International Journal of Innovative Research in Accounting and Sustainability
ISSN: 2736-1381 (Print), ISSN 2736-1500 (Online)
Vol. 8, No. 3, 2023

Monopolistic to Oligopolistic Competition: How Fast is the Nigeria Flour Market Changing?

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Abstract

The competition in the Nigerian flour industry is real and strong. The development has led to a continuous concentration of the industry into an oligopolistic competition. At present, the two leading firms, flour mills of Nigeria (FMN) and Crown flour mills (CFM) controls 75% of the market share. This is in addition to the fact that these firms are also harboring significant levels of un-utilized capacities which the new change in market structure will help to reduce. The study examined the factors that cause market structures to change and observed the resulting change in market structure will be long termed. One will have expected that the rising cost of diesel and transportation cost across the country will impede this market concentration and allow smaller firms to grow in capacities and consolidate on market share. But the likelihood of this seemed not forth coming in the short run. The study suggests that the continuous concentration of the industry into oligopolistic competition will continue into the near future and prices are expected to be higher with the new market structure.
Keywords: Monopolistic competition, oligopolistic competition, flour market, economy, Nigeria.

1. Introduction

The flour market in Nigeria is oligopolistic in nature. There are few numbers of firms controlling the dominant market share in the industry. This is unlike what it was about a decade ago when there were many small but active firms in the industry. It was a reminiscence of what looked like a monopolistic competition. The last one decade has seen to the collapse, merger and/or acquisition of many of the firms. Thereby increasing the market concentration and ability of individual firms to influence the industry price. Very recently, the merger deal between flourmills of Nigeria (FMN) and Honeywell Flour Mills (HFM) was completed in June 2023. The FMN (as emerging after the merger) alongside with the Crown flour Mills (CFM), a subsidiary of the Olams group now controls over 75% of the industry market share with the flour mills holding more than 50% of the stake. Since this development, the stage was set for a near duopolistic/oligopolistic market competition, with the emergence of two elephants[1] dictating the tune of the price and quality (or quantity) variations. The two elephants in the industry represent different blocs.

On one side is the Olam group, pushing four main brands of flour into the market (the brands include mamagold flour, mix and bake flour, Bua and Dangote flour). On the other side is the flour mills of Nigeria (FMN), pushing Golden Penny Flour, Confectionary Flour, Golden Penny Sausage Flour, Easy Bake, Classic, Eagle, honeywell superfine and

[1] The elephant is used to refer to FMN (after having acquired HFM) and CFM.

delight brands of flour. At the regional level, we have Life flourmills in Sapele, Delta state making strong representation in the south-south and some part of the south eastern states. Within the south-south region of Nigeria also are the pure flour mills located in river state, Kings flourmills in Akwa Ibom state and Flourmills of Nigeria branch in Calabar. The north does not have much concentration of flourmills as in the south. The regional firms have been able to remain relevant in the market by offering value brands[2]. Each of the flourmills represent a force out of the different blocs in the market. The discussions in this study are essentially focused on the leading firms whose products compete nationally. In essence, the center of the discussions focused on FMN and CFM. The regional firms as a whole constitute just a bloc of the market and their role in the competition game have been more of reactionary.

Another peculiarity about the competition in the industry is the degree to which firms exploit non-price strategies in pushing their market holdership. For instance, in the heat of the recent volatility in exchange rate, CFM raised the price of their flour by N2500 on September 21, 2023 and further suspended sales on credit to varying categories of their customers. It took the FMN almost two weeks to change prices. In a subtle way, it adopted a rationing mechanism after the initial price increase by the rival. Customers were only allowed to purchase the average of their monthly orders during the time per week. These actions had two main effects in the market. First, it moderated the new price pressure in the market as pushed by CFM. During the time, major bakers and end users diverted to the FMN for their flour needs and depleting the market share of CFM. Second, it gave FMN opportunity to undercut the market and attract new customers to taste their products.

Flour market is such that when new bakers taste a new product, not all will return to their former brand if the new products serve right. The contraction in the size of the flour firms have some implications for the industry's competitiveness and food security in the country. A very large proportion of the population depends on processed and manufactured good to make up their daily diets and food security. These are many others are the crux of this study. The rest of this paper is structured as follows. Section 2 discusses the strengths of each firm in driving the competitions and how the firms vary in their price setting. Section 3 examined the status of changing market structure. Section 4 discusses the implications of the market moving from monopolistic to oligopolistic competition. Section 5 concludes the study.

