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COMPANY ANALYSIS OF STARBUCKS CORPORATION

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Dominik Vugić Sakal

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1. STARBUCKS CORPORATION

1.1. About the Company

Starbucks Corporation is an American coffee company and coffeehouse chain. Starbucks was founded in Seattle, Washington in 1971. As of 2018, the company operates 28,218 locations worldwide. Starbucks locations serve hot and cold drinks, whole-bean coffee, microground instant coffee, espresso, caffe latte, teas including Teavana tea products, Evolution Fresh juices, Frappuccino beverages, La Boulange pastries, and snacks including items such as chips and crackers; some offerings (including their annual fall launch of the Pumpkin Spice Latte) are seasonal or specific to the locality of the store. Many stores sell pre-packaged food items, hot and cold sandwiches, and drinkware including mugs and tumblers; select "Starbucks Evenings" locations offer beer, wine, and appetizers. Starbucks-brand coffee, ice cream, and bottled cold coffee drinks are also sold at grocery stores.

The first Starbucks location outside North America opened in Tokyo, Japan, in 1996, while the Philippines became the second market in 1997. Starbucks entered the U.K. market in 1998 with the $83 million USD acquisition of the then 56-outlet, UK-based Seattle Coffee Company, re-branding all the stores as Starbucks. In August 2003, Starbucks opened its first store in South America in Lima, Peru and first store in Russia in 2007. In February 2016, Starbucks announced that it will enter Italy, its 24th market in Europe and the home of the espresso. The first location will open in Milan in October of 2018.

In September 2014, it was revealed that Starbucks would acquire the remaining *60.5%* stake in Starbuck Coffee Japan that it does not already own, at a price of $913.5 million, while in July, 2017, Starbucks acquired the remaining *50%* stake in their Chinese venture from long-term joint venture partners Uni-President Enterprises Corporation (UPEC) and President Chain Store Corporation (PCSC).

1.2. The Starbucks Experience

Starbucks' mission "to inspire and nurture the human spirit" requires not just serving excellent coffee but also engaging customers at an emotional level. As Schultz, Starbucks` founder and long-term chairman, explained: "We're not in the coffee business serving people, we are in the people business serving coffe". Central to Starbucks' strategy is Schultz's concept of the "Starbucks Experience," which centered on the creation of a "third place" somewhere other than home and work where people could engage socially while enjoying the shared experience of drinking good coffee. The Starbucks Experience combines several elements[1]:

1. Coffee beans of a high, consistent quality and the careful management of a chain of activities that resulted in their transformation into the best possible espresso coffee.
2. Starbucks' counter staff—the baristas—play a central role in delivering the Starbucks Experience. Their role is not only to brew and serve coffee but also to engage customers in the ambiance of the Starbucks coffee shop. Employees need to be committed and enthusiastic communicators of the principles and values of Starbucks, which implies treating them as business partners.
3. Community relations and social purpose. Schultz viewed Starbucks as redefining the role of business in society: "Every store is part of a community, and we take our responsibility to be good neighbors seriously. We want to be invited in wherever we do business. We can be a force for positive action—bringing together our partners, customers, and the community to contribute every day."
4. Store design is subject to meticulous planning. While every Starbucks store is adapted to its unique neighborhood, all stores reflect some common theme, reflected in the designers' generous employment of natural woods and richly layered, earthy colors along with judicious high-tech accessorizing.
5. Starbucks' location strategy of clustering 20 or more stores in each urban hub is viewed as enhancing the experience both in creating a local "Starbucks buzz" and in facilitating loyalty by Starbucks' customers.

[1] Grant, R. (2016) *Contemporary strategy analysis, Ninth edition*. United Kingdom, Wiley.

1.3. Business Segments

Starbucks has four reportable operating segments: 1) Americas, which is inclusive of the U.S., Canada, and Latin America; 2) China/Asia Pacific ("CAP"); 3) Europe, Middle East, and Africa ("EMEA") and 4) Channel Development. They also have several non-reportable operating segments, which are reffered to as All Other Segments. Americas, CAP, and EMEA segments include both company-operated and licensed stores. Americas segment is the most mature business and has achieved significant scale. Certain markets within CAP and EMEA operations are still in the early stages of development and require a more extensive support organization, relative to their current levels of revenue and operating income, than Americas operations. Channel Development segment includes roasted whole bean and ground coffees, premium teas, a variety of ready-to-drink beverages and other branded products sold worldwide through channels such as grocery stores, warehouse clubs, specialty retailers, convenience stores and U.S. foodservice accounts.

	Americas	as % of Total	CAP	as % of Total	EMEA	as % of Total	Other	as % of Total
Company-operated stores	9.496	*55,78%*	4.816	*60,24%*	496	*15,69%*	4	*13,79%*
Licensed stores	7.528	*44,22%*	3.179	*39,76%*	2.665	*84,31%*	25	*86,21%*
Total	**17.024**	*100,00%*	**7.995**	*100,00%*	**3.161**	*100,00%*	**29**	*100,00%*

Table: Number of company-operated stores and licensed stores per segment
Source: Second quater 10-Q, 2018

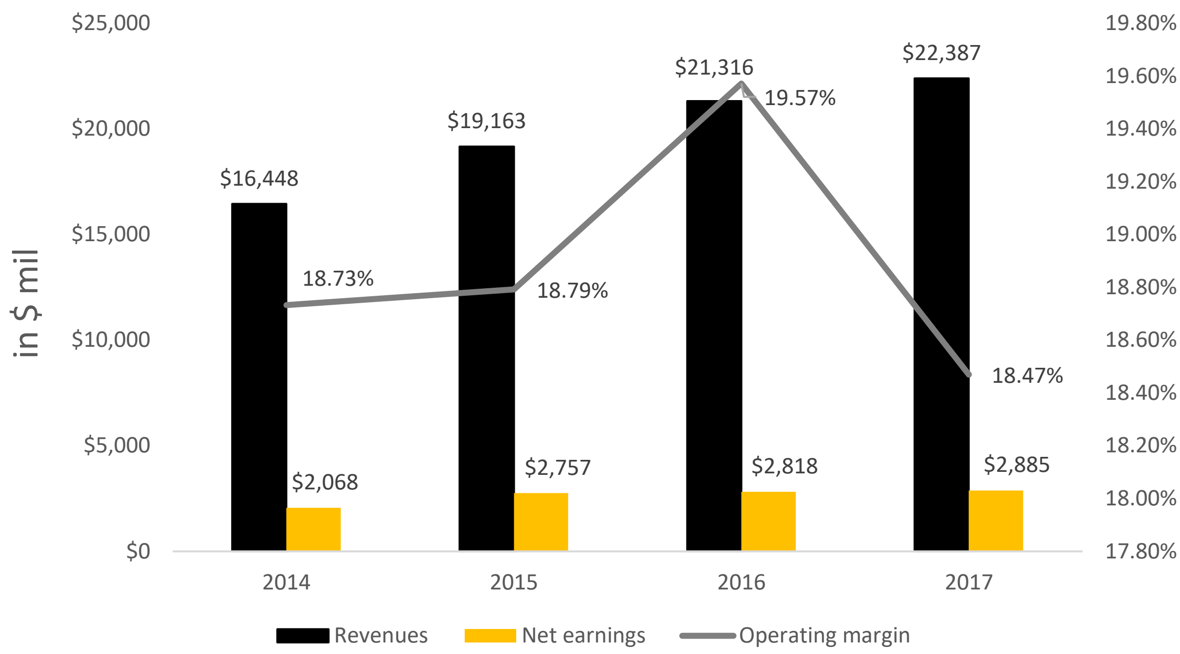
	Americas	as % of Total	CAP	as % of Total	EMEA	as % of Total	Other	as % of Total	Channel Dvlpt.
Company-operated stores	13.996,4	*89,42%*	2.906,0	*89,69%*	551,0	*54,36%*	197,3	*41,84%*	/
Licensed stores	1.617,3	*10,33%*	327,4	*10,10%*	407,7	*40,22%*	2,6	*0,55%*	/
Foodservice and other	39,0	*0,25%*	6,8	*0,21%*	55,0	*5,43%*	271,7	*57,61%*	/
Total revenue	**15.652,7**	***100,00%***	**3.240,2**	***100,00%***	**1.013,7**	***100,00%***	**471,6**	***100,00%***	**2.008,6**

Table: Revenue by segments
Source: 10-K, 2017

1.4. Financial Results for FY 2017

Starbucks results for fiscal 2017 continued to demonstrate the strength of its global business model, and its ability to successfully make disciplined investments in its business and partners. Consolidated total net revenues increased *5%* to $22.4 billion, primarily driven by incremental revenues from 2,320 net new store openings over the past 12 months and a *3%* growth in global comparable store sales. Consolidated operating income declined $37 million, or *1%*, to $4.1 billion. Operating margin declined 110 basis points to *18.5%*, primarily due to increased partner investments, largely in the Americas segment, restructuring and impairment charges and the absence of the 53rd week, partially offset by sales leverage. Earnings per share of $1.97 increased *4%* over the prior year earnings per share of $1.90.

