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# “Alexa, what should we buy next?”

- The proposed acquisition of Ulta by Amazon

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## **Abstract**

E-commerce has rapidly grown for the past 20 years and while some traditional retailers could not survive the fierce competition, others were able to adapt and opened their own online stores. For the past decade, this has been the prevailing trend in the retail environment. In recent years, however, we have been witnessing to the inverse, retailers going from clicks to bricks.

Amazon is known for having completed a high number of M&A transactions since its inception. The last one, in 2017, was the acquisition of Whole Foods Market and it shook the entire retail industry, as fears regarding a possible entrance by the e-commerce leader in the brick-and-mortar space spread.

The purpose of this dissertation is to analyse Amazon's acquisition of Ulta, the leading U.S. beauty specialty retailer, as part of the company's quest for an omnichannel presence. The in-store experience in the \$445Bn beauty industry is of major importance and Ulta's 1070 stores in the U.S. and 28 years of experience in the field stand as valuable opportunities for Amazon.

The recommended bid price is \$331,2 per share, which includes a 30% premium over the market price at the 21st May 2018. This value is justified by net synergies of \$4.123Mm and a \$373Mm value of control. The transaction should be a cash deal carried as a friendly takeover and has the potential of creating \$863.1Mm for Amazon's shareholders and an accretion of 12,4% in the first year's EPS.

Keywords: E-commerce, Mergers and acquisitions, Omnichannel retailing

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## **Resumo**

Com a crescente concorrência imposta pelo crescimento do comércio eletrônico nos últimos 20 anos, muitos retalhistas tradicionais fecharam as suas lojas e, apenas aqueles que se adaptaram, abrindo também, eles próprios, as suas lojas online, conseguiram sobreviver. Mais recentemente, temos vindo a assistir a uma inversão desta tendência: empresas a saírem do espaço online para o espaço físico.

A Amazon já completou várias fusões e aquisições ao longo da sua existência, tendo a última sido a aquisição da Whole Foods Market em 2017. Esta aquisição levantou receios relativamente à possível entrada do gigante do comércio eletrônico no segmento do retalho tradicional.

Esta dissertação propõe a aquisição da Ulta pela Amazon, como forma de alcançar uma estratégia omnicanal. A indústria da beleza tem um caráter bastante experimental, por isso, a aquisição de uma empresa com 28 anos de experiência parece ser o caminho indicado para reforçar a sua posição neste mercado.

A oferta de aquisição pública amigável à Ulta, com um prémio de 30% relativamente ao preço a 21 de maio de 2018, deverá assumir o valor de 331,2 dólares por ação, e ser pago na totalidade recorrendo a dinheiro. Espera-se que a aquisição origine sinergias no valor líquido de 4.123 milhões de dólares e valor acrescido relacionado com controlo de 373 milhões de dólares. Esta transação deverá criar valor para os acionistas da Amazon na ordem dos 863.1 milhões de dólares e aumentar o lucro por ação em 12,4% no primeiro ano após a aquisição.

Palavras-chave: Comércio eletrônico; Fusões e aquisições; Retalho omnicanal

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## List of Abbreviations

AI	Artificial Intelligence
APV	Adjusted Present Value
AWS	Amazon Web Services
BOPIS	Buy Online, Pickup In-store
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CF	Cash Flow
COGS	Cost of Goods Sold
Comps	Comparable Store Sales
GDP	Gross Domestic Product
D&A	Depreciation and Amortization
DCF	Discounted Cash Flow
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EPS	Earnings per Share
EV	Enterprise Value
FCFF	Free Cash Flow to the Firm
IPO	Initial Public Offering
M&A	Mergers and Acquisitions
MRP	Market Risk Premium
NOPLAT	Net Operating Profit Less Adjusted Taxes
PP&E	Property, Plant and Equipment
PV	Present Value
PVTS	Present Value of Tax Shields
R&D	Research & Development
Rd	Cost of Debt
Re	Cost of Equity
Rf	Risk-free Rate
ROE	Return on Equity
ROIC	Return on Invested Capital
SG&A	Selling, general and administrative expenses
TV	Terminal Value
WACC	Weighted Average Cost of Capital
WC	Working Capital

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## **Introduction**

In this fast-paced, innovative and ever-changing world, the question that remains in everyone's head is what comes next. People have long learned how to live with innovation, some were already born in this technological world, others had to learn how to adapt to it. Older generations once walking to the nearest village, watching their black-and-white TV and shopping in the neighbourhood mini-market, suddenly can take the plane to visit a different continent, go to 4D cinemas and shop from their houses using a computer. But with so many possibilities and much more to come, will the old and traditional still have a place in the future?

The retailing industry has seen substantial innovations in recent years, from augmented reality catalogue apps and fitting room magic mirrors to shopping recommendations given by artificial intelligence. But the most disruptive innovation of all times happened 20 years ago, with the rise of online shopping. Since then, e-commerce has rapidly grown and while some traditional retailers could not survive the fierce competition and closed stores, others were able to adapt and opened their own online stores. The question now stands as whether traditional brick-and-mortar stores can still be relevant in today's fully digital world or if they are doomed to end, just like black-and-white TVs.

Amazon was, without doubt, one of the pioneers in e-commerce, and, I dare to say, the most successful one so far. With a \$780Bn market cap, and in the race to become the first company to reach a \$1Tn value, Amazon has grown from an online bookstore to an everything online store. From acquisition to acquisition, Amazon grew not only in size but also in knowledge, capabilities and will to change the retail world as we know it. In 2017, Amazon acquired for the first time a brick-and-mortar chain, representing 472 stores of physical nature. The same type of stores that many speculate are going to disappear in the future ahead. If the company was not led by one of the most admired and influential CEO's in the world, one could even think that this deal was a mistake, but Jeff Bezos has long convinced us that he has a vision for the future, and that vision includes the integration of online and offline stores.

The objective of this dissertation is to propose a target company for Amazon's quest for an omnichannel presence in the retail space. The beauty industry was chosen as a potential candidate to reinforce Amazon's presence in the brick-and-mortar format due to its experimental nature. Consumers enjoy smelling perfumes, trying lipsticks and feeling the products in their hands and,

most importantly, they are engaged to brands that offer them this experience. Beauty specialty retailer Ulta offers exactly this. With over 1070 stores in the U.S. and 27,8 million people engaged in its loyalty program, Ulta might just be what Amazon should acquire next.

This dissertation proceeds as follows. In Part I, I provide a review of relevant academic articles on the topics of M&A and Valuation. Then, in Part II, I present an analysis of the retail industry and a focus on the beauty and personal care industry. In Part III, I introduce the companies involved in the proposed transaction, Amazon and Ulta, and, in Part IV, I discuss the rationale behind it. Part V compiles the results from the financial modelling involved in valuing each company and the merged entity. Finally, in Part VI, I provide some recommendations for how the transaction should proceed and mention the key risks involved.

## Part I- Literature Review

### 1 Mergers and Acquisitions

#### 1.1 M&A Motives

There are seven theories that attempt to explain why mergers occur (Trautwein, 1990). These can be divided into three main groups as illustrated in Figure 1.

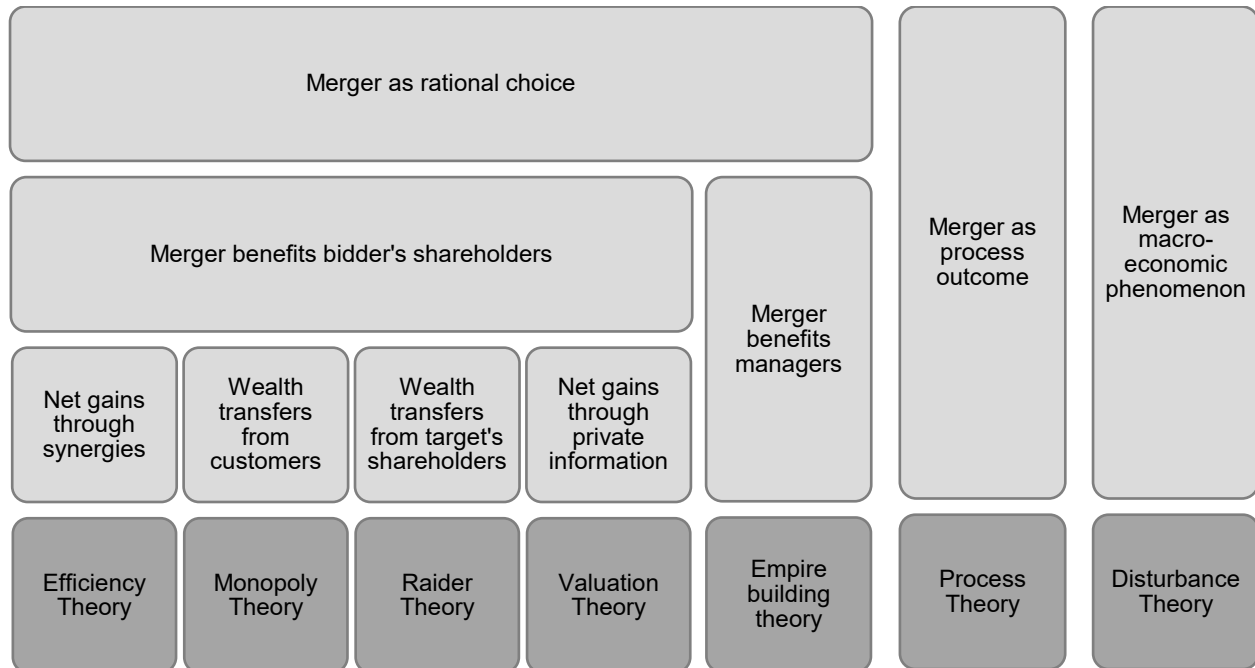


Figure 1. Theories of merger motives. Adapted from "Merger Motives and Merger Prescriptions" by F. Trautwein, 1990, *Strategic Management Journal*, 11, p.284.

According to Trautwein (1990), the theories that are the most plausible are the Valuation, Empire Building and Process theories. The Empire Building theory suggests that, by engaging in mergers, managers are only trying to maximize their own utility, disregarding the maximization of shareholders' value. The motives behind mergers can therefore be either growth maximization or power seeking. The Process theory aggregates different models that consider strategic decisions as non-comprehensively rational choices but rather outcomes of processes influenced by individuals' limited information processing capacity, by organizations' routine solutions to problems and also by political power. Evidence that the acquisition process is an example of a non-comprehensively rational decision was provided by Power's 1983 study (as cited in Trautwein, 1990).

Other theories worth mentioning are the Efficiency Theory, which regards synergies as the reason why firms engage in M&A (Trautwein, 1990), and the Disturbance Theory, which explains the occurrence of merger waves due to economic disturbances (Gort, 1969). Economic disturbances, such as rapid changes in technology and movements in security prices, affect both the individual expectations and the uncertainty involved in the valuation process that precede a merger. Andrade, Mitchell, and Stafford (2001) suggest that merger waves are industry-specific and are often the result of restructuring activity due to industry shocks.

## 1.2 Synergies

In practice, synergies are often seen as the main driver to engage in M&A activity and the reason why companies pay billions of dollars in premiums (Damodaran, 2006). When two companies merge, they create a new and more valuable company with access to opportunities that neither of the two companies could have achieved independently. This increase in value is commonly referred to as synergy.

### 1.2.1 Types of Synergies

There are two types of synergies: Operating and Financial (Damodaran, 2006). Operating synergies refer to cost savings through economies of scale and to strategic advantages such as the combination of different functional strengths, higher growth potential in existing or new markets and increasing pricing power. Eckbo (1983) report, however, that horizontal mergers had no collusive or anticompetitive effects and that merged firms did not benefit from increased pricing power or significant expansion of market share. On the other hand, Financial synergies include tax benefits, greater debt capacity, diversification, although mostly relevant for private businesses, and cash slack (Damodaran, 2006).

### 1.2.2 Synergies in the Context of Multi-channel Retailing

The concept of multi-channel retailing appeared after the proliferation of different channels through which consumers could interact with companies (Neslin et al., 2006). These include brick-and-mortar stores, the internet, kiosks and catalogues, just to mention a few. More recently, as increasing emphasis is being put on the interaction between channels and its borders begin to fade, this concept has evolved to omnichannel retailing (Verhoef, Kannan, & Inman, 2015).



A certain type of multi-channel strategy has become predominant for exclusively online players: to expand into physical locations. There are numerous advantages for this, the first being the billboard effect that is created and that increases brand awareness and brand associations for all channels and drives new customers to the online channel in the long-run (Avery, Steenburgh, Deighton, Brierley, & Caravella, 2012). Moreover, the implementation of both a Buy Online, Pickup In-store (BOPIS) strategy and a cross-channel return policy encourages customers to make additional purchases while in store (Neslin & Shankar, 2009). Nevertheless, Avery et al. (2012) found no evidence of an immediate increase in the flow of new customers to the internet channel after the implementation of a multi-channel strategy, highlighting the importance of maintaining marketing activities in the short-term.

Although cannibalization of sales is often feared, Pauwels & Neslin (2015) report that the opening of physical stores has no impact on internet sales and a significant negative impact on catalogue sales. Cannibalization will occur only if a new channel duplicates existing capabilities or offers superior ones, whereas complementary capabilities generate incremental demand in existing channels in the long-term (Avery et al., 2012).

### 1.2.3 Valuing Synergies

Damodaran (2006) proposes a three-step framework to value synergies: firstly, to compute the value of each firm independently, secondly the value of the combined firm without synergies, and lastly, the value of the combined firm with synergies. The synergy value is simply the difference between the value from the third and second steps. In case value of control exists, meaning the company is poorly managed, the value of control should be added to the target company before calculating the value of the combined company without synergies. The value of control is the difference between the status quo value of the target and the value with the intended changes in management.

### 1.3 Acquisition Premium

The acquisition premium represents the difference between the real value of the target company and the price the acquiring company is willing to pay for it. The average premium reported by Sirower and Sahni (2006) is 36%, while acquisitions with persistent positive returns had an average of 26% and acquisitions with persistent negative returns a 41% premium.

Managers set a bid price high enough to discourage competitive bids (Trautwein, 1990). However, according to Black (1989) managers overpay for target companies mainly due to their unreasonably high optimism and a divergence between their own interests and those of shareholders.

#### 1.4 Method of Payment

Companies can use stock, cash, straight debt or a mixture, usually with convertible securities, to pay for a corporate acquisition. The most important motives for the choice of payment are the mode of acquisition and the investment opportunity set faced by the acquiring firm (Martin, 1996). Regarding the first, tender offers tend to be cash financed because, in this case, offers are made directly to the stockholders and can be subject to competing offers. Making a cash offer is the fastest alternative, since it is not due to the same regulatory scrutiny as a stock offers and enables the acquiring firm to get ahead of the competition. On the contrary, if the acquiring firm has valuable investment opportunities, it is more likely to use stock as a financing method for corporate acquisitions (Martin, 1996). With growth opportunities, managers prefer using equity instead of debt because it allows for more discretion and flexibility (Jung, Kim, & Stulz, 1996). On the other hand, companies with poor investment opportunities benefit from issuing debt, as this will increase its firm value, thus they are more likely to resort to cash offers when pursuing corporate acquisitions (Jung et al., 1996).

#### 1.5 Profitability of M&A Deals

Empirical evidence seems to suggest that engaging in M&A activity generates positive gains (Jensen & Ruback, 1983). On average, target firm's shareholders receive a premium return and bidding firm's shareholders do not lose, meaning that, at least, they are compensated for their opportunity cost. Moeller, Schlingemann, and Stulz (2005), however, find contradicting evidence, suggesting that acquiring firms' shareholders lost, in aggregate, during the period of 1998 to 2001, around \$240Bn.

Post-acquisition returns are influenced by the mode of acquisition and form of payment (Loughran & Vijh, 1997). Tender offers, which are usually hostile, tend to generate higher wealth gains than mergers. When the form of payment is stock, the return to target shareholders is lower than a cash deal but still positive, however, for bidding firm's shareholders, the return is negative (Bruner, 2004). The form of payment conveys to the market that the acquiring firm's stock is overvalued in

case a stock offer is made (Loughran & Vijh, 1997). During the period of 1970 to 1989, Loughran and Vijh (1997) found that cash tender offers yielded positive excess returns of 61,7%, whereas stock mergers earned negative excess returns of 25,0%.

According to Sirower and Sahni (2006), companies struggle to create value for shareholders because a corporate acquisition requires a full up-front payment. This payment is based on the pre-offer market value of the target firm, which, by itself, already reflects possible future performance improvements. Moreover, and often forgotten by managers, synergies cannot be realized without a cost, requiring at least an increment in the capital invested. Lastly, when competitors can easily replicate the benefits of the deal, the return earned by the target and acquiring firms' stockholders is not significantly higher than industry peers.

Roll (1986) presents a different hypothesis to explain the persistence of the takeover phenomenon despite the apparent overestimate of aggregate gains. The Hubris Hypothesis focuses on the individual decisions leading to a takeover, specifically the "overbearing presumption of bidders that their valuations are correct" (Roll, 1986, p. 200). An offer is only observed when the valuation of the target is higher than its market price, however, managers fail to understand that this difference simply represents a positive error in the valuation process and consequently, the takeover premium is nothing more than a random error.

## 2 Valuation

### 2.1 Discounted Cash Flow

The Discounted Cash Flow (DCF) analysis has been the best practice for valuation since the 1970s (Luehrman, 1997). With this analysis, one can calculate the value of a business by discounting its expected future cash flows to present value at a discount rate. The Weighted Average Cost of Capital (WACC) and the Adjusted Present Value (APV) offer two distinct approaches.

#### 2.1.1 Weighted Average Cost of Capital

Under this method, the rate used to discount cash flows is defined as

$$WACC = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - Tc) \quad (1)$$

where  $R_e$  is the cost of equity,  $R_d$  the cost of debt,  $E$  the market value of equity,  $D$  the market value of debt,  $V$  is the total market value of the firm's financing ( $V=E+D$ ) and  $T_c$  is the corporate tax rate.

#### 2.1.1.1 Cost of equity

The most commonly used model to calculate the cost of equity ( $R_e$ ) is the Capital Asset Pricing Model (CAPM), introduced independently by Sharpe (1964), Lintner (1965) and Mossin (1966). This model is based on the mean-variance optimization theory of Markowitz (1952) and predicts that the expected return of a security ( $E(R_i)$ ) above the risk-free rate ( $R_f$ ) is proportional to the systematic or non-diversifiable risk, measured by the beta ( $\beta_i$ ). The market risk premium ( $E(R_m) - R_f$ ) component measures the excess return that investing in the market yields over a risk-free rate.

$$E(R_i) - R_f = \beta_i(E(R_m) - R_f) \quad (2)$$

This version of the CAPM has been tested extensively in the literature. Douglas's study of realized returns of common stocks from 1926 to 1960 (as cited in Jensen, 1972) reported that the average realized returns were not positively related to their covariance with the index of returns, which is inconsistent with the CAPM model. Miller and Scholes review and confirm this result, highlighting the econometric difficulties of estimating the relationships given by the CAPM, specifically the biases given by misspecifications of some components of the equation (as cited in Jensen, 1972).

##### 2.1.1.1.1 Beta

Kaplan & Ruback (1996) test different measures for systematic risk, namely, the firm-based, the industry-based and the market-based betas. The results obtained indicate that industry and market-based betas are the most reliable measures and consistently outperform the firm-based method. The industry-based beta involves calculating industry equity betas and unlever them using the equation

$$\beta_u = \frac{\beta_e}{1 + (1 - t) * \frac{D}{E}} \quad (3)$$

where  $\beta_u$  is the unlevered beta,  $\beta_e$  the levered beta,  $D$  and  $E$  are the market values of debt and equity and  $t$  the tax rate (Damodaran, 2018).

### 2.1.1.2 Cost of debt

Damodaran (2018) suggests calculating the pre-tax cost of debt ( $R_d$ ) summing a default spread to the risk-free rate ( $R_f$ ). The default spread depends on the rating of the company's traded bond or, in case, the firm is not rated, on its interest coverage ratio. The correspondence between these three variables is given in Figure 2.

<i>If interest coverage ratio is</i>		<i>Rating is</i>	<i>Spread is</i>
<i>&gt;</i>	<i>≤ to</i>		
-100000	0.199999	D2/D	18.60%
0.2	0.649999	C2/C	13.95%
0.65	0.799999	Ca2/CC	10.63%
0.8	1.249999	Caa/CCC	8.64%
1.25	1.499999	B3/B-	4.37%
1.5	1.749999	B2/B	3.57%
1.75	1.999999	B1/B+	2.98%
2	2.249999	Ba2/BB	2.38%
2.25	2.499999	Ba1/BB+	1.98%
2.5	2.999999	Baa2/BBB	1.27%
3	4.249999	A3/A-	1.13%
4.25	5.499999	A2/A	0.99%
5.5	6.499999	A1/A+	0.90%
6.5	8.499999	Aa2/AA	0.72%
8.50	100000	Aaa/AAA	0.54%

Figure 2. Default Spread for Large Non-financial Service Companies. Reprinted from “Ratings, Interest Coverage Ratios and Default Spread” by A. Damodaran, 2018.

### 2.1.2 Adjusted Present Value

The APV method divides the value of a company in two components: the value of the unlevered firm and financing side effects, such as the present value of tax shields (PVTs) and costs of financial distress (Luehrman, 1997). The appropriate discount rate to value the first component is the unlevered cost of capital ( $R_u$ ), calculated as

$$R_u = R_f + \beta_u(R_m - R_f) \quad (4)$$

Where  $\beta_u$  is the unlevered beta and  $(R_m - R_f)$  the market risk premium (MRP).

Myers (1974) discusses that both the risk-free rate and the unlevered cost of capital can be used to discount tax shields. The first should be used if book debt ratios are fixed and no uncertainty surrounding future tax shields exists. The second is preferred when debt to enterprise value (EV)

is kept constant over time. The cost of debt can be used as a discount rate as well since tax shields have the same uncertainty as principal and interest payments (Luehrman, 1997).

## 2.2 Relative Valuation

A Relative Valuation can be obtained from three different methods: Comparable Company, Comparable Transaction and Comparable Industry (Kaplan & Ruback, 1996). Although the most reliable methods are the Comparable Transaction and Comparable Industry Transaction, these might be difficult to implement if an insufficient number of comparable transactions exist.

To ensure the peer group has the most similar companies to the company being valued, Alford (1992) suggests focusing on three criteria: industry, risk, as measured by total assets, and long-term earnings growth. For the industry definition, the three digits SIC code is referred as the one providing the most accurate results. Kim and Ritter's 1999 study, however, provides evidence that the SIC codes often misclassify companies (as cited in Liu, Nissim, & Thomas, 2002). Thus, alternative industry classifications such as the Global Industry Classification Standard should be preferred.

The multiples that promote greater accuracy are the forward earnings, followed by historical earnings, cash flow (CF) and book value of equity, and lastly, as the worst performer, sales multiples (Liu, Nissim, and Thomas 2002). This ranking is consistent across all industries with few exceptions. Kaplan & Ruback (1996) report that the Relative Valuation performs well on average and that adding its results to DCF estimates provide the most reliable results.

## Part II- Industry Analysis

### 1 Retail Industry

#### 1.1 Current situation of the industry in the U.S.

##### 1.1.1 Market Size and Segmentation

The U.S retail industry grew 4,5% in 2017, reaching a 5,1 trillion-dollar value (see Figure 3). Between 2000 and 2016, the segments that grew the most were e-commerce, with an 8% Compound Annual Growth Rate (CAGR), and Health & Personal Care with approximately 5% CAGR (Deloitte, 2018c). In 2017, online sales in the U.S. reached \$450Bn, representing 8,9% of total retail sales.

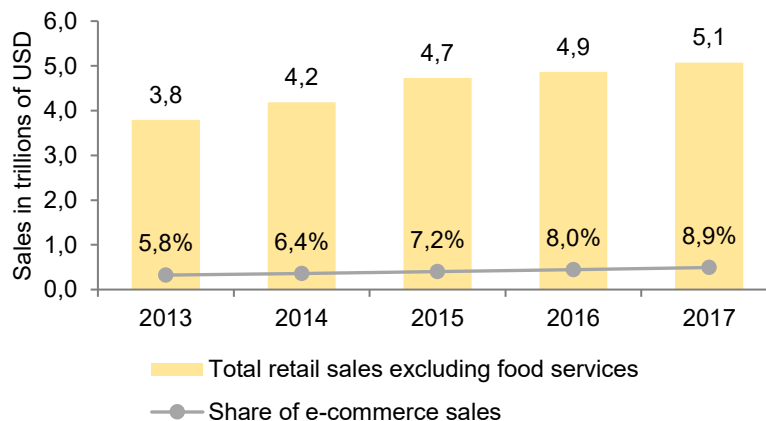


Figure 3. U.S. Retail Sales and E-commerce Penetration Rate (2013-2017). Retrieved from Thomson Reuters Eikon, 2018.

The retailing industry can be divided in different types of retailers such as supermarkets, department stores, specialty retailers and e-tailers. The latter was created to define the expanding number of retailers that sell exclusively online.

##### 1.1.2 Competitive Environment

Retailing is a highly competitive industry with low net margins. The main growth drivers are economic indicators such as Gross Domestic Product (GDP) growth, unemployment rate, consumer confidence and disposable personal income, resulting in a slow market growth rate. For this reason, to grow, retailers need to fight each other for market share. Additionally, price elasticity is high, meaning that it is difficult for retailers to increase prices.

