NOVA SCHOOL OF BUSINESS & ECONOMICS

MASTER IN FINANCE

WHOLE FOODS MARKET

COMPANY REPORT

GROCERY STORES

4 JANUARY 2019

STUDENT: JOÃO BERNARDO SANTOS ALVES

30160@novasbe.pt

America's Transaction of the Year

How Amazon is shaping the grocery retail market

- **WFM is overvalued** given that the price delivered by an intense analysis is **$30,21 which is 13,67% lower than the market value** on 31st of May 2017. Furthermore, the remaining methodologies used to give robustness to the model also yielded values lower than $34,99.

- **Current environment in natural and organic sector is tough** with an increasing competition due to the entrance of large national supermarket chains and the deterioration of gross margins as a result of price investments and deflation environment.

- **The reaction of WFM to the current industry conditions** has been through the following measures: creation of a store concept ("365 Stores"), e-commerce, reduction of cost structure and a more aggressive marketing and advertising strategy.

- On 16th of June it was announced the **WFM's acquisition from Amazon** which was concluded on 29th of August. **Jeff Bezos company paid $42 per share** which corresponds to a premium of 20% compared to stock price on 31st of May and 39% compared to the analyst valuation. So, **why did Amazon pay that premium?** Excess of liquidity, cross-selling, the incorporation of a new sales channel (brick-and-mortar stores) and possibility to scale and leverage the WFM's business are some of the explanations.

Brief company description

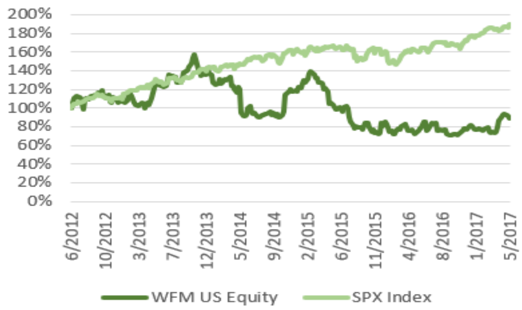
WFM is the largest supermarket chain of natural and organic foods in the US. The company was founded in 1980 in Austin and nowadays it is operating in three countries (US, Canada and UK) with a total of 456 stores. WFM offers a broad selection of natural and organic products with a strong emphasis on perishable foods.

Valuation:	**OVERVALUED**
Recommended Price:	**30.21 $**
Price (as of 31-May-2017)	**34.99 $**

Reuters: WFM.O, Bloomberg: WFM US Equity

52-week range ($)	27.96-37.03
Market Cap ($m)	11,205
Outstanding Shares (m)	320.025

Source:



Source: Bloomberg

(Values in $ millions)	2016	2017F	2018F
Revenues	15724	15909	16602
EBITDA	1355	1313	1406
EBIT	857	825	878
Net Profit	507	471	504
EBITDA margin	8,6%	8,3%	8,5%
EPS	0,54	0,51	0,54
ROIC	8,8%	8,0%	8,0%
ROE	15,5%	14,8%	14,0%
RR	85,0%	62,2%	79,2%
FCF	227,68	209,68	128,37

Source: WFM Annual Report & Analyst Estimation

NOVA SCHOOL OF BUSINESS & ECONOMICS

Table of Contents

Executive Summary

My advisor recommended me to develop an Equity Report about a company that had been acquired at a short time ago in order to relate the Work Project with my job in KPMG (Deal Advisory). The purpose would be to compare my analysis with the market price at that time and with the transaction value. Consequently, I have chosen one of the transactions of 2017: the acquisition of WFM by Amazon.

Whole Foods Market (WFM) is an American corporation which operates exclusively in the natural and organic products industry. Founded in 1980 in Austin, Texas, 37 years later represents part of the American retail industry having more than 450 stores spread over three different countries.

Despite being a premium brand focused on delivering high quality products to customers who highly value such product differentiation, WFM has been facing a few challenges in the last couple of years due to a paradigm change in its market. The deflation environment and the aggressive entrance of new players in the sector have been impacting WFM business, slowing down the growth pace of the company as well as its margins. This environment is challenging the dynamics of the company which is trying to react proactively to the market pressures, so it won't be captured by new players.

The valuation of the company was computed through three different methodologies: Discounted Cash Flow (DCF) model, trading comps and precedent transactions. Each methodology yielded a different value but for the recommendation was chosen a final price given by DCF ($30,21). The price interval found through the methodologies above is [$26,90, $33,38] with a median of $31,02 and an average of $30,44. As of 31st of May, the share price was $34,99 and, consequently, the computed price lead to the conclusion that WFM share price was overvalued at this time.

In 29th of August of 2017, WFM was purchased by Amazon, an acquisition that had already been announced on 16th of June of the same year. The transaction value was $13,7 billion which means a value per share of $42. This represents a premium of 39% comparing to the analyst valuation and 20% regarding to the stock price on 31st May of 2017 ($34,99).

A more detailed information about the current and forecasted environment and WFM's reaction to this big challenge together with some facts and figures about the company and its financials are presented in the next chapters. Ultimately, explanations regarding the premium paid by Amazon are also discussed in the following sections.

Company Overview

Company Description

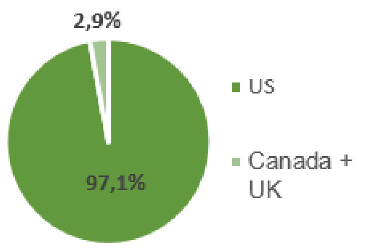


Figure 1: Revenue split by Geography
Source: Annual Report

Whole Foods Market (WFM) is a retail chain headquartered in Austin, Texas (United States) focused on natural and organic products which operates in three countries: **US, Canada and UK**. The share of each country in overall revenues can be seen in Figure 1. The first store was opened in Austin to the public in 1980 and in November 2016, WFM had 464 stores of which 444 were in the U.S., 11 in Canada and 9 in the UK. The WFM Initial Public Offering (IPO) was in 1992 at a price of $2,125 per share. In 2015, WFM created a new concept **"365 stores"** whose concept was to make stores smaller and cheaper.

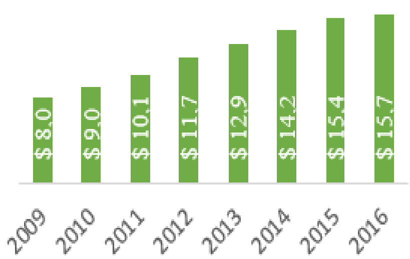


Figure 2: Net Sales ($bn) evolution
Source: Annual Report

The expansion to Canada took place in 2002 with the inauguration of its first international store in Toronto while the entrance in the UK market happened in 2007 with the opening of its first store in London. Its stores have an average size of 39000 gross square footage which corresponds to around 3623 square meters. Regarding **product category**, in the fiscal year 2016, 67% of sales were perishables (19% prepared foods and bakery and 48% other perishables) and the remaining non-perishables. These ratios have been stable over the last few years.

In the fiscal year 2016, **revenues were $15,7 billion** and **EBITDA was around $1,4 billion** with a **net income of $507 million**. WFM was an **industry-leader in sales per gross square foot** with a value of $915. Furthermore, in the U.S., WFM is the **market leader in natural and organic foods sector** and the 10th largest food retailer overall based on 2015 sales rankings from Progressive Grocer. By analysing WFM past performance (Figure 2 and Figure 3), it is possible to conclude that although sales have been increasing every year since 2009, operating income and margins have been decreasing. This is a consequence of lower prices and consequently, lower margins of the company's products. Moreover, the tougher environment in the industry is also reflected in the performance of comparable stores which also worsened in 2016 (Figure 4).

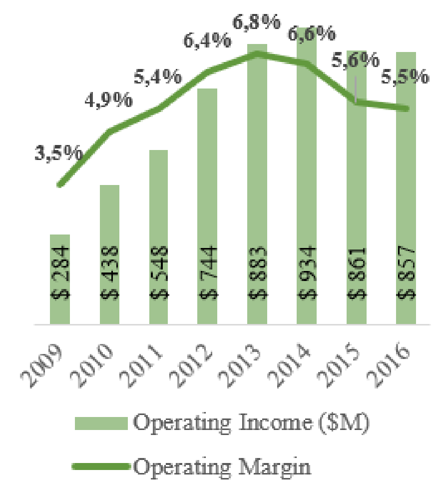


Figure 3: Company Performance Evolution
Source: Annual Report

The chain has around 87000 team members (as of September 2016) of which 69% are full-time workers with a turnover of 18%. In the last two decades, WFM has been recognized as one of the **"100 Best Companies to Work for in America"** by FORTUNE's magazine.

365 Everyday Value, Allegro Coffee and Whole Paws are some of WFM's **exclusive brands**. These together with temporary exclusive products are key components of the differentiation and product innovation strategy adopted by

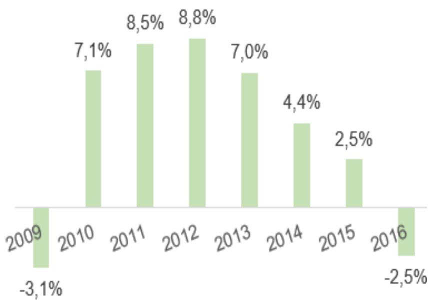


Figure 4: Comparable store sales growth
Source: Annual Report

WFM. The **exclusive brands** has increased its share in overall WFM sales and in the fiscal year of 2016, it represented around **15% of total retail sales**.

Additionally, the retail chain has an important role for the communities where WFM is a bridge between suppliers and consumers. Thus, through Whole Planet Foundation, Whole Kids Foundation and Whole Cities Foundation, the company contributes to enhance the life of those facing major difficulties by providing microcredit to developing world communities that supply their stores, improving children's nutrition, teaching, educating and supporting families and, lastly, supplying healthy food to poor communities. Finally, WFM is concerned about environmental sustainability and so, in 2014, the company announced its commitment to reduce 20% of its energy consumption by 2020.

Management Team

Over the last few months, there have been **many changes on the Board of Directors, on the Management Team and on how the top of hierarchy of the company is organized**. The main one was the transition from co-Chief Executive Officers (John Mackey and Walter Robb) to a sole CEO in January 2017, with the co-Founder John Mackey (63) embracing that role alone. Walter Robb (63) remained on the Company's Board of Directors and continues to be responsible for Whole Kids and Whole Cities Foundations.

Another important amendment was the replacement of the Executive Vice President and CFO Glenda Flanagan. She served the company as CFO for 29 years, the longest serving female CFO in the Fortune 500. She retired and was replaced by Keith Manbeck (CFO effective May 2017) who was the former vice president of Kohl's. Also, in May 2017, the chairman John B. Elstrott was replaced by Gabrielle Sulzberg, a private equity executive. Besides these main shifts, since November 2016, five new directors were nominated (Ken Hicks – former CEO of Foot Locker, Joe Mansuetto – founder and chairman of Morningstar, Sahron McCollam – former CFO of Best Buy, Scott Powers - a former vice president of State Street Corporation and Ronald Shaich – the founder and co-CEO of Panera Bread Company). In a board contemplating twelve directors, ten of them are independent, nine are current or former CEOs/CFOs and four are female.

There is a possibility that more adjustments can occur on the Board of Directors because one of WFM's main shareholders (Jana Partners) is negotiating with the Board to add two directors since the fund argues that **the company is in need of even more "fresh blood"**.

The company has completely changed its top in an attempt to add more expertise and ideas to shape and prepare WFM for the new future conditions.

Shareholder Structure

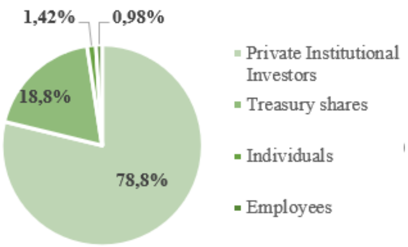


Figure 5: Shareholder Structure
Source: Annual Report & Bloomberg

According to Bloomberg, WFM is mainly owned by **private institutional investors** (77,6%), followed by **treasury shares** (18,8%) which are shares issued in the name of the company that are not outstanding. Besides these two big portions, **individuals** hold 1,42% of WFM and the remaining 0,98% is held by **employees** (including indirect beneficial ownership, all directors and officers as a group) - Figure 5. Yet it is important to highlight that the **CEO John Mackey** has 979 975 shares (as of April 2017) which corresponds to around 0,3%.

According to Orbis database and 10K quarterly report, the main shareholders (with more than 5% of the company) are the **Vanguard Group** (9,69%), **Jana Partners** (it acquired 8,2% of WFM in April 2017) and also **BlackRock, Inc** with 8,15%.

	2013	2014	2015	2016
EPS	$ 1,48	$ 1,57	$ 1,49	$ 1,55
DPS	$ 1,40	$ 0,48	$ 0,52	$ 0,54
Div. payout ratio	95%	31%	35%	35%
Total div. paid ($M)	$ 519	$ 176	$ 186	$ 174
Share rep. ($M)	$ 125	$ 578	$ 513	$ 944
Total payout ratio	117%	130%	130%	221%

Figure 6: Dividend & Share Information
Source: Annual Report

In 2016 dividends were **$0,54** per common share which shows a slight increase compared to the $0,52 in 2015. In 2013, the dividend was not in line with the remaining years due to an extraordinary payment of $1 during the 4th quarter. The expected dividend per common share for that year was $0,40 which would mean a dividend payout ratio of 27%. In the last two years, **the dividend payout ratio was around 35%**. As will be referred below, WFM stock price has been heavily decreasing since 2013. Consequently, believing its share price has been undervalued, since 2014 WFM has been **repurchasing stocks** as it can be seen in Figure 6.

Stock Performance

Since the financial crisis, WFM's share price can be split in **two different periods**. The **first one is until 2013**, in which the company outperformed by far the related indexes, Figure 7. This can be explained by the good results, the high growth rate and ambitious forecasts for the natural and organic niche market. However, **since 2013**, although main American stock indexes kept rising, Whole Foods Market experienced a free fall and lost around half of its market capitalization in 3 years (382,86 vs 186,02). This correction was due to worse results than those expected by shareholders, higher competition in the organic and natural products sector, food price deflation, waning store traffic and price investments (deteriorating gross margins). In the last two months, WFM's share has been performing consistently well mainly due to the **expectation of an acquisition of WFM**, after **Jana Partners** (a private equity fund) acquired around 8% of the company. Overall, WFM has underperformed the related indexes since 2009 as it is noticeable in Figure 7 and, as a consequence of, its poor performance, WFM ceased to be part of Nasdaq100 in December 2016.

