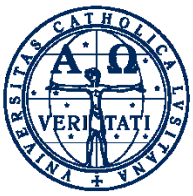

CATÓLICA LISBON
BUSINESS & ECONOMICS

WholeMart: Organic Groceries, Inorganic Growth

The proposed acquisition of Wholefoods by Walmart

Filippo Pendin

Dissertation written under the supervision of António Luís Borges de Assunção

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Abstract

The purpose of this paper is to propose a merger between Walmart and Wholefoods, respectively the biggest general and natural food retailer in the world. The rationale behind it relates to the improvements that both companies could provide to the other, complementing themselves on a financial, operational and strategic basis. Walmart would increase its product range and attract Millennials, while Wholefoods would improve its operations thanks to a much bigger bargaining power and a lower tax rate among other factors. After an extensive evaluation process, it is concluded that the combined entity, while carrying various risks, will be better off than the two companies on a standalone basis.

Based on the model, Wholefoods is valued at around $40,27/share, with the specific value identified by the DCF valuation at $12,8bn. The acquisition price considers a premium price of 24% over the market value for a total cost of $14,56bn. The deal is expected to generate value for $312m thanks to revenue, operational and financial synergies. The deal should be closed by using a cash/debt mix to benefit from positive debt environment, thereby improving the EPS of the entity and ultimately the value for the shareholders. This dissertation holds important practical implications and basic frameworks for companies willing to pursue similar growth paths.

Esta dissertação tem como objectivo propor uma fusão entre a empresa Walmart e a empresa Wholefoods, o maior retalhista geral e o maior retalhista de comida orgânica do mundo, respectivamente. Tem como racional as possíveis melhorias que ambas as empresas poderiam beneficiar, complementando-se mutuamente a um nível financeiro, operacional e estratégico. A Walmart aumentaria a sua gama de produtos e atrairia os Millennials, enquanto a Wholefoods melhoraria as suas operações graças a um melhor poder de negociação e a uma taxa de imposto mais baixa, entre outros factores. Após um extensivo processo de avaliação, foi concluído que a possível entidade que resultaria da combinação entre ambas as empresas, mesmo tendo em conta os eventuais riscos, seria melhor do que as duas empresas separadas a funcionar individualmente.

Baseado no modelo, a Wholefoods está avaliada em cerca de $40,27/acção, com uma avaliação identificada através do modelo DCF de $12,8b. O preço de aquisição tem em consideração um preço prémio 24% acima do valor de mercado para um custo total de $14,56b. É esperado que o acordo venha a gerar um valor de $312m graças a receitas e sinergias financeiras e operacionais. Este acordo deve ser celebrado através de um "cash/debt mix" de modo a beneficiar de um ambiente positivo de divida e, assim, melhorando o EPS da possível entidade e o valor para os acionistas. Esta dissertação tem em conta importantes implicações práticas e estruturas básicas para empresas que desejem seguir caminhos de crescimento semelhantes.

Acknowledgements

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List of Abbreviations

M&A	Mergers & Acquisitions
R&D	Research and development
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interests, taxes, depreciation and amortization
EBT	Earnings before taxes
DCF	Discounted Cash Flow
WACC	Weighted Average Cost of Capital
APV	Adjusted Present Value
NPV	Net Present Value
CAPM	Capital Asset Pricing Model
r_E	Cost of Equity

r_D	Cost of Debt
r_f	Risk Free Rate
r_m	Market Risk
EV	Enterprise Value
ev	Equity Value
COGS	Cost of Goods Sold
HR	Human Resources
IT	Information Technology
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditures
GAAP	General Accepted Accounting Principles
SG&A	Selling, General & Administrative
PP&E	Property, Plant & Equipment
“g”	Terminal Growth Rate
%	Percentage
β	Beta, measure of Risk
i.e.	Id Est
e.g.	For Example
EPS	Earnings per Share
P/E	Price/Earnings Ratio
WWF	White Wave Foods
WF	Wholefoods
WMT	Walmart

2. Introduction

M&A deals are carried to foster growth or gain access to specific resources by companies able to decrease its cash, increase its indebtedness or simply dilute shareholders' ownerships. M&A are more often carried at very initial industry stages to expand more rapidly or in mature markets where price competition has become prevalent and scale economies essentials to sustain profitability.

The aim of this paper is to examine an acquisition in the food grocery industry. Specifically, the acquisition of Wholefoods by Walmart is proposed. These two companies have been chosen after an analysis of the industry and of the players have been carried. The food retailing industry is currently being involved into major changes as digital solutions and a more sensible, urban-focused population are reshaping the world's economy. In this sense, Walmart has been able to become a predominant player in the e-commerce but has repeatedly failed to serve a healthy, socially responsible and ever-increasing urban population. On the other hand, Wholefoods growth has been slowed by the entrance of cheaper competitors and the company has been unable to regain the traction experienced in the past decade. A deal between these two retailers could provide the managerial, operational and financial capabilities much needed to ensure the success in this transitioning phase.

The paper analyzes the theories and rationale of the M&A deals, highlighting the main drivers of success and failure, empirical evidences and related considerations by exposing past findings in the literature review (2). This section also highlight the theory behind the synergies, their importance, their identification and their evaluation. Next, the industry and sub-industries where the two players are mainly operating are analyzed, alongside general consideration about the world economy and the impact of new consumer's patterns in relation to integrity, lifestyle and ethics (3). The strategic fit of the deal tries to observe the impact that these industry's characteristics have when combined with the companies' internal capabilities. The framework seems to deliver a positive result, thereby making the acquisition more appealing. After this analysis, mainly qualitative, the two companies are deeply analyzed in their financials before

coming to a range of valuation for both. To understand the deal will evolve, the two companies are combined and evaluated as a base on which to add the value of the synergies before measuring the impact of these in the final valuation (4). Lastly, a general assessment of the attractiveness of the deal sided by an accretion/dilution model to assess the impact that such acquisition has for both shareholders. The chapter concludes by analyzing the many potential risks the acquisition has and the importance of ensuring a clean and fast integration process.

3. Literature Review

Companies all over the world have historically pursued two main growth paths. Specifically, a company can decide to rely exclusively on its ability to raise funds and generate cash to finance its growth, or opt instead to increase its size and its operational efficiency by acquiring other companies and consolidate the businesses. The former has the important burden of not releasing the full effect of the investment at the time of the acquisition, however, while an acquisition gives full access to the acquired asset after the transaction is completed (Margsiri, Mello, and Ruckes 2008).

With these first considerations, it is easy to see why companies have pursued aggressive acquisition-focused growth strategies. Yet, when companies are measured as post-deal entities, the value is seldom what forecasted initially. Ferreira et al. (2014) showed that this discrepancy between pre-merger and post-merger values are driven by a higher price paid to acquire an existing business as well as a high volatility experienced during the integration process that a company faces after a successful acquisition. Hence, the real benefit of merging or acquiring a separate entity remains far from certain, with various papers standing for or against. Grubb and Lamb (2000) see it as a loser game, while Bruner (2004) argue that the samples adopted by the numerous past studies giving negative conclusions on the matter were mostly biased by macroeconomics, deal-specific and industry-specific events and characteristics such as boom/recession periods, the concentration of the industry and the size of the deal. If corrected, the actual returns for the new entities were positive and statistical significant, proving that the companies were indeed better off together. Standing on both shoes, (Moeller, Schlingemann, and Stulz 2004) analyzed a large sample from 1980 to 2001 and found that buyers adjusted returns were proving the popular view of the M&A market to be a loser's game if measured in dollar terms. However, when the same sample was analyzed in percentage, they found the average returns to be a positive 1,1%, and they attributed this difference to the extreme unprofitability of a few large deals. Consistent with the finding above, much of the losses were concentrated in 87 deals out of 12,023; if these deals were cut off, the whole sample would have shown strong positive returns in both dollar and percentage terms. Lastly, all the 87 biggest

losses were concentrated in the market of 1998 to 2001, a period of out-of-control growth that resulted in the collapse of the dotcom bubble.

Albeit the likelihood of an acquisition process to be unsuccessful is substantial, companies are still largely relying in this market to grow, especially in the short term. (Eckbo 1983); (King, Covin, and Hegarty 2003).

The basic rationale behind the acquisition is that the two companies' combined have access to a wider range of benefits then when alone, resulting in a higher valuation and a more efficient deployment of resources (Chatterjee 1986). These benefits can impact the entity in a single fashion (such as change in working capital) or in a permanent fashion (increasing bargaining power, lower tax rate or product price increase). The difference between the value of the merged entity and the sum of the two single entities is broadly defined as synergy. Managers have identified in synergies the true benefit of an acquisition, and have largely based their rationale upon them when presenting the deal to shareholder and stakeholders. However, the true value of those benefits is often misunderstood, and even more often overvalued. (Kaplan and Weisbach 1992) found that due to overpayment or inefficient blending of the two entities, 44 % of the acquisitions studied were divested. Roll (1986) argued that this mismatch is largely given by the overconfidence that skilled managers have, making them believe they can manage the target company better than past managers. This behavior, described as the hubris consequence, gives a misguided value to the synergies, which in turn result in a higher price to be paid to acquire the target. Further, Loderer and Martin (1990) found that large acquisitions are often overpaid as these deals tend to give more private benefit to the managers. Steger and Kummer (2007) argued that a significant number of deals result in overpayment simply because the corporations' managers get pressured by analyst and investors seeking higher growth rates. The above studies find confirmation in (Raghavendra Rau 1998), an "examination of the long term performances of bidding firms in mergers and tender offers" during the period of 1980 to 1991. They found that glamour firms (companies with higher price to book ratio and thus presumably with a better management, higher growth rates and consequently more

demand) tend to underperform value firm in the medium term, showing that are overvalued and are generally led by overconfident managers[1].

3.2 Synergies Identification

As previously introduced, we can identify synergies as the value of the additional benefits achievable with the acquisition of the target company. Damodaran (2005) groups these benefits into operational and financial synergies. Albeit the final outcome of both is to generate value, they do so differently: operational synergies impact the operation of the business, thus increasing sales, improving margins or giving access to new strategies, markets and opportunities, ultimately resulting in higher cash flows; on the other hand, financial synergies can both improve the cash flows (for example by increasing the tax benefits or benefiting for a higher depreciation write-up) or lowering discount rates, the latter resulting in a higher valuation for the new borne entity.

3.2.1 Operational Synergies

Operational synergies are identified by Damodaran (2005) in four main types, specifically:

- The advantage of the economies of scale obtainable through a horizontal merger, resulting from a better access to client and supplier, increase capacity and cost saving in the production process;
- Greater pricing power due to a higher market share, resulting in higher margins;
- Combination of functional strength, obtainable in every type of acquisition as functional strength are often easily transferrable disregarding the nature of the businesses;
- Higher growth in the markets in which the companies operates. This synergy is mostly affected by brand value and an easier and more efficient access to sales channels.

[1] For a more exhaustive explanation on the matter, read: "Glamour vs. Value: The Real Story, Chirinko and Schaller, Yale Economics, Oct. 2003"

Despite these synergies to be very hard to evaluate correctly, the best manager estimates should be used to do so. Most assumptions should be focused on the increase of future cash flows and growth, with emphasis over the form the synergy is expected to take (e.g. increased market share or higher margins) and the expected time it will take for the synergy to generate value. Cost synergies can produce one-time saving, increasing the present value, or show in multiple periods and incrementing cash flows over time. Growth synergies instead appears in three types and appear to be harder to value:

- The new-borne entity may produce higher return on investments;
- The new-borne entity may be able to invest in more project, increasing the reinvestment rate and the growth rate;
- The new-borne entity may find itself in a better competitive position and sustain growth levels for a longer period.

3.2.2 Financial Synergies

Financial synergies can appear under the form of a cash slack, increase debt capacity and/or tax benefit. With the cash slack, the company can have access to more profitable project that could not be pursued otherwise due to a larger pool of cash to draw from. This is why often companies with good cash flows and low R&D acquire companies running with lower or negative cash flows but have high investment in R&D (Bena and Li 2014, Myers and Majluf 1984). The value of the cash slack, in its simplest form, is given by the value of the project that could have been undertaken with the excess cash minus the values of the projects that have been developed instead. Increase in debt capacity allows the company to have access to more debt and possibly at better terms. The Tax Benefits are driven by an increase in the borrowing rate, the write up of the acquired company tax-loss carryforwards (if any) or the increase of depreciation charges. Increasing depreciation in fact allows the company to save taxes by reducing the EBIT, and thus the taxable income. The first driver's value is the present value of the tax savings. For the second driver, the value is the present value of tax loss carryforwards. Finally, the third driver is valued by estimating and discounting the tax savings derived by the higher depreciation.

3.3 Deal Valuation

Several methods are usually adopted to evaluate the value of the companies and the merged entity. Important to consider is that these methods are not mutually exclusive, but should instead be used together to have a better picture of what the potential range is most likely to be. When a definite number is expected, usually the DCF approaches are used. However, relative valuation methods – the so-called multiples – are very helpful in assessing the range of values upon which to base the final estimate. Both methods present advantages and disadvantages that are going to be briefly addresses hereafter, and a joint consideration of the results should always be sought to reduce the magnitude of a misevaluation of the company's asset and debt.

3.3.1 DCF Methods

DCF methods all considers the cash flow that a company is expected to produce in the future, subsequently discounting them by an appropriate discount rate based upon the time value of money (Wee and Law 2001), the opportunity cost and the risks involved in obtaining the flows. Generally, the forecasts can be accurate up to 5 years in the future, whereas for the subsequent years the perpetuity formula is used to synthetize the value[2]. What makes the valuations differ widely is the denominator, or the discount rate used to bring the value to the present. This variable is extremely sensible to assumptions and forecasts and can be easily manipulated by analysts and managers, being also the main object of conflict between the various approaches.

The first DCF method relies in the WACC, or the weighted average cost of capital, to deliver the value of the company. In this approach, the discount is a weighted-average of the returns expected by different asset classes (mainly equity, debt and preferred stocks)[3]. The rate is corrected to reflect the different costs of owning the assets as well as the cost of corporate leverage on the final valuation (Holthausen and

2 Broadly speaking, a perpetuity is an endless and constant stream of cash flows. As it gets extremely hard to predict cash flows after the fifth year, analysts generally adopt a definite cost of capital and growth rate and discount the last year FCFF by the difference.

3 The formula to calculate the WACC (without considering preferred stocks) is the following: $r_D*(1-tax\ rate)*\frac{Dv}{Ev}+ r_E*\frac{ev}{Ev}$, where Dv is the value of debt, Ev the enterprise value and ev the value of equity.

Zmijewski 2012a). Further, we can estimate the cost of debt by looking at the current and projected interest rate of the firm, while we can infer the cost of equity by applying the CAPM model (Sharpe 1964).

The WACC approach allows to calculate the value of the company by using only one discount factor, feature that contributed to its popularity in the past years. However, different assumptions lead to different results. For example, Holthausen and Zmijewski (2012a) argued that it can be dangerous to assign a beta of zero to all non-common equity securities, as these too have intrinsic risks. Assuming the same capital structure, this assumption implies a higher cost of equity and a subsequent higher WACC. The result is an incorrect cost of capital estimate, ultimately biasing the valuation downward.

The second method is called APV, or Adjusted Present Value method. Many studies have confronted the WACC and the APV methods to establish which is the best to use, with different opinions and results. (Luehrman 1997) stated that while the WACC was widely used in the past due to its relative simplicity, modern calculators can easily address the difficulties of the APV. This method aim to evaluate each component of value separately, considering the value of the company as if it was unlevered before adding the present values of all the financing side effects, such as the tax benefits, the cost of financial distress and other costs. However, finding the appropriate cost of equity to apply is a harsh challenge, as very few companies have a full-equity structure nowadays.

A third DCF valuation method based on dividends exists. But as pointed out by Brav et al., 2005 and many other observer of corporate strategy and control, the dividends are far from being a reliable source of data. Managers and shareholder can easily change the dividend policy to manipulate the financials in the short term (for example, to reach quarterly goals), thus making estimations upon them unreliable.