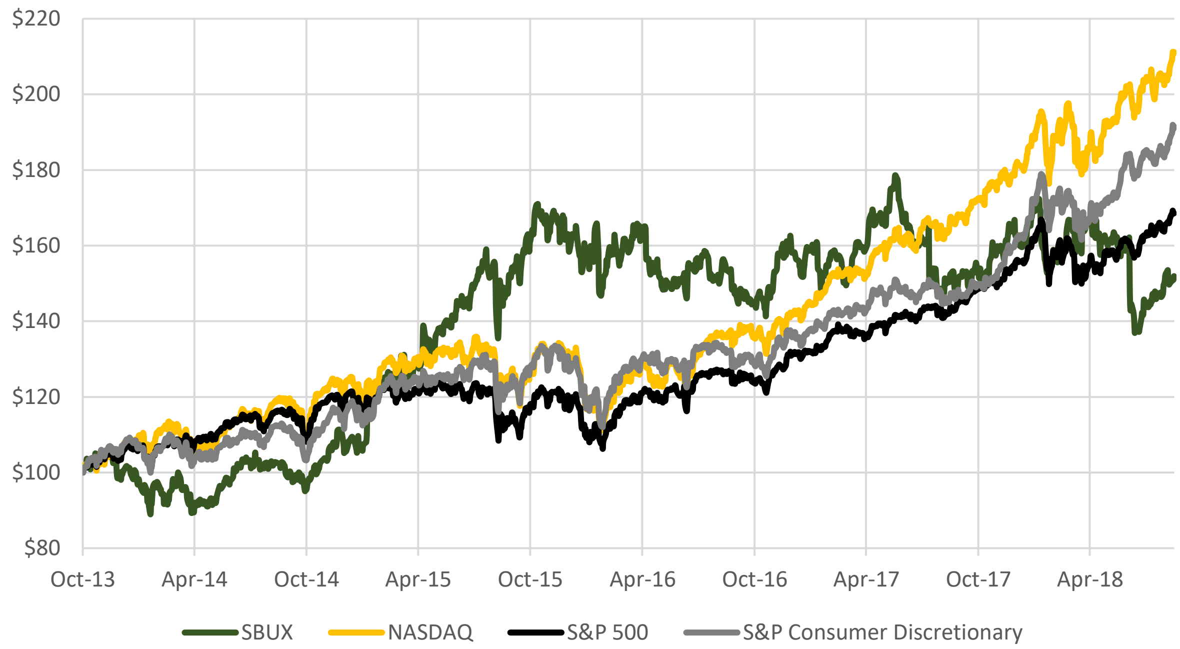
Americas revenue grew by *6%* to $15.7 billion, primarily driven by incremental revenues from 952 net new store openings over the last 12 months and comparable store sales growth of *3%*, which was driven by the success of premium food offerings coupled with innovation across coffee and tea beverage platforms. In China/Asia Pacific segment, revenues grew by *10%* to $3.2 billion, primarily driven by incremental revenues from the opening of 1,036 net new stores over the past 12 months and a *3%* increase in comparable store sales. Starbucks continues to execute on its strategy of repositioning the EMEA segment to a predominantly licensed model. As a result of this strategy, EMEA revenues declined $111 million to $1.0 billion, or *10%*, primarily driven by the absence of revenue related to the sale of Germany retail operations in the third quarter of fiscal 2016 and unfavorable foreign currency translation. Channel Development segment revenues grew by *4%* to $2.0 billion, primarily driven by increased sales through international channels and sales of packaged coffee, foodservice and single-serve products.



Graph: Starbucks` financial performance
Source: Starbucks` 10-K, 2017

1.5. Starbucks` Stock

The following graph depicts the total return to shareholders from September, 2013 through September, 2018, relative to the performance of the Standard & Poor's 500 Index, the NASDAQ Composite Index and the Standard & Poor's 500 Consumer Discretionary Sector, a peer group that includes Starbucks. All indices shown in the graph have been reset to a base of 100 as of September, 2013, and assume an investment of $100 on that date and the reinvestment of dividends paid since that date.



Source: Yahoo Finance

Despite the stock`s relative bad performance in comparison with the three indexes, it still returned more than *50%* to its shareholders during the five year period. For a period of time the stock greatly outperformed the indexed, until news in April 2017 of Howard Schultz steeping down as CEO and president, with Kevin Jonhson replacing him.

At the current price of about $56, the stock`s PE ratio stands at about 18, below 25.64, its eight year average. Starbucks 5-year market beta is 0.56 which shows that its stock is less volatile, and thus risky, than the market as a whole. This could be due to Starbucks being a mature company with a stable and growing base of customers, but it could also be due to economic expansion happening in most of the world in this period, preventing the reduction in demand for company`s products.

2. ANALYSIS OF STARBUCKS` EXTERNAL AND INTERNAL ENVIRONMENT

2.1. Analysing the Coffee Industry with Porter` 5 Forces Model

Rivalry Among Competitors

The specialty coffee market is intensely competitive with respect to product quality, innovation, service, convenience and price. The industry is mature and growth rate has been moderately low, which causes the intensity of competition among the companies to be moderately high due to all of them seeking to capture market share from established firms like Starbucks. The industry has a monopolistic competition, with Starbucks having the largest markets share and its closest competitors also having a significant market share, creating significant pressure on Starbucks. However, looking from the outside in, Starbucks has no clear competition that can truly rival it in size or revenue on a global scale. Most of Starbucks' competitors are regional or operate primarily in a different industry. Inter-firm rivalry is seen quite often in the specialty coffee industry with price discounting among competitors. One example of this is seen with the offering of low-cost coffee from the large restaurant chains Dunkin' Brands and McDonald's, which now sells premium specialty coffee beverages at a slight discount to Starbucks. Starbucks also competes with many regional and local chains. But Starbucks maintains competitive advantage over them because of its brand and sheer size.

Potential Entry of New Competitors

There is a moderate threat of new entrants into the industry as the barriers to entry are not high enough to discourage new competitors to enter the market. For new entrants, the initial investment is not significant as they can lease stores, equipment etc. at a moderate level of investment. At a localized level, small coffee shops can compete with the likes of Starbucks and Dunkin Brands because there are no switching costs for the consumers. But this relatively easy entry into the market is usually countered by large incumbent brands identities like Starbucks who have achieved economies of scale by lowering cost and improving efficiency with a huge market share. New entrants must differentiate themselves from Starbuck's product quality, its prime real estate locations, and its store ecosystem 'experience'. Many companies (Barnes & Noble, United Airlines, Sheraton Hotels, Nordstrom) have partnership with Starbucks that makes it even harder for new firms to enter the market. These partnerships also make it difficult for existing firms to penetrate the coffee market in some areas fully. The incumbent firms like Starbucks have a larger scale and scope, yielding them a learning curve advantage and favorable access to raw material with the relationship they build with their suppliers.

Threat of Substitutes

There are many reasonable substitute beverages to coffee, which are mainly tea, fruit juices, water, soda's (Coca-Cola, PepsiCo), energy drinks (Red Bull, Monster Beverage Corporation) etc. Bars and pubs with non/alcoholic beverages could also substitute for the social experience of Starbucks. Consumers could also make their own home produced coffee with household premium coffee makers at a fraction of the cost of buying from premium coffee retailers like Starbucks. But it is important to note that Starbucks also has its own brand of tea (Teavana which it acquired in 2012), fruit juices (Evolution Fresh in 2011) and home coffee makers (Verismo), which makes producers of these products competiton, not substitues.

Bargaining Power of Buyers

Starbucks has many customers, as indicated by its annual revenue. Their customers include both individuals and other companies. Because coffee is a commodity enjoyed by many, the customers are plentiful. There are an estimated 66 billion cups of coffee consumed each year in the US. With these numbers, it is difficult for customers to have very high bargaining power. In addition to a large customer base, Starbucks is capable of lowering the bargaining power of customers by offering differentiated products from their competitors. Starbucks uses the highest quality Arabica beans while others use inferior coffee to meet their low-cost strategy needs. This, however, is not true for all of Starbucks' competitors. Local chain stores also offer higher quality coffee, so in this case Starbucks is not differentiated. Starbucks coffee is price elastic mainly because many view it as a luxury good. Slumping sales caused by lower traffic in Starbucks is an indicator of the effects of its price elastic status. Starbucks' price elasticity is good news for competitors offering low-cost coffee, like McDonalds and

Dunkin Donuts. Starbucks' products do not represent a large share of the buyer's cost. With the average cup of coffee ranging below $5, it is not cheap in terms of beverage, but it is definitely not expensive compared to other expenses that customers have to bare. The average Starbucks customer earns an annual income of roughly $70,000 per year, with only *17%* of their customers falling below the $30,000 a year range.

Bargaining Power of Suppliers

Suppliers do not have much bargaining power in the specialty coffee market, especially with Starbucks because it works with many small farms and in many instances is their only customer. Starbucks maintains healthy relationships with its farmers by negotiating long-term contracts and often assisting them by providing loans to help them secure the resources needed to harvest an adequate amount of Arabica beans for Starbucks' premium coffee. Also, these coffee beans are standard inputs, which makes the cost of switching between substitute suppliers, moderately low. Starbucks also forms a highly important part of the suppliers business, due its size and scope, which makes the power of the suppliers lower.

2.2. Analysis of Starbucks` Competitors with Key Performance Ratios

FY17	STARBUCKS	Mcdonald's	dunkin' brands	CHIPOTLE	DARDEN	Yum!
Avg sales per sq ft	*$758*	*$639*	*$407*	*$773*	*$601*	*$503*
Rev 4y CAGR	*10.82%*	*(5.96%)*	*4.75%*	*(2.26%)*	*6.11%*	*(3.72%)*
Income 4y CAGR	*11.73%*	*2.96%*	*25.78%*	*N/A*	*(5.65%)*	*8.43%*
Operating margin adj	*24.50%*	*77.47%*	*54.26%*	*8.38%*	*10.82%*	*78.26%*
ROIC	*29.26%*	*N/A*	*14.15%*	*12.69%*	*16.35%*	*N/A*
ROIC adj	*16.84%*	*N/A*	*12.71%*	*5.41%*	*10.32%*	*N/A*
ROE	*52.93%*	*N/A*	*N/A*	*12.92%*	*22.96%*	*N/A*
Cost of premises/sales	*N/A*	*22.39%*	*7.01%*	*7.31%*	*17.65%*	*25.53%*
Current ratio	*1.25*	*1.84*	*2.79*	*1.94*	*0.62*	*1.66*
Inventory days	*N/A*	*5.32*	*N/A*	*4.14*	*31.23*	*8.27*
Inventory turnover	*N/A*	*68.60*	*N/A*	*88.24*	*11.69*	*44.12*
Debt to equity	*2.15*	*N/A*	*N/A*	*2.25*	*1.71*	*N/A*
Interest coverage adj	*15.36x*	*8.06x*	*3.76x*	*3.59x*	*5.84x*	*5.89x*

Table: Key performance ratios for Starbucks and its competitors, FY 2017
Source: 10-K`s, 2017

In the group of Starbucks` competitors, five companies were chosen, two of which are a more direct competition (McDonald` and Dunkin` Brands), and three of which are an indirect competiton (Chipotle Mexican Grill, Darden Restaurants and Yum! Brands). Some metrics that were chosen for the analysis are industry specifics, like average sales per square feet of stores, while some are more generaly used, like return on invested capital.