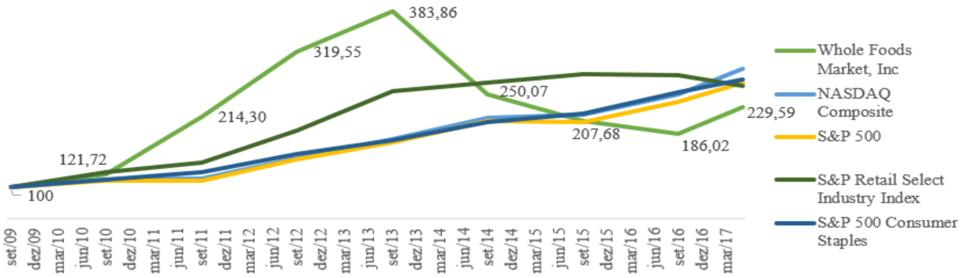


Figure 7: Stock Performance
Source: S&P Indices & Investing.com

Value Drivers

Brand Value

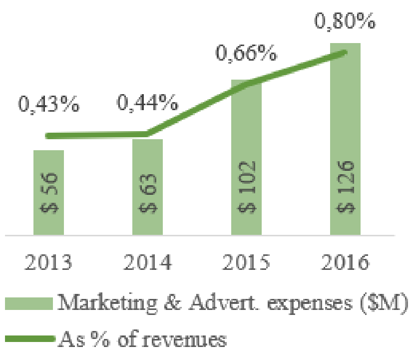


Figure 8: Marketing & Advertising expenses
Source: Annual Report

WFM has been building a **strong brand** since its inception with an excellent reputation where customers feel it is reliable to purchase **high quality products** which allows WFM to sell at **higher prices** than its competitors. The new industry conditions obliged WFM to **invest in advertising** to promote its unique qualities and remember customers why they should pay more to shop in WFM instead of going to a competitor and pay considerably less. Furthermore, WFM is also focused on **gathering data and marketing information** in order to optimize supermarket organization and product selection to retain its customers and maximize its sales. Therefore, the company has increased substantially its marketing and advertising expenses in the last few years as Figure 8 shows.

Opening new stores

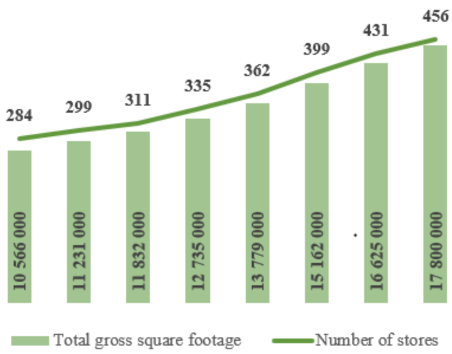


Figure 9: Stores and Total Square Footage Evolution
Source: Annual Report & eMarketer Retail

The supermarket chain has been **increasing its stores aggressively** hence its total square footage has also sharply increased, Figure 9. Since 2009, the total gross square footage increased by 68% while the number of stores only increased 60% which means that the average size per store also rose. Regarding the location of stores, it is noticeable in Figure 10 that it is **not homogeneous per state** since, for example, California has 84 stores while in some states WFM is not present. This is related to WFM strategy of being located in rich regions with high density and which are also healthy and environmentally aware. For the future, the plan would be to “cross the 500-store mark in fiscal year 2017” and to achieve long-term goal of 1200 stores in U.S. and 40 stores in Canada and UK, making the opening of new stores the main driver for growth. However, WFM sales have been slowing down in the last two years, specially sales per sq ft as it is noticeable in Figure 4 for comparable stores, which made WFM abandon that path. From now on, it is expected to continue to be one of the main drivers of

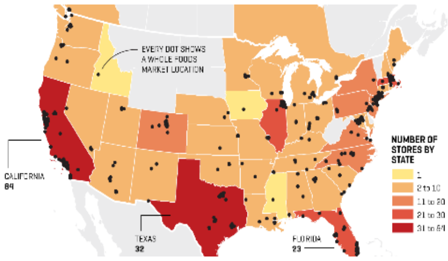


Figure 10: Whole Foods stores in United States (each dot means one store)
Source: Whole Foods Market

growth but in a **more disciplined way** since the aggressive unit expansion in the past was not followed by the demand growth needed. Moreover, the aggressive expansion has also caused **cannibalization** in some sites which is one of the main explanations for the **deterioration of the performance of each store**. Summarizing, WFM will continue to expand the number of stores but in a more conservative way than in the past.

365 Stores

365 Stores concept is a WFM's answer to the new environment in the natural and organic niche market. The company faced a dilemma: to **decrease prices while not affecting heavily operating margins neither the quality** since it was vital for WFM to not damage customer's perception of its brand excellence. Thus, in order to answer this challenge, WFM came up with a new concept where they can set **lower prices**, offsetting that with **lower structure costs** (less employees per sqm counterbalanced by technological improvements, simpler stores, smaller footprints and a higher percentage of exclusive/own brands). The concept is **millennial focused** as the youth generation is more price sensitive (more informed about concurrency and less wealthy) with a tech-driven shop experience and also adopting the trend of **smaller stores** (which already started in Europe with Tesco and Carrefour, for example). Furthermore, 365 stores allow WFM to explore **less affluent markets** which would not be profitable through the larger and more expensive traditional stores. Thus, the "365 stores" concept is vital to keep expanding, avoiding cannibalization and conquering a new segment of customers.

Price investments

	2016
Walmart	24,6%
Kroger	22,2%
Costco	11,1%
Target	29,1%
Publix	27,3%
Whole Foods Market	**34,4%**
Sprouts Farmers Market	29,2%
NGVC	28,6%
Ingles Market	24,4%
Weis Markets	27,8%
Median	**27,6%**

Figure 11: Competitors' gross margins
Source: eMarketer Retail

WFM still has a **huge gross margin** compared to its competitors in the retail sector (food and beverages) as it can be seen in Figure 11. The chosen group is composed by the largest supermarkets and the WFM peer group in order to have a better view of the grocery retail industry. The leadership in gross margin is mostly explained by its strong brand value and exclusively operating in a premium market where competition was not aggressive. However, over the last years the conditions in the sector have been changing drastically. The largest U.S. players in grocery sector noticed the opportunity and so, they started to explore the natural and organic sector by setting lower prices than WFM. This had a negative impact in WFM performance and, consequently, the company has been reacting through **price investments to retain customers** (promotion campaigns, affinity programs and reduction of some products' prices). Therefore, **gross margins have been declining** as it is noticeable in Figure 12. Although

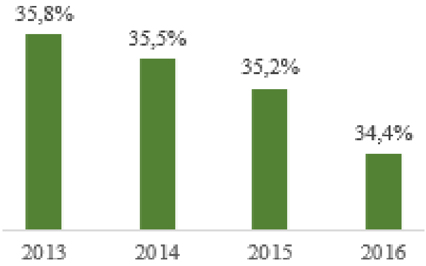


Figure 12: Gross Margin Evolution
Source: Annual Report

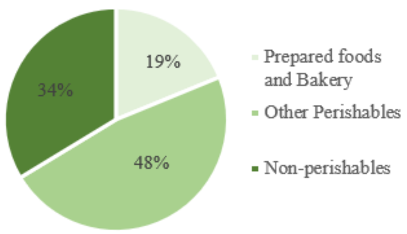


Figure 13: Product category
(Figures may not sum due to rounding)
Source: Annual Report

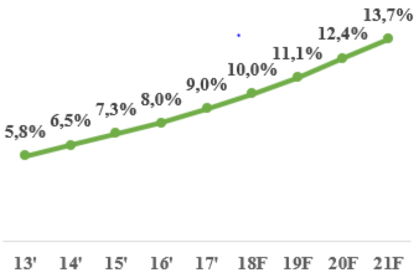


Figure 14: E-commerce share of total retail sales in US
Source: Statista

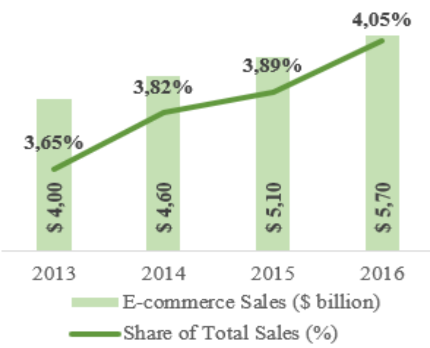


Figure 15: E-commerce Performance in Natural Products Industry
Source: Natural Foods Merchandiser

the price investments strategy is one available for WFM to overcome this tough environment, it is not its goal to start an aggressive price war, according its CEO.

Prepared Foods and Bakery

Prepared foods and bakery are a **key differentiator** of WFM and in 2016, they were responsible for around **19% of the overall sales** (around $3 billion), shown in Figure 13. It is also one type of product that diversifies WFM business which is vital to attract new customers and retain the existent ones and, consequently, to overcome the current tough industry conditions. In the future, it is expected to **relatively increase its weight in company's overall sales** due to e-commerce development where customers can order these prepared foods (working as a restaurant), and therefore, leverage this product category.

Online Channel

WFM in a **partnership with Instacart** launched an online national grocery and pick-up service in September 2014. The purpose of this move was to stay ahead of its competitors offering its customers an **additional sale channel** where they can choose according to their preferences how they want to buy. The partnership started in September 2014 in only two locations and in the end of 2016 the number of U.S. stores embedded in the program was around 50%. E-commerce is starting to be more and more used by customers. In retail sector, it is expected to remain with this **upside trend** in the next years (Figure 14). Specifically, from 2013 to 2016, in natural products industry, the **e-commerce grew 42,5%** from $4 billion dollars to $5,6 billion, increasing also its share in overall sales, as it can be seen in Figure 15. According to a study of 2014*, "Nielsen E-commerce and the New Retail Survey", **55%** of* respondents were willing to order online for delivery home and **57%** were willing to order online and pick up inside the store (Figure 16). Although more than half wanted to use these services, only 12% and 9%, respectively, were already using them. Furthermore, generation Z (15-20) and millennials (21-34) are the most avid online grocery shoppers. Thus, it is expected that in the future, e-commerce options experience a huge growth in the number of its users.

Macroeconomic Analysis

Whole Foods Market operates mainly in U.S., having also operations in Canada and UK. However, the **global economy has impacted the company performance** due to two main reasons: the entire world is connected, and some suppliers are from less developed countries.

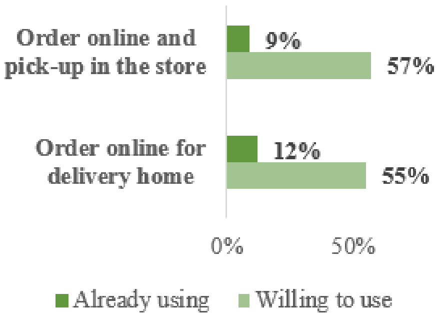


Figure 16: Percentage of people using and willing to use E-commerce in Grocery Industry
Source: "Nielsen E-commerce and the New Retail Survey", 2014

Based on the **World Economic Outlook Database**, April 2017, developed by the **International Monetary Fund (IMF)**, regarding the world performance, there is an expected GDP growth rate of 3-4% at constant prices between 2017 and 2022. This growth will not be uniform around the world, being expected advanced economies to grow at a slower pace (between 1,6% and 2%) while emerging market and developing economies to grow at around 4,5% to 5%. The world commodity food and beverage price index is forecasted to have a slight increase in 2017 of 2% and after that, it will remain more or less constant until 2022.

Regarding **U.S.**, according to IMF forecasts, **GDP at constant prices** will grow above 2% in the next 3 years, decreasing to around 1,7% in the following years. These numbers are in line with what happened in the previous years. However, **inflation** (average consumer prices) will behave very differently compared to previous years. It is expected to be above 2% in the following years which represents a huge jump compared to the previous 2 years. The **unemployment rate** is predicted to remain around 4,5-5% in line with 2016 while the **population** is expected to grow. In accordance with the University of Michigan, the **consumer sentiment**, which is an indicator that measures the health of the economy, has been increasing since 2012 from 75,0 in January 2012 to 97,1 in May 2017 (Units**:** Index 1966: Q1=100, Not Seasonally Adjusted). Lastly, in order to understand **the companies' health**, since the 2008/2009 Financial Crisis, the principal U.S. stock index (S&P 500) has been increasing at a high pace from 683,8 index points in March 2009 to 2415,8 index points in May 2017.

Regarding **Canada**, **GDP at constant prices** will have a growth rate of 1,8%-2% in the following six years which is higher than what was experienced in the last 2 years. **Inflation** will also grow from 1,4% in 2016 to 2% in 2017 and then it will remain constant in the following years while **unemployment rate** will go through a slow decrease from 7% in 2016 to 6,58% in 2022.

Lastly, it is more difficult to predict the future of **UK** due to the uncertainty regarding **Brexit**, voted on the 23th of June 2016. Nevertheless, IMF forecasts **GDP growth rate** to be negatively affected by Brexit mainly in 2018 and 2019, as it can be seen in Figure 17. **Inflation** was almost 0 in 2015 and 0,64% in 2016. Besides these low figures in the past, until 2022, it is forecasted to be equal to or above 2%. The **unemployment rate** will be constant around 5%.

