PANDORA A/S

COMPANY REPORT

LUXURY GOODS AND JEWELLERY

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Pandora: Is the charms business losing its shine?

- We **initiate our coverage** on **Pandora** with a **BUY recommendation** and a **price target FY2019 of 696.35 DKK** (total shareholder's expected return of 42.65%).

- The **fine jewellery market** is expected to **grow at 4.2% a year through 2022**. However, in a still **local, fragmented and unbranded industry**, **competition is fierce**. Due to **recovered consumer confidence in developed markets** and **strong potential of emerging markets**, there is a growing supply. As so, in the middle of the **digital era**, it becomes key to engage the **more eager and demanding than ever consumers** through **multiple touchpoints**. In the end, being able to **constantly adapt** to **new market trends** and **changing consumer needs**, while delivering the **best consumer experience** and remaining **trendy and meaningful** is of **paramount importance**.

- **Pandora** is considered one of the **most consistent high growth** companies in the industry, with a **CAGR for 2013-2017 of 26.10%**. However, the **projected CAGR for 2017-2023 is only 3.86%**. Nonetheless, through operating a **vertically integrated business**, high focus on **brand equity** and by achieving **economies of scale**, the company is **able to sustain high EBITDA margins of around 36%**, empowering it with a **strong competitive advantage**.

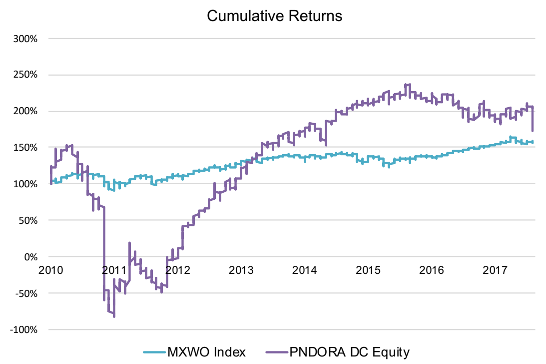
Company description

Founded in 1982, Pandora is a Danish jewellery provider that operates within the affordable luxury segment. The company runs a vertically integrated business worldwide, with its products being sold in more than 100 countries through around 7,800 points of sale, including more than 2,400 concept stores.

Recommendation:	**BUY**
Price Target FY2019:	**696.35 DKK**
Price (as of 23-MAY-2018)	**518.00 DKK**

52-week range (DKK)	498.50-756.00
Market Cap (DKKm)	56,841
Outstanding Shares (m)	110.03

Source: Bloomberg



Source: Bloomberg

	2017A	2018F	2019F
Revenues (DKKm)	22,781	23,260	24,375
EBITDA (DKKm)	8,409	8,434	8,843
EBIT (DKKm)	7,688	7,529	7,763
Comprehensive Income (DKKm)	5,507	5,637	5,821
EPS	48.95	51.23	52.91
P/E	13.45	13.54	13.51
EV/EBITDA	9.36	9.62	9.45

Note: Base case scenario's values
Source: Company's data; Analyst's estimates

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Executive Summary

Pandora, best known for its charm bracelet concept, is a Danish jewellery provider that operates within the luxury goods and jewellery market and runs a vertically integrated business worldwide.

The fine jewellery market is currently valued at around 268 USD billion and its growth is primarily driven by a strong potential of emerging markets, such as China. In an industry that faces fierce competition, in a sector that is suffering a reconfiguration of the channel landscape and as consumers get more eager and demanding than ever, companies must be able to constantly adapt to new market trends and changing consumer needs, while delivering the best consumer experience and remaining trendy and meaningful in order to thrive.

"We invest using quant trading models, but we're still surprised by the stock market reaction," said Jacob Loiborg, chief portfolio manager at Sparinvest.

Source: Bloomberg

Exhibit 1: Consensus estimates, as of 23rd May 2018

Consensus Estimates	
Buy Recommendation	50%
Hold Recommendation	45%
Sell Recommendation	5%
12M Target Price (in DKK)	723.21

Source: Bloomberg

Since Pandora's IPO in 2010, the company has been consistently and heavily growing, yet it is presently showing signs of a substantial deceleration. Moreover, on 15th May 2018, at the time of the first quarter earnings release, Pandora surprised investors and analysts with a significant slowdown in the revenue growth faced by China, a key growth market for the company (from 62% in Q42017 to 16% in Q12018, in local currency). This decrease was mainly due to the rise of supply through unofficial channels (also known as grey market trading), a problem that can be mitigated but difficultly completely eliminated. Nonetheless, and in the light of the latest events that led to a decline of the stock price from 664.20 DKK on May, 14 to 501.00 DKK on May, 18, we believe the market is being too harsh on Pandora and that although this surely raises a red flag on the company, foreseeing that maybe the future will not be as bright as we once thought, we think Pandora will be able to partially recover, with a better second half of 2018 and smoother long term effects. As so, we consider that we are being conservative enough by predicting a CAGR from 2017 to 2023 of 3.86%, compared to the expected fine jewellery market growth of 4.2% a year through 2022 and the company's CAGR from 2013 to 2017 of 26.10%. Furthermore, our price target estimate and respective recommendation are in line with consensus estimates.