It can be seen from the table that Starbucks has the highest average sales per square feet of stores, highest four year CAGR revenue growth, highest ROIC and ROIC adjusted for operating leases, highest ROE, as well as interest coverage ratio, which shows how many times can the company cover its interest expense with its operating income. The most important metrics in this analysis are revenue growth and ROIC adjusted, since a company`s return on invested capital and its revenue growth together determine how revenues are converted to cash flows and earnings. That means the amount of value a company creates is governed ultimately by its ROIC, revenue growth, and ability to sustain both over time[2]. Starbucks has shown it can produce the highest return for its investors among its competitors, as well as sustain a high growth rate despite its size. Also, as will later be shown, weighted average cost of capital for Starbucks was calculated to be about 8%, much lower than ROIC adjusted, meaning that Starbucks is creating value for its owners above their opporutnity cost, increasing its total value.

As was already said, ROIC was adjusted for operating leases. Since companies don`t have to include the value of their operating leases in their assets and liabilities on the balance sheet, leases become a source of off-balance sheet financing, and thus the amount of capital invested in the company is seemingly smaller. This can distort financial ratios of return and debt, making them higher. The process of including the value of operating leases on the balance sheet is called capitalization of operating leases and it will be done for Starbucks, since most Starbucks` stores are under operating leases and a huge amount of assets and debt is off Starbucks` balance sheet. The process of capitalizing operating leases for Starbucks was done as follows[3]:

[2] Koller, Goedhart, Wessels (2015) *Valuation: Measuring and Managing the Value of Companies*. New Jersey, Wiley.
[3] Damodaran, A. (2012) *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, Third Edition*. New Jersey, Wiley.

1. The obligations for operating leases were found in Starbucks` financial statements and were discounted to present value at Starbucks` long-term borrowing rate.
2. The present value of obligations for operating leases represents the value of these leases, which is added to existing assets and liabilities on the balance sheet.
3. EBIT was also adjusted by increasing it by the amount of interest the company would have paid on operating leases were they capitalized from the start. The amount of interest was calculated by multiplying the value of operating leases with the long-term borrowing rate.
4. CAPEX was also adjusted by changing it by the amount of change in capitalized operating leases from one year to another.

The value of capitalized operating leases in 2017 was $7,714 million. This was added to the existing value of long-term assets and liabilities on the balance sheet. Long-term assets increased from $9,082 million to $16,796 million, while debt increased from $6,208 million to $13,922 million. EBIT was also adjusted for $189 million, from $3,896 to 4,085 million, reflecting interest the company would pay on its operating leases. CAPEX for 2017 increased from $1,440 million to $2,613 million.

2.3. SWOT Analysis

Strengths

Strong Market Position and Global Brand Recognition: Starbucks has a significant geographical presence across the globe and maintain a *39.8%* market share in the United States and has operations in over 62 countries. Starbucks is also the most recognized brand in the coffeehouse segment and is ranked 60st in the best global brands of 2018. Further, management focuses on increasing its global market share by judiciously opening stores in new and existing markets, remodeling existing stores, deploying technology, controlling costs and aggressive product innovation and brand building. In fiscal 2018, Starbucks expects to expand globally by adding 2,300 net new locations. The company aims to open approximately 12,000 new stores globally by fiscal 2021, reaching the total store count to an estimated 37,000. The company's long-term growth targets include *3-5%* comps growth yielding high-single-digit revenue growth and EPS growth of at least *12%.*

Products of the Highest Quality: They give the highest importance to the quality of their products and avoid standardization of their quality even for higher production output.

Location and Aesthetic appeal of its Stores: Starbucks has stores in some of the most prime and strategic location across the globe. They target premium, high-traffic, high-visibility locations near a variety of settings. This has earned them a significant competence and advantage to be able to penetrate prime markets and tap into customers convince factor. Their stores are visually appealing and have a 'cool' factor attached to it with being designed to reflect the unique character of the neighborhood they serve in and environmentally friendly. They provide free wifi, great music, great service, warm atmosphere and provide an environment of community meeting spot, which forms a wider part of the 'Starbucks Experience'. The main aim for the firm is to make their stores a 'third place' besides home and work.

Human Resource Management: Starbucks is know for its highly knowledge base employees. Each new employee has to take a 24 hour training program and weeks of on job experiance to become efficient. Employees are the main assets of the company and they are provided with great benefits like stock option, retirement accounts, healthy culture, college tuitition and rent loans.

Use of Technology and Mobile Outlets: Starbucks holds a leading position in digital, card, loyalty and mobile capabilities. Retail companies are witnessing a shift in consumer shopping behavior from bricks-and-mortar stores to online shopping. Customers are consuming more food/ beverages away from home and using mobile phones for most online activity. Starbucks has secured a leading position in leveraging its mobile and digital assets and loyalty and e-Commerce platforms to capitalize on these trends and create more revenue streams.

Customer base loyalty: Starbucks has cult following status among consumers and they have also implemented loyalty-based programs to drive loyalty with the Starbucks Rewards programs and Starbucks Card. Starbucks' loyalty cards are gaining popularity. In the United States, the company's membership increased *11%* year over year under the My Starbucks Rewards (MSR) program in the fiscal 2017. The positive trend continued in fiscal third quarter of 2018 as well, with the membership growing *14%* year over year to 15.1 million active members. Customers in the United States are using the chain's mobile app to order and pay for drinks. They are also joining the company's rewards program. Currently, MSR is one of the most important business drivers of Starbucks.

Weaknesses

Expensive Products: While Starbucks does differentiate their products with being high quality and coupled with the whole 'Starbucks Experience', in times of economic sluggishness, consumers will switch to competitor's products with lower prices and forgo paying a premium. These premium prices could also pose some weakness for it to succeed in developing countries.

Self-Cannibalization through overcrowding: Aggressive expansion and high saturation due to overcrowding in the market leads to one store taking customers from another, thus diminishing long term growth targets of Starbucks. This is happening especially in the United States where Starbucks operates 13,930 stores.

Overdependence on the United States market: Starbucks generates a huge percentage of their total revenue (*70%*) from the U.S. and this makes it very sensitive to prospects of the US economy and growth.

Dependecy on the success of certain international markets in order to achieve growth targets: The broader CAP market is now one of two significant profit engines driving Starbucks global returns, along with North American business. In particular, both China and Japan MBUs contribute meaningfully to both consolidated and CAP net revenues and earnings and China in particular is a significant market for growth. A decline in performance of one or more of these significant international MBUs could have a adverse impact on Starbucks' consolidated results.

American coffee culture clash with that of other countries: Starbucks coffee culture may not widely accepted in some countries as part of their international expansion strategy e.g. Australia.

Opportunities

Expansion into Emerging Markets: The increased saturation and self-cannibalization of the US market makes its international strategy even more important. The main driver in the coming years should be China. Starbucks plans to open 600 new stores there in period from 2018 to 2022, expanding their physical footprint to 6,000 locations across 230 cities. Taking in account middle-class growth in China, as well as them adopting western coffe-drinking habits as opposed to tea, revenues should continue to increase by high double-digit percentages in the forthcoming years (revenue growth in 3rd quater of 2018 was *46%* yoy).

Partnerships with Alibaba: On August 1, 2018, Starbucks and Alibaba jointly announced a partnership to "transform the coffee experience in China". Central to the partnership is the adoption of Ele.me, Alibaba's on-demand food delivery platform that has three million registered delivery riders and was last valued at $9.5 billion, to pilot delivery services beginning from September in Beijing and Shanghai. There are plans to widen the delivery program to more than 2,000 Starbucks stores across 30 cities by the end of the calendar year 2018. For its part, the Alibaba Group brings to the table not just Ele.me but also the Tmall and Taobao online marketplaces, Hema supermarkets, where "Starbucks Delivery Kitchens" dedicated for delivery order fulfillment will be sited, and the Alipay digital payment service. In effect, the move opens up Starbucks to 500 million or more active users of the apps from these Alibaba units.

Partnership with Nestle: Starbucks and Nestle announced a global marketing deal that gives the latter "perpetual rights" to market Starbucks' products globally outside its coffee shops. This alliance will expand the global reach of Starbucks brands in the consumer packaged goods ("CPG') and foodservice categories to nearly 190 countries around the world from the present count of 28.

Expanding Product mix and offerings: Starbucks is strengthening its product portfolio with significant innovation around beverages, refreshment, health and wellness, tea and core food offerings. Beverage innovations have been a significant contributor to comps growth for Starbucks over the years. Seasonal offerings like pumpkin spice latte have been in the market for 10 years now and are quite popular. Meanwhile, the company's Reserve Roastery and Tasting Room elevates the coffee experience to the next level, with small-batch super-premium coffee produced using innovative coffee-brewing techniques. Starbucks' strategy to boost the overall brand through its premium Roastery/Reserve brands is a huge opportunity. Food has become a key growth driver and contributes more than *21%* to the company's U.S. revenues. The company plans to expand its lunch menu and offer locally relevant snacks around the world. Starbucks' much talked about evening program – food, wine and beer offerings – available at 100 stores is expected to be rolled out in *20–25%* of Starbucks outlets in the United States by fiscal 2019. The evening program is expected to add $1 billion in revenues by the end of fiscal 2019.

