In an industry where M&A is the new black, should Pandora A/S acquire Aritzia Inc.?

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Abstract

The present dissertation aims at performing a thorough analysis of the feasibility of a friendly acquisition deal between Pandora A/S and Aritzia Inc., where Pandora A/S is the acquirer firm, whereas Aritzia Inc. is the target. Pandora A/S is a global jewelry manufacturer and retailer, while Aritzia is a women's apparel designer, manufacturer and retailer; an overview of each company's business is presented. The analysis performed herewith also comprises an economic outlook of the jewelry and apparel industries, followed by the valuation of the companies as separate entities and as a combined entity, resorting to differing valuation approaches, such as the Discounted Cash Flow Valuation and the Relative Valuation methods. The deal would take place in a global environment with a strong M&A activity in the fashion industry, with the amount of deals and their value reaching record-high numbers. The suggested deal entails synergies valued at USD 395.19 million and will take the form of an all-share transaction, with a purchase price of USD 1,877 million, corresponding to a premium of 20.35%. By 2023, expectations are that the deal will potentially yield an accretion of 5.87%.

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Keywords: M&A; Jewelry Industry; Apparel Retail Industry; Omnichannel; Synergies; Premium

Resumo

A presente dissertação tem como objetivo realizar uma análise minuciosa da viabilidade da realização de um negócio de aquisição amigável entre a Pandora A/S e a Aritzia Inc., no qual a Pandora A/S atua como empresa aquisitiva, e a Aritzia Inc. como empresa-alvo da compra. A Pandora A/S é uma produtora e retalhista mundial de joalharia, enquanto que a Aritzia elabora o design, produz e vende produtos de vestuário feminino; é aqui apresentada uma visão global do negócio de cada empresa. A análise realizada inclui, também, uma visão global das indústrias de joalharia e vestuário, seguida da avaliação das empresas enquanto entidades individuais, e também enquanto uma só entidade fundida, recorrendo a diferentes abordagens de avaliação. A transação teria lugar num ambiente global pautado por uma forte atividade de Fusões e Aquisições na indústria da moda, sendo que o número de transações e o valor que estas tomam têm atingido valores recorde. O negócio aqui sugerido ocasiona sinergias avaliadas em USD 395.19 milhões, e adota a forma de um negócio totalmente financiado por ações, com um preço de aquisição de USD 1,877 milhões, a que corresponde um prémio de 20.35%. Em 2023, expecta-se que a transação terá associado um lucro por ação de 5.87%.

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Título: Numa indústria em que Fusões e Aquisições são a nova moda, deverá a Pandora A/S adquirir a Aritzia Inc.?

Palavras-chave: Fusões e Aquisições; Indústria de Joalharia; Indústria de Retalho de Vestuário; Omnicanal; Sinergias; Prémio

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LIST OF ABBREVIATIONS

ADR	American Depositary Receipt
BRIC	Brazil, Russia, India and China
CAD	Canadian Dollar
CAGR	Compound Annual Growth Rate
CapEx	Capital Expenditures
COGS	Cost of Goods Sold
C&IP	Consumer and Industrial Products
D&A	Depreciation and Amortization
DCF	Discounted Cash Flows
DKK	Danish Krone
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EMEA	Europe, Middle East and Africa
EV	Enterprise Value
FCFF	Free Cash Flows to the Firm
FX	Foreign Exchange
G&A	General and Administrative
IA	Intangible Assets
IPO	Initial Public Offering
MarketCap	Market Capitalization
NASDAQ	National Association of Securities Dealers Automated Quotations
OMX	Open Mobile Exchange
p.e.	per example
PER	Price-to-Earnings
PGR	Perpetuity Growth Rate
PPE	Property, Plant and Equipment
PV	Present Value
ROA	Return on Assets
ROIC	Return on Invested Capital
SG&A	Selling, General and Administrative
SG&M	Selling, General and Marketing
TSE	Toronto Stock Exchange
USA	United States of America
USD	United States Dollar
WACC	Weighted Average Cost of Capital
ΔNWC	Changes in Net Working Capital

List of Variables and Symbols

β_L	Levered Beta
β_U	Unlevered Beta
Cov (x ; y)	Covariance of the variables x and y
D	Debt
E	Equity
$E(CF_t)$	Expected Cash Flow at time t
$FCFF_t$	Free Cash Flow to the Firm at time t
k	Discount Rate
k_d	Cost of Debt
k_e	Cost of Equity
R_f	Risk-free Rate
R_i	Return on Individual Stock
R_M	Return on Market Index
T_c	Corporate Tax Rate
Var (z)	Variance of the variable z

1 INTRODUCTION

M&A is the new black in fashion, as retailers and manufacturers attempt to survive in an industry where disruption is constant and from which shareholders expect positive return levels.

Being as it is, the current ever-changing economic conjuncture presents a challenge for companies all around the world. Disruption is a key-word in today's global economy as technology is gaining terrain, consumers' preferences shift on an hourly-basis, nationalistic and protectionist trends are rising, and sustainability influences company reputation and consumer demand. Consequently, operating margins and profits are threatened, and companies understand that acquisitions appear as a good strategy to successfully face this scenario.

However, in the scope of the current aggressive M&A environment, where deals are reaching record-high values, companies should question the worthiness of engaging in a deal.

Accordingly, one question is hereby posed: in the current economic M&A environment, is it value-accretive for Pandora A/S to buy Aritzia Inc.?

With the goal of answering this question, the present dissertation is structured as follows: section 2 provides an overview on academic literature on M&A and company valuation; section 3 entails an overview of the industries where Pandora and Aritzia operate – the jewelry industry and the apparel retail industry – and identifies the main industry trends; section 4 describes and analyses Pandora and Aritzia's business activity, quote history, ownership structure and historical performance; section 5 consists of a discussion on the rationality of the deal; section 6 comprises each company's individual valuation; section 7 values companies as a combined entity and includes a description of the peculiarities inherent to a cross-border deal, the sources of synergy and their valuation; section 8 describes the transaction process, namely the method of payment and deal value; section 9 presents the conclusions emerging from the elaboration of this dissertation, along with the recommendation of whether or not the companies should go ahead with the proposed deal.

2 Literature Review

The concept of Mergers and Acquisitions (M&A), also referred to as business combinations, denotes the situation in which disassociated companies are combined into one single reporting entity. As a result, we can interpret the occurrence of M&A as a form of company restructuring – it is likely that firms respond to industry shocks by restructuring, which is often carried out by means of merging (Andrade, Mitchell, & Stafford, 2001).

The definition of a transaction rationale together with the definition of a takeover strategy is one of the four steps to consider upon engaging in M&A. The steps that follow involve the choice of a target and its valuation, the amount to be paid by the acquirer for the acquisition of the target, and the method of payment (stock, cash or a combination of both). Lastly, crucial to the success of the deal, is the post-merger period, defined by the need to integrate two distinct business models (Damodaran, 2012).

In this context, the present section provides a theoretical framework for M&A through a thorough literature review. The chapter begins by describing the several motivations leading to the occurrence of M&A, followed by M&A deals with a cross-border nature, how to finance M&A, and the different methods used to value the firms involved in the deal.

2.1 M&A Motivations

A merger or acquisition occurs when the expected economic, operational and financial benefits arising from the combination of companies are greater than the benefits emerging from the separate entities operating on their own. The existence of synergies is what determines the existence of M&A deals. Damodaran (2005) describes synergies as the *"additional value that is generated by combining two firms"* and categorizes them into operating and financial, according to their sources.

2.1.1 Operating Synergies

Operating synergies are translated into higher expected cash flows and can emerge from economies of scale, increasing pricing power and higher growth potential, for example. The operational synergies that may arise from the present deal are herewith described.

2.1.1.1 *Diffusion of Know-How and Strategic Realignment*

The *"complementarity in research and basic technological expertise"* originates synergies (Lewellen, 1971). When companies have differing functional strengths, these can be transferred. Through the share of know-how via M&A, companies can more easily adapt to changes in their surrounding environment, allowing them to adapt faster than if they were to internally develop (Verboven, Ilkovitz, Stennek, Meiklejohn, & Röller, 2000).

Pandora will take advantage of Aritzia's know-how of e-commerce and its developed and successful online platform, rather than developing one internally (Motis, 2007).

2.1.1.2 *Increase in Purchasing and Pricing Power*

The combined company (operating at the downstream stage of production) has an increased purchase and bargaining power with suppliers (at the upstream level of production) due to becoming a bigger company. The increase in purchasing power yields the benefit of obtaining discounts and/or better prices from suppliers, leading to increased margins and operating income (Damodaran, 2005).

2.1.1.3 *Higher Growth and Entrance in New Markets*

Thanks to the business combination, both the acquirer and the target can enter new markets and profit from each other's already established distribution network and public awareness of the brand, or increase sales in markets where they already operate (Damodaran, 2005).

2.1.2 FINANCIAL SYNERGIES

Financial synergies are evident through either higher cash flows or lower discount rates, and may include tax benefits and higher debt capacity.

Financial synergies have both positive and adverse effects. For example, risk reduction is one advantage that springs when two firms are combined, as there is a diversification factor, given that activities' cash flows are imperfectly correlated. Yet, when firms operate on their own, the separate capital structures entail the benefit of optimization.

The impact of financial synergies depends on the riskiness and correlation of cash flows and taxes, among others.

2.1.2.1 *Diversification – Riskiness and Correlation of Cash Flows*

Diversification entices M&A activity (Damodaran, 2005). Modern Portfolio Theory dictates that having a level of risk at aim, it is possible to build up a diversified portfolio which maximizes returns (Motis, 2007). Moreover, according to Leland (2007), financial synergies are more likely to be positive when companies have a low correlation and low even similar volatilities. Furthermore, when the firms involved in the transaction have elevated default costs, diversification increases value through risk-reduction (Leland, 2007).

2.1.2.2 *Increased Debt Capacity*

By reducing the risk of default, mergers increase the combined firm's debt capacity (Lewellen, 1971). M&A reduces the risk of default of the companies involved because they reduce the relative variability of the combined firm's income stream. Consequently, there is a lower probability that the combined entity will be unable to meet with the contractual agreement of interest and principal payments.

2.2 CROSS BORDER MERGERS

Within the scope of this dissertation, it is relevant to discuss cross-border mergers, as Pandora is a Danish company and Aritzia is Canadian. Unlike in national mergers, cross-border mergers face challenges posed by the existence of national borders. Some challenges which are not present in national mergers and influence cross-border deals are the different cultural identities – different languages are spoken, there may be different religions, and the own country's corporate culture can also diverge. All these factors increase the costs of M&A and must be examined.

The reasons that justify the occurrence of cross-border M&A are, conceptually, the same as the ones occurring at national levels (Erel, Liao, & Weisbach, 2012), as well as additional motives that national borders create. Nevertheless, firms merge when the value of the combined firm is superior to the sum of the values of the individual firms (Erel et al., 2012).

Geography plays an important role in cross-border M&A, since the distance between countries increases the costs of merging. Bilateral trade is also important – synergies are more likely to arise as the acquirer company already has established a set of customers in the target's country (and vice-versa), knows the market and the culture (Erel et al., 2012).

Valuation changes emerging from currency movements are also an important factor in international deals. When there is a depreciation in the target firm's currency in relation to the acquirer's, the target becomes more attractive to potential acquirers as it becomes relatively cheaper. The opposite can also occur - when the acquirer's currency appreciates, its buying power increases.

Additionally, there are complex issues that must be subject of careful consideration when engaging in international deals. These are related to political considerations and their implications on the deal – p.e., the current environment of an imminent trade war between the USA and China and its indirect impact in Europe, Canada, and Latin America (Tennant, 2018). The current nationalistic and protectionist trends permeating economies should also be examined, along with legal and regulatory issues, diverging tax systems and accounting rules, and labor and employment challenges (Tennant, 2018).

Notwithstanding these challenges, in 2018, 38.2% of global M&A corresponded to cross-border deals.

2.3 Valuation Techniques Overview

2.3.1 Discounted Cash Flows (DCF)

According to the DCF methodology for valuing operations, the value of a business equals its forecasted future cash flows discounted to their present value (Luehrman, T., 1997). Such discount is made through an adequate rate, adjusting for the time value of money, and representing the risk of the cash flows (Luehrman T., 1997). The forecasted cash flows are computed for a period varying from company to company, after which the firm is assumed as a going concern.

Formula 1 indicates how to compute the present value (PV) of an asset:

$$PV = \sum_{t=0}^{n} \frac{E(CF_t)}{(1+k)^t}$$

Where:

- ***n*** is the number of periods in the asset's life
- ***E(CF*** $_t$***)*** is the expected cash flow at time *t*
- ***k*** is the discount rate

Formula 1 *- Present value*

2.3.1.1 *Free Cash Flows to the Firm (FCFF)*

The hereby preferred method to compute FCFF, takes on from the firms' EBIT (Kaplan & Ruback, 1996) and is given by Formula 2.

	$FCFF_t$
=	EBIT
–	Corporate taxes *(EBIT*tax rate)*
+	Depreciation and Amortization (D&A)
–	Changes in Net Working Capital (ΔNWC)
–	Capital Expenditures (CapEx)

Formula 2 *- FCFF*

2.3.1.2 *WACC (Weighted Average Cost of Capital)*

WACC is the discount rate used herein to compute the PV of the FCFF.

The WACC is a weighted average of "*two very different magnitudes"*: the cost of debt and the required return to equity (Fernández, 2011).

WACC weights "*the market-determined cost of debt and equity with the respective proportional claims of each"* and adds these two components (Froot & Kester, 1995). It is a tax-adjusted discount rate which considers the tax advantage associated with the increase in corporate debt: the interest tax shield.

WACC is computed resorting to Formula 3.

$$WACC = \frac{E}{V} * K_e + \frac{D}{V} * K_d * (1 - T_c)$$	Where: • ***E*** is the market value (MV) of the firm's equity • ***D*** is the MV of the firm's debt • ***V=E+D*** is the total MV of the firm's financing • K_e is the required return on equity • K_d is the cost of debt • T_c is the corporate tax rate

Formula 3 *– WACC*

2.3.1.2.1 Cost of Equity

The cost of equity is determined by taking the risk-free rate of an economy, to which the market risk premium multiplied by the risk of a company's stock (β) is added. This is reflected by Formula 4:

$$K_e = R_f + \beta_L(R_M - R_f)$$	Where: • R_f is the risk-free rate • β_L is the levered beta • R_M is the return on market index • $R_M - R_f$ is the market risk premium

Formula 4 *- Cost of Equity*

2.3.1.2.1.1 The Risk-Free Rate

The risk-free rate represents the compensation an investor should expect to get from a zero-risk investment. In finance, risk is assessed based on the variance of actual returns relative to expected returns – when variance is zero, we are before a risk-free asset (Damodaran, 2008). According to Damodaran (2008), for mature markets, using the 10-year treasury bond rate as a measure for the risk-free rate is *"a good practice in valuation"*.

