NOVA SCHOOL OF BUSINESS & ECONOMICS

Microeconomics

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Competition and Market Power

The Commoditization of Starbucks

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1.Introduction

The focus of our paper is to understand how Starbucks' pressure to grow could force it to "commoditize" and make it more vulnerable to competition from other companies that previously were not regarded as direct competitors to Starbucks. For this, we analysed the coffee shop market in the US, the main branch the company operates in.

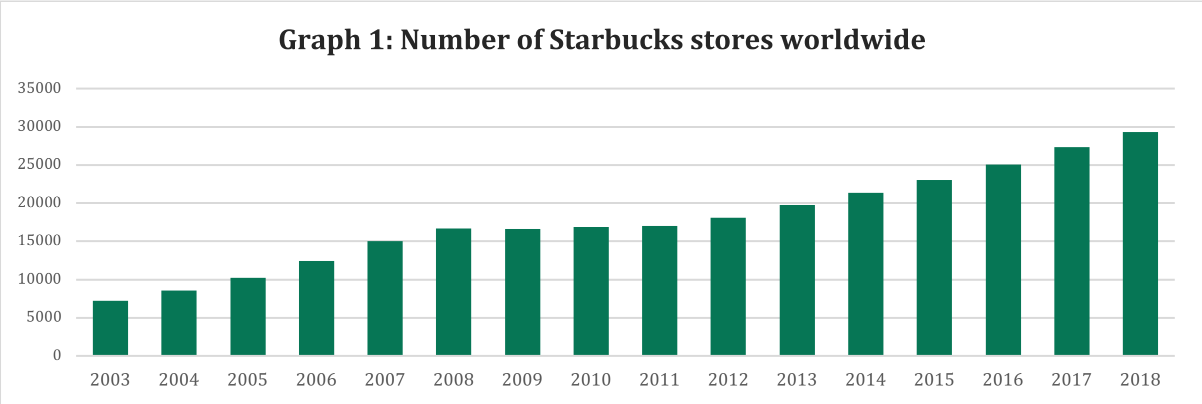
What makes this topic interesting is how Starbucks obtained their market power through the use of barely any marketing or the other "usual" tactics. They went beyond selling a product and offered, in their words "an experience". How this ended up being their major competitive advantage, and how their efforts to become more efficient (which would in theory improve the firm's profitability) led to the decrease in this "experience" feeling and how this has and may continue to hurt them, is going to be something we will approach throughout this paper.

It also allows us to understand how the pressure of new firms can reduce the market share of an incumbent firm, no matter how established their brand is. It allows us to enter the minds of the managers of Starbucks, as we observe how they react to these new threats and how they try to remain profitable, whether by decreasing fixed costs or by expanding into new markets.

In the following section, Background, we will provide a brief history of the firm, as well as an overview of the market we are analysing. After that, in Section 3, we will provide a thorough analysis of the theoretical content we will use in later sections. In addition, we will also provide all the graphs and inherent intuition that we deem necessary. Section 4 will be focused on data, i.e., where we got the data from. Section 5 will be the main focus of our work, where we will discuss the topic of this paper and expand on all the theoretical content from previous sections, and apply it to our case study. We will bring theoretical reasons to what is happening to Starbucks and why it is happening, and how they can mitigate the effects associated with accelerated growth, so as to keep their main market power feature and not take any steps back in terms of market standing.

2. Background

In 1981, Howard Schultz, the man who brought success to Starbucks, was hired as director of retail operations and marketing. Schultz's vision was to combine commodity coffee with a great coffee experience. Later in 1987, with the help of local investors, he purchased Starbucks and started to implement his vision. Starbucks Corporation became a multinational coffee chain store which retails, roasts, and provides its own brand of speciality coffee. It is the biggest coffeehouse chain in the world with more than 28000 stores worldwide.