The top 10 players in the global retail industry, represented in Table 1, are all U.S. companies, except for the Chinese e-commerce giant Alibaba Group. Taking into consideration only the U.S. market, the top 10 companies represent 30% of the market.

Table 1. *Top Global Retail Firms and Performance Indicators*

Ranking <sup>1</sup>	Company	Revenues (\$Bn)	Gross Profit Margin (%)	Same Store Sales Growth (%)	Inventory Turnover
1	Walmart	500,3	25,4%	1,4%	8,77
2	CVS Health	184,8	15,5%	0,1%	11,03
3	Amazon.com	177,9	37,1%	N/A	10,38
4	Walgreens Boots Alliance	118,2	24,7%	N/A	9,93
5	Home Depot	100,9	34,0%	7,5%	4,84
6	Alibaba Group Holding	23,0	64,9%	N/A	N/A
7	Costco Wholesale	129,0	13,3%	8,0%	11,41
8	Lowe's Companies	68,6	34,1%	5,7%	N/A
9	Target	71,9	28,9%	N/A	6,50
10	Kroger	122,7	22,0%	2,4%	N/A

Note. Retrieved from Thomson Reuters Eikon, 2018

### 1.1.3 E-commerce

Over the years, there has been a steep increase in online shopping (see Figure 4), leading traditional brick-and-mortar retailers to open their own e-commerce website. Although there are pure website or app-based players, having a presence both in-store and online is becoming increasingly important. In fact, being able to interact with products was referred as the most important reason for shopping in-store, whereas avoiding shipping costs was the second (Deloitte, 2017).

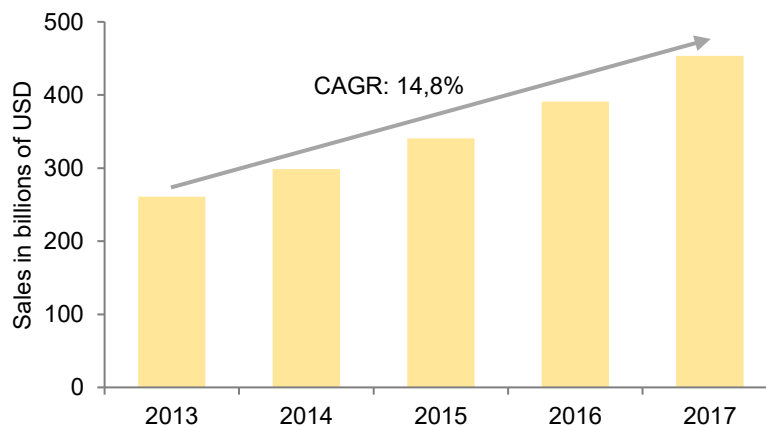


Figure 4. U.S. E-commerce sales (2013-2017). Retrieved from Thomson Reuters Eikon, 2018.

<sup>1</sup> From The World's Biggest Public Companies ranking by Forbes



Walmart, the global retail leader for over 20 years with 9,8% market share in the U.S., offers both in-store and online shopping (Deloitte, 2018b). In addition to having its own online shopping website since 2000, Walmart acquired Jet.com, an American e-commerce start-up, in 2016.

Amazon, the largest online shopping platform in the world, with a 43,5% market share in the U.S. e-commerce market in 2016 (eMarketer, 2017a), acquired in 2017 the brick-and-mortar chain Whole Foods Market. This acquisition was a turning point not only for Amazon, since it was a significant investment in physical stores, but also to the food and grocery stores industry.

In fact, over the last couple of years, the retailing industry has seen a spread of omnichannel retailers. An omnichannel service enables consumers to shop quickly and smoothly, anytime and anywhere with an integrated returns service. One of the key developments in this field has been the BOPIS service. This service fully integrates physical stores and e-commerce websites and allows retailers to drive traffic to physical stores. Since 2015, the adoption of the BOPIS service increased 44%, with 40% of consumers referring that they chose this service to avoid home delivery (Scottsdale, 2017).

## 1.2 The future of the Retail industry

### 1.2.1 Growth Projections

For 2018, the retail industry is forecasted to continue growing due to confident spending boosted by rising incomes, strong labour markets and, overall, a growing U.S. economy. The National Retail Federation forecasts a growth between 3,8% and 4,4% for 2018 retail sales. Regarding online sales, the predictions are substantially higher, with 10 to 12% growth rates (Smith, 2018).

### 1.2.2 M&A Activity

Deal activity is expected to increase in 2018, mainly due to the U.S. tax reform. Additionally, M&A or strategic partnerships with technology companies, as alternatives to Research & Development (R&D), will enable companies to integrate the latest technologies in their businesses, in the form of improved products and services or enhanced customer experience.

### 1.2.3 Trends

Artificial Intelligence (AI) has several applications in retail, from influencing and anticipating purchases to guiding customers' shopping experiences in a highly personalized manner. One example that has already been implemented in many retailers' websites is Chatbot, a computer

program that mimics conversations between people and takes the role of an AI-powered shopping assistant. Apart from answering costumers' queries, in the future, Chatbots should be able to anticipate the behaviour of users and make smart purchase recommendations.

In online shopping, the biggest trend right now is social commerce. Facebook and Instagram are the platforms of choice when it comes to shopping directly on social media platforms, with Facebook accounting for 81% of the total 2016 purchases (Baird & Rosenblum, 2018). Approximately 56% of consumers follow brands on social media with the purpose of viewing products (Chahal, 2016). And only one-third of U.S. social media users have never made purchases directly via social (eMarketer, 2017b).

#### 1.2.4 Key Challenges

In a digital world, consumers are highly influenced by what they see online. In fact, 55% of online consumers search for reviews and recommendations on the internet before buying a product (KPMG, 2017). In physical stores, the trend is similar, as digital interactions influence 56 cents of every dollar spent in stores (Deloitte, 2016). Smartphones play a big role in consumers' shopping journey and have fulfilled the need for constant information in-store and for making better purchasing decisions (Deloitte, 2018a). This reality carries responsibility to companies in terms of what content they post online and how to better engage with consumers using mobile-apps.

As online shopping grows at an astonishing speed, traditional retailers face increasing challenges. In 2017, the number of store closings in the U.S. reached the highest number since 2009 (KMPG, 2018). Department stores and specialty retailers, such as J. C. Penney, CVS and Staples, fall among the ones with the highest store closings, mainly because of shrinking mall traffic and reconfiguration of store networks (Fung Global Retail & Technology, 2018). In 2016 and 2017, store closings exceeded the number of new stores, yet a selected number of retailers have aggressively expanded during this period. These are from the categories of fast fashion, sportswear and beauty.

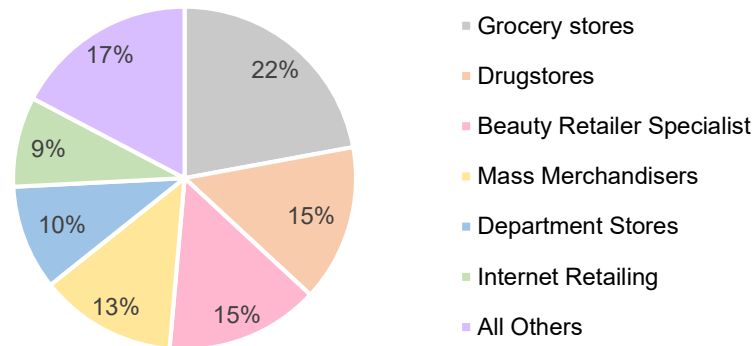
## 2 Beauty and Personal Care Industry

### 2.1 Current situation of the industry in the U.S.

#### 2.1.1 Market Size and Segmentation

The beauty and personal care industry in the U.S. grew 4% in 2016, reaching a value of \$93Bn, according to Euromonitor International data. Globally, this industry is valued in \$445Bn.

In terms of products, this industry can be segmented in: Skin Care, Makeup, Fragrances, Bath & Shower, and others. In terms of market share, Hair Care and Skin Care are the segments with the highest revenues, with approximately 24% market share each. The beauty and personal care industry can be segmented in terms of distribution channel as well. Grocery stores and Drugstores are the most popular channels with a share of 22% and 15% each (Figure 5).



*Figure 5.* U.S. shares in the beauty and personal care industry (2016). Adapted from Channel Shifts in US Beauty Retailing, by Fung Global Retail & Technology, 2017, p.5

Focusing on the Makeup segment, preferences change, and beauty specialty stores capture the largest share of the market, 21% in 2016. Department stores, once the leading channel for makeup, have been losing market share since 2013, to beauty specialty stores and online retailers (Fung Global Retail & Technology, 2017b).

#### 2.1.2 Competitive Environment

The beauty and personal care industry is a highly fragmented market with more than 70,000 purchase locations in the U.S. The retailers where U.S. consumers shop most frequently are represented in Figure 6.

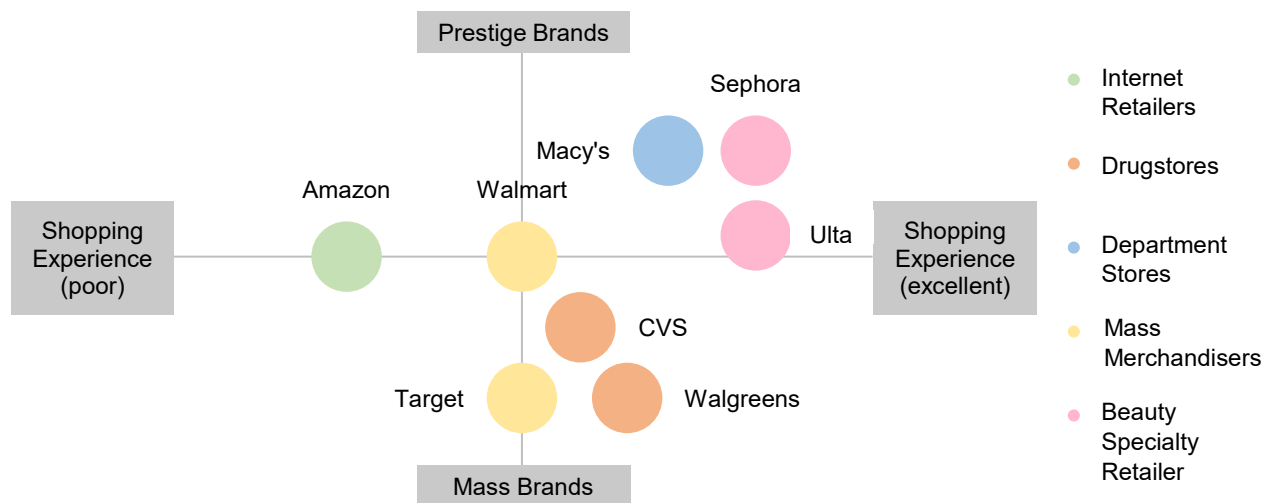


Figure 6. Leading beauty and personal care retailers in the U.S.

Walmart is the undisputable leader for beauty and personal care products, followed by CVS and Target. Beauty specialty retailers, namely Ulta and Sephora, are more attractive to Millennials than to older generations mainly due to their shopping experience, selection of products and quality (Fung Global Retail & Technology, 2017b).

The smaller firms in the market are the ones that innovate the most. That is why big players often acquire young entrepreneurial companies. Recently, innovation has been one of the key drivers of M&A activity, with the acquisition of Modiface.com<sup>2</sup> by L'Oréal a good example. Another catalyst of the beauty M&A has been the access to new distribution channels. Department store Macy's acquired the beauty and spa chain Bluemercury to gain access to a new channel while adding new dimensions to its current offering and leveraging its expertise in omnichannel retailing.

The e-commerce channel is of particular interest when pursuing beauty M&A. Target's acquisition of DermStore, an online beauty retailer, highlights the importance of expanding online market shares and reaching more consumers.

<sup>2</sup> Modiface.com is the tech company that made beauty try-on simulations on live video possible.

### 2.1.3 E-commerce

In 2016, only 9% of the U.S. beauty sales came from online shopping. The e-commerce penetration rate is significantly different depending on the product category, as described in Figure 7.

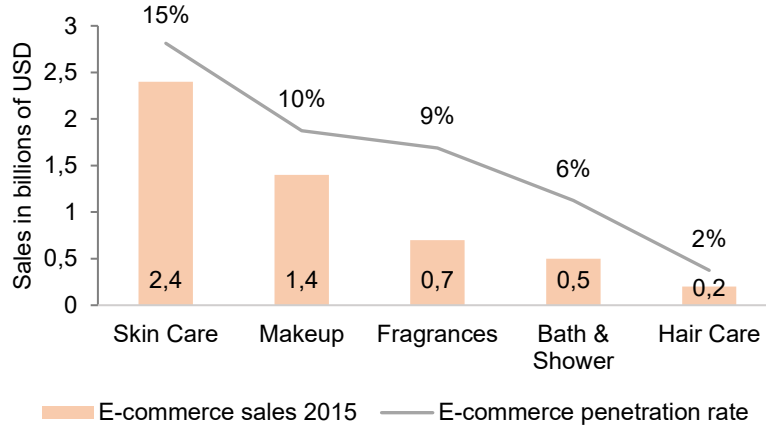


Figure 7. U.S. E-commerce sales and penetration rate by segment (2015). Adapted from Beauty and the E-Commerce Beast, by A.T. Kearney, 2017, p.3

According to an A.T. Kearney (2017) survey, 69% of consumers refer Amazon as one of the websites where they search and buy beauty and personal care products (see Figure 8). Sephora and Ulta appear next on the list mainly due to the selection and quality of its products. From 2014 to 2016, Ulta was the store that increased its ranking the most, jumping from the ninth to the third position.

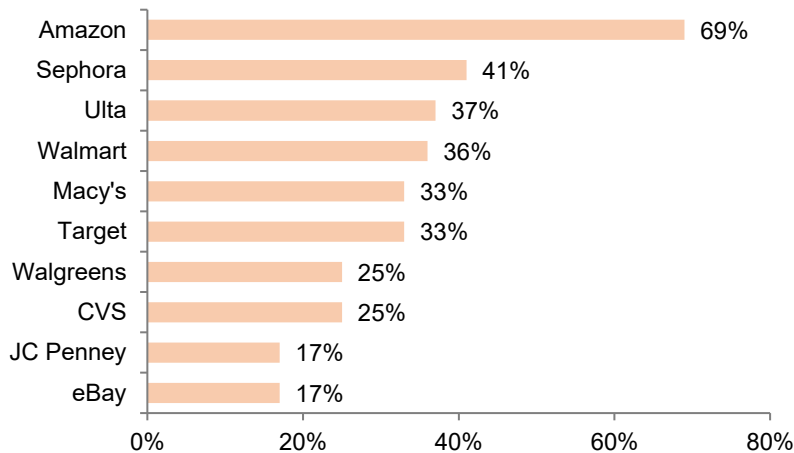


Figure 8. Most used websites to search and buy beauty and personal care products. Adapted from Beauty and the E-Commerce Beast (p. 7), by A.T. Kearney, 2017.

## 2.2 The future of the Beauty and Personal Care industry

### 2.2.1 Growth Projections

The global beauty and personal care market should reach \$429,8Bn by 2022, registering a 4,3% CAGR between 2016 and 2022 (Allied Market Research, 2016). Focusing on the U.S., the industry is expected to continue growing, with Euromonitor International estimating the 2016-2021 CAGR to be between 2 and 3% across all segments. This growth is fuelled by a rising GDP, a 2,3% and 2,2% growth are forecasted in 2018 and 2019 respectively, and by an increase in the per capita disposable income, allowing consumers to spend more money across all product categories (OECD, 2017). A particular driver for the industry is the higher spending of Generation Z consumers in beauty and personal care products as they become financially independent. This is regarded as the most self-conscious generation ever due to excessive social media usage (Fung Global Retail & Technology, 2017c).

### 2.2.2 M&A Activity

Fung Global Retail & Technology (2017) study forecasts that, in the coming years, M&A activity will be motivated by the demands of Generation Z consumers for pure and natural ingredients and cruelty-free products. Multi-brand companies such as L'Oréal and Coty, will need to adapt their brand portfolios accordingly and will probably engage in M&A to acquire smaller specialized companies.

### 2.2.3 Trends

Recently, the beauty industry has seen a rising demand, primarily from Millennials and Generation Z consumers, for online quality beauty content. According to a study, 65% of millennials prefer watching their favourite Youtuber than listening to an in-store beauty advisor (Mao, 2017). In fact, social media, as a whole, has seen its influence on shopping rise, whether it is with photos of influencers showing products in Instagram or videos explaining how to use them in YouTube. Regarding the latter, between 2015 and 2016, the number of beauty videos on the platform increased by 200% (Fung Global Retail & Technology, 2017c). To react to this shift of influences, companies have begun to partner with bloggers and Youtubers to create digital content. MAC Cosmetics, for instance, partnered up with ten Instagram beauty influencers in 2017 to promote its new released lipstick shades.

Augmented reality can have several applications in the beauty industry. Some companies have already started using this technology to engage with consumers in a more unique way, but this trend is expected to grow as we move closer to a fully digital world. MAC Cosmetics recently launched an in-store augmented reality mirror such that customers can immediately see how the products look on themselves without having to physically try them.

#### 2.2.4 Key Challenges

The beauty industry is still very attached to the in-store experience, due to the experimental nature of its products. As long as there is no alternative to trying products physically in-stores, e-tailers will have difficulties in capturing the majority of the market. A disruptive approach to this problem was implemented by Birchbox, an online beauty subscription company, that sends every month personalized samples to customers such that they can try out the products before engaging in a purchase online. In 2016, the company recorded 125% year-on-year revenue growth.

Regarding the online beauty and personal care market, there is still much left to do in terms of building relationships with customers. A.T. Kearney (2017) reported that 67% of consumers use four or more websites when searching for and buying products. The e-commerce market for this industry is growing fast, but if companies are not able to hook consumers, then this increase in number of transactions might just go to the website that offers the best prices. In this sense, physical stores have a clear advantage as they can provide beauty advice, give in-store workshops or host famous Youtube celebrities to engage customers.

## **Part III- Company Profiles**

### 1 Amazon

#### 1.1 Overview of the company

Amazon is the largest e-commerce company in the world present in 15 countries including the U.S., Canada, Mexico and India. It was founded in 1994 by Jeffrey Bezos, who currently is the President, CEO and Chairman of the group. Although the company started as an online bookstore, it later diversified and now offers an extensive range of products including electronic gadgets, food supplies, clothing, beauty products, furniture, and much more. In 2016, Amazon's market share in the U.S. e-commerce industry was 43,5% and about 4% in the retail industry.

Amazon.com is a market place where Amazon sells its electronic devices such as Kindle, Echo and FireTV and its private label products under the brand AmazonBasics, but it is also a market place for third-party sellers to display and sell their products. Amazon also provides advertisement solutions and fulfilment services, which consists on storing, shipping and customer service, to third-party sellers.

For a long time, Amazon was present exclusively online but, in 2015, it opened its first physical store in Seattle, a bookstore. Currently, the company has 13 bookstores across the U.S. and 31 pickup locations. In 2017, with the acquisition of Whole Foods, Amazon added 472 physical stores to its portfolio.

Apart from retail, Amazon has expanded into entertainment with Amazon Studios and the streaming platforms Amazon Music and Prime Video, and also into cloud services. Amazon Web Services (AWS) provides data storage and data management tools for more than 1 million clients. Even though this was not part of Amazon's core strategy, the company has become the market leader in cloud services with approximately 30% market share.

Amazon's strategy has always been very customer-centric, which is reflected in low prices, convenient services and ongoing innovation. The Amazon Prime subscription service was introduced to provide costumers special benefits such as exclusive discounts, two-day free shipping and free access to all kindle books, with new benefits being frequently added.



One of Amazon’s key competitive advantages is, without doubt, its technology. The company has been able to put machine learning to practice in a convenient and valuable way to customers. Alexa, the cloud-based AI assistant on Amazon Echo devices, can play music as requested, control smart-house systems, deliver fashion and beauty advice, among others. Another innovation was the opening of AmazonGo, the first supermarket in the world where customers can walk in and out without having to stand in a check-out line.

## 1.2 Structure of Ownership and Subsidiaries

Amazon’s largest shareholder is its founder Jeffrey Bezos, with 16,3% shares outstanding (Figure 9). The remaining shareholders are mainly investment managers and brokerage firms, predominantly from the U.S. and U.K.

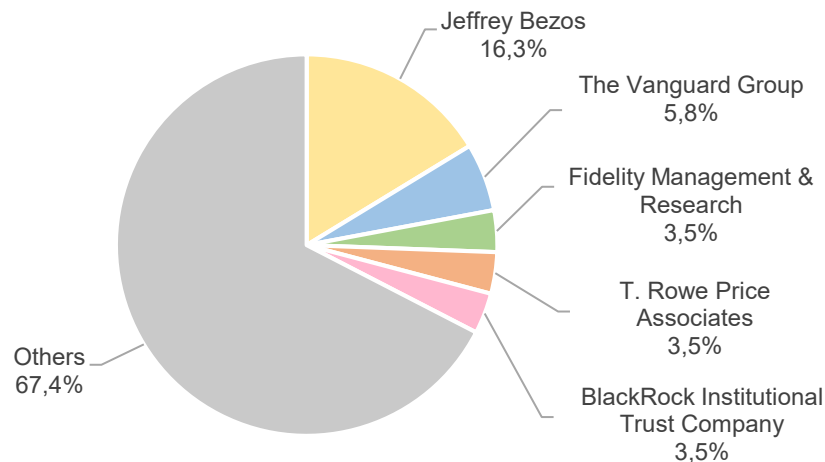


Figure 9. Amazon’s Ownership Structure. Retrieved from Thomson Reuters Eikon, 2018

Amazon has 40 subsidiaries from different fields: audio books, grocery stores, video distribution, among others (see full list on Appendix A). Most of its subsidiaries were acquired by Amazon, such as Souq for \$583Mm and Whole Foods for \$13,2Bn, the largest acquisition the company has ever made.

## 1.3 Financial Statement Analysis

### 1.3.1 Revenues and Costs

Amazon presents its quarter and annual results segmented in three areas: North America, International and AWS. The North America segment consists of the retail sales of consumer

products and subscriptions in the U.S., Canada and Mexico websites, while the International segment refers to all other internationally-based websites. The AWS segment consists of the global sales associated with computation, storage and database services.

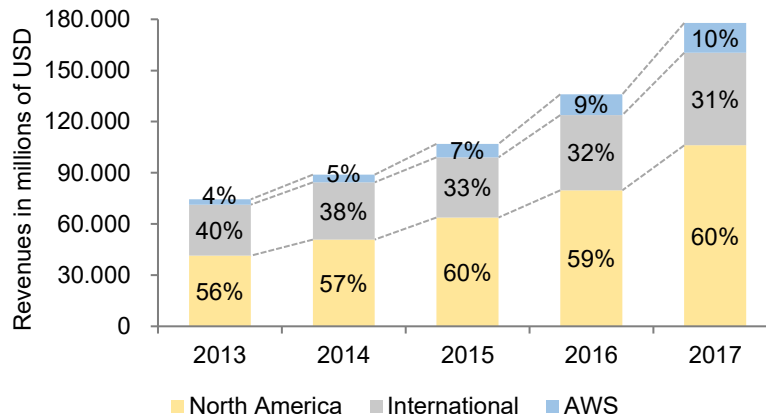


Figure 10. Amazon's revenue breakdown by segment (2013-2017). Retrieved from Company's Annual Reports

As illustrated in Figure 10, the North America segment is responsible for more than half Amazon's revenues. International revenues, although having increased in absolute terms, saw its relative importance to Amazon decrease since 2013. AWS has been the segment with the fastest growth rate, with a 43% revenue growth rate from 2016 to 2017.

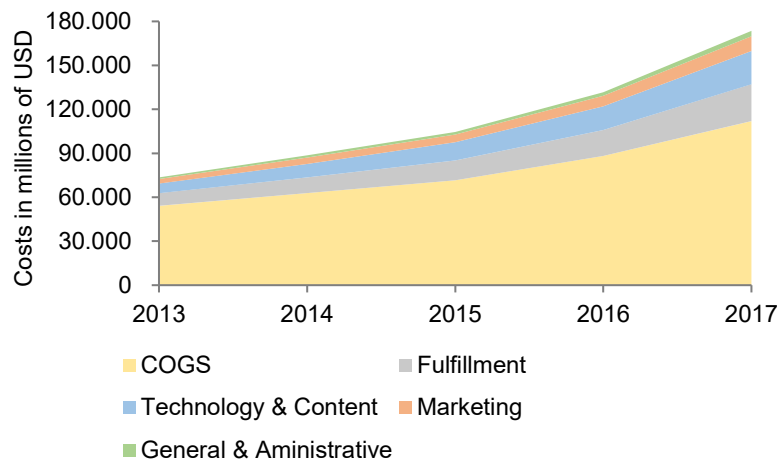


Figure 11. Amazon's operating costs breakdown (2013-2017). Retrieved from Company's Annual Reports

In terms of costs, the Cost of Goods Sold (COGS), from 2016 to 2017, increased significantly in dollar terms due to an increase in product and shipping costs resulting from higher revenues (see Figure 11).

Technology & Content costs are an important figure for Amazon since it covers R&D costs as well as AWS and other technology infrastructure costs. In 2017, these accounted for 13% of total operating costs and amounted to \$22.620Mm. Marketing expenses saw a 40% increase from 2016 to 2017, mainly due to higher spending on online marketing channels and television advertising.