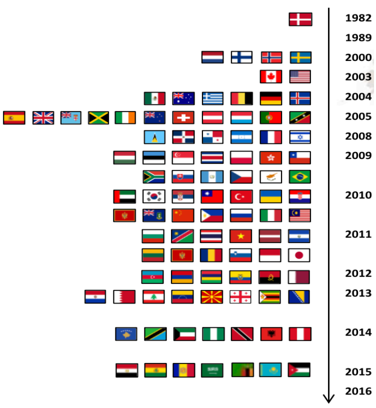
Hence, and based on the information that is currently available, our valuation takes into consideration three scenarios that deal with different views on the company and on the economic conditions, by affecting the main sources of value: revenue drivers and perpetual growth rate. The valuation yields a target price in FY2019 of 696.35 DKK, corresponding to an equity valuation of 76,619 DKK million and to a total shareholder's expected return of 42.65%. Therefore, our recommendation is to BUY Pandora's stock.

The Company

Description

Pandora operates within the luxury goods and jewellery market. As the company defines itself “Pandora designs, manufactures and markets hand-finished and contemporary jewellery made from high-quality materials at affordable prices”. The company’s mission is to inspire and celebrate women by offering them the opportunity for self-expression while its vision consists in becoming the branded jewellery manufacturer that delivers the most personal experience.

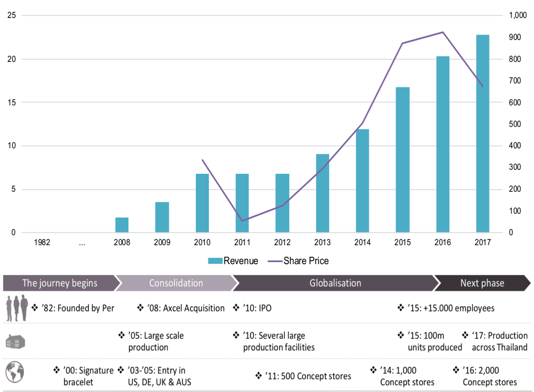
Exhibit 2: Globalization



Source: Pandora’s Investor Presentation

The journey of Pandora started in 1982, in Denmark, when it was founded by Per and Winnie Enevoldsen. After several years of importing jewellery from Thailand, in 1989, the company decided to move forward and to start manufacturing its own jewellery in that same location. Consolidation and globalisation began then with the entry in the new century. In 2000, Pandora launched its charm bracelet concept for the first time in the Danish market, with consumers embracing the idea from the beginning. In the following years, driven by an increasing demand, the company started expanding internationally. From 2003 to 2005, the company entered in new markets, such as the US, Germany, the UK and Australia. In 2005, Pandora started producing in large scale through the opening of a big fully-owned crafting facility in Thailand. In 2008, a second production facility was opened in the area, followed by the third and fourth facilities in 2010, further increasing the company’s manufacturing capacity. Moreover, in 2008, Axcel, a private equity firm, acquired 60% of Pandora while the remaining 40% was still owned by the founding family. Two years later, in 2010, there was the IPO of the company, which started being publicly traded on the Nasdaq Copenhagen stock exchange. The main purposes of the IPO were not only to allow consolidation of Pandora’s distribution channels and offer a platform for future growth by improving the company’s public profile and visibility, but also to give a partial exit to its private equity and family owners. From then onwards, the company started growing very quickly. In 2011, there were 500 concept stores, a number that doubled by 2014 and quadrupled by 2016. In 2017, 117 million units were crafted.

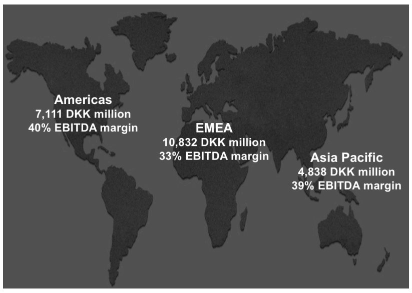
Exhibit 3: Revenue and share price, revenue values in DKK billion and share price values in DKK



Source: Company’s data; Bloomberg; Pandora’s Investor Presentation

Nowadays, Pandora, with headquarters still in Denmark, runs a vertically integrated business in most markets, from in-house design and production to global marketing, distribution and selling to the final consumer. The company’s products are sold in more than 100 countries through around 7,800 points of sale, including more than 2,400 concept stores. It employs more than 27,350 people worldwide of whom around 13,250 work in Thailand, where its crafting facilities are located.

Exhibit 4: Regional areas

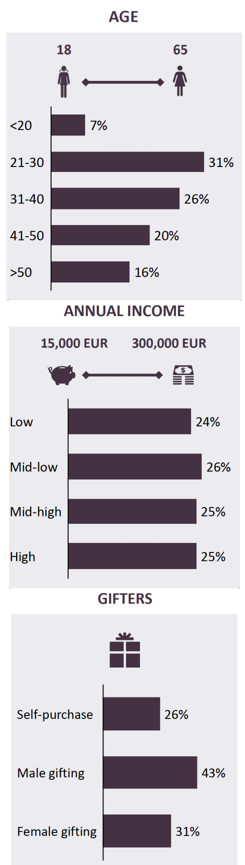


Source: Company's data

Pandora is divided in three regional areas: EMEA, Americas and Asia Pacific. The largest markets in EMEA are the UK, Italy, France and Germany. In Americas, the largest one is the US while in Asia Pacific the largest markets are Australia and China. Its product categories are charms, bracelets, rings, earrings and necklaces & pendants.