Data Source: Statista

Successful Business Model and Strategy

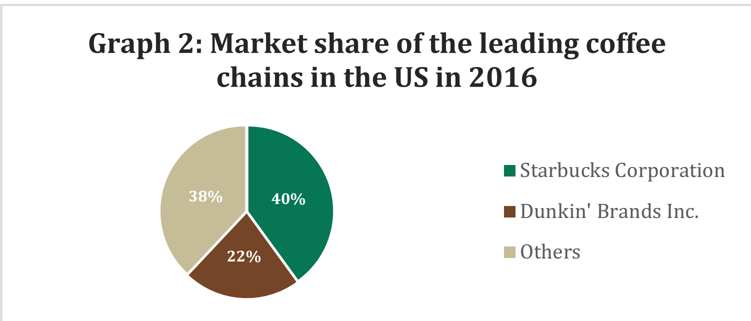
Behind their huge market power and quality in branding are several important factors that made them one of the largest coffee consumers worldwide, from great production to an ethical and well-managed supply chain. Firstly, Starbucks was successful in implementing an equilibrium between company-operated and licenced stores (franchising), allowing a higher control in brand and quality. Furthermore, the coffee shops are designed to enhance the in-store coffee experience, by excelling in customer service and serving premium coffee products (product differentiation). Finally, these pillars enabled the firm to create a strengthened and distinct brand image, associated with long lasting qualities, ethics and customer service. As a result, the advertising expenses did not increase aggressively comparing to its indirect peers in the mass market, especially with *McDonald's*. [1]

Market Information

United States is the biggest market for Starbucks (47,74% of total stores are in the U.S.)[2]. It is so saturated that Starbucks' coffee shops are being closed in the U.S. due to *cannibalism* (coffee shops near each other are stealing their own customers). The firm competes primarily in the retail coffee and snacks store industry and we assume that the company operates in two segments: Reserve Market and Mass Market. The first refers to the growing market for rare coffees, using high-end coffee products to attract customers that are willing to pay a premium, obtaining high gross margins. Its direct competitors in this market are *Peet's Coffee, Coffee Bean & Tea Leaf, Blue Bottle Coffee and Intelligentsia Coffee & Tea*. There are no indirect competitors. The Seattle-based coffeehouse giant has specific coffee shops destined to enhance the experience and to make a separation between the two types of consumer. The second term indicates the "commoditization" of coffee, which is designed to maximize efficiency and mass-production of coffee with similar characteristics and sell at lower costs. In this segment, Starbucks' direct competitors are *Caribou Coffee* and *Tim Hortons*, and indirect competitors include *McDonald's, Dunkin Donuts*, among others.

Market Share

As the main player of the market, it is expected that the firm has the biggest market share in the United States. Looking at the pie chart of 2016, *Starbucks Corporation* has approximately 40% of the total sales in the coffee-house chain industry. In second place comes *Dunkin' Brands Inc.*, holding 22% of the market share.[3]