### 1.3.2 Profitability

Being a low margin, high volume business, Amazon has historically maintained an operating margin ranging from 0,2 to 3,1%, as illustrated in Figure 12. In terms of net income margin, its value averaged 0,8% over the last five years, with net income being negative only in 2014.

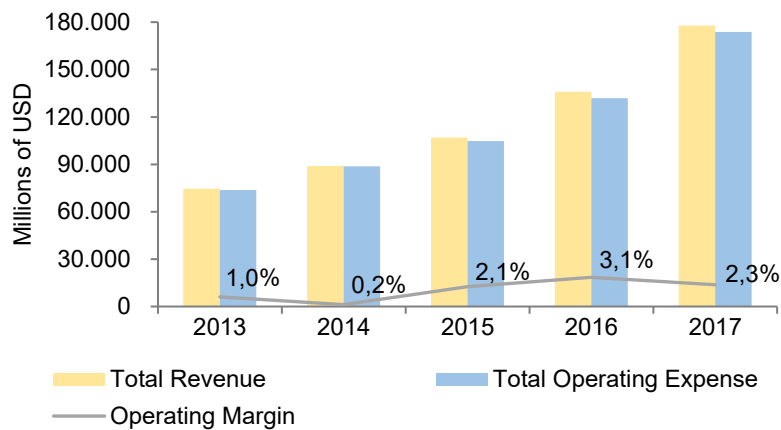


Figure 12. Evolution of Amazon's Operating Results. Retrieved from Company's Annual Reports

### 1.3.3 Key Metrics

In terms of profitability, Amazon is slightly below the industry median for gross margin and operating margin but at the industry level for net income margin (refer to Table 2). Regarding operating metrics, inventory turnover is slightly higher than the industry, which reflects strong sales levels and large discounts.

Table 2. Amazon's key metrics evolution and comparison to industry median (2015-2017)

	2015	2016	2017	Industry Median
<b>Profitability</b>				
Gross Margin	33,0%	35,1%	37,1%	48,5%
Operating Margin	2,1%	3,1%	2,3%	3,2%
Net Margin	0,6%	1,8%	1,3%	1,3%
<b>Operating</b>				
Inventory Turnover	7,7	8,1	8,1	7,7
ROIC	2,2%	7,0%	4,0%	N/A
<b>Liquidity</b>				
Current Ratio	1,1	1,0	1,0	1,5
Interest Coverage Ratio	4,9	8,6	4,8	1,9
Cash Cycle (Days)	(27,5)	(30,9)	(30,9)	(1,8)
<b>Leverage</b>				
Debt/Equity	1,1	1,0	1,6	0,48
<b>Earning Power</b>				
Asset Turnover	1,8	1,8	1,7	1,7
ROE	4,9%	14,5%	9,6%	5,4%
Dividend Yield	0,0	0,0	0,0	2,4%

Note. Retrieved from Thomson Reuters Eikon, 2018

Focusing on liquidity, the company has healthy ratios, with an interest coverage ratio well above industry peers and an advantageous cash cycle. Cash cycles are usually negative for online retailers because these can pay to suppliers after receiving the payment from customers, hence inventory levels do not have to be very high.

Amazon has historically been more leveraged in book value than industry peers. In 2017, the debt-to-equity ratio reached its maximum level following the Whole Foods acquisition. In market values, Amazon has a debt-to-equity ratio of 5,7%.

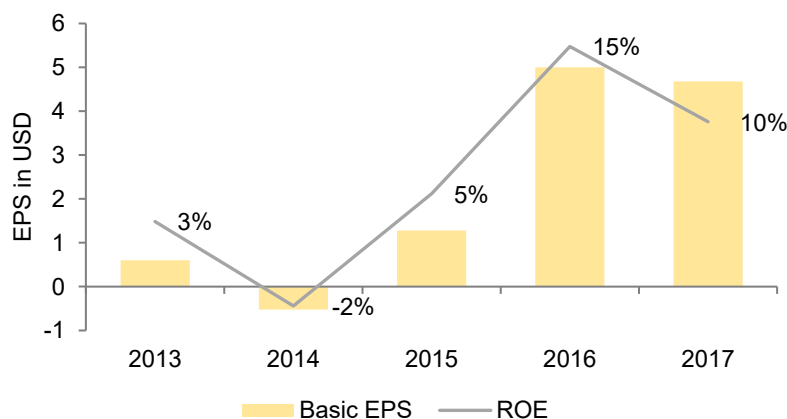


Figure 13. Amazon's Basic EPS and ROE evolution (2013-2017). Retrieved from Thomson Reuters Eikon, 2018

Amazon is known for its focus on long-term growth instead of earnings. In fact, the company's earnings per share (EPS) have been low since 2013 and reached a negative value in 2014 (Figure 13). However, from 2016 onwards, the company has been able to increase its earnings and achieve a return on equity (ROE) well above the industry median. Nevertheless, Amazon has never paid dividends to its shareholders, contrary to industry peers, which have an average 2,4% dividend yield.

#### 1.4 Stock Market Performance

Amazon went public in 1997, at an Initial Public Offering (IPO) price of \$16 on the NASDAQ stock exchange under the ticker AMZN.

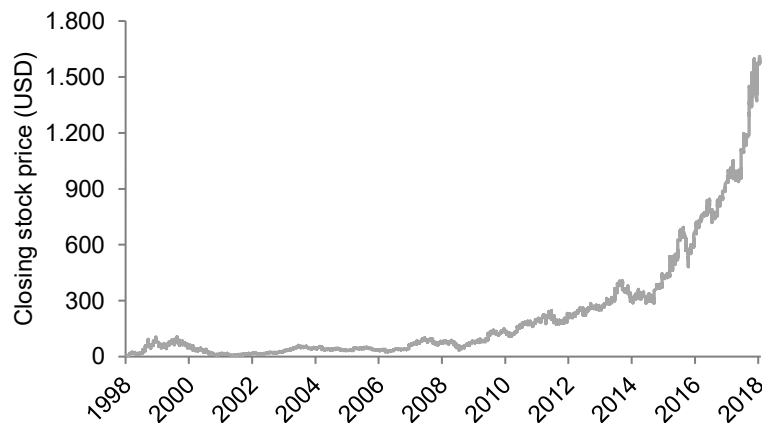


Figure 14. AMZN price evolution on NASDAQ (1998-2018). Retrieved from Thomson Reuters Eikon, 2018

The stock price has considerably increased over the last five years, as illustrated on Figure 14. This trend was also seen in the Internet and Direct Marketing Retail industry, however, from 2008 onwards, Amazon began significantly outperforming peers (Figure 15). As of 8<sup>th</sup> March 2018, 96% of the analyst coverage had a buy or strong buy recommendation on Amazon's stock (Reuters, 2018).

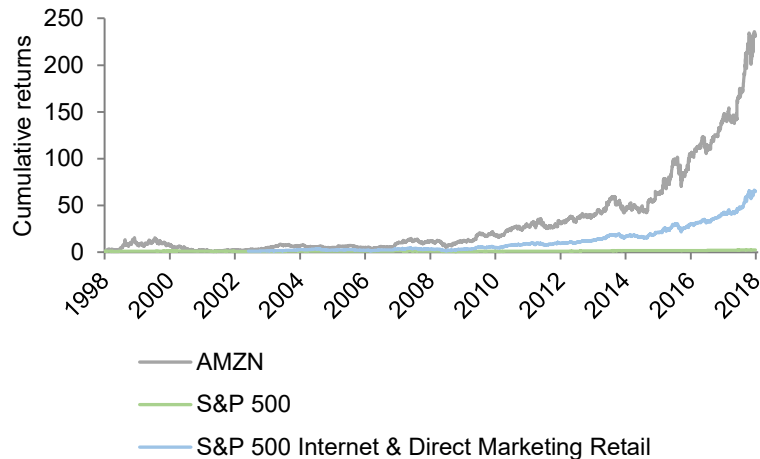


Figure 15. AMZN cumulative returns against main indices (1998-2018). Retrieved from Thomson Reuters Eikon, 2018

## 2 Ulta

### 2.1 Overview of the company

Ulta is the U.S. leading beauty specialty retailer with 1.074 retail stores across 48 states. The company was founded in 1990 under the unique proposition of *All Things Beauty. All in One Place.*<sup>TM</sup>. At that time, prestige, mass, and salon products were sold at distinct channels and Ulta developed a new specialty retail concept, where customers could make all their beauty purchases in a convenient and welcoming shopping environment. Almost 30 years later, the company management continues to envision Ulta as the most-loved beauty destination and has a core strategy of offering relevant, innovative, and exclusive products that excite guests. Ulta is best known for its industry-leading loyalty program called Ulta Rewards with 27,8 million active users as of 2017.

Ulta offers over 20.000 products from 500 mass and prestige brands across all beauty categories, including private label products. The company focuses on four main product categories: makeup; skincare, bath and fragrance; haircare products and styling tools; others, such as nail products and accessories. Ulta's market share in the U.S. beauty market was 6,4% in 2017.

One of the company's key competitive advantage is its distinctive in-store experience and personalized service, which is achieved with 950 square feet per store dedicated to salon services. Every Ulta store has a comprehensive service offering consisting of hair, skin, brow and makeup

services. In the highly fragmented U.S. salon services market, Ulta captured a 0,5% market share in 2017.

In addition to physical stores, Ulta also offers online shopping to its customers which already represents 9,7% of total revenues. In 2017, e-commerce sales increased 64,7% mainly due to digital marketing initiatives and the enhancement of the chain's mobile app and mobile website.

In the second quarter of 2017, the *Store 2 Door* program was piloted in 40 physical stores and later extended to all stores following its success. This program enables customers who are in physical stores to place online orders which are then delivered to their houses and has led to an increase in omnichannel customers.

Ulta has active relationships with over 400 vendor partners, being the Estée Lauder Companies, L'Oréal and Shiseido the most important ones for the chain. In 2016 and 2017, the top ten vendor partners accounted for 64% of total net sales.

## 2.2 Structure of Ownership and Subsidiaries

Ulta's ownership is mainly composed of investment managers, around 90,4% of all outstanding shares. Its largest institutional shareholders are The Vanguard Group and Capital World Investors (Figure 16). Current directors and executive officers as a group account for 5,6% of total ownership.

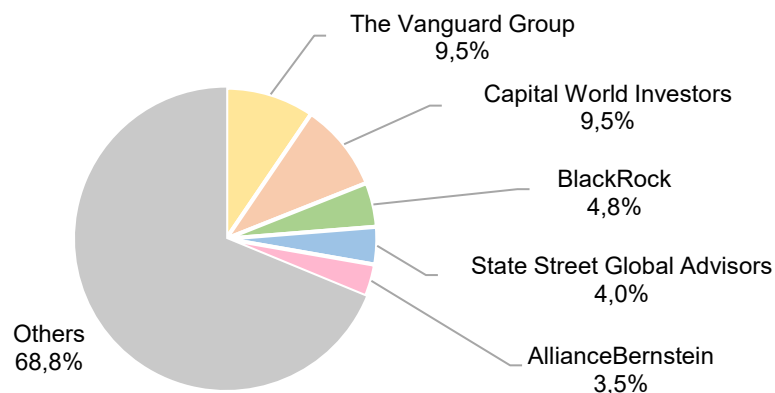


Figure 16. Ulta's Ownership Structure. Retrieved from Thomson Reuters Eikon, 2018

The subsidiaries of Ulta Beauty Inc include Ulta Salon, Cosmetics & Fragrance Inc, Ulta Beauty Credit Services Corporation and Ulta Beauty cosmetic, LLC.

## 2.3 Financial Statement Analysis

### 2.3.1 Revenues and Costs

In 2017, Ulta's revenues increased 21,2% to \$5.885Mm (Figure 17), mainly fuelled by an e-commerce growth of 64,7% and the opening of 102 new stores. E-commerce has been rapidly gaining a higher share of the company's revenues, from 3,6% in 2013 to 9,7% in 2017.

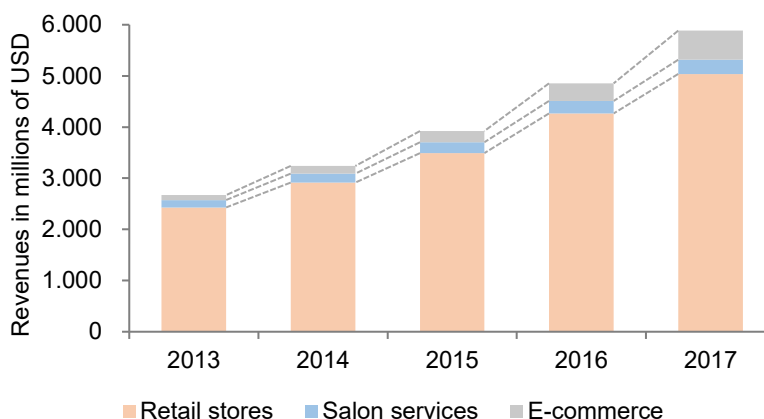


Figure 17. Ulta's revenue breakdown by segment (2013-2017). Retrieved from Company's Annual Reports

The company's cost structure is very stable, with COGS being the most representative cost with an average 74,3% weight on total operating costs. Selling, general and administrative expenses (SG&A) includes various costs such as payroll, advertising, stock-based compensation and corporate office occupancy costs. Advertising expense, in particular, decreased from 6,0% of operating costs in 2013 to 5,1% in 2017 (Figure 18).

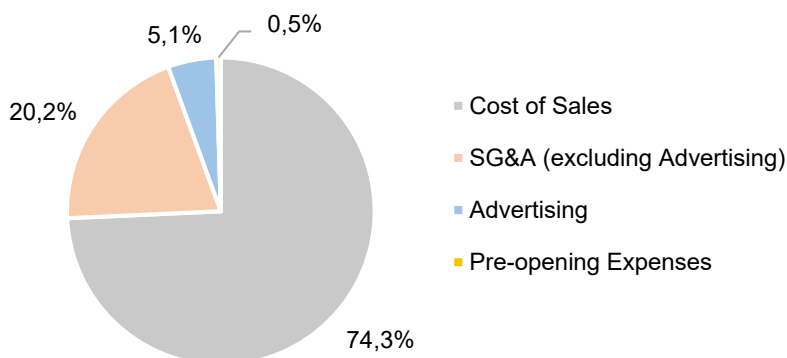


Figure 18. Ulta's cost breakdown (2017). Retrieved from Company's Annual Reports



Pre-opening expenses include store set-up labour, management and employee training, and grand-opening advertising expenses related to the period before a new, remodelled or relocated store is open to the public. In 2017, 102 new stores opened to the public, including 20 stores in new markets (Figure 19).

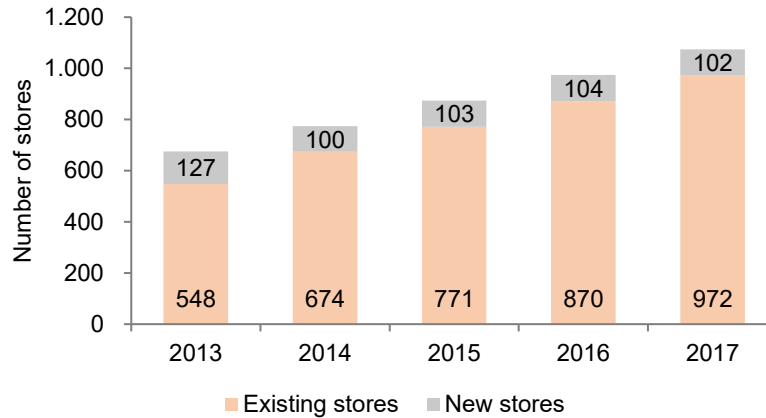


Figure 19. Ulta’s store count (2013-2017). Retrieved from Company’s Annual Reports

### 2.3.2 Profitability

The company’s net income margin increased from approximately 8,4% in 2016 to 9,4% in 2017 (Figure 20). This increase was primarily due to a \$350Mm increase in gross profit and to a significant decrease in income tax. Operating margin decreased from 13,5% to 13,3% in 2017 due to intense marketing and merchandising strategies.

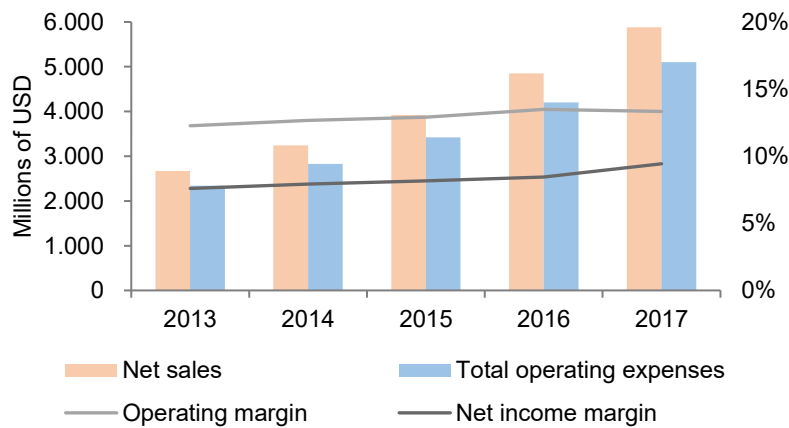


Figure 20. Evolution of Ulta’s Operating Results (2013-2017). Retrieved from Company’s Annual Reports

### 2.3.3 Key Metrics

Table 3 shows the company's key metrics and how they compare to the industry. Comparable Store Sales (Comps) growth was 11,0% in 2017, which included a 6,7% increase in transactions and a 4,3% increase in average receipt, and positively compares to the industry median.

In terms of profitability, gross margin is slightly below the industry, taking an average value of 35,4% versus the industry's value of 37,6%. Operating margin, on the other hand, is almost twice the value of the industry.

The specialty retailing industry is characterized by low leverage values, with a median 0,3 debt-to-equity ratio. Ulta stands below the industry, with no outstanding borrowings since 2010.

Table 3. *Ulta's key metrics evolution and comparison to industry median (2015-2017)*

	2015	2016	2017	Industry Median
<b>Retail</b>				
Comps Growth	11,8%	15,8%	11,0%	1,4%
Inventory per Sq Ft (\$Mm)	82,6	91,9	97,0	50,6
Net Sales per Retail Sq Ft (\$Mm)	450,0	504,0	548,0	340,0
Number of Stores	874	974	1.074	1.077
<b>Profitability</b>				
Gross Margin	35,3%	36,0%	35,6%	37,6%
Operating Margin	12,9%	13,5%	13,3%	6,7%
Net Margin	8,2%	8,4%	10,1%	3,9%
<b>Operating</b>				
Inventory Turnover	3,8	3,6	3,7	3,9
ROIC	18,5%	21,2%	27,7%	N/A
<b>Liquidity</b>				
Current Ratio	3,5	2,9	2,6	1,6
Cash Cycle (Days)	74,0	79,0	77,2	62,7
<b>Leverage</b>				
Assets/Equity	1,6	1,7	1,6	2,2
Debt/Equity	0,0	0,0	0,0	0,3
<b>Earning Power</b>				
Asset Turnover	1,9	2,0	2,2	1,9
ROE	23,8%	27,4%	35,7%	15,0%
Dividend Yield	0,0	0,0	0,0	1,9

Note. Retrieved from Thomson Reuters Eikon, 2018

Basic EPS registered a 23% CAGR during from 2013 to 2017, while ROE was consistently above the industry median of 15,0% and reaching 35,7% on 2017 (Figure 21). The company has never paid dividends, however, it engages in frequent share repurchase programs and, in 2017, \$367,6Mm worth of stocks were repurchased.

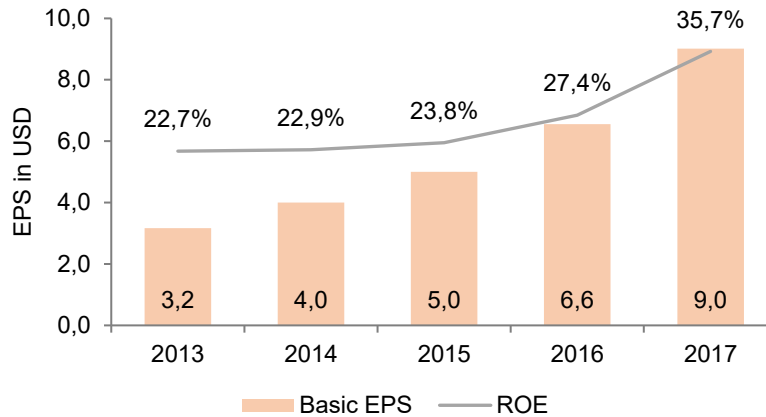


Figure 21. Ulta's Basic EPS and ROE evolution (2013-2017). Retrieved from Company's Annual Reports

## 2.4 Stock Market Performance

ULTA was listed on the NASDAQ stock exchange for the first time in October 2007 at an IPO price of \$18. The evolution of the stock price since then is presented in Figure 22.

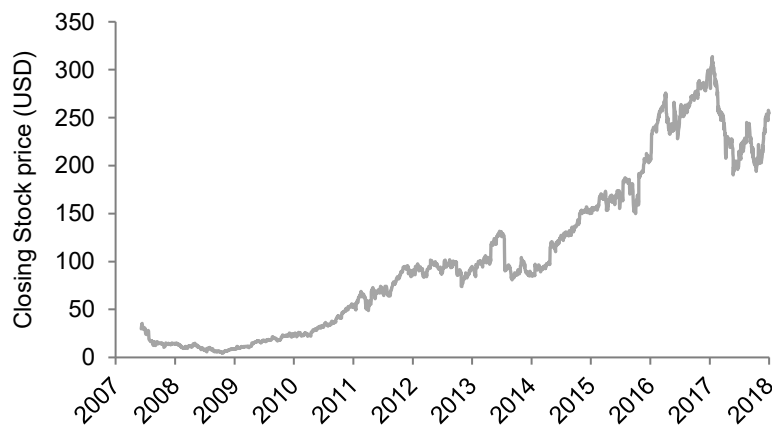


Figure 22. ULTA price evolution on NASDAQ (Nov 2007- Dec 2017). Retrieved from Thomson Reuters Eikon, 2018

In the first three years, Ulta performed below the industry average, however, this trend inverted in 2010 and since then, Ulta has consistently outperformed the industry and the S&P500. From June to November 2017, the stock suffered a 36% loss due to investor sell-off and as a result of second quarter earnings lower than expected and concerns regarding the beauty industry (Figure 23). As of 27<sup>th</sup> April 2018, 69% of the analyst coverage had a buy or strong buy recommendation (Reuters, 2018).

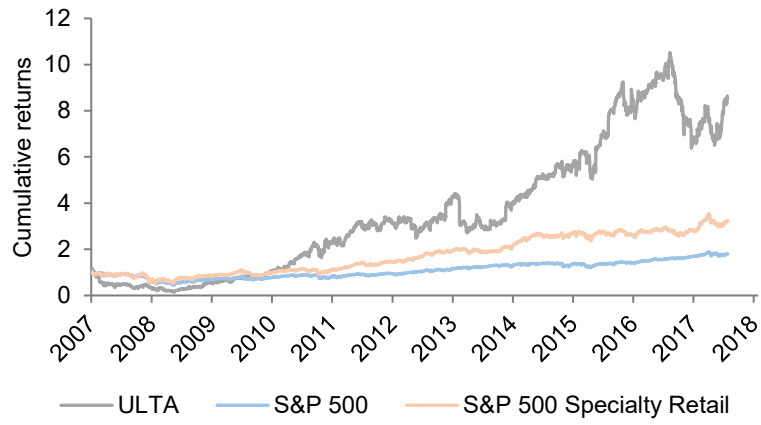


Figure 23. ULTA cumulative returns against main indices (2007-2017). Retrieved from Thomson Reuters Eikon, 2018

## **Part IV- Deal Rationale**

For the past 20 years, Amazon has completed 85 M&A transactions, involving companies from a broad set of activities such as transportation & logistics, publishing and consumer products. These acquisitions have reinforced the ultimate objective of Amazon of being an everything store. More recently, the bold entrance into the grocery market, with the acquisition of Whole Foods, announced Amazon's intention of becoming an omnichannel player.

Many have speculated on what the next large Amazon's acquisition might be. With estimated global annual sales of \$445Bn, the beauty industry could be a potential target to expand the company's offline presence. In 2017, Amazon's luxury beauty segment experienced a 47% growth rate, while mass cosmetics jumped as much as 60%. With clear signs that Amazon's customers are increasingly searching for beauty offers, it is imperative that the company expands its brand portfolio and works on customer loyalty.

The in-store experience in the beauty industry is of major importance. Consumers like to touch and experiment with products before buying and, most importantly, they feel engaged with retailers which provide them a unique shopping experience and compelling loyalty programs. Amazon's current offering, in this sense, is very limited and until the e-commerce leader adjusts to the particularities of this segment, it will not be able to capture a large share of the market.

Acquiring Ulta, the leading beauty specialty retailer in the U.S. with an unmatched shopping experience, appears to be the best solution to strengthen Amazon's position in the industry. Ulta's customer base is very loyal and mainly composed of the so-called Beauty Enthusiasts, which account for 77% of all dollars spent on beauty products according to the company's segmentation study. Ulta's customers also appear to be open to online shopping, proven by a strong e-commerce revenue growth of around 65% in 2017 and the popularity of the try-on app *Glamlab* in which customers can digitally test the wide selection of products sold online. There is little overlap between Ulta's and Amazon's customers, as indicated by a report from Fung Global Retail & Technology (2017). Amazon's main purchase drivers for beauty related products is price while Ulta's are selection and quality, indicating that high income individuals prefer to shop at the brick-and-mortar chain. It is also interesting to note that the characteristics of Ulta's customers make them potential Amazon Echo device users, especially after the introduction of the Echo Show with

the newly released *Let's Get Ready* skill, which gives personalized step-by-step video makeup tutorials depending on events, skin colour, hair colour, among others.