Pandora's business is divided into concept stores and other points of sale (such as shop-in-shops and multi-branded stores). Both concept stores and shop-in-shops can be Pandora owned or not. Stores are strategically situated in highly frequented places on high streets and in shopping malls. They are also country or region orientated and the company quickly adapts to changes in consumer needs. For example, in the US, due to an increasing demand for earrings, Pandora started applying a stronger focus on them, driving sales up.

Exhibit 5: Distribution of consumers who have purchased Pandora within last 12 months



Source: Pandora's Investor Presentation

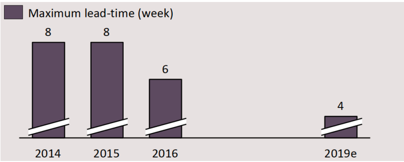
Being perceived as an affordable luxury brand, Pandora targets women between 18 and 65 years of age, with an annual income between 15,000 and 300,000 EUR. Research shows that there is a rising group of women with increased purchasing power and so, Pandora has been evolving its brand to create a greater connection with them. In addition to female consumers, the company also devotes some resources to improve its awareness among men, since around 75% of women who own its products receive them as a gift and about 60% of the givers are men. Moreover, Pandora aspires to maintain one brand across the globe while pursuing a segmented approach to marketing that addresses the different consumer segments taking into account their individual characteristics. Finally, Pandora preserves a certain blank identity by not using celebrities in its campaigns. This is definitely intentional and aims to reach a wider audience.

The company is best known for its charm bracelet concept, which enjoys from high levels of consumer recognition. The charms and bracelets categories allow consumers to build a more personalised look, by adding and combining charms as they please, and incentivise repeated purchases, allowing for a higher total spend over time while offering affordable prices for each charm. Moreover, each product, either a gift or a personal acquisition, is used to celebrate a special occasion, leading to a higher emotional bond with the product and, consequently, the brand.

Strategy

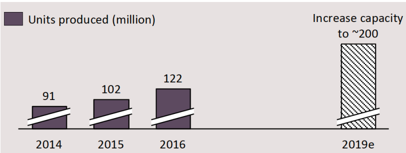
Pandora's manufacturing facilities are centralized in Thailand, combining standardised and scalable modern production methods with traditional craftsmanship, which allow keeping quality high and prices affordable. Recently, a

Exhibit 6: Lead-time improvement



Source: Pandora's Investor Presentation

Exhibit 7: Production capacity expansion



Source: Pandora's Investor Presentation

new crafting facility was opened, allowing the maximum lead-time target to be reduced to 4 weeks by the end of 2019, while 2016's level was 6 weeks. Additionally, 2015's capacity is expected to double to more than 200 million pieces by that time, as well. This allows Pandora to be a market leader in terms of capacity and lead-time and to better react in case a certain collection is below or above expectations. According to the company, its consumer return rate of around 3% is considerably better that the industry average of 8-12%. Additionally, its large-scale production combined with low labour costs in the country allow the company to enjoy very high margins. On the other hand, its concentration of production makes it very vulnerable (e.g. geopolitical unrest) and it can somehow slow down the supply chain's efficiency. Despite that, as Pandora operates a vertically integrated business, it can easily use data from the different segments of the value chain to improve efficiency, allowing it to benefit from flexibility, maintain a clear view of operations and develop products and actions to match changing market needs. For example, while usually developing a new collection takes around 11 months, Pandora is able to respond with new jewellery to macro trends and cultural movements in just 4 months.

The company is aiming at a strong development across product categories, in order to provide a full jewellery product offering, increase brand awareness and diversify risk. Although its core categories are still charms and bracelets and following several years of progress in the rings category, the company has recently begun to focus on the earrings and the necklaces & pendants categories. In 2017, revenue from rings, earrings and necklaces & pendants has increased by 28% and contributed to 26% of total revenue. By further developing other product categories, upselling also gets easier, since items such as rings have higher price points than charms.

Pandora is expanding and improving its store network, focusing on the opening of company owned concept stores and also acquiring some from existing franchisees. The goal is to provide a better consumer experience to improve brand control and strengthen brand loyalty. Moreover, the conversion of sales from wholesale to retail may also improve margins. In this sense, the company expects to have around 3,500 concept stores by 2022, where 65% of them are owned by the company. During 2017, Pandora added net 376 owned concept stores. Also, distribution operations in Belgium, South Africa and Spain were acquired. During May 2018, Pandora took over distribution in Ireland. Currently, around 40% of concept stores are owned by Pandora and the tendency is for this number to rise.