Technological advances: As with the introduction of stored value card program driving customers' loyalty and paying via mobile phones (a market that has 9y CAGR of *33,47%*), the company is constantly seeking to expand its business in new innovative ways. One of the ways is a renovation of existing stores and the other is an initiative to encourage extra revenue streams from crypto. Even though the company is not going to accept cryptocurrencies directly at the cash register, it will support spending through a partnership with Bakkt, a joint venture of the Intercontinental Stock Exchange (NYSE's parent), BCG, Microsoft (MSFT) and others.

Threats

Increased Competition: With the market being at a mature stage, there is increased pressure on Starbucks from its competitors like Dunkin Brands, McDonalds, Costa Coffee, Pete's Coffee, mom and pop specialty coffee stores. Another trend which is becoming increasingly popular is specialty coffee roasters such as Caveman Coffee, Onnit and Black Rifle Coffee. These companies are direct to consumer with a growing social media presence and advertising on unconventional avenues such as podcasts. Companies such as Caveman Coffee are skipping brick and mortar and growing their consumer base through their relationships with individuals such as Joe Rogan. They can create quality coffee and go direct to the consumer while developing a whole brand around their coffee including apparel, tumblers, mugs and home brewing options such as French and Aeropress. The days of needing retail to have a successful business are over and this is translating into the coffee industry now.

Not realising expansion in new markets: Many countries have operated around the demand for coffee just as long as the U.S., some for even longer. This makes some of the more highly developed and profitable locations stubborn to the idea of change in the coffee culture. Countries such as these enjoy a very specific coffee consumption culture pertaining to the coffee itself, the service, and the environmental culture. As Starbucks has not had time to fully acclimate themselves to these new ideals and values they can potentially fall victim to a negative perception in the eyes of foreign consumers. This negative affectivity can result in large losses of international profits which can also limit their opportunities of further expansion into these foreign markets. Another threat relating especially to China is the ongoing trade war between it and U.S. China could retaliate against the trade tariffs, making restrictions on foreign investments and disrespecting legal rights of foreign-owned companies.

Price Volatility in the Global Coffee Market: There has be significant fluctuations in the market prices of high quality coffee beans, which Starbucks can't control.

Developed Countries Economy: In an increasingly economically integrated world, an economic crisis like the one in 2008 could have a trickle down effect from the developed markets to the developing markets. This threat would hurt revenues for Starbucks as consumers shift away from premium product mix to stay in limited budgets during economic hardships.

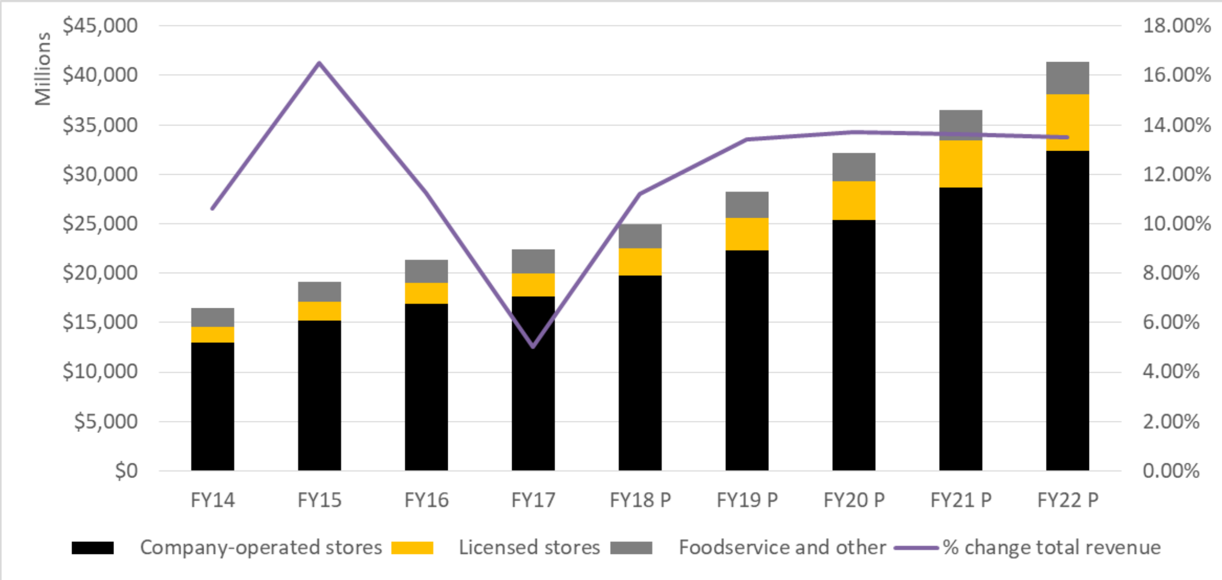
Changing Consumer tastes and lifestyle choices: The shift of consumers toward more healthy products and the risk of coffee culture being just a fad represent a threat for Starbucks going into the future.

3. DCF AND RELATIVE VALUATION FOR STARBUCKS

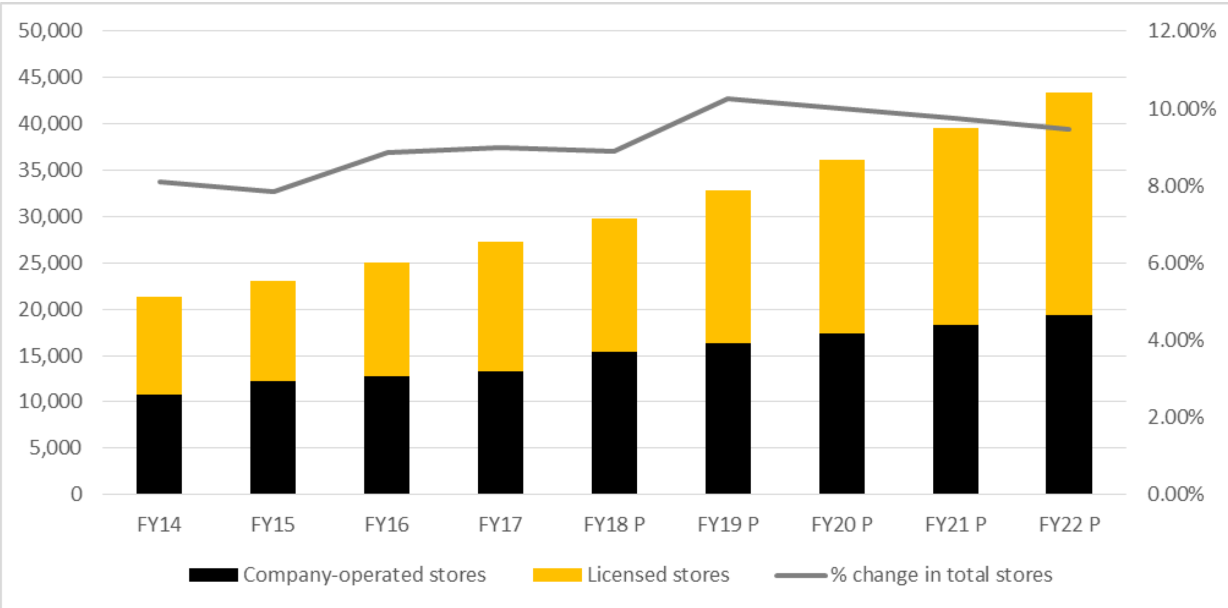
3.1. Revenue Projection

Revenue for Starbucks was projected for every segment separately, and separately for company-operated stores and lincensed stores within each segment. The projection was made with two variables, number of new stores opened and change in revenue per store. Number of new store openings were projected for every half of the year, and were done either by following an observed historical trend or by taking into account the announcements from the company itself. Change in revenue per store was projected either by following an observed trend or by taking an average of historical numbers where there was no trend. Revenue in each half of the year was calculated by multiplying the projected number of stores and projected revenue per store for that period. Detailed assumptions for revenue growth can be found in Appendix.

Since expansion into China is a big driver for future Starbucks` revenue growth and company value, revenue projection for this country was done seperately from projections for CAP segment, and was done for three cases, Base, Upside and Downside case. In the Base case, the expansion into China will proceed as the company planned, with 600 new store openings per year for the next five years. In the Upside case, expansion would double and Starbucks would open 1,200 new store per year. And in the Downside case, the expansion would be halved to 300 new stores per year. The same was done for projections of revenue per store for the whole CAP segment, with growth in the Base case starting from *10%* and decreasing to *7%* by 2022; from *14%* to *10%* in the Upside case; and from *6%* to *2%* in the Downside case. The reason for setting these cases up is to determine the impact of change in growth assumptions in China on final value per share and to determine is this expansion creating new value for Starbucks` shareholders.