3.3.2 Multiples Valuation

Valuation multiples are a very common form of valuation. Using these methods is very practical and immediate, and since it is market-based it gives a good grasp of the current M&A environment. Value here is seen to be having positive correlation with

earnings and negative with risk. With multiples, the enterprise value or equity value is a multiple of accounting values such as EBITDA, EBIT, earnings or sales, but the simplicity of multiples does not translate in inefficient valuations. Kaplan and Ruback (1995) found that while DCF are a great way to value a business, simple EBITDA multiples have a similar accuracy.

In the past, historical earnings have widely been used as proxy for valuation since top line revenues do not have high relevance unless they're matched with the expenses. In other words, gross sales alone are not able to tell us much about the status of the business. However, the use of historical data found critics among the academics. While Boatsman and Baskin (1981) found that when companies with similar historical earnings are analyzed valuation errors decrease significantly, Liu, Nissim, and Thomas (2002) instead argued that result dispersion increase widely when historical drivers are used, while forward earnings are doing the job in a better manner.

Despite the multiples being a well renowned and reliable method, pitfalls when using them are common and can lead to misleading values. An efficient calculation requires two fundamental steps:

- The identification of similarly-priced comparable companies;
- Adjust the financial numbers used to measure the market multiples.

The identification process is often biased by many aspects, most of all the size of the companies. Banz (1981) and Fama and French (1992) studied a large pool of companies and both concluded that size seems to be correlated with returns even when the returns are controlled using the CAPM. Hence, the CAPM might not be sufficient to control for risk in a complete way.

In relation to the second point particularly, Holthausen and Zmijewski (2012b) warns about financials editing, dividing them in two categories. These numbers can in fact be responsible to changes in only one of the two terms of the fraction, or both. Particularly in the second case, assumptions such as Growth Rate, COGS and Tax Rate must be carefully considered as the impact over the final valuation is great. On the base of these findings, the researchers suggest using the enterprise value to unlevered earnings multiple as a more reliable measure in multiple valuation.

3.4 How to Fund a Deal

An acquisition is generally seen as an exchange of money for the corresponding value of the acquired company. Nonetheless, M&A transactions can also be completed with stocks. In the latter form, the acquiring company issue new shares to raise capital and exchange them for the acquirer's company ones upon a definite exchange ratio. Despite the final value being the same, the implications involved in both types of transactions differs greatly. With cash transactions, in fact, the acquirer buys 100 % (or the sought stake) of the target company in exchange of cash, which is delivered to the target' shareholders. In other words, the position of this shareholder is fully liquidated. But in the second case (stock transaction) the situation is different: the target shareholder position is not liquidated but rather converted in a position in the new company. Further, several considerations over taxation must be considered. Using cash allows the company to revalue the asset, thus increasing depreciation and reducing taxable income. It also increases interest payments resulting in the same tax benefit just mentioned. Stocks transaction instead allows the target shareholder to receive new stocks tax free, as their position hasn't been liquidated but rather converted in a new one (Rappaport and Sirower 1999). Generally, stocks acquisitions are pursued when the acquirer's stocks are overvalued, while the opposite is true with cash transactions. The most fundamental implication concern the transfer of risk. In the first case the acquiring company shoulder all the risk that the synergies won't materialize, while in the second case this risk is shared with the target shareholder on a pro rata basis (Rappaport and Sirower 1999).

Despite what may seem logic, this risk dispersion is not always associated with enhanced returns. Multiple academic findings showed that stock transactions generally perform poorly compared to cash transaction (Myers and Majluf 1984). Further, Eckbo, Giammarino, and Henkel (1990) suggest that a combination of stock and cash is the best solution, finding the highest return for acquiring company's stockholders compared to all stock or all cash transactions.

Lastly, the duration of the negotiation process also has a significant influence over the post-acquisition performances of the merged entity. Walsh (1989) found that the

longer the positional bargain, the higher is the management turnover and the higher the likelihood to end up with a bad post-implementation due to strained relationships.

4. Industry and Companies

4.2 US Grocery Market Overview

Overall, the industry has seen a protracted period of flat growth before starting to change dramatically. As of 2016, analyst agrees that as demographic, economic and regulatory issues are reshaping the industry's landscape, companies must quickly adapt to remain. Many of them have find a solution by acquiring smaller players, a strategy often used in mature markets where fierce price competition force many players to merge and benefit from scale economies. Others, such as Wal-Mart, have maintained their predominant position by leveraging their bargaining power as well as fostering customers' retention initiatives.

Products are mainly sold via supermarkets, which accounted for 95 % of the total grocery sales as of 2013 (MarketRealist 2015a). Despite the e-commerce boom, in fact, physical shops should still account for as much as 85% of total US retail sales by 2025 (McKinsey).

Lastly, the Obama administration's social policies left the consumers with less disposable income, thereby impacting the demand. Indeed, the retail industry has slowed its CAGR to 4 % from as high as 7 % prior to the recession.

4.3 Growth Drivers

Food sales have become increasingly important for retailers, as food drives the purchase of other goods sold in the same store.

Consolidation and a focus on organic and natural products are the major trends dominating the industry. Organic food sales in the US hit $40 billion in 2015, accounting for slightly more than 5 % of the overall demand. However, the weight of the segment in the industry is expected to increase dramatically in the next years (OTA).

McKinsey (2015) identified 5 imperatives to drive growth in the medium term, ranging from revenues to company's assets.

- *Expand revenues*. As the sales of traditional products and service is lagging momentum, companies must find new ways to increase their revenues by leveraging their assets and capabilities.
- *Cut Costs*. Direct costs should be cut through negotiation as well as developing new techniques to eliminate anything that increase cost rather than value for the customers. Indirect costs should be addressed by applying lean techniques and improve offshoring of services such as HR, finance or IT.
- *Physical Assets*. The real estate portfolio of traditional retailer is becoming obsolete: large hypermarkets in the suburban areas of major cities aren't the choice of new consumers which prefer convenience to variety. Retailer should reconfigure their real estate assets focusing on reducing the size while increasing urban locations.
- *Data analytics to play the big role in decision making*. Companies should use big data to further improve its knowledge of the customers as the new generation expect a high degree of personalization. An example is to offer promotions on a one-to-one basis and customized by preferences, location and shopping occasion.
- *Rethink Product Offering*. Products should follow the big trends of the industry and provide more detailed information as customers are more concerned about being informed than ever before.

4.3.1 Industry Trends

Predict with accuracy the development of a wide and diverse industry such as food retailing is a harsh challenge that leaves many questions unanswered. However, many agrees that among the most important factor we will most likely find continued consolidation, an aging population, migratory movements toward urban centers, the impact of the mobile word and the importance of Millennials (McKinsey 2015). A

recent industry insight observed that the industry's major changes will affect three main areas: Retail, Food and Consumers (Duff&Phelps 2016).

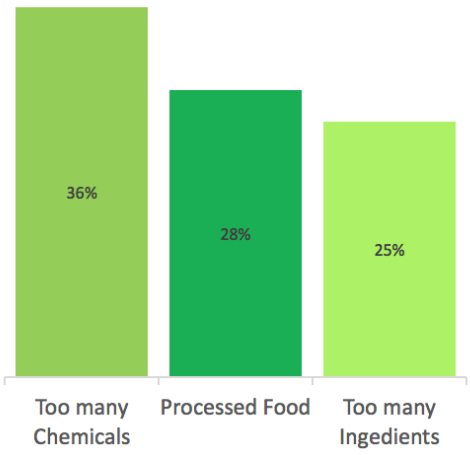
4.3.1.1 Retail Trends

- *Channel Shifting*. The average size of supermarket is expected to shrink even further, posing a threat to companies such as WMT, CSC and TGT while helping others such as Trader's Joe, Aldi and Packaged Facts.
- *Natural/Organic Competition.* Increasing competition is plummeting the share prices of the biggest players which are currently underperforming the S&P 500. As the organic market is expected to increase at a CAGR of 13% from 2015 to 2020, more competitors are joining the race or offering new concepts. Apollo bought Fresh Market in March 2016, while Wholefoods is fighting back Trader's Joe aggressive pricing policy with a new, lower-priced concept: 365 by Whole Foods Market. The aim is to attract lower-income Millennials which are expected to drive sales in future years.
- *Delivery*. The entrance of online marketplaces in the online grocery formats is putting pressure in the whole industry. Aided by their efficient delivery and logistic systems, companies such as Amazon are forcing retailers to allocate resources to boost the online sales and improve the delivery process by either developing their own fleets or partnering with specialized companies such as Instacart.
- *Technology*. As more and more people have less disposable time to spend for their groceries, they look for convenience in the shopping process. This can be achieved by lowering the waiting time at the checkout, expand in the delivery business or offering new collect-and-delivery services.
- *Large Operator Advantage.* Companies such as Wal-Mart and The Kroger are expected to be more capable to weather rapid changes in the industry due to their ability to leverage infrastructures, optimize capabilities or offer competitive prices thanks to a bigger bargaining power. Further, their bigger size allows these companies to develop projects that are too expensive for others. An example of this is The Kroger, which has thoroughly developed its private brands to cut costs and improving profitability by bringing production in-house.

4.3.1.2 Food and Consumers' Trends

According to a recent survey[4], US consumers are unsatisfied with their current healthy levels. The biggest concerns are about chemicals in the products (36% of interviewed) processing foods (28% of interviewed) and too many ingredients (25%). Labels with health attributes have seen their sales increasing by as much as 13% in 2015. These behaviors have translated in three main aspects. First, fresh foods and vegetable demand has increased widely, as consumers perceived such products as healthier. Second, the prepared food market is also growing since consumers are looking for convenience in their food. Healthy snack, seen as meal replacement by Millennials, will drive sales in their segment in the future. Third, "local" food is perceived as healthier and with a better taste, and more consumers are seeking local buyers rather than grocery chains.

Exhibit 1. US consumers' biggest food concerns.



Source: Supermarkets guru Grocers Association, 2016

- *Millennials*. roughly a quarter of the population will soon be part of this generation. These consumers are much different from the Baby Boomers, focusing more on healthy living and restaurants. The recent economic downturn

[4] 2015 Supermarkets Guru Grocers Association

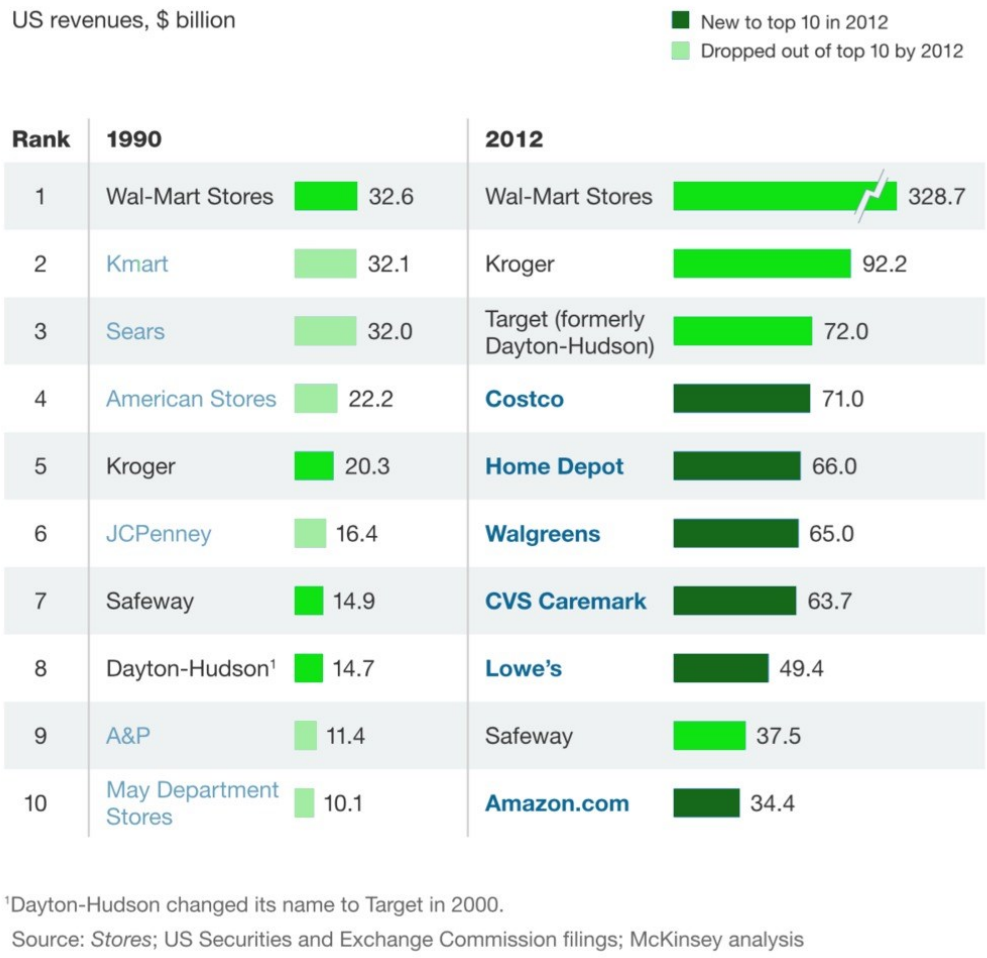
has thus produced the effect of boosting organic and prepared foods as Millennials are looking for the same benefits that restaurants can provide. In this optic, the best-placed chain is Wholefoods, which offers a wide range of fresh, prepared food in nearly every store.

- *Baby Boomers*. despite the big differences with the Millennials, these too will increasingly look for healthy choices as they age. However, for them retirement gives more free time to cook and shop and thus they prefer to buy the ingredient one by one, indicating that grocery retailers must keep a balance of prepared and non-prepared food in their stores.
- *Demographic shift*. Hispanics are growing at a much faster rate than other races in the US. It's share of the total population is expected to increase to 24,1% in 2040, up from just 17,5% as of 2015. Studies found that Hispanics cook at home more frequently than other races and are keen on spending more time at the grocery market (McKinsey 2013). Lastly, smaller household will drive changes in product packaging and product positioning among the others.

4.4 Competitive Landscape

Competition in the retail food market has increased dramatically in the recent years as the industry looks for consolidation in its mature phase. Top players, which accounted for 17% of the total industry sales in 1992, increased their market share enormously by 2013, achieving 36% of the pie. In the past two decade retailers such as Sears and Kmart have left space to newcomers such as The Kroger (second biggest retailer after Wal-Mart), Target, Costco and Home Depot. If this wasn't enough, the emerging importance of digitalization is reshaping the landscape, forcing the companies to focus on online retailing and convenience (McKinsey 2013).

Exhibit 2. Top-10 biggest retailer, 1990 to 2012 comparison.



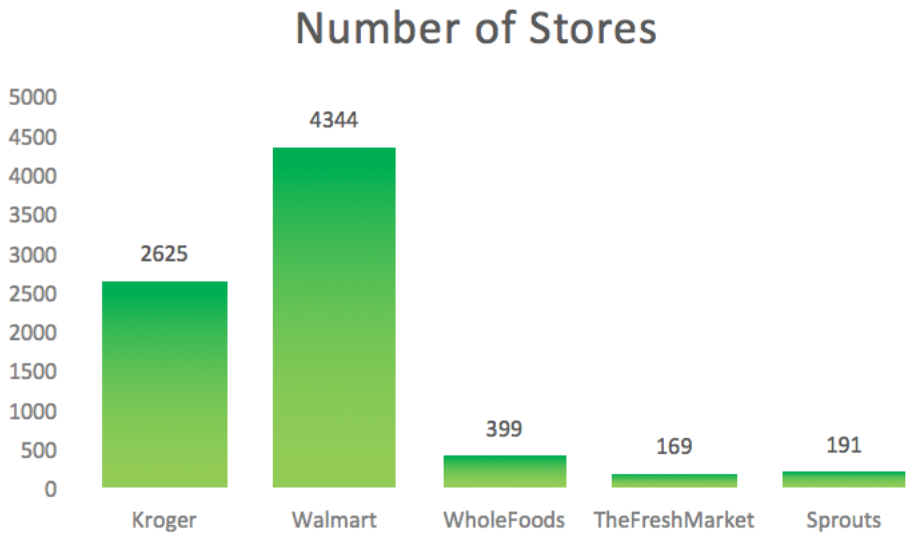
Analyzing each competitor would be a tough challenge to cover. Hence, only one of the competitors will be studied hereafter. Despite the very different nature of many retail giants – Wal-Mart being a traditional retailer, Costco a wholesaler, Amazon having no physical presence and Wholefoods being organic – The Kroger has been identified as the most interesting competitor in terms of growth strategy and size and is posing a real threat to Wal-Mart and Wholefoods future profits.