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP growth at constant prices	US	2,224	1,677	2,37	2,596	1,616	2,307	2,519	2,121	1,825	1,672	1,703
	Canada	1,746	2,475	2,565	0,942	1,433	1,941	1,956	1,843	1,8	1,8	1,8
	UK	1,313	1,911	3,07	2,194	1,806	2,048	1,457	1,606	1,909	1,92	1,917
Inflation	US	2,073	1,465	1,612	0,12	1,275	2,654	2,381	2,637	2,324	2,18	2,271
	Canada	1,53	0,925	1,92	1,132	1,409	1,972	2,098	2,068	2,003	1,999	2,007
	UK	2,801	2,568	1,472	0,05	0,642	2,452	2,625	2,244	2,1	2	2
Unemployment Rate	US	8,075	7,367	6,167	5,258	4,85	4,675	4,612	4,439	4,48	4,748	4,993
	Canada	7,325	7,1	6,925	6,9	7	6,868	6,753	6,7	6,654	6,616	6,579
	UK	7,975	7,575	6,2	5,4	4,9	4,912	5,052	5,2	5,2	5,1	5
Population	US	314,284	316,476	318,789	321,08	323,298	325,741	328,244	330,766	333,307	335,867	338,448
	Canada	34,697	35,102	35,496	35,821	36,229	36,694	37,097	37,506	37,918	38,335	38,757
	UK	63,705	64,106	64,597	65,11	65,572	66,03	66,487	66,928	67,36	67,781	68,203

Figure 17: Macroeconomic Data
Source: IMF Forecasts

Industry Overview

Natural and organic food and beverages have been increasing its share in customer's consumption over the last years since people are increasingly more concerned about health and environmental issues. According to Statista, in 2016, the health and wellness food sales worldwide were **$707,12 billion** with expectation to keep the **uptrend** (Figure 18). Regarding the **organic food market**, it accounted to **$90 billion** also in 2016. U.S., Canada and UK accounted for **46%, 4% and 3% of retail sales of organic food**, respectively, hence representing a few of the main agents of the market.

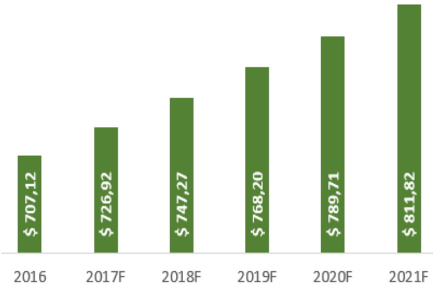


Figure 18: Health and wellness food market value worldwide from 2016 to 2021 (in $ billion)
Source: Statista

Regarding the **U.S.**, the supermarket industry is composed by a **large number of supermarket chains** ranging from international companies to small local stores. In 2016, according to the Progressive Grocer, the **supermarket industry in food and beverages** recorded **$668,68 billion** in sales (Figure 19 – light green bars). Although there are many players in the sector, the market share of the top 4, 8 and 20, as it can be seen in Figure 20, has been increasing over the past decades which shows the **consolidation of the industry**. Regarding the market share of the main food and beverage retailers in 2016, Walmart and Kroger accounted for 17,3% and 8,9%, respectively, while **WFM for 1,7%** (Figure 21).

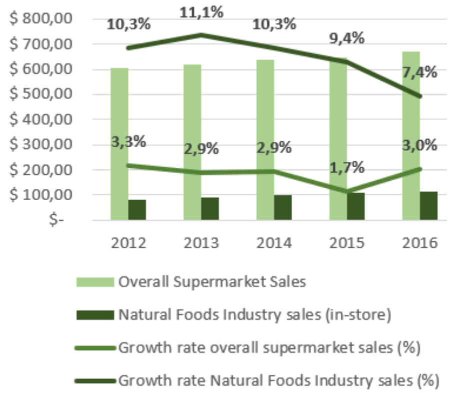


Figure 19: Supermarket performance in U.S.
Source: Natural Foods Merchandiser

In the **U.S. natural products sector**, sales in 2016 yielded **$140,9 billion** (Figure 19 – dark green bars) which were split per distribution channel in Figure 22. For the $54,4 billion sold by natural products retailers, WFM accounted for **28,2%** being the largest player followed by Trader Joe's. The share of conventional retailers' sales has been increasing very fast which is one more proof that they are entering aggressively in this niche. Regarding **organic food**, in 2016, it accounted for $41,7 billion and it is forecasted to achieve $135,3 billion in 2025, according Statista.

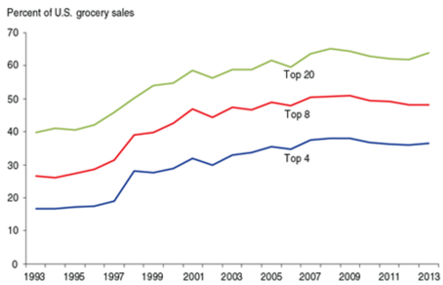


Figure 20: Largest 4, 8 and 20 firms' share of U.S. grocery sales
Source: USDA, Economic Research Service using data from US Census Bureau's Economic Census and Monthly Trade Survey, company annual reports and industry sources

According to specialists in the industry, besides the deflation and price investments that have been flooding the sector in U.S. in the last couple years, some **trends** are also appearing which may affect the future of the grocery industry: the appearance of **e-commerce**, **shorter trips to the supermarkets** which means consumers go more times but spend less money, the **arising of smaller stores**, the **entrance of new large international players** (Aldi and Lidl) and the increasingly interest in **natural and organic products**.

As referred by Packaged Facts, there are some more **important facts** about this niche market: **1)** 36% of consumers seek out for organic food while 42% for natural foods and beverages; **2)** natural and organic foods and beverages sales are forecasted to grow 70% from 2016 to 2021; **3)** although consumers continue

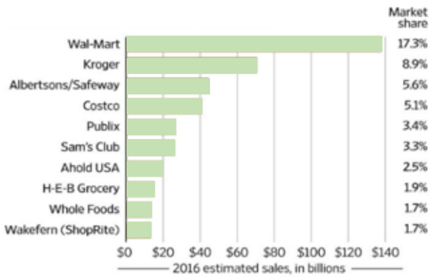


Figure 21: U.S. sales of top food and beverages retailers in 2016
Source: Cowen and Company

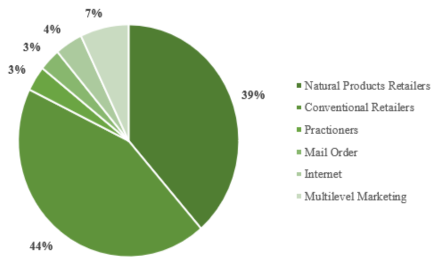


Figure 22: 2016 Market Overview for natural products industry
Source: Natural Foods Merchandiser

to make their decisions according to the traditional value drivers (price, convenience and taste), they are also weighing increasingly the following drivers in their food purchasing decisions: health and wellness, safety, social impact, experience and transparency. The market research publisher, Packaged Foods, calls to these new drivers **"evolving drivers"** since they are expected to have even more importance in the future in consumers' decisions which is a good signal for natural and organic food retailers.

Furthermore, as stated in Allied Market Research Report, from 2017 to 2023, China, Canada, Germany, France and U.S. will be **the most lucrative markets** in this niche sector. This conclusion is withdrawn after the evaluation of market growth and market attractiveness for a few different countries.

Porter's Analysis

In order to have a better perception of industry environment and how **WFM fits in the sector**, a Porter's Analysis was conducted.

Competitive rivalry or competition is getting **more intense** due to the entrance of large supermarket chains in the niche market which practice lower prices. This is the consequence of the increased demand for these products (people are increasingly aware about health issues, food quality and its origin). Thus, competitive rivalry has been having a **strong negative influence** on the performance of Whole Foods Market over the last couple of years. In order to **minimize this negative effect** of competition, WFM created the 365 stores, a concept with lower prices that was already explained, it started to offer e-commerce and last but not least, it increased the advertisement and marketing investments to show people the high quality of its products and also to maximize category management.

The **bargaining power of customers** is **stronger** thanks to an increase in the number of companies offering this type of products which now gives much more choice to consumers. Besides, the websites and companies' apps allow customers to compare products and prices easily and faster which also increases their bargaining power. Lastly, the high price sensitivity of a significative share of natural and organic products' customers, youth people, turns price into an even more vital factor. WFM reacted through price investments, promotion campaigns and an enhanced loyalty program to minimize the consequence of this force.

The **bargaining power of suppliers** is **moderate** for WFM. On one hand, the company has **many different suppliers** and this allows WFM to always have a second choice with **low switching costs**. On the other hand, one of the suppliers accounted for **32,5%** of the total purchases in fiscal year 2016 meaning that operating results would be affected if something happened between WFM and United Natural Foods, Inc (UNFI). Furthermore, the **high requirements about quality** and the **no use of some non-natural products** restricts the number of suppliers available which **increases bargaining power** of the ones that fill these requirements.

The **threat of substitute products** is **moderate** since although “traditional” products have much lower prices and similar characteristics, the raising concern about environment and health issues makes the consumption of these type of products a priority for some customers and so, **product differentiation** is very **high** for them.

The **threat of new entrants** is **very high** in grocery retail industry since there are almost **no barriers to entry** (no patents nor specialized labour force) **neither high capital requirements** as it happens in another sectors. Thus, with the ease of opening a supermarket, the odds that more players keep entering in the niche market are high.

Competition & Peer Group

For the **competitors’ group**, all the supermarket chains which sell natural and rganic products were considered. Thus, Wal-Mart (WMT), Publix and Costco (COST) represent the **national superstores** that have been increasing natural and organic foods offerings while Kroger (KR), Supervalu and Safeway (subsidiary of Albertsons) represent the **national conventional supermarkets** that are also increasing the share of organic products. Besides these companies, for the **alternative food retailers’ group** (where Whole Foods Market is included), the following were considered: Sprouts Farmers Market (SFM), Vitamin Cottage Natural Grocers (NGVC), Trader Joe’s, The Fresh Market, Smart & Final, Ingles Markets (IMKTA) and Weis Markets (WMK). Moreover, there are much more regional and local conventional stores which compete with the retailers mentioned above. However, neither all of them are considered to belong to the same peer group as WFM. Thus, the most similar to WFM are Trader Joe’s, Sprouts Farmers Market (SFM) and The Fresh Market because they have the U.S. as the main market, they are big enough to be organized like WFM, operate exclusively in the niche market (natural and organic products) and also have high margins. However, for multiple valuation, it will only be considered SFM (**tier 1**) since the other ones are not public companies. Besides this company, others (**tier 2**) which are similar (but not so much as the previous) were considered. Three more companies were added: NGVC, Ingles Markets and Weis Markets. These supermarkets chains are in tier 2 since they fail one of the criteria above. In NGVC, the revenues amounts are very different while for the

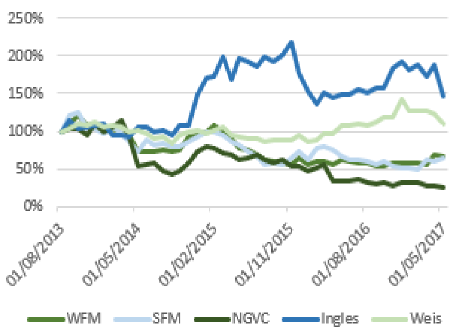


Figure 23: Peer group share performance
Source: Reuters

other two the trouble is that selling natural and organic products is not their main activity although they have an important line of such products. The description about each company is in Appendix. Nevertheless, they are similar enough to compare them (Figure 24) and so, it is useful to compute an EV using all of them.

	Revenues ($m)	Gross Margins	EBITDA	EBITDA margin	US stores	Average store size (sq ft)	ROIC (not adjusted)
Whole Foods Market	15724,0	34,4%	1355,0	8,6%	434	39000	12,70%
Sprouts Farmers Market	4064,4	29,2%	293,3	7,2%	253	27900	12,30%
Vitamin Cottage Natural Grocers	705,5	28,6%	45,9	6,5%	123	16100	8,20%
Ingles Markets	3795,0	24,4%	238,0	6,3%	201	55300	6,30%
Weis Markets	3136,7	27,8%	175,0	5,6%	204	47900	9,10%

Figure 24: Peer Group
Source: eMarketerRetail

Forecasts

Revenues

	Revenues ($M)	Share per channel
Us traditional stores	15101,81	96,0%
US 365 stores	30,2	0,2%
Canada	343,93	2,2%
UK	108,01	0,7%
Online Sales	140,09	0,9%
Total Sales	15724,00	100,0%

Figure 25: Revenues per channel in 2016
Source: Company data, Analyst assumptions & Newspapers' news

In order to forecast the revenues of WFM, **sales** were split **by channel** (physical stores and e-commerce). Physical stores were divided **by geography** (US, Canada and UK) and U.S. physically stores which were additionally broken down into traditional stores and the new concept stores (365). For **brick-and-mortar stores**, the **three key drivers** are the **number of stores**, **square feet (sq ft) per store** and the **sales per sq ft** while for **online sales**, revenues were separated in **number of stores** and the **performance per store**. The share of each channel in end of the fiscal year of 2016 can be seen in Figure 25 which includes some assumptions since the annual report does not have specific information about 365 stores and online sales revenues neither the split between Canada and UK.

Furthermore, the following **assumptions** were made: **1)** in the past, the size per traditional store was the same in the three countries; **2)** a new store has a performance of 50% because since as it is not known when it was opened, it was assumed that, on average, they are opened in the middle of the year; and **3)** relocated stores have a performance of 75%, assuming it takes 3 months since it is closed one store until it is reopened. It is important to notice that WFM ST and MT forecasts were not done neither based on correlations between its performance and macroeconomic evolution nor industry data of the past because the industry has been experiencing a new environment and so, using only **correlations with past information would lead to wrong forecasts**.

U.S. (Traditional Stores)

Figure 26: Sales per sq ft evolution of U.S. Traditional Stores
Source: Analyst assumptions

For the United States, it is noticeable the **deterioration of sales** per sq ft in the last couple of years (Figure 26) which was counterbalanced with **the opening of new stores**, yielding positive revenues' growth rates. For the future, it was assumed the number of new stores opened each year will decrease as CEO John Mackey mentioned it in an interview. Until 2021 the forecasts for stores

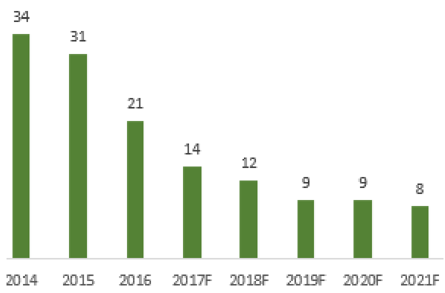


Figure 27: Number of new U.S. Traditional Stores
Source: Analyst & Company estimations

were based on the Annual Report, which mentions that 79 new traditional stores will be opened of which 18 stores are reallocations. Thus, the analyst forecasted that WFM will open 52 new traditional stores in U.S. until 2021, but at a decreasing pace (Figure 27). Afterwards, the number of new stores opened per year will converge to 5 per year. This number is in line with WFM goals of keeping opening new stores but in a more selective and conservative way. Yet, as more stores are opened, the difficulty to find good places for the expansion increases. Regarding the **size of each store**, it was considered to converge for the size expected for 2021, according to Annual Report 2016. After that, the size was presumed to be constant. Finally, the **sales per sq ft** is the main driver of revenues and the most affected in the recent past. As it was mentioned above, WFM is trying to overcome the tough environment in the industry through promotions campaigns, price investments, improving its loyalty programs and higher marketing & advertising expenses. Even though these measures have been undertaken, it is expected that it takes some time for them to succeed. In **the short run**, the deflation environment, lower gross margins and the loss of some customers are expected to be stronger forces than the positive effects coming from the measures stated above, thus inducing a continued downward trend in sales per sq ft until 2018 (Figure 25). **After 2019**, it is expected sales per sq ft to tend to the inflation rate, reaching its value in 2021. After that, it will keep growing at the inflation rate. Therefore, the higher demand for these products in the future was forecasted to be mainly fulfilled by the entry of new players and/or traditional players (as Walmart and Kroger) and by the new concepts. This means WFM is expected to grow at a rate lower than the market and, consequently, to lose market share. In the next 5 years, revenues from U.S. traditional stores will increase at a CAGR of 3,6% (Figure 28).