2. Literature Review

2.1 Competition in Nigerian Flour Market

Competition in the Nigerian flour industry is real, strong and general across the various products of the flourmills (Ofonyelu (2014,2020), Onijingin et al (2017)). Each of the leading flourmills has their competitive strengths and this goes a long way in determining the price decisions in the industry. The strengths of CFM derive from its ability to harness cheap foreign exchange from the international market due to its multinational nature. Access to cheap foreign exchange is important in securing purchase of wheat at foreign markets. This has scarcely been a problem for the CFM. The engagement of the firm in export of cash crops and annexation of gains from international trade provided a very secured source for her competitive strength. Viewed from another perspective, the firm explored this advantage for low-cost production and push into the markets. Over the last five years, CFM, via its

[2] Value brand is used to refer to cheaper but low yielding categories of flour which are easily penetrating the markets because of the cheaper price. These categories of flour always have a price difference from the premium brands with about N1000 to N2000 per bag

major flour brand of mamagold has been very aggressive and damning in setting a sticky and low-price regime in the industry. At every point in time, the firm was always undercutting price and pushing sales on credit than the other firms. For this, it represented a major force in the market. In fact, prices can rarely change in the industry if mamagold flour is not ready to change its price. This has been the situation over the years until the recent months where the firms seem to be leading in spiking price increases (see able I). Since July 2023, changes in the price of flour have become more rapid and led by the mamagold unlike the case in the previous years. Before this year, price of flour rarely changes more than 2 or 3 times. But for this year alone, prices have changed for 5 times, and the year has not ended.
On the other side of the market is the FMN, a major place also in the flour industry. The strengths of its competition derive from the ability of the firm to acquire smaller firms at strategic regional levels which gave it wider coverage and good grip of the market. With the spread, it has been able to retain a strong holdership on the market over the past two decades. FMN has exploited its advantage of bigger size to maintain a strong market presence across the six geopolitical zones in the country. Unlike the CFM whose strong markets share were mainly in the southern parts of the country. The recent acquisition of HSF was a major game changer in the competition gears in the industry. That since action gave the FMN over 12% market share of the industry. No wonder it refused collapsing the two firms into one after the completion of the merger and the choice to run the two entities separately to maintain the brand and customer loyalty. A look at table 1 showed how the flour prices have changed over the years. Over the years, mamagold will always set her price lower than the leading brands, be the last to raise prices and bags her flour to be over 50kg. These subtle actions were impactful and strategic. In fact, the firm determines when price will change or the nature of non-price competition that will happen in the industry. For instance, in 2018 when it began giving extra 6bags to every 600bags of flour bought, other flour mills had to adopt the strategy and this ran for over a month. Till the present, the flour firm is still bagging its flour over 50kg[3].

Table 1: Prices of flour brands from 2014 -2023

years/flour brands	Honeywell Superfine flour	Golden Penny Prime flour	Mama Gold Flour
2014	6571	6650	6550
2015	6190	6200	6050
2016	6855	6700	6500
2017	10380	10300	10200
2018	10857	10900	10750
2019	11303	11500	11300
2020	12703	12750	12500
2021	20528	20400	20300
2022	32450	32550	31500
1/4/023	31500	31200	31000
8/7/023	32500	32300	32500
16/7/023	34600	34500	34500
10/8/023	37750	37500	38000
*1/10/023	40,250	40,000	40000

Source: Compiled from sales invoices of the flour mills (2023) *predicted

[3] An average bag of mamagold flour weighs between 50.5 and 51kg. This is unlike golden and honeywell whose average weighs are 50.3 and 50.1 respectively. A kg of flour cost about N800 in the market and the extra yield from it is enough to make customers want to stick to a brand with extra bagging.

A look at the table showed the prices from mamagold flour as being cheaper compared to honeywell and golden flour brands throughout the periods except this year. This price difference is aside the fact that mamagold flour supply majority of their customers on credit. The price listed were for company delivery. Ordinarily, the actual price will be higher for a customer who self-collect using commercial trucks. The price difference per bag is about additional N100 or more per bags. While delivery by Honeywell is the easiers and mostly in batches of 300bags, company delivery from FMN and CFM mostly come in 600 and 900bags respectively. This on its own making payment for Honeywell flour easier and the delivery more frequent for new and upcoming distributors. Until recently, over 70% of golden penny flours are lifted on self-collection. Since late 2022, FMN had crashed the price of their haulage/delivery services by about 30%. This thereby forced many of the customers to switch to company delivery and indirectly translating to cut-offs in the price of the products.