4.4.1 The Kroger, Inc.

The Kroger is currently the biggest competitor of Wal-Mart and is deeply eroding Wholefoods market share in the organic segment, growing at a 5-year CAGR of 7,2% (sales) and 14,2% (EBITDA) in the period of 2010-2015. The stock price of The Kroger

has turned downwards in the past year, however the company mitigated the share price drop better than most competitors (MarketRealist 2015a).

Exhibit 3. Stores comparison, major general retailers and major organic retailers.



Source: Market Realist, 2016

The wide range of product sold at The Kroger, ranging from groceries to health services and even fuel, have helped the company to attract and maintain its customers base. It operates supermarkets, convenience stores and jewelry stores under the banners of Kiwi shop, Loaf 'N Jug, Quick Stop, Tom Thumb and Turkey Hill Minit Markets.

Sales per square foot, a leading indicator of a retailer's profitability, have fared better than Wal-Mart but worse than Wholefoods, showing a high profitability considering its wide diversification and its nature of traditional retailer.

The Kroger operates a store combination of different sizes and purpose, with an average square footage of 76 thousand. Thus, the lower average size makes it more flexible and more able to face industry changing patterns than Wal-Mart. Further, an aggressive inorganic expansion has helped the company to become the second biggest retailer in the US. The Kroger bought a dozen of smaller players in the past decade shifting from e-commerce to digital coupons/promotions and even pharma retailers. On the other hand, the company has successfully developed its own healthy product lines which have become billion-dollar brands in just two years of its launch as the company seeks to lower costs and remain competitive in the organic segment by focusing on its

own manufacturing facilities (these brands accounted for 25 % of sales in 2015) (MarketRealist 2015a). Hence, The Kroger is a good benchmark to be used for competitor's evaluation: its great size, its aggressive cost cutting policy, its focus in the new drivers of growth and its inorganic growth strategies have all proved to be effective. On the other hand, this aggressive fight to increase its market share forced The Kroger to increase its Capex to sales ratio by 16,7% CAGR in the period 2010-2015 and is currently operating with a robust debt-to-equity ratio of 2x, compared to just 0,2% CAGR and 0,5x of Wal-Mart, respectively. Lastly, its gross profit margin is the lowest in its peer group at 21 %, compared to 35 % of Wholefoods and 25 % of Wal-Mart.

4.4.2 M&A Activity

The mature food retailing industry leaves little space to further growth. Consequently, a significant wave of consolidation has shaped the competition in the past five years. Consumers are diverging from the traditional shopping solutions and are now looking for convenient, healthy, high end food concepts and stores. 2014 and 2015 have been the most prolific years, counting for almost 80 % of food retailing transaction in terms of value (S&P Capital IQ). The Kroger has been by far the most active buyer, acquiring Harris Teeter to foster online convenience, Turkey Hill Mini Markets to enter the convenience store segment and Roundy's to expand its mid-west presence. The incredible demand experienced in the past two years also increased EBITDA multiples, posing questions over the sustainability of an inorganic expansion.

Despite the Natural and Organic main players are struggling to keep pace with the industry growth rate, their valuations are still high compared to traditional supermarkets averaging between 9,8x and 7,5x EBITDA, whereas the latter do not go above 7,1x EBITDA as of 2015 (Duff&Phelps 2016). Acquisitions mainly have a strategic rationale behind, such as improving operations or increasing market penetration in prime areas. However, the recent wave of takeovers and the share price meltdown of the organic retailers have interested PE funds as well, with Apollo Management, Bain Capital and Irving Place Capital recently performing acquisitions of mid cap players (Bloomberg, Duff&Phelps).

Exhibit 4. Multiples in the retailing industry.

Company	52 Week Change	EV (Billions)	EV as a Multiple of Revenue	EV as a Multiple of EBITDA	Trailing P/E	Q Rev. Growth
Natural/Organic						
Whole Foods Matket	-12,57%	9,63	0,61x	7,04x	21,08x	1,80%
Sprouts Farmers Market	-36,64%	2,81	0,69x	9,56x	21,51x	6,00%
Large Cap Supermarkets						
Wal-Mart	3,71%	253,93	0,52x	7,73x	16x	1,00%
The Kroger	-24,90%	40,38	0,35x	6,99x	13,85x	5,50%
Target	-32,49%	40,83	0,59x	5,59x	9,85x	-4,30%
Others						
Costco	8,58%	71,69	0,59x	14,24x	30,18x	5,70%
Amazon	48,77%	401,2	2,95x	34,38x	173,97x	22,40%

Source: Yahoo Finance. Value as of March 25, 2017.

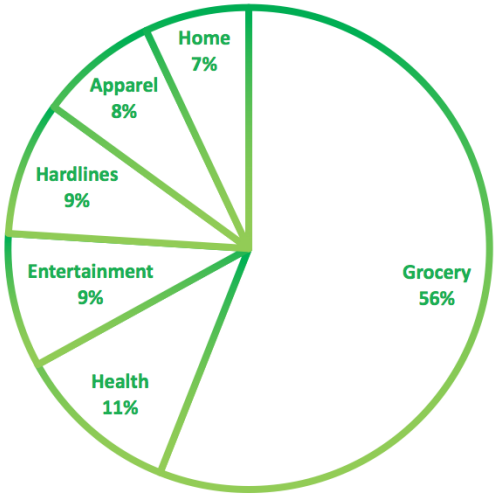
4.5 Acquirer and Target

4.5.1 Wal-Mart

Wal-Mart is the world biggest retailer in terms of sales (almost $500 billion as of 2017). Based in Arkansas, the company have deeply ramified across the US before expanding to international markets such as Mexico, Canada, China and the UK among others. Its biggest strengths are the geographical reach alongside an unmatched bargaining power, which have in turn shaped the motto of the company: “everyday low prices”. However, the aggressive cost-cutting policies that helped the company climb the ladder have backfired lately as an increasing number of customers are looking for quality and ethics in the products. Various groups of consumers, suppliers and workers have unionized against the company, which now employs almost two and a half million people. To mitigate the impact of these issues the company must shift its business strategy and focus on convenience, health and urban presence without penalizing its low-cost policy. Wal-Mart has in fact successfully launched its online website offering products from meat to smartphones and jewelry, becoming in 2016 the second biggest online marketplace behind Amazon (eMarketer). Further, the company is pushing heavily on the click-and-collect method, where customers can buy online and collect at

a given hour of their choice. On the other hand, the various initiatives to exploit the growing organic segment have failed so far.

Exhibit 5. Walmart' Sales Breakdown by Category, 2016.



Source: Walmart 10-K report, 2016

The most recent financials highlight a healthy business with strong fundamentals: Wal-Mart cash reserve are close to $8,7B, Debt/Equity is just above 0,5x, the company is generating strong operating cash flows in excess of $27B and the stock price is currently trailing above the 200-day moving average.

Organic Segment Penetration

Despite an impressive effort to shift from being a traditional retailer to an innovative player, Wal-Mart has struggled to impress. Specifically, the company is dropping many products of its private organic brand and announced it would close all the Wal-Mart Express locations in 2016 after just two years of planning and operations. The lack of a convenient, organic-oriented option for its customers is posing risks over the future growth of the company as Costco and The Kroger both proved the importance to keep pace with industry changes. As such, the strong financials and the much-needed strategic expansion in the organic segment are all making Wal-Mart a good potential buyer.

4.5.2 *Wholefoods*

Wholefoods is a supermarket chain that focuses almost totally in organic food and excludes all the groceries which include artificial enhancers such as colorants, preservatives and hydrogenated fats. Unlike Wal-Mart, its presence is focused in urban areas. In this sense, the company seems to be much better off in terms of supplying new customer's needs. The average store size is in fact only 38 thousand square feet, compared to more than 100 thousand for the latter(MarketRealist 2015b).

Wholefoods growth strategy focuses primarily on organic growth and its private labels, which has sold more than $2B in fiscal 2015, or roughly 13 % of the company's sales. On the other hand, the high prices of its product are not well received recently as more and more competition enters the market. What was once perceived as warranty of quality is now seen as an avoidable cost as many other players are now selling similar products at much lower prices. Therefore, sales have been staggering in the past couple years forcing the company to cut costs by more than $300M and layoff more than 1500 workers. The company in 2016 launched "365 by Whole Foods Market", a budget version with very similar products and concept to fight back competition.

Wholefoods was the rising star among the grocery retailers just a couple years ago. However, competition from bigger players hurt the company substantially: sales per retail sq. feet, a measure widely used in the industry to assess profitability, have been declining since the beginning of 2014, and the company lost the first spot as biggest organic retailer in favor of Costco. However, Wholefoods remain an important national player in the organic segment and the biggest organic-only company, with excellent reputation, one of the highest-perceived product quality among its peers and prime locations in every major US city.

The most recent financials highlight a different situation than Wal-Mart. With a capitalization of just over $9B, the company would be an easy target for retail giants. Further, the current stock price is only slightly above the 52-week low and below the 200-day moving average, suggesting a potential bargain. It's debt/equity ratio, on the other hand, is even stronger than Wal-Mart at 0,31x and its cash flow from operation appears to be stable.

5. Valuation

In this chapter of the thesis the two firms are evaluated. The purpose is to propose a range of values from which to base our final calculations and synergies identifications. Despite the many doubts exploited during the literature review above the WACC method, once again this has been chosen as the most accurate to use in the DCF valuation. In addition, an EBITDA valuation has also been considered as this non-GAAP measure is seldom left aside in the M&A field. It should be kept in mind, especially for the DCF valuation, that small variations in the discount rate will produce much bigger variation of the enterprise value. These variations and their impact will be in the sensitivity analysis.

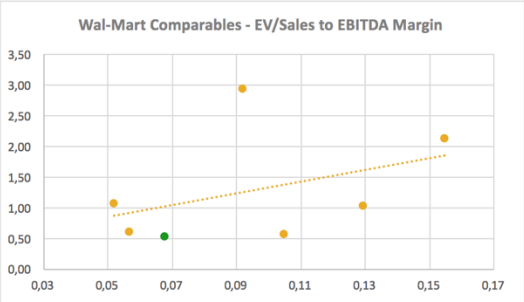
5.2 Valuation Snapshots

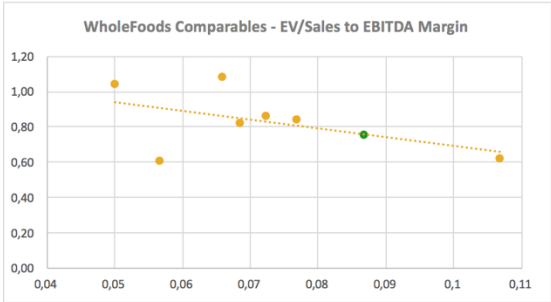
Before examining both companies in detail, a quick yet intuitive look at the industry competitive landscape is given. This analysis considers the multiples of Walmart and Wholefoods and compare them to their closest peers. In the first case, the EBITDA margin and sales ratio are chosen to understand how the company's ability to sell relate with their ability to generate sustainable profits. Using a two variables approach should also give a better benchmark than simply comparing the company to the industry average.

Exhibit 6. EBITDA margin to EV/Sales multiple comparison.

Wal-Mart		
Company Name	EBITDA Margin	EV/Sales
Home Depot	15%	2,13
Costco	6%	0,61
Target	10%	0,58
Amazon	9%	2,95
The Kroger	5%	1,08
Dollar General	13%	1,04
Walmart	7%	0,52

WholeFoods		
Company Name	EBITDA Margin	EV/Sales
Wesfarmers	7%	0,82
AC-T	7%	1,08
Seven & i	11%	0,62
Sprouts Mkts	7%	0,86
Loblaw	8%	0,84
Costco	6%	0,61
TheKroger	5%	1,04
WholeFoods	9%	0,75





Source: Google Finance, Yahoo Finance. Value as of 25 March 2017.

In relation to Wal-Mart, the regression line might have been substantially biased by the presence of Amazon, which trails at almost 3x Sales despite an average EBITDA margin. Wholefoods instead has one of the highest margins, but the recent decline in sales has shifted its valuation downward.

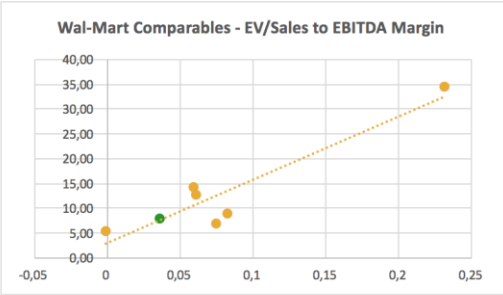
The second graph metrics include the 5yr growth rate and the EBITDA multiple. This metric does not reflect the ability of the companies to generate cash and therefore it may seem misleading, but since retailers operates with very optimized margins, increasing the revenues is often the main driver of growth in the industry. Hence, this graph plots the ability to generate profits with an ability to sustain growth.

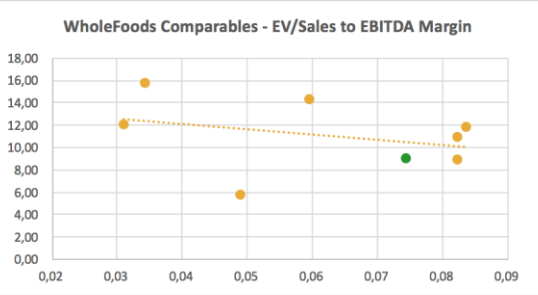
Exhibit XX:

Exhibit 7. Growth to EV/EBITDA multiple.

Wal-Mart		
Company Nai	5 Yr Growth	EV/EBITDA
Home Depot	6%	12,87
Costco	6%	14,32
Target	0%	5,45
Amazon	23%	34,53
The Kroger	7%	7,03
Dollar Gener	8%	8,93
Walmart	4%	7,75

WholeFoods		
Company Nai	5 Yr Growth	EV/EBITDA
Wesfarmers	3%	12,03
AC-T	3%	15,76
Seven & i	5%	5,79
Sprouts Mkts	8%	11,86
Loblaw	8%	10,96
Costco	6%	14,32
TheKroger	8%	8,93
WholeFoods	7%	8,98





Source: Google Finance, Yahoo Finance. Value as of 25 March 2017.

From the charts above we can see that neither of them are currently overpriced. On the other hand, the declining phase of Wholefoods is reflected here as well. Despite the organic retailer having the highest 5-years growth in its peer group, investors seem not to believe that the company will be able to restore its past growth pace. These conclusions are reinforced by the DCF valuation outlined below.

5.3 Valuation of Walmart

5.3.1 FCFF Identification

The first step to evaluate a company using basically any analytical approach is to project the cash flow into the future, usually the next five years. This gives an idea of how much cash the company will be able to generate in the future, and how much we should be willing to pay to obtain them. According to the management growth forecasts included in the latest 10-K, new stores openings has been projected to grow between 1,4% and 3,1% until 2021. However, in the same document it is also hinted that the company intend to shift towards smaller store format, therefore reducing the overall sales growth rate. Hence, the revenue growth will range between 0,9% and 1,0% in the

next five years. COGS and SG&A in the retailing industry are playing the biggest role in driving profitability: they often make up more than 95% of revenues, leaving little cash to be used for interests, taxes and other purposes. Wal-Mart have seen its figure slowly increasing over the years, reaching the value of 94,6% by year-end 2016. Continuing the trend, we forecasted these margins to increase even more, reaching a value of 95,7% on 2021.Walmart has paid on average 31,8% of EBT in taxes in the past ten years. Hence, this figure will be considered for the next five.

Exhibit 8. Walmart's sales forecasts based on new store opening.