Moreover, valuable customer insights could be gathered to better understand purchasing behaviour in this industry and utilized to improve the online shopping experience for beauty products. On the other hand, Ulta's large network of physical stores across the U.S. would allow Amazon to extend its pick-up locations and thus, take advantage of a BOPI strategy that would lower shipping costs. At the same time, cost synergies in fulfilment and shipping operations would be achieved.

## Part V- Valuation

### A) Valuation of independent companies

#### 1 Amazon

To value Amazon, a sum-of-the-parts valuation is going to be performed. The company was divided in two segments: Retail and AWS. The first consists of Amazon's e-commerce business, subscription services and physical stores retail business from North American and International operations. The second segment, AWS, is related to the company's cloud services platform. Corporate costs and assets are valued separately and added at the end to the enterprise value of Retail and AWS.

Amazon has been able to sustain a revenue growth rate above 20% for the last 15 years with no signs of slowing down. Since the company is clearly not near a sustainable long-term growth rate, the forecast length was set to ten years, with an initial period of continuous high growth from 2018 to 2023 followed by a four-year period of approximation to industry averages. The first period is forecasted in higher detail.

#### 1.1 Forecasts

##### 1.1.1 Retail Revenues

Revenue forecasts for this segment were based on the number of Prime members, due to their importance for the company. In 2017, U.S. Prime members accounted for 63% of total customers and had an average spending between \$1.000 and \$1.300, while non-members spent, on average, \$729 during the year.

Since the company does not disclose the number of Prime members in none of the countries where the service is available, this number was estimated based on historical values for subscription services sales and the Prime membership fee per country (Appendix B). For future years, the number of members is expected to increase due to the management's objective of capturing more members as these tend to spend significantly more on average (Figure 24).

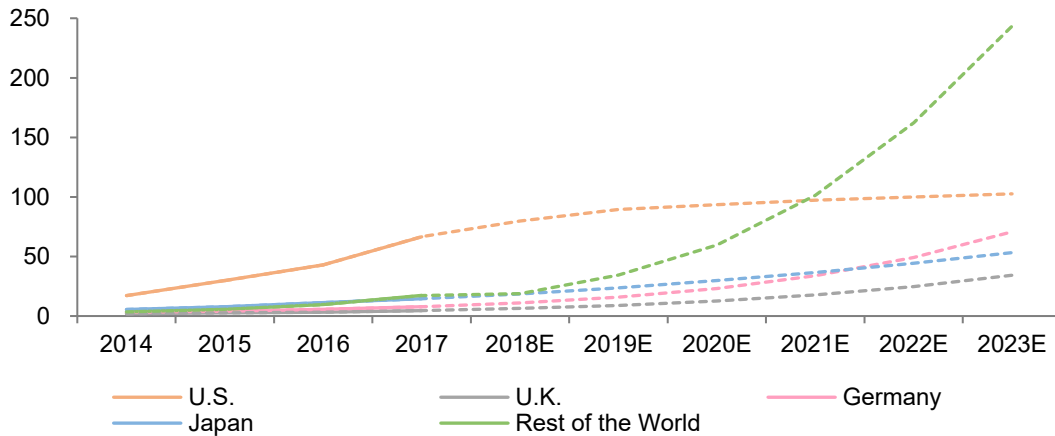


Figure 24. Estimated number of Prime members (2014-2023)

The number of Prime members in the U.S. is near its saturation point because penetration rates in the highest income households are already quite high, at 82% for households with more than \$112k and 67% for households between \$68k and \$112k. Therefore, the majority of the growth in Prime subscribers is expected to come from Amazon’s international operations, specifically India and Brazil. The company has been growing its presence in India for the past years, surpassing India’s e-commerce leader, Flipkart, in 2016 in terms of sales. According to a report from Morgan Stanley, online retail in India is forecasted to grow to \$200Bn by 2026, representing a growth of 1.200% since 2016. Additionally, the company has recently invested R\$97,5Mm in Brazil to expand operations in the country.

To better estimate Amazon’s future Retail revenues, a detailed forecast was performed for each of the company’s sources of revenue:

- E-commerce Business (Appendix C)
- Subscription Services (Appendix D)
- Physical Stores (Appendix E)

The relative importance of each source of revenue for Amazon’s Retail business is expected to change over time, as suggested by Figure 25. Subscription services are going to become Amazon’s second largest segment in Retail by 2023, when they are forecasted to account for 10% of revenues. This goes in line with video streaming increasing popularity and the company’s investment in video content creation for Prime Video.



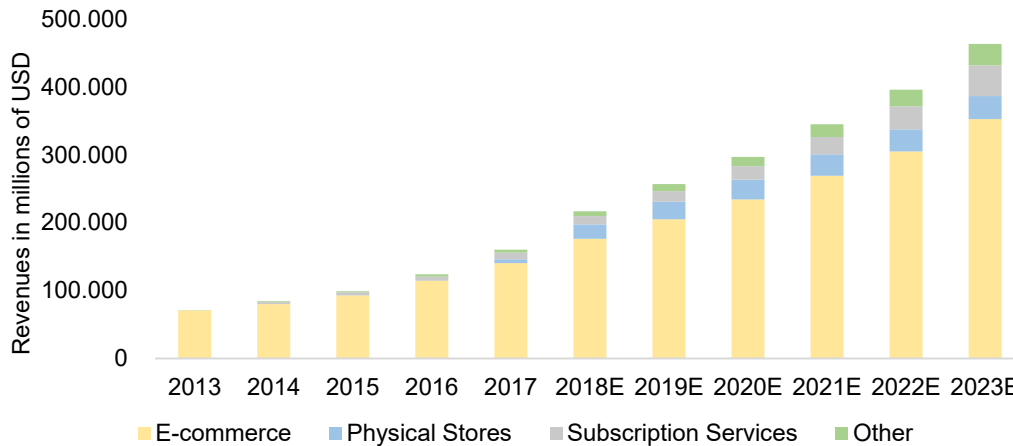


Figure 25. Retail Historical and Forecasted Revenues (2013-2023)

### 1.1.2 Amazon Web Services Revenues

Estimates for AWS revenue were obtained from a combination of the total cloud market growth and the evolution of AWS market share. At the end of the fourth quarter of 2017, Amazon announced three new large enterprise customers fully integrated in AWS cloud and ten companies starting to move its databases to the cloud.

AWS has been the largest cloud platform in the world for several years and has revenues larger than its two closest competitors combined, Microsoft Azure and Google Cloud. Nevertheless, in the fourth quarter of 2017, the year-over-year growth of Microsoft Azure far surpassed that of AWS, with an acceleration of 98% versus 45% (KeyBanc Capital Markets, 2018).

The future of the cloud market seems to be a battle of automation rather than features. So far, companies have fought on the basis of new features, with AWS releasing 1.000 feature enhancements annually for the past two years. However, in 2018, automation seems to be the next competitive advantage that cloud providers seek. For AWS, this shift has several advantages such as cost savings, less time deployed by developers and competitive differentiation from other companies.

Due to the positive prospects of the industry and capabilities of AWS, revenues are estimated to continue growing but at a slower pace. Between 2018 and 2023, a 22% CAGR is estimated and AWS market share is expected to increase until 40% (Appendix F). In the following period, revenue growth is going to significantly slow down, reaching an 11% CAGR until 2027.

### 1.1.3 Operating Costs

According to the company's financial reports, the costs associated to the Retail segment are COGS, Fulfilment, Marketing and Technology and Content, whereas AWS operational costs are mainly Technology and Content. Corporate costs such as payroll, rent, professional fees and litigation costs are recorded under the label General and Administrative and allocated to the Corporate segment.

COGS is forecasted to decrease mainly due to the incorporation of Whole Foods. As discussed in Part II, BOPIS is increasingly popular among online customers and, with this acquisition, Amazon gained access to 472 physical store locations, which the company can use to deliver products to its customers while decreasing its overall shipping costs. Both fulfilment and marketing costs are expected to remain quite stable, while Technology and Content costs for Retail are modelled to increase as a percentage of revenues in comparison to 2017, since it is the management's intentions to add more computer scientists, designers and software and hardware engineers. The evolution of all costs associated with the Retail segment are presented in Figure 26.

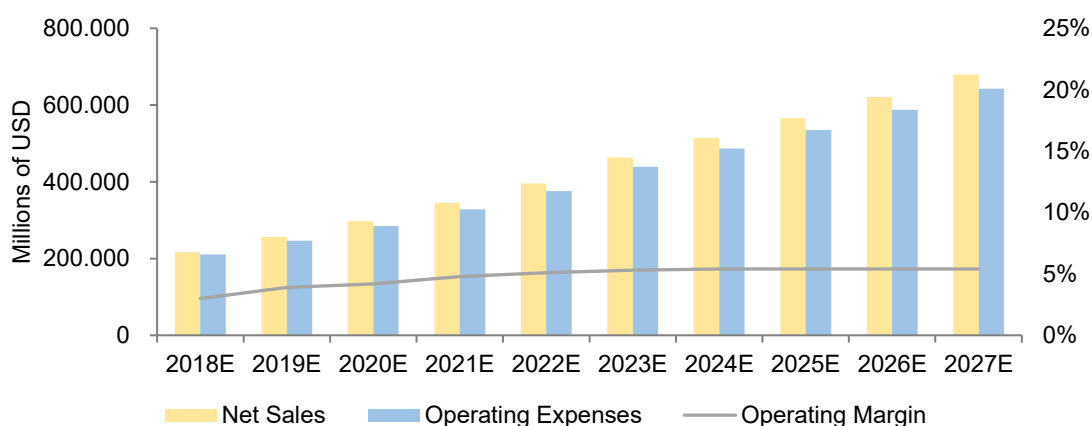


Figure 26. Retail Forecasted Operating Results (2018-2027)

In terms of AWS costs, these are forecasted to grow at a slower pace, as efficiency increases and economies of scale appear. In terms of operating margin, a slight decrease is expected in 2018, following the previous downwards trend, but it should improve rapidly as high margin products such as automation software grow in the sales mix (Figure 27).

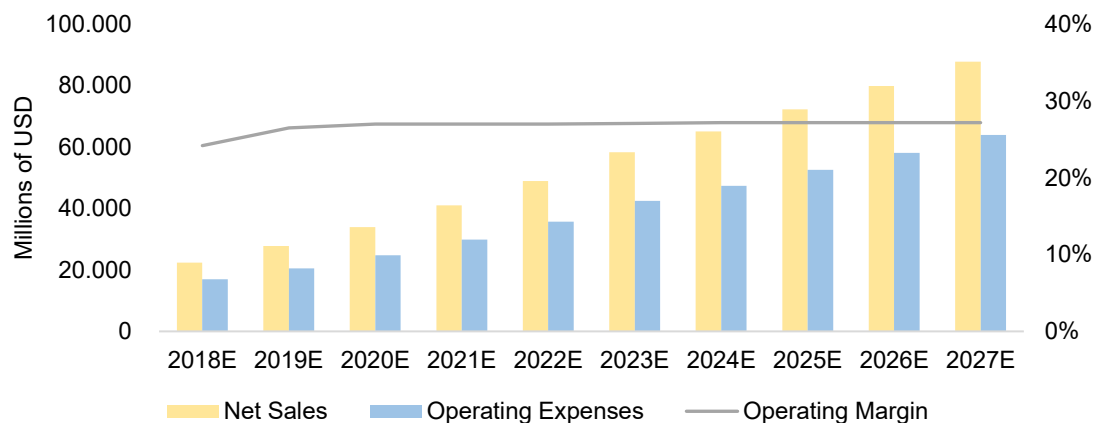


Figure 27. AWS Forecasted Operating Results (2018-2027)

#### 1.1.4 Working Capital

Please refer to Appendix G.

#### 1.1.5 D&A, CAPEX and PP&E acquired under capital and finance leases

Please refer to Appendix H.

#### 1.1.6 Debt Schedule and Capital and Finance Lease Repayments

Please refer to Appendix I.

### 1.2 Cost of capital

Three costs of capital were computed, one for each segment, and the results are presented in Table 4. The WACC for the corporate segment was computed as a weighted average of the Retail and AWS WACC and assumes a value of 7,94%.

Table 4. WACC calculation for Amazon's segments

	<b>Retail</b>	<b>AWS</b>
Rf	2,83%	2,83%
Beta	1,09	0,95
MRP	5,50%	5,50%
<b>Re</b>	<b>8,81%</b>	<b>8,05%</b>
<b>Rd</b>	<b>3,73%</b>	<b>3,73%</b>
Net Debt to EV	9,59%	8,77%
Equity to EV	90,41%	91,23%
Tax rate	21,00%	21,00%
<b>WACC</b>	<b>8,25%</b>	<b>7,60%</b>

The risk-free rate is the 10-year U.S. Treasury Bond yield and the MRP was set at 5,50%, the value recommended by a recent research for the U.S. market in 2017 (KPMG, 2018). The beta used was

the re-levered industry beta, obtained from the median unlevered betas of a restricted peer group formed for each segment through a cluster analysis (Appendix J).

The 3,73% cost of debt results from an A+ credit rating on long-term debt issued on April 2018 and the corresponding 0,9% default spread rate.

Finally, the target capital structure was set to be the industry average for each segment and the tax rate was assumed to be 21%, the level set by the 2017 Tax Act in the U.S.

### 1.3 Discounted Cash Flow Valuation

To compute the enterprise value of Amazon at the end of 2017, the Free Cash Flow to the Firm (FCFF) was computed for each segment, based on the individual and consolidated financial statements (Appendix K). In order to obtain a more accurate estimate for the fair value of the company, the value of PP&E acquired under capital and finance leases was also discounted from NOPLAT, as recommended in the company's annual report.

Two scenarios were tested for the terminal value growth rate. Scenario 1 is the high growth scenario, with a growth rate of 5,56%, and portrays confidence in Amazon's unique competitive advantages, focus on long-term growth and constant disruptive innovations. Scenario 2 is less optimistic with a moderate growth of 4,50% and is intended to provide a reality check.

The results obtained with this method are detailed in Appendix L and summarized in Table 5, where the upside/downside is given relative to the share price of 21<sup>st</sup> May 2018.

Table 5. Amazon's DCF Valuation

	<b>Scenario 1</b>	<b>Scenario 2</b>
Retail EV	568.360	409.344
AWS EV	515.984	343.404
Corporate EV	(249.773)	(186.196)
<b>Total EV</b>	<b>834.571</b>	<b>566.552</b>
(-) Net Debt	13.061	13.061
<b>Equity Value</b>	<b>821.510</b>	<b>553.491</b>
Number Diluted Shares	493	493
<b>Fair Share Price (USD)</b>	<b>1.666</b>	<b>1.123</b>
<i>Upside (Downside)</i>	<i>5,1%</i>	<i>-29,2%</i>

Data in \$Mm except otherwise stated

### 1.3.1 Sensitivity Analysis

A sensitivity analysis was performed with a 0,3-p.p. range in the WACC of Retail and AWS and a 4-value range in the terminal value growth rate containing the two rates previously tested. The impact on the enterprise value of each segment is presented in Figure 28.

		WACC Retail		
		7,95%	8,25%	8,55%
Growth rate	4,00%	398.669	361.712	329.850
	4,50%	455.795	<b>409.344</b>	370.026
	5,00%	532.314	471.652	421.533
	5,56%	655.289	<b>568.360</b>	499.213

		WACC AWS		
		7,30%	7,60%	7,90%
Growth rate	4,00%	331.511	297.059	268.047
	4,50%	388.903	<b>343.404</b>	306.090
	5,00%	471.229	407.560	357.243
	5,56%	618.510	<b>515.984</b>	439.922

Figure 28. Amazon's DCF Sensitivity Analysis on each segment's EV (\$Mm)

### 1.4 Relative Valuation

For the Relative Valuation, the forward multiples EV to Revenue, EV to EBITDA, and EV to Operating CF were obtained from the same peer group as beta (Appendix M). The results for each segment are presented in Figure 29 and Figure 30.

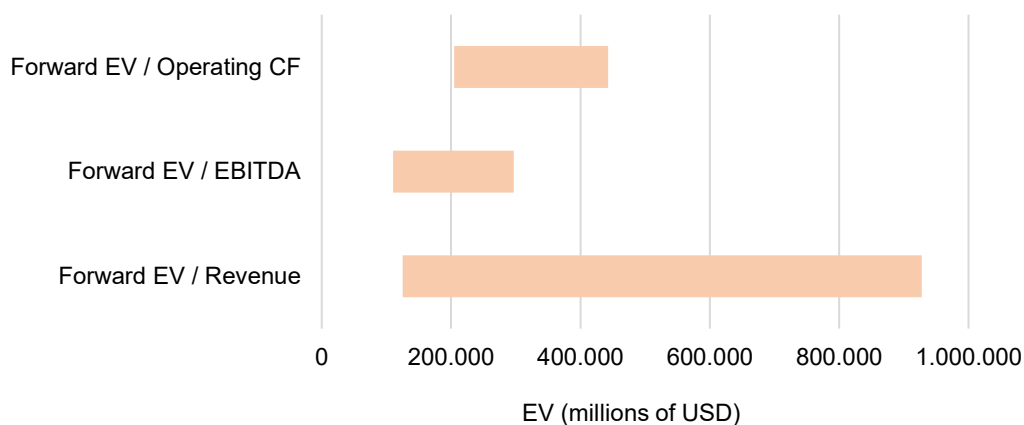


Figure 29. Summary of Retail Relative Valuation

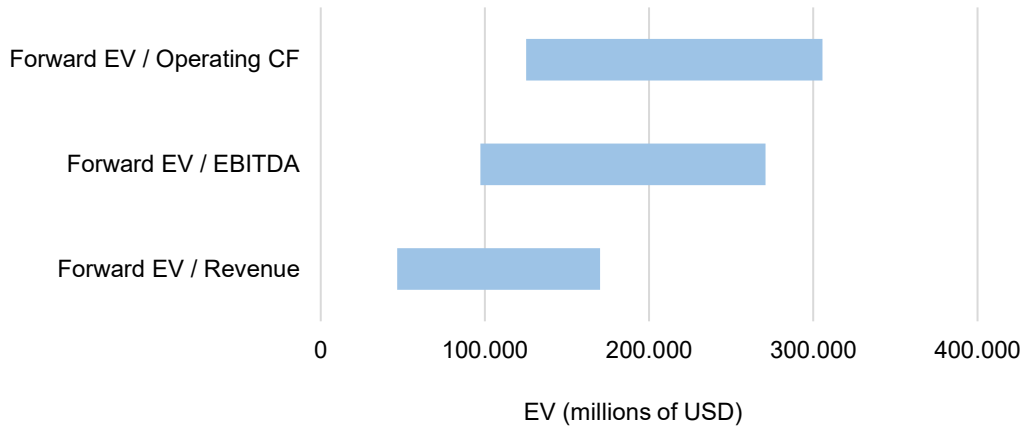


Figure 30. Summary of AWS Relative Valuation

The enterprise value of the consolidated firm under this method is \$663.121Mm and the fair share price \$1.319, a 16,8% downside relative to the market share price. Please find the detailed calculation in Appendix N.

### 1.5 Summary

Figure 31 summarizes the results from the valuation methods used against the 12-month price target and 52-week trading range (Reuters, 2018).

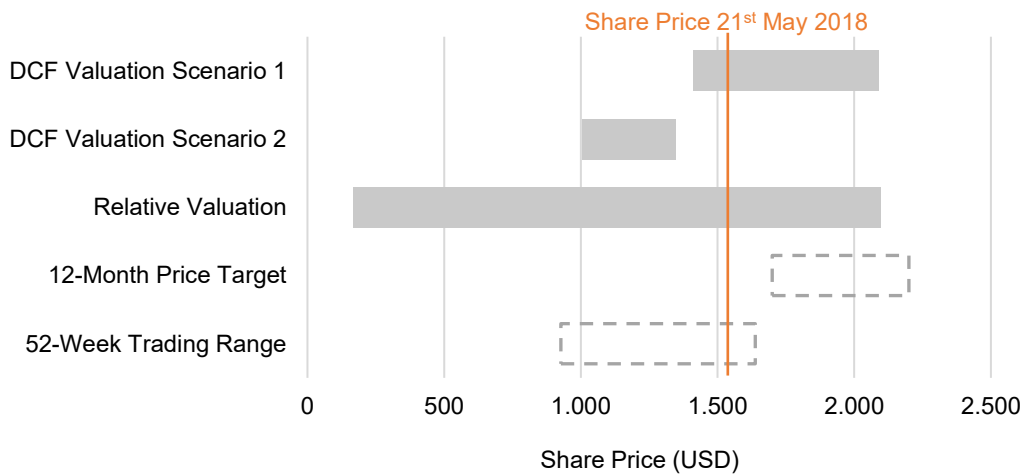


Figure 31. Summary of Amazon's share price per valuation method and market comparison

The enterprise value of Amazon hereafter is assumed to be \$834.571Mm and its fair share price \$1.666, the result of the DCF model Scenario 1. The relative valuation was not considered to yield a good estimation primarily because Amazon possesses a significant competitive advantage over its peers in both of its segments, as discussed in Part III, and reinforced by the fact the company's

multiples are the maximum from the peer group in most cases. The DCF Scenario 1 was preferred over Scenario 2 due to its proximity to the current stock price and assuming efficient capital markets.

## 2 Ulta

To value Ulta, a DCF analysis is going to be performed for the next five years of operations followed by a perpetuity starting in 2023. Additionally, a Relative Valuation is going to be developed to provide a base of comparison.

### 2.1 Forecasts

#### 2.1.1 Revenues

Revenues were estimated for physical stores and e-commerce business aggregately since the firm discloses its Comps growth including internet sales for a better reflection of the business. Firstly, the number of new and closed stores per year was forecasted based on the company’s management prediction that the chain will reach 1.400 stores in the next few years, opening 100 new stores on 2018 (Figure 32). Secondly, an estimation was made regarding future comps growth, following management’s expectations of strong e-commerce growth in the short-term, but anticipating an eventual decline to industry comps growth rate by 2021 (Appendix O).

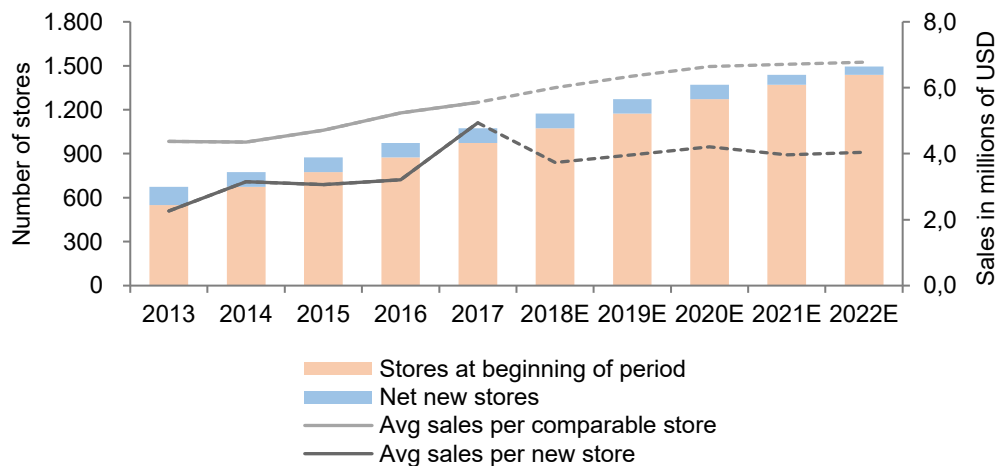


Figure 32. Historical and Forecasted Store Count and Average Sales per Square Foot (2013-2022)

#### 2.1.2 Operating Costs

Ulta’s management team foresees an increase in COGS between 0,5 and 0,7 p.p. for 2018 and, accordingly, gross profit margin is forecasted to reach 34,9% and decrease until 34,7% by 2022.

Operating margin is also predicted to slightly decrease in 2018 and stabilize in 2020 at 11,8% (Figure 33).

SG&A were kept constant at 22,0% of net sales and employee stock-based compensation was maintained at 1,8% of SG&A, the 3-year historical average.

Pre-opening expenses were forecasted according to the predicted number of new, remodelled and relocated stores and the 2017 expense per store. Future remodelled and relocated stores are set as a decreasing percentage of total stores at the beginning of each period minus closed stores until 2020, when this number is expected to stabilize (Appendix P).

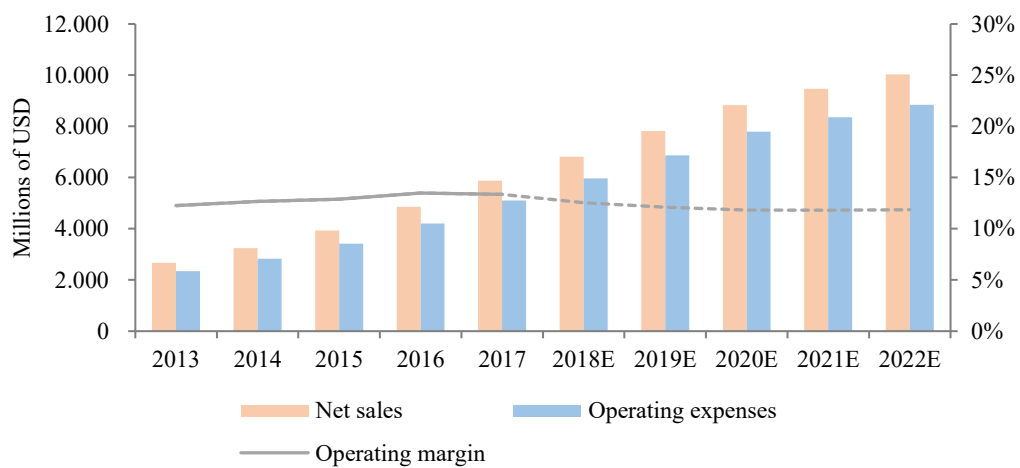


Figure 33. Ultra Historical and Forecasted Operating Results (2013-2022)

### 2.1.3 Working Capital

Please refer to Appendix Q.