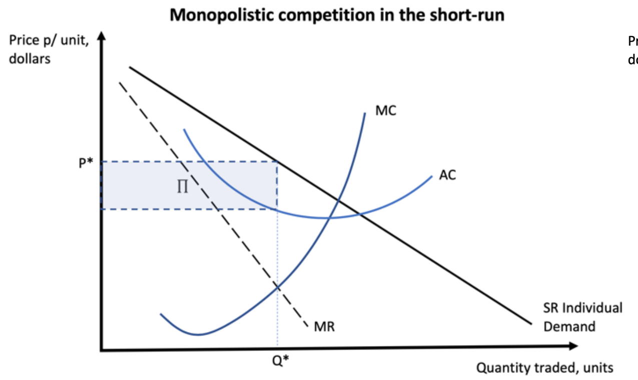
Data Source: Statista

3. Methodology

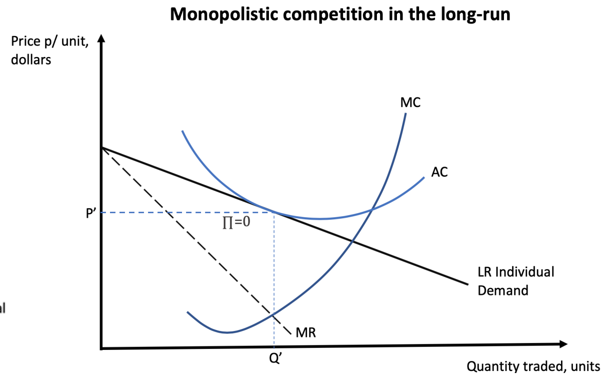
Market power is the ability of the firm to set prices above their marginal cost. Firms with high market power have a great level of influence in the market so they can be described as "price makers", that is, the ability to choose a price (over marginal cost) in order to maximize their profits. Monopolistic competition characterizes an industry in which many firms offer products or services that are similar, but not perfect substitutes (due to some product differentiation). Barriers to entry and exit in a monopolistic competition industry are low and there is a lack of perfect knowledge/information. These types of markets are composed of a large number of buyers and sellers. Due to the existence of some degree of differentiation, the consumer demand is not perfectly elastic because different producers can charge different prices for their differentiated good (just a little) and still have profits, that is, if they charge a higher price from the market price, they won't lose all consumers compared to what happens in the perfect competition case.

The difference between the short and long-run in this market is that in the long-run new firms can enter the market, which is especially likely if firms are earning positive economic profits in the short-run. New firms will be attracted to these profit opportunities and will choose to enter the market in the long-run. The entry of new firms leads to an increase in the supply of differentiated products, which causes each firm's individual market demand curve to shift to the left and become flatter. As entry into the new market increases, the firm's individual demand curve will continue shift until it is just tangent to the average total cost curve at the profit-maximizing level of output. Thus, in the long-run, the competition brought about by the entry of new firms will cause each firm in a monopolistically competitive market to earn normal profits, just like a perfectly competitive firm.

Graph 3



Graph 4



Commoditization of a good happens when the firm's product loses its distinctive characteristics that it had before (loses product differentiation), automatically increasing the number of available substitute goods, which in turn results in lower market power.

This normally happens when there is an increase in the number of firms in a given market: the total quantity of the product traded gets diluted for each of the firms, so each of them sells less. As a consequence, profits will decrease, in order to counter this effect, firms attempt to lower their costs in order to increase their margin. Reducing costs decreases the differentiation of the product.

The Lerner Index describes a firm's market power and is measured by the difference between the output price of a firm and the marginal cost divided by the output price. The index ranges from a high of 1 (monopoly) to a low of 0 (perfect competition), with higher values implying greater market power. The main problem with this measure, however, is that it is almost impossible to gather the necessary information on prices and particularly costs. The Lerner Index is equivalent to the negative inverse of the elasticity of demand formula that the firm faces.

4. Data

Table 1: Cost of Starbucks' Cappuccino	
Coffee	0.16$
Milk	0.16$
Cup + Stirrer + Lid	0.32$
Shop overhead and rent	1.31$
Staff payment	1.10$

Source: CoffeeMakerUsa.com

Table 2: Prices of Cappuccinos	
Starbucks	3.65$
Caribou Coffee	3.59$

Source: FastFoodMenuPrices.com

5. Discussion

Starbucks is a typical monopolistic competition example. There are numerous retail coffee companies that sell several types of coffees, and each of them with their own characteristics. With this, firms can charge different prices and still have profits. Since Starbucks provides a huge product differentiation (not only the product itself but also the whole Starbucks experience), it can charge higher prices when comparing to the rest of the market and still have huge profits. In this market, we assumed low barriers to entry or exit. Again, due to product differentiation, there is a lack of perfect knowledge/information because each retail coffee company does what they want to specialize their coffee and have customized recipes.

How have they dealt with it throughout the years?

With the increasing competition in this market and to prevent loss of market share, it was inevitable to reform and innovate in the business model. In the last 10 years, the number of stores almost doubled. The substitution of the *La Marzocco,* the machine that used to brew the speciality coffee of Starbucks, with automatic espresso machines, albeit faster and more efficient, produce different fragrance and taste from the original one, and the association to drive thru and delivery businesses have rapidly removed their characteristic exclusiveness.

Why the Cappuccino as the reference for Market Power of Starbucks?