Graph: Total revenue in historical and projected years, Base case



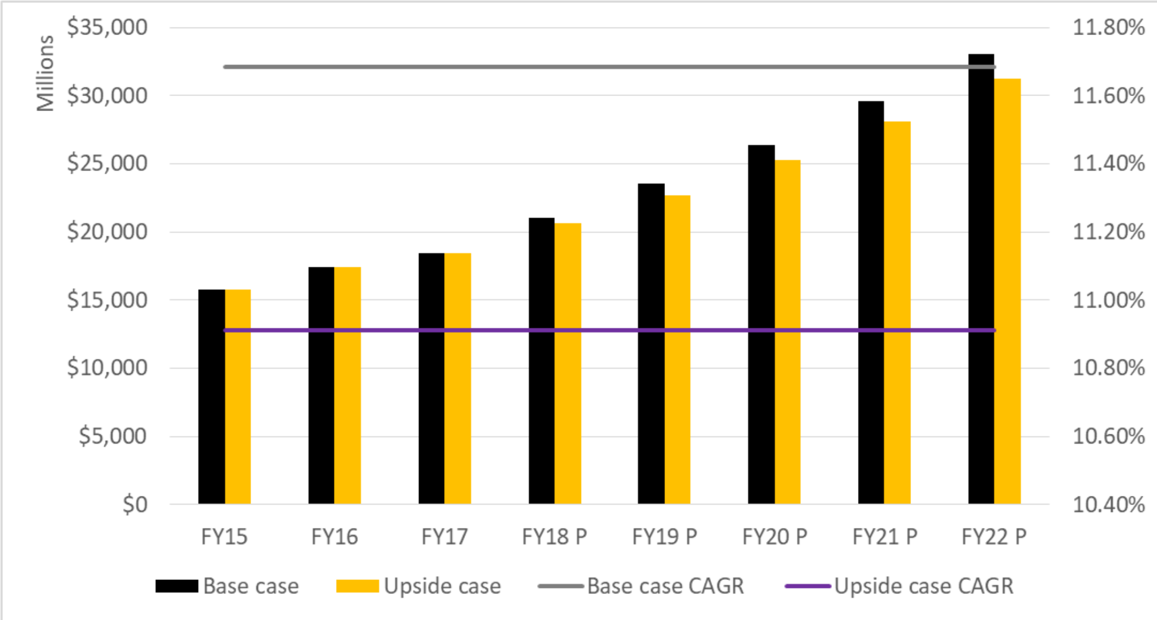
Graph: Total number of stores for historical and projected period

Growth per Case	**Base**	**Upside**	**Downside**
Total revenue	*84.99%*	*128.35%*	*63.72%*
Company-operated stores	*30.48%*	*48.71%*	*21.37%*
Licensed stores	*79.46%*	*79.46%*	*79.46%*
Total stores	*53.74%*	*63.31%*	*48.96%*

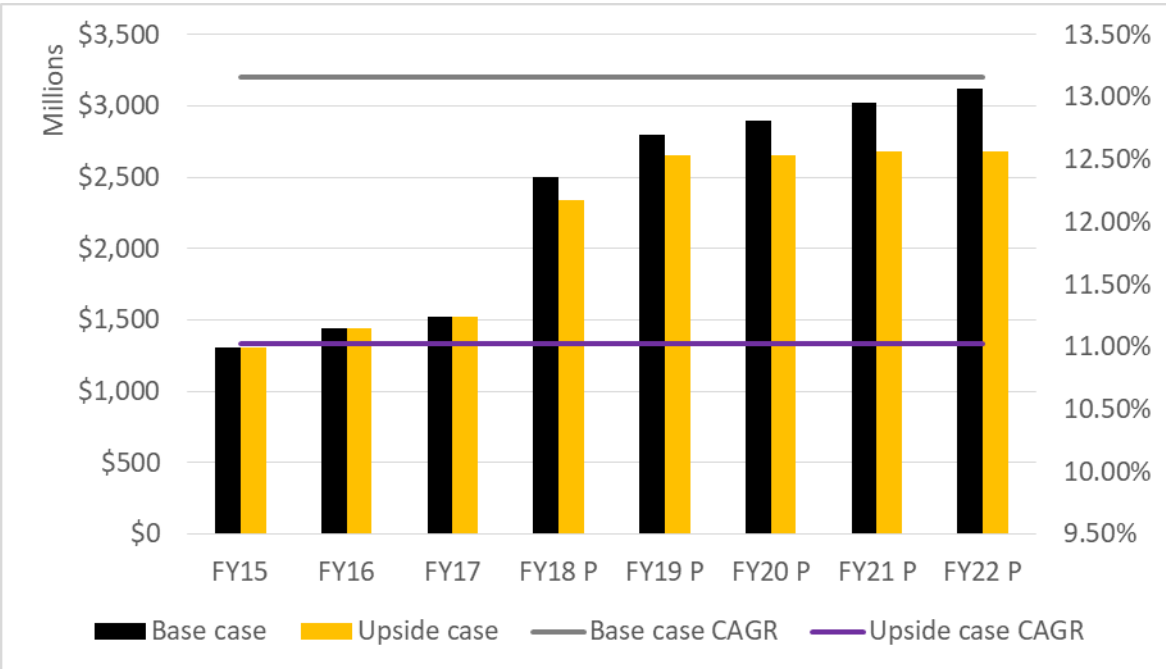
Table: Growth in revenue and number of stores per case

3.2. Expenses and Cash Flow Projection

Expense and cash flow line items, which include Cost of sales including occupany cost, Other operating expenses, Depreciation and amortization, General and administrative expenses and Depreciation and amortization on CFS, were projected as percentage of revenue. Projections were made either by following an observed trend or by taking the average of historical numbers. Store operating expenses were projected as operating expenses per company-operated store, and two cases were were also set up in this projection, separate from the growth cases. In the the Base case, operating expenses per store follow the observed increasing historical trend, while in the Upside case, this trend reverses to historical average. CAPEX was projected as CAPEX per change in company-operated stores, and two cases similar to cases for store operating expenses were set up. In the Base case, CAPEX per newly opened company-operated store countinues to increase, while in the the Upside case, it reverts to historical average. The reason for setting these cases for expenses is, as will be shown later, due to huge negative impact on price per share if the increasing trend in expenses and spending per store continues. Detailed assumptions and projections can be found in Appendix.



Graph: Total operating expenses and their CAGR per case



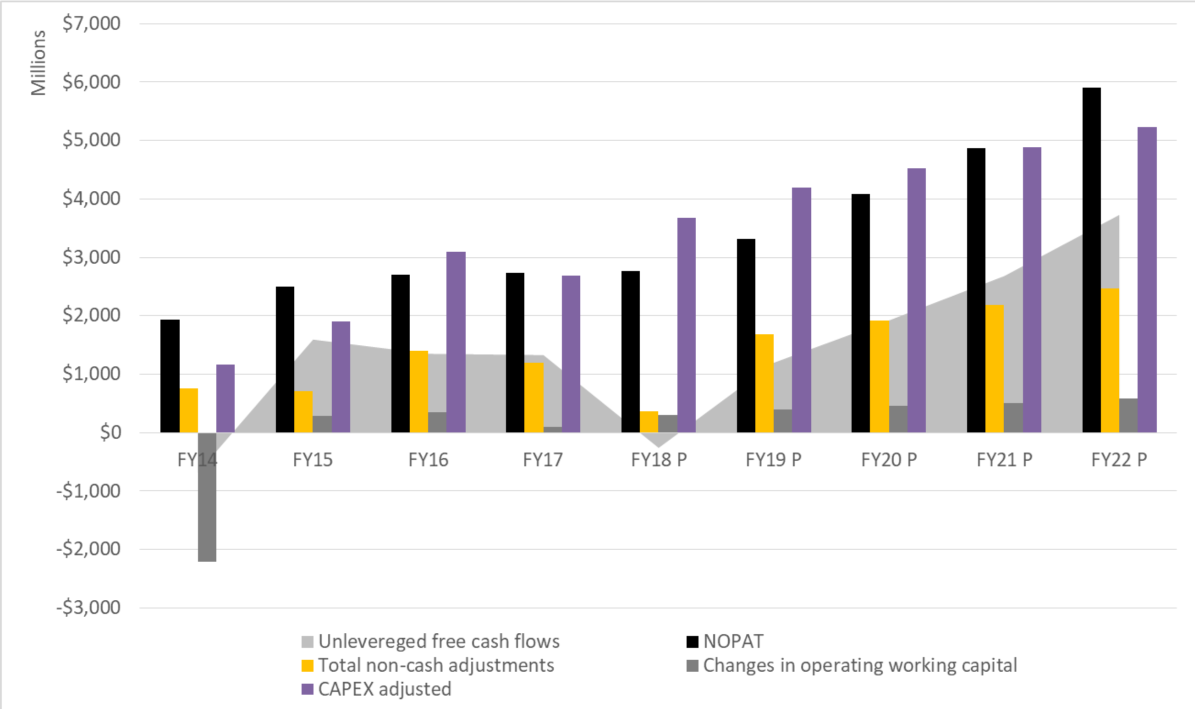
Graph: CAPEX and its CAGR per case

3.3. Calculating Unleveraged Free Cash Flows

By continuing the treatment for operating leases, the amount of CAPEX for every year needs to be adjusted for change in capitalized operating leases from previous year. Capitalized operating leases were projected per company operated store, and two cases were also set up for this. In the Base case, capitalized operating leases per company-operated store continue to increase, while in the Upside case they revert to historical average. If the rising trend in the Base case continues, it will greatly reduce unlevereged free cash flows in the future, and thus also the price per share. Future tax rate used for subtracting operational taxes from EBIT to calculate NOPAT were estimated by using an average of effective historical tax rates. Adjustments to reconcile net earnings to cash from CFS, that is, non-cash expenses that are added back to NOPAT, were projected by projecting individual line items of this category, by following a historical observed trend. Changes in operating assets and liabilities on CFS, that is, change in operating working capital that is added to NOPAT, was projected as a percentage change in revenue, using average of historical numbers. Unleveraged free cash flows were then estimated by adding non-cash expenses and change in operating working capital to NOPAT, and subtracting adjusted CAPEX. Detailed assumptions and projections can be found in Appendix.