### 2.1.4 D&A and CAPEX

Please refer to Appendix R.



## 2.2 Cost of capital

The cost of capital used was 6,61%, which was derived from the components presented in Table 6.

Table 6. *WACC calculation for Ulta*

Rf	2,83%
Beta	0,69
MRP	5,50%
<b>Re</b>	<b>6,61%</b>
<b>Rd</b>	<b>4,02%</b>
D/EV	0,00%
E/EV	100,00%
Tax rate	24,00%
<b>WACC</b>	<b>6,61%</b>

The risk-free rate is once again the 10-year U.S. Treasury Bond yield and the MRP was set, equally, at 5,50%. For the beta calculation, a cluster analysis was performed to extract the median unlevered beta which was then re-levered to the company's target capital structure (Appendix S).

Ulta's cost of debt is 4,02%, which represents the interest rate (LIBOR+1,25%) of its unused revolving credit facility expiring in 2022. This was the cost considered since Ulta does not have any outstanding borrowings since 2009. The target capital structure was marked at a 100% equity to EV based not only on Ulta's historical zero debt balance sheet but also on the management's intentions of sustaining this capital structure in the future.

Finally, the tax rate was assumed to be 24%, the expected level for the forecasted period after the changes set by the 2017 Tax Act in the U.S.

## 2.3 Discounted Cash Flow Valuation

To arrive at the enterprise value of Ulta at the end of 2017, the FCFE was computed based on projected financial statements exhibited in Appendix U. The terminal growth rate considered for 2023 onwards was 2%, the U.S. inflation target set by The Fed.

The main results are summarized in Table 7, where the upside/downside is given relative to the share price of 21<sup>st</sup> May 2018. The full model can be consulted in Appendix T.

Table 7. Ulta's DCF Valuation

EV	16.262
(-) Net Debt	(397)
<b>Equity Value</b>	<b>16.659</b>
Number Diluted Shares	62
<b>Fair Share Price (USD)</b>	<b>268,8</b>
Upside (Downside)	5,5%

Data in \$Mm except otherwise stated

### 2.3.1 Sensitivity Analysis

A sensitivity analysis of Ulta's enterprise value is given in Figure 34. A range of 3-p.p. was tested on the company's WACC and terminal value growth rate.

EV (\$Mm)		WACC		
		6,3%	6,6%	6,9%
Growth rate	1,7%	16.493	15.408	14.538
	2,0%	17.485	<b>16.262</b>	15.290
	2,3%	18.625	17.235	16.141

Figure 34. Ulta's DCF Sensitivity Analysis

### 2.4 Relative Valuation

The multiples used to value Ulta were the forward Price to EPS, EV to Operating CF and EV to EBIDTA and the peer group used was the same as for the beta computation. The enterprise value that results from each multiple is illustrated in Figure 35.

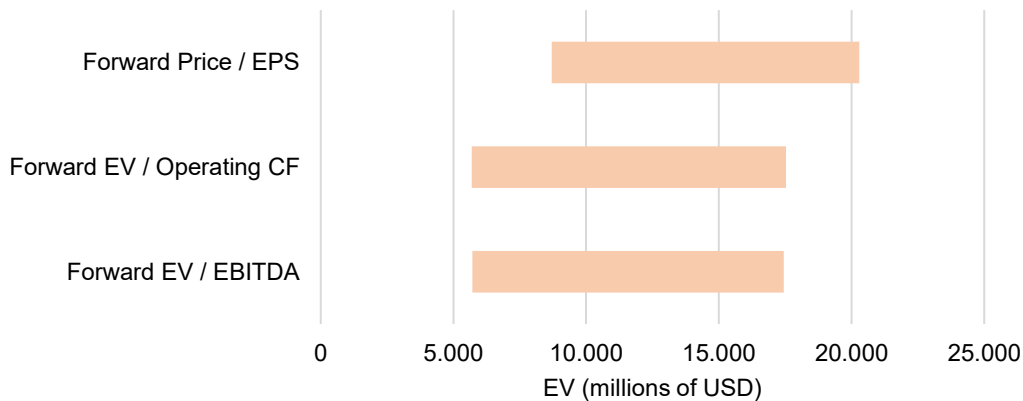


Figure 35. Summary of Ulta Relative Valuation

Since the values yielded by the last two multiples are fairly close, the enterprise value of the firm is assumed to be the average of the two, \$11.908Mm, and the fair share price \$198,56, a 22,1% downside relative to the market share price.

## 2.5 Summary

The results obtained from the different valuation methods are summarized in Figure 36, in comparison to the 12-month price target and 52-week trading range (Reuters, 2018).

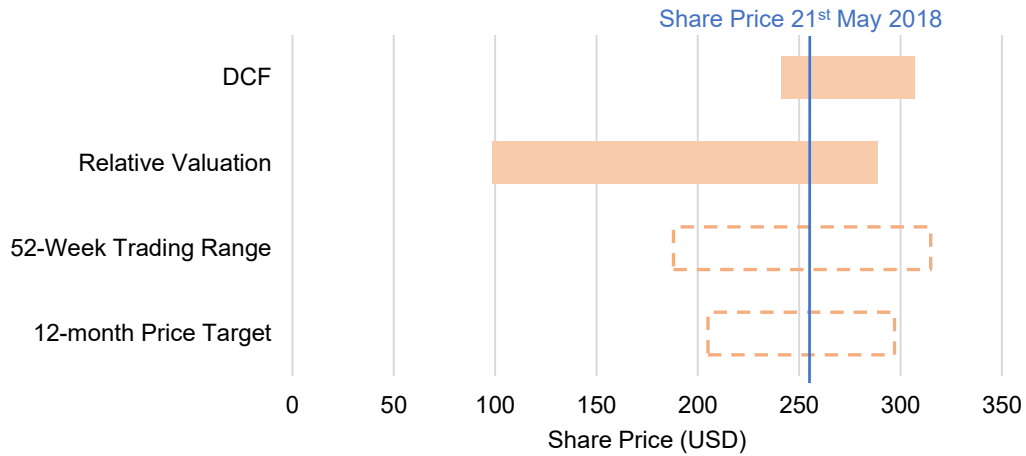


Figure 36. Summary of Ulta's share price per valuation method and market comparison

Hereafter, the enterprise value of Ulta is assumed to be \$16.262Mm and its fair share price \$268,8, the result of the DCF model. Although the Relative Valuation yields a distinct result, the outstanding performance of Ulta in the last years, despite the wave of store closings that the industry witnessed, conveys confidence in the retailer's prospects.

## B) Valuation of Merged Entity

### 1 Value of Control

If we recall Ulta's no-debt policy, it is clear that the company does not have an optimal capital structure. The benefits of an increase in leverage could easily be achieved by the current management team if the debt policy was to be changed, hence the value created by increasing the company's leverage is going to be assessed as the result of a change in control and not as a financial synergy.

To value the effect of this change on enterprise value, an APV method was implemented to compute the value of the levered firm and, afterwards, to compare it to the firm's unlevered value. The chosen market debt-to-equity ratio to portray the optimal capital structure of Ulta was the specialty retail industry median of 14,4% and the implicit new debt to be issued \$2.000Mm. The interest rate considered was the same as the company's current unused revolving credit facility expiring in 2022, although in reality the rate would be higher due to increased risk.

The output of the APV valuation with the optimal capital structure is presented in Appendix V and yields an enterprise value of \$16.635Mm with PVTs around \$395Mm and bankruptcy costs of \$22Mm. The value of control is therefore \$373Mm.

### 2 Merged Entity Without Synergies

The value of the merged entity without synergies is \$850.833Mm, which is simply the sum of each company's EV. Accounting for the value of control, this value raises to \$851.206Mm, as represented in Figure 37.

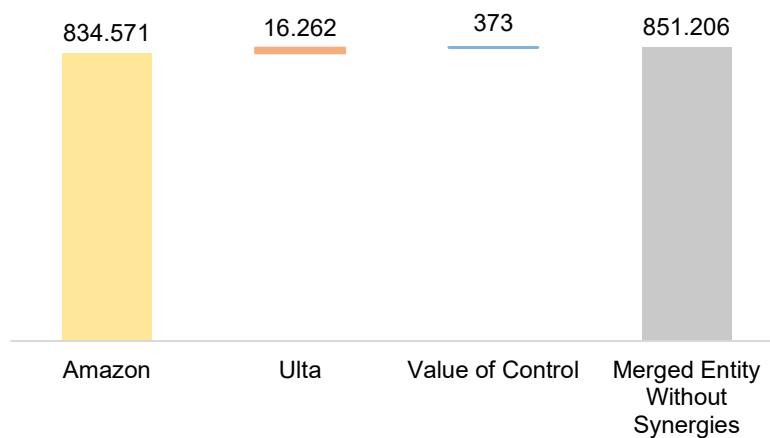


Figure 37. EV of Merged Entity (\$Mm)

### 3 Merged Entity With Synergies

After the integration of the target company, Amazon expects the delivery of synergies, as this is one of the main reasons firms engage in M&A activities, as discussed in Part I. An overview of the different types of synergies this deal is predicted to generate is given below.

#### 3.1 Revenue Synergy

Revenue synergies are difficult to quantify and often overlooked in M&A deals, nevertheless, for the purpose of this deal, they are going to be conservatively estimated due to the academic literature available surrounding the topic of multi-channel retailing and already discussed in Part I. For the reasons presented, a 1% revenue synergy is inputted in the model and linked to the target's annual revenues (Table 8).

Table 8. Revenue Synergy Estimation

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Synergy Realization	15%	40%	65%	100%	100%	100%	100%	100%	100%	100%
Revenue Synergy	10,2	31,3	57,4	94,7	100,3	102,3	104,3	106,4	108,5	110,7
Operating Costs	(8,9)	(27,3)	(50,2)	(82,8)	(87,7)	(89,5)	(91,2)	(93,1)	(94,9)	(96,8)
<b>Net Revenue Synergy</b>	<b>1,3</b>	<b>3,9</b>	<b>7,2</b>	<b>11,9</b>	<b>12,6</b>	<b>12,8</b>	<b>13,1</b>	<b>13,4</b>	<b>13,6</b>	<b>13,9</b>

Data in millions of USD except otherwise stated

#### 3.2 Cost Synergies

Cost Synergies should realize in four main areas: COGS, Fulfilment, Marketing and General & Administrative. Technology & Content costs are not expected to have any synergy benefit since the majority of these costs relate to the AWS segment. The 1,0% reduction in Ulta's COGS is related to a decrease in shipping costs following the enhancement of cross-channel activities and to the purchasing power of Amazon. Fulfilment costs are also expected to decrease as a consequence of optimisation of warehousing and transportation activities. This synergy is predicted to achieve a 0,1% of Amazon's Fulfilment expenses. Regarding Marketing expenses, these can be eliminated in 2,5% due to the effectiveness of cross-channel communications and promotions, however, only in the third year after the acquisition can these expenses be eliminated, otherwise a reduction in the inflow of new customers in the original channel might take place. Lastly, the centralization of administrative functions and elimination of duplicate corporate facilities and roles contribute to a decrease of 4,0% in General & Administrative costs. Both Marketing and General & Administrative synergies are linked to the target's cost structure. Table 9 presents the quantification of each synergy.

Table 9. Cost Synergies Estimation

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Synergy Realization	15%	40%	65%	100%	100%	100%	100%	100%	100%	100%
COGS	6,7	20,4	37,4	61,8	65,5	66,8	68,1	69,5	70,9	72,3
Fulfilment	5,1	16,0	30,1	53,8	61,8	72,3	80,8	88,9	97,5	106,7
General & Administrative	9,0	28,1	52,1	86,0	91,1	92,9	94,7	96,6	98,6	100,5
Synergy Realization	0%	0%	15%	40%	65%	100%	100%	100%	100%	100%
Marketing	0,0	0,0	1,5	4,4	7,6	11,9	12,2	12,4	12,7	12,9
<b>Total Cost Synergies</b>	<b>20,8</b>	<b>64,5</b>	<b>121,3</b>	<b>206,1</b>	<b>225,9</b>	<b>243,9</b>	<b>255,8</b>	<b>267,4</b>	<b>279,6</b>	<b>292,4</b>

Data in \$Mm except otherwise stated

### 3.3 Financial Synergies

If we recall the sources of financial synergies discussed in Part I, it is clear that neither cash slack nor debt capacity can be applied to the proposed deal. The first because both companies have enough cash reserves to fund their own projects and the second because, since Ulta is not under an optimal capital structure, synergies resulting from increased debt capacity cannot be calculated.

Regarding tax benefits, both companies are headquartered in the U.S. but in different states, hence tax discrepancies, if existent, are probably negligible. Furthermore, the U.S. 2017 Tax Reform introduced the possibility of depreciating 100% of assets purchased after September 2017, which, despite being a source of synergy, has a minor impact in present value terms as these are already risk-free cash-flows.

### 3.4 Transaction and Integration Costs

Transaction costs include one-time advisory and legal fees, estimated to be \$60Mm<sup>3</sup> and incurred in 2018. Integration costs should reach 1% of the target enterprise value, approximately \$163Mm, and consist mainly of integrating fulfilment operations and IT systems, workforce adjustments and knowledge transfer. These costs are distributed in the first three years after the acquisition, before the synergies reach their full realization.

### 3.5 Valuation output

The enterprise value of the merged entity accounting for the value of control and synergies is \$855.329Mm, which translates into a net synergy value of \$4.123Mm. Figure 38 illustrates the present value (PV) of each synergy type, summing up to \$4.333Mm, the PV of integration costs and the one-time transaction fee.

<sup>3</sup> Average value for similar deals.

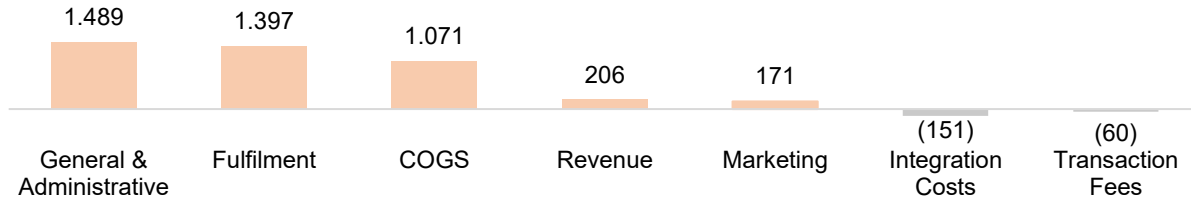


Figure 38. Net Synergies Breakdown (\$Mm)

The merged entity WACC assumes a value of 8,26%, which emerges from a target capital structure of 5,3% net debt to EV, the median value for the internet and direct marketing retail industry combined with the specialty retail industry, and a beta of 1,04 (Appendix W).

### 3.6 Distribution of Synergy Benefits

In the retail and wholesale industries, target shareholders capture on average 23% of total synergies created, while the acquiring firm receives the remaining 77% (BCG, 2013). Applying these rates to the proposed deal, it was found that \$997Mm worth of synergies are due to Ulta and \$3.336Mm to Amazon.

## Part VI- The Acquisition

### 1 Mode of Acquisition

The proposed deal would ideally be characterized as a friendly takeover instead of hostile. Since Ulta has common takeover defences and is subject to provisions of Delaware law, that restrict changes in control, engaging in a hostile takeover would be difficult and costly. Therefore, a friendly approach to the target firm's board and the negotiation of the terms of the transaction is the preferred mode to proceed.

### 2 Bid Price

The first step in setting the bid price is to add the value of the target to the PV of net synergies and the value of control (Table 10). This is the maximum bid price the acquiring firm can offer.

*Table 10. Maximum Bid Price*

EV target	16.262
(+) Value of control	373
(+) Net synergies	4.123
(-) Net debt	(397)
Equity value	21.155
<b>Max bid price (USD)</b>	<b>341,3</b>
<i>Implied premium</i>	<i>34,0%</i>

Data in \$Mm except otherwise stated

Given that the bid price cannot be lower than the current market price of the target, the range of possible bid prices is from \$254,8 to \$341,3.

The premium of comparable deals in the retail industry ranges from 19% to 80%, with an average of 42% (Appendix X). Since the proposed transaction is to be implemented as a friendly takeover, setting a low premium is the most sensible decision.

A premium of 30% is recommended and a corresponding offer of \$331,2 per share should be carried forward. With this premium level, the acquiring shareholders capture \$863,1Mm assuming full synergy realization and change of control.

### 3 Form of Payment

Amazon should finance this \$20,5Bn deal entirely with cash, following the pattern of previous acquisitions and signalling to the market that the company is confident in the success of the deal.



Furthermore, recalling the fair share price of Amazon calculated in Part IV, the company is undervalued in the market, hence paying with stock would be inconsistent with the firm's interests.

#### 4 Accretion/Dilution Analysis

To measure the impact on the acquiring firm's shareholders earnings, an Accretion/Dilution analysis was performed (Appendix Y). The results obtained are favourable to the acceptance of this acquisition by the buyer's shareholders. Indeed, an accretion of 12,4% is expected in the first year, remaining positive throughout the complete forecasted period (Table 11).

Table 11. Accretion/Dilution Analysis

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Pro-forma Net Income (\$Mm)	5.561	9.085	11.777	15.789	19.556	23.984	27.953	31.027	34.344	37.905
Total Diluted Shares (\$Mm)	485	485	485	485	485	485	485	485	485	485
Pro-forma EPS	11,5	18,7	24,3	32,6	40,4	49,5	57,7	64,0	70,9	78,2
<b>Accretion (Dilution)</b>	<b>12,4%</b>	<b>8,6%</b>	<b>7,7%</b>	<b>6,6%</b>	<b>5,7%</b>	<b>4,7%</b>	<b>4,1%</b>	<b>3,8%</b>	<b>3,5%</b>	<b>3,3%</b>

#### 5 Execution Risks

Any M&A deal carries a certain portion of risk. In cash deals, the urgency of assessing risks, in specific the ones associated with synergies, is even higher because acquiring shareholders take on the entire risk of the operation. Figure 39 provides the assessment of the major risks involved in the deal on two metrics, probability of occurrence and impact for the acquiring firm.

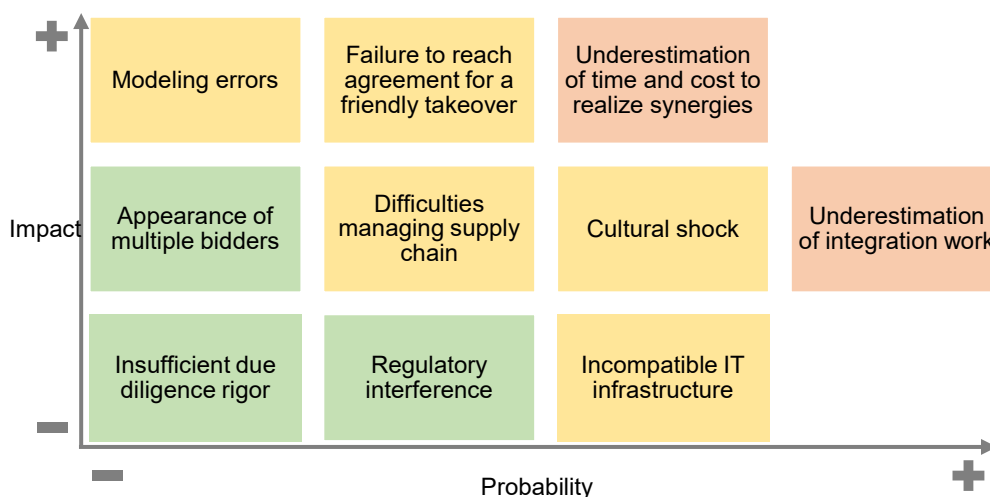


Figure 39. Risk Assessment Matrix for Amazon-Ulta Deal

The risks with the highest impact all relate to potential overpayment, which is one of the reasons why so many M&A deals fail to create value for acquiring shareholders. For this transaction in specific, the appearance of multiple bidders is unlikely because the deal should be carried forward as a friendly takeover, which, in itself, discourages counter-bids. Nevertheless, if no agreement is reached with the target company and Amazon is forced to carry the transaction as a hostile takeover, then the appearance of counter-offers is very likely, especially from Walmart.

## Conclusion

This dissertation was intended to analyse a potential target for Amazon as part of the company's strategy to expand its presence in the brick-and-mortar segment of retailing and to recommend the bid price at which the offer should be made.

I started by analysing the retail segment and found that pure e-commerce players are starting to expand to physical stores as part of an omnichannel strategy. With the Whole Foods acquisition in 2017, Amazon is clearly following the same pattern and, after expanding into brick-and-mortar grocery stores, I propose an entrance in the profitable U.S. beauty market, by acquiring the specialty retailer Ulta.

I propose a bid price of \$331,2 per share, which includes a 30% premium over the market price at the 21<sup>st</sup> May 2018. This recommendation is based on a thoroughly analysis that involved the projection of cash flows for Amazon and Ulta independently and as a merged firm. Under my projections, the enterprise value of Amazon is \$834.571Mm and of Ulta is \$16.262Mm. These results indicate a 5,1% and 5,5% upside potential relative to current stock prices. The acquisition should result in synergies of \$4.333Mm decreased by transaction fees of \$60Mm and integration costs valued in \$151Mm. Additionally, I recognize that Ulta is not being managed under optimal capital structure and estimate a \$373Mm value of control.

The transaction should be a cash deal carried as a friendly takeover and has the potential of creating \$863.1Mm for Amazon's shareholders and an accretion of 12,4% in the first year's EPS. Nevertheless, this transaction carries a certain portion of risk that should not be neglectable, including underestimation of time and cost to realize synergies. Limitations to this study include the identification of alternative targets which could have involved Sally Beauty, and the simplification of tax synergies.

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## Appendices

### Appendix A: List of Amazon's Subsidiaries

<b>Subsidiary</b>	<b>Description</b>
6pm	Fashion Brands
Abebooks	Books, art and collectibles
ACX	Audiobook Publishing
Alexa	Actionable Analytics for the Web
Amazon Business	Purchasing solutions for business supplies
Amazon Drive	Cloud Storage
Amazon Inspire	Digital Educational Resources
Amazon Music	Music Streaming
Amazon Rapids	Children stories
Amazon Restaurants	Food delivery from local restaurnts
Amazon Video Direct	Video Distribution
Amazon Warehouse	Used Products
Amazon Web Services	Scalable Cloud Computing Services
Amazonfresh	Groceries
Amazonglobal	International shipping
Audible	Audio Books
Audiobookstand	Audio books
Book Depository	Books with free delivery worldwide
Box Office Mojo	Movie Box Office Data
Comixology	Digital Comics
Createspace	Publishing
Dpreview	Digital Photography
East Dane	Designer Men's Fashion
Fabric	Sewing, quilting and knitting
Goodreads	Book reviews and recommendations
Home Services	Cleaning, assembly and house improvement
Imdb	Database for movies, TV and entertainment programs
Imdbpro	Entertainment information for professionals
Junglee.com	Online shopping in India
Kindle Direct Publishing	Digital Publishing
Prime Now	Subscription service
Prime Photos	Photo Storage
Shopbop	Designer Fashion Brands
Souq.com	Online shopping in the Middle East
Subscribe with Amazon	Subscription services
Tenmarks.com	Math Activities for Kids and Schools
Whole Foods Market	Healthy Grocery Store
Withoutabox	Film Festivals
Woot!	Discount e-commerce
Zappos	Shoes and Clothing

## Appendix B: Prime Membership Fees per Country in 2017

	Prime membership fee (local currency)	Prime membership fee (USD)
U.S.	\$ 99,00	\$ 99,00
Germany	€ 95,88	\$ 118,37
U.K.	£ 95,88	\$ 136,56
Japan	¥ 4.800,00	\$ 44,72
<b>Rest of the World</b>		
Canada	\$ 79,00	\$ 62,81
France	€ 49,00	\$ 60,60
India	₹ 999,00	\$ 15,26
Italy	€ 59,88	\$ 74,06
Luxemburg	€ 47,88	\$ 59,22
Netherlands	€ 47,88	\$ 59,22
Singapore	\$ 35,88	\$ 27,45
Spain	€ 59,88	\$ 74,06
Average		\$ 54,09

Exchange rates of 14th April 2018

## Appendix C: Amazon's E-commerce Revenue Forecast

The forecast was divided in U.S. and International net sales. E-commerce net sales in the U.S. were forecasted in more detail under the following assumptions:

- Average spending per year for Prime members was set at \$1.000 in 2018 and updated according to changes in consumer spending in the U.S. as predicted by Trading Economics, (2018).
- Percentage of consumers with intention to renew their Prime membership at the end of 2017 was 95% and assumed to remain stable in the future (CIRP, 2017).
- Following Amazon's acquisition of Whole Foods, Morgan Stanley estimates that 5 million Whole Foods customers are not currently subscribed to Prime. Amazon has already started attracting these customers by offering in-store discounts to Prime members and it is forecasted that 90% will convert until 2021.