Wal-Mart - Revenue Model									
	HISTORICAL				PROJECTED				
Revenue Assumptions	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**	**2020E**	**2021E**
net new stores US	137	198	313	58	150	150	160	170	180
net new stores International	496	324	183	90	180	185	190	200	213
net new stores Sam's Club	9	12	15	8	12	12	12	12	12
# of Beginning Stores	9766	10408	10942	11453	11609	11951	12298	12660	13042
# of New and Acquired Stores	642	534	511	156	342	347	362	382	405
# of Ending Stores	**10408**	**10942**	**11453**	**11609**	**11951**	**12298**	**12660**	**13042**	**13447**
					1,4%	2,9%	2,9%	2,9%	3,0%
Avergae Sales per Store	45,08	43,53	42,40	41,53	40,70	39,89	39,09	38,31	37,54
Growth in Sales/Store		*-3,43%*	*-2,58%*	*-2,06%*	*-2,00%*	*-2,00%*	*-2,00%*	*-2,00%*	*-2,00%*
Total Sales	**469162**	**476294**	**485651**	**482130**	**486407**	**490519**	**494859**	**499595**	**504807**
Total Sales Growth Rate		*1,5%*	*2,0%*	*-0,7%*	*0,9%*	*0,8%*	*0,9%*	*1,0%*	*1,0%*

Depreciation and CAPEX were modelled in relation to gross PP&E and sales, respectively. As the company is slowly shifting its investment strategies from big supercenters in the suburban areas to smaller store formats, CAPEX will move accordingly. Lastly, the terminal value growth rate after year 5 has been chosen to best reflect the ability of the company to capture industry growth in the future. Being the undisputed market leader and by far the biggest company in the world by revenues, Wal-Mart is not expected to grow at a rapid pace. Assuming a constant growth rate of 1,0% seemed to be a fair assumption.

Assumptions Wal-Mart

Exhibit 9. Walmart's assumption forecasts.

Assumptions	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*
Income Statement		Observed				Forecast				
Revenue Growth		5,0%	1,5%	2,0%	-0,7%	0,9%	0,8%	0,9%	1,0%	1,0%
COGS % of sales	-75,0%	-75,1%	-75,2%	-75,2%	-74,9%	-75,1%	-75,1%	-75,1%	-75,1%	-75,1%
SG&A % sales	-17,3%	-17,1%	-17,3%	-17,3%	-18,2%	-18,2%	-18,2%	-18,2%	-18,2%	-18,2%
D&A		5,3%	5,2%	5,1%	5,2%	5,2%	5,2%	5,2%	5,2%	5,2%
Interest Expense		3,9%	3,7%	4,1%	4,3%	4,0%	4,0%	4,0%	4,0%	4,0%
Income Taxes % of EBT	32,6%	31,0%	32,9%	32,2%	30,3%	31,8%	31,8%	31,8%	31,8%	31,8%
Balance Sheet										
Receivables	1,3%	1,4%	1,4%	1,4%	1,2%	1,3%	1,3%	1,3%	1,3%	1,3%
Inventory	-12,1%	-12,4%	-12,5%	-12,4%	-12,3%	-12,4%	-12,4%	-12,4%	-12,4%	-12,4%
Other*	0,4%	0,3%	0,5%	0,5%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%
Loans and debt due within a year	0,0%	20,4%	16,9%	9,6%	9,2%	9,0%	9,0%	9,0%	9,0%	9,0%
Account payable	-10,9%	-10,8%	-10,4%	-10,5%	-10,7%	-10,7%	-10,7%	-10,7%	-10,7%	-10,7%
Others (Accrued liabilities & taxes)	0,0%	33,7%	27,5%	29,1%	30,8%	30,3%	30,3%	30,3%	30,3%	30,3%
Others (deferred taxes and redeemable)	1,8%	1,7%	2,0%	1,8%	1,5%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Flow Statement										
Capex	-2,8%	-2,6%	-2,6%	-2,4%	-2,2%	-2,4%	-2,4%	-2,4%	-2,4%	-2,4%
Net Debt issuance/repayment	0,8%	0,3%	0,6%	-1,0%	-0,7%	0,0%	0,0%	0,0%	0,0%	0,0%
Net equity issuance/repurchase	0,0%	-10,0%	-8,5%	-3,5%	-6,3%	0,0%	0,0%	0,0%	0,0%	0,0%
Dividends paid	-1,3%	-1,2%	-1,4%	-1,4%	-1,5%	-1,5%	-1,5%	-1,5%	-1,5%	-1,5%
Other financing activities	0,0%	0,0%	0,4%	2,1%	1,6%	0,0%	0,0%	0,0%	0,0%	0,0%

5.3.2 WACC Calculation

As previously stated, the WACC has been used to discount future cash flows into the present. The formula has been highlighted in the literature review. Unfortunately, being Walmart (apparently) one of the less-volatile companies on earth, a WACC extrapolated by the formula would give a value that cannot be used in a DCF model as it would result in an enormous valuation. Hence, for Walmart it has been preferred to use the WACC based on comparable companies. A value of 5,34% has consequently be assumed.

If on one side the “beta comparable” gives more reasonable outcomes, on the other hand Wal-Mart has been consistently safer than any of its peers in the past 30 years. The reader might want to account for this further assumption and increase the valuation of the company accordingly.

Exhibit 10. WACC analysis Wal-MArt.

Risk-Free Rate				2,16%
Equity Risk Premium				6%
Interest Rate on Debt				4,00%

Company	Beta	D/E*	Tax Rate	Unlevered Beta
Amazon	1,44	0,399	35%	1,15
Costco	0,90	0,4077	35%	0,71
DollarGeneral	0,83	0,594	35%	0,60
Home Depot	1,07	5,447	35%	0,24
Kroger	0,79	2,098	35%	0,34
Target	0,53	1,164	35%	0,30
WholeFood	0,72	0,32	35%	0,59
Median	**0,83**			**0,59**

Wal-Mart	**0,14**			

Wal-Mart	0,59	0,51	35%	0,79

Cost of Equity - Comparables	6,91%
Cost of Equity - Historical	5,73%

WACC	**5,34%**

5.3.3 Wal-Mart Enterprise Value

In relation to the financial analysis and discount rate calculation outlined above, the enterprise value of the company is $323.165 Billions. This result seems to be slightly upward biased, resulting in a premium of 18% in a share value basis. To compute the equity value, the FCFFs and the perpetuity value have been brought back to the present to obtain the enterprise value. After, the equity value was derived by subtracting a net debt of roughly 40B, for a final value of € 282.236 Billions.

Exhibit 11. DCF valuation snapshot

DCF valuation	2017	2018	2019	2020	2021	N
EBIT	23157	22827	22506	22208	21935	22154
Income Taxes	-7362	-7257	-7155	-7060	-6973	-7043
Capex	-11737	-11836	-11941	-12055	-12181	-12295
Change in W(	-1595	-124	-131	-143	-157	-158
D&A	9752	10361	10975	11594	12219	12333
FCFF	12215	13971	14255	14544	14843	14991
Terminal Value						348879
"g"						*1%*
Discount Fact	0,974	0,925	0,878	0,833	0,791	0,751
WACC						5,34%
DCF	11898	12918	12512	12119	11741	261978
Enterprise Value						**323165**
Short term debt						-5816
Long term debt						-44030
Minority interest						-3065
Cash & equivalents						11982
Equity Value						**282236**
Shares Outstanding (7 May 2017)						3031,556
Value per Share						**93,10**
Actual share price (7 May 2017)						76,5
Share price overvaluation (undervaluation)						**-18%**

5.3.4 EBITDA Multiple Valuation

To provide a comparable valuation for both companies, the EBITDA method has been exploited too. This method discount to the present value the cash flow of the next five years and finally add the present value of a multiple valuation based on year 5 EBITDA (2021). This EBITDA multiple considers the industry, the competitors and the company itself. To show the calculations, an EBITDA multiple of 7,00x has been chosen. However, due to the different sizes between the company and its peers it is recommended to have a look at multiples between 5,5x and 10,5x. The EBITDA for each year has been calculated by adding interests, taxes and depreciation back to net income, while the FCFF was calculated by using the same method of the DCF approach. This second method can help us to validate the previous DCF valuation and reinforce the assumption that the company seems to be currently undervalued. A more

extensive analysis of the possible range of values can be seen in the sensitivity analysis at the end of the chapter.

Exhibit 12. Walmart's EBITDA valuation.

EBITDA multiple valuation						
	2017	2018	2019	2020	2021	N
EBIT	23157	22827	22506	22208	21935	22154
Income Taxes	-7362	-7257	-7155	-7060	-6973	-7043
Capex	-11737	-11836	-11941	-12055	-12181	-12295
Change in W	-1595	-124	-131	-143	-157	-158
D&A	9752	10361	10975	11594	12219	12333
FCFF	12215	13971	14255	14544	14843	14991
Terminal EBITDA						34487
Multiple						7,00
Discount Fact	0,974	0,925	0,878	0,833	0,791	0,751
WACC						5,34%
DCF	11898	12918	12512	12119	11741	241412
Enterprise Value						302599
Short term debt						-5816
Long term debt						-44030
Minority interest						-3065
Cash & equivalents						11982
Equity Value						261670
Shares Outstanding (7 May 2017)						3031,56
Value per Share						86,32
Actual share price (7 May 2017)						76,5
Share price overvaluation (undervaluation)						-11%

5.3.5 *Wal-Mart Peers' Multiples and Valuation Ranges*

To conclude the valuation for Wal-Mart, an overview of the peer's multiples has been considered and subsequently applied to the company. The values have been recorded from leading financial providers such as yahoo and google finance, Morningstar among others. This analysis compute the company's value based on multiples of similar listed companies selected in relation to their revenue sources, size, growth, industry and geographical location. The median for revenue, EBITDA and EBIT multiple are 0,84, 11,39 and 13,46 respectively. This metric has been preferred to

the mean because – at least theoretically - it explains the middle point better than the mean when the sample size is low.

Exhibit 13. Walmart's comparable companies.

Peer TTM Multiples				
Company	EV	EV/Revenue	EV/EBITDA	EV/EBIT
Home Depot	201480	2,13	13,08	14,97
Costco	73660	0,61	14,59	19,38
Target	40240	0,58	5,50	8,10
Amazon	401130	2,95	34,37	130,66
The Kroger	41060	0,36	7,10	11,95
Dollar General	22960	1,08	9,69	11,13

Source: Yahoo, personal calculations. Value as of March 28, 2017

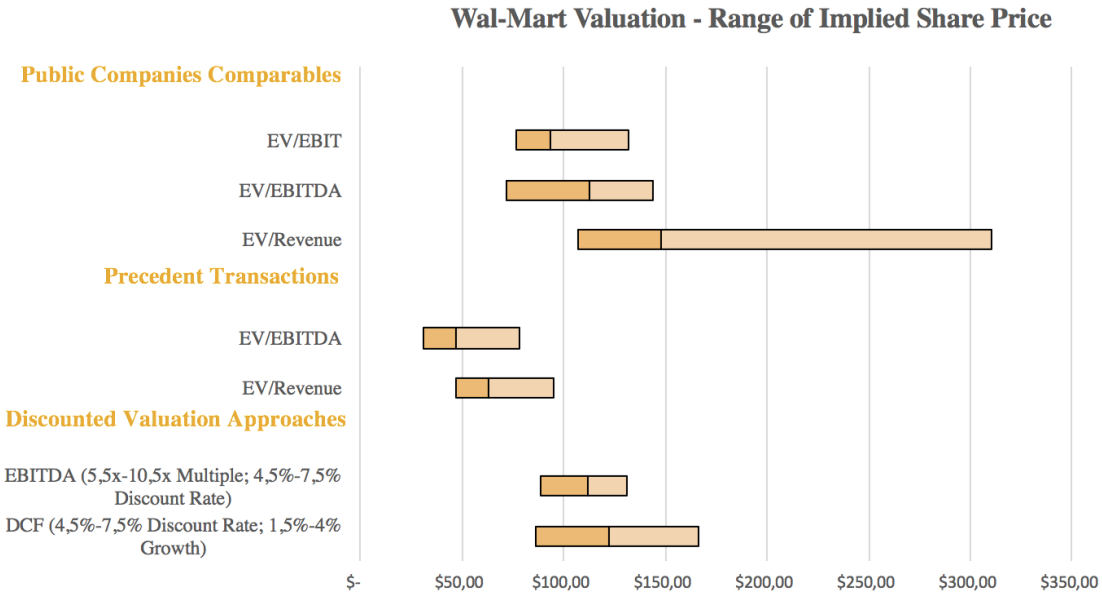
Further, recent transactions can be a useful source of information, too. Transactions multiples tend to be different from TTM multiples because the premium price to pay to acquire a company is reflected in there. Therefore, we should theoretically expect higher multiples. Despite this assumption, the following table shows that the median is actually lower. One reason can be found in the size of the deals: none of them is bigger than $15bn, and usually small acquisitions have lower multiples than big ones.

Exhibit 14. Recent transactions multiples.

Recent Transactions Multiples					
Fiscal Year	Acquirer	Target	EV	EV/Revenue	EV/EBITDA
2015	The Kroger	Roundy's	803	0,20	7,00
2015	**Koninklijke N.V.**	**Delhaize Group**	**12274**	**0,47**	**8,40**
2015	Acon Investments	Fiesta Mart	120		5,00
2014	Pace Food Retail	Dean & DeLuca	140		14,00
2014	**Albertsons**	**Safeway**	**8960**	**0,25**	**5,50**
2014	Victory Park Capital	Mi Pueblo Food Center	51	0,13	6,60
2014	Cardebnas Markets	Pro's Ranch Markets	55	0,29	4,00
2013	TPG Capital	Gelson's	370	0,84	10,70
2013	The Kroger	Harris Teeter Supermarkets	2497	0,53	6,70
2013	**Sobeys**	**Canada Safeway Limited**	**5555**	**0,87**	**10,70**
2013	BI-LO	Delhaze Americe, Sweetbay	246	0,14	
2013	AUA PE Partners	Associated Food Holdings	155	0,33	5,00
			Median	**0,31**	**6,70**
			Mean	**0,41**	**7,60**
			25th Percentile	**0,21**	**5,25**
			75th Percentile	**0,52**	**9,55**

By combining the results obtained with these methods, it is possible to have a visual representation of the middle range of values the company is suggested to have. In the specific, the graph tells us that when public comparable and discounted valuation approaches are used the share price of Wal-Mart is around $100/share. When the precedent transactions are considered instead, the value halves to $50/share.

Exhibit 15. Range of implied share price (25th to 75th percentile).



A sensitivity analysis of the DCF and EBITDA valuation method is outlined below. The analysis has been carried to underline the large impact that small variations in WACCs and Multiples have over the results.

Exhibit 16. Sensitivity table for the DCF valuation.

DCF Valuation							
Equity Value							
282236	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	421517	354726	304699	265844	234808	209455	188364
2,0%	506256	414232	348575	299396	261198	230686	205760
2,5%	633393	497562	407096	342549	294200	256646	226646
3,0%	845328	622585	489046	400105	336646	289108	252184
3,5%	1269256	830995	612000	480705	393257	330861	284118
4,0%	2541155	1247872	816959	601632	472534	386547	325192
Share Price							
93,10	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	139,04	117,01	100,51	87,69	77,45	69,09	62,13
2,0%	167,00	136,64	114,98	98,76	86,16	76,09	67,87
2,5%	208,93	164,13	134,29	112,99	97,05	84,66	74,76
3,0%	278,84	205,37	161,32	131,98	111,05	95,37	83,19
3,5%	418,68	274,12	201,88	158,57	129,72	109,14	93,72
4,0%	838,23	411,63	269,49	198,46	155,87	127,51	107,27
Share Price Overvaluation (Undervaluation)							
-18%	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	-45%	-35%	-24%	-13%	-1%	11%	23%
2,0%	-54%	-44%	-33%	-23%	-11%	1%	13%
2,5%	-63%	-53%	-43%	-32%	-21%	-10%	2%
3,0%	-73%	-63%	-53%	-42%	-31%	-20%	-8%
3,5%	-82%	-72%	-62%	-52%	-41%	-30%	-18%
4,0%	-91%	-81%	-72%	-61%	-51%	-40%	-29%

Exhibit 17. Sensitivity analysis for the EBITDA multiple valuation.