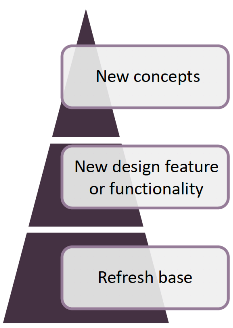
The company wants to become a balanced global business. As so, Pandora aims to sustain solid performance in developed markets while also improving its presence in emerging markets where the brand is not so well established. For example, by the end of 2017, Pandora expected to have around 60 concept stores in China and about 200 in Latin America. In the first quarter of 2017, Pandora opened its first concept store in India and a new regional office in Panama in order to drive the emerging activities in Latin America. Taking this goal of becoming a truly global brand into consideration, the company develops a market-specific approach whenever pursuing it. As Pandora expands into new markets, it starts to compete with local players that have better knowledge of local preferences and a more flexible supply chain. However, it tries to fight this weakness by entering into partnerships with local players in the short term and assuming the distribution control once the brand is well established. Jewellery is considered a personal item and consumer preferences vary wildly by market. Therefore, Pandora aims to adjust its brand positioning and marketing to meet consumer expectations across all of its markets.

Exhibit 8: Online platforms

Source: Pandora's Investor Presentation

Given the importance of digital channels these days, the company is also developing its online business. Pandora eSTOREs are available in 19 countries across all regions, including China, Australia, Hong Kong, Italy, the UK, the US, among others. Pandora has more than 120 million visits on its eSTOREs, 13.2 million Facebook followers and 3.7 million Instagram followers. The company also created a Pandora club that currently has around 10 million members worldwide. In the fourth quarter of 2017, eSTORE revenue corresponded to around 11% of total revenue. Moreover, Pandora is increasing brand awareness among Chinese consumers by also operating on online via Tmall.com. The online format engages consumers by making easier to browse for products. Furthermore, it allows the company to maintain a closer relationship with them by promoting new products or offers through the different platforms (website, e-commerce, the Pandora club and social media) and by monitoring consumer feedback. As so, Pandora intends to spend more than 50% of its marketing expenses on digital media.

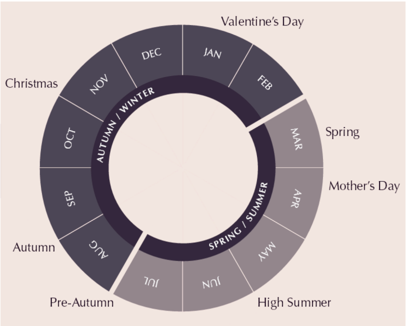
Exhibit 9: Product development levels



Source: Pandora's Investor Presentation

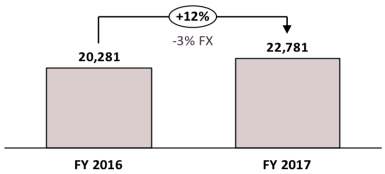
The company believes in the importance of increasing newness, in order to not only attract new consumers but also retain the existing ones. For instance, around 50% of revenue is generated from products launched in the last 12 months. As so, product development occurs on three levels: refresh base, new design feature or functionality and new concept. Pandora was the first jewellery brand to do 7 common launches (drops) each year that are based on traditional fashion and gift-giving seasons. By 2022, it will introduce 10 drops a year. This allows to increase consumer traffic into stores and drive growth in an environment where innovation is key, but also to retire slow-moving products through sales promotions. In 2017, a total of 500 new products were launched and a similar number were discontinued. Regarding new concepts, the company expects to launch at least

Exhibit 10: Common launches (drops)



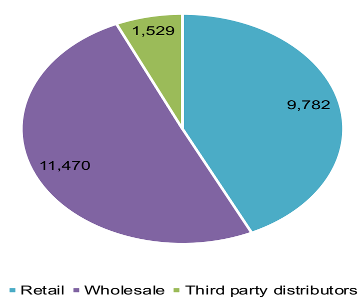
Source: Pandora's Investor Presentation

Exhibit 11: Revenue development, values in DKK million



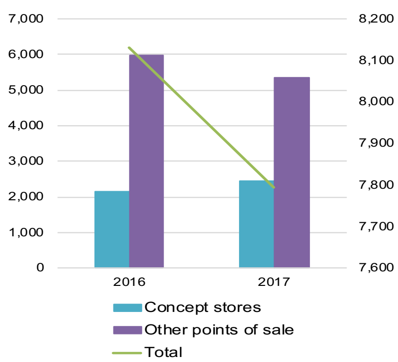
Source: Pandora's Investor Presentation

Exhibit 12: Revenue by sales channel, values in DKK million



Source: Company's data

Exhibit 13: Number of stores



Source: Company's data

one new concept per year. Concepts such as Essence, Disney and Rose accounted for around 75% of growth in new customers in charms and bracelets in the US, in 2015. Moreover, the Disney collection, introduced in the US in 2014 and in Asia Pacific in 2015, was launched in EMEA in 2017 and it was well received.

To sum up, Pandora's investment case towards 2022 consists in building a unique integrated business model, by being recognised as an affordable jewellery leader, with a leading position in branded manufacturing and a large and profitable distribution network.

Performance

In 2016, the company ranked in the 6th position in terms of world jewellery value, with a share of 1.3%, based on Euromonitor research (see Competition chapter for comparison with other players). Pandora has been able to provide sustainable growth in the last few years, primarily driven by its product development, retail strategy and global network expansion. In 2017, total revenue reached 22,781 DKK million, an increase of 12% compared with 2016 (15%, in local currency).

