and long run is in reverse to as used in Roller and Sickles (2000). This is because profit maximization and business survival are both long run issues for a trading firm. A manufacturing firm with huge idle capacity as in the context portrayed by Roller and Sickles (2000) and Ma (2005) can operate in the reverse order when credit sales is not involved.

**Further findings**

Table 3: The size of credit sales unpaid (2021-2025)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Years | 2021 | 2022 | 2023 | 2024 | 2025 |
| Amount (N’M) | 40 | 140 | 120 | 90 | \*51 |

Source: compiled

\* This study is conducted between January and June, 2025, as a result, the data given for the year 2025 reflect only for half of the year.

Table 3 shows the size of unpaid credit through a five-year period among key flour distributors in the state. Specifically, the trend has become high despite recent tightening actions by distributors in curtailing the trend. At middle of the year 2025, the accumulated new bad debts had reached over N50 million naira. This is despite the fact that past bad debts are rarely repaid. In fact, the nature of flour business is such that bakers tend to close down and liquidate the business once they sink into debts with little or no hopes for the creditors. A lot of factors can cause a baker to fail. This include lack of managerial capacity, poor product quality, lack of competitiveness and wrong financial decisions. These factors make it difficult to recover a bad debt from any baker once it has elapsed into months. The situation is worse among the small bakers because they are always tucked into making only daily production decisions. Most of them take simply short decisions as if the business will not last into the future. For many, this is the main motive for buying on credit. With the expectation that if the business fails, the creditors become co-losers. Among the master bakers in Ondo state, more than half of the members have this short run mindset and is the reason why most of the bakers continue to operate on small scale and many shutting down yearly.

Table 4: Number of failed bakeries in selected towns in Ondo state

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Years | 2021 | 2022 | 2023 | 2024 | 2025 |
| No of Bakeries closed down | 9 | 12 | 9 | 8 | \*5 |

Source: compiled

\* This study is conducted between January and June, 2025, as a result, the data given for the year 2025 reflect only for half of the year.

Table 4 show the incidence of failed bakeries in selected 5 towns in Ondo state over a five-year period. A look at the table showed the trend of bakery closures in 5 major towns in Ondo state. The towns include Ikare, Owo, Akure, Ore and Ondo town. The bakeries that closed down were th ose that deal majorly on the production of bread and/or bread buns. In recent time, bakers have diversified into wider production of products which includes bread buns, fast foods and eateries. The focus of this study is essentially on the non-industrial bakeries who specialize in bread baking and/or bread buns frying. The activities of industrial and hybrid bakeries which specialize on wide range of baking and allied services with brand names such as *Oyato*, *Captain cook*, *Foodco*, etc is outside the scope of this study. The future of the baking market in Nigeria is encouraging with more private firms increasing their investments and growing their branch networks across the nation. One expect that with such commitments, default in repayment of flour sold on credit will begin to decline. As bakeries grow bigger, chances and incentive to default would reduce. Selling of flour on credit may no longer be a major sales strategy in pushing for new markets in the near future given the experience from Ondo state master bakers.

**Conclusion**

This study examined the reasons why selling on credit is endemic in flour business. Flour mills and dealers sell on credit because they need a constant loyalty of customers who will continue to clear the shelves. An absence of such steady pools of buyers may imply that firms will have to shut down intermittently to respond to demand dynamics. It questioned the common belief that flour dealers must sell on credit to bakers in order to survive and sustain market share. By examining the activities of selected flour dealers across Ondo state, the study observed a declining link between selling on credit and competitiveness. Credit sales had become a major source of bad debt in the market and is majorly rampant among the small bakeries. The study suggests that many firms may be forced to close down if the trend should continue. Flour sales on credit has become riskier because of the rising moral hazard among bakers. Smaller bakeries default on credit sales than the bigger ones. As default risks rises in the market, flour dealers need consider business survival as more important goal than sales turnover.

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