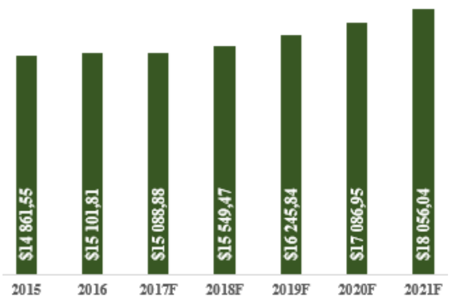


Figure 28: Revenues from U.S. Traditional Stores ($M)
Source: Analyst estimations

365 Stores

"365 Stores" is a new concept created in 2015 and thus there is no official information about their performance in the 2016 Annual Report. Therefore, having in consideration the average size of its stores, the prices charged and the market segment, it was considered **its performance** (sales per sq ft) **would be similar to Sprouts Farmers Market (SFM) stores**. However, as WFM brand is stronger than Sprouts Market, it was considered 365 stores will have sales per sq ft slightly higher than SFM. Following all these assumptions, a value of $657,61 was found for **sale per sq ft** in 2016 (Figure 29). For the future, it was forecasted a growth rate equal to the inflation rate plus a premium of 0,5% due to the expectation of a successful implementation because besides its lower prices, 365 stores have embedded future trends: smaller and more technological stores. It is important to highlight that for 2017, the inflation rate considered for food and

	SFM	365 Stores
Sales per sq ft (old store)	$ 616,15	$ 677,76
Sales per sq ft (new store)	$ 308,07	$ 338,88

Figure 29: 365 stores Performance vs SFM Performance
Source: Analyst assumptions

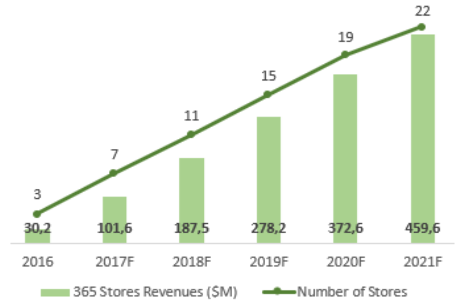


Figure 30: 365 stores' performance
Source: Analyst & Company estimations

beverages was lower than the overall country's inflation because of the deflation environment in the sector as it was referred above. The **number of stores** opened in the following years (until 2021) and the **average size of each store** were based on the information given in Annual Report 2016. For **perpetuity**, it is assumed sales per sq ft will keep growing at a premium of 0,5% above inflation rate and the opening of 4 new stores per year. For the size per store, it will be the same as in 2021. Through all these assumptions, in the next 5 years, 365 stores will grow a lot, turning itself as one of the main drivers for the supermarket chain (Figure 30).

UK

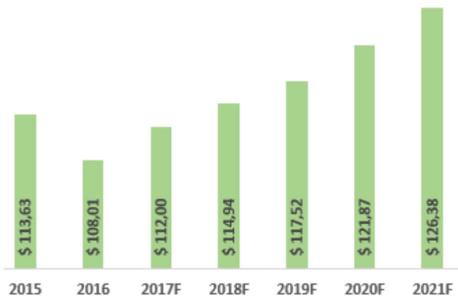


Figure 31: Revenues from UK Stores ($M)
Source: Analyst estimations

WFM performance in the UK has been very poor comparing to North America countries. UK revenues represent only **1% of total revenues** (Figure 31). Consequently, there are experts stating WFM may close or sell its UK stores. As UK share in overall revenues is residual, the **number of stores** was not affected by these predictions and was assumed to be the same. Lastly, according to the Rabobank report "Organic is good for you!" from 2016, organic food sales will grow in the base scenario at a CAGR of 6,7% from 2016 until 2025 in Western Europe. However, due to the unpredictability of UK future caused by Brexit and its worse performance compared to other Western Europe countries, it is reasonable to be sceptic about the 6,7% growth for UK, considering better to assume a discount of 3% in order to have more conservative and realistic assumptions for the uncertainty of UK future. In 2018 and 2019, **sales per sq ft** will grow at the inflation rate since the **Brexit consequences** in the UK Economy are not clear yet. Since 2022 onwards, it is considered it will tend to inflation rate plus a premium of 0,5%. This **premium** is explained by mainly two reasons: 1) there is no possibility for cannibalization due to low number of WFM stores; 2) it is a sector of the future and although more players will explore it, it is reasonable to expect WFM will also absorb a share of the growing demand of the future.

Canada

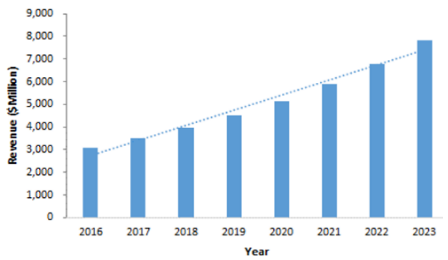


Figure 32: Canada Natural Food & Drinks Market, 2016-2023 ($ Million)
Source: Allied Market Research

Canada operations have a share of around **2% in the overall WFM sales**. For the future, it is considered **the size of the stores will go hand-in-hand with U.S. stores**. Regarding the expansion in **number of stores**, in 2013, the LT goal for Canada was 40 but with no timeline. However, nowadays this number is too optimistic because Canada does not have a lot of cities with a size considerably enough to be profitable to open so many WFM stores since there are already other companies exploring the niche market. Consequently, it was considered LT goal for Canada will not be achieved, lowering the value for 25 stores. For simplicity, it was considered **sales per sq ft** will grow at a small premium

Figure 33: Revenues from Canada Stores ($M)
Source: Analyst estimations

compared to inflation rate because there is no risk of cannibalization effect (low number of stores) and also because according to Allied Market Research Report, Canada will be one of the most lucrative countries to invest in this niche. Figure 32 shows that Canada's natural industry will grow substantially in the next 6 years as well as WFM's division in Canada (Figure 33), **keeping constant the market share in Canada**. Regarding 2017, according to a specialist, Canada's businesses have been hurting due to the drop of oil prices over the last years. Consequently, in 2017, it is assumed the growth rate of sales per sq ft will be 0 since oil prices on 31st of May were in line with past prices.

Online Channel

The WFM e-commerce still has a long path ahead and there is no specific data about its evolution in any Annual Report. According to the co-CEO Walter Robb, on February 2015, the **weekly online delivery sales were around $1 million**. As the e-commerce operated at that time in 15 cities which had on total 85 stores, it was considered in that year, those stores would make $52 million. The **average per store is assumed to be constant**. In 2016, the number of stores with e-commerce were **50% of U.S. stores**, as stated by the company. For the future, it is assumed the program will be expanded to around **90% of the stores and not 100%** since there are stores which are so close to others that would not make sense to have this service.

The forecast of e-commerce growth rate will be based on the market expectation due to lack of official information from WFM. According to FMI-Nielson Report, the online grocery spending will grow at a **CAGR** between **9%** (most conservative) to **20%** (most optimistic) during 2016-2025. Since the 2013-2016 compound growth rate in natural products e-commerce in U.S. lies in that range (**12,5%**), it is assumed this value for the forecasted period. In **perpetuity**, it is assumed to grow at a higher rate than inflation due to the expectation that future generations will be more likely to use the service and so, it will keep expanding.

Regarding the **prices**, WFM set the products to be sold at the same as in traditional stores and customers pay an extra fee to Instacart that depends on the location and also the frequency. About **costs**, although the company saves in labour costs, there is the need to invest on IT to have good platforms (website and app) which allow customers to have a good shopping experience.

Gross Margin

As it was referred above, market conditions are not favourable to keep constant gross margins in the future. Deflation environment, price investments and the entrance of new discounters (Aldi and Lidl) have been **narrowing margins**. As it

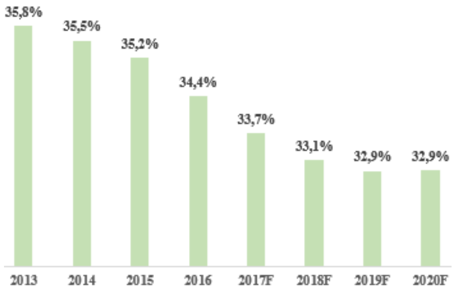


Figure 34: Overall WFM's Gross Margin
Source: Analyst assumptions

was stated by the company, WFM will continue with price investments in the future, and, consequently, it is expected that margins will decrease even more (Figure 34). However, **margins are not expected to converge to the industry average** as WFM has a premium brand in which customers pay more due to its higher quality and reliability. Moreover, CEO Mackey's view for WFM highlights this position, **"Promotions and price investments are an integral part of our conversation, but we are not participating in a race to the bottom."**. Thus, margins will decrease in the next 3 years and then will remain constant, assuming industry will be more stable and price war has already finished.

Regarding 365 stores, due to the absence of information and their similarity to SFM, it was assumed **their margins to be the same as SFM average gross margins of the last 2 years**. This is expected to **remain constant in the future** since 365 stores have lower prices than traditional stores and it was considered WFM will not do extra promotion campaigns in these stores. Furthermore, 365 stores were created in these current conditions and so, it is believed its margins will remain constant.

Costs

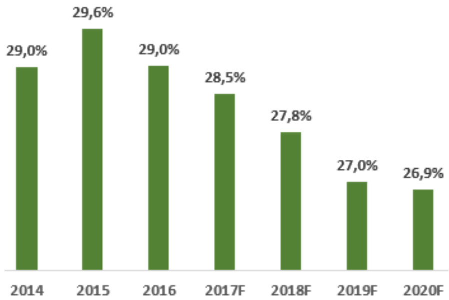


Figure 35: SG&A, Pre-opening and Relocations expenses as % of Revenues
Source: Analyst assumptions

In a competitive environment where margins have been affected, in order to survive, WFM's CEO John Mackey said in March 2016 **"our strategy is to adjust our operating model to a lower margin and lower cost structure,"** (Figure 35). Summarizing, investments made in technology, in marketing and in pricing are expected to be offset by a lowering cost structure with labour restructuring and with a hybrid purchasing structure instead of a decentralized one as it is currently implemented.

Labour Costs

	Employees per store	Employees per sq ft
WFM	190,8	0,00489
SFM	106,7	0,00383
NGVC	24,4	0,00152
Ingles Markets	131,8	0,00238
Smart & Final Stores	39,2	0,00165
Weis Markets	112,7	0,00235

Figure 36: Peers' ratios regarding employees
Source: eMarketer Retail

Regarding labour costs, there are no specific numbers mentioned in past Annual Reports. However, in **2013**, the WFM's CEO declared that the average hourly wage of WFM was **$18,89**, a value that is above the industry average. This is reasonable because it is supposed that WFM employees offer a premium support to its customers. In order to convert this value to 2016, it was assumed WFM employees' nominal wage grew at the same pace as private companies' salaries in U.S. during the same period. Thus, considering the assumption referred above, the **average hourly wage in 2016 was $20,20**, using growth rates based on Bureau of Labor Statistics. Another assumption was that part-time employees work, on average, 20 hours per week. With all this information, WFM spent around $3,1 billion in 2016 in wages which corresponds to 19,6% of revenues. As it can be seen in Figure 36, the **number of employees per sq ft is much higher in WFM than in other companies**. Thus, and also because cost structure is expected to decrease according to the Board of Directors, it is assumed **employees per sq ft will continue to decrease to numbers closer to SFM**. This phenomenon is counterbalanced by more technological stores. However, the ratio in WFM traditional stores will continue to be higher than SFM because as already mentioned, a premium store demands more employees per customer for a better and faster service. Thus, in the next three years, WFM ratio will converge to 110% of current SFM ratio, stabilizing the ratio from 2019 onwards (Figure 37). The average hour paid will be updated indexed to inflation.

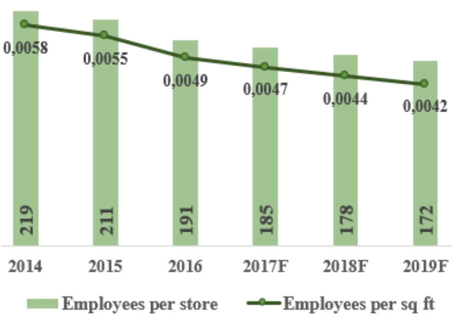


Figure 37: Labour evolution of WFM
Source: Analyst estimations

Regarding 365 stores, it was assumed the average of employees per sq ft will be the same as the first 365 store opened in Silver Lake and it will remain constant in the future. This assumption was made since when the concept was created, this competitive environment was already present in the grocery sector. Thus, 365 stores will have a slightly lower ratio than in traditional stores which is offset by more technological stores and less personal support by employees.

Marketing & Advertising

The marketing and advertising were far from a priority to WFM since its inception. However, times have changed as well as the atmosphere in natural and organic grocery industry. The huge increase in competition has been affecting WFM negatively and so, the company felt **the need to react in order to keep pushing the brand value** and to increase loyalty from its customers, as mentioned above.