Within the scope of the present paper, given the international nature of the deal, it should be noted that the risk-free rate varies across currencies. The risk-free rate used in an asset's valuation should be measured in the same currency as the cash-flows, p.e., the Canadian Govecotrnment bond rate will be used as the risk-free rate if the cash flows of an investment are presented in CAD (Damodaran, 2008).

2.3.1.2.1.2 Beta (β)

Beta is a measure of the relative volatility of a stock against the market (Jacobs & Shivdasani, 2012). It measures the systematic (non-diversifiable) risk of a stock by comparing it to the stock's reaction in relation to the market.

Beta can either be levered or unlevered. The levered beta (β_L) measures the risk of a firm against the market, considering both debt and equity in the firm's capital structure; the unlevered beta (β_U) measures the risk of a firm's assets, as it does not consider the financial effects of leverage.

To compute the cost of equity, we consider the levered beta of a firm, given by Formula 5.

$$\beta_L = \frac{Cov(R_i; R_M)}{Var(R_M)}$$	Where: • ***R_i*** is the return on an individual stock • ***R_M*** is the return on the overall market • ***Cov*** is the covariance – how changes in a stock's returns are related to changes in the market's returns • ***Var*** is the variance – how far the market's data points spread out from their average value

Formula 5 *–Levered Beta*

2.3.1.2.2 *Cost of Debt*

The rate at which a company can borrow money today is given by the cost of debt ***(K_d)***, which is derived by adding the company's estimated default spread to the risk-free rate:

$$K_d = R_f + Default\ Spread$$

Formula 6 - *Cost of Debt*

Companies which have a greater risk of defaulting are associated with higher costs of debt – debtholders will demand a higher premium for taking on debt securities that are riskier.

2.3.1.3 *Discounting Foreign Currency Cash Flows*

According to Zenner, Matthews, Marks, & Mago (2004), there are two paths to determine cross-border DCF values. The first is through discounting cash flows at the "home" currency discount rate. The second involves discounting cash flows at the foreign currency discount rate and is the path hereby preferred and detailed in Appendix 1.

2.3.2 RELATIVE VALUATION

The relative valuation methodology resorts to the value of comparable (or similar) assets assessed by the market and compares these with the value of the asset under analysis – this methodology was developed bearing in mind the conception that the market values similar assets in similar ways (Damodaran, 2015).

As specified by Kaplan & Ruback (1995), relative valuation holds two assumptions which are important, though not entirely valid: the risks and future cash flows of the peer companies are expected to be proportional to the ones of the firm under analysis; the value of the firm varies proportionally to changes in its performance.

"Multiples are useful in a second stage of valuation", as they allow the analysis of the methods previously used and enable a comparison between the valued firm and its peers (Fernández, 2001). Multiples are always computed relative to a performance measure, such as EBITDA, EBIT, Net Income or Revenues (Kaplan & Ruback, 1995). The most commonly used multiples

are the PER and the EV/EBITDA. However, some multiples are more appropriate than others for different industries (Fernández, 2001).

Value is gauged by multiplying the average of the peers' multiples by the performance measures of the company to be valued.

3 INDUSTRY OVERVIEW

Pandora is a multinational brand which designs, manufactures and markets jewelry. Aritzia operates both as a designer and as a retailer of several in-house apparel brands.

According to the Global Industry Classification Sector, both companies operate in the same industry: Apparel, Accessories and Luxury Goods (GICS: 25203010), which integrates the Textiles, Apparel and Luxury Goods sector , commonly known as the Fashion Industry.

Given the clear distinction between companies operating in the apparel sub-sector and in the jewelry sub-sector, the following section presents a separate analysis of the Jewelry Retail business and of the Apparel Retail one.

3.1 THE JEWELRY INDUSTRY

The Jewelry Industry is multifaceted, producing objects of personal adornment, from precious metals, gems and other materials, subjected to artistic treatment. Within the jewelry industry, there are two sales categories: costume jewelry and fine jewelry. Costume jewelry has lower quality, lower price, higher rates of repeat purchase, and is more penetrated by e-commerce. Fine jewelry makes up to 85% of the total jewelry industry, and is associated with luxury products.

The economic development of the industry is positively related to the economic cycles and is subject to the per capita income growth. After the 2008 crisis, the revival of the global economy positively impacted the market for all kinds of luxury goods, especially jewelry. The global market is expected to continue to grow in resemblance to recent years, a trend expected to prevail through the end of 2023.

Despite the upswing of the global economy and its positive impact in the market for luxury goods, there are new challenges ahead. It is crucial for players to be aware and responsive to important trends and developments, as consumer behavior changes.

The Jewelry Industry is fragmented, as the 10 largest players only represent 12% of the global market. It is a primarily local industry, as the rest of the market is composed of strong national brands and small enterprises. The strongest brands are expected to grow internationally through acquisitions.

As far as markets are concerned, China is the biggest one, representing 30% of the global jewelry market, as well as the biggest growing market in the industry, with a CAGR of 15%, from 2013 to 2018. The Chinese market is followed by India (which is expected to double in size within the next 5 years), by the USA (whose growth is expected to slow throughout the next 5 years), and by Europe (a market with steady growth over the years).

Figure 1 indexes the jewelry and watches industry value by 2017, by region.

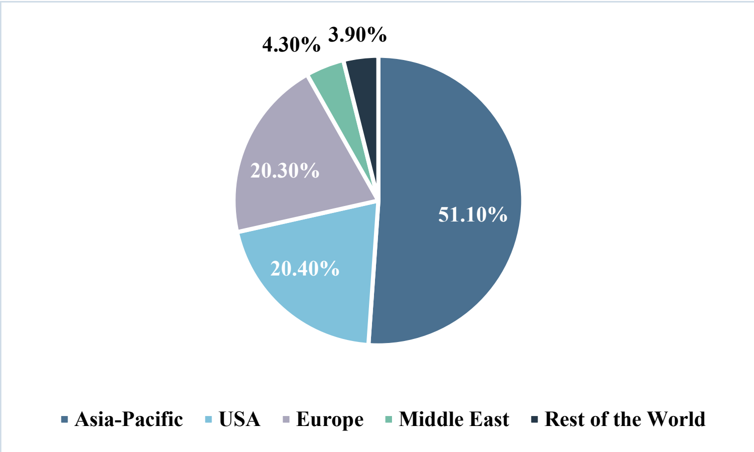

***Figure 1** - Global Jewelry & Watches Industry value by geographic location, 2017*

3.1.1 Growth Expectations

In the past, the growth of the jewelry industry was driven by the expansion of big established players (p.e. Cartier and Tiffany's) and by the entrance of new players in the market (p.e. Pandora). In contrast, McKinsey predicts that future growth will likely arise from non-jewelry players entering the market and expanding their supply assortment, namely high-end apparel players.

From 2017 to 2018, the Industry grew by 7% and, in 2018 it was worth €292 Billion. Studies point that, by the end of the current decade, the jewelry market will reach a growth of 4% to 10% (Pentago, 2017). Three types of consumers were identified as contributors to this growth:

1. "New money" consumers, described as consumers whose purchasing power is self-acquired (as opposed to inherited) and have the desire to show-off their newly-acquired status. There has been an increasing number of high net-worth individuals worldwide.
2. Emerging market consumers, from countries with emerging economies and increasing purchase power, for whom brands inspire a sense of trust and of an upgraded lifestyle.

3. Young customers, who tend to buy branded jewelry to express themselves and sense self-realization. There is an increasing inclination of millennials towards fine jewelry.

Allied to these consumers there is the revival of the global economy, with which consumers' purchase power is increasing. This is associated with Engel's Law which states that as income rises, the percentage spent on basic surviving needs (namely food) decreases, whilst the percentage of income spent on superfluous goods and services increases (namely luxury goods and entertainment services).

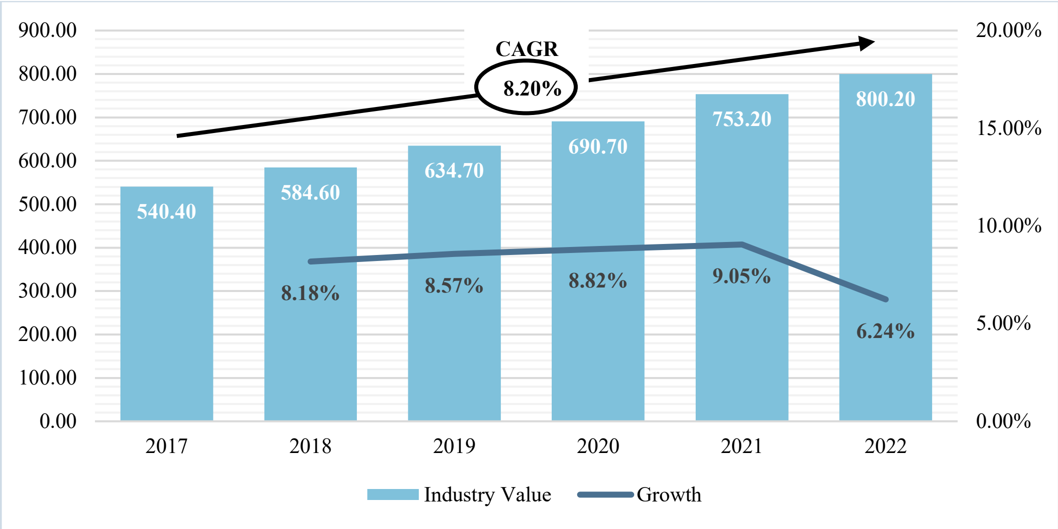

Figure 2 - Expected jewelry and watches industry growth, in USD billion, 2017-2022

3.1.2 Industry Trends

3.1.2.1 *E-Commerce and the Evolving Brick-and-Mortar Store*

The percentage of jewelry sold online is relatively small when compared with other retail categories. In the jewelry industry, e-commerce represents 4%-5% of sales. This value is expected to increase to 10% by 2020. Associated with the purchase of jewelry there is a sensory experience – jewelry is a high-involving category and, besides the need for customers to touch and feel the merchandise, there is a higher reliability associated with brick-and-mortar stores.

Nowadays, omnichannel development has had an increasing importance, as customers are becoming more demanding for convenience. Omnichannel consists of a marketing approach to sales via different channels, which aims at providing customers a unique and seamless shopping experience, either via online shopping or shopping at a brick-and-mortar store, providing customers an almost immediate product assortment and shopping possibility. Moreover, around two-thirds of customers rely on social media to guide purchases, from which retailers have been taking more and more advantage to drive sales.

The landscape is evolving for the traditional brick-and-mortar stores. Both in the apparel and jewelry industries, mono-brand stores have been gaining ground. For instance, the number of Pandora stores quadrupled from 200 locations in 2009 to over 800 in 2012. The evolution of mono-brand stores has occurred at the expense of multi-brand boutiques and department stores sales. Jewelry players are investing in mono-brand boutiques, and Pandora is not an exception to the rule. Mono-brand boutiques offer companies the advantage of having greater control over their brands, and of potentiating profit margins, by being closer to customers.

3.1.2.2 *Conversational Commerce and the Evolving Store*

Retail spaces are becoming more than places of transaction. Conversational commerce is on the rise - consumers expect personalized products and services. Chatbots are increasingly being adopted to guide customers more efficiently on their shopping journey and to customize products.

3.1.2.3 *High Demand for Convenience*

Convenience is a critical factor increasingly influencing purchasing decisions. Consumers seek what they need, when and where they want it. The abundance of choice and information available makes it easier for customers to choose the most convenient option. Hence, omnichannel has become standard and essential to meet customer demand.

3.1.2.4 *Sustainability on the Rise*

Consumer expectations of environmental and social performance continued to grow in 2018. Young people perceive the private sector as a potential force for positive impact and are aware of the impact of socially and environmentally-responsible companies in society.

3.1.2.5 *Polarization and Hybrid Consumption*

The market for jewelry is becoming polarized – while the high and low-end of the market are growing, the middle-market is stagnating. Thus, fine jewelers may opt between two distinct strategies – introducing new more affordable product designs, providing the opportunity for less affluent consumers to enter the brand experience, or play exclusively in the high-end of the market. In this possibility scenario, Pandora has opted to design affordable jewelry.

There is an increasing number of hybrid consumers which do not fit into any particular consumer category defined by traditional marketing literature. The hybrid consumer may either buy low-end or high-end products on differing occasions.

3.1.2.6 *Technology in Jewelry Items*

As technology is marking its presence into people's everyday lives, it is also making its way into jewelry. Wearable technology design has been growing and smart bracelets and watches are trending. This is associated with customers' need for convenience, reflected in the shopping experience and also in choosing the convenient features attached to wearable technology.

3.1.2.7 *Company Integration*

The strongest national brands are expected to grow internationally and become a top brand by 2020 due to industry consolidation, through the acquisition of small local jewelers by international retail groups. Furthermore, the concept of Industry 4.0 invariably indicates that supply-chain processes will accelerate, and vertical integration will become increasingly common, as it is a factor that defines whether companies will survive the current market dynamics or not.

3.2 THE APPAREL RETAIL INDUSTRY

The apparel industry integrates companies which design, manufacture, distribute and sell clothing items (which can include footwear and accessories). The global apparel market is worth USD 1.34 trillion a year, for which womenswear accounts for more than 53% of spending (Common Objective, 2018). Throughout the past years, the apparel retail industry has experienced healthy growth rates, expected to continue in the future.

As far as market size by geography is concerned, the USA market is the world's largest and accounts for 23.6% of the global industry, followed by the Asia-Pacific region. The latter is a market on the rise and represents 37.1% of the global market. The ten top national markets make up 69% of the global apparel retail marketplace. Amongst these are the BRIC, whose population size has a high capability of accelerating revenue growth in the industry.