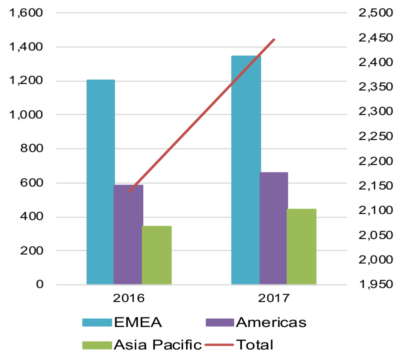
As so, sales growth was driven by strong Pandora owned retail development. The numbers released showed that Pandora owned retail revenue was 9,782 DKK million corresponding to 43% of total revenue, hereof Pandora owned concept stores represented 40% of total revenue. Wholesale still corresponded to 50% of total revenue, with a value of 11,470 DKK million, hereof franchise concept stores represented 29% of total revenue. Finally, the last 7% of total revenue related to third party distributors and corresponded to 1,529 DKK million.

The year of 2017 was also marked by the continued development of its store network, with a strong focus on concept stores. As so, there were 308 net openings of concept stores during the year, totalizing 2,446 concept stores, hereof Pandora owned stores increased by 376 to a total of 974 driven by the take over of Spain, Belgium and South Africa amongst others, while the number of net openings of other points of sale decreased by 645 to a total of 5,348, again showing the tendency to increase control over operations.

By region, revenue in EMEA corresponded to 10,832 DKK million (48% of total revenue), in Americas to 7,111 DKK million (31% of total revenue) and in Asia Pacific to 4,838 DKK million (21% of total revenue). Regarding, the number of concept stores opened during 2017, there were 141 net openings in EMEA totalizing 1,347 stores, 69 net openings in Americas totalizing 657 stores and 98 net openings in Asia Pacific totalizing 442 stores.

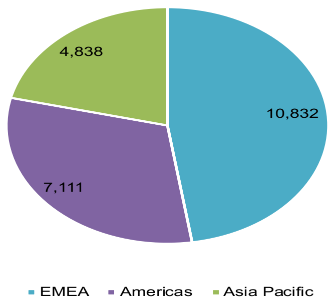
Pandora has a strong capacity to generate cash, being best-in-class in terms of profitability (see Competition chapter for comparison with other players). In 2017,

Exhibit 14: Number of concept stores by region



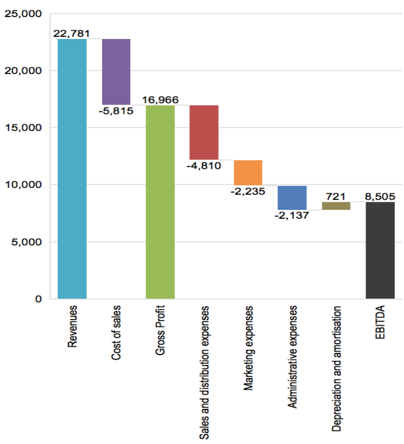
Source: Company's data

Exhibit 15: Revenue by region, values in DKK million



Source: Company's data

Exhibit 16: Income statement items, values in DKK million



Source: Company's data

gross profit margin[1] represented 75% of total revenue, being positively impacted by increasing share of Pandora owned retail revenue, but negatively impacted by a change in the metal mix. Regarding operating expenses[2], sales & distribution expenses increased mainly due to the increase share of revenue from Pandora owned stores that lead to higher property and staff costs, representing 21% of total revenue, marketing expenses increased due to bigger focus on brand building activities, namely on digital media, representing 10% of total revenue and finally, administrative expenses decreased primarily due to leverage on costs across regions, representing 9% of total revenue. As so, EBITDA margin[3] corresponded to 37% of total revenue. By region, EBITDA margin in EMEA corresponded to 40% of total revenue in the region, in Americas to 33% and in Asia Pacific to 39%.

Based on brand tracking analysis carried out by Ipsos among women aged 18+, in 25 markets, Pandora's aided brand awareness has been increasing massively, from 36%, in 2010, the year of its IPO, to 80%, in 2016. According to Pandora brand track, in 40 markets, in 2017, the aided brand awareness is about 83% while around 34% of the inquired people would consider buying the company's products. Moreover, based on this same study, its clients stay loyal and willing to buy. Regardless of the time of ownership of the first piece of Pandora's jewellery, around 80% of Pandora owners still consider buying its products and about 40-60% have actually purchased something for themselves in the past 12 months.

Shareholder Information

As of 23rd May 2018, the share price is 518.00 DKK. Moreover, Pandora currently has 110,029,003 shares outstanding. Each ordinary share is entitled to 1 voting right. There are no major shareholders holding a significant percentage of the share capital and voting rights in the company.

Pandora's capital structure intends to provide the company adequate financial flexibility to pursue its strategy, while maintaining a stable financial structure and a conservative balance sheet. The free cash flows generated in the business are firstly used to repay any interest-bearing debt outside the target capital structure, secondly used to fund value creating growth opportunities and thirdly used to compensate shareholders through dividend and share buyback programmes. The company aims to increase nominal dividends per share annually while returning all excess cash via share buyback programmes.