	2016
WFM	0,61%
SFM	0,90%
Natural Grocers	1,50%
Ingles Markets	0,40%
Weis Markets	0,30%
Median	**0,61%**

Figure 38: Peers' Advertising expenses as % of Revenues
Source: eMarketer Retail

One of the measures taken by the company was to **invest in advertising**, launching its first TV ad ever in 2015 ("Values Matter") and the second in the beginning of 2017 in line of what CEO John Mackey said, **"We can lower prices here and there, but if people don't know about them, we won't get the full lift."**. This way **WFM has added the advertising to the word-of-mouth** as the two main channels to show why is worth to buy there in order to boost its sales. In 2016, WFM spent 0,61% of revenues in advertising expenses which were the same as the median of its peer group (Figure 38). Thus, it is assumed that WFM will keep with this strategy and, consequently, the ratio will remain constant. As Bill Kirk, an analyst for RBC Capital Markets, said, "We believe this is a positive development that suggests Whole Foods' 2016 pursued strategies have reached a point where **it's time to communicate the company's progress**."

Regarding **marketing**, the investments were made more in **data about customers, their preferences (personalization) and also category management**. Thus, as gathering customer data is increasingly more important and WFM declared one of the main ways to overcome these difficult times would be retaining its best customers, it was assumed next year marketing expenses as percentage of revenues will raise to 0,25% and then the ratio will keep constant.

Net Working capital

Net working capital includes the following captions: Operating Cash, Restricted Cash, Accounts Receivable, Inventories and Prepaid expenses and Other Current Assets in operating assets and Accounts Payable, Accrued payroll, bonus and benefits due team members and Other Current Liabilities in operating liabilities.

Regarding **Operating cash**, it was considered to be 2% of revenues since, according to bibliography, it is the amount necessary, on average, to manage current operations regarding the core of the company. **Prepaid expenses and other current assets** is a residual caption that was volatile in the past. Thus, it was considered the same percentage of revenues occurred in 2016 (1,06%). Additionally, for **Restricted Cash** caption, as it is associated to the workers' compensation obligations, the driver chosen to forecast was the number of workers. The ratio of restricted cash to number of workers was constant over the last 2 years and, consequently, it was assumed in the future it will keep constant at 0,14%. From 2020 onwards, it was assumed the ratio will be constant as percentage of revenues.

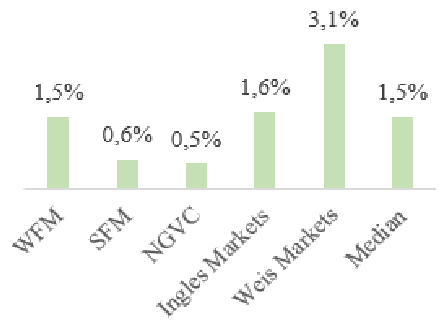


Figure 39: Accounts Receivables as % of Revenues of Peer Group
Source: eMarketerRetail

For the **operating liabilities**, the caption **Other Current Liabilities** is composed by quite different components and it has been volatile over the past 4 years which makes it harder to forecast. Thus, it was considered the average percentage of revenues of those years and assumed it will remain constant in the future. For the **Accrued payroll, bonus and benefits due team members**, it was forecasted through two drivers: number of workers and the following ratio (expenses with this caption as percentage of workers). For the future, it was assumed the ratio will be constant and equal to the average of the last 4 years. Then, it is multiplied by the number of workers of each year.

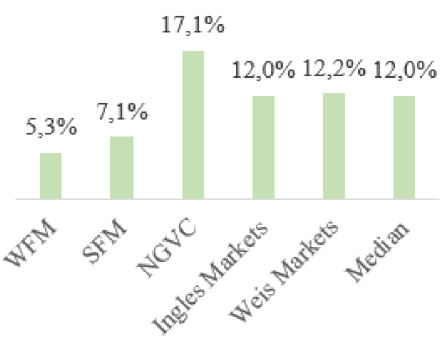


Figure 40: Inventories as % of COGS of Peer Group
Source: eMarketerRetail

For the accounts receivable, inventories and accounts payable, it was used data about the peer group in order to have a better perception on how these captions will evolve in the future. Regarding **Accounts Receivable**, it was computed as percentage of revenues. The median of peer group is equal to WFM value for 2016 (Figure 39) and, consequently, it is assumed the ratio will keep constant in the future with the same value as in 2016.

Regarding **Inventories**, it was considered as percentage of costs of goods sold (COGS) instead of revenues to take the effect of different margins among the peer group. WFM has a more **efficient inventory policy** comparing to its peers as it can be seen in Figure 40. Thus, it is assumed WFM will stick with its policy since there is no information against this assumption.

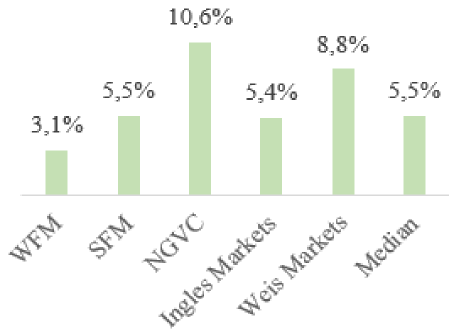


Figure 41: Accounts Payable as % of COGS of Peer Group
Source: eMarketerRetail

Lastly, regarding **Accounts Payable**, it is much lower than the peers' value (Figure 41). This can be explained by two main reasons: the lower inventory amount as percentage of revenues and a large number of suppliers which means lower amounts owed to each one and, consequently, a paid speedily. For the future, it is assumed this value will increase slightly due to the evolution for a hybrid centralized purchasing, but it will remain far from peer group's median.

Concluding, in the next years, the **cash flow from NWC variations** will be favourable which shows the expected efficiency improvements WFM will take in order to overcome current conditions. The ratio of current assets to current liabilities fluctuated between 0,99 and 1,20 over the last four years. In **perpetuity**, this ratio will converge to 1,12 which is slightly lower than market standard but in line with WFM past values.

CAPEX and Capitalized Operating Leases

CAPEX

The WFM's Capex is computed through the difference of PPE plus depreciations. Regarding the PPE, it corresponds to the average of the last 4 years of PPE per sq ft adjusted by inflation times the forecasted total square footage. The increase in PPE is expected to happen at a lower rate in the future since WFM will be more selective choosing the new stores and, consequently, will expand at a slower pace. This is clear after analysing **expansion capex** as percentage of revenues. While in the last 3 years the average of this ratio was 3,6%, in the future, it will have its maximum in 2018 (2,8%) and will converge for 1,4% in perpetuity. As it can be seen in Figure 42, the expansion CAPEX will be decreasing its share in overall CAPEX which is in accordance with a slower WFM's expansion (opening less stores per year, on average, than in the past). Regarding **depreciations**, in the future, it is assumed to have the ratio depreciations as percentage of PPE constant and equal to the average of the last 4 years. In supermarket chains, **operating leases** are used in different quantities among the companies and so, it does not make sense to compare the Capex as percentage of revenues with other corporations since the comparison would be biased. **For the long-term**, beyond 2023, it was considered PPE as percentage of revenues to be equal to the 2022 value.

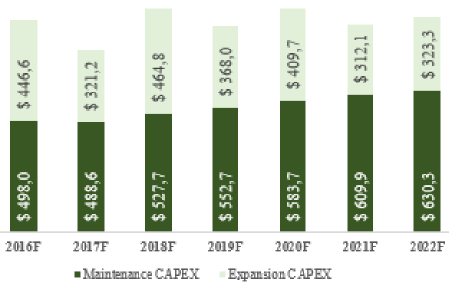


Figure 42: Capex ($M)
Source: Analyst estimations

Operating Leases

WFM has a significant number of operating leases which is an **off-balance sheet caption**. Although the reformulation of these leases **does not affect the equity value of the company**, it affects the EV, ROIC and unlevered free cash flows. As it is stated in Mckinsey book, **"Adjusting the financial statement makes**

return on capital and free cash flow once again independent of capital structure choices, specifically whether to lease, own, or borrow", having a better idea of the company's core performance. In order to compute the capitalized operating leases, the formula below was used (Figure 43), taking past rental expenses from Annual Reports and forecasting future rents. The cost of debt considered was AA-rated yields (lower risk than the company because it is associated to a physical collateral). Lastly, to estimate the asset life, the methodology proposed by Lim, Mann and Mihov of dividing PPE by annual depreciation was used. Afterwards, to include these assets in the balance sheet, they were added to operating assets and financial debt. At last but not least, according to "Lim, Mann and Mihov" and "Ohio State University", one more reason to readjust capitalized operating leases is the fact that **rating agencies take into account these operations to evaluate the company's rating**.

$$\text{Asset Value}_{t-1} = \frac{\text{Rental Expense}_t}{k_d + \frac{1}{\text{Asset Life}}}$$

Figure 43: To compute the asset value correspondent to a rental expense
Source: "Valuation – Measuring and Managing the Value of Companies" from McKinsey & Company

ROIC Analysis

It is important to analyse the Return on Invested Capital (ROIC) of WFM and compare it with the closest peer and a proxy for the industry in order to understand how good it is WFM at turning capital into profits relatively to its sector. The comparison will be made considering **ROIC adjusted for operating leases** since the purpose is to conclude about the performance of the core business regardless of the financial structure. **WFM's ROIC decreased heavily in the last year** but it is not an isolated case as the Figure 44 shows. The tough environment in the industry affected negatively also the closest peer and the industry retail (grocery and food) given by Damodaran database. It is important to highlight that WFM might have been more affected than SFM because of its higher prices.

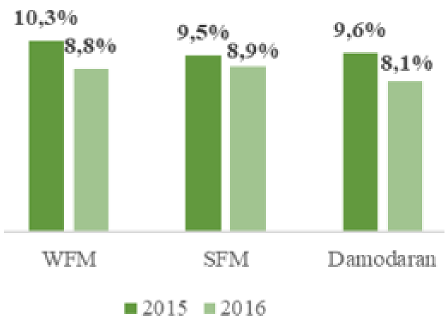


Figure 44: ROIC evolution of WFM, SFM and the grocery industry
Source: Annual Reports & Damodaran Database

Regarding the forecast period, in the short-term, it is expected the **RONIC** to be negative, affecting the overall ROIC. However, RONIC will increase after 2018 because it is expected the **stabilization of the industry** which will allow the company to profit from the invested capital. After that, from 2024 onwards, **RONIC** will stabilize around 9,0-9,5% which is reasonable since it is a value **higher than WACC and lower than ROIC**. The comparison with WACC allows to conclude that the company will be continuously creating value since RONIC is always higher than WACC from 2018 onwards. Lastly, the **reinvestment rate** will be lower in the future due to the current WFM strategy of being more selective in the opening of new stores. The evolution of the respective ratios in the next years is presented in Figure 45.

	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F
ROIC	10,3%	8,8%	8,0%	8,0%	8,8%	9,1%	9,5%	9,8%	9,9%	9,8%
RR	73,2%	85,0%	62,2%	79,2%	54,0%	53,5%	37,1%	37,7%	42,4%	41,7%
RONIC	0,5%	-11,7%	-2,1%	7,9%	21,3%	15,3%	17,6%	19,4%	10,9%	9,5%
g	0,6%	-8,6%	-1,8%	4,9%	16,9%	8,3%	9,4%	7,2%	4,1%	4,0%
WACC	6,0%	6,0%	6,1%	6,1%	6,1%	6,2%	6,2%	6,2%	6,3%	6,3%

Figure 45: WFM Performance according key financial indicators
Source: Analyst estimations

Valuation

DCF

Risk-free	2,21%
Market risk premium	5,69%
Tax rate	39,84%

Figure 46: DCF inputs
Source: Analyst assumptions

In order to use the **DCF methodology** to discount the cash flows to find the enterprise value and, consequently, the equity value, the WACC had to be figured. The **risk-free** assumed in the computations was the YTM of 10-year U.S. government bonds in 31st of May 2017 and it is assumed it will remain constant in the future. For the **tax rate**, it was assumed the federal income tax of 35% plus the average of the state income tax rate of last 4 years and also assumed it will keep constant in the future. Regarding the **market risk premium**, as it was recommended, it was taken from bibliography. In this specific case, it was considered 5,69% based on Damodaran database (Figure 46) which was computed with the returns of the last 5 years of the S&P 500.

Unlevering		
Shares outstanding		320250000
Share Price	$	34,99
Net Debt	$	635 480 000,00
EV	$	11 841 027 500,00
Market Cap.	$	11 205 547 500,00
Operating Leases		
YTM		2,60%
Annualized PD		0,05%
Recovery Rate		62,5%
Rd		2,41%
Bd		0,04
Normal Debt		
YTM		4,21%
Annualized PD		0,46%
Recovery Rate		49,50%
Rd		3,98%
Bd		0,36

Figure 47: Data to Unlevered Beta of Equity
Source: Analyst assumptions & Bloomberg

The **cost of debt** of the company will be a **weighted average of the two type of debts** that WFM incorporates (**normal financial debt and capitalized operating leases**), as stated in Figure 47. First of all, it was computed the cost of debt for the normal debt, taking the YTM of the senior notes issued on December 2015 with maturity on December 2025. After, the YTM was converted to **the cost of debt (3,98%)** which has embedded a beta debt of 0,36. For the capitalized operating leases, as it says in Mckinsey book, “The secured cost of debt can be proxied by the yield to maturity on AA-rated 10-year bonds”. Consequently, with the same approach as before, taking the YTM from US Corporate AA Effective Yield, a **cost of debt for capitalized operating leases of 2,41%** was found.

Regarding the **cost of equity**, two approaches were used. One of them is based on statistical linear regression of historical stock returns’ sensitivity to market risk while the other is based on the median of the unlevered beta of the peer group which is then relevered for the WFM capital structure.

Adjusted Raw Beta (Be)	0,75
Re	6,46%
Bu	0,72
Ru	6,33%

Figure 48: 1st Methodology's Forward-looking unlevered beta
Source: Analyst estimations

For the **first methodology** (Figure 48), WFM’s weekly returns for the last two years were regressed on the S&P 500’s weekly returns (a proxy for the market since WFM shareholders are mostly U.S. investors that care only about U.S. market). Thus, the slope taken from the regression is the WFM’s beta, according to CAPM theory. After, it was adjusted according to forward-looking methodology (a practice used by Bloomberg). Lastly, it was unlevered the adjusted beta, yielding an **unlevered beta of 0,72**.