97% of the fashion retail sector profit is earned by the 20 top players. The 10 largest brands represent 8% of global sales, and are presented in Appendix 2.

3.2.1 GROWTH EXPECTATIONS AND PROFITABILITY PERFORMANCE

The main drivers for growth in apparel retail are global per capita disposable income growth and global population growth (Ibis World, 2019), along with positive economic contexts. Indeed, the strong sales in 2018 were bolstered by a strong US economy and by a healthy labor market, resulting in the increase of disposable income in developed and developing economies. In fact, the BRIC countries and their growing populations highly influence apparel demand due to the sheer size of their populations.

Industry revenues are expected to grow at the annualized rate of 4.60%, from 2018 to 2023, representing an increase of, roughly, USD 822.7 billion a year (Ibis World, 2019). Industry value is expected to grow 29.70% from 2017 to 2022, reaching USD 1.834 billion. Figure 3 indexes global industry growth from 2017 to 2022.

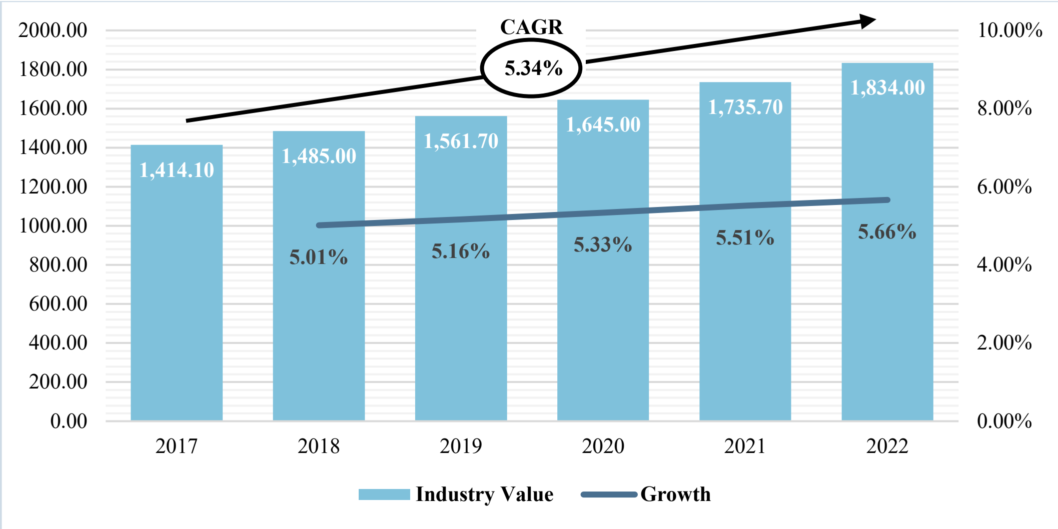

Figure 3 *- Expected apparel retail industry growth, in USD billion, 2017-2022*

ROA is a commonly used measure of profitability performance in the industry. Since 2017, ROA in apparel retail has been registering a changing pattern as it is lower than during the 2008 crisis. This pattern is driven by pressures compressing companies' profitability, as competition becomes fiercer, and new players enter the market.

3.2.2 Industry Trends

The apparel retail industry is going through a process of disruption which is challenging the traditional market rules, as new players attempt to penetrate it and the world becomes more digitalized. Disruption is also enabled by the recent trade war between the USA and China, as well as by consumers' growing demand for personalized products. The following section details the main industry trends.

3.2.2.1 *Consumer Power*

The market trend of ready-to-wear items denotes mass production aligned with mass consumption and the increasing power of consumers.

Jeffrey Bezos describes «*the customer empowerment phenomenon*» as customers are «*divinely discontent*» and «*people have a voracious appetite for a better way, and yesterday's "wow" quickly becomes today's "ordinary"* » (Amazon, 2017).

This phenomenon is a consequence of customers being increasingly digitally connected and thus have access to more information than ever before, leading them to be more demanding for their needs to be fulfilled instantly.

3.2.2.2 *Competition and Convergence*

Competition in the industry is increasing. Besides the new entrants from other industries which are creating their own retail decks, there is an increasing number of e-retailers (which do not have leasing nor store maintenance costs) and discount players with highly competitive prices.

New tech-enabled players which offer expensive to develop products and a distinct product assortment have also penetrated the industry, at the same time that retailers are expanding into other consumer sectors. Consequently, it has become increasingly difficult to distinguish retail players from tech players.

Hence, companies' costs to increase market share are increasing.

3.2.2.3 *The Omnichannel Experience*

As mentioned in **Section 3.1.3.1.**, omnichannel consists of a marketing approach to sales via different channels. In the core of this approach, there is the integrated shopping experience, where customers' choice of channel becomes indifferent.

Attached to this concept are companies' plans to enable convenience through technology, either online or in physical stores. Companies are attempting to enable online shopping to resemble physical shopping and vice-versa, to provide consumers a unique shopping experience. For example, Amazon developed a virtual fitting room that simulates how customers look with the desired items, resorting to their social media photos. Conversely, American Eagle installed fitting-room devices where customers can search for more product information, request different sizes and look for other items in the store's inventory.

3.2.2.4 *The Celebrity Effect*

Celebrities have the power to set trends, as the human brain perceives them as friends, and fans engage in the purchase of items worn by their idols as if these were personally recommended by someone close (Chi, Yeh, & Tsai, 2011).

Revenues are driven by this phenomenon and brands look for celebrities to participate in their campaigns. Appendix 3 entails an example of the celebrity effect.

3.2.2.5 *Demand for Sustainability and Ethical Behavior*

New generations are more aware of the need for sustainability and demand sustainable products. The fashion industry reacted by sustainable production materials (sustainable apparel items grew 139%), reaching sustainability scores of 75% in 2017.

Other trends are the demand for size, ethnicity and gender diversity, "*driven by the growing popularity of body positivity on social media and increasing societal acceptance of diversity"* (Duff & Phelps, 2019), to which the industry positively responded.

4 Company Overview

4.1 Pandora

Pandora A/S is a Denmark-based company, considered the world's leader in high-quality and contemporary affordable jewelry, and is the number one jewelry brand in the world. The company is headquartered in Copenhagen, Denmark, and went public in October 2010.

Pandora operates as a designer, manufacturer and marketer of jewelry. The business is divided into five distinct segments: charms, bracelets, rings, earrings, and necklaces & pendants. In 2018, the biggest source of revenue was the Charms segment, representing 53% of sales. Furthermore, the company's sales are generated through different channels: owned retail stores (including e-stores), wholesale and third-party distribution. Revenue by product category and by channel are outlined in Figures 4 and 5, respectively.

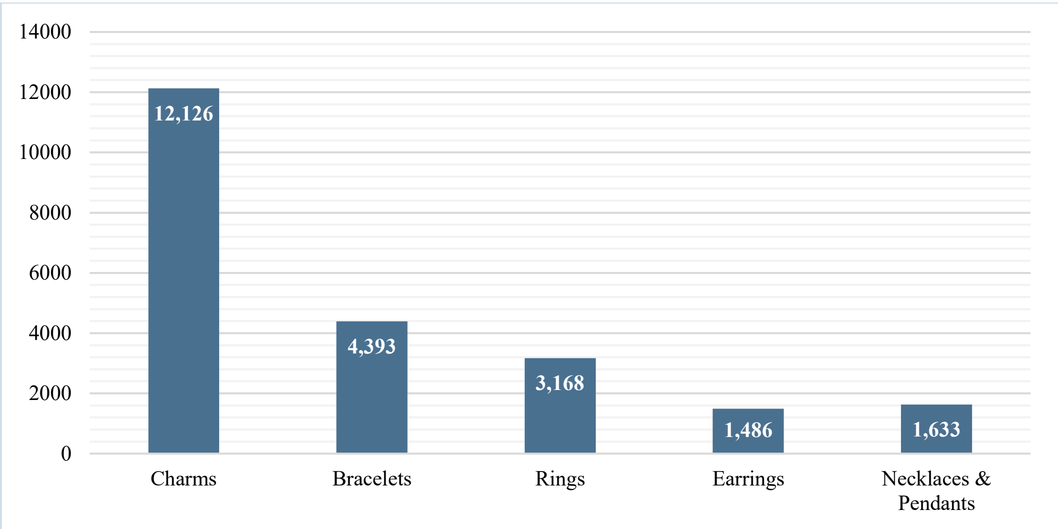

Figure 4 *- Pandora's revenue by product category, in DKK million, 2018*

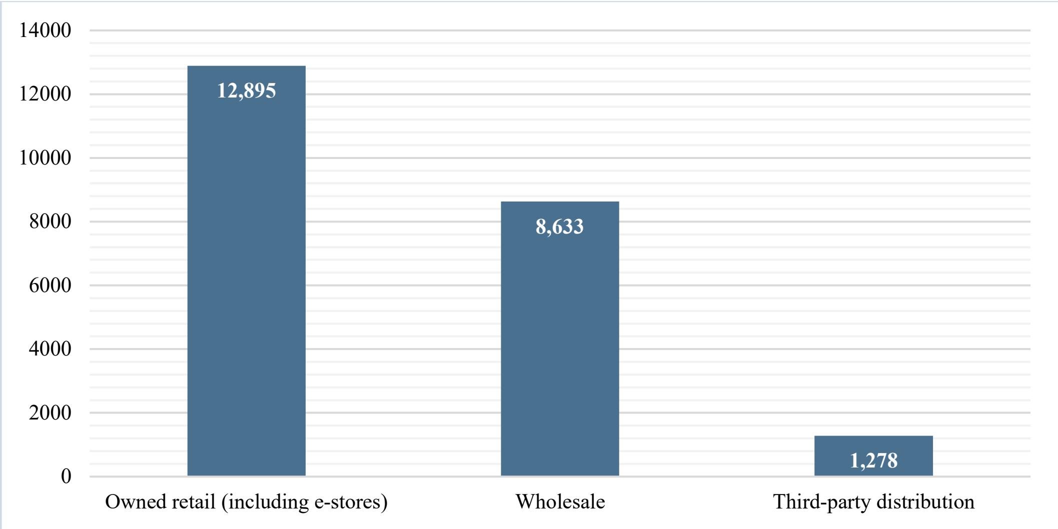

Figure 5 - Pandora's revenue by product category, in DKK million, 2018

Pandora operates in over 100 countries and employs around 32,000 people. Most of the company's revenue (around 50%) is generated in the Asia-Pacific region.

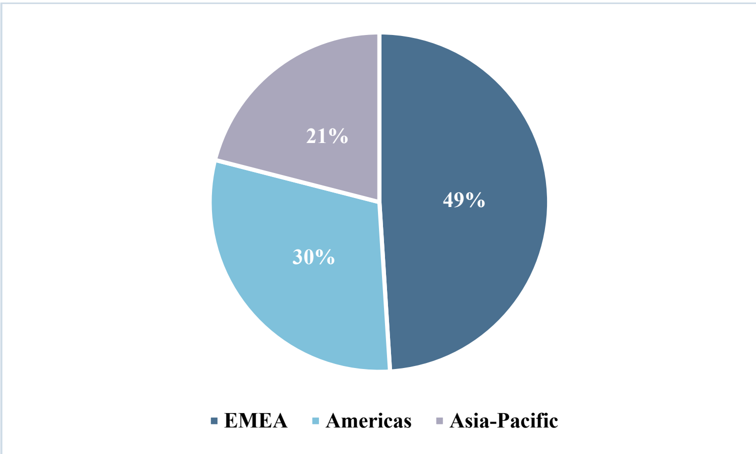

Figure 6 - Pandora's revenue by geographic region, 2018

4.1.1 Share Price History

Pandora launched its IPO on October 5th, 2010, in the NASDAQ OMX Copenhagen stock exchange; additionally, it is included in the blue-chip index OMX C20. Pandora is also traded in the US over-the-counter market, under the symbol PANDY, through its ADR (American Depositary Receipt).

Throughout 2018, Pandora's lowest quoted price was DKK 256.7, being the highest DKK 700.0. As of March 3rd, 2019, the company's MarketCap was DKK 32,030,620,332.5 (approximately USD 4,868,768,684.67).

Figure 7 presents the market and Pandora's cumulative returns.

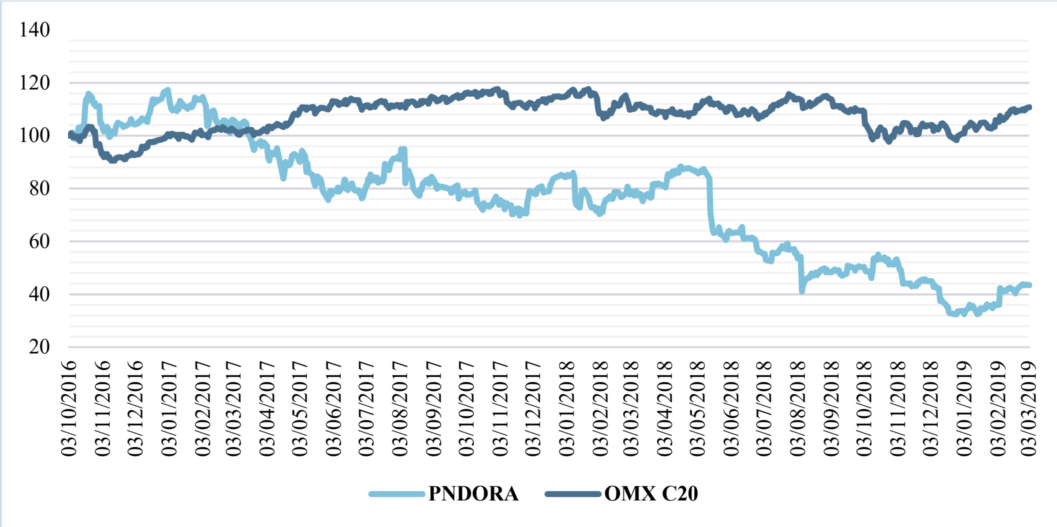

***Figure** 7 - Pandora and OMX C20 cumulative returns, 3-oct-2016 to 4-mar-2019*

4.1.2 Program NOW

After changes in the company's interim joint leadership team and an unsatisfactory revenue performance in the third quarter of 2018, Pandora did a business health check, which led to the designing of Program NOW.

After careful analysis of the challenges of the business, Pandora found that there is a need to restore sustainable growth in the long-term, by focusing on like-for-like growth rather than on growth via expansion, to protect profitability. Hence, Pandora will proceed with the pursuit of cost opportunities, the reduction of working capital and unification of the company on a global basis. There is also emphasis on reigniting a passion for the brand.