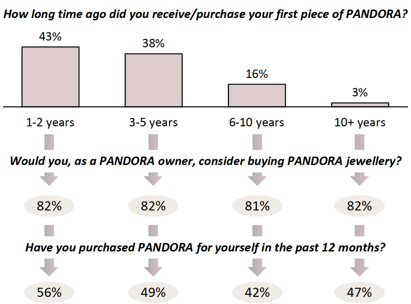
[1] Pandora includes staff costs, amortisation expense and depreciation expense in cost of sales. For valuation purposes, those costs were separated from cost of sales, so gross profit margin diverges.
[2] Pandora includes staff costs, amortisation expense and depreciation expense in the respective operating expense. For valuation purposes, those costs were separated from the respective operating expense, so the percentage of revenue of each expense diverges.
[3] Pandora does not include net operating finance income in EBITDA. For valuation purposes, that income was added to EBITDA, so the EBITDA margin can diverge a little.

Exhibit 17: Consumer KPIs across markets among women aged 18+

Selected key markets	Aided awareness[1]		Consideration[2]	
	2017	2016	2017	2016
US	88%	88%	32%	27%
UK	94%	92%	43%	41%
Italy	91%	88%	47%	42%
France	74%	65%	25%	19%
Germany	82%	79%	28%	29%
Australia	94%	96%	45%	48%
China	50%	53%	31%	33%
Global	**83%**	**80%**	**34%**	**31%**

Source: Pandora's Investor Presentation

Exhibit 18: Time of ownership and willingness to buy



Source: Pandora's Investor Presentation

Exhibit 19: Shareholders

Top Holders	Percentage of Shares
BLACKROCK	5.32%
MASSACHUSETTS MUTUAL LIFE INS	3.23%
PRUDENTIAL PLC	2.84%
VANGUARD GROUP	2.56%
SWEDBANK AB	2.52%
NORDEA BANK AB	2.49%

Source: Bloomberg

Exhibit 20: Top 100 luxury goods companies by sales

	Average	Pandora
Ranking position	-	24th
FY2015 sales growth	6.8%	40.2%
FY2015 net profit margin	9.7%	22.0%
FY2013-2015 sales CAGR	5.2%	36.3%

Source: Deloitte

The Industry

The Luxury Goods and Jewerelly Market

The luxury goods market consists of apparel & footwear, bags & accessories, cosmetics & fragrances, jewellery & watches and multiple luxury goods companies (whenever substantial revenue comes from at least two product sectors). In 2017, Deloitte published a top 100 luxury goods companies by sales and a top 20 luxury goods fastest growing companies by sales CAGR over a two-year period. Pandora appears ranked in the 24th position in the first ranking and in the 3rd position in the second one, demonstrating a FY2015 luxury goods sales growth of 40.2%, a FY2015 net profit margin of 22.0% and a FY2013-2015 luxury goods sales CAGR of 36.3%, comparing with the top 100's average of 6.8%, 9.7% and 5.2% and the top 20 fastest growing's average of 24.0%, 12.3% and 22.2%, respectively. During such period, Pandora was the company with most consistent high growth, mainly driven by an intensive branded store expansion, taking over existing not owned concept stores, opening new ones and launching eSTOREs. Moreover, its share price was also rising. Regarding a product sector analysis, 28 out of the 100 companies analysed were in the jewellery & watches sector[4], corresponding to 26.7% of top 100's total luxury goods sales. The top three performers in this group in terms of FY2015 sales growth were all vertically integrated jewellery companies, being Pandora the one ranked in the 3rd position.

Regarding the jewellery market, jewellery can be divided into fine jewellery that includes all jewellery items produced with precious metals and/or gemstones and costume jewellery that includes all jewellery items produced with other types of materials. According to Euromonitor research, the jewellery industry is currently valued at around 310 USD billion, with fine jewellery representing 268 USD billion and costume jewellery representing 42 USD billion. As so, fine jewellery is by far the leading segment within the category, accounting for 86% of 2017 value sales and growing faster than costume jewellery. The CAGR between 2012 and 2017 for fine jewellery was above 5%. From 2017 to 2022, fine jewellery is expected to continue to outperform costume jewellery in terms of year-to-year growth. In fact, fine jewellery is expected to grow at 4.2% a year through 2022, according to Bloomberg Intelligence. Furthermore, internet sales of fine jewellery showed a 16% CAGR globally over the period from 2012 to 2017. Based on Euromonitor, Pandora clearly outperforms the global jewellery market in terms of year-to-year retail value performance growth from 2011 to 2016.

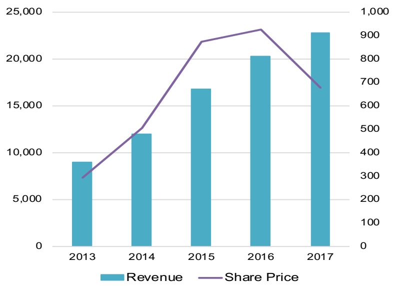
[4] This sector could be grouped into three categories: 9 Swiss-based luxury watchmakers, 9 luxury jewellery groups based in China/Hong Kong and India and 10 predominantly jewellery companies, category in which Pandora was included.