Peer Group	Beta unlevered
WFM	0,72
SFM	1,04
Natural Grocers	0,63
Ingles Markets	0,76
Weis Markets	1,00
Median	**0,76**

Figure 49: 2nd Methodology's Forward-looking unlevered beta
Source: Analyst estimations

The **second methodology** (Figure 49) assumes the median of the unlevered beta of the peer group is the best proxy for the unlevered beta of that industry. The time range to compute peer group's equity betas was the same as the one used for WFM and the proxy for the market was also the same. Afterwards, they were adjusted for forward-looking methodology and, subsequently, they were unlevered. Thus, the **unlevered beta for the industry is 0,76**.

The most trustworthy methodology is assumed to be the 2nd Methodology for this case since the **R^2** (7,18%) for the WFM equity beta is very low and its confidence interval is wide which increases the error for the 1st DCF methodology. Thus, although the two processes are going to be taken into account, from now on, sensitivity and scenario analysis will be presented only for the 2nd Methodology as well as the implied share price presented in the first page of the Report.

Average GDP nominal growth rate	3,74%
Average GDP real growth rate	1,71%
Average inflation	2,00%
LT nominal growth rate	3,15%
LT real growth rate	1,13%

Figure 50: Long-term growth rate split by inflation and real growth
source: Analyst estimations

Considering the unlevered beta, risk-free, tax rate, and the beta of both types of debt constant in the future, the **WACC could finally be discovered for every year** since the capital structure is not constant in the future. **For the long-term growth rate**, the model with all the assumptions above yields a long-term growth rate of 3,15% through the product of RONIC and RR. This can be split by inflation rate of 2% (long-term goal for the inflation rate of the three countries where WFM is present) and the real growth of 1,13% (Figure 50). The real growth rate comes essential from the opening of new stores, the good performance of 365 stores, UK and Canada stores and online channel. The value is reasonable since it is higher than inflation rate which means the company will grow every year in real terms but lower than GDP real growth rate. Thus, **the 1st and the 2nd DCF methodology yielded $33,28 and $30,21 for the implied share price**, respectively. It is important to highlight that 55% of WFM's value is in perpetuity.

Multiple Valuation

	P/E Ratio	EV/EBITDA
WFM	24,08	7,95
SFM	26,82	12,22
NGVC	25,41	6,44
Ingles Markets	18,67	7,58
Weis Markets	24,83	9,51
Median	**25,12**	**8,55**
EV		$10 829,08
Net Debt		$ 635,48
Equity Value		$10 193,60
Share price	**$ 32,40**	**$ 31,83**

Figure 51: Peers' Multiples Valuation
(EV, Net Debt and Equity Value are in $M)
Source: Bloomberg

In order to have a more robust valuation of WFM, other valuation methodologies besides DCF were performed which allow the public to have a broader perspective of the company's valuation. Thus, using some **peers' multiples** and **precedent transactions**, it was computed the enterprise value for WFM.

Industry Peers

The ratios used were based on market values to understand how investors look at companies in this sector. Thus, **P/E** and **EV/EBITDA** were taken from Bloomberg for WFM's peer group and the median was computed as it can be seen in Figure 51. **This methodology yielded a range for the company's**

value between $31,83 and $32,40. Although it would make sense to present a ratio where sales were included since it is one of the most important ratios for supermarkets chains' valuation, in this particular case, this would mislead the correct valuation of WFM because WFM's margins are the largest in the peer group by a significant amount.

Comparable Transactions

	TV/EBITDA	TV/EBIT
Median	7,3	12,4
EV	9251,29	9570,092
Net Debt	635,48	635,48
Equity	8615,81	8934,612
Price per share	**$ 26,90**	**$ 27,90**

Figure 53: Relative Valuation - Comparable Transactions
Source: Analyst estimations

Lastly, the EV was also computed based on **historical transactions**. In order to choose which deals were related to WFM, **four parameters were used**: companies operating mainly in U.S. market; grocery (food and beverages) sector's transactions; total transaction value higher than $500 million; and transactions within a time span of 4 years. Having in consideration these four requirements, **five transactions were selected** (Figure 52). Consequently, and using the WFM's EBITDA and EBIT taken from Bloomberg for the second quarter (Q2) of 2017 in order to have the most recent information as possible, it was calculated the EV and, consequently, equity value for WFM, shown in Figure 53. With this methodology of past deals comparison, **the value of the company ranges from $26,9 to $27,9.**

Announce Date	Acquirer Name	Target Name	TV ($M)	TV/EBITDA	TV/EBIT
16/10/2016	Onex Corporation	Save-a-Lot Inc	1365,0	7,7	12,2
14/03/2016	Apollo	The Fresh Market	1334,4	7,5	12,3
10/11/2015	Kroger	Roundy's	784,9	6,9	17,1
06/03/2014	Albertsons	Safeway	7903,6	5,0	12,4
08/07/2013	Kroger	Harris Teeter Supermarkets	2460,9	7,3	17,1

Figure 52: Comparable Transactions
Source: Bloomberg and Duff &Phelps' Report

Summary of Different Equity Values

		Implied Share Price
DCF		
1st Methodology	$	33,38
2nd Methodoly	$	30,21
Industry Peers		
P/E Ratio	$	32,40
EV/EBITDA	$	31,83
Comparable Transactions		
TV/EBITDA	$	26,90
TV/EBIT	$	27,90

Figure 54: Summary of implied share price for each valuation methodology
Source: Analyst estimations

Summarising, the outcome of the six methodologies is presented in Figure 54. Based on them, **the range for WFM's share price is between $26,90 and $33,38**. The median and the average of the six methodologies are $31,02 and $30,44, respectively. However, **based on the trustworthy model (2nd DCF methodology), WFM's share price is $30,21** which means is **overvalued by 13,7%**. This value as well as the median and average of the six methodologies are in line with WFM's share price of March and April, before Jana Partners acquired 8,2% of WFM. Therefore, the analyst concluded current stock price is due to **the speculation of a future WFM acquisition and not due to the intrinsic value of its business.**

Sensitivity and Scenario Analysis

The grocery industry is experiencing an unstable atmosphere and so, it is difficult to predict when and how it will stabilize. Thus, the most significant variables will be subject to a sensitivity and scenario analysis in order to have a more tough valuation and an idea of how the share price will evolve if some previous assumptions are breached.

Sensitivity Analysis

		g				
		2,0%	2,6%	3,15%	3,4%	3,7%
βu	0,56	$ 35,6	$ 42,4	$ 52,6	$ 60,4	$ 70,6
	0,66	$ 28,3	$ 32,8	$ 39,2	$ 43,6	$ 49,2
	0,76	$ 22,8	$ 26,0	$ 30,2	$ 33,1	$ 36,4
	0,86	$ 18,6	$ 20,9	$ 23,8	$ 25,8	$ 28,0
	0,96	$ 15,2	$ 16,9	$ 19,1	$ 20,4	$ 21,9

Figure 55: Sensitivity Analysis for LT growth rate and unlevered beta
Source: Analyst estimations

For the sensitivity analysis, **three variables and their effect in the share price were assessed**. First, it was done the sensitivity for the **long-term growth rate** that has embedded an implicit RONIC and RR and for **the unlevered beta**. For the unlevered beta, it was taken and added 0,1 two times while the LT growth rate value was ranged between the inflation rate (2%) and the weighted average of nominal GDP in three countries (3,74%), assuming their GDP growth rate in perpetuity will be in line with values for 2022 (Figure 17). The impact in share price can be seen in Figure 55. The values in red are the ones lower than the analyst valuation, in green values between $30,21 and $42,00 while in light blue, the remaining values. It is noticeable the **high sensitivity** to both variables. Besides this, it was also studied the impact of changes in the **federal income tax rate** since President Trump established as one of the main measures for his mandate a reduction of federal tax rate to 15%. However, since it is not certain how much he will actually decrease it, it was taken 5% from current tax rate five times and added one time to understand the impact. The impact is substantial (Figure 56) and it can help WFM to survive in this tough industry environment. The decrease in tax rates were not included in the model's forecasts due to the uncertainty of the measure's implementation.

Tax Rate						
10%	15%	20%	25%	30%	35%	40%
$57,7	$51,9	$46,3	$40,8	$35,4	$30,2	$25,1

Figure 56: Sensitivity Analysis for changes in federal tax rate
Source: Analyst estimations

Scenario Valuation

	Base Scenario	
Equity Value	$	9 674,20
Imp. Share Price	$	30,21
LT growth rate		3,15%
ROIC in 2030		9,71%
RONIC in 2030		9,26%
WACC in 2030		6,67%

Figure 57: Base-case scenario
Source: Analyst estimations

For the scenario analysis, **the more significant and unstable variables of the model**, regarding the core operations, were studied. Thus, the opening of new stores in U.S. and Canada, sales per sq ft of U.S. traditional stores, 365 stores and Canada stores, COGS margin related to traditional stores and e-commerce and, lastly, online growth rate were challenged to build two scenarios. The assumptions for each scenario are presented in Appendix.

On one hand, the **optimistic scenario** (Figure 58) incorporates **five main features**: a less intense price war in the ST, meaning higher COGS margins in the future; there will be more new traditional U.S. stores opening in perpetuity; an increase of sales per sq ft because it is assumed that the measures taken by the company will be more effective in the ST than what was assumed before and in the LT it is assumed they will grow above inflation rate; a better perception of e-commerce by the public; and, ultimately, that WFM will not be affected by Brexit. According to all these assumptions, **implied share price increases to $59,89**

	Optimistic Scenario	
Equity Value	$	19 179,90
Imp. Share Price	$	59,89
LT growth rate		3,72%
ROIC in 2030		13,18%
RONIC in 2030		12,82%
WACC in 2030		6,74%

Figure 58: Optimistic-case scenario
Source: Analyst estimations

with a LT growth rate of 3,7%. The ROIC and RONIC in **perpetuity** are expected to be 13,2% and 12,8%, respectively, which are higher than WACC value (6,7%).

	Pessimistic Scenario	
Equity Value	$	4 623,86
Imp. Share Price	$	14,44
LT growth rate		2,54%
ROIC in 2030		7,32%
RONIC in 2030		6,80%
WACC in 2030		6,54%

Figure 59: Pessimistic-case scenario
Source: Analyst estimations

On the other hand, the **pessimistic scenario** (Figure 59) analyses with a negative view the same variables challenged in the optimistic scenario. The **main changes were**: there will be less new traditional U.S. stores opening in perpetuity due to deterioration of their sales per sq ft; sales per sq ft were defined to grow at inflation rate in 365 stores, UK and Canada in perpetuity; fewer stores in Canada; online sales growth to expand at a much lower rate which shows that the big sharks in e-commerce would not allow WFM to have success; lastly, price war will be more intense and, consequently, its margins will deteriorate even more compared to the base case. According to all these assumptions, **implied share price would be $14,44 with a LT growth rate of 2,54%**. The ROIC and RONIC in 2030 are 7,32% and 6,8%, respectively which are slightly higher than WACC (6,54%).

Business Risks

Evaluating the nature of the market and the situation of the industry and, ultimately, the recent performance of the company **some risks may jeopardize the WFM business in the next few years**. Some of these risks might be: **1)** the deterioration of brand value and, consequently, people not be willing to pay a premium to purchase in WFM; **2)** the even more worsening of sales per sq ft could lead to the closure of more stores which could, in turn, lead to the decrease of revenues; **3)** the failure of e-commerce partnership due to the cannibalization from large players like Amazon could increase costs that would not be paid off; **4)** the reduction in gross margins may not be enough to keep customers attracted to WFM creating serious problems for the firm; **5)** the opening of new stores might cannibalize other existing stores instead of boosting sales; **6)** the deterioration of the relationship between WFM and UNFI **7)** the worsening of macroeconomic conditions that may cause lower disposable income for families, higher unemployment rate, declining consumer confidence, higher prices for commodities and deflation environment could be responsible for decrease of sales and lower margins having an adversely effect in the company; **8)** lastly, and more specific to UK, Brexit can have adverse consequences in UK's businesses.

Transaction

WFM acquisition by Amazon was **announced on 16th of June 2017** and **closed on 29th of August**. **Amazon paid $42 per share plus the net debt** which gives an **EV of around $13,7 billion**. The price per share means a premium of 20%

compared to the share price on 31st of May and 39% comparing to the analyst's DCF valuation. The deal multiples were higher than comparable transactions referred above, having TV/EBIT and TV/EBITDA equal to 19,27x and 10,88x, respectively. So, the ultimate question is: **why did Amazon pay such price?**

There are **financial and strategic reasons** that help to explain the premium offered by Amazon. First of all, Amazon had **high level of excess cash** which allowed the company to acquire WFM with no need to finance from third parties. Another reason is that Whole Foods Market's acquisition allows Amazon to have a **real and strong presence in brick-and-mortar stores** which brings essentially three advantages for Amazon: minimizes costs of deliveries and returns, offers another channel where customers can buy and tunes of customer data since people have different behaviours in physical stores and online. This last point could be irrelevant for some companies but for Amazon is vital since customer data and its personalization is one of the keys for its success. Besides these reasons, the acquisition is one way to **decrease the effect of seasonality associated to Amazon** activity given that 33% of its sales occurs in the 4th quarter and grocery industry usually does not have seasonality. Moreover, Amazon can **explore better the internationalization of WFM** which, although it was not very successful in the past, does not necessarily guarantee the same outcome in the future since Amazon might have a better know-how. Through its channels and marketing/advertising expertise, Amazon can **increase the penetration rate of private labels** which might increase at the same time margins and loyalty, ceteris paribus. Additionally, **cost efficiencies** through centralization of products purchasing can also bring value. The capacity of Amazon to **scale the business** by aggressively opening more stores while **decreasing prices** due to cost savings can also be a very powerful tool. The acquisition also allows Amazon to explore more aggressively the food and beverages sector. Lastly, Amazon can take advantage of brick-and-mortar stores to sell other products, attracting customers that are not used to purchase online.

The **market reaction to the acquisition announcement** was very positive for WFM and Amazon and negative for grocery competitors since they were afraid of **Amazon's effect**. While Amazon and WFM stocks were up 2,8% and 27%, respectively, all the competitors were losing value in the late morning of 16th of June (SFM, Kroger and Walmart were down 14,0%, 12,9% and 5,41%, respectively) which means investors expected a brilliant future ahead for Amazon and WFM as well as negative consequences for WFM's competitors.

Summarising, the **premium paid by Amazon** is due in particular to the synergies with its main activity and the capacity to boost and leverage WFM business.