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Existing customers		63	76	86	90	94	97
New customers		16	13	8	8	8	8
Customers conversion from Whole Foods		1,0	1,5	1,5	0,5	0,0	0,0
<b>Total number Prime members U.S.</b>	67	80	90	95	99	102	104
<i>Growth</i>	55,0%	20,0%	13,0%	5,5%	4,0%	3,0%	2,5%
Average spending per year Prime members (USD)	1.000	1.028	1.054	1.084	1.114	1.145	1.177
<i>Consumer Spending U.S. Growth</i>	2,8%	2,9%	2,5%	2,8%	2,8%	2,8%	2,8%
<b>U.S. Net Sales Prime members</b>	<b>66.515</b>	<b>82.089</b>	<b>95.081</b>	<b>103.121</b>	<b>110.251</b>	<b>116.738</b>	<b>123.007</b>

Data in \$Mm except otherwise stated

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Prime Members (% of total customers)	63,0%	64,9%	67,2%	69,2%	71,1%	72,5%	73,6%
<i>Growth</i>		3,0%	3,5%	3,0%	2,8%	2,0%	1,5%
U.S. Total Amazon customers	106	123	134	138	139	141	142
<b>Total number of non-members U.S.</b>	39	43	44	42	40	39	37
Average spending per year Non-members (USD)	729	750	769	790	812	835	858
<i>Consumer Spending U.S. Growth</i>	2,8%	2,9%	2,5%	2,8%	2,8%	2,8%	2,8%
<b>U.S. Net Sales Non-members</b>	<b>28.480</b>	<b>32.382</b>	<b>33.894</b>	<b>33.500</b>	<b>32.651</b>	<b>32.225</b>	<b>32.129</b>

Data in \$Mm except otherwise stated

For e-commerce sales outside the U.S., Amazon's market share was predicted against the forecast for global e-commerce sales growth.

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Global E-commerce sales	2300000	2800000	3300000	3900000	4500000	5193000	5987529
<i>Growth</i>		21,6%	19,5%	18,7%	15,4%	15,4%	15,3%
Amazon Market Share	2,0%	2,2%	2,3%	2,5%	2,8%	3,0%	3,3%
<b>World Net Sales E-commerce (except U.S.)</b>	<b>45.240</b>	<b>61.600</b>	<b>75.900</b>	<b>97.500</b>	<b>126.000</b>	<b>155.790</b>	<b>197.588</b>

Data in \$Mm except otherwise stated

	2017	2018E	2019E	2020E	2021E	2022E	2023E
U.S. Net Sales E-commerce (\$Mm)	94.995	114.471	128.975	136.621	142.902	148.964	155.136
<i>Growth</i>		20,5%	12,7%	5,9%	4,6%	4,2%	4,1%
<i>As a % of total sales</i>	67,7%	65,0%	63,0%	58,4%	53,1%	48,9%	44,0%
World Net Sales E-commerce (except U.S.) (\$Mm)	45.240	61.600	75.900	97.500	126.000	155.790	197.588
<i>Growth</i>		17,8%	36,2%	23,2%	28,5%	29,2%	26,8%
<i>As a % of total sales</i>	32,3%	35,0%	37,0%	41,6%	46,9%	51,1%	56,0%
<b>Total Net Sales E-commerce (\$Mm)</b>	<b>140.235</b>	<b>176.071</b>	<b>204.875</b>	<b>234.121</b>	<b>268.902</b>	<b>304.754</b>	<b>352.724</b>
<i>Growth</i>		25,6%	16,4%	14,3%	14,9%	13,3%	15,7%

## Appendix D: Amazon's Subscription Services Revenue Forecast

Subscription Services include Prime membership fees and revenue from books, music, videos and games subscriptions, however, for simplicity, only Prime fees are recorded for this segment. Net sales were estimated based on the number of Prime members per country as previously defined and the membership fee adjusted for inflation forecasts from the International Monetary Fund (2018)

	2017	2018E	2019E	2020E	2021E	2022E	2023E
United States	66,5	79,8	90,2	95,2	99,0	101,9	104,5
<i>Growth</i>	55,0%	20,0%	13,0%	5,5%	4,0%	3,0%	2,5%
Germany	7,8	11,0	15,8	23,2	33,9	49,1	70,7
<i>Growth</i>	39,3%	41,0%	43,0%	47,0%	46,0%	45,0%	44,0%
United Kingdom	4,6	6,4	9,0	12,8	17,9	24,8	34,3
<i>Growth</i>	38,5%	40,0%	41,0%	42,0%	40,0%	39,0%	38,0%
Japan	14,6	18,6	23,7	29,8	36,7	44,4	53,2
<i>Growth</i>	28,2%	28,0%	27,0%	26,0%	23,0%	21,0%	20,0%
Rest of the World	10,4	18,8	34,3	59,7	101,4	162,2	243,4
<i>Growth</i>	78,8%	81,0%	82,0%	74,0%	70,0%	60,0%	50,0%
<b>Total number Prime members</b>	<b>104</b>	<b>134,7</b>	<b>172,9</b>	<b>220,6</b>	<b>288,8</b>	<b>382,5</b>	<b>506,1</b>
<i>Growth</i>	50,5%	29,7%	28,4%	27,6%	30,9%	32,5%	32,3%

Data in \$Mm except otherwise stated

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Prime Fee U.S.	99	101	104	106	109	111	114
<i>CPI yoy Growth U.S.</i>	2,1%	2,1%	2,6%	2,4%	2,2%	2,3%	2,3%
Prime Fee Germany	118	120	123	125	128	131	134
<i>CPI yoy Growth Germany</i>	1,6%	1,5%	2,0%	2,1%	2,3%	2,5%	2,5%
Prime Fee UK	137	140	143	146	149	152	155
<i>CPI yoy Growth U.K.</i>	2,6%	2,6%	2,2%	2,1%	2,0%	2,0%	2,0%
Prime Fee Japan	45	45	45	46	47	48	48
<i>CPI yoy Growth Japan</i>	0,4%	0,5%	1,1%	1,6%	1,3%	1,6%	1,6%
Prime Fee Rest of the World	54	56	58	60	62	63	66
<i>CPI yoy Growth World</i>	3,1%	3,3%	3,3%	3,3%	3,2%	3,2%	3,2%

Data in USD except otherwise stated

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Net Sales Subscriptions U.S.	6.585	8.068	9.354	10.105	10.740	11.317	11.867
Net Sales Subscriptions Germany	926	1.326	1.934	2.903	4.335	6.443	9.510
Net Sales Subscriptions U.K.	622	893	1.286	1.865	2.663	3.776	5.315
Net Sales Subscriptions Japan	651	837	1.075	1.376	1.714	2.108	2.570
Net Sales Subscriptions Rest of the World	937	1.052	1.979	3.556	6.239	10.302	15.947
<b>Net Sales Subscription Services</b>	<b>9.721</b>	<b>12.176</b>	<b>15.628</b>	<b>19.805</b>	<b>25.693</b>	<b>33.946</b>	<b>45.209</b>
<i>Growth</i>		25,3%	28,3%	26,7%	29,7%	32,1%	33,2%

Data in \$Mm except otherwise stated

#### Appendix E: Amazon's Physical Stores Revenue Forecast

Physical Stores revenues includes product sales from Amazon's 13 physical bookstores and the 472 acquired Whole Foods stores. Only the larger portion of this segment is considered for estimation purposes. The number of Whole Foods customers was predicted based on research from Morgan Stanley after Amazon's acquisition of the retail chain. In terms of average prices, one of Amazon's promises with the acquisition was to lower the prices of the chain, which was implemented at the beginning of 2018. It is forecasted that until 2020, the company lowers prices even more in an attempt to change customers' perception of Whole Foods as an overpriced retailer.

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Number of Whole Foods customers	12,9	17,4	21,7	25,2	27,2	28,1	28,9
<i>Growth</i>		34,9%	24,7%	16,1%	7,9%	2,9%	2,8%
Price cuts		-1,9%	-2,8%	-3,0%	0,0%	0,0%	0,0%
<b>Net Sales</b>	<b>16.030</b>	<b>21.317</b>	<b>25.988</b>	<b>29.401</b>	<b>31.734</b>	<b>32.654</b>	<b>33.568</b>
<i>Growth</i>		33,0%	21,9%	13,1%	7,9%	2,9%	2,8%

Data in \$Mm except otherwise stated

## Appendix F: AWS Revenue Forecast

	2017	2018E	2019E	2020E	2021E	2022E	2023E
Total Cloud Market	52.222	66.602	82.636	100.354	121.328	145.351	173.694
<i>Growth</i>	31,8%	27,5%	24,1%	21,4%	20,9%	19,8%	19,5%
AWS Market share	33,4%	33,6%	33,7%	33,8%	33,8%	33,7%	33,6%
<b>AWS Net Sales</b>	<b>17.459</b>	<b>22.378</b>	<b>27.848</b>	<b>33.920</b>	<b>41.009</b>	<b>48.983</b>	<b>58.361</b>
<i>Growth</i>	42,9%	28,1%	24,48%	21,8%	20,9%	19,4%	19,1%

Data in \$Mm except otherwise stated

## Appendix G: Amazon's Working Capital Assumptions

Working Capital data was divided between the Retail and AWS segments based on net sales and considering that AWS does not hold inventory. Unearned revenue for each segment was forecasted based on its 3-year historical average weight on net sales and set as a decreasing rate over time.

<b>Retail</b>	
Inventory Days	50
Accounts Receivable Days	23
Accounts Payable Days	97
<b>AWS</b>	
Accounts Receivable Days	23
Accounts Payable Days	97

## Appendix H: Amazon's D&A, CAPEX and PP&E acquired under capital and finance leases Forecast

Depreciation on existing Property, Plant and Equipment (PP&E) was maintained at the same level of 2017, whereas depreciation for new PP&E, either acquired through Capital Expenditure (CAPEX) or capital and finance leases, was depreciated at an 8,4% rate. PP&E depreciation also includes amortization of capitalized internal-use software and website development costs, since this asset is recorded under PP&E. Amortization of acquired intangible assets and video and music content, recorder under Other Assets in the Corporate segment, was modelled similarly to PP&E but using a depreciation rate of 7,7% on new additions.

	Relative Weight on PP&E	Estimated Useful Life (years)
Land and Buildings	35,2%	20,5
Equipment	61,3%	7,5
Internal Use Software and Website Development	1,4%	2,0
Other Corporate Assets	2,2%	4,0
<b>Average PP&amp;E</b>		11,9
Depreciation Rate PP&E		8,4%
<b>Other Assets</b>		13,0
Depreciation Rate Other Assets		7,7%

Net Addition to PP&E per segment was forecasted as a fixed percentage of net sales, according to the historical 3-year average. From here, CAPEX was defined as being a constant percentage of Net Addition, since Amazon also relies heavily on capital and finance leases to acquire PP&E. Assets acquired under capital and finance leases were computed as being the remaining Net Addition to PP&E that was not allocated to CAPEX minus proceeds from incentives received from PP&E vendors. PP&E related to the Corporate segment was allocated to the other segments based on usage. Other assets such as acquired intangible assets and video and music content are assumed to be part of the Corporate segment and evolve at a decreasing percentage of consolidated net sales.

Net Addition to PP&E	2017	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Retail	18.700	15.893	18.308	20.602	23.228	25.881	29.353	31.554	33.577	35.593	37.581
<i>As a % of Retail net sales</i>	11,7%	7,3%	7,1%	6,9%	6,7%	6,5%	6,3%	6,1%	5,9%	5,7%	5,5%
AWS	9.883	13.265	15.114	16.714	18.156	19.238	20.003	19.067	17.549	15.397	12.543
<i>As a % of AWS net sales</i>	56,6%	59,3%	54,3%	49,3%	44,3%	39,3%	34,3%	29,3%	24,3%	19,3%	14,3%
<b>Net Addition to consolidated PP&amp;E</b>	<b>28.583</b>	<b>29.158</b>	<b>33.423</b>	<b>37.316</b>	<b>41.385</b>	<b>45.119</b>	<b>49.356</b>	<b>50.620</b>	<b>51.126</b>	<b>50.990</b>	<b>50.124</b>
<i>As a % of consolidated net sales</i>	16,1%	12,2%	11,7%	11,3%	10,7%	10,1%	9,5%	8,7%	8,0%	7,3%	6,5%

Data in \$Mm except otherwise stated

<b>PP&amp;E CAPEX</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
Retail	-	7.086	8.163	9.185	10.356	11.539	13.087	14.068	14.970	15.869	16.755
Proceeds from PP&E incentives	-	(1.217)	(1.402)	(1.578)	(1.779)	(1.982)	(2.248)	(2.416)	(2.571)	(2.726)	(2.878)
<b>CAPEX net of proceeds from incentives Retail</b>	<b>-</b>	<b>5.869</b>	<b>6.761</b>	<b>7.608</b>	<b>8.578</b>	<b>9.557</b>	<b>10.839</b>	<b>11.652</b>	<b>12.399</b>	<b>13.143</b>	<b>13.878</b>
AWS	-	5.914	6.739	7.452	8.095	8.577	8.918	8.501	7.824	6.865	5.592
Proceeds from PP&E incentives	-	(1.016)	(1.157)	(1.280)	(1.390)	(1.473)	(1.532)	(1.460)	(1.344)	(1.179)	(961)
<b>CAPEX net of proceeds from incentives AWS</b>	<b>-</b>	<b>4.898</b>	<b>5.581</b>	<b>6.172</b>	<b>6.705</b>	<b>7.104</b>	<b>7.387</b>	<b>7.041</b>	<b>6.480</b>	<b>5.686</b>	<b>4.632</b>
Consolidated	11.955	13.000	14.901	16.637	18.451	20.116	22.005	22.569	22.795	22.734	22.348
<i>As a % of Net Addition to PP&amp;E</i>	<i>35,2%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>	<i>44,6%</i>
Proceeds from PP&E incentives	(1.897)	(2.233)	(2.559)	(2.857)	(3.169)	(3.455)	(3.779)	(3.876)	(3.915)	(3.905)	(3.838)
<i>As a % of Net Addition to PP&amp;E</i>	<i>6,6%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>	<i>7,7%</i>
<b>CAPEX net of proceeds from incentives Consolidated</b>	<b>10.058</b>	<b>10.767</b>	<b>12.342</b>	<b>13.780</b>	<b>15.282</b>	<b>16.661</b>	<b>18.226</b>	<b>18.693</b>	<b>18.880</b>	<b>18.829</b>	<b>18.509</b>

Data in \$Mm except otherwise stated

<b>PP&amp;E acquired under leases</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
Retail	-	10.024	11.547	12.994	14.651	16.324	18.514	19.902	21.178	22.449	23.703
AWS	-	8.366	9.533	10.542	11.452	12.134	12.616	12.026	11.069	9.712	7.912
<b>Total</b>	<b>18.525</b>	<b>18.391</b>	<b>21.081</b>	<b>23.536</b>	<b>26.102</b>	<b>28.458</b>	<b>31.130</b>	<b>31.928</b>	<b>32.247</b>	<b>32.161</b>	<b>31.615</b>

Data in \$Mm

<b>Other Assets CAPEX</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
Other assets Beginning	4.723	8.897	9.319	10.804	12.242	13.886	15.569	17.730	19.113	20.408	21.705
<b>+CAPEX</b>	<b>6.821</b>	<b>3.298</b>	<b>4.629</b>	<b>4.891</b>	<b>3.766</b>	<b>3.256</b>	<b>4.207</b>	<b>3.949</b>	<b>4.428</b>	<b>5.046</b>	<b>5.702</b>
-Amortizations	(2.647)	(2.875)	(3.144)	(3.454)	(2.121)	(1.573)	(2.046)	(2.566)	(3.133)	(3.748)	(4.414)
Other assets Ending	8.897	9.319	10.804	12.242	13.886	15.569	17.730	19.113	20.408	21.705	22.993
<i>As a % of consolidated net sales</i>	<i>5,0%</i>	<i>3,9%</i>	<i>3,8%</i>	<i>3,7%</i>	<i>3,6%</i>	<i>3,5%</i>	<i>3,4%</i>	<i>3,3%</i>	<i>3,2%</i>	<i>3,1%</i>	<i>3,0%</i>

Data in \$Mm except otherwise stated



## Appendix I: Amazon's Debt Schedule and Capital and Finance Lease Repayments

	2017	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Long-term Debt Opening	7.694	24.743	24.643	23.309	22.051	21.051	19.801	18.551	17.301	16.051	14.801
Issuance	0	0	0	0	0	0	0	0	0	0	0
Repayment	(1372)	(100)	(1.334)	(1.258)	(1.000)	(1.250)	(1.250)	(1.250)	(1.250)	(1.250)	(1.250)
<b>Long-term Debt Closing</b>	<b>24.743</b>	<b>24.643</b>	<b>23.309</b>	<b>22.051</b>	<b>21.051</b>	<b>19.801</b>	<b>18.551</b>	<b>17.301</b>	<b>16.051</b>	<b>14.801</b>	<b>13.551</b>
Leases Obligations Opening	7.519	13.183	23.005	29.132	33.732	37.908	41.725	45.734	47.934	49.023	49.319
Assets acquired under leases	13.178	18.391	21.081	23.536	26.102	28.458	31.130	31.928	32.247	32.161	31.615
Repayment of leases	(4.999)	(8.569)	(14.953)	(18.936)	(21.926)	(24.641)	(27.122)	(29.727)	(31.158)	(31.866)	(32.058)
<i>As a % of Opening Lease Obligations</i>	<i>66%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>	<i>65%</i>
<b>Lease Obligations Closing</b>	<b>13.183</b>	<b>23.005</b>	<b>29.132</b>	<b>33.732</b>	<b>37.908</b>	<b>41.725</b>	<b>45.734</b>	<b>47.934</b>	<b>49.023</b>	<b>49.319</b>	<b>48.876</b>

Data in \$Mm except otherwise stated

## Appendix J: Amazon's Cluster Analysis and Beta Computation

The Retail and AWS peer groups defined below exclude small and mid-cap companies (market capitalization below \$10Bn) and companies with negative ROE or extremely high long-term growth, as these are assumed not to be comparable to Amazon.

Retail Peers	GICS Industry Name	Market Cap (\$Bn)	Total Assets (\$Bn)	Debt-to-EV	Basic EPS	Dividend Payout Ratio	ROE	ROIC	Long-Term Growth
Amazon	Internet & Direct Marketing Retail	692,66	131,3	5,9%	6,32	0,0%	9,6%	20,9%	20,5%
Ebay	Internet Software & Services	40,38	26,0	0,6%	-0,95	0,0%	22,4%	7,6%	12,0%
Alibaba Group	Internet Software & Services	440,62	73,6	15,4%	2,55	63,4%	21,9%	21,9%	32,7%
Best Buy	Specialty Retail	20,11	13,0	21,6%	3,33	0,0%	30,8%	22,5%	16,2%
Walmart	Food & Staples Retailing	253,82	204,5	4,4%	3,29	0,0%	12,4%	11,7%	6,9%
Target	Multiline Retail	38,53	39,0	6,9%	5,37	31,9%	22,4%	13,5%	6,2%
Dollar General	Multiline Retail	25,86	12,5	24,1%	5,64	53,4%	21,3%	16,8%	15,4%
Facebook	Internet Software & Services	477,00	84,5	10,1%	5,49	23,4%	27,2%	24,2%	26,1%
Alphabet	Internet Software & Services	717,99	197,3	0,0%	18,27	0,0%	15,4%	23,8%	24,6%
Booking	Internet & Direct Marketing Retail	100,72	25,5	8,9%	47,78	0,0%	35,3%	22,2%	16,0%
Expedia Group	Internet & Direct Marketing Retail	16,28	18,5	22,0%	2,49	48,4%	8,4%	11,9%	15,2%

Retail Cluster 1	ROIC	Total Assets (\$Bn)	Long-Term Growth
Ebay	7,6%	26,0	12,0%
Expedia Group	11,9%	18,5	15,2%
Booking	22,2%	25,5	16,0%
Best Buy	22,5%	13,0	16,2%
Target	13,5%	39,0	6,2%
Dollar General	16,8%	12,5	15,4%
<b>Median</b>	<b>15,2%</b>	<b>21,98</b>	<b>15,3%</b>

Retail Cluster 2	ROIC	Total Assets (\$Bn)	Long-Term Growth
Amazon	20,9%	131,3	20,5%
Walmart	11,7%	204,5	6,9%
Alphabet	23,8%	197,3	24,6%
<b>Median</b>	<b>20,9%</b>	<b>197,3</b>	<b>20,5%</b>

Retail Cluster 3	ROIC	Total Assets (\$Bn)	Long-Term Growth
Alibaba Group	21,9%	73,6	32,7%
Facebook	24,2%	84,5	26,1%
<b>Median</b>	<b>23,1%</b>	<b>79,08</b>	<b>29,4%</b>

Retail Peer Group	Market Debt-to-Equity	Effective Tax Rate	Beta	Unlevered Beta
Amazon	5,70%	40,94%	1,62	1,57
Walmart	18,36%	31,79%	0,55	0,49
Alphabet	0,54%	17,31%	1,06	1,05
Industry Median Unlevered Beta				1,05
<b>Retail Levered Beta</b>				<b>1,07</b>

AWS Peer Group	GICS Industry Name	Market Cap (\$Bn)	Total Assets (\$Bn)	Debt-To-EV	Basic EPS	Dividend Payout Ratio	ROE	ROIC	Long-Term Growth
Amazon	Internet & Direct Marketing Retail	692,66	131,31	5,9%	6,32	0,0%	9,6%	20,9%	20,5%
Alibaba Group	Internet Software & Services	440,62	73,63	4,5%	2,55	0,0%	21,9%	21,9%	32,7%
Alphabet	Internet Software & Services	717,99	197,30	0,6%	18,27	0,0%	15,4%	22,9%	24,6%
Apple	Technology Hardware & Storage	886,58	375,32	13,8%	9,27	24,0%	39,0%	65,9%	13,2%
Akamai Technologies	Internet Software & Services	12,15	4,60	5,5%	1,27	0,0%	7,5%	0,7%	15,5%
Microsoft Corp	Software	716,70	250,31	13,2%	2,74	49,2%	34,5%	10,7%	11,1%
International Business Machines	IT Services	144,36	125,36	27,8%	6,17	37,9%	62,7%	17,1%	2,9%
Oracle	Software	188,11	134,99	33,4%	2,27	26,8%	21,4%	9,3%	9,1%

<b>AWS Cluster 1</b>	<b>ROIC</b>	<b>Total Assets (\$Bn)</b>	<b>Long Term Growth</b>
Amazon	20,9%	131,3	20,5%
Alibaba Group	21,9%	73,6	32,7%
Akamai Technologies	0,7%	4,6	15,5%
International Business Machines	17,1%	125,4	2,9%
Oracle	9,3%	135,0	9,1%
<b>Median</b>	<b>17,1%</b>	<b>125,4</b>	<b>15,5%</b>

<b>AWS Cluster 2</b>	<b>ROIC</b>	<b>Total Assets (\$Bn)</b>	<b>Long-Term Growth</b>
Alphabet	22,9%	197,3	24,6%
Apple	65,9%	375,3	13,2%
Microsoft	10,7%	250,3	11,1%
<b>Median</b>	<b>22,9%</b>	<b>250,3</b>	<b>13,2%</b>

<b>AWS Peers</b>	<b>Market-Debt-to-Equity</b>	<b>Effective Tax Rate</b>	<b>Beta</b>	<b>Unlevered Beta</b>
Amazon	5,70%	40,90%	1,62	1,57
Alibaba Group	3,98%	0,23	2,52	2,45
Akamai Technologies	5,28%	0,23	0,63	0,60
International Business Machines	35,67%	1,50%	0,90	0,67
Oracle	30,36%	18,90%	1,15	0,92
Industry Median Unlevered Beta				0,92
<b>AWS Levered Beta</b>				<b>0,95</b>

## Appendix K: Amazon's Consolidated Financial Statements

<b>Historical Income Statement</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Net sales	74.452	88.988	107.006	135.987	177.866
COGS	(54.181)	(62.752)	(71.651)	(88.265)	(111.934)
Fulfillment	(8.585)	(10.766)	(13.410)	(17.619)	(25.249)
Technology & content	(6.565)	(9.275)	(12.540)	(16.085)	(22.620)
Marketing	(3.133)	(4.332)	(5.254)	(7.233)	(10.069)
General & administrative	(1.129)	(1.552)	(1.747)	(2.432)	(3.674)
Other	(114)	(133)	(171)	(167)	(214)
<b>Operating income</b>	<b>745</b>	<b>178</b>	<b>2.233</b>	<b>4.186</b>	<b>4.106</b>
Interest income	38	39	50	100	202
Interest expense	(141)	(210)	(459)	(484)	(848)
Other income (expense)	(136)	(118)	(256)	90	346
<b>Net income before taxes</b>	<b>506</b>	<b>(111)</b>	<b>1.568</b>	<b>3.892</b>	<b>3.806</b>
Provision for income taxes	(161)	(167)	(950)	(1.425)	(769)
Equity method investment activity, net of tax	(71)	37	(22)	(96)	(4)
<b>Net income</b>	<b>274</b>	<b>(241)</b>	<b>596</b>	<b>2.371</b>	<b>3.033</b>