EBITDA Multiple Valuation							
Equity Value							
261670	37000	38000	39000	40000	41000	42000	43000
5,5	223758	229258	234758	240258	245758	251258	256758
6,5	260758	267258	273758	280258	286758	293258	299758
7,5	297758	305258	312758	320258	327758	335258	342758
8,5	334758	343258	351758	360258	368758	377258	385758
9,5	371758	381258	390758	400258	409758	419258	428758
10,5	408758	419258	429758	440258	450758	461258	471758
Share Price							
86,32	37000	38000	39000	40000	41000	42000	43000
5,5	73,81	75,62	77,44	79,25	81,07	82,88	84,70
6,5	86,01	88,16	90,30	92,45	94,59	96,74	98,88
7,5	98,22	100,69	103,17	105,64	108,12	110,59	113,06
8,5	110,42	113,23	116,03	118,84	121,64	124,44	127,25
9,5	122,63	125,76	128,90	132,03	135,16	138,30	141,43
10,5	134,83	138,30	141,76	145,23	148,69	152,15	155,62
Share Price Overvaluation (Undervaluation)							
-11%	37000	38000	39000	40000	41000	42000	43000
5,5	4%	1%	-1%	-3%	-6%	-8%	-10%
6,5	-11%	-13%	-15%	-17%	-19%	-21%	-23%
7,5	-22%	-24%	-26%	-28%	-29%	-31%	-32%
8,5	-31%	-32%	-34%	-36%	-37%	-39%	-40%
9,5	-38%	-39%	-41%	-42%	-43%	-45%	-46%
10,5	-43%	-45%	-46%	-47%	-49%	-50%	-51%

5.4 Wholefoods Valuation

A similar approach to the one used to evaluate Walmart has been used for Wholefoods. Management expectations are that in the next five years the number of stores will increase by 50%, from 456 to 606. However, Wholefoods is currently facing a sales drop issue in almost every store in the country. Assuming a slow recovery of sales/store from -4,57% to -1,50% in the next five years, the company will increase its sales moderately in the future. Operating costs have been kept somewhat constant between 94% and 95% of sales, while taxes are modelled to be 38,5% of EBT.

Exhibit 18. Wholefoods revenue growth model.

WholeFoods - Revenue Model									
	HISTORICAL				PROJECTED				
Revenue Assumptions	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**	**2020E**	**2021E**
New Stores	32	38	28	38	**36**	**36**	**36**	**36**	**36**
Closed/Relocated Stores	-5	-1	-6	-3	**-6**	**-6**	**-6**	**-6**	**-6**
# of Beginning Stores	335	362	399	421	456	486	516	546	576
# of New and Acquired Stores	27	37	22	35	30	30	30	30	30
# of Ending Stores	**362**	**399**	**421**	**456**	**486**	**516**	**546**	**576**	**606**
Square Footage per Store	0,038	0,038	0,039	0,039	0,039	0,039	0,039	0,039	0,039
Total Square Footage	**13,78**	**15,16**	**16,63**	**17,80**	**18,97**	**20,14**	**21,31**	**22,48**	**23,66**
Sales/sqft	937,44	936,16	925,65	883,37	865,70	848,39	831,42	818,95	806,67
Growth in Sales/Sqft		*-0,14%*	*-1,12%*	*-4,57%*	*-2,00%*	*-2,00%*	*-2,00%*	*-1,50%*	*-1,50%*
Total Sales	**12917**	**14194**	**15389**	**15724**	**16423**	**17088**	**17720**	**18413**	**19082**
Total Sales Growth Rate		*9,9%*	*8,4%*	*2,2%*	*4,4%*	*4,0%*	*3,7%*	*3,9%*	*3,6%*

D&A and Capex are modelled to follow the movements of gross PP&E and sales, while the terminal growth rate has been increased to 2%, reflecting the steadier sales growth of Wholefoods and the fact that the company is operating in a faster growing industry segment.

Exhibit 19. Wholefoods assumption for forecasts.

Assumptions	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*
Income Statement		Observed				Forecast				
Revenue Growth		10,4%	9,9%	8,4%	2,2%	4,4%	4,0%	3,7%	3,9%	3,6%
COGS % of sales	-64,5%	-64,2%	-64,5%	-64,8%	-65,6%	-64,7%	-64,7%	-64,7%	-64,7%	-64,7%
SG&A % sales	-26,5%	-26,4%	-26,3%	-26,7%	-25,8%	-26,3%	-26,3%	-26,3%	-26,3%	-26,3%
D&A		15,5%	15,5%	15,0%	15,7%	15,4%	15,4%	15,4%	15,4%	15,4%
Interest Expense		3,9%	3,7%	4,1%	4,3%	4,0%	4,0%	4,0%	4,0%	4,0%
Income Taxes % of EBT	-38,0%	-38,4%	-38,8%	-39,7%	-37,3%	-38,5%	-38,5%	-38,5%	-38,5%	-38,5%
Balance Sheet										
Receivables	1,7%	1,5%	1,4%	1,4%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Inventory	5,0%	5,0%	4,8%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%	5,0%
Other*	12,3%	8,4%	6,5%	3,8%	5,5%	7,3%	7,3%	7,3%	7,3%	7,3%
Loans and debt due within a year	0	0,2%	0,2%	0,2%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%
Account payable	-3,3%	-3,0%	-3,0%	-3,0%	-3,0%	-3,0%	-3,0%	-3,0%	-3,0%	-3,0%
Others (Accrued liabilities & taxes)	0	136,1%	90,0%	75,9%	82,3%	0,0%	0,0%	0,0%	0,0%	0,0%
Others (deferred taxes and redeemable)	0,04205488	4,2%	4,3%	4,3%	4,6%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Flow Statement										
Capex	-2,2%	-2,6%	-3,1%	-3,4%	-2,5%	-2,8%	-2,8%	-2,8%	-2,8%	-2,8%
Net Debt issuance/repayment	0,0%	0,0%	0,0%	0,0%	6,3%	0,00%	0,00%	0,00%	0,00%	0,00%
Net equity issuance/repurchase	9,0%	-1,1%	-14,1%	-11,9%	-28,7%	0,0%	0,0%	0,0%	0,0%	0,0%
Dividends paid	-20,2%	-92,9%	-29,8%	-36,9%	-33,2%	-33,3%	-33,3%	-33,3%	-33,3%	-33,3%
Other financing activities	1,3%	1,0%	0,2%	0,3%	-0,1%	0,0%	0,0%	0,0%	0,0%	0,0%

5.4.1 WACC Calculation

Unlike Walmart, Wholefoods seems to be much more volatile. Explanations can be found in the industry in which operates (growing segment compared to a mature market), the much smaller size compared to Walmart and the incoming competition. The historical beta of the company has therefore been used in the WACC calculation, delivering a slightly higher value than Walmart's WACC.

Exhibit 20. WACC of Wholefoods.

Risk-Free Rate	**2,05%**
Equity Risk Premium	**6%**
Interest Rate on Debt	**3,90%**

Company	Beta	D/E*	Tax Rate	Unlevered Beta
Wesfarmers	0,90	0,399	35%	0,71
AC-T	0,38	0,4077	35%	0,30
Seven & i	0,36	0,2	35%	0,32
Sprouts Mkts	0,52	2,098	35%	0,22
Loblaw	0,85	1,164	35%	0,48
Costco	0,90	0,2	35%	0,79
TheKroger	0,79	0,79	35%	0,52
Median	**0,79**			**0,48**

WholeFoods	**0,72**

WholeFood	0,48	0,32	35%	0,58

Cost of Equity - Comparables	5,55%
Cost of Equity - Historical	6,36%

WACC	**5,76%**

5.4.2 Wholefoods Enterprise Value

In relation to the financial analysis and forecasts outlined above, the DCF valuation model gives us a value of $13,32bn, which translates into a value of $12,83bn after subtracting $491 Millions of net debt. According to the valuation, it seems that the public has reacted accordingly to the sales slump of the past two years. The undervaluation implied is in fact of only 8% on a per share basis.

Exhibit 21. Wholefoods DCF valuation.

DCF Valuation	2017	2018	2019	2020	2021	N
EBIT	940	929	994	1073	1146	1204
Income Taxe	-361	-357	-382	-413	-441	-463
Capex	-456	-474	-492	-511	-530	-550
Change in W	-441	-171	-172	-186	-189	-196
D&A	531	602	593	576	563	572
FCFF	213	528	541	539	549	567
Terminal Value						15369
"g"						2%
Discount Fac	0,972	0,919	0,869	0,822	0,777	0,735
WACC						5,76%
DCF	207	485	470	443	427	11289
Enterprise Value						**13321**
Short term debt						0
Long term debt						-1048
Minority interest						32
Cash & equivalents						524
Equity Value						**12829**
Shares Outstanding (7 May 2017)						318,565
Value per Share						**40,27**
Actual share price (7 May 2017)						36,87
Actual share price overvaluation (undervaluation)						**-8%**

5.4.3 EBITDA multiple evaluation

The EBITDA multiple has been calculated by using the same method of Walmart's valuation but a different multiple has been used. Comparable transaction in the food and retailing industry hints that, due to size and industry, Wholefood most likely multiple is around 8,5x. With this multiple, however, the undervaluation appears more evident. The percentage difference on a per value basis increases to 29%. It must be kept in mind, however, that an EBITDA multiple valuation can assume much different values depending on the acquisition process and the negotiation itself, and should therefore be used as a comparable proxy rather than as absolute value.

Exhibit 22. Wholefoods' EBITDA multiple valuation.

EBITDA multiple valuation						
	2017	2018	2019	2020	2021	N
EBIT	940	929	994	1073	1146	1204
Income Taxe	-361	-357	-382	-413	-441	-463
Capex	-456	-474	-492	-511	-530	-550
Change in W	-441	-171	-172	-186	-189	-196
D&A	531	602	593	576	563	572
FCFF	213	528	541	539	549	567
Terminal EBITDA						1775
Multiple						8,50
Discount Fac	0,972	0,919	0,869	0,822	0,777	0,735
WACC						5,76%
DCF	207	485	470	443	427	15092
Enterprise Value						17123
Short term debt						0
Long term debt						-1048
Minority interest						32
Cash & equivalents						524
Equity Value						16632
Shares Outstanding (7 May 2017)						318,57
Value per Share						52,21
Actual share price (7 May 2017)						36,87
Actual share price overvaluation (undervaluation)						-29%

5.4.4 Peer comparable and acquisition multiples

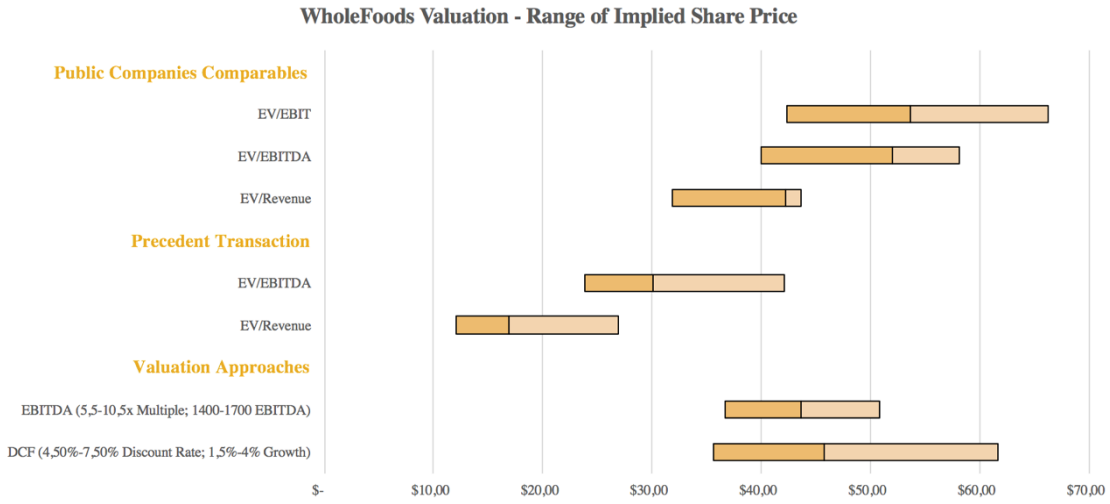
To evaluate the company in the same way as Walmart has been, a peer comparable evaluation has been carried, too. The peer of Wholefoods are more specialized grocery retailers operating in the natural, BIO and organic sub-categories, or big wholesaler/retailer that have been able to exploit the demand for these products more recently and are now becoming major players in the same sub-categories, such as The Kroger and Costco. As expected, the higher multiples are reflecting the fastest growing rate of these companies and the natural food industry in general. Medians for EV/Revenue, EV/EBITDA and EV/EBIT are 0,82x, 11,87x and 19,38x, respectively.

Exhibit 23. Wholefoods comparable companies.

Peer TTM Multiples				
Company	**EV**	**EV/Revenue**	**EV/EBITDA**	**EV/EBIT**
Wesfarmers	55530	0,82	12,02	41,26
AC-T	37070	1,04	15,77	21,38
Seven & i	31980	0,62	5,79	13,93
Sprouts Mkts	3490	0,86	11,87	16,38
Loblaw	39240	0,85	10,99	26,75
Costco	73660	0,61	14,59	19,38
TheKroger	41060	0,36	7,10	11,95
Median		0,82	11,87	19,38

On the other hand, the same acquisitions in the food and retailing industry used for Walmart has been used to compute the multiples based on past acquisitions. When public comparable and valuation approaches are used, the value of the company ranges between $40,00 to $50,00 per share, whilst when Precedent Transactions are used the value lowers to the $20,00 - $30,00 range.

Exhibit 24. Wholefoods range of implied share price (25th to 75th percentile).



A similar sensitivity analysis used for Walmart has been applied to Wholefoods and is outlined below.

Exhibit 25. Wholefoods DCF sensitivity table.

DCF Valuation							
Equity Value							
12829	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	16659	14147	12265	10804	9637	8684	7891
2,0%	19759	16314	13856	12015	10586	9444	8511
2,5%	24408	19347	15977	13572	11771	10372	9255
3,0%	32156	23897	18946	15648	13295	11533	10164
3,5%	47652	31480	23399	18554	15327	13025	11301
4,0%	94142	46646	30821	22914	18173	15015	12762

Share Price							
40	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	52,30	44,41	38,50	33,92	30,25	27,26	24,77
2,0%	62,02	51,21	43,49	37,72	33,23	29,64	26,72
2,5%	76,62	60,73	50,15	42,60	36,95	32,56	29,05
3,0%	100,94	75,01	59,47	49,12	41,73	36,20	31,91
3,5%	149,58	98,82	73,45	58,24	48,11	40,89	35,47
4,0%	295,52	146,43	96,75	71,93	57,05	47,13	40,06

Share Price Overvaluation (Undervaluation)							
0	4,5%	5,0%	5,5%	6,0%	6,5%	7,0%	7,5%
1,5%	-0,29	-0,17	-0,04	0,09	0,22	0,35	0,49
2,0%	-0,41	-0,28	-0,15	-0,02	0,11	0,24	0,38
2,5%	-0,52	-0,39	-0,26	-0,13	0,00	0,13	0,27
3,0%	-0,63	-0,51	-0,38	-0,25	-0,12	0,02	0,16
3,5%	-0,75	-0,63	-0,50	-0,37	-0,23	-0,10	0,04
4,0%	-0,88	-0,75	-0,62	-0,49	-0,35	-0,22	-0,08

Exhibit 26. Wholefoods terminal EBITDA valuation sensitivity table.

EBITDA Multiple Valuation							
Equity Value							
16632	1400	1450	1500	1550	1600	1650	1700
5,5	9240	9515	9790	10065	10340	10615	10890
6,5	10640	10965	11290	11615	11940	12265	12590
7,5	12040	12415	12790	13165	13540	13915	14290
8,5	13440	13865	14290	14715	15140	15565	15990
9,5	14840	15315	15790	16265	16740	17215	17690
10,5	16240	16765	17290	17815	18340	18865	19390

Share Price							
52	1400	1450	1500	1550	1600	1650	1700
5,5	29,01	29,87	30,73	31,60	32,46	33,32	34,19
6,5	33,40	34,42	35,44	36,46	37,48	38,50	39,52
7,5	37,80	38,97	40,15	41,33	42,50	43,68	44,86
8,5	42,19	43,52	44,86	46,19	47,53	48,86	50,19
9,5	46,58	48,08	49,57	51,06	52,55	54,04	55,53
10,5	50,98	52,63	54,28	55,92	57,57	59,22	60,87

Share Price Overvaluation (Undervaluation)							
0	1400	1450	1500	1550	1600	1650	1700
5,5	27%	23%	20%	17%	14%	11%	8%
6,5	10%	7%	4%	1%	-2%	-4%	-7%
7,5	-2%	-5%	-8%	-11%	-13%	-16%	-18%
8,5	-13%	-15%	-18%	-20%	-22%	-25%	-27%
9,5	-21%	-23%	-26%	-28%	-30%	-32%	-34%
10,5	-28%	-30%	-32%	-34%	-36%	-38%	-39%

5.5 Valuation of Combined Entity Excluding synergies

Before forecasting and implementing synergies, a valuation of the combined entity without them must be carried. The scope is to understand how the financials evolve if the acquisition happens, but without any benefit deriving from the synergies. The model shows that the valuation of the combined entity, without considering any synergies, is equal to the sum of the two companies. This valuation will be used in the following chapters to comment the value increase derived by the synergies.