FCFF Calculation	***Units:***	**FY14**	**FY15**	**FY16**	**FY17**	**FY18 P**	**FY19 P**	**FY20 P**	**FY21 P**	**FY22 P**
Total revenue	*$ in mil*	16,447.8	19,162.7	21,315.9	22,386.8	24,898.9	28,236.5	32,108.3	36,482.5	41,412.5
(-) Total operating expense	*$ in mil*	13,655.2	15,811.6	17,462.2	18,490.0	21,022.9	23,584.2	26,361.6	29,607.7	33,052.2
EBIT adjusted	***$ in mil***	**2,957.6**	**3,539.0**	**4,014.0**	**4,085.8**	**4,093.8**	**4,904.0**	**6,038.4**	**7,211.9**	**8,749.0**
Tax rate	*%*	*34.56%*	*29.30%*	*32.87%*	*33.18%*	*32.48%*	*32.48%*	*32.48%*	*32.48%*	*32.48%*
NOPAT	***$ in mil***	**1,935.4**	**2,501.9**	**2,694.7**	**2,730.1**	**2,764.2**	**3,311.3**	**4,077.2**	**4,869.7**	**5,907.6**
(+) Non-cash adjustments	*$ in mil*	749.9	711.0	1,403.2	1,199.7	356.6	1,686.4	1,914.8	2,182.6	2,473.2
(+) Change in operating working capital	*$ in mil*	-2,209.8	278.8	353.0	89.7	293.4	389.8	452.2	510.9	575.8
(-) CAPEX adj	*$ in mil*	1,160.9	1,899.0	3,101.2	2,692.5	3,675.0	4,190.7	4,523.4	4,883.6	5,229.0
Unlevereged Free Cah Flow	***$ in mil***	**-685.4**	**1,592.7**	**1,349.8**	**1,326.9**	**-260.8**	**1,196.8**	**1,920.9**	**2,679.6**	**3,727.6**

Table: Unlevereged free cash flow calculation, Base case



Graph: Unlevereged free cash flow and its components, Base case

3.4. Calculating Weighted Average Cost of Capital

Cost of equity was calculated with Capital Assets Pricing Model (CAPM). Yield to maturity on US government 10-year bonds was used as a risk free rate, equaling 3.07%. Delevereged beta for restaurant industry was taken from Damodaran[4], and using Starbucks` debt to equity ratio and its effective tax rate, fundamental beta for Starbucks was calculated, which not only reflects stock`s risk from market volatility, but also from the industry in which the company operates and the amount of debt it has. Risk premium for US was also taken from Damodaran. Cost of equity was equal to *8.64%*. For cost od debt, simple yield to maturity on Starbucks` 10-year bonds was used, equaling *4.02%*. For market value of equity, total market capitalization of Starbucks` stock was used. The market value of debt was calculated by treating all the debt on the balance sheet as one sintetic coupon bond with maturity equal to wieghted average of Starbucks` individual bond values and their years to maturity, and one coupon payment equal to interest on total debt, whereby the calculated pre-tax cost of debt was used for discounting cash flows from that sintetic bond. Share of equity capital was

[4] Damodaran` web site. Available at: http://pages.stern.nyu.edu/~adamodar/ [November 2018]

90.10%, while the share of debt capital was *9.90%*, and using these numbers in a weighted average, WACC was calculated to be *8.18%*.

	Units:	
Risk-free rate	%	3,07%
Industry delevereged ß	a.s.	0,68
Tax rate	%	33,18%
D/E	%	73,24%
Fundamental ß	a.s.	1,01
Risk premium	%	5,50%
Cost of equity	**%**	**8,64%**
Cost of debt	**%**	**4,02%**

	Units:	
Market value of equity	$ in B	76,764
Market value of debt adj	$ in B	8,431
Book value of debt adj	$ in B	13,922
LTM interest expense adj	$ in B	0,129
Average years to maturity	a.s.	8,68
Cost od debt before tax	%	5,95%
% of equity	%	90,10%
% of debt	%	9,90%
WACC	**%**	**8,18%**

Table: Calculating WACC

3.5. Determining Fair Value per Share with DCF

After discounting unlevereged free cash flows with WACC to their present value and calculating the terminal free cash flow value (terminal growth rate was assumed to be *2%*), those two were sumed to arrive at enterprise value of $48,268 million for Starbucks. From that value, Adjusted market value of debt and Noncontrolling interest were subracted, while Cash and cash equivalents, Short-term investments, Long-term investments and Equity and cost investments were added, to arrive at equity value of $42,393 million. Dividing this amount by number of shares, fair value per share was estimated to be $31.42 in Base case.

In the table below, fair value per share in six different cases can be seen, determined by different assumptions for growth and expenses. It can be seen that Starbucks` stock is overvalued by about *44%* in both Base case growth in China and Base case expenses, compared to prevailing market price of $56. Even in the best case scenario, Upside case growth in China and Upside case expenses where expenses and spending per store revert to their historical average, the stock is only fairly valued. What is more, value per share in Downside case growth, where Starbucks` expansion in China is halved to 300 new stores per year, is higher than for Base and Upside cases growth. This is due to the rising trend in expenses and spending per store, including Store operating expenses and CAPEX adjusted for operating leases. This can be seen by comparing projected CAGR for revenue and expenses for the period FY 2014 to 2022, where Total operating expense and CAPEX adjusted for operating leases will increase by *11.68%* and *20.70%*, respectively, while Total revenue will increase by only *12.2%*. If Starbucks won`t be able to control its expenses and spending per store, bigger expansion in China could actually reduce value of the company and its value per share. Reasons the market is paying a premium for the stock could be optimistic expectations regarding expansion in China, unawarness of rising expenses and spending per store, and non-capitalization of big operating leases off the balance sheet.

	Units:	
Value of supernormal growth period	*$ in mil*	6,770.6
Terminal value	*$ in mil*	61,493.0
Present value of terminal value	*$ in mil*	41,498.2
Enterprise value	***$ in mil***	**48,268.7**
(-) market value of debt adj	*$ in mil*	8,430.8
(-) noncontrolling interest	*$ in mil*	6.0
(+) cash and cash equivalents	*$ in mil*	1,892.1
(+) short-term investments	*$ in mil*	84.5
(+) long-term investments	*$ in mil*	261.4
(+) equity and cost investments	*$ in mil*	323.4
Equity value	***$ in mil***	**42,393.3**
Number of shares	*$ in mil*	1,349.1
Fair value per share	**a.s.**	**31.4**

Table: Calculating fair value per share

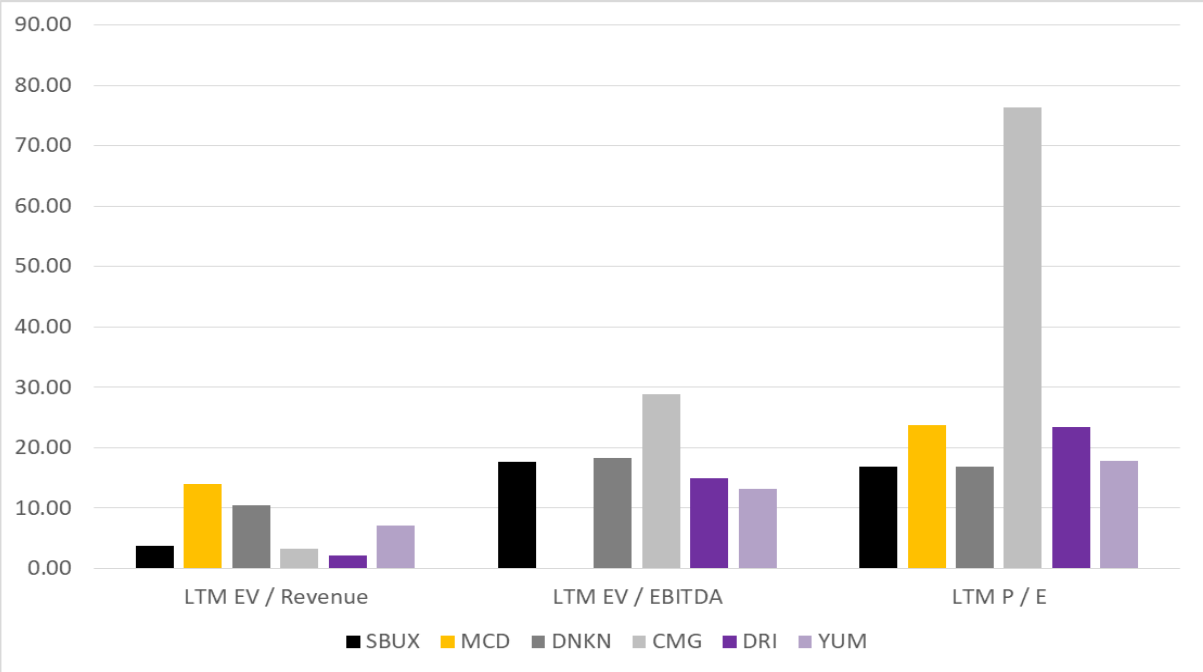
		Growth		
		Base	**Upside**	**Downside**
Expenses	**Base**	$31.42	$21.49	$35.72
	Upside	$55.70	$54.60	$55.84