As a first step, the Program entails a change in network expansion strategy, through the reduction of store openings and focus on key markets, and the reduction of the acquisition of franchises. Simultaneously, Pandora is investing in an omnichannel platform.

The step that follows targets a cost reduction of DKK 1.2 billion, which will be enabled by globally unifying the company. The third step focuses on like-for-like growth by enhancing the company's marketing, personalization, digitalization, e-commerce and customer store experience capabilities.

Financially, Program NOW will firstly have a negative impact in financial results. Expected organic revenue growth is between -3% and -7%.

4.1.2.1 *Previous Expansion Program*

Before Program NOW was strategized, Pandora went through an expansion program consisting of an investment of DKK 1.5 billion to improve and expand the world-class crafting facilities in Thailand, allowing a production at affordable prices and ensuring the company's leader position in jewelry crafting.

In 2017, a new crafting facility was opened in Lamphun (Thailand), and in 2018, a four-story innovation center and major crafting facility was inaugurated in Bangkok.

4.1.3 OWNERSHIP STRUCTURE

Pandora has 92,174,447 shares outstanding, from which 99.92% is free-float. The main shareholders are presented in Table 1.

Shareholder	#Shares	Position
Black Rock Institutional Trust Company, N.A.	5,300,000	5.30%
Swedbank Robur Fonder AB	3,730,000	3.73%
M&G Investment Management Ltd.	2,680,000	2.68%
Norges Bank Investment Management (NBIM)	2,360,000	2.36%
The Vanguard Group, Inc.	2,340,000	2.34%
Fidelity Investments Canada ULC	1,990,000	1.99%
Dimensional Fund Advisers, L.P.	950,000	0.99%

Table 1 *- Pandora's top shareholders, 2018*

4.1.4 Historical Analysis

A historical analysis of Pandora's performance has been carried out for the period of 2014 to 2018.

Figure 8 summarizes Pandora's revenue comparing to its EBITDA margin.

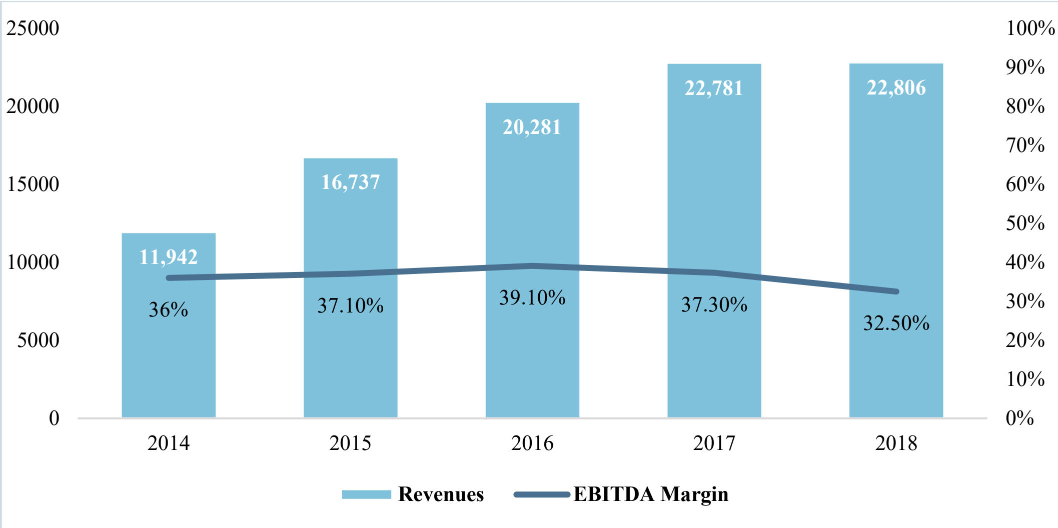

Figure 8 *- Pandora's revenues and EBITDA margin, in DKK million, 2014-2018*

The company's revenues registered a steady growth from 2014 to 2017. In 2018, however, even though grew positively, revenue growth deaccelerated, due to the third quarter of 2018, where revenues decreased by 3%. After registering annual growth rates ranging from 13% to 27%, from 2014 to 2017, in 2018, it grew close to 0%. Pandora' attempt to improve sales by increasing its product assortment was not successful, as consumers prefer Pandora's more traditional/classic products. Nevertheless, revenues registered a CAGR of 17.56% between 2014 and 2018.

COGS registered a similar pattern of evolution, with double-digit annual growth from 2014 to 2017, and having only grown 0.84% in 2018. In this scenario, Gross Profit grew, following a trend akin to revenue and COGS – double-digit growth throughout the years from 2014 to 2017, and negative growth in 2018.

As for Pandora's net profit, it had an unstable growth pattern throughout the years under analysis. Whilst in 2015 it registered a growth rate of 63.99%, in the years that followed that rate was negative: -4.27% in 2017 and -12.53% in 2018. Regardless of this growth pattern, net profit margin remained relatively stable.

Where the company's EBITDA margin is concerned, this increased until 2016. However, in 2017 and 2018, the value for the EBITDA/Revenues fell by 4.8 basis points, owing to the negative like-for-like sales growth, paired with changes in the levels of inventories at the wholesale level. Like-for-like sales, which grew 20% in 2014, 15% in 2015, 8% in 2016 and 0% in 2017, decreased 4% in 2018.

These metrics are summarized in Table 2.

	2014	2015	2016	2017	2018
Revenues	11,942	16,737	20,281	22,781	22,806
yoy % growth		40.15%	21.17%	12.33%	0.11%
COGS	3,519	4,544	5,058	5,815	5,864
in % of revenues		29.13%	11.31%	14.97%	0.84%
Gross Profit	8,423	12,193	15,223	16,966	1,942
in % of revenues	70.53%	72.85%	75.06%	74.47%	74.29%
Net Profit	3,098	3,674	6,025	5,768	5,045
in % of revenues	25.94%	21.95%	29.71%	25.32%	22.12%
EBITDA	4,294	6,214	7,922	8,505	7,421
in % of revenues	35.96%	37.13%	39.06%	37.33%	32.54%

Table 2 - *Pandora's main metrics overview, in DKK million, 2014-2018*

4.2 Aritzia

Aritzia is a Canadian-based company, whose main business is the designing and retailing of high-quality apparel for women, having developed exclusive in-house brands (shown in Appendix 6). Aritzia was founded in 1984 in Vancouver, Canada, where it is headquartered.

As a vertically-integrated company, besides being a retailer, Aritzia also manufactures most of its lines, allowing the company to control production and costs. Aritzia's product assortment ranges from apparel items to sports clothing and accessories. Aritzia is considered an anti-fast fashion company whose performance has been consistent, unlike what has been the case with fast-fashion players, whose performances have been softening.

Geography-wise, the company operates brick-and-mortar stores in Canada and the USA. Figure 9 represents revenue by country in 2018 (generated in boutiques and the e-store).

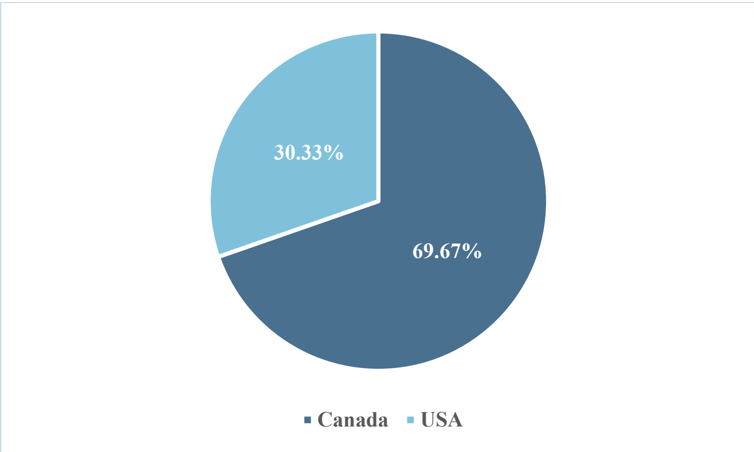

Figure 9 - Aritzia's revenue by geographic region, 2018

4.2.1 Sales Channels

Generation of sales occurs through different channels. Aritzia has a strong e-commerce presence and has 115 brick-and-mortar stores spread throughout Canada and the USA. The company focus is on the development of an omnichannel structure, aiming at providing customers with a seamless shopping experience.

Aritzia has been investing in its online platform and the goal of generating 25% of revenues from its online channel by 2021. This achievement is expected to be supported by Aritzia's recently opened distribution center and upgraded warehouse management system. E-commerce is part of the company's strategy to support long-term growth and adapt to the ever-changing customer.

The firm has had a high measured store growth. Figure 10 shows Aritzia's measured store growth by region, from 2014 to 2019.

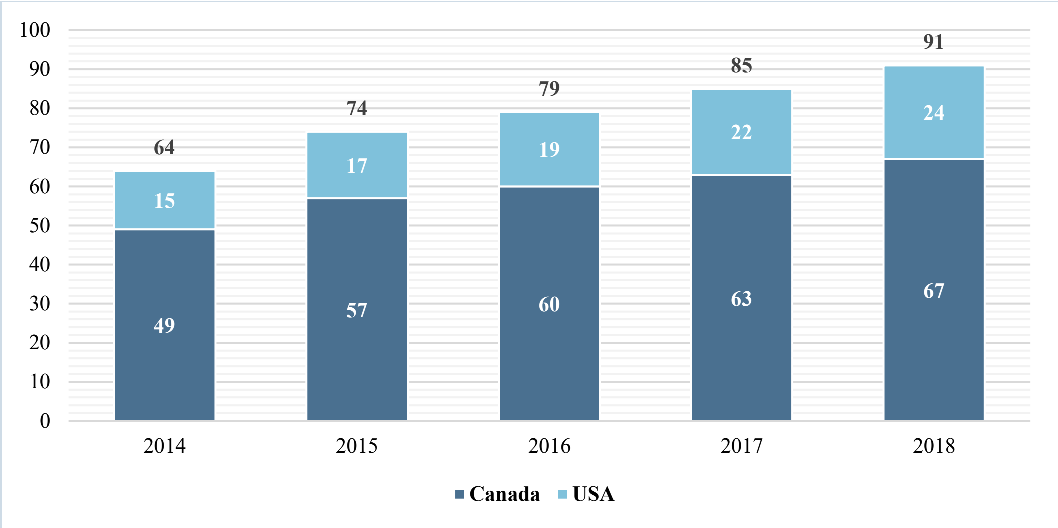

Figure 10 - Aritzia's measured store growth, 2014-2018

4.2.2 Share Price History

Aritzia is a recently public company, whose IPO was on October 3rd, 2016. It is traded in the Toronto Stock Exchange (TSE) under the symbol *ATZ*. As of March 3rd, 2019, Aritzia had a MarketCap of CAD 2,097,527,790.40 (approximately, USD 1,559,404,938).

Throughout 2018, the highest quoted price was CAD 19.79, while the lowest was CAD 11.59. As of the 3rd of March, share price was CAD 16.40.

Figure 11 presents the market and Aritzia's cumulative returns.

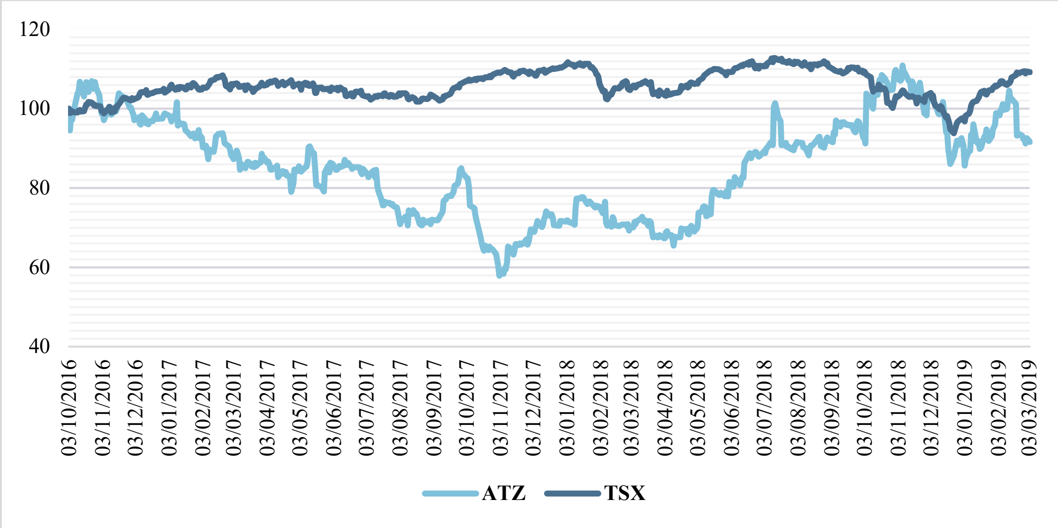

Figure 11 - Aritzia and TSE cumulative returns, 3-oct-2016 to 4-mar-2019

4.2.3 Ownership Structure

Aritzia has 127,898,036 shares outstanding, from which 98.11% is free-float. Free-float shares are mainly distributed amongst institutional shareholders, presented in Table 3.

Shareholder	#Shares	Position
QV Investors Inc.	9,280,000	11.13%
Beutel, Goodman and Company Ltd.	5,850,000	7.02%
RBC Global Asset Management Inc.	5,580,000	6.69%
Manulife Asset Management Limited	3,720,000	4.46%
GWL Investment Management Ltd.	3,110,000	3.73%
Capital Research Global Investors	1,980,000	2.37%
TD Asset Management Inc.	1,420,000	1.70%
Fidelity Investments Canada ULC	1,200,000	1.44%
Bensadoun (Aldo)	1,080,000	1.30%

Table 3 - Aritzia's top shareholders, 2018

4.2.4 Historical Analysis

The current section presents a historical analysis of Aritzia's performance from 2014 to 2018.

The evolution of Aritzia's revenue is shown in Figure 12, along with the evolution of its EBITDA margin.