Even though when an acquisition is performed the target's debt is retired and refinanced, this will not have any impact on the financials of the combined entity since the two companies have almost the same interest rate and the debt increase is not expected to lower the credit score of Walmart. Hence, the equity value will remain the same.

Exhibit 27. Combined entity DCF valuation.

DCF Valuation	2017	2018	2019	2020	2021	N
EBIT	24096	23755	23500	23281	23081	23311
Income Taxe	-7723	-7614	-7537	-7472	-7414	-7506
Capex	-12193	-12311	-12433	-12566	-12711	-12845
Change in W	-2036	-295	-303	-329	-346	-354
D&A	10284	10963	11568	12170	12782	12910
FCFF	12428	14499	14796	15083	15393	15558
Terminal Value						360682
"g"						0,01
Discount Fac	0,974	0,924	0,877	0,833	0,790	0,750
WACC						5,36%
DCF	12105	13403	12982	12561	12168	273267
Enterprise Value					$	336 486
Short term debt						-5816
Long term debt						-45078
Minority interest						-3033
Cash & equivalents						12506
Equity Value					$	282 236

5.6 Transaction's Synergies

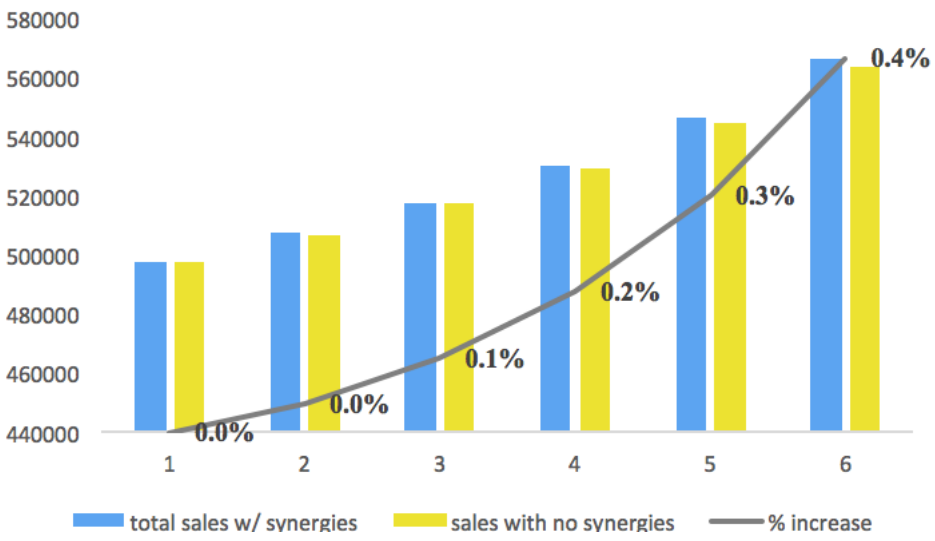
As previously explain, the main rationale behind an acquisition is the benefit derived by the synergies. Walmart can benefit from synergies derived by operation, such as cost reduction or sales increase, or from better financial conditions, such as lower interest rates or lower tax rates. Further, the synergies have different vesting periods since not all the benefits is achievable at the acquisition's time. A very conservative synergy model was applied to the transaction, almost excluding revenue synergies.

5.6.1 Revenue Synergies

Revenue synergies can potentially be exploited from both sides: Walmart would increase its product offering and cross-selling as well as gain access to higher-income locations, while Wholefoods would use the costs savings deriving from a much higher bargaining power to offer the same products, with similar margins, at a much lower

price. However, despite the fact that 84% of corporate executives cited market share and scale as key strategic driver for acquisitions (Habeck 2014), assumptions over revenue synergies are many and hardly quantifiable. Therefore, it has been preferred to apply a low sales improvement. Walmart is very likely to boost sales in its e-commerce channel, much more oriented towards sensible consumers such as Millennials: more than 50% of online sales are in fact covered by this demographic class (Blumenthal 2016). Currently, the company is increasing its sales in the online segment by 30% a year. With the addition of Wholefoods organic and natural products, more people will buy from the website (McKinsey 2013). Despite what could be a much larger increase, for the deal to generate value it has been forecasted that the e-commerce of Walmart must increase its CAGR from 30% to 31% in the next five years, resulting in a 10,8% exposure to the online sales channel in 2021, up from the 10,4% forecasted without the acquisition. Since these revenues are generated by Walmart, the operating margins of Walmart have been assumed to compute the value of the synergy.

Exhibit 28. Impact of synergies over Walmart's sales.

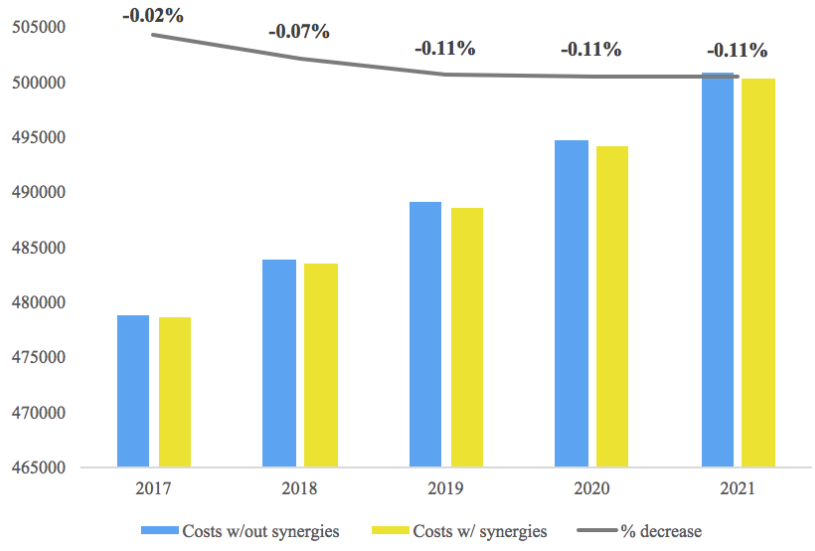


5.6.2 Cost Synergies

Cost synergies are most often the result of economies of scale in production / operations, a better purchasing power toward suppliers, a decrease in D&A derived from a less intensive capital structure (also tied to economies of scale) and the reduction

of personnel cost due to a diminished workforce. Since Walmart and Wholefoods operate mainly in the grocery retailing segment, the new company would benefit from the excellent bargaining skills of Walmart, a more efficient utilization of the fixed assets and reduction of overlapping job roles. D&A savings couldn't be assessed as both companies are currently in a phase in which they're shifting from their traditional business strategies and for which any assumption could lead to the wrong direction. Edward Kelly, analyst at Credit Suisse, analyzed a potential deal between The Kroger and Wholefoods stating that "a deal would marry each company's strength to each other's weaknesses, unlocking massive cost synergies that could reach 3% of Wholefoods' sales". The Kroger is currently the closest competitor of Walmart, but it's still less than half its size. However, to avoid overestimation the costs savings has been kept at the same level. It is also assumed that these savings are spread between SG&A and COGS, vesting immediately and in three years respectively. Despite what have been defined as "massive cost synergies", the effect on the combined entity are minimal: savings will range from 0,02% to 0,11% of total costs.

Exhibit 29. Impact of cost synergies in combined entity's costs.

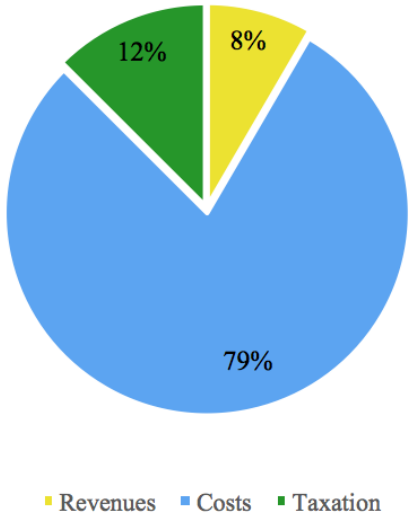


5.6.3 Financial Synergies

Having the two companies very similar interest rates and WACCs, it has been preferred to not influence the valuation by modifying them. However, Wholefoods has a

higher taxation compared to Walmart. A possible explanation is the different location of their headquarters. Despite being both in the US, Wholefoods' is incorporated in Austin, Texas while Walmart is incorporated in Bentonville, Arkansas, the latter having subsidies and tax reliefs to sustain and attract businesses in depressed areas of the Mid-West. Another explanation is the exploitation of US taxes loopholes by the corporations[5].These synergies will have immediate effect; hence, the impact is fully reflected from the first year. The new-borne entity is expected to save $280m in five years thanks to the new incorporation.

Exhibit 30. Weight of synergies by type.



5.6.4 Integration costs

Aside of the purchase price, an acquisition has other costs to be accounted for. The most immediate are the costs relative to the transaction itself, such as legal expenses, due diligence, commissions to banks, brokers or sales agents. However, these costs occur upfront and are incorporated in the acquisition price.

A more substantial cost is instead provided by the synergies themselves. Specifically, achieving the potential of the synergies is never an easy task and must be sided by operational, managerial and financial changes among other. Further,

5 ("How Walmart Is Dodging Billions in Taxes" 2013)

employees must be thought and trained on how to implement changes. Establishing the impact of these costs is hard, but a 2014 report from EY indicates that a further 14% of the deal value is used as integration cost on average (Habeck 2014). This value will be accounted for, resulting in an expense of $408m each year for the next five years.

5.6.5 Summary

The following exhibits shows the impact of the synergies in the combined entity.

Exhibit 31. Combined income statement including synergies.

Income Statement (data in million USD)	2017	2018	2019	2020	2021
Revenues	502830	507608	512579	518008	523889
Revenue Synergies Walmart	158	413	808	1406	2294
Revenue Synergies WholeFoods	0	0	0	0	0
Total Revenue	**502988**	**508020**	**513387**	**519415**	**526183**
Costs					
COGS	-375759	-379277	-382943	-386947	-391292
SG&A	-102974	-104576	-106135	-107781	-109516
Expenses Associated w/ rev Synergie	-151	-394	-771	-1344	-2195
COGs savings Walmart	0	0	0	0	0
SG&A savings Walmart	0	0	0	0	0
COGS savings WholeFoods	0	171	354	368	382
SG&A savings WhioleFoods	82	171	177	184	191
Integration Costs	-408	-408	-408	-408	-408
Total Costs	**-479210**	**-484312**	**-489726**	**-495927**	**-502838**
EBIT	23778	23708	23661	23488	23345
% of sales	4,73%	4,67%	4,61%	4,52%	4,44%

Exhibit 32 gives a visual representation of the impact of the synergies on the combined entity's valuation:

Exhibit 32. Combined entity valuation including synergies.

DCF Valuation	2017	2018	2019	2020	2021	N
EBIT	23778	23708	23661	23488	23345	23578
Income Taxes	-7559	-7537	-7522	-7467	-7421	-7496
Capex	-12193	-12311	-12433	-12566	-12711	-12838
Change in WC	-2036	-295	-303	-329	-346	-350
D&A	10284	10963	11568	12170	12782	12910
FCFF	12274	14529	14971	15296	15649	15806
Terminal Value						366416
"g"						1%
Discount Factor	0,974	0,924	0,877	0,833	0,790	0,750
WACC						5,36%
DCF	11954	13430	13136	12738	12370	274906
Enterprise Value						338533
Short term debt						-5816
Long term debt						-53642
Minority interest						-3033
Cash & equivalents						6506
Equity Value						282548
						3032
Value per Share						93,20

6. Acquisition considerations

Paramount to the success of the deal is the understanding of the shareholder structure of the seller, since these shareholders ultimately must be willing to sell and must agree on price and premium price, if any. In this specific deal, it is also important to understand how the major shareholders have modified their position in the recent past. Since Wholefoods have seen its share price decreasing in the past two years, it might be unlikely that a big institutional investor would be willing to sell its stake and register a loss. More likely is that it would hold the position and reinforce it to offset past losses. Hence, to understand if the acquisition can be made it is necessary to understand these movements.

All the equity of the company appears to be "free floating" (i.e. available to be bought and sold by the public). This float is currently distributed among institutional

investors with Vanguard (9,35%), Jana Partners (7,15%), State Street (4,35%), BlackRock (3,94%) and Sands Capital (3,66%) being the Top 5 investors. Only about 0,05% of the company's equity is held by insiders. Of the top 5 institutional owners mentioned above, all except Sands Capital have increased their position in the past 5 months. Particularly, activist investor Jana Partners bought its full stake in late March 2017. Thus, the premium that Walmart is willing to pay seems to be sufficient to convince the major shareholders to sell as the latter are opening long positions as a sign of belief in the company's future rise in share price or imminent acquisition. On the other hand, the fact that the company has not yet entered in an official selling process combined with Jana Partners late entry triggers questions regarding a selling mechanism already in process, with the potential buyers identified as Amazon, the Kroger and Walmart itself.

6.2 Acquisition Value and Price

The above valuation exercise was carried to assess a specific value to both companies and to understand which is the best price to pay and in which way. A valuation of both companies helped to understand their value and their potential in the medium period. Moreover, the combined valuation and the combined plus synergies valuation were useful to understand how a merged entity would perform. In the calculation of the price, a premium of 24% was applied to the market value of Wholefoods as of 7th May 2017. This premium is based on the recent largest acquisition ever performed by Danone: the French multinational acquired White Wave Foods for $12,5 billions in July 2016, including a premium of 24% (CNBC 2016). The close valuation compared to our proposed deal and the very similar operational areas of White Wave Foods and Wholefoods were at the roots of the choice. The acquisition value of Wholefoods considering the chosen premium represents a price of $14,56bn or $45,72 on a per share basis, a value last seen on the 2nd of May 2015.

For a deal to create value, it is required that the equity value assumed plus the NPV of the synergies exceeds the total acquisition price. The expected NPV of the synergies is given by the difference in enterprise value between the combined entity without synergies and the combined entity with synergies. The difference has been identified at


$2,05bn. The equity value identified by the DCF model is $12,87bn, for a total value of $14,88bn. On the other hand, the market price at the given date is $11,75bn. The premium of 24% corresponds to $2,82bn for a total acquisition price of $14,56bn. The result is a gain of $312m. Therefore, the deal will ultimately generate value for Walmart's shareholder. As discussed, the premium offered seems to be appealing to the numerous return-driven institutional shareholders of Wholefoods, allowing them to offset the losses incurred in the past two years. An acquisition should thus be well-perceived by the target's shareholders.

6.3 Method of payment

The form in which the transaction takes place - stocks, debt or cash, or any combination of those – can have a strong impact in the final valuation and ultimately determine if the acquisition is accretive or dilutive for the acquiring company. In this scenario, the acquisition is proposed with an all-cash transaction, eventually supplied by Walmart's cash reserves for 41,2% of the value, and by issuing new debt for the remaining 58,8%. Despite the company to have more cash than the chosen value, a large cushion has been retained to ensure operational continuity and coverage of any extra-capex requirement. Further, the current market environment favors the use of debt. With inflation and bond returns close to the all-time low, financing the deal in the current market environment with debt is very convenient as it doesn't burn cash reserve nor increases interests rate and distress the company much.

A stock payment has been left aside because the cost of issuing new equity to finance the deal is much higher than the cost of cash or the cost of debt. Being the shareholders the major risk takers, the return on equity is implicitly higher. Further, the share price of Walmart is just above its 52-week moving average, and the precedent valuation methods highlighted a fundamental undervaluation of the company. With a relatively low share price, it would be unwise to finance the transaction with equity since doing so would increase the dilution for current shareholders.

Exhibit 33. Source of Funds.