Appendix

Revenues

	2013	2014	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
IN-STORE SALES																		
US																		
Normal Stores																		
# Stores	347	381	412	433	438	450	459	468	476	484	491	498	504	509	514	519	524	529
New stores	25	34	31	21	14	12	9	9	8	8	7	7	6	5	5	5	5	5
Relocations	5	1	6	3	4	4	4	3	3	0	0	0	0	0	0	0	0	0
Old stores	317	346	375	409	420	434	446	456	465	476	484	491	498	504	509	514	519	524
Sqft per Store	38064	38000	38573	39097	39704	40320	40946	41581	42226	42226	42226	42226	42226	42226	42226	42226	42226	42226
Sales per sqft - old stores	985	993	975	916	884	871	875	888	907	928	947	965	985	1004	1025	1045	1066	1087
Sales per sqft - new stores	492	496	488	458	442	435	437	444	454	464	473	483	492	502	512	523	533	544
Sales per sqft - relocated stores	739	745	732	687	663	653	656	666	681	696	710	724	739	753	768	784	799	815
Total Sales US Trad. Stores	**12491**	**13726**	**14862**	**15102**	**15089**	**15549**	**16246**	**17087**	**18056**	**18809**	**19485**	**20160**	**20833**	**21483**	**22129**	**22792**	**23473**	**24172**
365 Stores																		
# Stores	0	0	0	3	7	11	15	19	22	25	29	33	37	41	45	49	53	57
New stores	0	0	0	3	4	4	4	4	3	3	4	4	4	4	4	4	4	4
Sq ft per Store	0	0	0	29667	29551	29435	29320	29205	29091	29091	29091	29091	29091	29091	29091	29091	29091	29091
Sales per Sq ft old	0	0	0	678	688	708	730	751	771	792	812	832	853	874	896	919	941	965
Sales per sqft new	0	0	0	339	344	354	365	375	385	396	406	416	426	437	448	459	471	483
Total Sales 365 Stores	**0**	**0**	**0**	**30**	**102**	**187**	**278**	**373**	**460**	**541**	**638**	**750**	**868**	**992**	**1121**	**1256**	**1397**	**1544**
OUTSIDE US																		
Canada																		
# Stores	8	9	10	11	12	14	16	18	20	21	22	23	24	25	25	25	25	25
New stores	1	1	1	1	1	2	2	2	2	1	1	1	1	1	0	0	0	0
Sqft per Store	38064	38000	38573	39097	39704	40320	40946	41581	42226	42226	42226	42226	42226	42226	42226	42226	42226	42226
Sales per Sqft old stores	1208	1137	987	838	838	860	882	904	926	949	973	998	1023	1048	1074	1101	1129	1157
Sales per sqft new stores	604	569	494	419	419	430	441	452	463	475	487	499	511	524	537	551	564	578
Total Sales Canada	**345**	**367**	**362**	**344**	**383**	**451**	**541**	**639**	**743**	**822**	**884**	**948**	**1015**	**1084**	**1134**	**1162**	**1191**	**1221**
UK																		
# Stores	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Sqm per Store	38064	38000	38573	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097	39097
Sales per Sqft	306	295	327	307	318	327	334	346	359	368	377	387	396	406	417	427	438	449
Total Sales UK	**81**	**101**	**114**	**108**	**112**	**115**	**118**	**122**	**126**	**130**	**133**	**136**	**139**	**143**	**147**	**150**	**154**	**158**
E-commerce																		
Total Sales E-commerce	**0**	**0**	**52**	**140**	**224**	**300**	**342**	**390**	**443**	**503**	**569**	**645**	**729**	**790**	**840**	**877**	**914**	**954**
TOTAL SALES	**12917**	**14194**	**15389**	**15724**	**15909**	**16602**	**17525**	**18610**	**19828**	**20804**	**21708**	**22639**	**23585**	**24492**	**25371**	**26237**	**27130**	**28049**

Income Statement

(in millions dollars)	2013	2014	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Core Business																		
Sales	**12917**	**14194**	**15389**	**15724**	**15909**	**16602**	**17525**	**18610**	**19828**	**20804**	**21708**	**22639**	**23585**	**24492**	**25371**	**26237**	**27130**	**28049**
Normal stores	12917	14194	15337	15554	15583	16115	16905	17848	18926	19760	20501	21244	21987	22710	23410	24105	24819	25551
365 stores	0	0	0	30	102	187	278	373	460	541	638	750	868	992	1121	1256	1397	1544
Online	0	0	52	140	224	300	342	390	443	503	569	645	729	790	840	877	914	954
Costs of goods sold	**-7914**	**-8743**	**-9532**	**-9836**	**-10044**	**-10568**	**-11193**	**-11890**	**-12671**	**-13297**	**-13878**	**-14477**	**-15086**	**-15670**	**-16236**	**-16795**	**-17371**	**-17964**
Normal stores	-7914	-8743	-9500	-9728	-9833	-10249	-10785	-11387	-12075	-12607	-13080	-13553	-14028	-14489	-14935	-15379	-15834	-16302
365 stores	0	0	0	-21	-69	-128	-190	-254	-314	-369	-435	-512	-593	-677	-765	-857	-953	-1054
Online	0	0	-32	-88	-142	-191	-218	-249	-283	-321	-363	-411	-465	-504	-536	-559	-583	-608
Lease depreciation	**-309**	**-333**	**-362**	**-407**	**-419**	**-442**	**-465**	**-490**	**-516**	**-531**	**-554**	**-578**	**-603**	**-626**	**-649**	**-671**	**-694**	**-717**
Gross Profit	**4694**	**5118**	**5495**	**5481**	**5446**	**5593**	**5866**	**6230**	**6641**	**6976**	**7276**	**7584**	**7896**	**8196**	**8486**	**8771**	**9065**	**9368**
S,G&A expenses	**-3682**	**-4032**	**-4392**	**-4477**	**-4428**	**-4566**	**-4674**	**-4952**	**-5250**	**-5499**	**-5737**	**-5983**	**-6233**	**-6473**	**-6705**	**-6935**	**-7170**	**-7413**
Other SG&A expenses	-633	-672	-720	-764	-764	-784	-798	-822	-876	-919	-959	-1000	-1042	-1082	-1121	-1159	-1199	-1240
Labor costs	-2654	-2920	-3131	-3089	-3038	-3111	-3172	-3385	-3593	-3770	-3934	-4102	-4274	-4438	-4597	-4754	-4916	-5083
Depreciation & Amortization	-339	-377	-439	-498	-489	-528	-553	-584	-610	-630	-658	-686	-714	-742	-769	-795	-822	-850
Advertising expense	-56	-63	-89	-96	-97	-101	-107	-114	-121	-127	-133	-138	-144	-150	-155	-160	-166	-171
Marketing expense	0	0	-13	-30	-40	-42	-44	-47	-50	-52	-54	-57	-59	-61	-63	-66	-68	-70
Pre-opening expenses	**-52**	**-67**	**-67**	**-64**	**-52**	**-43**	**-44**	**-40**	**-37**	**-36**	**-38**	**-40**	**-41**	**-43**	**-44**	**-46**	**-47**	**-49**
Relocation, Store Closure and Termination Costs	**-12**	**-11**	**-16**	**-13**	**-41**	**-13**	**-13**	**-9**	**-9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Operating Expenses	**-3746**	**-4110**	**-4475**	**-4554**	**-4520**	**-4622**	**-4731**	**-5001**	**-5297**	**-5535**	**-5775**	**-6023**	**-6275**	**-6516**	**-6750**	**-6980**	**-7218**	**-7462**
Operating Income	**948**	**1008**	**1020**	**927**	**926**	**971**	**1135**	**1229**	**1345**	**1441**	**1500**	**1561**	**1622**	**1680**	**1736**	**1791**	**1847**	**1906**
Recurrent taxes	-374	-402	-410	-364	-369	-387	-452	-490	-536	-574	-598	-622	-646	-669	-692	-714	-736	-759
Non-recurrent taxes	10	10	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOPLAT	**583**	**616**	**620**	**567**	**557**	**584**	**683**	**739**	**809**	**867**	**903**	**939**	**976**	**1011**	**1044**	**1077**	**1111**	**1146**
Non-Core Business																		
Income																		
Investment and Other Income	11	12	17	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Expenses																		
One-off expenses - Asset impairment charges (2015)	0	0	-46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
One-Time Termination Charges	0	0	-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charge associated with the separation agreement of Walter Robb	0	0	0	0	-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Core Income	**11**	**12**	**-63**	**11**	**-2**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**
Non-operational taxes	-4	-5	25	-4	1	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
Non-Core Result	**7**	**7**	**-38**	**7**	**-1**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Financial																		
Financial Result (Interest expenses)	**0**	**0**	**0**	**-41**	**-52**	**-52**	**-52**	**-52**	**-52**	**-52**	**-52**	**-52**	**-52**	**-9**	**0**	**0**	**0**	**0**
Tax shield	0	0	0	16	21	21	21	21	21	21	21	21	21	3	0	0	0	0
After tax lease interest	-39	-45	-47	-42	-53	-56	-59	-62	-64	-66	-69	-72	-75	-78	-80	-83	-86	-89
Net Income	**551**	**579**	**536**	**507**	**471**	**504**	**599**	**653**	**721**	**776**	**809**	**842**	**876**	**934**	**971**	**1001**	**1032**	**1064**

Balance Sheet

		2013	2014	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Core	**(millions in $)**																		
	Operating Assets																		
	Operating Cash	173	190	237	314	318	332	351	372	397	416	434	453	472	490	507	525	543	561
	Restricted Cash	111	109	127	122	120	120	119	124	133	139	145	151	158	164	170	175	181	187
	Accounts Receivable	188	198	218	242	245	256	270	286	305	320	334	348	363	377	390	404	418	432
	Inventories	414	441	500	517	527	555	588	624	665	698	729	760	792	823	853	882	912	943
	PP&E	2428	2923	3163	3442	3540	3823	4005	4229	4419	4566	4765	4969	5177	5376	5569	5759	5955	6157
	Goodwill	679	708	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710
	Prepaid expenses and Other current Assets	93	97	108	167	169	176	186	198	211	221	231	240	250	260	269	279	288	298
	Deferred Income Taxes (ST)	151	168	199	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197
	Deferred income taxes (LT)	72	132	144	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Other Int. Assets (net of acumulated amortization)	65	81	79	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
	Capitalized operating leases	2566	2976	2985	3152	3375	3557	3744	3929	4051	4227	4408	4592	4769	4940	5109	5282	5462	5646
	Total Operating Assets	**6939**	**8023**	**8470**	**9038**	**9376**	**9900**	**10343**	**10844**	**11261**	**11669**	**12126**	**12595**	**13062**	**13510**	**13948**	**14387**	**14839**	**15305**
	Operating Liabilities																		
	Accounts Payable	247	276	295	307	331	369	413	463	522	548	572	596	622	646	669	692	716	740
	Accrued payroll, bonus and benefits due team members	367	379	436	407	396	396	393	410	426	447	466	486	507	526	545	564	583	603
	Other Current Liabilities	436	557	473	581	560	584	616	655	697	732	763	796	829	861	892	923	954	987
	Deferred lease liabilities	500	548	587	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640
	Total Operating Liabilities	1550	1760	1791	1935	1927	1988	2062	2168	2285	2367	2442	2519	2598	2673	2746	2819	2893	2969
	Net Operating Assets	**5389**	**6263**	**6679**	**7103**	**7449**	**7912**	**8280**	**8676**	**8976**	**9302**	**9685**	**10076**	**10464**	**10837**	**11202**	**11568**	**11946**	**12335**
Non-Core																			
	Non-Core Assets																		
	Long Term Investments - available-for-sale securities	302	120	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other Assets	12	24	38	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Total Non-core Assets	314	144	101	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Non-Core Liabilities																		
	Other long-term liabilities	46	66	71	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
	Total Non-core Liabilities	46	66	71	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
	Net Non-Core	**268**	**78**	**30**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**	**-48**
Financial																			
	Financial Assets																		
	Short-Term Investments - available-for-sale securities	733	553	155	379	379	379	379	379	379	379	379	379	379	379	379	379	379	379
	Cash and cash equivalents (Excess of Cash)	117	0	0	37	0	0	249	554	944	1406	1843	2300	2781	2316	2886	3482	4098	4733
	Financial Liabilities																		
	Issuance of new debt	0	0	0	0	159	42	0	0	0	0	0	0	0	0	0	0	0	0
	LT capital lease obligations, less current installments	26	60	62	1048	1048	1048	1048	1048	1048	1048	1048	1048	1048	48	48	48	48	48
	Current Portion of LT Debt and Capital Lease obligations	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Capitalized Operating leases (8*rent)	2566	2976	2985	3152	3375	3557	3744	3929	4051	4227	4408	4592	4769	4940	5109	5282	5462	5646
	Net Financial Assets	**-1742**	**-2485**	**-2895**	**-3788**	**-4206**	**-4271**	**-4167**	**-4047**	**-3779**	**-3493**	**-3237**	**-2964**	**-2660**	**-2296**	**-1895**	**-1472**	**-1035**	**-585**
	Shareholders' Equity	**3915**	**3856**	**3814**	**3267**	**3195**	**3592**	**4065**	**4581**	**5149**	**5761**	**6399**	**7064**	**7755**	**8493**	**9259**	**10048**	**10863**	**11702**
	Total Liabilities and Equity	8104	8720	8726	9493	9795	10319	11010	11816	12624	13494	14388	15314	16261	16245	17253	18288	19356	20457
	Total Assets	8104	8720	8726	9493	9795	10319	11010	11816	12624	13494	14388	15314	16261	16245	17253	18288	19356	20457
	Common stock dividends paid	519	176	186	174	163	174	207	225	249	268	279	291	302	322	335	345	356	367
	Payout Ratio (only dividends)	94%	31%	35%	34%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
	Total Transaction with Shareholders		630	557	1050	543	106	126	138	152	164	171	178	185	197	205	211	218	225
	Payout Ratio (including everything)		109%	104%	207%	115%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%