We chose the Grande Cappuccino sold by Starbucks as a reference to compute the Lerner Index, the measure we chose to represent market power. The Cappuccino Grande or Caffe Latte is a relatively simple coffee-based drink, produced by mixing an espresso with foamed milk, and is one of the most popular beverages sold, which means it is included in the menu of almost every competitor, allowing for an industry-wide comparison. The Caffe Latte is sold at Starbucks for 3.65$ and has an associated production cost of about 64¢[4] as stated in the Data section. The costs associated with rents and personnel are not considered due to their fixed nature. Plugging these values we get a Lerner Index for Starbucks of approximately 0,825.

Caribou Coffee sells the Cappuccino Grande for 3.59$, 6¢ cheaper than Starbucks. We were not able to find data regarding Caribou's costs. However, since they are considerably smaller than Starbucks and given the fact that they outsource their coffee from the Rainforest Alliance (a network of sustainable coffee farms) as opposed to Starbucks, that produces its own coffee, we can assume that Caribou's marginal cost is higher. The lower the selling price combined with the higher marginal cost will result in a lower Lerner Index for *Caribou Coffee*, which translates to a lower market power, as proven on the Index.

6. Conclusion

After realizing that Starbucks had lost the vision of the value of the consumer experience, they decided to predominantly focus on everything that relates to the customer: "We are not in the coffee business serving people, but in the people business serving coffee" - Howard Schultz, ex-Chairman of Starbucks. In the short-run, we believe that Starbucks' brand loyalty is enough to compensate for the divergence in their values. However, in the long-run, keeping the same path would only turn coffee into a common product causing them to lose all their power. Finally, as a suggestion, we think Starbucks should focus, once again, in the whole experience that they are known for.

Appendix

Lc – Caribou's Lerner Index	***Pc*** – Price of Caribou	***MCc*** – Marginal Cost of Caribou
Ls – Starbucks' Lerner Index	***Ps*** – Price of Starbucks	***MCs*** – Marginal Cost of Starbucks

$$L = \frac{P - MC}{P} \Leftrightarrow L = 1 - \frac{MC}{P} \quad ; \quad Pc = Ps + \delta \quad ; \quad MCc = MCs + \varepsilon$$

$$Ls = \frac{Ps - MCs}{Ps} \Leftrightarrow Ls = \frac{3.65\$ - 0.64\$}{3.65\$} \Leftrightarrow \boldsymbol{Ls \cong 0,825}$$

$$Lc = 1 - \frac{MCc}{Pc} \Leftrightarrow 1 - \left(\frac{MCs + \varepsilon}{Ps + \delta}\right) \Leftrightarrow Lc = 1 - \frac{MCs}{Ps} - \frac{\varepsilon}{\delta} \Leftrightarrow$$

$$\Leftrightarrow Lc = Ls - \frac{\varepsilon}{\delta} \Leftrightarrow \boldsymbol{Lc = Ls - \alpha} \;,\; \forall\; \delta, \varepsilon > 0$$

Table 3: Number of Starbucks stores worldwide (Graph 1)

Year	Nº of stores
2003	7225
2004	8569
2005	10241
2006	12440
2007	15011
2008	16680
2009	16635
2010	16858
2011	17003
2012	18066
2013	19767
2014	21366
2015	23043
2016	25085
2017	27339
2018	29324

Table 4: Number of stores owned vs licensed stores in the U.S. (Graph 5)

Years	Company-operated stores	Licensed stores	Total number of stores
2005	4 918	2 435	7 353
2006	5 728	3 168	8 896
2007	6 793	3 891	10 684
2008	7 238	4 329	11 567
2009	6 764	4 364	11 128
2010	6 707	4 424	11 131
2011	6 705	4 082	10 787
2012	6 856	4 189	11 045
2013	7 049	4 408	11 457
2014	7 303	4 659	11 962
2015	7 559	4 962	12 521
2016	7 880	5 292	13 172
2017	8 222	5 708	13 930
2018	8 575	6 031	14 606

Graph 5: Partition of Starbucks stores in the US

Data Source: Statista

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