Source of Funds	% of Deal Va	Amount	Interest Rate
Cash	6000	41,2%	1,00%
Debt	8564	58,8%	4,00%

6.4 Accretion / Dilution

To conclude the valuation exercise, the accretion/dilution model has been performed to quantify the impact over Walmart's shareholders. Such model – and therefore the acquisition - is considered accretive when the deal increase the EPS of the acquiring company in the future. It's instead considered dilutive when the EPS lowers, and thus the shareholder are entitled to less profits on a per share value basis. The model indicates that the deal will be accretive disregarding the implementation of the synergies, albeit the EPS percentage increase will slower with time without their materialization. On the other hand, the shareholders will have a lower growth in the first year which will be more than compensated in the next four, reaching a 6,6% increase by the end of 2021.

Exhibit 34. combined entity's accretion / dilution model.

Accretion/Dilution Model	2017	2018	2019	2020	2021
Combined Revenue	502830	507608	512579	518008	523889
Revenue Synergies through Walma	791	2096	4167	7363	12199
Revenue Synergies through Whole	0	0	0	0	0
Total Revenue	**503621**	**509704**	**516746**	**525371**	**536087**
Combined Costs & Expenses	-478734	-483852	-489079	-494728	-500808
Expenses Associated w/ rev Synerg	-753	-1999	-3977	-7035	-11669
Expenses Associated w/ rev Synerg	0	0	0	0	0
COGS Synergies	0	171	354	368	382
SG&A Synergies	82	171	177	184	191
Integration Costs	-408	-408	-408	-408	-408
Total Costs and Expenses	**-479813**	**-485917**	**-492932**	**-501618**	**-512312**
EBIT	**23808**	**23787**	**23814**	**23753**	**23775**
% of Sales	4,73%	4,67%	4,61%	4,52%	4,43%
Buyers+Seller Interest Income / (E	-2498	-2520	-2548	-2577	-2608
Buyers+Seller Net Non-Operating I	0	0	0	0	0
Foregone Interest on Cash	-60	-60	-60	-60	-60
Interest Paid on New Debt	-343	-343	-343	-343	-343
Pre-Tax Income (EBT)	**20908**	**20864**	**20864**	**20773**	**20765**
Income Taxes	-6705	-6691	-6696	-6673	-6676
Tax synergies WholeFoods	58	58	63	69	74
Income/Loss from Affiliates	0	0	0	0	0
Net Income	**14204**	**14174**	**14168**	**14100**	**14089**
EPS	4,69	4,68	4,67	4,65	4,65
Walmart Standalone EPS	4,66	4,58	4,50	4,43	4,36
Accretion/(Dilution)	0,03	0,10	0,17	0,22	0,29
Accretion/(Dilution) %	**0,6%**	**2,1%**	**3,9%**	**5,1%**	**6,6%**
Calculation Excluding Synergies					
Less: Net effect of synergies (exclu	-288	32	313	472	695
Pro-Forma Pre-Tax Income	**21196**	**20833**	**20550**	**20301**	**20070**
Income Taxes	-6705	-6691	-6696	-6673	-6676
Income/Loss from Affiliates	0	0	0	0	0
Net Income	**14492**	**14142**	**13855**	**13629**	**13394**
Pro-Forma EPS	4,78	4,66	4,57	4,50	4,42
Buyers Standalone EPS	4,66	4,58	4,50	4,43	4,36
Pro-forma Accretion (Dilution)	0,12	0,09	0,07	0,07	0,06
Pro-forma Accretion (Dilution) %	2,6%	1,9%	1,6%	1,6%	1,4%

7. Risk Assessment

As anticipated, there several risks involved in the acquisition.

First and foremost, the two companies are operating in the same industry yet are fundamentally different. Walmart's is a global retailer which grew mainly through organic growth in the past 35 years, adopting a very price focused business model to target the low-income population. Wholefoods is – or was - a dynamic and innovative retailer operating in the hottest industry segment. Its targets are mainly Millennials and mid-to-high income consumers who can afford to sustain a sensible lifestyle. It has also been a pioneer in the fresh food category which has largely contributed to the growth of the past decade, while Walmart's has seldom offered food in forms different than cans, plastic or other long-lasting processed food solutions. As such, differences on all levels are many. However, even Walmart has shifted its strategy where a radical change was needed, acquiring Sam's Club to expand in the wholesaler segment and more recently Jet.com to optimize its online sales channel. As the company has already failed to penetrate the natural food segment with its own brand, an acquisition seems to be the most appealing alternative. Thus, the wide differences between the management and operational policies, implementation strategies and growth paths must be carefully considered before proceeding. The same differences are also likely to keep both top-tier managements in the BoD of the combined entity since none of the two can substitute the other but rather complement it, increasing the importance of communication and mutual understanding.

Second, the go-to-market strategy of the new acquired products must be carefully planned to give the intended benefits. A failure in this phase would likely implies the loss of the revenue synergies and partially the cost synergies, which are fundamental for the success of the deal. The most feasible solution translates into operating the two Wholefoods brands in separate ways. The premium *Wholefood*s brand should reinforce its physical presence in prime location and expand internationally into high-income urban areas, focusing on quality, fresh-food and convenience, while the cheaper *365 by Wholefoods* brand should have a stronger online presence and be used to boost cross-selling of lower-value Walmart products.

Third, the success of the operation is also tied to the perceived value the consumers associate to the new entity and partially to the brand. In the above analysis, it is assumed the new value to increase with the addition of the Wholefoods brand and the net effect to have a strong positive impact on sales and margin through expanded product offering, customers acquisition and customer's retention, ultimately offsetting the negative reputation of Walmart. However, if the integration process is not carried at its best, consumers might associate the Wholefoods brand to Walmart instead, decreasing the perceived value of the natural retailer and preferring alternatives such as Trader's Joe, Costco and The Kroger.

Lastly, the acquisition would give Walmart an even bigger share of the total US grocery market, potentially turning the attention of regulators to the deal. The company must be ready to show evidence of increasing benefits for the consumer – for example through price decrease due to increase in competition in the natural segment or higher convenience through increased geographical reach and boost of online commerce. On the other hand, regulators will look at the increased market share and the ability of the company to impact prices and product offering to assess the feasibility of the deal. Despite the big size of both players, the acquisition is not likely to be halted. Walmart's market share in the US is 25%, while Wholefoods only stands at 2%. The combined market share would therefore be 27%. This increase in market share does not seems sufficient to impact the industry landscape significantly, also considering that many new players such as Trader's Joe, Aldi and Lidl have entered the market recently and are increasing the competition for the traditional US retailers.

8. Conclusion

The purpose of this paper is to analyze a potential acquisition of Wholefoods by Walmart. The study initially looked at the literature on the matter to give a theoretical overview of the reasons, the consequences and the implementation of the processes.

M&A deals are carried for many reasons; however, two main rationales are behind: financial and strategical. Financials are those which improve the profitability of the company through revenue increase, cost saving, operational improvements or better financing options. The strategic rationale instead relies on the assumption that an acquisition would improve the company's market positioning by e.g. offering new products and serving the consumers better or by giving access to new resources and assets.

M&A deals have produced dubious benefits to many companies, and therefore the literature is extremely controversial. Authors on the cons. side argue that the acquiring companies tend to over valuate the synergies obtainable by merging the companies, often to ensure that the acquisition is performed, resulting in a negative impact for the combined entity. Failure to follow a structured, quick and non-frictional path in the integration process also plays a major role to ensure the final success of the transaction. Authors on the pros side argue that in most cases the negative financials were offset by the acquisition of specific, hardly replicable assets, better contracts and access to new customers and information or specific markets. Macro-economic condition and the magnitude of a few deals also influenced results widely.

Regarding the strategic fit of the transaction, Walmart need to ensure the attraction of Millennials while Wholefoods must deploy a more aggressive growth strategy to slow the rapid pace at which competitors are gaining market share. The deal seems to have strategic evidence under the lights of geographic and demographic reach, customer attraction and retention, increased product offering and cross-selling, reputational improvement and possibly international expansion.

Further, the valuations and their dependence over different assumptions provide a detailed image of what drives the price of the two players. Based on the DCF models, Walmart has a valuation of $282bn, while Wholefoods of $12,8bn despite a market

value of $11,75bn. A premium of 24% has been applied to the market value to make the acquisition palatable to institutional investors which owns the biggest chunk of Wholefoods free-floating capital. The combined entity would benefit from synergies derived from revenue increase, cost saving and tax reliefs and ultimately pay back the investment. For the deal to be successful, it must generate only 1% sales more in the e-commerce sales channel of Walmart. Evidence shows that the impact over Walmart's revenues could be much bigger. The deal would result in an accretion of the EPS of up to 6,6% when compared to Walmart as a standalone company.

To conclude, the companies should carefully integrate the businesses if they want to mitigate the other numerous risks involved. Specifically, these includes, in order of importance, the go-to-market strategy of the newly acquired products, the cultural fit of employees and management, the perception that consumers will have regarding the merged entity and the low probability that the deal would be halted by regulators

List of Appendixes

Appendix 1. Walmart historical income statement.

INCOME STATEMENT (million USD)	Observed				
	2012	2013	2014	2015	2016
Revenue	**446950**	**469162**	**476294**	**485651**	**482130**
YoY growth		5,0%	1,5%	2,0%	-0,7%
COGS	-335127	-352488	-358069	-365086	-360984
Gross Profit	**111823**	**116674**	**118225**	**120565**	**121146**
% of sales	25,0%	24,9%	24,8%	24,8%	25,1%
SG&A	-85265	-88873	-91353	-93418	-97041
% of sales	-19,1%	-18,9%	-19,2%	-19,2%	-20,1%
Operating Income	**26558**	**27801**	**26872**	**27147**	**24105**
% sales	5,9%	6,2%	6,0%	6,1%	5,4%
Interest Expenses	-2160	-2064	-2216	-2348	-2467
% of sales	-0,5%	-0,5%	-0,5%	-0,5%	-0,6%
EBT	**24398**	**25737**	**24656**	**24799**	**21638**
Income Taxes	-7944	-7981	-8105	-7985	-6558
Effective Tax Rate / EBT	32,6%	31,0%	32,9%	32,2%	30,3%
Others *	-755	-757	-662	-451	-386
Net Income	**15699**	**16999**	**15889**	**16363**	**14694**
YOY growth	0,0%	8,3%	-6,5%	3,0%	-10,2%
% of sales	3,51%	3,62%	3,34%	3,37%	3,05%

Appendix 2. Walmart historical balance sheet.

BALANCE SHEET (million USD)	Observed				
	2012	2013	2014	2015	2016
ASSETS					
Current Assets					
Cash & equivalents	**6550**	**7781**	**7281**	**9135**	**8705**
Receivables	5937	6768	6677	6778	5624
Inventory	40714	43803	44858	45141	44469
Other*	1774	1588	2369	2224	1441
Total current assets	***54975***	***59940***	***61185***	***63278***	***60239***
PP&E					
Property and equipment	160938	171724	178678	182634	188054
Less accumulated depreciation	-48614	-55043	-60771	-65979	-71538
property and equipment, net	***112324***	***116681***	***117907***	***116655***	***116516***
Other assets, goodwill and deferred charges	26107	26484	25659	23557	22826
Total Assets	**193406**	**203105**	**204751**	**203490**	**199581**
LIABILITIES AND EQUITY					
Current liabilities					
Loans and debt due within a year	6374	12719	12171	6670	6004
Account payable	36608	38080	37415	38410	38487
Others (Accrued liabilities & taxes)	19318	21019	19759	20173	20128
Total current liabilities	***62300***	***71818***	***69345***	***65253***	***64619***
Long term debt	47079	41417	44559	43495	44030
Others (deferred taxes and redeemable)	8266	8132	9508	8805	7321
Total liabilities	**117645**	**121367**	**123412**	**117553**	**115970**
Equity					
Common stock	4034	3952	2685	2785	2122
Retained earnings	67253	72391	73570	78609	78424
Noncontrolling interest	4446	5395	5084	4543	3065
Total equity	**75733**	**81738**	**81339**	**85937**	**83611**
Total liabilities and equity	**193378**	**203105**	**204751**	**203490**	**199581**

Appendix 3. Walmart historical cash flow statement.

CASH FLOW STATEMENT (million USD)	Observed				
	2012	2013	2014	2015	2016
Cash Flow from Operating Activities					
Net Income	**16454**	**17756**	**16551**	**16814**	**15080**
Reconciliation adjustments					
D&A	8130	8478	8870	9173	9454
Receivables	-796	-614	-566	-569	-19
Inventory	-3727	-2759	-1667	-1229	-703
Payables	2687	1061	531	2678	2008
Other operating activities	*1507*	*1646*	*-462*	*1697*	*1569*
Net cash provided by operating activities	**24255**	**25568**	**23257**	**28564**	**27389**
Cash flow from investing activities					
Capex	-12570	-12366	-12388	-11604	-10842
Other investing activities	-3679	-245	-138	479	167
Net cash used in investing activities	**-16609**	**-12611**	**-12526**	**-11125**	**-10675**
Cash flow from financing activities					
Net Debt issuance/repurchase	3485	1487	3015	-5018	-3158
Net equity issuance/repurchase	-6298	-7600	-6979	-2859	-5438
Dividends	-5645	-5859	-6565	-6785	-7013
Other financing activities	-597	-498	-260	-409	-513
Net cash used in financing activities	**-8458**	**-11972**	**-10789**	**-15071**	**-16122**
Effect of exchange rates	-33	223	-442	-514	-1022
Net increase (decrease) in cash and equivalents	-845	1231	-500	1854	-430
Cashand equivalents at the beginning of the year	7395	6550	7781	7281	9135
Cashand equivalents at end of period	**6550**	**7781**	**7281**	**9135**	**8705**

Appendix 4. Walmart forecasted income statement

INCOME STATEMENT (million USD)	Forecast				
	2017	2018	2019	2020	2021
Revenue	**486407**	**490519**	**494859**	**499595**	**504807**
YoY growth	0,9%	0,8%	0,9%	1,0%	1,0%
COGS	-365134	-368221	-371478	-375034	-378946
Gross Profit	**121273**	**122298**	**123380**	**124561**	**125861**
% of sales	24,9%	24,9%	24,9%	24,9%	24,9%
SG&A	-98116	-99472	-100874	-102354	-103926
% of sales	-20,2%	-20,3%	-20,4%	-20,5%	-20,6%
Operating Income	**23157**	**22827**	**22506**	**22208**	**21935**
% sales	4,8%	4,7%	4,5%	4,4%	4,3%
Interest Expenses	-2456	-2478	-2506	-2535	-2566
% of sales	-0,5%	-0,5%	-0,5%	-0,5%	-0,5%
EBT	**20701**	**20349**	**20001**	**19673**	**19369**
Income Taxes	-6581	-6469	-6358	-6254	-6157
Effective Tax Rate / EBT	-31,8%	-31,8%	-31,8%	-31,8%	-31,8%
Others *	0	0	0	0	0
Net Income	**14120**	**13880**	**13643**	**13419**	**13212**
YOY growth	-3,9%	-1,7%	-1,7%	-1,6%	-1,5%
% of sales	2,90%	2,83%	2,76%	2,69%	2,62%

Appendix 5. Walmart forecasted balance sheet.

BALANCE SHEET (million USD)	Forecast				
	2017	2018	2019	2020	2021
ASSETS					
Current Assets					
Cash & equivalents	**11982**	**17154**	**22533**	**28115**	**33902**
Receivables	6552	6607	6666	6729	6800
Inventory	45121	45502	45905	46344	46828
Other*	1936	1952	1969	1988	2009
Total current assets	**65590**	**71215**	**77073**	**83177**	**89538**
PP&E					
Property and equipment	199791	211627	223568	235624	247805
Less accumulated depreciation	-81290	-91651	-102626	-114220	-126439
property and equipment, net	**118501**	**119976**	**120943**	**121404**	**121366**
Other assets, goodwill and deferred charges	22826	22826	22826	22826	22826
Total Assets	**206917**	**214017**	**220841**	**227407**	**233730**
LIABILITIES AND EQUITY					
Current liabilities					
Loans and debt due within a year	5816	5842	5874	5908	5945
Account payable	38966	39295	39643	40022	40440
Others (Accrued liabilities & taxes)	20128	20128	20128	20128	20128
Total current liabilities	**64910**	**65265**	**65645**	**66058**	**66513**
Long term debt	44030	44030	44030	44030	44030
Others (deferred taxes and redeemable)	7321	7321	7321	7321	7321
Total liabilities	**116261**	**116616**	**116996**	**117409**	**117864**
Equity					
Common stock	2122	2122	2122	2122	2122
Retained earnings	85469	92214	98659	104810	110679
Noncontrolling interest	3065	3065	3065	3065	3065
Total equity	**90656**	**97401**	**103846**	**109997**	**115866**
Total liabilities and equity	**206917**	**214017**	**220841**	**227407**	**233730**

Appendix 6. Walmart forecasted cash flow statement.