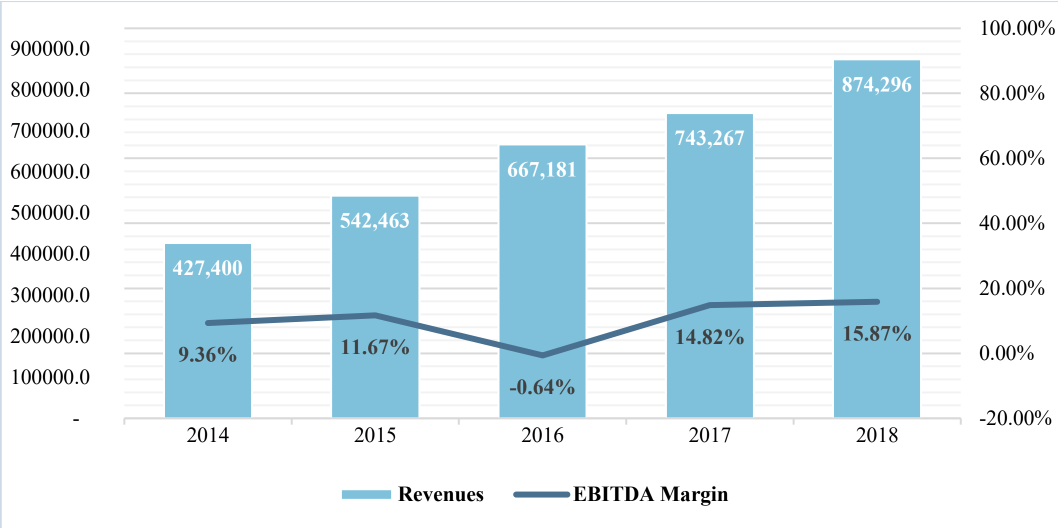

Figure 12 *- Aritzia's revenues and EBITDA margin, in CAD thousands, 2014-2018*

Aritzia's revenues grew at double-digit rates, having had a lower growth in 2017 of 11.40%, when compared with growth rates higher than 20% for the remaining years of the period under consideration. Growth was recovered in 2018, whose last quarter registered the highest net revenue in the company's history. All in all, Revenues had a CAGR of 19.59% from 2014 to 2018.

Gross Profit registered the same double-digit growth pattern as revenues and COGS, and also deaccelerated in 2017.

The EBITDA margin was negative in 2016, mainly due to the high value of Stock-Based Compensation Expense, which grew 867% from 2015 to 2016. Even though Aritzia's net income before taxes was negative in 2016, the company still paid income taxes. These corresponded to the "*reversal of a deferred income tax asset previously recognized on stock-based compensation liability*". Aritzia's Net Profit was negative for that year.

The metrics described above are outlined in Table 4.

	2014	2015	2016	2017	2018
Revenues	427,400	542,463	667,181	743,267	874,296
yoy % growth		26.92%	22.99%	11.40%	17.63%
COGS	268,100	344,095	401,658	447,776	531,383
in % of Revenues	62.73%	63.43%	60.20%	60.24%	60.78%
Gross Profit	159,300	198,368	265,523	295,491	342,913
in % of Revenues	37.27%	36.57%	39.80%	39.76%	39.22%
Net Profit	16,507	32,372	-56,109	57,093	78,728
in % of Revenues	3.86%	5.97%	-8.41%	7.68%	9.00%
EBITDA	39,988	63,323	-4,258	110,127	138,715
in % of revenues	9.36%	11.67%	-0.64%	14.82%	15.87%

Table 4 *- Aritzia's main metrics overview, in CAD thousands, 2014-2018*

5 TRANSACTION RATIONALE

Shifts within the retail marketplace have been taking place, as far as the convergence of e-commerce, data analytics, mobile capabilities, the Internet of Things and other fast-moving digital advances are concerned. In this scenario, retailers have turned to M&A to face the challenge of disruption (some examples are presented in Appendix 7).

There has been an increasing trend for brands to develop e-commerce and multi-brand platforms, driving up competition in the online luxury marketplace. In fact, legacy companies (whose usual business relies on sales through brick-and-mortar stores) are searching for innovative ways to grow (through new markets or new consumers) which, coupled with the fact that these companies have been reporting historically high amounts of cash, sets the perfect threshold for dynamizing M&A activities. The fashion retail industry is no exception.

Throughout the past few years, the fashion industry in Europe, more specifically the luxury retail sector, has been dynamic where M&A is concerned. Even though deal count in 2018 has been lower than 2017, the amounts spent were greater, representing a total of nearly USD 5 billion. Additionally, more has been spent in the acquisition of luxury fashion companies than the previous four years combined; consequently, there has been a decreasing number of players operating in the market.

«As newer players disrupt the retail and consumer product space, the choice for the established companies has become clear: use M&A to help pivot business toward the future – otherwise, face losing relevance or being acquired» (AT Kearney, 2018).

In this scope, the acquisition of Aritzia by Pandora appears as rational. Aritzia is a relatively recent company who is present solely in Canada and the USA, and which is attempting to compete alongside historical high-end fashion houses. However, as the company is small in comparison with competitors, its brand awareness is also much lower and so is its market presence. Furthermore, historical fashion houses have been recently resorting to M&A to strengthen profitability and market presence, becoming stronger competitors in that sense. One way to mitigate the smaller competitiveness of Aritzia would be by engaging in M&A activities.

As far as Pandora is concerned, the deal with Aritzia would mitigate the company's recent unsatisfactory performance. Pandora's revenues have decreased in the past year, as the company has been unable to successfully predict trends and consumers' preferences. Furthermore, the increasing number of fast-jewelry players, which offer products at lower prices, has also has a negative effect on Pandora's business. Moreover, with the increasing online retail, Pandora would benefit from a strong platform, such as Aritzia's.

Everything considered, a deal of this nature would come as positive both for the acquirer and the target. Pandora would benefit from Aritzia's online market expertise and astonishingly developed e-commerce platform, while Aritzia would benefit from Pandora's geography spread and supply chain connections around the world. One other benefit the deal would bring for Aritzia is the higher brand awareness that being associated to a global leader like Pandora entails.

6 VALUATION

In M&A, company valuation is essential. Two valuation methods were used to determine the value of Pandora and Aritzia: relative valuation and DCF. The forecasting period for the DCF valuation includes five years (explicit period), ranging from 2019 to 2023. Pandora's valuation and financial results are presented in DKK million, whereas Aritzia's are presented in CAD thousands.

6.1 PANDORA

6.1.1 DISCOUNTED CASH FLOWS VALUATION

Through Formula 2 (**Section 2.3.1.1.**), FCFF have been computed for the explicit period, as well as the company's terminal value for 2024 and beyond, considering the company is a going concern. The forecasted Income Statement and Balance Sheet (Assets and Liabilities) are in Appendices 8 and 9, respectively.

6.1.1.1 *Revenue Forecast*

Pandora's results for the 3rd quarter of 2018, were unsatisfactory, as revenues decreased by 3%. After analyzing the health of the business, Pandora launched Program NOW detailed **Section 4.1.2**.

In the scope of the Program's implementation, revenues are expected to decrease between 1% and 5%. A revenue growth rate of -1.5% has been assumed for 2019 and 2020.

The effects of the implementation will still be felt in 2021, as it is a restructuring program, impacting the company in the long-term. Ergo, Pandora's revenues are assumed to grow 0% for that year. Since the implementation will occur during 2019 and 2020, the benefits arising from the Program will start to be noticed by 2021.

As implementation gains momentum, the Program's benefits increase and so do the revenues. Pandora's revenues will recover over time and growth rates are expected to become positive in 2022 (1%) and 2023 (3%), where Pandora is assumed to reach a sustainable growth state. In this regard, a word of caution is needed – after Program Now is fully in place, revenue growth rates will not be returning to historical levels, as these two-digit rates were not sustainable and were boosted by acquisition and expansion programs, which will be practically inexistent upon Program NOW.

Revenue forecast is detailed in Appendix 10.

6.1.1.2 *COGS, SG&A, Gross Profit and EBIT*

COGS, SG&M expenses, and administrative costs were computed as a fixed percentage of historical revenues, in resemblance with EBIT's computation.

6.1.1.3 *Income Tax Expense*

Income tax expense as a percentage of profit before tax is relatively stable historically-speaking. An average historical income tax of 24.12% was assumed and applied to EBIT for the explicit period.

6.1.1.4 *Depreciation and Amortization*

D&A was forecasted based on its historical values as a percentage of total Net PPE and Intangible Assets. The Net value for PPE and IA was chosen over the gross one, as D&A was perceived to be more stable in relation to the former than to the latter.

6.1.1.5 *Capital Expenditures*

Within the scope of Pandora's business, CapEx comprises the Purchase of PPE and of IA.

Since Pandora is a jewelry retailer and manufacturer, CapEx on PPE are mainly directed towards store, factory and office maintenance; the opening of new owned stores also adds up to this line item.

The Purchase of Intangible Assets encompasses Goodwill emerging from the acquisition of companies and activities, the Acquisition of Distribution Networks and Distributions Rights, and expenditures on Other Intangibles (mostly software).

Based on Pandora's plans of refurbishing existing stores, opening new ones and investing in distribution networks, CapEx were computed based on its historical percentage in relation to revenues.

6.1.1.6 *Changes in NWC*

NWC is estimated by deducting Current Liabilities (excluding debt) from Current Assets (excluding cash and cash equivalents), computed based on Balance Sheet line items.

6.1.1.7 *WACC Computation*

Where DCF valuation is concerned, WACC is the preferred discount rate. WACC was computed based on Formula 3 presented in **Section 2.3.1.2**.

The cost of debt was estimated to be 5.73%, having been computed by taking as a proxy Pandora's Finance Costs of DKK 382 million for 2018, as a percentage of its total debt for the year (DKK 6,669 million).

For the cost of equity, the risk-free rate, the levered beta (β_L), and the risk-premium are needed. The risk-free rate was assumed to be the 10-year Danish Government Bond yield of 1.90%. β_L is 1.35 and was computed through the bottom-up beta approach. This approach takes the company's peers' average unlevered beta and levers it through a multiplying factor which includes Pandora's debt:

$$\beta_L = \beta_U * \left[1 + (1 - Tax\ Rate) * \frac{Debt}{Equity}\right]$$

Formula 7 - Levering beta

The market risk-premium is 5.70% and was taken from the Thomson Reuters database, and so was the target debt-to-equity ratio of 1.03%. The assumed tax rate was 24.12%.

6.1.1.8 *FCFF*

Based upon the previously described assumptions, FCFF was computed and is detailed in Table 5.

(DKK millions)	**2018**	**2019E**	**2020E**	**2021E**	**2022E**	**2023E**
EBIT	6,431.00	4,299.96	4,118.48	4,007.35	3,870.10	3,893.96
Income Tax Expense	-1,537.00	-1,003.51	-971.47	-970.17	-924.72	-934.08
Depreciation	990.00	734.90	801.29	886.77	992.65	1,125.60
CapEx	1,107.00	1,119.18	1,133.73	1,150.73	1,171.45	1,194.87
Changes in NWC	- 939.00	506.16	-17.42	0	11.44	34.66
FCFF	**5,716.00**	**2,406.01**	**2,832.00**	**2,773.23**	**2,755.15**	**2,855.94**

Table 5 *- Pandora's FCFF, in DKK million, 2018-2023*

6.1.1.9 *Equity Value*

To reach the EV of DKK 41,799 million, the PV of the FCFF was computed and added to the present terminal value.

The terminal value was determined as the PV average of the FCFF from 2019 to 2023, year at which the company is assumed to reach a steady state, with a perpetuity growth rate of 1.5%.

To reach Pandora's equity value, its market value of debt, minority interests and capitalized operating leases were deducted. Equity value is DKK 25,957 million (approximately USD 3,298 million) which bestows a price per share of DKK 281.60 (USD 35.78). A summary is presented in Appendix 11.

Given Pandora's current share price of DKK 347.5, the company is potentially overvalued by the market by 23.40%.

6.1.1.10 *Sensitivity Analysis*

The WACC and perpetuity rate are key inputs for DCF valuations. To understand how the value of Pandora from DCF reacts to changes in these variables, a sensitivity analysis was performed and is presented in Table 6.

		Terminal Value				
	Share Price	**1.30%**	**1.40%**	**1.50%**	**1.60%**	**1.70%**
WACC	**7.42%**	285.38	291.00	296.80	302.81	309.02
	7.52%	278.08	283.49	289.08	294.86	300.84
	7.62%	271.00	276.22	281.60	287.17	292.92
	7.72%	264.15	269.18	274.37	279.73	285.27
	7.82%	257.51	262.36	267.37	272.53	277.87

Table 6 *- Pandora's share price sensitivity analysis to WACC and PGR, in DKK*

6.1.2 Relative Valuation

Before performing a relative valuation, the peer group of the company under analysis must be determined. Accordingly, a Cluster Analysis has been put to practice.

6.1.2.1 *Cluster Analysis*

The cluster analysis was performed considering the companies' revenue growth and ROIC. Pandora's cluster is presented in Appendix 12.

6.1.2.2 *Multiples*

To compute the multiples' value, an average of the peers' ratios was determined. The peers' ratios were extracted from the Thomson Reuters Database.

The multiples used in the scope of this valuation are the most commonly used in line with the described by Fernández (2001): EV/EBITDA; Price/EPS; Forward Enterprise Value-to-EBIT; EV/Sales; EV/EBITDA and P/Earnings (PER).

Ultimately, the price for Pandora's shares computed through this method ranges between DKK 96.62 and DKK 167.03.

6.1.3 VALUATION RESULTS

A summary of Pandora's equity valuation per share is presented in Figure 13.