Exhibit 21: Top 20 luxury goods fastest growing companies by sales CAGR over a two-year period

	Average	Pandora
Ranking position	-	3rd
FY2015 sales growth	24.0%	40.2%
FY2015 net profit margin	12.3%	22.0%
FY2013-2015 sales CAGR	22.2%	36.3%

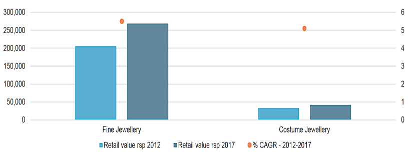
Source: Deloitte

Exhibit 22: Pandora: revenue and share price, revenue values in DKK million and share price values in DKK



Source: Company's data; Bloomberg

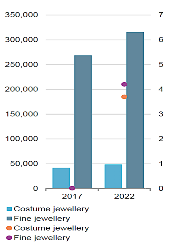
Exhibit 23: Fine vs costume jewellery: market size and CAGR 2012-2017, market size values in USD million and CAGR values in percentage



Note: rps stands for retail selling price

Source: Euromonitor

Exhibit 24: Fine vs costume jewellery: market size and year-to-year growth 2017-2022, market size values in USD million and year-to-year growth values in percentage

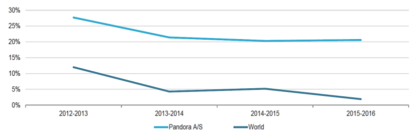


Source: Euromonitor

The jewellery industry is still largely local and fragmented, yet it is beginning to consolidate. In part, this is due to strong growth for international companies in Asia Pacific, mainly in China, and, on the other hand, recovering consumer confidence in developed markets is also driving the trend. In 2016, the 10 biggest jewellery brands captured 13% of global value (up from 11%, in 2012). Nonetheless, only Cartier and Tiffany & Co. are on the Interbrand's Top 100 Best Global Brands. Currently, around 20% of the jewellery market is branded. However, according to McKinsey's projections, in 2020, this percentage will increase to 30-40%. Therefore, growth of branded jewellery, further industry consolidation and globalization of successful brands are expected, with global branded players driving growth and increasing their market share in the future. Moreover, growing demand for affordable and high-end branded jewellery is encouraging companies with roots in apparel and leather goods to expand their assortment by introducing jewellery collections. As so, established jewellery brands, such as Cartier, Tiffany & Co. and Pandora will experience higher levels of competition and should seek to strengthen and differentiate their position. Finally, global branded jewellery should be driven by consumers from emerging markets, for whom brands are a symbol of trust, lifestyle and status as well as younger consumers, for whom brands are a mean of self-expression.

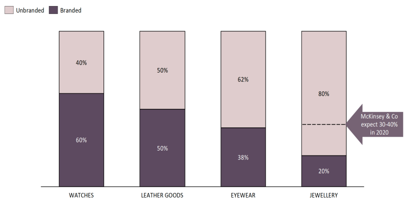
Furthermore, as consumers change their purchasing habits, the jewellery market is suffering a reconfiguration of the channel landscape. Now more than ever, consumers interact with companies at multiple touchpoints, both physical and digital. In addition to the physical store environment, companies need to engage consumers via websites, social media platforms and mobile apps in order to increase sales and build brand identity, awareness and loyalty. Developing an omni-channel marketing and communication are key. Therefore, it is of paramount importance for jewellery brands to cultivate a consistent presence across their multiple channels and integrate both physical with online experiences. Online jewellery sales account for 4-5% of total market today, although there are significant variations across regions, brands and type of jewellery. According to McKinsey, online fine jewellery sales will reach 10% of total market by 2020 but will not grow much more than that, since most consumers prefer to buy expensive jewellery from brick and mortar stores, where the sense of involvement is higher and they can touch and feel the items. The exception could be for affordable luxury branded jewellery, which may experience stronger online sales growth thanks to strong brand association and lower price points. In any case, having an online presence is mandatory, these days. From 2009 to 2016, the number of internet users has doubled to 3 billion people, worldwide. Moreover, around 50% of the world's population, or more precisely 4 billion people, will have access to the

Exhibit 25: Pandora vs global jewellery: market retail value performance 2011-2016, values in percentage



Source: Euromonitor

Exhibit 26: Branded vs unbranded jewellery market



Source: Pandora's Investor Presentation

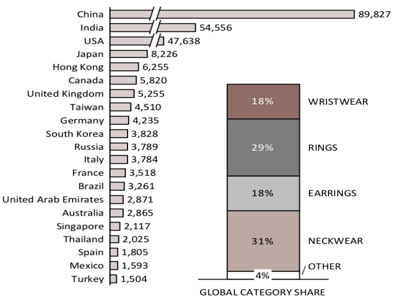
internet by 2021. Based on McKinsey research, more than 75% of luxury purchases are influenced by digital activities. Most modern consumers engage in online research prior to an in-store purchase. Actually, the most common scenario is one where consumers use online for initial product discovery and then the physical store is preferred for the final purchase, pick-up and returns. On the other hand, one cannot forget that the essence of luxury products is about taste, personal meaning and status, which have now become less about "what I have" and much more about "who I am". As so, the offline landscape is also evolving. Jewellery companies are focusing on retail over wholesale, especially on owned flagships, which give them more control over their brand image and allow for closer relationships with consumers, who also prefer this kind of format, since they can find there a full product range and dedicated service and staff. Consumers are looking for personalization and higher connection. Therefore, while wholesale is used to build global exposure, retail and online are preferred to boost profitability in the long term. Of course, these formats require more inventories, high-level IT systems, improved distribution and higher staffing costs, but they also offer potential for higher margins and better control. So, in the end they are worth it.