CASH FLOW STATEMENT (million USD)	Forecast				
	2017	2018	2019	2020	2021
Cash Flow from Operating Activities					
Net Income	**14120**	**13880**	**13643**	**13419**	**13212**
Reconciliation adjustments					
D&A	9752	10361	10975	11594	12219
Receivables	-928	-55	-58	-64	-70
Inventory	-652	-381	-403	-439	-483
Payables	479	329	348	379	418
Other operating activities	-495	-16	-17	-19	-21
Net cash provided by operating activities	**22277**	**24117**	**24487**	**24870**	**25274**
Cash flow from investing activities					
Capex	-11737	-11836	-11941	-12055	-12181
Other investing activities	0	0	0	0	0
Net cash used in investing activities	**-11737**	**-11836**	**-11941**	**-12055**	**-12181**
Cash flow from financing activities					
Net Debt issuance/repurchase	0	0	0	0	0
Net equity issuance/repurchase	0	0	0	0	0
Dividends	-7075	-7135	-7198	-7267	-7343
Other financing activities	-188	26	32	34	37
Net cash used in financing activities	**-7264**	**-7109**	**-7166**	**-7233**	**-7306**
Effect of exchange rates	0	0	0	0	0
Net increase (decrease) in cash and equivalents	3277	5172	5379	5582	5787
Cashand equivalents at the beginning of the year	8705	11982	17154	22533	28115
Cashand equivalents at end of period	**11982**	**17154**	**22533**	**28115**	**33902**

Appendix 7. Wholefoods historical income statement.

INCOME STATEMENT (million USD)	Observed				
	2012	2013	2014	2015	2016
Revenue	**11699**	**12917**	**14194**	**15389**	**15724**
YoY growth		10,4%	9,9%	8,4%	2,2%
COGS	-7543	-8288	-9150	-9973	-10313
Gross Profit	**4156**	**4629**	**5044**	**5416**	**5411**
% of sales	35,5%	35,8%	35,5%	35,2%	34,4%
SG&A	-3412	-3746	-4110	-4555	-4554
% of sales	-29,2%	-29,0%	-29,0%	-29,6%	-29,0%
Operating Income	**744**	**883**	**934**	**861**	**857**
% sales	6,4%	6,8%	6,6%	5,5%	5,5%
Interest Expense, net of Investments	8	11	12	0	0
% of sales	0,1%	0,1%	0,1%	0,0%	0,0%
EBT	**752**	**894**	**946**	**861**	**857**
Income Taxes	-286	-343	-367	-342	-320
Effective Tax Rate / EBT	-38,0%	-38,4%	-38,8%	-39,7%	-37,3%
Others *	5	-4	-8	-21	-4
Net Income	**471**	**547**	**571**	**498**	**533**
YOY growth		16,1%	4,4%	-12,8%	7,0%
% of sales	4,0%	4,2%	4,0%	3,2%	3,4%

Appendix 8. Wholefoods historical balance sheet.

BALANCE SHEET (million USD)	Observed				
	2012	2013	2014	2015	2016
ASSETS					
Current Assets					
Cash & equivalents	89	290	190	237	351
Receivables	197	188	198	218	242
Inventory	374	414	441	500	517
Other*	1443	1088	927	589	865
Total current assets	***2103***	***1980***	***1756***	***1544***	***1975***
PP&E					
Property and equipment	2193	2428	2923	3163	3442
Less accumulated depreciation	0	0	0	0	0
property and equipment, net	***2193***	***2428***	***2923***	***3163***	***3442***
Other assets, goodwill and deferred charges	998	1131	1065	1034	924
Total Assets	**5294**	**5539**	**5744**	**5741**	**6341**
LIABILITIES AND EQUITY					
Current liabilities					
Loans and debt due within a year	1	1	2	3	3
Account payable	247	247	276	295	307
Others (Accrued liabilities & taxes)	369	840	979	954	1031
Total current liabilities	***617***	***1088***	***1257***	***1252***	***1341***
Long term debt	23	26	60	62	1048
Others (deferred taxes and redeemable)	492	546	614	658	728
Total liabilities	**1132**	**1660**	**1931**	**1972**	**3117**
Equity					
Common stock	2592	2765	2863	2904	2933
Retained earnings	1205	1113	957	893	323
Others (noncontrolling interest, OCI)	5	1	-7	-28	-32
Total equity	**3802**	**3879**	**3813**	**3769**	**3224**
Total liabilities and equity	**4934**	**5539**	**5744**	**5741**	**6341**

Appendix 9. Wholefoods historical cash flow statement.

CASH FLOW STATEMENT (million USD)	Observed				
	2012	2013	2014	2015	2016
Cash Flow from Operating Activities					
Net Income	**466**	**551**	**579**	**536**	**507**
Reconciliation adjustments					
D&A	311	339	377	439	498
Receivables	-30	9	-14	-21	-24
Inventory	-37	-42	-41	-61	-11
Payables	10	0	30	20	13
Other operating activities	*200*	*152*	*157*	*216*	*133*
Net cash provided by operating activities	**920**	**1009**	**1088**	**1129**	**1116**
Cash flow from investing activities					
Capex	-262	-339	-447	-516	-395
Other investing activities	-1079	50	-37	61	-500
Net cash used in investing activities	**-1341**	**-289**	**-484**	**-455**	**-895**
Cash flow from financing activities					
Net Debt issuance/repurchase	0	-2	-1	-1	993
Net equity issuance/repurchase	342	-44	-536	-447	-925
Dividends	-95	-508	-170	-184	-177
Other financing activities	50	37	9	10	-4
Net cash used in financing activities	**297**	**-517**	**-698**	**-622**	**-113**
Effect of exchange rates	1	-2	-6	-5	6
Net increase (decrease) in cash and equivalents	-123	201	-100	47	114
Cashand equivalents at the beginning of the year	212	89	290	190	237
Cashand equivalents at end of period	**89**	**290**	**190**	**237**	**351**

Appendix 10. Wholefoods forecasted income statement.

INCOME STATEMENT (million USD)	Forecast				
	2017	2018	2019	2020	2021
Revenue	**16423**	**17088**	**17720**	**18413**	**19082**
YoY growth	4,4%	4,0%	3,7%	3,9%	3,6%
COGS	-10626	-11056	-11465	-11913	-12346
Gross Profit	**5798**	**6032**	**6255**	**6500**	**6736**
% of sales	35,3%	35,3%	35,3%	35,3%	35,3%
SG&A	-4858	-5104	-5261	-5427	-5590
% of sales	-26,3%	-26,3%	-26,3%	-26,3%	-26,3%
Operating Income	**940**	**929**	**994**	**1073**	**1146**
% sales	5,7%	5,4%	5,6%	5,8%	6,0%
Interest Expense, net of Investments	-42	-42	-42	-42	-42
% of sales	-0,3%	-0,2%	-0,2%	-0,2%	-0,2%
EBT	**898**	**887**	**952**	**1031**	**1104**
Income Taxes	-345	-341	-366	-396	-424
Effective Tax Rate / EBT	-38,5%	-38,5%	-38,5%	-38,5%	-38,5%
Others *	0	0	0	0	0
Net Income	**552**	**546**	**586**	**635**	**679**
YOY growth	3,6%	-1,2%	7,4%	8,3%	7,0%
% of sales	3,36%	3,19%	3,31%	3,45%	3,56%

Appendix 11. Wholefoods forecasted balance sheet.

BALANCE SHEET (million USD)	Forecast				
	2017	2018	2019	2020	2021
ASSETS					
Current Assets					
Cash & equivalents	524	1039	1566	2087	2611
Receivables	246	256	265	276	286
Inventory	527	548	569	591	612
Other*	1203	1251	1298	1348	1397
Total current assets	***2500***	***3095***	***3698***	***4302***	***4907***
PP&E					
Property and equipment	3898	3841	3731	3649	3603
Less accumulated depreciation	-531	-602	-593	-576	-563
property and equipment, net	**3367**	**3239**	**3138**	**3073**	**3040**
Other assets, goodwill and deferred charges	929	906	878	851	826
Total Assets	**6795**	**7239**	**7714**	**8227**	**8772**
LIABILITIES AND EQUITY					
Current liabilities					
Loans and debt due within a year	0	0	0	0	0
Account payable	323	336	349	362	375
Others (Accrued liabilities & taxes)	1104	1182	1265	1355	1451
Total current liabilities	**1427**	**1518**	**1614**	**1717**	**1826**
Long term debt	1048	1048	1048	1048	1048
Others (deferred taxes and redeemable)	728	728	728	728	728
Total liabilities	**3203**	**3294**	**3390**	**3493**	**3602**
Equity					
Common stock	2933	2933	2933	2933	2933
Retained earnings	691	1055	1446	1870	2323
Others (noncontrolling interest, OCI)	-32	-43	-55	-69	-85
Total equity	**3592**	**3945**	**4324**	**4733**	**5170**
Total liabilities and equity	**6795**	**7239**	**7714**	**8227**	**8772**

Appendix 12. Wholefoods forecasted cash flow statement.

CASH FLOW STATEMENT (million USD)	Forecast				
	2017	2018	2019	2020	2021
Cash Flow from Operating Activities					
Net Income	**552**	**546**	**586**	**635**	**679**
Reconciliation adjustments					
D&A	531	602	593	576	563
Receivables	-4	-10	-9	-10	-10
Inventory	-10	-21	-20	-22	-21
Payables	16	13	12	14	13
Other operating activities	-343	-36	-31	-38	-40
Net cash provided by operating activities	**743**	**1093**	**1131**	**1154**	**1185**
Cash flow from investing activities					
Capex	-456	-474	-492	-511	-530
Other investing activities	0	0	0	0	0
Net cash used in investing activities	**-456**	**-474**	**-492**	**-511**	**-530**
Cash flow from financing activities					
Net Debt issuance/repurchase	-3	0	0	0	0
Net equity issuance/repurchase	0	0	0	0	0
Dividends	-184	-182	-195	-211	-226
Other financing activities	73	78	84	89	96
Net cash used in financing activities	**-114**	**-104**	**-112**	**-122**	**-131**
Effect of exchange rates	0	0	0	0	0
Net increase (decrease) in cash and equivalents	173	515	527	521	524
Cashand equivalents at the beginning of the year	351	524	1039	1566	2087
Cashand equivalents at end of period	**524**	**1039**	**1566**	**2087**	**2611**

Appendix 13. Valuation ranges of Walmart.

WAL-MART					
Multiples	Value per Share (in USD)				
Public Company Comparables	Minimum Multiple	25th percentile	Median	75th percentile	Maximum Multiple
EV/Revenue	$ 70,12	$ 106,74	$ 147,71	$ 310,51	$ 482,61
EV/EBITDA	$ 47,44	$ 72,29	$ 112,53	$ 143,81	$ 367,00
EV/EBIT	$ 50,89	$ 76,62	$ 93,51	$ 131,85	$ 1 025,43
Recent Transactions					
EV/Revenue	$ 34,18	$ 47,30	$ 62,80	$ 95,41	$ 151,86
EV/EBITDA	$ 30,78	$ 44,62	$ 60,67	$ 92,22	$ 141,48
Valuation					
DCF (4,5%-7,5% Discount Rate; 1,5%-4% Growth)	$ 62,13	$ 86,47	$ 122,26	$ 166,28	
EBITDA (5x-14x Multiple; 2,98%-7% Discount Rate)	$ 73,81	$ 88,59	$ 111,83	$ 131,25	$ 155,62

Appendix 14. Valuation ranges of Wholefoods.

WHOLEFOODS					
Multiples	Value per Share (in USD)				
Public Company Comparables	Minimum Multiple	25th percentile	Median	75th percentile	Maximum Multiple
EV/Revenue	$ 19,11	$ 31,82	$ 42,18	$ 43,69	$ 52,82
EV/EBITDA	$ 26,19	$ 40,03	$ 52,03	$ 58,13	$ 68,64
EV/EBIT	$ 33,69	$ 42,32	$ 53,69	$ 66,28	$ 112,53
Recent Transactions					
EV/Revenue	$ 7,96	$ 12,03	$ 16,84	$ 26,96	$ 44,49
EV/EBITDA	$ 18,56	$ 23,87	$ 30,04	$ 42,16	$ 61,09
Valuation					
DCF (4,50%-7,50% Discount Rate; 1,5%-4% Growth)	24,77	35,66	45,77	61,70	295,52
EBITDA (5,5-10,5x Multiple; 1400-1700 EBITDA)	29,01	36,72	43,60	50,78	60,87

Appendix 15. Combined forecasted income statement.

INCOME STATEMENT (million USD)	Forecast				
	2017	2018	2019	2020	2021
Revenue	**502830,137**	**507607,517**	**512578,995**	**518008,172**	**523888,616**
YoY growth	1,0%	1,0%	1,0%	1,1%	1,1%
COGS	-375759	-379277	-382943	-386947	-391292
Gross Profit	**127071**	**128331**	**129636**	**131061**	**132597**
% of sales	27,7%	28,0%	28,3%	28,6%	28,9%
SG&A	-102974	-104576	-106135	-107781	-109516
% of sales	-22,5%	-22,8%	-23,1%	-23,5%	-23,9%
Operating Income	24096	23755	23500	23281	23081
% sales	4,8%	4,7%	4,6%	4,5%	4,4%
Interest Expenses	-2498	-2520	-2548	-2577	-2608
% of sales	-0,5%	-0,5%	-0,6%	-0,6%	-0,6%
EBT	21599	21236	20953	20704	20473
Income Taxes	-6926	-6810	-6724	-6650	-6582
Effective Tax Rate / EBT	-32,1%	-32,1%	-32,1%	-32,1%	-32,1%
Others *	0	0	0	0	0
Net Income	14673	14426	14229	14053	13891
YOY growth	-3,6%	-1,7%	-1,4%	-1,2%	-1,2%

Appendix 16. Combined entity's valuation.

DCF Valuation	2017	2018	2019	2020	2021	N
EBIT	24096	23755	23500	23281	23081	23311
Income Taxe	-7723	-7614	-7537	-7472	-7414	-7506
Capex	-12193	-12311	-12433	-12566	-12711	-12845
Change in W	-2036	-295	-303	-329	-346	-354
D&A	10284	10963	11568	12170	12782	12910
FCFF	12428	14499	14796	15083	15393	15558
Terminal Value						360682
"g"						0,01
Discount Fac	0,974	0,924	0,877	0,833	0,790	0,750
WACC						5,36%
DCF	12105	13403	12982	12561	12168	273267
Enterprise Value						$ 336 486
Short term debt						-5816
Long term debt						-45078
Minority interest						-3033
Cash & equivalents						12506
Equity Value						$ 295 065

Appendix 17. Synergies Assumptions and Vesting Period.

Imputs					
	2017	2018	2019	2020	2021
Revenue					
Walmart (% increase)	0,0%	0,1%	0,2%	0,3%	0,4%
WholeFoods (% increase)	0,0%	0,0%	0,0%	0,0%	0,0%
Costs					
Walmart	0,0%	0,0%	0,0%	0,0%	0,0%
COGS (% revenues)	0,0%	0,0%	0,0%	0,0%	0,0%
SG&A (%revenues)	0,0%	0,0%	0,0%	0,0%	0,0%
WholeFoods	0,5%	2,0%	3,0%	3,0%	3,0%
COGS (% revenues)	0,0%	1,0%	2,0%	2,0%	2,0%
SG&A (%revenues)	0,5%	1,0%	1,0%	1,0%	1,0%
Financials					
Wholefoods new tax rate	31,8%	31,8%	31,8%	31,8%	31,8%
Debt	0,0%	0,0%	0,0%	0,0%	0,0%
Interests	0,0%	0,0%	0,0%	0,0%	0,0%

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