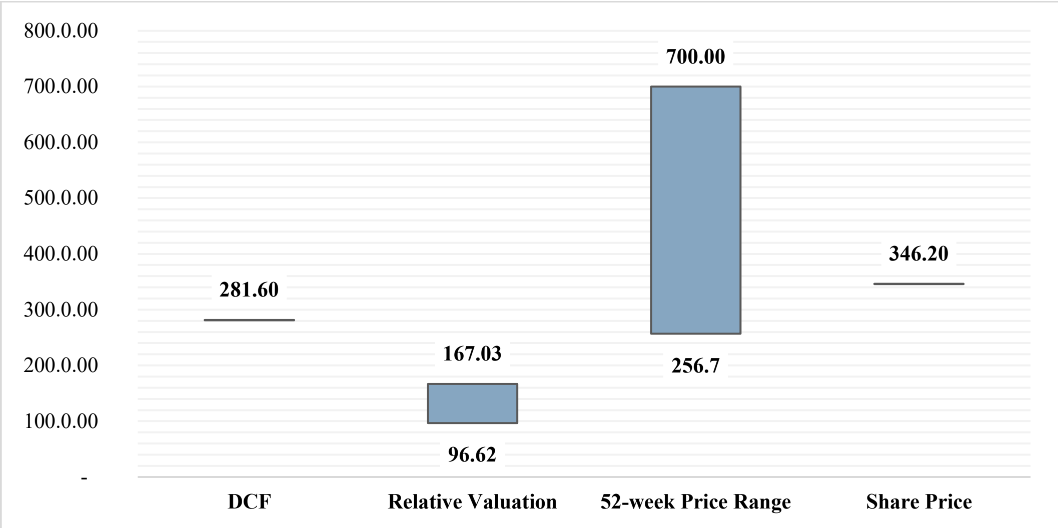

Figure 13 - Pandora's share price valuation summary, in DKK

6.2 ARITZIA

6.2.1 DISCOUNTED CASH FLOWS VALUATION

The valuation of Aritzia was made analogously to Pandora's, with the inherent assumption that Aritzia is a going concern. The forecasted Income Statement and Balance Sheet (Assets and Liabilities) are in Appendices 13 and 14, respectively.

6.2.1.1 *Revenue Forecast*

Revenues were forecasted considering Aritzia's revenue goal of CAD 1.5 billion by 2021, meaning that from 2018 to 2021, the company's revenues would have a CAGR of 9.57%. Revenues were forecasted based on this growth rate, which was also assumed for 2022 and 2023.

The reasons behind this assumption are connected to the fact that, historically, Aritzia's revenue growth experienced two-digit growth rates, being the revenue growth of 9.57% below the historical average of 18.46%. Therefore, this value comes as rather conservative.

Moreover, Aritzia is increasingly operating as an e-commerce retailer and 25% of its revenues are generated online – as a result, its revenue growth will not be as low as the average apparel retail sector (3.70%), nor as high as in average online retail (13.00%).

The detailed revenue forecasts are presented in Appendix 15.

6.2.1.2 *COGS, SG&A, Gross Profit and EBIT*

These line items were forecasted analogously to Pandora's estimations.

6.2.1.3 *Income Tax Expense*

The income tax expense is computed in analogy to Pandora's previously forecasted expense. In Aritzia's case, the average historical income tax is 28.57%.

6.2.1.4 *Depreciation & Amortization, Capital Expenditures, NWC Changes*

In resemblance to Pandora, Aritzia operates as a retailer and manufacturer, albeit in a different industry. Nevertheless, D&A, CapEx and changes in NWC have been forecasted in resemblance to Pandora's.

6.2.1.5 *WACC Computation*

The same approach for the computation of Pandora's DCF WACC was applied to Aritzia's.

The cost of debt was estimated to be 6.46% (Aritzia's Finance Expenses of CAD 4,821 thousand, as a percentage of its total debt of CAD 74,624 thousand, in 2018).

For the cost of equity, the risk-free rate was assumed to be the Canada 10-year Government Bond yield of 1.68%. β_L is 1.05 and was computed through the bottom-up beta approach.

The market risk-premium has a value of 5.96% and was determined by calculating an average of the market risk premiums of the countries Aritzia operates weighted by the revenue percentage generated in those countries (70% in Canada, 30% in the USA).

The assumed tax rate was 28.57%, the average historical income tax.

6.2.1.6 *FCFF*

FCFF was compute based on the previously described assumptions and is in Table 7.

CAD thousands	**2018**	**2019E**	**2020E**	**2021E**	**2022E**	**2023E**
EBIT	116,076	119,190	130,593	143,087	156,776	171,775
Income Tax Expense	32,922	33,373	36,566	40,064	43,897	48,097
Depreciation	27,065	31,444	34,452	37,748	41,359	45,316
CapEx	62,010	55,274	60,562	66,356	72,704	79,660
Changes in NWC	31,970	-57,403	-1,249	-1,368	-1,499	-1,643
FCFF	**16,239**	**119,390**	**69,166**	**75,783**	**83,034**	**90,977**

Table 7 *- Aritzia's FCFF, in CAD thousand, 2018-2023*

6.2.1.7 *Equity Value*

The same approach as Pandora was used. Since Aritzia's market value of debt, minority interests and capitalized operating leases are zero, the value for enterprise and equity is the same: CAD 1,939 thousand, which corresponds to CAD 15.16 per share, lower than the market price of CAD 16.40.

The terminal value entails a perpetuity growth rate of 3.78%, which is Canada's nominal GDP growth rate. The company's DCF results are presented in Appendix 16.

6.2.1.8 *Sensitivity Analysis*

Analogously to the sensitivity analysis performed for Pandora in **Section 6.1.1.10**, the same was simulated for Aritzia. The results are in Table 8.

		Terminal Value				
	Share Price	**3.6%**	**3.7%**	**3.8%**	**3.9%**	**4.0%**
WACC	**7.42%**	15.29	15.62	15.98	16.35	16.74
	7.52%	14.91	15.23	15.56	15.91	16.28
	7.62%	14.55	14.85	15.16	15.49	15.84
	7.72%	14.20	14.49	14.78	15.10	15.43
	7.82%	13.87	14.14	14.42	14.72	15.03

Table 8 - Pandora's share price sensitivity analysis to WACC and PGR, in CAD

6.2.2 Relative Valuation

6.2.2.1 *Cluster Analysis*

Aritzia's cluster analysis was determined in resemblance to Pandora's. Four companies were identified to belong to Aritzia's cluster, and are presented in Appendix 17.

6.2.2.2 *Multiples*

Analogously to Pandora, the peers' ratios were extracted from the Thomson Reuters Database. The same multiples as in Pandora's relative valuation were used to compute Aritzia's share price.

Ultimately, the price for Aritzia's shares computed through this method ranges between CAD 11.59 and CAD 19.79.

6.2.3 VALUATION RESULTS

A summary of Aritzia's equity valuation per share is presented in Figure 14.

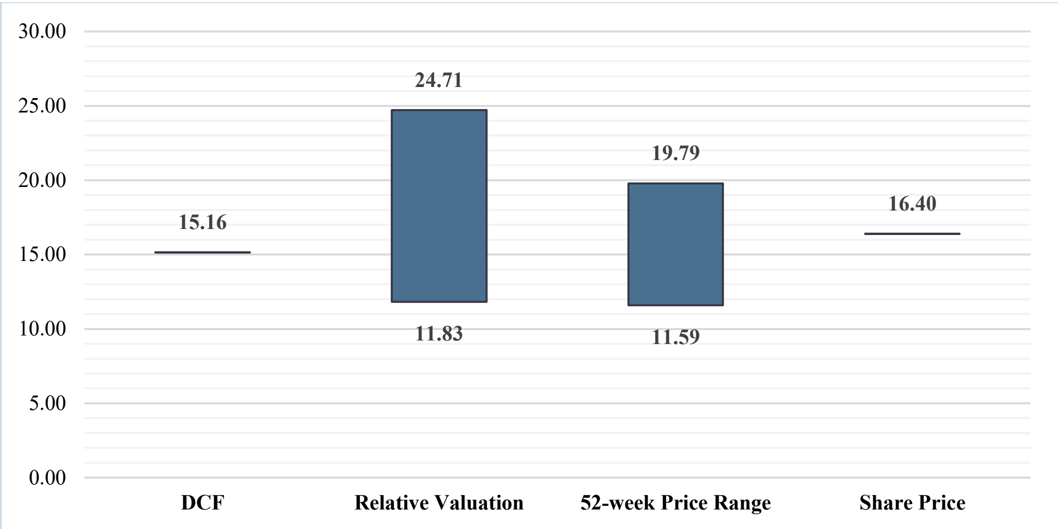

Figure 14 *- Aritzia's share price valuation summary, in CAD*

7 THE COMBINED FIRM

Damodaran (2005) suggests that there are three steps to follow when valuing operating synergies:

1. Perform the independent valuation of the firms involved in the transaction;
2. Compute the value of the firms when combined, considering synergies (add the values obtained in the previous step);
3. Determine the value of the combined firm, considering the synergies emerging from the merger. The value of the synergy is given by the difference between the value of the firm computed hereby and the value of the firm computed in step 2.

The scope of the present section focuses on steps 2 and 3 of the M&A valuation process.

7.1 CROSS BORDER FX PECULIARITIES

The present deal merges two companies headquartered in two distinct countries where different currencies are used: Pandora is a Danish company reporting in DKK; Aritzia is a Canadian company using CAD as its official currency.

To combine financial statements, it is crucial that all the values from both companies are written in the same currency – the USD is hereby assumed.

There are two paths to cross-border DCF values (Zenner, Matthews, Marks, & Mago, 2004). The first one is through the discounting at the "home" currency discount rate. The second involves discounting cash flows at the foreign currency discount rate. The second is the preferred one and is presented in Appendix 1.

In accordance with this approach, for both currencies, FX futures quotes were taken from CME Group's database (these quotes are shown in Appendix 18).

7.2 Combined WACC and Perpetuity Growth Rate

To compute the value of the combined entity both with and without considering synergies, the same WACC and PGR will be applied. These were computed by taking the average of each firm's WACC and PGR, weighted by the firms' individual enterprise values as a percentage of total enterprise value.

Pandora's EV		Aritzia's EV	
41,799	DKK million	1,939	CAD million
0.1271	DKK/USD	0.74	CAD/USD
5,311	USD million	1,442	USD million

Total Enterprise Value
USD 6,753 million

Combined WACC	Perpetuity Growth Rate
7.62%	1.99%

Table 9 *- Pandora and Aritzia's EV, from DKK and CAD to USD (respectively); combined WACC and PGR, 2018*

7.3 Valuation with No Synergies

The valuation of the companies without synergies is made by simply adding up the values of the firms' FCFF and applying the terminal value, in accordance with the WACC and PGR computed in **Section 7.2**.

The enterprise value of the combined entity without synergies is USD 6,846 million which, by deducting the market value of debt of USD 2,013 million, entails an equity value of USD 4,833 million.

7.4 VALUATION OF THE MERGED FIRM AND INHERENT SYNERGIES

> *«Synergy is the additional value that is generated by combining two firms, creating opportunities that would not be available for these firms operating separately».*
>
> (Damodaran, The Value of Synergy, 2005)

Synergies can be sorted into two different groups: operating synergies and financial synergies. While operating synergies have impact on the combined firm's operations and are generally manifested as higher cash flows, financial synergies can be evident through enhanced cash flows and also through lower discount rates.

Within the scope of the present valuation, synergies are assumed to take the form of increased cash flows, either through revenue enhancement or through cost reductions.

7.4.1 SOURCES OF SYNERGY

7.4.1.1 *Production Sites and Cross-Selling*

Due to the nature of the deal, cost synergies are limited – both firms operate in different industries and manufacture distinct products, so production sites ought to remain independent.

However, cross-selling would be possible if Aritzia's stores offer Pandora's products. The other way around would not be smart from a marketing point of view. Pandora's stores are designed to offer a jewelry assortment, and are smaller, as there is no need for the stores to have, for example, fitting-rooms, or to present the same product in a wide range of sizes. Furthermore, Pandora's store concept has recently been redesigned to appear more minimalistic, being one of the brand's most appreciated characteristics.

7.4.1.2 *SG&A and COGS*

Upon the merger, Pandora and Aritzia will remain independent companies, implying that, where SG&A expenses are concerned, cost reductions would be limited.

Cost reductions are expected to arise from the emergence of economies of scale in support services such as Legal Departments and Accounting. Some duplicate personnel and underutilized facilities will also be a contributor to cost-cutting.

Pandora's G&A Expenses represent 36% of its Revenues, while Aritzia's represent 29%. A benchmark is expected to be made by the acquirer to improve SG&A costs.

7.4.1.3 *Marketing and Advertising Cost-Cutting Synergies*

The fashion industry is highly sensitive to brand awareness and trends suggest that as consumers increasingly use digital channels, *«The use of digital marketing is an essential tool in the luxury brand armory»* (Deloitte , 2015). The application of Aritzia's greatly developed online marketing and advertising skills to boost Pandora's sales represents one channel of synergy-generation.

7.4.1.4 *Shared E-Commerce Platform*

Through its highly developed omnichannel platform, Aritzia not only outperforms competitors, but also demonstrates its capability to adapt to the changing retail reality.

Aritzia's omnichannel strength can become highly beneficial for Pandora. Jewelry consumers prefer the physical purchase experience over the online one. As a result, e-commerce in the jewelry sector is lower. This hardship can be mitigated by a platform in which consumers trust and which provides a seamless experience, like Aritzia's.

7.4.1.5 *Brand strength*

Aritzia is a major player within online shopping and has been able to stand up in the crowded fashion apparel sector by staying ahead of trends in an industry where trends drive demand. Pandora is the world's biggest jewelry brand and is a trend-setter, recognized globally.

Even though when merged, both companies will continue to operate as distinct brands, the combination of brand strength is beneficial, inspiring customers and strengthening shareholders' trust in the company and its ability to generate the desired results.

7.4.1.6 *Geographic diversification and store concept*

Pandora operates in more than 90 countries and has developed a clean and minimalistic welcoming store design. Aritzia's main operations are in Canada and the USA, and the company currently operates 91 brick-and-mortar stores spread over North-America, all located in premier-locations.

Both companies' geographic footprint combination is a plus - Pandora is specialized in the EMEA market, whereas Aritzia's main market is North-America. Besides easing Aritzia's investment in store openings in the EMEA region, Pandora would strengthen its position in the USA and Canada.

7.4.2 VALUING SYNERGIES

Synergies are computed as a percentage of costs saved and as a percentage of increases in revenues. The value for these percentages hereby assumed were based in Deloitte's "Unlocking the Full Potential for M&A" study (Deloitte, 2017).

The value for synergies is summarized in Table 10.

Transaction Synergies	
395.19	
Cost Synergies	**Revenue Synergies**
42%	58%

Table 10 - Summary of the deal synergies, in USD million; synergy type as a percentage of total synergy value

7.4.2.1 *Revenue Synergies*

For most of the transactions analyzed in Deloitte's study, revenue enhancements were announced to be between 1% and 5% in 35% of the sample. The value for revenue enhancements arising from Pandora and Aritzia's deal is conservatively assumed to represent 2.5% of Aritzia's revenues.