Data in \$Mm

<b>Projected Income Statement</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
Net sales	239.071	284.461	331.012	385.922	445.054	521.749	579.491	638.091	700.565	766.897
COGS	(149.301)	(175.010)	(201.726)	(232.126)	(265.368)	(309.543)	(342.049)	(376.254)	(412.751)	(451.549)
Fulfillment	(34.021)	(40.032)	(46.346)	(53.806)	(61.787)	(72.288)	(80.794)	(88.873)	(97.494)	(106.658)
Technology & content	(30.398)	(36.122)	(42.884)	(50.976)	(59.918)	(70.812)	(79.008)	(87.383)	(96.280)	(105.679)
Marketing	(13.133)	(15.552)	(18.006)	(20.904)	(24.004)	(28.084)	(31.388)	(34.527)	(37.876)	(41.436)
General & administrative	(4.182)	(4.976)	(5.791)	(6.751)	(7.786)	(9.128)	(9.272)	(10.209)	(11.209)	(12.270)
Other	(318)	(377)	(437)	(507)	(582)	(681)	(761)	(837)	(918)	(1.005)
<b>Operating income</b>	<b>7.718</b>	<b>12.392</b>	<b>15.823</b>	<b>20.851</b>	<b>25.609</b>	<b>31.213</b>	<b>36.219</b>	<b>40.008</b>	<b>44.037</b>	<b>48.299</b>
Interest income	162	224	246	277	335	406	509	618	746	915
Interest expense	(1.601)	(2.011)	(2.214)	(2.355)	(2.489)	(2.597)	(2.714)	(2.754)	(2.747)	(2.707)
Other income (expense)	32	34	39	44	50	56	64	69	74	79
<b>Net income before taxes</b>	<b>6.311</b>	<b>10.638</b>	<b>13.894</b>	<b>18.818</b>	<b>23.506</b>	<b>29.078</b>	<b>34.079</b>	<b>37.941</b>	<b>42.110</b>	<b>46.586</b>
Provision for income taxes	(1.325)	(2.234)	(2.918)	(3.952)	(4.936)	(6.106)	(7.157)	(7.968)	(8.843)	(9.783)
Equity method investment activity, net of tax	(38)	(40)	(46)	(52)	(60)	(67)	(76)	(82)	(87)	(93)
<b>Net income</b>	<b>4.948</b>	<b>8.364</b>	<b>10.930</b>	<b>14.814</b>	<b>18.510</b>	<b>22.905</b>	<b>26.846</b>	<b>29.892</b>	<b>33.179</b>	<b>36.710</b>

Data in \$Mm

<b>Historical Balance Sheet</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Cash and equivalents	8.658	14.557	15.890	19.334	20.522
Marketable securities	3.789	2.859	3.918	6.647	10.464
Inventories	7.411	8.299	10.243	11.461	16.047
Accounts receivable, net and other	4.920	5.802	5.654	8.339	13.164
Doubtful Debts	(153)	(190)	0	0	0
<b>Total Current Assets</b>	<b>24.625</b>	<b>31.327</b>	<b>35.705</b>	<b>45.781</b>	<b>60.197</b>
Property and Equipment, Net	11.530	17.608	22.480	29.114	48.866
Goodwill	2.655	3.319	3.759	3.784	13.350
Other assets	1.930	2.892	3.445	4.723	8.897
<b>Total Assets</b>	<b>40.159</b>	<b>54.505</b>	<b>64.747</b>	<b>83.402</b>	<b>131.310</b>
Accounts Payable	15.133	16.459	20.397	25.309	34.616
Unearned Revenue	1.159	1.823	3.118	4.768	5.097
Accrued expenses and others	6.688	9.807	10.384	13.739	18.170
<b>Total Current Liabilities</b>	<b>22.980</b>	<b>28.089</b>	<b>33.887</b>	<b>43.816</b>	<b>57.883</b>
Long-term debt	3.191	8.265	8.227	7.694	24.743
Lease Obligations	1.990	4.224	5.948	7.519	13.183
Construction liabilities	385	467	378	714	1.350
Tax contingencies	457	510	932	1.395	1.004
Long-term deferred tax liabilities	571	1.021	1.084	392	990
Other long-term liabilities	839	1.188	1.584	2.587	4.448
<b>Total Liabilities</b>	<b>30.413</b>	<b>43.764</b>	<b>51.363</b>	<b>64.117</b>	<b>103.601</b>
Common stock	5	5	5	5	5
Treasury stock	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)
Additional paid-in capital	9.573	11.135	13.394	17.186	21.389
Retained earnings	2.190	1.949	2.545	4.916	8.636
Accumulated other comprehensive loss	(185)	(511)	(723)	(985)	(484)
<b>Total Equity</b>	<b>9.746</b>	<b>10.741</b>	<b>13.384</b>	<b>19.285</b>	<b>27.709</b>

Data in \$Mm

<b>Projected Balance Sheet</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
Cash and equivalents	32.310	36.497	42.550	53.634	67.206	86.821	107.657	132.126	164.533	205.604
Marketable securities	10.464	10.464	10.464	10.464	10.464	10.464	10.464	10.464	10.464	10.464
Inventories	20.711	24.278	27.984	32.201	36.812	42.940	47.450	52.195	57.258	62.640
Accounts receivable, net and other	14.995	17.842	20.762	24.206	27.915	32.726	36.348	40.023	43.942	48.103
Doubtful Debts	0	0	0	0	0	0	0	0	0	0
<b>Total Current Assets</b>	<b>78.481</b>	<b>89.082</b>	<b>101.760</b>	<b>120.505</b>	<b>142.398</b>	<b>172.951</b>	<b>201.919</b>	<b>234.808</b>	<b>276.196</b>	<b>326.811</b>
Property and Equipment, Net	66.747	86.088	106.192	126.893	150.169	175.440	199.004	221.815	240.213	253.539
Goodwill	13.350	13.350	13.350	13.350	13.350	13.350	13.350	13.350	13.350	13.350
Other assets	9.319	10.804	12.242	13.886	15.569	17.730	19.113	20.408	21.705	22.993
<b>Total Assets</b>	<b>167.897</b>	<b>199.324</b>	<b>233.543</b>	<b>274.634</b>	<b>321.486</b>	<b>379.471</b>	<b>433.385</b>	<b>490.381</b>	<b>551.464</b>	<b>616.693</b>
Accounts Payable	44.233	52.005	60.255	69.719	80.111	93.670	103.613	114.101	125.281	137.150
Unearned Revenue	7.400	8.520	9.584	10.787	11.995	13.541	14.460	15.284	16.080	16.835
Accrued expenses and others	22.427	25.296	28.335	31.851	35.683	40.694	44.410	48.274	52.393	56.767
<b>Total Current Liabilities</b>	<b>74.059</b>	<b>85.822</b>	<b>98.174</b>	<b>112.358</b>	<b>127.790</b>	<b>147.904</b>	<b>162.483</b>	<b>177.658</b>	<b>193.753</b>	<b>210.752</b>
Long-term debt	24.643	23.309	22.051	21.051	19.801	18.551	17.301	16.051	14.801	13.551
Lease Obligations	23.005	29.132	33.732	37.908	41.725	45.734	47.934	49.023	49.319	48.876
Construction liabilities	1.350	1.350	1.350	1.350	1.350	1.350	1.350	1.350	1.350	1.350
Tax contingencies	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
Long-term deferred tax liabilities	1.481	1.762	2.050	2.390	2.756	3.231	3.589	3.952	4.339	4.749
Other long-term liabilities	4.448	4.448	4.448	4.448	4.448	4.448	4.448	4.448	4.448	4.448
<b>Total Liabilities</b>	<b>129.989</b>	<b>146.826</b>	<b>162.808</b>	<b>180.509</b>	<b>198.875</b>	<b>222.222</b>	<b>238.109</b>	<b>253.486</b>	<b>269.013</b>	<b>284.731</b>
Common stock	5	5	5	5	5	5	5	5	5	5
Treasury stock	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)	(1.837)
Additional paid-in capital	26.640	32.866	40.173	48.750	58.726	70.458	83.384	97.652	113.347	130.554
Retained earnings	13.584	21.948	32.878	47.691	66.202	89.107	114.208	141.559	171.420	203.725
Accumulated other comprehensive loss	(484)	(484)	(484)	(484)	(484)	(484)	(484)	(484)	(484)	(484)
<b>Total Equity</b>	<b>37.907</b>	<b>52.498</b>	<b>70.735</b>	<b>94.125</b>	<b>122.612</b>	<b>157.249</b>	<b>195.276</b>	<b>236.895</b>	<b>282.451</b>	<b>331.963</b>

Data in \$Mm

<b>Historical Cash Flow Statement</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Cash flow-operating activities</b>					
Net income	274	(241)	596	2,371	3,033
D&A	3,253	4,746	6,281	8,116	11,478
Deferred taxes	(156)	(316)	81	(246)	(29)
Stock-based compensation	1,134	1,497	2,119	2,975	4,215
Other operating expense, net	114	129	155	160	202
Other expense (income), net	89	53	250	(20)	(292)
Non-cash expenses	4,434	6,109	8,886	10,985	15,574
Accounts receivable	(846)	(1,039)	(1,755)	(3,367)	(4,786)
Inventories	(1,410)	(1,193)	(2,187)	(1,426)	(3,583)
Accounts payable	1,888	1,759	4,294	5,030	7,175
Accrued expenses	736	706	913	1,724	283
Unearned revenue	399	741	1,292	1,955	738
Changes in working capital	767	974	2,557	3,916	(173)
<b>Cash from operating activities</b>	<b>5,475</b>	<b>6,842</b>	<b>12,039</b>	<b>17,272</b>	<b>18,434</b>
<b>Cash flow-investing activities</b>					
Capital expenditures	(3,444)	(4,893)	(5,387)	(7,804)	(11,955)
Proceeds from PP&E incentives	-	-	798	1,067	1,897
PP&E acquired under capital and finance leases	(10,546)	(4,801)	(5,232)	(6,259)	(18,525)
Acquisitions, net of cash acquired, and other	(312)	(979)	(795)	(116)	(13,972)
Sales and maturities of marketable securities	2,306	3,349	3,025	4,733	9,988
Purchases of marketable securities	(2,826)	(2,542)	(4,091)	(7,756)	(13,777)
<b>Cash from investing activities</b>	<b>(14,822)</b>	<b>(9,866)</b>	<b>(11,682)</b>	<b>(16,135)</b>	<b>(46,344)</b>
<b>Cash flow-financing activities</b>					
Excess tax benefits from stock-based compensation	78	6	0	0	0
Dividends paid	0	0	0	0	0
Proceeds from long-term debt	394	6,359	353	621	16,231
Repayments of long-term debt	(231)	(513)	(1,652)	(354)	(1,372)
Proceeds from leasing	10,546	4,801	5,232	6,259	18,525
Principal repayments of capital and finance lease obligations	(780)	(1,420)	(2,583)	(4,007)	(4,999)
<b>Cash from financing activities</b>	<b>(539)</b>	<b>4,432</b>	<b>(3,882)</b>	<b>(3,740)</b>	<b>9,860</b>
Net change in cash	574	5,899	1,333	3,444	1,188
Cash and equivalents, beginning of period	8,084	8,658	14,557	15,890	19,334
Cash and equivalents, end of Period	8,658	14,557	15,890	19,334	20,522

Data in \$Mm

<b>Projected Cash Flow Statement</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
<b>Cash flow-operating activities</b>										
Net income	4.948	8.364	10.930	14.814	18.510	22.905	26.846	29.892	33.179	36.710
D&A	14.153	17.226	20.666	22.805	23.416	26.132	29.622	31.448	36.341	41.212
Deferred taxes	491	281	288	340	366	475	358	363	387	411
Stock-based compensation	5.251	6.226	7.307	8.577	9.976	11.732	12.926	14.268	15.695	17.207
Other operating expense, net	-	-	-	-	-	-	-	-	-	-
Other expense (income), net	-	-	-	-	-	-	-	-	-	-
Non-cash expenses	19.894	23.733	28.261	31.722	33.758	38.339	42.906	46.078	52.423	58.830
Accounts receivable	(1.831)	(2.847)	(2.920)	(3.444)	(3.709)	(4.811)	(3.622)	(3.676)	(3.919)	(4.161)
Inventories	(4.664)	(3.566)	(3.706)	(4.217)	(4.611)	(6.128)	(4.509)	(4.745)	(5.063)	(5.382)
Accounts payable	9.617	7.772	8.249	9.465	10.392	13.558	9.944	10.487	11.180	11.869
Accrued expenses	4.257	2.870	3.039	3.516	3.832	5.010	3.717	3.863	4.119	4.375
Unearned revenue	2.303	1.120	1.063	1.204	1.208	1.545	919	824	796	756
Changes in working capital	9.681	5.349	5.726	6.523	7.112	9.175	6.448	6.754	7.113	7.457
<b>Cash from operating activities</b>	<b>34.522</b>	<b>37.446</b>	<b>44.917</b>	<b>53.058</b>	<b>59.380</b>	<b>70.420</b>	<b>76.200</b>	<b>82.724</b>	<b>92.715</b>	<b>102.996</b>
<b>Cash flow-investing activities</b>										
Capital expenditures	(13.000)	(14.901)	(16.637)	(18.451)	(20.116)	(22.005)	(22.569)	(22.795)	(22.734)	(22.348)
Proceeds from PP&E incentives	2.233	2.559	2.857	3.169	3.455	3.779	3.876	3.915	3.905	3.838
PP&E acquired under capital and finance leases	(18.391)	(21.081)	(23.536)	(26.102)	(28.458)	(31.130)	(31.928)	(32.247)	(32.161)	(31.615)
Increases in other assets	(3.298)	(4.629)	(4.891)	(3.766)	(3.256)	(4.207)	(3.949)	(4.428)	(5.046)	(5.702)
Acquisitions, net of cash acquired, and other	-	-	-	-	-	-	-	-	-	-
Sales and maturities of marketable securities	-	-	-	-	-	-	-	-	-	-
Purchases of marketable securities	-	-	-	-	-	-	-	-	-	-
<b>Cash from investing activities</b>	<b>(32.456)</b>	<b>(38.052)</b>	<b>(42.207)</b>	<b>(45.150)</b>	<b>(48.375)</b>	<b>(53.564)</b>	<b>(54.569)</b>	<b>(55.554)</b>	<b>(56.036)</b>	<b>(55.826)</b>
<b>Cash flow-financing activities</b>										
Excess tax benefits from stock-based compensation	0	0	0	0	0	0	0	0	0	0
Dividends paid	0	0	0	0	0	0	(1.745)	(2.541)	(3.318)	(4.405)
Proceeds from long-term debt	0	0	0	0	0	0	0	0	0	0
Repayments of long-term debt	(100)	(1.334)	(1.258)	(1.000)	(1.250)	(1.250)	(1.250)	(1.250)	(1.250)	(1.250)
Proceeds from leasing	18.391	21.081	23.536	26.102	28.458	31.130	31.928	32.247	32.161	31.615
Principal repayments of lease obligations	(8.569)	(14.953)	(18.936)	(21.926)	(24.641)	(27.122)	(29.727)	(31.158)	(31.866)	(32.058)
<b>Cash from financing activities</b>	<b>9.722</b>	<b>4.793</b>	<b>3.342</b>	<b>3.176</b>	<b>2.567</b>	<b>2.758</b>	<b>(795)</b>	<b>(2.701)</b>	<b>(4.272)</b>	<b>(6.098)</b>
Net change in cash	11.788	4.188	6.052	11.084	13.573	19.614	20.836	24.469	32.407	41.072
Cash and equivalents, beginning of period	20.522	32.310	36.497	42.550	53.634	67.206	86.821	107.657	132.126	164.533
Cash and equivalents, end of period	32.310	36.497	42.550	53.634	67.206	86.821	107.657	132.126	164.533	205.604

Data in \$Mm



## Appendix L: Amazon's DCF Valuation

	Revenue Mix	Real GDP Growth Rate	Inflation
U.S.	41,97%	1,40%	2,30%
Rest of the World	58,03%	3,70%	3,20%
Weighted Average		2,73%	2,82%
<b>TV Growth Scenario 1</b>	<b>5,56%</b>		

Note. Retrieved from *International Monetary Fund*, 2018.

<b>TV Growth Scenario 2</b>	<b>4,50%</b>
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Retail	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
EBIT	6.484	9.989	12.456	16.530	20.170	24.525	27.775	30.553	33.517	36.667	-
*(1-t)	79%	79%	79%	79%	79%	79%	79%	79%	79%	79%	-
<b>NOPLAT</b>	<b>5.123</b>	<b>7.891</b>	<b>9.840</b>	<b>13.059</b>	<b>15.934</b>	<b>19.374</b>	<b>21.943</b>	<b>24.137</b>	<b>26.478</b>	<b>28.967</b>	<b>30.577</b>
+D&A	5.640	7.176	8.905	10.853	13.025	15.487	16.858	16.645	19.631	22.784	-
-CAPEX	(7.086)	(8.163)	(9.185)	(10.356)	(11.539)	(13.087)	(14.068)	(14.970)	(15.869)	(16.755)	-
-PP&E acquired under leases	(10.024)	(11.547)	(12.994)	(14.651)	(16.324)	(18.514)	(19.902)	(21.178)	(22.449)	(23.703)	-
+Change WC	4.464	1.748	1.778	1.911	2.057	2.753	1.750	1.846	1.898	1.940	2.048
<b>FCFF</b>	<b>(1.883)</b>	<b>(2.894)</b>	<b>(1.657)</b>	<b>816</b>	<b>3.153</b>	<b>6.014</b>	<b>6.581</b>	<b>6.479</b>	<b>9.688</b>	<b>13.233</b>	<b>32.625</b>
TV (Scenario 1)											1.213.503
TV (Scenario 2)											862.313
<b>EV Retail (Scenario 1)</b>	<b>568.360</b>										
<b>EV Retail (Scenario 2)</b>	<b>409.344</b>										

Data in \$Mm except otherwise stated

<b>AWS</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>
EBIT	5.416	7.380	9.158	11.072	13.225	15.816	17.716	19.664	21.729	23.902	-
*(1-t)	79%	79%	79%	79%	79%	79%	79%	79%	79%	79%	-
<b>NOPLAT</b>	<b>4.278</b>	<b>5.830</b>	<b>7.235</b>	<b>8.747</b>	<b>10.448</b>	<b>12.495</b>	<b>13.995</b>	<b>15.535</b>	<b>17.166</b>	<b>18.883</b>	<b>19.932</b>
+D&A	5.637	6.905	8.307	9.830	8.818	8.598	10.198	11.670	12.962	14.014	-
-CAPEX	(5.914)	(6.739)	(7.452)	(8.095)	(8.577)	(8.918)	(8.501)	(7.824)	(6.865)	(5.592)	-
-PP&E acquired under leases	(8.366)	(9.533)	(10.542)	(11.452)	(12.134)	(12.616)	(12.026)	(11.069)	(9.712)	(7.912)	-
+Change WC	960	731	909	1.096	1.222	1.412	982	1.045	1.096	1.142	1.205
<b>FCFF</b>	<b>(3.405)</b>	<b>(2.806)</b>	<b>(1.542)</b>	<b>127</b>	<b>(222)</b>	<b>970</b>	<b>4.648</b>	<b>9.357</b>	<b>14.648</b>	<b>20.535</b>	<b>21.137</b>
TV (Scenario 1)											1.033.684
TV (Scenario 2)											674.606
<b>EV AWS (Scenario 1)</b>	<b>515.984</b>										
<b>EV AWS (Scenario 2)</b>	<b>343.404</b>										

Data in \$Mm except otherwise stated

<b>Corporate</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>
EBIT	(4.182)	(4.976)	(5.791)	(6.751)	(7.786)	(9.128)	(9.272)	(10.209)	(11.209)	(12.270)	-
*(1-t)	79%	79%	79%	79%	79%	79%	79%	79%	79%	79%	-
<b>NOPLAT</b>	<b>(3.304)</b>	<b>(3.931)</b>	<b>(4.575)</b>	<b>(5.334)</b>	<b>(6.151)</b>	<b>(7.211)</b>	<b>(7.325)</b>	<b>(8.065)</b>	<b>(8.855)</b>	<b>(9.694)</b>	<b>(10.232)</b>
+D&A	2.875	3.144	3.454	2.121	1.573	2.046	2.566	3.133	3.748	4.414	-
-CAPEX	(3.298)	(4.629)	(4.891)	(3.766)	(3.256)	(4.207)	(3.949)	(4.428)	(5.046)	(5.702)	-
+Change WC	0	0	0	0	0	0	0	0	0	0	0
<b>FCFF</b>	<b>(3.727)</b>	<b>(5.416)</b>	<b>(6.012)</b>	<b>(6.978)</b>	<b>(7.833)</b>	<b>(9.372)</b>	<b>(8.707)</b>	<b>(9.360)</b>	<b>(10.153)</b>	<b>(10.982)</b>	<b>(10.232)</b>
TV (Scenario 1)											(429.529)
TV (Scenario 2)											(293.456)
<b>EV Corporate (Scenario 1)</b>	<b>(249.773)</b>										
<b>EV Corporate (Scenario 2)</b>	<b>(186.196)</b>										

Data in \$Mm except otherwise stated

## Appendix M: Amazon's Relative Valuation

Retail	Forward EV / Revenue	Forward EV / EBITDA	Forward EV / Operating CF
Amazon	2,88	24,50	24,27
Alphabet	4,28	11,46	13,97
Walmart	0,58	9,08	11,22
Median	2,88	11,46	13,97
Min	0,58	9,08	11,22
Max	4,28	24,50	24,27
<b>EV Retail (\$Mm)</b>	<b>624.074</b>	<b>138.951</b>	<b>254.798</b>

AWS	Forward EV / Revenue	Forward EV / EBITDA	Forward EV / Operating CF
Amazon	2,88	24,50	24,27
Alibaba	7,60	21,73	20,80
Akamai	4,39	11,23	12,42
International Business Machines	2,08	8,79	9,94
Oracle	4,31	8,98	11,74
Median	4,31	11,23	12,42
Min	2,08	8,79	9,94
Max	7,60	24,50	24,27
<b>EV AWS (\$Mm)</b>	<b>96.450</b>	<b>124.118</b>	<b>156.343</b>

To value the consolidated firm, the chosen multiple for the Retail segment was the median EV to Revenue, because the EV from each multiple is very different and thus, making an average would distort results. For AWS, the multiple considered was the average between the median EV to EBITDA and EV to Operating CF.

Retail EV	624.074
AWS EV	140.231
Corporate Costs TV	(101.184)
<b>Total EV</b>	<b>663.121</b>
(-) Net Debt	13.061
<b>Equity Value</b>	<b>650.060</b>
Number Diluted Shares	493
<b>Fair Share Price (USD)</b>	<b>1.319</b>
<i>Upside (Downside)</i>	<i>-16,8%</i>

Data in \$Mm except otherwise stated

## Appendix N: Ulta's Revenue Forecast

	2017	2018E	2019E	2020E	2021E	2022E
Comparable sales growth	11,0%	8,0%	5,8%	4,6%	1,4%	1,4%
Total comparable sales	5.390,7	6.446,2	7.429,7	8.422,4	9.200,3	9.793,5
Non-comparable growth	10,2%	9,3%	5,9%	4,3%	1,0%	1,0%
Total sales non-comparable	513,6	373,7	388,2	412,8	270,0	234,8
<b>Net sales</b>	<b>5.904,3</b>	<b>6.819,9</b>	<b>7.817,9</b>	<b>8.835,2</b>	<b>9.470,3</b>	<b>10.028,3</b>

Data in \$Mm except otherwise stated

## Appendix O: Ulta's New, Remodelled and Relocated Stores Forecast

	2017	2018E	2019E	2020E	2021E	2022E
New stores	102	100	100	100	70	60
Remodelled stores	11	12	11	10	11	12
<i>As a % net stores beginning period</i>	<i>1,1%</i>	<i>1,0%</i>	<i>0,9%</i>	<i>0,8%</i>	<i>0,8%</i>	<i>0,8%</i>
Relocated stores	7	6	5	4	5	5
<i>As a % net stores beginning period</i>	<i>0,7%</i>	<i>0,5%</i>	<i>0,4%</i>	<i>0,3%</i>	<i>0,3%</i>	<i>0,3%</i>

Note. Net stores at the beginning period is calculated as stores at beginning of the period minus closed stores during the period.

## Appendix P: Ulta's Working Capital Assumptions

Accounts Receivable Days	6,3
Inventory Days	108,7
Prepaid Expenses and Other Current Asset (% of Operating Expenses)	2,1%
Accounts Payable Days	30,0
Accrued Liabilities (% of Operating Expenses)	5,9%
Accrued Income Taxes (% of Revenues)	0,2%

## Appendix Q: Ulta's CAPEX and D&A

D&A on existing PP&E was maintained at the same level of 2017, while new PP&E was depreciated at a 14,0% rate, according to an average expected useful life of 7,1 years. The company does not differentiate between depreciation and amortization, therefore it was assumed that amortization is neglectable.

	Relative Weight on PP&E	Estimated Useful Life (years)
Equipment and Fixtures	40,2%	6,5
Electronic Equipment and Software	24,6%	4,0
Leasehold Improvements	35,2%	10,0
<b>Average</b>		<b>7,1</b>
Depreciation Rate		14,0%

Each component of the company's CAPEX was forecasted according to the evolution of its main driver. Predictions for 2018 CAPEX were given by the company in its 2017 Annual Report.