The competition in the industry has a serious impact on the prices of flour at two levels. On one side, the fact that the shelve life of flour is less than three months pushes the flour mills to selling on credit. In these regards, mamagold flour since January 2023 began an expansive push for market grabbing via credit sales. For instance, key distributors were no longer required to clear old debits before new orders are release. Once they are able to clear up to 60% of their outstanding debts, new orders are raised for them. The implication of these on the side of the distributors is that cheap finance and working capital are indirectly made available to them. This advantage pressures the dealers to begin to sell also on credits to the consumers and bakers with the attendant default risks inherent in it. On the rule of the thumb, a baker is twice likely to default on repayment of supply once he is sure to get the same service from another dealer. Between January and April 2023, at least 30% of the working capital of the distributors have been increased due to the credit supply. From another perspective, the advent of credit supply has made flour dealers to be more aggressive on reaching the grass root bakers. Now, the bakers know that they are the beautiful bride and their incentive for adverse selection and moral hazards have increased. With this, the flour mills face risks of bad debts while the dealers face declining profits as they need to crash prices to be able to sell in the faces of the short shelve life of the product.

The end result of these activities is the return to the era of flour mills failures and merger/acquisition as was the case about two decades ago. The implication of these is that these monies may not get back to the flour mills unless they want to lose the dealers to other competitors who sell on cash. Flour customers are known with a particular trait. They become averse to settling their old debt once they are not sure of a new supply. But they will likely continue business with the person who sell to them on cash when they are stocked out. This was the cause of the general debt burden that crippled the flour industry in late 1990s through early 2000. When two flour mills begin a fight for a market capture by selling on credit, the market winners' curse can be too expensive. A lot of money will be lost in the market as many of the customers do not pay back once they had purchased on credit. The current economic hardship experience in the economy has also joined in raising the moral hazards among customers. The firms lately since June 2023 have backed down on credit sales and this with the new consolidation of HSF by FMN have become a major game changer in the competition dynamics in the industry.

2.2 Changing Flour Market structure

There a number of reasons why market structures change. Economic literature had noted the roles of macroeconomic shocks (Hall, Blanchard & Hubbard, 1986), high markups prices (Domowitz, Hubbard & Peterson, 1988), Transportation cost and legal barriers

(Kirzner, 1973), market share elasticities (Boyer, 1979) and accumulation of huge idle capacities (Ma, 2005) as factors that cause market structures to change. These same factors are all present in the market structure of the Nigerian flour industry. In attempt to beat the rising cost of transportation to distribute flour across the nation, it has become attractive to cannibalize strategic small and regional flour mills for a possible merger or acquisition. As a prelude to the action, the leading flourmills introduces price discrimination into the market. Low prices are sustained at the regions where they have such interests. For instance, prices are flour are push at lesser prices in the south-south region of Nigerian than in the south west. Part of the reason for this is to ensure a continuous holdership of the market share in the region. In addition, the region is seriously competed for by many small regional firms which may not be able to sustain continuous deadly competitions. Both FMN and CFM are known to be deeply interested in capturing smaller firms for market annexation. From another perspective, the impacts of the economic shocks arising the on-going exchange rate fluctuations cannot be overlooked.

The depreciating exchange rate which has made sourcing of wheat, the primary input for the production of flour very difficult and expensive. As a result, firms who do not have cheap means of securing such loses a competitive edge. In the face of the worsening economic situations, such firm may be required to stop production, be acquired and/or merge with the succeeding one[4]. It is only a big firm that are able to orders wheats could carry the company through many months in the face of the global scarcity of cereals and price fluctuations. The Russia-Ukraine war stated over a year now imposed serious pressures on global food security and availability of wheats. One can see the impacts as price of flour has changed more than 5 times this year and the change by more than 45%. Absorbing this shock and still remaining in the market is not an easy one. These factors have been the reason for the collapse of several firms within the last one decade in the industry. The competition in the industry is cannibalistic in nature. The big firms are poised to acquiring the smaller firms. Based on experience, this strategy has been the means by which big firms consolidate their market powers. Acquiring a smaller or weak firms has some benefits. If the small firm is a regional player, it allows the new acquisition to penetrate and annex a new market. The acquisition of Eagle flourmill in Ibadan by FMN was a strategic one.

The FMN has been finding difficult to made major headway in raising the market share Oyo state axis of the south west until the acquisition. Even after the acquisition, the firm retained the product lines while introducing new products to ensure wider coverage of the market. At the wake of the new administration of President Bola Ahmed Tinubu, a number of new reforms were implemented with its wide varying effect on the domestic economy. The reforms include the elimination of fuel subsidy removal, the abrogation of multiple exchange rate system and an overhaul of the power industry. The reforms have led to major depreciation in the local currency, more than tripling of the price of petrol, soaring inflation and decline in the purchasing power of the populace. These developments joined to shrink the average purchasing power of the populace and as a result taking the proceed foods markets out of the reach of a greater member of the population. As a rule of the thumb, the price of flour changes whenever naira depreciates by more than N50. In fact, there seem to be a ratio 1:20 in the naira to dollar exchange rate depreciation. When naira depreciates by N100 for instance, price of flour will rise by N2000. This has been of the premise on which speculation of changes in flour prices are been made (see table 2).