However, according to Damodaran, *"synergies seldom show up instantaneously"* (Damodaran, 2005). Bearing that in mind, as companies need an adaptation period to the new logistics emerging from the firm combination, synergies are assumed to gradually increase from 2019, gaining momentum as time goes by, and reaching their full potential by 2023.

7.4.2.2 *Cost Synergies*

With the generation of cost synergies, the costs of the combined firm are assumed to decrease by 3%. For most of the transactions analyzed in Deloitte's study, cost synergies represent between 1% to 5% of the combined company's revenues. An important detail is that the median cost synergy for transactions taking place in the C&IP sector is 1%. Cost synergies are hereby assumed to be 2% of the combined company's costs (SG&A and COGS). In resemblance to revenue synergies, cost synergies are assumed to gradually walk towards their full potential, which is reached by 2023.

7.4.3 TRANSACTION FEES AND INTEGRATION COSTS

Transaction fees were assumed to correspond to 1% of the deal value, whereas integration fees were computed as a percentage of synergies and are also assumed to be 1%. Transaction fees are paid upon officializing the deal; integration costs are spread over the first three years after the deal is made, and are higher for the earliest years, i.e., the cost of integrating the companies is mitigated as time goes by.

A summary of these fees is presented in Appendix 19.

7.4.4 VALUATION RESULTS

Bearing in mind the firms' individual enterprise value before the merger, their value as a combined entity, the value of the synergies arising from the deal and the incurred transaction and integration fees of the deal, we arrive at an EV of USD 7,177 million. A summary of the valuations is presented in Figure 15.

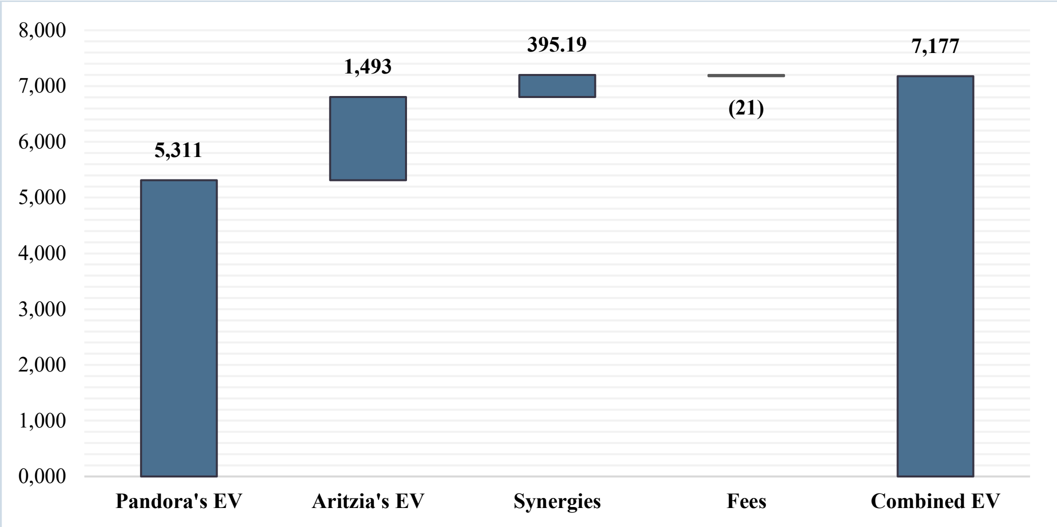

Figure 15 - Valuation Summary of EV, in USD million

7.4.5 SENSITIVITY ANALYSIS

A sensitivity analysis to the combined firm valuation was performed regarding different values that synergies can take. A summary of this analysis is presented in Table 11.

		Revenue Synergies				
	Firm Value *USD million*	**1.50%**	**2.00%**	**2.50%**	**3.00%**	**3.50%**
Cost Synergies	**1.00%**	-328	-250	-170	-91	-11
	1.50%	-46	33	112	192	272
	2.00%	235	315	395	475	556
	2.50%	518	598	678	758	839
	3.00%	800	880	961	1,041	1,122

Table 11 *- EV sensitivity analysis to shifts in synergy assumptions, in USD million*

8 THE TRANSACTION PROCESS

Following the analysis of Pandora and Aritzia, their industries, their valuation both individually and combined, and the computation of possible synergies to emerge from the deal, some important considerations must be looked at.

Before Pandora can present an offer for Aritzia, the price and premium must be determined, along with the payment method. Moreover, the company should carefully consider the risks attached to the acquisition. These transaction concerns are presented in this section.

8.1 TRANSACTION PREMIUM

In any economic transaction, buyer and seller must agree on a price for the transaction to take place. In the world of M&A this is no different.

Having the goal of acquiring Aritzia, Pandora should not only offer as a minimum price the target's market value (which, as of the 3rd of March 2019, is lower than the intrinsic value of USD1,493 million), but also include a premium to make the offer more attractive.

The premium for this transaction was determined by analyzing similar historical transactions. The premium that Pandora should offer for Aritzia is 20.35% over the former's market value as of the 3rd of March 2019. In this setting, the purchase price will be of USD 1,877 million – USD 14.67 per share.

8.2 METHODS OF PAYMENT

One question remains: how can Pandora pay for Aritzia? According to the intrinsic value calculation carried out in this paper, Pandora is overvalued by the market (by USD 1,570). The method of payment assumed to be the most suitable for this acquisition is all-stock.

This method implies a stock consideration of USD 1,877, which corresponds to Aritzia's market value plus the premium. Ergo, to meet this stock consideration, Pandora is to issue 35,530,098 shares, corresponding to a share exchange ratio of 0.28. A summary of the method of payment is presented in Table 12.

Method of Payment (USD)	
Aritzia's Market Value	1,559 million
Implied Premium (20.35%)	317 million
Total Offer Value	1,877 million
Aritzia's Shares Outstanding	127,898,036
Offer Price per share	14.67
Pandora's Price per share	52.82
Share Exchange Ratio	0.28
#Shares issued by Pandora	35,530,098

Table 12 *- Summary of the method of payment, in USD*

8.3 ACCRETION/DILUTION ANALYSIS

In the context of an all-stock deal, an accretion/dilution analysis was conducted to determine the impact of the acquisition in Pandora's EPS. Such analysis is displayed in Appendix 20.

By computing the EPS before and after the deal takes place, one inference is that, for the first three years after the merger, the deal is dilutive. However, as the synergies chip in, they drive accretion and, by 2022 and 2023, respectively, the combined entity has an EPS of USD 4.22 and USD 4.56. Individually, their EPS would be USD 4.18 and USD 4.30, respectively.

In this sense, in the long-term, the transaction makes shareholders better-off.

8.4 Inherent Risks of the Transaction

The deal herein examined entails evidence that positive outcomes are to arise from it. Nevertheless, the risks inherent to a deal of this dimension and scope must always be subject of analysis.

In a stock for stock transaction, there may be the risk that shareholders will not immediately approve of the acquisition, and dissenting them may be time-consuming. It may also be more expensive for the acquirer, as there might be the pressure to increase the offered premium.

Other risks are related to the “clash of cultures” within the combined firm, the acquirer paying too high of a value for the target, the overestimation of synergies or the failure to outperform competition.

9 CONCLUSION

Having the purpose of determining the viability of an acquisition deal whereby Pandora acquires Aritzia, the present dissertation was elaborated.

Through an analysis of the economic context where the deal would occur, it is possible to infer that M&A activity in the fashion industry has been reaching record high numbers of deals and record high deal values. This is as an attempt of companies to survive in an industry affected by the disruption emerging from digitalization and increasingly demanding customers.

In this framework, Pandora appears as a company whose performance was affected by these conditions. The acquisition of a suitable target, such as Aritzia, represents a strategy for Pandora to recover profitability and competitiveness. At the same time, Aritzia, a relatively recent company, would benefit from Pandora's established market presence and brand awareness.

The individual companies' EV were computed through a DCF approach, having Pandora an EV of USD 3,298 million, and Aritzia of USD 1,442 million. The deal was determined to generate synergies of USD 395.19 million. In this scenario, the offer price Pandora proposes to acquire Aritzia is USD 1,877 million, entailing a premium of 20.35%.

In the conspectus of a friendly deal, the proposed method of payment is all-share. Even though this proposal entails a dilution in the four years that follow the acquisition, accretion is verified thereafter.

The creation of significant synergy value, the fact that shareholders would be better-off, was the deal to take place, and with the increasing M&A activity and competitiveness within the fashion industry, the proposed deal entails positive outcomes and is, therefore, hereby recommended.

APPENDICES

Appendix 1 - Exchange Rate Computation

Path 2 – Discount at the Foreign Currency Discount Rate
1. Estimate foreign currency CF;
2. Discount these foreign currency CF at a foreign currency discount rate appropriately risk-adjusted. Risk adjustments include (a) country risk, (b) asset/operating risk, and (c) financial risk;
3. The result is the present value in the foreign currency;
4. Convert the foreign currency PV to the home currency PV using the spot rate.

Table 13 *– Computation of the exchange rate for merging companies which report in different currencies*

Appendix 2 – World's 10 Largest Apparel Retail Brands

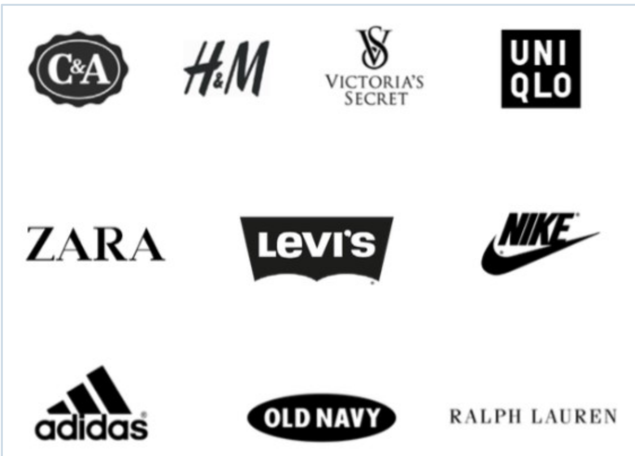

Image 1 *- World's 10 largest apparel retail brands*

Appendix 3 – Illustration of the Celebrity Effect

Wardrobe Drives Shares

Shares of the Vancouver-based fashion retailer touched a 52-week high on Thursday.

Meghan Markle wearing a Mackage coat on a visit to Belfast | Source: Andrew Parsons - Pool/Getty Images

VANCOUVER, Canada — A nod from the Duchess of Sussex is helping Aritzia attract global exposure.

Image 2 *- "Wardrobe Drives Shares", news segment - an example of "The Celebrity Effect" (Source: Business of Fashion, 2019)*

Appendix 4 – Jewelry Industry Five Forces Analysis

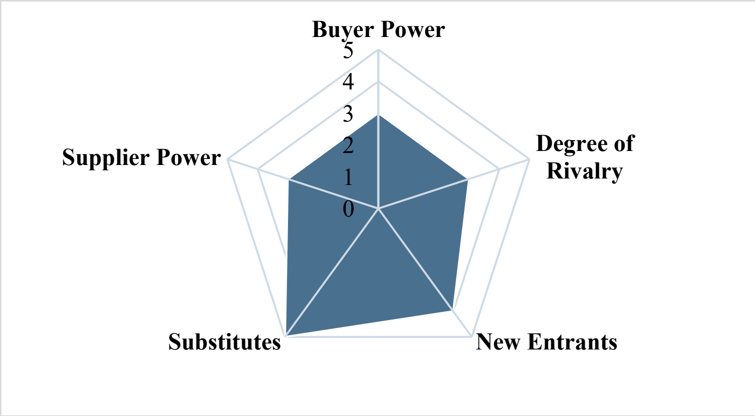

Figure 16 - Forces driving competition in the global jewelry and watches market, 2017

4.1. Buyer Power

Overall, buyer power is moderate.

Buyer power is moderate. New buyers are driving up industry growth, namely the high net-worth individuals and millennials. Buyer power is weakened because of the large numbers of small buyers. The costs of switching from one retailer to another are null. The sensitivity of the jewelry market to prices is high. With the 2008 crisis, sales in the jewelry industry fell. Furthermore, since jewelry is a superfluous good, demand for jewelry is very elastic. Jewelry trends are attached to fast-fashion trends, i.e., they might easily go out of fashion and thus, consumers' willingness to pay higher prices decreases.

4.2. Supplier Power

Overall, supplier power is moderate.

In the jewelry market, both manufacturers and designers are key suppliers. Using product design to differentiate themselves increases supplier power. Vertical integration in the jewelry market is common. Backward integration exists where some companies source their merchandise from subsidiaries or from manufacturing facilities they own, weakening supplier power. Since companies in the industry are extremely vulnerable to changes in the prices of raw materials, namely commodities such as gold, silver or diamonds, it is essential that they rely on more than one supplier.

4.3. New Entrants

There is strong likelihood of new entrants. The jewelry industry is highly fragmented. As a result, it is easy for new players to enter the market, as there is no high scale competitors. The market fragmentation is increased with fashion retailers incorporating jewelry in their collections. Social media has become more and more important as a means for brands to advertise their products. Since social media has an easy access, new entrants can also potentiate their growth by resourcing to these. Male fashion, where players can find a new market, is also a branch of the industry that has been growing.

4.4. Threat of Substitutes

In a market where products are luxurious and regarded as superfluous, the threat for substitutes is very strong. Fine jewelry can easily be replaced by costume jewelry, especially when the economic cycle takes a downturn. Due to the highly fragmented nature of the jewelry industry, where there is a high number of small players, prices tend to converge to similar price points, and design becomes the key factor for consumers to decide who to buy from. Culturally speaking, fine jewelry may be regarded as a store of wealth, to which financial products may also arise as substitutes.

4.5. Degree of Rivalry

The degree of rivalry is moderate.

There are many players in the market, namely: department stores, mass merchandisers, discount stores, brand retailers, shopping clubs, television sales channels, direct home sellers, online retailers and auction sites. Moreover, fashion retailers have been increasingly incorporating jewelry in their collections. Companies that are specialized in jewelry may experience seasonality, with high sales during key events such as Christmas, Valentine’s Day or Black Friday. Rivalry is eased since it is easy to exit the market.