Table: Fair value per share in six different scenarios

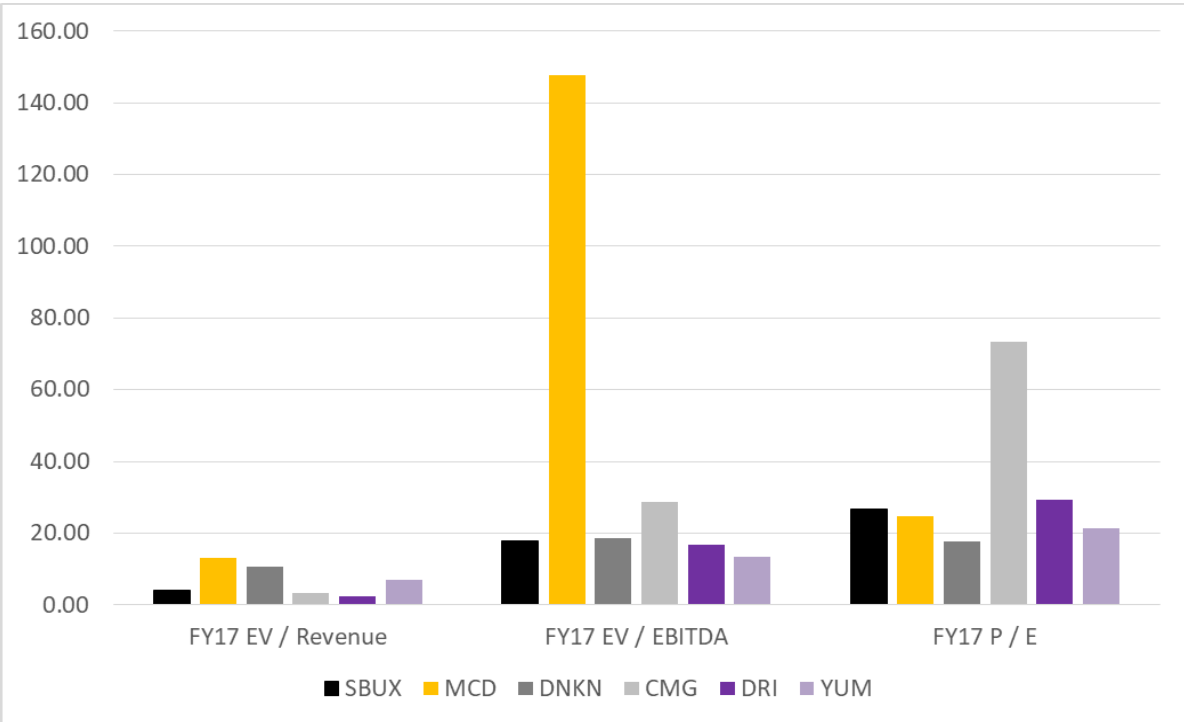
3.6. Relative valuation

In the peer group for relative valuation of Starbucks, five companies were chosen, McDonalds` (MCD), Dunkin` Brands (DNKN), Chipotle Mexican Grill (CMG), Darden Restaurants (DRI) and Yum! Brands (YUM). Six valuation multiples were used in the analysis, EV / Revenue, EV / EBITDA and P / E ratio. For each of the three multiples, their values for FY 2017 and values for last twelve months were computed. For each peer company, value of Debt adjusted for operating leases and Noncontrolling interest were added, while Cash and cash equivalents, Short-term investments, Assets held for sale, Long-term investments and Equity investments were subtracted from market capitalization to calculate enterprise value. After calculating minimum, 25th percentile, median, 75th percentile and maximum for every valuation multiple, Starbucks` revenue, EBITDA and EPS were used to estimate a range of enterprise values for Starbucks. After subtracting debt and adding non-operational assets, a range of equity values was estimated. Dividing these ranges with number of shares, a range of fair values per share were calculated for every multiple. Detailed calculations can be found in Appendix.

When looking at median fair values per share, it can be seen that Starbucks is fairly valued on the market. Despite revenue multiples and EPS multiple for LTM showing undervaluation of the stock, the most relevant multiples, EV / EBITDA for FY 2017 and LTM, show that stock is fairly valued or slightly undervalued.



Graph: LTM valuation multiples for Starbucks and its peer group



Graph: FY 2017 valuation multiples for Starbucks and its peer group

3.7. Valuation Summary

From the graph below, it can be seen that Starbucks` stock is overvalued when looking at the fair price per share for most valuation methods used here, except for relative valuation with revenue multiples. The most important valuation method, DCF, shows that the stock is hugely overpriced by about *44%* in Base case, and only fairly priced in the most optimistic case of Upside case growth and expenses. Despite its strong competitive position within the industry, excellent financial performance compared to its competitors and many growth drivers including further expansion in China, unless Starbucks will be able to keep its expeneses and spending per store in line, its stock should not be bought or its should be sold.

Graph: Valuation summary

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5. APPENDIX

5.1. Revenue Growth Assumptions

Revenue Assumptions	Units:	2H 2018	1H 2019	2H 2019	1H 2020	2H 2020	1H 2021	2H 2021	1H 2022	2H 2022
Americas Segment Assumptions:		**2H 2018**	**1H 2019**	**2H 2019**	**1H 2020**	**2H 2020**	**1H 2021**	**2H 2021**	**1H 2022**	**2H 2022**
Change in number of:										
Company-operated stores	*# stores*	200	100	200	100	180	90	180	90	160
Licensed stores	*# stores*	250	400	260	420	270	440	280	460	290
% change in revenue / store:										
Company-operated stores	*%*	*1.70%*	*2.50%*	*1.70%*	*2.50%*	*1.70%*	*2.30%*	*1.70%*	*2.30%*	*1.70%*
Licensed stores	*%*	*1.92%*	*4.97%*	*1.92%*	*4.97%*	*1.92%*	*4.97%*	*1.92%*	*4.97%*	*1.92%*
% change in Foodservice and other	*%*	*15.00%*	*10.00%*	*15.00%*	*10.00%*	*15.00%*	*8.00%*	*13.00%*	*8.00%*	*11.00%*
CAP Segment Assumptions:		**2H 2018**	**1H 2019**	**2H 2019**	**1H 2020**	**2H 2020**	**1H 2021**	**2H 2021**	**1H 2022**	**2H 2022**
Change in number of:										
Company-operated stores	*# stores*	365	375	375	385	385	395	395	405	405
Licensed stores	*# stores*	500	300	550	350	600	400	650	450	700
% change in revenue / store:										
Company-operated stores	*%*	*10.00%*	*10.00%*	*9.00%*	*9.00%*	*8.00%*	*8.00%*	*7.00%*	*7.00%*	*6.00%*
Licensed stores	*%*	*-2.40%*	*14.67%*	*-2.40%*	*14.67%*	*-2.40%*	*14.67%*	*-2.40%*	*14.67%*	*-2.40%*
% change in Foodservice and other	*%*	*-27.51%*	*95.47%*	*-27.51%*	*95.47%*	*-27.51%*	*95.47%*	*-27.51%*	*95.47%*	*-27.51%*
EMEA Segment Assumptions:		**2H 2018**	**1H 2019**	**2H 2019**	**1H 2020**	**2H 2020**	**1H 2021**	**2H 2021**	**1H 2022**	**2H 2022**
Change in number of:										
Company-operated stores	*# stores*	-30	-30	-30	-30	-30	-30	-30	-30	-30
Licensed stores	*# stores*	300	200	350	250	400	300	450	350	500
% change in revenue / store:										
Company-operated stores	*%*	*2.81%*	*-3.47%*	*2.81%*	*-3.47%*	*2.81%*	*-3.47%*	*2.81%*	*-3.47%*	*2.81%*
Licensed stores	*%*	*1.65%*	*0.50%*	*1.65%*	*0.80%*	*1.65%*	*1.00%*	*1.65%*	*1.50%*	*1.65%*
% change in Foodservice and other	*%*	*4.60%*	*15.00%*	*4.60%*	*16.00%*	*4.60%*	*17.00%*	*4.60%*	*18.00%*	*4.60%*
Other Segments Assumptions:		**2H 2018**	**1H 2019**	**2H 2019**	**1H 2020**	**2H 2020**	**1H 2021**	**2H 2021**	**1H 2022**	**2H 2022**
Change in number of:										
Company-operated stores	*# stores*	0	0	0	0	0	0	0	0	0
Licensed stores	*# stores*	-25	0	0	0	0	0	0	0	0
% change in revenue / store:										
Company-operated stores	*%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
Licensed stores	*%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
% change in Foodservice and other	*%*	*-12.51%*	*10.02%*	*-12.51%*	*10.02%*	*-12.51%*	*10.02%*	*-12.51%*	*10.02%*	*-12.51%*
Channel Development Assumptions:		**2H 2018**	**1H 2019**	**2H 2019**	**1H 2020**	**2H 2020**	**1H 2021**	**2H 2021**	**1H 2022**	**2H 2022**
Revenue % change	*%*	*-1.08%*	*9.51%*	*-1.08%*	*9.51%*	*-1.08%*	*9.51%*	*-1.08%*	*9.51%*	*-1.08%*

5.2. Expense and Cash Flow Assumptions

Expenses and Cash Flow Assumptions	Units:	2H 2018	1H 2019	2H 2019	1H 2020	2H 2020	1H 2021	2H 2021	1H 2022	2H 2022
Cost of sales including occupancy costs, % of revenue	%	40.33%	41.10%	40.33%	41.10%	40.33%	41.10%	40.33%	41.10%	40.33%
Store operating expenses, per company-operated store	$ in mil	0.26	0.25	0.27	0.25	0.28	0.26	0.29	0.26	0.30
Other operating expenses, % of revenue	%	2.30%	2.20%	2.20%	2.10%	2.10%	2.00%	2.00%	2.00%	2.00%
Depreciation and amortization expenses, % of revenue	%	4.55%	5.00%	4.55%	5.20%	4.55%	5.40%	4.55%	5.60%	4.55%
General and administrative expenses, % of revenue	%	6.25%	6.24%	6.25%	6.24%	6.25%	6.24%	6.25%	6.24%	6.25%
Depreciation and amortization from CFS, % of revenue	%	4.77%	5.20%	4.77%	5.30%	4.77%	5.40%	4.77%	5.50%	4.77%
CAPEX, per new company-operated store	$ in mil	3.00	2.50	3.10	2.60	3.20	2.70	3.30	2.80	3.40