[4] Kings flourmills in Akwa Ibom has not been producing flour for over 3months now. The continuous closure of the firm may just be a prelude to its total collapse or future take over by one of the bigger firms.

Table 2: Relationship between dollar and flour prices

Dates	price of dollar/naira	50kg bag of flour price
31/1/023	650	31500
28/2/023	620	31500
30/3/023	635	31500
30/4/023	715	31500
31/5/023	750	31500
30/6/023	785	32500
31/7/023	810	34500
31/8/023	905	37500
30/9/023	1000	40000

Source: Author's Compilation (2023)

A look at Table 2 showed the relationship between changing exchange rates and flour prices. Some important observations can be made from the table. Major changes in exchange rate are followed by changes in the price of flour. All flour mills are not equally affected by the variations in the exchange rate. However, since all require dollar to access the wheat market, the exchange rate becomes important in determining the selling prices of flour. Apart from the dollar prices, the season of the market is also importantly considered. Flour prices tend to be sticky during harvesting time because of the abundance of competing farm foods but rises freely during the planting season. Barring all unforeseen circumstances, one would expect that the price of flour would be sticky till the end of the year. Flourmills are known to be built with huge idle capacity utilization so that they could flexibly respond to increase in market demand. On the part of FMN for instance, the changing market structure offers ample opportunity for profit maximization as there may not necessarily be need to build new firms but to jus optimize the existing capacity in response to demand. The extent to which fall in the average cost of production will compensate for the cross-country distribution cost determines how the new changing market structure will stabilize in the near future. The change in the market structure is becoming more uncertain as the increasing concentration of firms is also raising the cross elasticities of the products

2.3 Implications of the new market structure

Competition is a very important factor in setting cheaper prices and maximizing general welfare in the market spaces. The competition in the industry have seen to prices rising in recent time. However, with the shrinking number of firms in the market, one may need to be weary of the near monopoly experience in the market. The evidence that market-structure influences economic performance suggests that the firms cannot be trusted to act in the best interest of the consumer outside competition (Caves, 1976). In addition, the incentive to keep only few firms in the market could return the industry into building and acquiring excess and idle capacities as a way of deterring new firms from entering the market (Ma, 2005). Oligopolistic markets are known to offers higher prices than the competitive. The growing oligopolistic stance confers increased market power to the firms and opportunity for a cooperative cartel. One can only imagine the consequence of this on the economy given the fact that majority of the population depends on the processed and manufactured good for their daily living. With the rising cost of diesel, supplying the whole nation from a particular point is becoming increasingly difficult and expensive. One will expect that the regional firms will use the opportunity to grow in capacity and consolidate on market share.

The extent to which this will be possible is still left for the future to determine. On the other side, conglomerate firms like FMN are not relenting in the ensuing face off as they depend on their regional branches and cheaper company delivery (with own vehicles) to keep a strong hold on the market share. The fact that the leading firms are also harboring significant levels of un-utilized capacities in the face of new change in market structure creates an incentive for them to want to fight on in the competition against the consolidation of the smaller firms. Even though flour market is differentiated by the brands, bakers are finding it easier now in substituting the products. This implies increase cross elasticities and interdependence of the firms in price and quantity decision making. Given the poor regulatory and anti-trust policy of the government on firm performance, one can expect the consumers of flour to face higher price regime in the on-going developments.

3. Conclusion

This study examined the motive and implications of the increasing concentration of the flour industry towards oligopolistic competition. The concentration has intensified in the last one decade and stratified the firms into blocs. At the national space, FMN and CFM are the major competitor. However, there are several other firms competing at the regional levels especially in the south-south and south-eastern states. The change in the structure changes arise because the firms experience high transportation cost for distributions of the products across the nation, face macroeconomic shocks and the cross elasticity of the products are rising. The rise in the price of diesel have created opportunity for the regional firms to consolidate and grow their capacities because it is has become expensive for the leading forms to cheaply distribute across the country. However, the extent to which this can be exploited is left for another study. One expects that the continuous concentration of the industry into oligopolistic competition will continue into the near future. Prices are expected to be higher going with the new market structure.

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