Free Cash Flow Maps

	2014	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Core Business																	
NOPLAT	**616**	**620**	**567**	**557**	**584**	**683**	**739**	**809**	**867**	**903**	**939**	**976**	**1011**	**1044**	**1077**	**1111**	**1146**
D&A	377	439	498	489	528	553	584	610	630	658	686	714	742	769	795	822	850
Operational Cash Flow	**993**	**1059**	**1065**	**1045**	**1112**	**1236**	**1323**	**1419**	**1497**	**1560**	**1625**	**1690**	**1753**	**1813**	**1872**	**1933**	**1996**
Invested Capital - Fixed Assets	5899	6148	6594	6915	7380	7748	8158	8470	8793	9173	9561	9946	10316	10678	11042	11416	11802
Maintenance CAPEX	-377	-439	-498	-489	-528	-553	-584	-610	-630	-658	-686	-714	-742	-769	-795	-822	-850
Expansion CAPEX	-906	-248	-447	-321	-465	-368	-410	-312	-323	-380	-388	-384	-370	-362	-364	-375	-386
Invested Capital - NWC and Others	-9	185	264	290	287	288	274	262	265	268	271	274	277	280	283	286	289
Investment in NWC and Others	89	-194	-79	-25	2	-1	14	12	-3	-3	-3	-3	-3	-3	-3	-3	-3
Deferred income taxes (LT)	132	144	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Investment in Deferred income taxes (LT)	-60	-12	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investment Cash Flow	-877	-454	-482	-346	-463	-369	-396	-300	-327	-383	-392	-387	-373	-364	-367	-378	-389
Unlevered Operational FCF	**-261**	**166**	**85**	**211**	**122**	**314**	**344**	**509**	**540**	**520**	**547**	**588**	**637**	**680**	**710**	**733**	**757**
Operational Non-Core Cash Flow	7	-38	7	-1	7	7	7	7	7	7	7	7	7	7	7	7	7
Invested Capital	78	30	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48
Investment Cash Flow Non-Core	190	48	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deferred lease liabilities	548	587	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640
Investment in Deferred lease liabilities	48	39	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodwill	708	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710	710
Investment in Goodwill	-29	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other intang. Assets	81	79	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Investment in Other Int. Assets	-16	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Free Cash Flow	**-60**	**216**	**228**	**209**	**128**	**321**	**350**	**516**	**547**	**527**	**554**	**595**	**644**	**686**	**717**	**740**	**764**
Financial																	
Financial Result	0	0	-41	-52	-52	-52	-52	-52	-52	-52	-52	-52	-9	0	0	0	0
Tax Shield	0	0	16	21	21	21	21	21	21	21	21	21	3	0	0	0	0
Net Financial Assets	-2485	-2895	-3788	-4206	-4271	-4167	-4047	-3779	-3493	-3237	-2964	-2660	-2296	-1895	-1472	-1035	-585
Investment in Net Financial Assets	743	409	893	418	65	-104	-120	-269	-286	-256	-273	-304	-364	-401	-423	-437	-451
Net Cash Transactions with Shareholders (Δ Equity in Cash)	-630	-557	-1050	-543	-106	-126	-138	-152	-164	-171	-178	-185	-197	-205	-211	-218	-225
Other Comprehensive Income	-8	-21	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
After tax lease interest	-45	-47	-42	-53	-56	-59	-62	-64	-66	-69	-72	-75	-78	-80	-83	-86	-89
Financial Free Cash Flow	**60**	**-216**	**-228**	**-209**	**-128**	**-321**	**-350**	**-516**	**-547**	**-527**	**-554**	**-595**	**-644**	**-686**	**-717**	**-740**	**-764**

Statement of Changes in Equity

($ in millions)	2014	2015	2016	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
Initial Equity	**3915**	**3856**	**3814**	**3267**	**3195**	**3592**	**4065**	**4581**	**5149**	**5761**	**6399**	**7064**	**7755**	**8493**	**9259**	**10048**	**10863**
Comprehensive Income																	
Net Income	579	536	507	471	504	599	653	721	776	809	842	876	934	971	1001	1032	1064
Foreign currency translation adjustments	-8	-21	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Comprehensive Income	**571**	**515**	**503**	**471**	**504**	**599**	**653**	**721**	**776**	**809**	**842**	**876**	**934**	**971**	**1001**	**1032**	**1064**
Transactions with shareholders																	
Dividends accrued	6	2	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dividends	-176	-186	-174	-163	-174	-207	-225	-249	-268	-279	-291	-302	-322	-335	-345	-356	-367
Issuance of common stocks to team members	41	66	19	18	19	22	24	27	29	30	32	33	35	36	38	39	40
Purchase of treasury stock	-578	-513	-944	-444	0	0	0	0	0	0	0	0	0	0	0	0	0
Tax benefits related to exercise of team member stock options	9	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Share-based payment expense	68	64	49	46	49	58	63	70	75	78	81	85	90	94	97	100	103
Other	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Transaction with Shareholders	**-630**	**-557**	**-1050**	**-543**	**-106**	**-126**	**-138**	**-152**	**-164**	**-171**	**-178**	**-185**	**-197**	**-205**	**-211**	**-218**	**-225**
Shareholders' Equity	**3856**	**3814**	**3267**	**3195**	**3592**	**4065**	**4581**	**5149**	**5761**	**6399**	**7064**	**7755**	**8493**	**9259**	**10048**	**10863**	**11702**

Peer Companies

Sprouts Farmers Market: it is a retailer of natural and organic food with headquarters in Phoenix, Arizona founded in 2002. SFM operates exclusively in United States through a chain of 253 stores with 24000 employees.

Vitamin Natural Grocers: it is a specialty retailer of natural and organic food founded in 1995 with its headquarters in Lakewood, Colorado. It operates only in United States with 123 stores and it has 3074 employees. Its IPO was in July 2012.

Ingles Markets: it is a supermarket chain that operates in the southeast of United States. It sells all type of products with an important line of organic, beverage and health-related items. It is headquartered in Black Mountain, North Carolina. As of September 2016, it operated 201 stores with 25000 employees.

Weis Markets: it is a retailer that mainly operates in Pennsylvania and surrounding states. Its headquarters is in Sunbury, Pennsylvania. The chain was founded in 1912 and as of September 2016, it had 204 stores with 23000 employees.

Scenario Assumptions

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Base Scenario														
Traditonal US Stores														
Stores open	14,00	12,00	9,00	9,00	8,00	8,00	7,00	7,00	6,00	5,00	5,00	5,00	5,00	5,00
Sales per sq ft growth	-3,5%	-1,5%	0,5%	1,5%	2,2%	2,3%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
365 stores														
Sales per sq ft growth	1,5%	2,9%	3,1%	2,8%	2,7%	2,8%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
UK														
Sales per sq ft growth	3,7%	2,6%	2,2%	3,7%	3,7%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
Canada														
Stores open	1,00	2,00	2,00	2,00	2,00	1,00	1,00	1,00	1,00	1,00	0,00	0,00	0,00	0,00
Sales per sq ft growth	0,0%	2,6%	2,6%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
Online Sales growth	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	8,0%	6,0%	4,0%	4,0%	4,0%
COGS margin														
Traditional Stores	63,1%	63,6%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%
Online Stores	63,1%	63,6%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%	63,8%
Optimistic Scenario														
Traditonal US Stores														
Stores open	14,00	12,00	9,00	9,00	8,00	8	7	7	7	7	7	7	7	7
Sales per sq ft growth	-2,5%	-0,5%	1,5%	2,5%	2,5%	2,5%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%
365 stores														
Sales per sq ft growth	1,50%	2,9%	3,1%	2,8%	2,7%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%
UK														
Sales per sq ft growth	4,2%	4,2%	4,2%	4,2%	4,2%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%
Canada														
Stores open	1	2	1	1	1	2	2	2	2	2	2	0	0	0
Sales per sq ft growth	0,0%	2,7%	2,7%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,7%	2,7%	2,7%
Online Sales growth	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%	12,5%	7,5%	4,5%	4,5%	4,5%
COGS margin														
Traditional Stores	62,6%	62,9%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%
Online Stores	62,6%	62,9%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%	63,1%
Pessimistic Scenario														
Traditonal US Stores														
Stores open	14	12	9	9	8	7	5	3	3	3	3	3	3	3
Sales per sq ft growth	-4,0%	-2,0%	0,0%	1,0%	1,7%	2,0%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
365 stores														
Sales per sq ft growth	1,5%	2,4%	2,6%	2,3%	2,2%	2,3%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
UK														
Sales per sq ft growth	2,5%	0,0%	0,0%	2,1%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Canada														
Stores open	1	2	1	1	1	0	0	0	0	0	0	0	0	0
Sales per sq ft growth	0,0%	1,8%	1,9%	1,9%	1,8%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Online Sales growth	9,0%	7,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	3,0%	3,0%	3,0%	3,0%	3,0%
COGS margin														
Traditional Stores	63,6%	64,3%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%
Online Stores	63,6%	64,3%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%	64,5%

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

This report was prepared by João Bernardo Santos Alves, a Master in Finance student of Nova School of Business & Economics ("Nova SBE"), within the context of the Directed Research Internship – Alternative Track.

This report is issued and published exclusively for academic purposes, namely for academic evaluation and masters graduation purposes, within the context of said Field Lab – Equity Research. It is not to be construed as an offer or a solicitation of an offer to buy or sell any security or financial instrument.

This report was supervised by a Nova SBE faculty member, acting merely in an academic capacity, who revised the valuation methodology and the financial model.

Given the exclusive academic purpose of the reports produced by Nova SBE students, it is Nova SBE understanding that Nova SBE, the author, the present report and its publishing, are excluded from the persons and activities requiring previous registration from local regulatory authorities. As such, Nova SBE, its faculty and the author of this report have not sought or obtained registration with or certification as financial analyst by any local regulator, in any jurisdiction. In Portugal, the author of this report is not registered with or qualified under COMISSÃO DO MERCADO DE VALORES MOBILIÁRIOS ("CMVM", the Portuguese Securities Market Authority) as a financial analyst. No approval for publication or distribution of this report was required and/or obtained from any local authority, given the exclusive academic nature of the report.

The additional disclaimers also apply:

USA: Pursuant to Section 202 (a) (11) of the Investment Advisers Act of 1940, neither Nova SBE nor the author of this report are to be qualified as an investment adviser and, thus, registration with the Securities and Exchange Commission ("SEC", United States of America's securities market authority) is not necessary. Neither the author nor Nova SBE receive any compensation of any kind for the preparation of the reports.

Germany: Pursuant to §34c of the WpHG (*Wertpapierhandelsgesetz*, i.e., the German Securities Trading Act), this entity is not required to register with or otherwise notify the *Bundesanstalt für Finanzdienstleistungsaufsicht* ("BaFin", the German Federal Financial Supervisory Authority). It should be noted that Nova SBE is a fully-owned state university and there is no relation between the student's equity reports and any fund raising programme.

UK: Pursuant to section 22 of the Financial Services and Markets Act 2000 (the "FSMA"), for an activity to be a regulated activity, it must be carried on "by way of business". All regulated activities are subject to prior authorization by the Financial Conduct Authority ("FCA"). However, this report serves an exclusively academic purpose and, as such, was not prepared by way of business. The author - a Masters' student - is the **sole and exclusive responsible** for the information, estimates and forecasts contained herein, and for the opinions expressed, which exclusively reflect his/her own judgment at the date of the report. Nova SBE and its faculty have no single and formal position in relation to the most appropriate valuation method, estimates or projections used in the report and may not be held liable by the author's choice of the latter.

The information contained in this report was compiled by students from public sources believed to be reliable, but Nova SBE, its faculty, or the students make no representation that it is accurate or complete, and accept no liability whatsoever for any direct or indirect loss resulting from the use of this report or of its content.

Students are free to choose the target companies of the reports. Therefore, Nova SBE may start covering and/or suspend the coverage of any listed company, at any time, without prior notice. The students or Nova SBE are not responsible for updating this report, and the opinions and recommendations expressed herein may change without further notice.

The target company or security of this report may be simultaneously covered by more than one student. Because each student is free to choose the valuation method, and make his/her own assumptions and estimates, the resulting projections, price target and recommendations may differ widely, even when referring to the same security. Moreover, changing market conditions and/or changing subjective opinions may lead to significantly different valuation results. Other students' opinions, estimates and recommendations, as well as the advisor and other faculty members' opinions may be inconsistent with the views expressed in this report. Any recipient of this report should understand that statements regarding future prospects and performance are, by nature, subjective, and may be fallible.

This report does not necessarily mention and/or analyze all possible risks arising from the investment in the target company and/or security, namely the possible exchange rate risk resulting from the security being denominated in a currency either than the investor's currency, among many other risks.

The purpose of publishing this report is merely academic and it is not intended for distribution among private investors. The information and opinions expressed in this report are not intended to be available to any person other than Portuguese natural or legal persons or persons domiciled in Portugal. While preparing this report, students did not have in consideration the specific investment objectives, financial situation or particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in any security, namely in the security covered by this report.

The author hereby certifies that the views expressed in this report accurately reflect his/her personal opinion about the target company and its securities. He/ She has not received or been promised any direct or indirect compensation for expressing the opinions or recommendation included in this report.

[If applicable, it shall be added: *“While preparing the report, the author may have performed an internship (remunerated or not) in* [insert the Company’s name]. *This Company may have or have had an interest in the covered company or security”* and/ or *“A draft of the reports have been shown to the covered company’s officials (Investors Relations Officer or other), mainly for the purpose of correcting inaccuracies, and later modified, prior to its publication.”]*

The content of each report has been shown or made public to restricted parties prior to its publication in Nova SBE’s website or in Bloomberg Professional, for academic purposes such as its distribution among faculty members for students’ academic evaluation.

Nova SBE is a state-owned university, mainly financed by state subsidies, students tuition fees and companies, through donations, or indirectly by hiring educational programs, among other possibilities. Thus, Nova SBE may have received compensation from the target company during the last 12 months, related to its fund raising programs, or indirectly through the sale of educational, consulting or research services. Nevertheless, no compensation eventually received by Nova SBE is in any way related to or dependent on the opinions expressed in this report. The Nova School of Business and Economics does not deal for or otherwise offer any investment or intermediation services to market counterparties, private or intermediate customers.

This report may not be reproduced, distributed or published, in whole or in part, without the explicit previous consent of its author, unless when used by Nova SBE for academic purposes only. At any time, Nova SBE may decide to suspend this report reproduction or distribution without further notice. Neither this document nor any copy of it may be taken, transmitted or distributed, directly or indirectly, in any country either than Portugal or to any resident outside this country. The dissemination of this document other than in Portugal or to Portuguese citizens is therefore prohibited and unlawful.