Appendix 5 – Apparel Retail Industry Five Forces Analysis

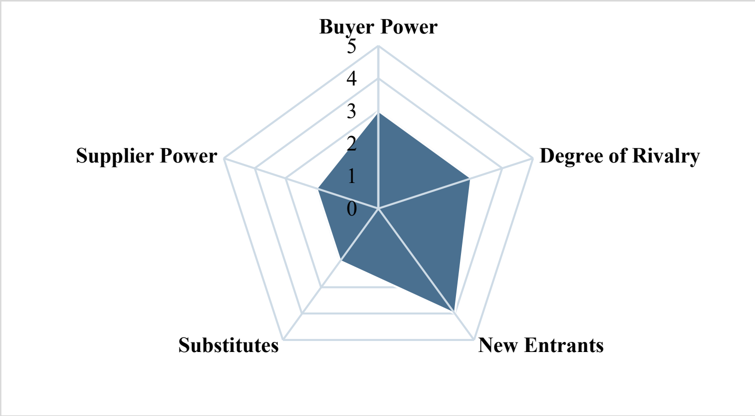

Figure 17 - Forces driving competition in the apparel retail market, 2017

5.1. Buyer Power

Buyer power is perceived as moderate.

Buyers in apparel retail are individual consumers, being unlikely that the loss of one customer impacts revenues. However, consumer power is increasing due to the greater access to information and the low cost of transition between different brands (brand loyalty is almost inexistent in apparel retail).

5.2. Supplier Power

Overall, supplier power is moderate.

Apparel retail suppliers are manufacturers and wholesalers. Supplier power has decreased due to globalization and international trade liberalization, as companies seek cheaper product sources mainly in low-wage countries. However, this weakness is offset by the risk that switching suppliers poses to retailers: these may incur in the risk of contracting a supplier with a larger value chain or that is not able to face industry demand changes in an adequate time frame.

5.3. New Entrants

The threat of new entrants is strong.

In an industry where initial investment capital requirements are low, barriers to entry are practically inexistent. Furthermore, customers incur in practically no shifting costs when opting to purchase different brand items.

5.4. Threat of Substitutes

Overall, there is a weak threat of substitutes.

Even though there are no substitutes for apparel, there are distinct purchase alternatives. The number of pure online stores, whose running costs are lower, has been increasing, which is enticing for manufacturers who intend to sell directly to the final consumer. Amazon and Alibaba have entered the apparel retail business, threatening existent players as they offer products at lower prices. Other alternative is presented by home-made clothing items, auction sites and second-hand clothing. Counterfeit clothing is also a common threat to company profitability within the sector.

5.5. Degree of Rivalry

Degree of rivalry is perceived as moderate.

The market is composed of a large number of similar firms, acting almost as a perfect competition market, where product assortment and differentiation are crucial for companies' survival. Artificial intelligence is enhancing rivalry, as players who own big databases have a competitive edge over rivals. Social media may contribute to the reduction of industry rivalry if used correctly by all players, as it is being more and more used by consumers and it is a cheap advertising channel.

The greatest source of rivalry within the sector is innovation. The health of a fashion retailer is much dependent on its ability to predict trends and consumer preferences. Consumers are ever-changing and their pursuit for convenience is increasing – players who manage to integrate technology in their products will most certainly succeed. Furthermore, there has been a trend to utilize technology in stores that facilitates consumers' interaction with the brand.

Appendix 6 – Aritzia's In-House Brands

Image 3 - Aritzia's in-house brands

Appendix 7 – M&A Deals in Retail, 2018

Image 4 - Recent apparel M&A transaction activity (Duff & Phelps, 2019)

Appendix 8 - Pandora’s Income Statement Forecasts

DKK millions	2019E	2020E	2021E	2022E	2023E
Revenue	22,464	22,127	22,127	22,348	23,019
COGS	-5,966	-5,877	-5,877	-5,935	-6,114
Gross Profit	**16,498**	**16,250**	**16,250**	**16,413**	**16,905**
SD&M Expenses	-9,162	-9,201	-9,328	-9,591	-9,943
Admin. Expenses	-3,035	-2,931	-2,915	-2,952	-3,068
Operating Profit	**4,300**	**4,118**	**4,007**	**3,870**	**3,894**
Finance Income	245	284	318	314	348
Finance Costs	-384	-375	-304	-350	-369
Profit Before Tax	**4,160**	**4,027**	**4,022**	**3,833**	**3,872**
Income Tax Expense	-1,004	-971	-970	-925	-934
Net Profit	**3,156**	**3,056**	**3,052**	**2,909**	**2,938**

Table 14 - Pandora's forecasted Income Statement, in DKK million, 2019-2023

Appendix 9 - Pandora’s Balance Sheet (Assets and Liabilities) Forecasts

DKK millions	2019E	2020E	2021E	2022E	2023E
Inventories	3,031	2,986	2,986	3,016	3,106
Trade Receivables	1,864	1,836	1,836	1,854	1,910
Right-Of-Return Assets	19	18	18	18	19
Derivatives	152	150	150	152	156
Income Tax Receivable	126	125	125	126	130
Other Receivables	868	855	855	864	890
Cash	1,332	1,312	1,312	1,325	1,365
Current Assets	**7,393**	**7,282**	**7,282**	**7,355**	**7,575**
Goodwill	5,145	6,187	7,441	8,949	10,763
Brand	1,057	1,057	1,057	1,057	1,057
Distribution Network	254	251	251	253	261
Distribution Rights	1,350	1,329	1,329	1,343	1,383
Other Intangibles	1,006	991	991	1,001	1,031

Intangible Assets	**8,812**	**9,815**	**11,069**	**12,603**	**14,494**
PPE	1,968	1,939	1,939	1,958	2,017
Deferred Tax	980	965	965	975	1,004
Other Assets	256	252	252	255	262
Non-Current Assets	**12,016**	**12,971**	**14,225**	**15,791**	**17,778**
Total Assets	**19,409**	**20,253**	**21,507**	**23,145**	**25,353**
Provisions	872	859	859	867	893
Refund Liabilities	171	168	169	170	175
Contract Liabilities	13	13	13	13	13
Loans & Borrows	155	152	152	154	158
Derivatives	260	256	256	258	266
Trade Payables	1,799	1,772	1,772	1,790	1,843
Tax Payable	665	655	655	662	681
Other Payables	1,209	1,191	1,191	1,203	1,239
Current Liabilities	**5,143**	**5,066**	**5,066**	**5,116**	**5,270**
Provisions	156	154	154	155	159
Loans & Borrows	3,604	3,550	3,550	3,585	3,693
Deferred Tax	544	536	536	541	558
Other Payables	283	278	278	281	290
Non-C. Liabilities	**4,587**	**4,518**	**4,518**	**4,563**	**4,700**
Total Liabilities	**9,730**	**9,584**	**9,584**	**9,680**	**9,970**

Table 15 *- Pandora's forecasted assets and liabilities, in DKK million, 2019-2023*

Appendix 10 - Pandora's Revenue Forecast

DKK millions	2019E	2020E	2021E	2022E	2023E
Revenue	22463.91	22126.95	22,126.95	22,342.22	23,018.67
Yoy % growth	-1.50%	-1.50%	0.00%	1.00%	3.00%

Table 16 *- Pandora's revenue forecast*

Appendix 11 - Pandora's Summary of DCF Results

Summary of the DCF Valuation – Pandora	
(in DKK million except shares outstanding and price per share)	
Sum of the PV of FCFF (2019-2023)	10,939
Terminal Value	30,860
Enterprise Value	**41,799**
MV Debt	15,842
Equity Value	**25,957**
Shares Outstanding	92174447
Price per share	**281.60**

Table 17 *- Pandora's summary of DCF results*

Appendix 12 - Pandora's Peer Group

Company	Revenue Growth	ROIC
Pandora	-3%	30%
Moncler	12%	42%
Technogym	7%	46%
Novozymes	5%	23%
Chr Hansen Holding	9%	19%
Compagnie Fin Richemont	8%	15%
Kering	8%	27%

Table 18 *- Pandora's peer group, 2018*

Appendix 13 - Aritzia's Income Statement Forecasts

CAD thousands	2019E	2020E	2021E	2022E	2023E
Net Revenue	957,940	1,049,586	1,150,000	1,260,021	1,380,567
COGS	588,904	645,245	706,975	774,612	848,719
Gross Profit	**369,036**	**404,341**	**443,025**	**485,409**	**531,848**
SG&A	249,845	273,748	299,938	328,633	360,073
SBCE	0	0	0	0	0
Operating Profit	119,190	130,593	143,087	156,776	171,775
Finance Expense	0	0	0	0	0
Other Expense	-1,980	-2,170	-2,377	-2,605	-2,854
Profit Before Tax	**117,210**	**128,423**	**140,710**	**154,171**	**168,921**
Tax Expense	33,373	36,566	40,064	43,897	48,097
Net Profit	**85,817**	**94,027**	**103,023**	**112,879**	**123,678**

Table 19 – Aritzia's forecasted Income Statement, in CAD thousands, 2019-2023

Appendix 14 - Aritzia's Balance Sheet (Assets and Liabilities) Forecasts

CAD thousands	2019E	2020E	2021E	2022E	2023E
C&CE	78,433	85,937	94,158	103,166	113,036
Accounts Rec.	4,632	5,075	5,561	6,093	6,676
Inventory	74,963	82,134	89,992	98,602	108,035
Income Tax Rec	0	0	0	0	0
Other	20,998	23,007	25,208	27,619	30,262
Current Assets	179,026	196,153	214,919	235,481	258,009
PPE	156,597	171,579	187,994	205,979	225,685
Intangible Asset	95,152	104,255	114,230	125,158	137,132
Goodwill	151,682	151,682	151,682	151,682	151,682
Other Assets	4,306	4,718	5,169	5,664	6,206
Deferred Taxes	0	0	0	0	0
Non-C. Assets	**407,737**	**432,234**	**459,074**	**488,482**	**520,704**
Total Assets	**586,763**	**628,387**	**673,994**	**723,963**	**778,713**

Accounts Payable	78,490	85,999	94,226	103,241	113,118
Income Taxes	14,016	15,357	16,826	18,436	20,200
Lease Obligations	662	726	795	871	954
Long-Term Debt	23,997	26,293	28,808	31,564	34,584
Deferred Revenue	21,404	23,452	25,696	28,154	30,848
Current	**138,569**	**151,826**	**166,352**	**182,266**	**199,704**
Other Non-C. L.	95,526	104,665	114,678	125,650	137,670
Deferred Tax	25,453	27,888	30,556	33,479	36,682
Lease Obligations	1,402	1,536	1,683	1,844	2,020
Long-Term Debt	182,792	200,280	219,441	240,435	263,437
Non-Current	**305,173**	**334,369**	**366,358**	**401,407**	**439,810**
Total Liabilities	**443,742**	**486,195**	**532,710**	**583,674**	**639,514**

Table 20 *– Aritzia's forecasted assets and liabilities, in CAD thousands, 2019-2023*

Appendix 15 - Aritzia's Revenue Forecast

CAD thousands	2019E	2020E	2021E	2022E	2023E
Revenue	957,940	1,049,586	1,150,000	1,260,021	1,380,567
Yoy % growth	9.57%	9.57%	9.57%	9.57%	9.57%

Table 21 *- Aritzia's revenue forecast, in CAD thousands, 2019-2023*

Appendix 16 - Aritzia's Summary of DCF Results

Summary of the DCF Valuation – Aritzia	
(in CAD thousands except shares outstanding and price per share)	
Sum of the PV of FCFF (2019-2023)	365,359
Terminal Value	1,582,659
Enterprise Value	**1,939,019,235**
MV Debt	0
Equity Value	**1,939,019,235**
Shares Outstanding	127898036
Price per share	**15.16**

Table 22 *- Aritzia's summary of DCF results*

Appendix 17 - Aritzia's Peer Group

Company	Revenue Growth (%)	ROIC (%)
Aritzia Inc.	**15.18%**	**22.00%**
Capri Holdings Ltd.	17.03%	16.80%
Canada Goose Holdings	25.54%	30.70%
Dollarama Inc.	7.21%	31.00%
Lululemon Athletica Inc.	13.74%	37.00%

Table 23 *- Aritzia's peer group*

Appendix 18 - FX Futures Quotes for DKK/USD and CAD/USD

	2014	2015	2016	2017	2018	2019E	2020E	2021E	2022E	2023E
DKK/USD	0.1340	0.1203	0.1165	0.1329	0.1271	0.1240	0.1269	0.1296	0.1323	0.1350
CAD/USD	0.8665	0.7300	0.7493	0.7839	0.7434	0.7551	0.7554	0.7544	0.7530	0.7515

Table 24 *- FX futures quotes*

Appendix 19 - Transaction Fees and Integration Costs

USD millions	2019E	2020E	2021E
Transaction Fees	18.77	0	0
Integration Costs	2.08	1.25	0.83
Total	**20.85**	**1.25**	**0.83**
Present Value	19.37	1.08	0.67
Sum of PVs		**21.12**	

Table 25 - Estimation of transaction fees and integration costs, in USD million

Appendix 20 - Accretion/Dilution Analysis

USD million	2019E	2020E	2021E	2022E	2023E
Acquirer Net Income	391	388	395	385	397
Pro-forma Net Income	467	488	521	538	582
Acquirer FD Shares Outstanding	92	92	92	92	92
Pro-forma FD Shares Outstanding	128	128	128	128	128
Acquirer EPS	4.25	4.21	4.29	4.18	4.30
Pro-forma EPS	3.67	3.82	4.08	4.22	4.56
Accretion/Dilution (%)	**-13.58%**	**-9.15%**	**-4.93%**	**0.96%**	**5.87%**

Table 26 - Accretion/dilution analysis of the EPS before and after the deal, in USD millions and percentage

GLOSSARY

Acquisition – a deal between two companies whereby one of them (the acquirer) buys the other (target) to gain control.

Apparel Retail Industry - integrates companies which design, manufacture, distribute and sell clothing items (which can include footwear and accessories).

Jewelry Industry – a multifaceted industry which produces and markets objects of personal adornment, from precious metals, gems and other materials, subjected to artistic treatment.

Merger – occurs when two companies are combined into one single entity through a deal.

Omnichannel - a marketing approach to sales via different channels. In the core of this approach, there is the integrated shopping experience, where customers' choice of channel becomes indifferent.

Premium – the extra value an acquirer firm offers for a target over its market value, in order to make the transaction more attractive.

Synergies –the value-added that is generated when two entities are combined, as when companies are combined, the value of the new firm is greater than the sum of the individual companies' values.

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