5.3. Unlevereged Free Cash Flow Calculation

		Historical				Projected				
Unlevereged Free Cash Flow Calc	***Units:***	**FY14**	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**
Revenue										
Company-operated stores	*$ in mil*	12,977.9	15,197.3	16,844.1	17,650.7	19,749.7	22,339.3	25,328.6	28,668.8	32,385.7
Licensed stores	*$ in mil*	1,588.6	1,861.9	2,154.2	2,355.0	2,715.9	3,265.8	3,926.8	4,714.5	5,652.0
Foodservice and other	*$ in mil*	1,881.3	2,103.5	2,317.6	2,381.1	2,433.4	2,631.4	2,852.9	3,099.3	3,374.8
Total revenue	***$ in mil***	**16,447.8**	**19,162.7**	**21,315.9**	**22,386.8**	**24,898.9**	**28,236.5**	**32,108.3**	**36,482.5**	**41,412.5**
% change		N/A	16.5%	11.2%	5.0%	11.2%	13.4%	13.7%	13.6%	13.5%
Cost of sales including occupancy costs	*$ in mil*	6,858.8	7,787.5	8,511.1	9,038.2	10,178.3	11,492.8	13,068.7	14,849.1	16,855.9
Store operating expenses	*$ in mil*	4,638.2	5,411.1	6,064.3	6,493.3	7,516.7	8,359.0	9,049.6	9,938.2	10,684.0
Other operating expenses	*$ in mil*	457.3	522.4	545.4	553.8	570.2	621.2	674.3	729.6	828.3
Depreciation and amortization expenses	*$ in mil*	709.6	893.9	980.8	1,011.4	1,172.8	1,346.8	1,562.7	1,811.0	2,096.3
General and administrative expenses	*$ in mil*	991.3	1,196.7	1,360.6	1,393.3	1,584.9	1,764.5	2,006.4	2,279.8	2,587.8
Total operating expense	***$ in mil***	**13,655.2**	**15,811.6**	**17,462.2**	**18,490.0**	**21,022.9**	**23,584.2**	**26,361.6**	**29,607.7**	**33,052.2**
Capitalized operational leases	*$ in mil*	4,284.7	4,880.0	6,540.9	7,714.0	8,887.4	10,276.1	11,904.5	13,761.0	15,869.0
Long-term borrowing rate	*%*	3.85%	3.85%	2.45%	2.45%	2.45%	2.45%	2.45%	2.45%	2.45%
per company operated store	*$ in mil*	0.33	0.32	0.39	0.44	0.45	0.46	0.47	0.48	0.49
Operating profit (EBIT) adj	*$ in mil*	2,957.6	3,539.0	4,014.0	4,085.8	4,093.8	4,904.0	6,038.4	7,211.9	8,749.0
adjustment	*$ in mil*	165.0	187.9	160.3	189.0	217.7	251.8	291.7	337.1	388.8
EBIT margin	*%*	18.0%	18.5%	18.8%	18.3%	16.4%	17.4%	18.8%	19.8%	21.1%
Tax rate	*%*	34.6%	29.3%	32.9%	33.2%	32.5%	32.5%	32.5%	32.5%	32.5%
NOPAT	***$ in mil***	**1,935.4**	**2,501.9**	**2,694.7**	**2,730.1**	**2,764.2**	**3,311.3**	**4,077.2**	**4,869.7**	**5,907.6**
% change	*%*	N/A	29.3%	7.7%	1.3%	1.3%	19.8%	23.1%	19.4%	21.3%
Adjustments to reconcile net earnings to net cash:										
Depreciation and amortization	*$ in mil*	748.4	933.8	1,030.1	1,067.1	1,228.3	1,406.4	1,614.8	1,852.6	2,123.2
Deffered income tax, net	*$ in mil*	10.2	21.2	265.7	95.1	800.0	100.0	120.0	140.0	160.0
Income earned from equity investees	*$ in mil*	-182.7	-190.2	-250.2	-310.2	-200.0	-220.0	-250.0	-270.0	-300.0
Distr received from equity method investees	*$ in mil*	139.2	148.2	223.3	186.6	200.0	220.0	240.0	260.0	280.0
Gain resulting from aqusition of joint venture	*$ in mil*	0.0	0.0	0.0	0.0	-1,373.9	0.0	0.0	0.0	0.0
Gains resulting from divestiture	*$ in mil*	-70.2	-394.3	-6.1	-93.5	-496.3	0.0	0.0	0.0	0.0
Loss on extinguishment of debt	*$ in mil*	0.0	61.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stock-based compesition	*$ in mil*	183.2	209.8	218.1	176.0	200.0	210.0	220.0	230.0	240.0
Goodwill impairments	*$ in mil*	0.0	0.0	0.0	87.2	28.5	0.0	0.0	0.0	0.0
Excess tax benefit on share-based awards	*$ in mil*	-114.4	-132.4	-122.8	-77.5	-100.0	-110.0	-120.0	-130.0	-140.0
Other	*$ in mil*	36.2	53.8	45.1	68.9	70.0	80.0	90.0	100.0	110.0
Total adjustments	***$ in mil***	**749.9**	**711.0**	**1,403.2**	**1,199.7**	**356.6**	**1,686.4**	**1,914.8**	**2,182.6**	**2,473.2**
Changes in operating assets and liabilities:										
Accounts receivable	*$ in mil*	-79.7	-82.8	-55.6	-96.8					
Inventories	*$ in mil*	14.3	-207.9	-67.5	14.0					
Accounts payable	*$ in mil*	60.4	137.7	46.9	46.4					
Accrued ligitation charge	*$ in mil*	-2,763.9	0.0	0.0	0.0					
Income taxes payable, net	*$ in mil*	0.0	0.0	0.0	0.0					
Accrued liabilities and insurance reserves	*$ in mil*	0.0	0.0	0.0	0.0					
Deffered revenue	*$ in mil*	0.0	0.0	0.0	0.0					
Stored value card liability	*$ in mil*	140.8	170.3	180.4	130.8					
Prepaid expenses and other assets	*$ in mil*	418.3	261.5	248.8	-4.7					
Total changes in op assets and liabilities	***$ in mil***	**-2,209.8**	**278.8**	**353.0**	**89.7**	**293.4**	**389.8**	**452.2**	**510.9**	**575.8**
% Change in Revenue	*%*	-139.77%	10.27%	16.39%	8.38%	11.68%	11.68%	11.68%	11.68%	11.68%
CAPEX adj	**$ in mil**	**1,160.9**	**1,899.0**	**3,101.2**	**2,692.5**	**3,675.0**	**4,190.7**	**4,523.4**	**4,883.6**	**5,229.0**
Change in capitalized operating leases	*$ in mil*	N/A	595.3	1,660.9	1,173.1	1,173.3	1,388.7	1,628.4	1,856.6	2,108.0
Unlevereged Free Cah Flow	***$ in mil***	**-685.4**	**1,592.7**	**1,349.8**	**1,326.9**	**-260.8**	**1,196.8**	**1,920.9**	**2,679.6**	**3,727.6**

5.4. Relative Valuation Calculations

Individual line items, in $ mill	SBUX	MCD	DNKN	CMG	DRI	YUM
EV	88,130.8	164,722.8	9,204.1	15,442.6	17,527.8	40,558.7
(+) market equity value	76,764.0	129,101.0	6,182.0	12,946.0	14,109.0	28,606.0
(+) debt adj	13,922.2	39,171.3	3,527.9	3,070.5	3,565.7	12,265.7
(+) noncontrolling interest	6.0	0.0	0.0	0.0	0.0	0.0
(-) cash and equivalents	1,892.1	2,463.8	367.9	225.7	146.9	313.0
(-) short term investments	84.5	0.0	0.0	348.3	0.0	0.0
(-) assets held for sale	0.0	0.0	0.0	0.0	11.9	0.0
(-) long-term investments	261.4	0.0	0.0	0.0	0.0	0.0
(-) equity investments	323.4	1,085.7	137.9	0.0	0.0	0.0
LTM Revenue	24,114.2	11,744.2	881.9	4,653.1	8,080.1	5,752.0
2017-12-31 Revenue	22,386.8	12,718.9	860.5	4,476.4	7,170.2	5,878.0
LTM EBITDA adj	4,978.9	N/A	505.0	535.1	1,178.4	3,083.5
2017-12-31 EBITDA adj	4,943.7	1,115.7	492.5	538.5	1,048.9	3,048.5
LTM Earnings	4,551.4	5,454.1	366.2	169.7	603.8	1,608.0
2017-12-31 Earnings	2,884.7	5,192.3	350.9	176.3	482.5	1,340.0

Multiples Ranges	min	25th perc	median	75th perc	max
LTM EV / Revenue	2.17	2.74	7.05	12.23	14.03
2017-12-31 EV / Revenue	2.44	2.95	6.90	11.82	12.95
LTM EV / EBITDA	13.15	13.58	16.55	26.20	28.86
2017-12-31 EV / EBITDA	13.30	15.01	18.69	88.16	147.64
LTM P / E	16.88	17.34	23.37	49.97	76.27
2017-12-31 P / E	17.62	19.48	24.86	51.35	73.45

EV, in $ mill	min	25th perc	median	75th perc	max
LTM EV / Revenue	52,309.9	66,169.8	170,035.0	294,940.3	338,222.9
2017-12-31 EV / Revenue	54,725.4	65,977.3	154,470.9	264,692.8	289,932.0
LTM EV / EBITDA	65,490.6	67,632.1	82,400.0	130,448.8	143,683.9
2017-12-31 EV / EBITDA	65,774.2	74,192.9	92,393.7	435,828.7	729,897.1
LTM P / E	76,839.8	78,904.2	106,352.6	227,440.7	347,147.7
2017-12-31 P / E	50,820.1	56,201.0	71,725.0	148,118.8	211,884.8

Equity Value, in $ mill	min	25th perc	median	75th perc	max
LTM EV / Revenue	46,434.5	60,294.4	164,159.6	289,064.9	332,347.5
2017-12-31 EV / Revenue	48,850.0	60,101.9	148,595.5	258,817.4	284,056.5
LTM EV / EBITDA	59,615.2	61,756.7	76,524.6	124,573.4	137,808.5
2017-12-31 EV / EBITDA	59,898.8	68,317.5	86,518.3	429,953.3	724,021.7
LTM P / E	76,839.8	78,904.2	106,352.6	227,440.7	347,147.7
2017-12-31 P / E	50,820.1	56,201.0	71,725.0	148,118.8	211,884.8

Fair Value per Share, in $	min	25th perc	median	75th perc	max
LTM EV / Revenue	34.42	44.69	121.68	214.26	246.35
2017-12-31 EV / Revenue	36.21	44.55	110.14	191.84	210.55
LTM EV / EBITDA	44.19	45.78	56.72	92.34	102.15
2017-12-31 EV / EBITDA	44.40	50.64	64.13	318.70	536.67
LTM P / E	56.96	58.49	78.83	168.59	257.32
2017-12-31 P / E	37.67	41.66	53.17	109.79	157.06