	2017	2018E	2019E	2020E	2021E	2022E
New, Remodelled & Relocated Stores	190,0	175,0	169,8	159,8	104,8	89,9
<i>Average Capex per new stores</i>	<i>1,9</i>	<i>1,8</i>	<i>1,7</i>	<i>1,6</i>	<i>1,5</i>	<i>1,5</i>
Merchandising & Refreshed Stores	87,0	80,0	76,3	68,5	57,5	59,8
<i>Average capex per store at end of period</i>	<i>0,08</i>	<i>0,07</i>	<i>0,06</i>	<i>0,05</i>	<i>0,04</i>	<i>0,04</i>
Information Systems	74,0	65,0	74,5	75,4	71,0	74,9
<i>As a % of net sales</i>	<i>1,3%</i>	<i>1,0%</i>	<i>1,0%</i>	<i>0,9%</i>	<i>0,8%</i>	<i>0,8%</i>
Supply Chain	42,0	30,0	34,4	38,9	41,5	43,8
<i>As a % of net sales</i>	<i>0,7%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>
Store Maintenance and Other	48,0	25,0	28,7	32,4	34,6	36,5
<i>As a % of net sales</i>	<i>0,8%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>	<i>0,4%</i>
<b>Total CAPEX</b>	<b>441,0</b>	<b>375,0</b>	<b>383,7</b>	<b>374,9</b>	<b>309,5</b>	<b>304,9</b>
<i>As a % of sales</i>	<i>7,5%</i>	<i>5,5%</i>	<i>4,9%</i>	<i>4,2%</i>	<i>3,3%</i>	<i>3,1%</i>

Data in \$Mm except otherwise stated

#### Appendix R: Ulta's Cluster Analysis and Beta Computation

The peer group presented below already excludes companies with market capitalization above \$85Bn or negative ROE, since those are not considered to be comparable to Ulta.

Ultra Peers	GICS Industry Name	Market Cap (\$Bn)	Total Assets (\$Bn)	Debt to EV	Basic EPS	Dividend Payout Ratio	ROE	ROIC	Long-Term Growth
Ulta Beauty	Specialty Retail	13,4	2,9	0,0%	9,64	0,0%	35,7%	30,0%	20,0%
Nordstrom	Multiline Retail	8,0	8,1	27,9%	2,87	51,5%	52,0%	13,8%	8,1%
Target	Multiline Retail	38,5	39,0	24,5%	4,65	53,4%	22,4%	11,2%	6,2%
CVS Health	Food & Staples Retailing	64,4	95,1	75,4%	5,01	39,4%	17,8%	7,9%	6,8%
TJX Companies	Specialty Retail	51,0	14,1	4,8%	3,96	31,5%	52,2%	34,9%	10,0%
Estee Lauder Companies	Personal Products	54,7	11,6	7,2%	3,40	36,4%	33,5%	20,8%	15,0%
Urban Outfitters	Specialty Retail	4,2	2,0	0,0%	1,55	0,0%	13,2%	13,3%	15,5%
American Eagle Outfitters	Specialty Retail	3,9	1,8	0,0%	1,08	47,3%	15,7%	17,4%	5,6%
Kohls	Multiline Retail	10,3	13,3	32,6%	4,33	51,9%	13,6%	7,3%	8,8%
Abercrombie & Fitch	Specialty Retail	1,9	2,3	18,2%	0,39	201,5%	2,2%	3,7%	12,6%
E.l.f. Beauty	Personal Products	0,9	0,4	14,9%	0,48	0,0%	13,1%	9,5%	15,0%
Costco Wholesale	Food & Staples Retailing	82,9	36,3	7,6%	6,11	136,7%	23,9%	16,4%	11,7%
Church & Dwight	Household Products	11,9	6,0	17,0%	1,88	39,3%	22,4%	15,3%	10,4%

Cluster 1	ROIC	Total Assets (\$Bn)	Long-Term Growth
Ulta Beauty	30,0%	2,9	20,0%
Urban Outfitters	13,3%	2,0	15,5%
American Eagle Outfitters	17,4%	1,8	5,6%
Abercrombie & Fitch	3,7%	2,3	12,6%
E.l.f. Beauty	9,5%	0,4	15,0%
Church & Dwight	15,3%	6,0	10,4%
Median	14,3%	2,1	13,8%

Cluster 2	ROIC	Total Assets (\$Bn)	Long-Term Growth
Nordstrom	13,8%	8,1	8,1%
TJX Companies	34,9%	14,1	10,0%
Estee Lauder Companies	20,8%	11,6	15,0%
Kohls Corp	7,3%	13,3	8,8%
Median	17,3%	12,5	9,4%

<b>Cluster 3</b>	<b>ROIC</b>	<b>Total Assets (\$Bn)</b>	<b>Long-Term Growth</b>
Target	11,2%	39,0	6,2%
CVS Health	7,9%	95,1	6,8%
Costco Wholesale	16,4%	36,3	11,7%
Median	11,2%	39,0	6,8%

<b>Company Name</b>	<b>Market Debt-to-Equity</b>	<b>Effective Tax Rate</b>	<b>Beta</b>	<b>Unlevered Beta</b>
Ulta Beauty	0,00%	24,57%	0,67	0,67
Urban Outfitters	0,00%	33,82%	0,52	0,52
American Eagle Outfitters	0,00%	33,12%	1,00	1,00
Abercrombie & Fitch	14,15%	44,84%	0,86	0,80
E.l.f. Beauty	16,32%	2,64%	0,82	0,71
Church & Dwight	20,33%	32,08%	0,39	0,34
Industry Median Unlevered Beta				0,69
<b>Ulta Levered Beta</b>				<b>0,69</b>

*Note.* Although named “Ulta Levered Beta”, Ulta’s beta is actually unlevered because the company does not have debt

## Appendix S: Ulta’s Financial Statements

<b>Income statement</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Net sales	2.670,6	3.241,4	3.924,1	4.854,7	5.884,5	6.819,9	7.817,9	8.835,2	9.470,3	10.028,3
COGS	(1.729,3)	(2.104,6)	(2.539,8)	(3.107,5)	(3.787,7)	(4.439,8)	(5.089,4)	(5.760,5)	(6.184,1)	(6.548,5)
SG&A	(596,4)	(712,0)	(863,4)	(1.073,8)	(1.287,2)	(1.500,3)	(1.759,0)	(2.005,6)	(2.149,8)	(2.276,4)
Pre-opening expenses	(17,3)	(14,4)	(14,7)	(18,6)	(24,3)	(26,6)	(31,3)	(34,4)	(36,9)	(39,1)
Operating income	327,6	410,4	506,3	654,8	785,3	856,0	945,9	1.046,0	1.119,0	1.187,8
Interest income	0,1	0,9	1,1	0,9	1,6	1,0	1,1	1,0	1,3	2,4
Interest expense	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Net income before taxes	327,7	411,3	507,4	655,7	786,9	857,0	947,0	1.047,0	1.120,4	1.190,2
Provision for income taxes	(124,9)	(154,2)	(187,4)	(246,0)	(231,6)	(205,7)	(227,3)	(251,3)	(268,9)	(285,7)
Net income	202,8	257,1	320,0	409,8	555,2	651,3	719,7	795,7	851,5	904,6

Data in \$Mm

<b>Balance sheet</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
Cash and equivalents	419,5	389,1	345,8	385,0	277,4	299,7	262,3	394,5	803,9	1.446,6
Short-term investments	0,0	150,2	130,0	30,0	120,0	120,0	120,0	120,0	120,0	120,0
Accounts receivable, net	47,049	52,4	65,0	88,6	99,7	117,7	134,9	152,5	163,4	173,0
Inventory, net	457,9	581,2	761,8	944,0	1.096,4	1.321,8	1.515,3	1.715,1	1.841,2	1.949,7
Prepaid expenses and other current asset	56,0	66,5	72,5	88,6	98,7	122,6	141,3	160,1	171,7	181,8
Deferred income taxes	22,2	20,8	0,0	0,0	1,5	1,5	1,5	1,5	1,5	1,5
<b>Total current assets</b>	<b>1.002,7</b>	<b>1.260,4</b>	<b>1.375,2</b>	<b>1.536,2</b>	<b>1.693,7</b>	<b>1.983,3</b>	<b>2.175,3</b>	<b>2.543,7</b>	<b>3.101,7</b>	<b>3.872,6</b>
Property and equipment, net	595,7	717,2	847,6	1.004,4	1.189,5	1.259,1	1.283,4	1.246,4	1.100,9	982,6
Other long-term assets	4,3	5,7	8,1	11,3	25,5	25,2	27,6	30,0	31,6	32,9
<b>Total assets</b>	<b>1.602,7</b>	<b>1.983,2</b>	<b>2.230,9</b>	<b>2.551,9</b>	<b>2.908,7</b>	<b>3.267,5</b>	<b>3.486,3</b>	<b>3.820,1</b>	<b>4.234,2</b>	<b>4.888,2</b>
Accounts payable	148,3	190,8	196,2	259,5	325,8	365,2	418,6	473,8	508,7	538,6
Accrued liabilities	103,2	149,4	187,4	260,9	302,3	350,3	403,6	457,5	490,5	519,3
Accrued income taxes	15,3	19,4	12,7	9,0	14,1	17,0	19,5	22,0	23,6	25,0
<b>Total current liabilities</b>	<b>266,8</b>	<b>359,6</b>	<b>396,2</b>	<b>529,3</b>	<b>642,2</b>	<b>732,5</b>	<b>841,8</b>	<b>953,4</b>	<b>1.022,8</b>	<b>1.082,9</b>
Long-term debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Deferred rent	261,6	294,1	321,8	366,2	407,9	493,6	565,8	639,4	685,4	725,8
Deferred income taxes	66,7	74,5	59,5	86,5	59,4	63,5	70,1	77,5	83,0	88,1
Other long-term liabilities	4,5	7,4	10,5	19,6	25,0	24,9	28,6	32,3	34,6	36,6
<b>Total liabilities</b>	<b>599,6</b>	<b>735,7</b>	<b>788,0</b>	<b>1.001,7</b>	<b>1.134,5</b>	<b>1.314,5</b>	<b>1.506,3</b>	<b>1.702,6</b>	<b>1.825,8</b>	<b>1.933,5</b>
Common stock	0,65	0,65	0,64	0,63	0,61	0,594	0,564	0,535	0,511	0,495
Treasury stock-common, at cost	(8,1)	(9,7)	(11,7)	(14,5)	(18,8)	(18,8)	(18,8)	(18,8)	(18,8)	(18,8)
Additional paid-in capital	548,2	577,0	621,7	658,3	698,9	726,4	758,7	795,5	834,9	876,7
Retained earnings	462,4	679,6	832,2	905,8	1.093,5	1.244,8	1.239,5	1.340,2	1.591,7	2.096,3
<b>Total equity</b>	<b>1.003,1</b>	<b>1.247,5</b>	<b>1.442,9</b>	<b>1.550,2</b>	<b>1.774,2</b>	<b>1.953,0</b>	<b>1.980,0</b>	<b>2.117,5</b>	<b>2.408,4</b>	<b>2.954,7</b>

Data in \$Mm



<b>Cash flow statement</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>
<b>Cash flow-operating activities</b>										
Net income	202,8	257,1	320,0	409,8	555,2	651,3	719,7	795,7	851,5	904,6
D&A	106,3	131,8	165,0	210,3	252,7	305,4	359,3	412,0	455,5	424,4
Deferred income taxes	3,9	9,2	5,8	27,0	(27,1)	4,1	6,7	7,4	5,4	5,2
Stock-based compensation charges	16,0	14,9	15,6	19,3	24,4	27,5	32,3	36,8	39,4	41,8
Excess tax benefits from stock-based compensation	(13,4)	(3,2)	(9,5)	(9,1)	0,0	0,0	0,0	0,0	0,0	0,0
Loss on disposal of PP&E	3,9	4,5	3,7	9,1	7,5	-	-	-	-	-
Deferred rent	53,6	32,5	27,7	44,4	41,7	85,7	72,2	73,6	46	40,4
Other long-term assets	0,2	1,6	0,6	6,0	(8,3)	0,3	(2,4)	(2,5)	(1,5)	(1,4)
Other long-term liabilities	-	-	-	-	-	(0,1)	3,6	3,7	2,3	2,0
Non-cash expenses	170,5	191,3	208,9	307,1	290,9	422,9	471,7	531,0	547,1	512,4
Receivables	(5,5)	(5,4)	(12,6)	(23,6)	(11,1)	(18,0)	(17,2)	(17,6)	(11,0)	(9,6)
Inventory	(96,8)	(123,3)	(180,6)	(182,2)	(152,4)	(225,4)	(193,4)	(199,8)	(126,1)	(108,5)
Accrued income taxes	18,7	7,3	2,8	5,3	3,6	2,9	2,5	2,5	1,6	1,4
Prepaid expenses and other current asset	(5,5)	(10,6)	(6,0)	(16,1)	(10,0)	(23,9)	(18,7)	(18,9)	(11,6)	(10,1)
Accounts payable	29,4	42,5	5,4	63,3	66,2	39,4	53,4	55,2	34,8	30,0
Accrued liabilities	14,2	37,6	37,9	71,1	36,9	48,0	53,3	53,9	33,0	28,7
Changes in working capital	(45,6)	(51,8)	(153,0)	(82,2)	(66,8)	(177,0)	(120,1)	(124,6)	(79,2)	(68,1)
<b>Cash from operating activities</b>	<b>327,7</b>	<b>396,6</b>	<b>375,9</b>	<b>634,7</b>	<b>779,4</b>	<b>897,2</b>	<b>1.071,4</b>	<b>1.202,1</b>	<b>1.319,4</b>	<b>1.348,9</b>
<b>Cash flow-investing activities</b>										
CAPEX	(226,0)	(249,1)	(299,2)	(373,7)	(440,7)	(375,0)	(383,7)	(374,9)	(310,1)	(306,1)
Purchases of short-term investments		(200,2)	(130,0)	(90,0)	(330,0)	-	-	-	-	-
Proceeds from short-term investments		50,0	150,2	190,0	240,0	-	-	-	-	-
<b>Cash from investing activities</b>	<b>(226,0)</b>	<b>(399,3)</b>	<b>(279,0)</b>	<b>(273,7)</b>	<b>(530,7)</b>	<b>(375,0)</b>	<b>(383,7)</b>	<b>(374,9)</b>	<b>(310,1)</b>	<b>(306,1)</b>
<b>Cash flow-financing activities</b>										
Debt issuance costs	0,0	0,0	0,0	0,0	(0,6)	0,0	0,0	0,0	0,0	0,0
Excess tax benefits from stock-based compensation	13,4	3,2	9,5	9,1	0,0	0,0	0,0	0,0	0,0	0,0
Change in common stock	-	-	-	-	-	(0,02)	(0,03)	(0,03)	(0,02)	(0,02)
Repurchase of common shares	(37,3)	(39,9)	(167,4)	(344,3)	(367,6)	(500,0)	(725,0)	(695,0)	(600,0)	(400,0)
Stock options exercised	21,9	10,6	19,6	16,3	16,2	-	-	-	-	-
Purchase of treasury shares	(0,6)	(1,6)	(2,0)	(2,8)	(4,2)	0,0	0,0	0,0	0,0	0,0
<b>Cash from financing activities</b>	<b>(2,7)</b>	<b>(27,6)</b>	<b>(140,2)</b>	<b>(321,8)</b>	<b>(356,2)</b>	<b>(500,0)</b>	<b>(725,0)</b>	<b>(695,0)</b>	<b>(600,0)</b>	<b>(400,0)</b>
Net change in cash	99,0	(30,3)	(43,3)	39,2	(107,6)	22,2	(37,3)	132,2	409,3	642,8
Cash and equivalents, beginning of period	320,5	419,5	389,1	345,8	385,0	277,4	299,7	254,1	394,5	803,9
Cash and equivalents, end of period	419,5	389,1	345,8	385,0	277,4	299,7	262,3	394,5	803,9	1.446,6

Data in \$Mm

## Appendix T: Ulta's DCF Valuation

	2018E	2019E	2020E	2021E	2022E	2023E
EBIT	856,0	945,9	1.046,0	1.114,7	1.178,6	-
*(1-t)	0,8	0,8	0,8	0,8	0,8	-
<b>NOPLAT</b>	650,6	718,9	794,9	847,2	895,7	913,6
+D&A	305,4	359,3	412,0	455,4	424,2	-
-CAPEX	(375,0)	(383,7)	(374,9)	(309,5)	(304,9)	-
+Change WC	(177,0)	(120,1)	(124,6)	(74,8)	(63,1)	(64,4)
<b>FCFF</b>	403,9	574,5	707,4	918,3	951,9	849,3
Terminal value						18.448,2
<b>EV</b>	<b>16.262,0</b>					

Data in \$Mm except otherwise stated

## Appendix U: Ulta's Relative Valuation

	Forward EV / EBITDA	Forward EV / Operating CF	Forward Price / EPS
Ulta Beauty	12,24	16,63	22,26
Urban Outfitters	8,22	9,97	16,58
American Eagle Outfitters	6,08	7,40	13,66
Abercrombie & Fitch	4,92	6,34	28,58
E.l.f. Beauty	15,02	16,94	31,07
Church & Dwight	14,25	19,54	20,25
Median	10,23	13,30	21,26
Min	4,92	6,34	13,66
Max	15,02	19,54	31,07
<b>EV (\$Mm)</b>	<b>11.883</b>	<b>11.934</b>	<b>13.756</b>
Share Price (USD)	198,15	198,97	228,37
<i>Upside (Downside)</i>	<i>-22,2%</i>	<i>-21,9%</i>	<i>-10,4%</i>

## Appendix V: Ulta's APV Valuation

	2018E	2019E	2020E	2021E	2022E
Bank Debt	2.000	2.000	2.000	2.000	2.000
Interest on Bank Debt	80	80	80	80	80
Interest Tax Shield	19	19	19	19	19
<b>PV Tax Shield</b>	<b>19</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>16</b>

Note. Tax Shields were discounted with Ulta's cost of debt

Tax rate	24,0%
Unlevered beta	0,69
Unlevered cost of capital	6,6%
Cost of debt	4,0%
TV growth rate	2,0%

Interest coverage ratio	10,62
Moody's	Aaa
S&P	AAA
Probability of Default	0,54%
Direct bankruptcy cost	20,0%
Indirect bankruptcy cost	5,0%

PV Unlevered Firm	2.869
PV TV Unlevered Firm	13.393
PVTS	86
PV TV Tax Shields	309
(-) PV Bankruptcy Cost	22
EV	16.635
(-) Net Debt	(397)
Equity Value	17.033
Share Price (USD)	274,8

Data in \$Mm except otherwise stated

## Appendix W: Merged entity WACC computation

Unlevered Beta Retail	1,09
EV Retail	568.360
Unlevered Beta AWS	0,92
EV AWS	515.984
Unlevered Beta Amazon	1,01
EV Amazon	834.571
Unlevered Beta Ulta	0,69
EV Ulta	16.262
<b>Unlevered Beta Merged Entity</b>	<b>1,00</b>
Market Debt-to-Equity	5,30%
Tax Rate	21,00%
Re-levered beta	1,04

Rf	<b>2,83%</b>
Beta	1,04
Market Risk Premium	5,50%
<b>Re</b>	<b>8,56%</b>
<b>Rd</b>	<b>3,73%</b>
Net Debt to EV	5,31%
Equity to EV	94,69%
Tax rate	21,00%
WACC	8,26%

## Appendix X: Comparable Deals

Date	Acquirer	Target	Deal Value (\$bn)	Premium Paid
2017	Amazon	Wholefoods	13,7	27%
2017	Petsmart	Chewy.com	3,4	39%
2017	QVC	Home shopping network	2,1	29%
2017	Harland Clarke	Retailmenot	0,6	50%
2016	Walmart	Jet.com	3,0	80%
2016	Fnac	Darty	1,6	47%
2015	Walgreens Boots Alliance	Rite Aid	17,2	48%
2013	Kroger	Harris Teeter	2,7	34%
2011	Walmart	Massmart	2,4	19%

## Appendix Y: Accretion/Dilution Model

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Target Revenue	6.820	7.818	8.835	9.470	10.028	10.229	10.433	10.642	10.855	11.072
Acquirer Revenue	239.071	284.461	331.012	385.922	445.054	521.749	579.491	638.091	700.565	766.897
Revenue Synergies	10	31	57	95	100	102	104	106	109	111
Target COGS	(4.440)	(5.089)	(5.761)	(6.184)	(6.549)	(6.679)	(6.813)	(6.949)	(7.088)	(7.230)
Acquirer COGS	(149.301)	(175.010)	(201.726)	(232.126)	(265.368)	(309.543)	(342.049)	(376.254)	(412.751)	(451.549)
COGS Synergies	7	20	37	62	65	67	68	69	71	72
Costs Associated with Revenue Synergy	(9)	(27)	(50)	(83)	(88)	(89)	(91)	(93)	(95)	(97)
Acquirer Fulfilment Costs	(34.021)	(40.032)	(46.346)	(53.806)	(61.787)	(72.288)	(80.794)	(88.873)	(97.494)	(106.658)
Fulfilment Synergies	5	16	30	54	62	72	81	89	97	107
Acquirer Technology & Content Costs	(30.398)	(36.122)	(42.884)	(50.976)	(59.918)	(70.812)	(79.008)	(87.383)	(96.280)	(105.679)
Target Marketing Costs	(308)	(361)	(412)	(442)	(468)	(477)	(487)	(496)	(506)	(516)
Acquirer Marketing Costs	(13.133)	(15.552)	(18.006)	(20.904)	(24.004)	(28.084)	(31.388)	(34.527)	(37.876)	(41.436)
Marketing Synergies	0	0	2	4	8	12	12	12	13	13
Target General & Administrative Costs	(1.192)	(1.398)	(1.594)	(1.708)	(1.809)	(1.845)	(1.882)	(1.919)	(1.958)	(1.997)
Acquirer General & Administrative Costs	(4.182)	(4.976)	(5.791)	(6.751)	(7.786)	(9.128)	(9.272)	(10.209)	(11.209)	(12.270)
General & Administrative Synergies	9	28	52	86	91	93	95	97	99	101
Target Other Costs	(24)	(23)	(23)	(17)	(16)	(16)	(16)	(17)	(17)	(17)
Acquirer Other Costs	(318)	(377)	(437)	(507)	(582)	(681)	(761)	(837)	(918)	(1,005)
<b>Operating income</b>	<b>8.596</b>	<b>13.406</b>	<b>16.997</b>	<b>22.188</b>	<b>27.036</b>	<b>32.681</b>	<b>37.724</b>	<b>41.549</b>	<b>45.616</b>	<b>49.917</b>
Target Interest Income	1	1	1	1	2	2	2	3	3	3
Acquirer Interest Income	162	224	246	277	335	406	509	618	746	915
Target Interest Expense	0	0	0	0	0	0	0	0	0	0
Acquirer Interest Expense	(1.601)	(2.011)	(2.214)	(2.355)	(2.489)	(2.597)	(2.714)	(2.754)	(2.747)	(2.707)
Acquirer Other income (expense)	32	34	39	44	50	56	64	69	74	79
Foregone Interest on Cash	(103)	(103)	(104)	(104)	(105)	(105)	(106)	(106)	(107)	(107)
<b>Net Income Before Taxes</b>	<b>7.087</b>	<b>11.550</b>	<b>14.966</b>	<b>20.052</b>	<b>24.830</b>	<b>30.444</b>	<b>35.480</b>	<b>39.379</b>	<b>43.584</b>	<b>48.099</b>
Provision for Income Taxes	(1.488)	(2.426)	(3.143)	(4.211)	(5.214)	(6.393)	(7.451)	(8.270)	(9.153)	(10.101)
Acquirer Equity method investment activity, net of tax	(38)	(40)	(46)	(52)	(60)	(67)	(76)	(82)	(87)	(93)
<b>Net Income</b>	<b>5.561</b>	<b>9.085</b>	<b>11.777</b>	<b>15.789</b>	<b>19.556</b>	<b>23.984</b>	<b>27.953</b>	<b>31.027</b>	<b>34.344</b>	<b>37.905</b>
Pro-forma Adjustments	0	0	0	0	0	0	0	0	0	0
<b>Pro-forma Net Income</b>	<b>5.561</b>	<b>9.085</b>	<b>11.777</b>	<b>15.789</b>	<b>19.556</b>	<b>23.984</b>	<b>27.953</b>	<b>31.027</b>	<b>34.344</b>	<b>37.905</b>

Note. Pro-forma Adjustments are zero because neither company has reported non-recurring charges in the past three years.

Acquirer Average Diluted Shares	485	485	485	485	485	485	485	485	485	485
Shares Issued in Transaction	0	0	0	0	0	0	0	0	0	0
Total Diluted Shares	485	485	485	485	485	485	485	485	485	485
Pro-forma EPS	11,5	18,7	24,3	32,6	40,4	49,5	57,7	64,0	70,9	78,2
Acquirer Diluted EPS	10,2	17,3	22,6	30,6	38,2	47,3	55,4	61,7	68,5	75,7
Accretion (Dilution) (USD)	1,3	1,5	1,7	2,0	2,2	2,2	2,3	2,3	2,4	2,5
<b>Accretion (Dilution) (%)</b>	<b>12,4%</b>	<b>8,6%</b>	<b>7,7%</b>	<b>6,6%</b>	<b>5,7%</b>	<b>4,7%</b>	<b>4,1%</b>	<b>3,8%</b>	<b>3,5%</b>	<b>3,3%</b>

*Note.* Pro-forma Adjustments are zero because neither company has reported non-recurring charges in the past three years