The gap between prices of fine and costume jewellery is widening. While fine jewellery is getting more expensive, with higher premiums being charged, costume jewellery is getting cheaper, mainly due to price wars. Hence, with the jewellery landscape showing signs of polarization, there is an opportunity for the rise of affordable luxury players, such as Pandora. However, adopting a clear pricing and brand positioning are key in such a dynamic and competitive industry. On the other hand, the rise of affordable luxury is also due to an increasing group of women with greater purchasing power that are regularly buying jewellery for themselves rather than receiving it as an occasional gift from men. This group of women is looking for quality, personalisation and meaning and expecting value for money.

Moreover, with the development of the digital era, namely, the use of social media platforms, consumers are getting eager and demanding jewellery in a faster way. In this sense, the jewellery industry is experiencing a fashionability and acceleration phenomenon. In order to stay relevant, jewellery brands, especially the ones that compete in the affordable luxury segment feel the need to launch trendy collections at an accelerated pace, stay informed about changes in consumer needs and react quickly through constant information feedback from the stores and the streets to the design and production teams and reduce product development cycle times, so that they can prevent consumers from trading down. Here, one should mention the advantage of Pandora by operating a vertically integrated business model that allows for faster communication and higher efficiency throughout the value chain and its recent investment to increase capacity production and to improve lead-time. Additionally, the company also releases 7 launches a year, with collections spaced less than 2 months apart.

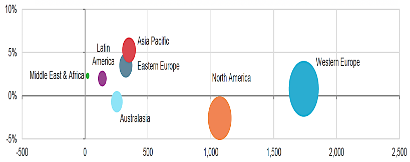
Based on Euromonitor research, the largest jewellery markets in 2018 will be China, India and the US. It is important to reinforce that Pandora has been massively investing in China and during 2017 it opened the first concept store in India. Furthermore, the US is the largest market for the company. Moreover, 18% of global market correspond to wristwear, 29% to rings, 18% to earrings, 31% to neckwear and 4% to others. Here again, one should notice that the company has realized this growth opportunity and so, it is increasing its focus on rings, earrings and necklaces & pendants, taking advantage from the brand recognition obtained from its core categories. While strong growth in the fine jewellery market is expected to persist for countries such as China and India, one cannot forget the potential of other emerging markets where greater participation in the workforce, bigger urbanisation and higher disposable income will cause a rise in consumer demand for fine jewellery, creating an opportunity for well-known companies, such as Pandora, to continue to expand their presence.

Exhibit 27: Largest jewellery markets 2018E, values in EUR million



Source: Pandora's Investor Presentation

Exhibit 28: Pandora: retail selling price value 2016 and CAGR 2017-2022 by region, retail selling price values in USD million and CAGR values in percentage



Source: Euromonitor

Exhibit 29: Real GDP growth

	2018	2023
EMEA	2.5%	2.3%
Western Europe	1.9%	1.6%
Eastern Europe	2.4%	2.1%
Middle East and Africa	3.3%	3.5%

Source: Euromonitor

Exhibit 30: Luxury jewellery market size growth

	2018	2022
Western Europe	2.6%	2.8%
Eastern Europe	6.9%	8.6%
Middle East and Africa	6.2%	7.9%

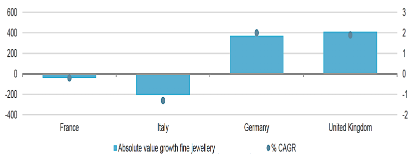
Source: Euromonitor

EMEA

Based on Euromonitor, currently, real GDP growth rate on annual terms is 2.5% for EMEA, with values of 1.9% for Western Europe, 2.4% for Eastern Europe and 3.3% for Middle East and Africa while the corresponding values for 2023 are forecasted to be 2.3%, 1.6%, 2.1% and 3.5%, respectively. Moreover, currently, market size growth on annual terms for luxury jewellery is 2.6% for Western Europe, 6.9% for Eastern Europe and 6.2% for Middle East and Africa while the corresponding values for 2022 are predicted to be 2.8%, 8.6% and 7.9%, respectively.

In this region, the largest markets for Pandora are the UK, Italy, France and Germany. There is a positive outlook in Western Europe to support the company's strategy. From 2017 to 2022, the absolute value growth and respective CAGR for fine jewellery are expected to be positive for the UK and Germany, while for Italy and France they are predicted to be negative, according to Euromonitor. Nonetheless, Italy and France have delivered robust growth for the company. Moreover, they are still relatively new markets for Pandora and so there are still growth opportunities there. For example, the Italian jewellery market remains greatly fragmented, with most of jewellers being independent and many family owned, which presents a chance for a global brand as Pandora to improve its market share. This way, although consumer confidence is still weak there and fine jewellery has seen a decline in value sales, the company's revenue increased 30% from 2016 to 2017. On the other hand, markets such as the UK and Germany

Exhibit 31: Four largest jewellery markets in Western Europe for Pandora: absolute value growth and CAGR 2017-2022, absolute value growth values in USD million and CAGR values in percentage



Source: Euromonitor

Exhibit 32: Real GDP growth

	2018	2023
Americas	2.3%	2.1%
North America	2.4%	1.8%
Latin America	2.3%	2.8%

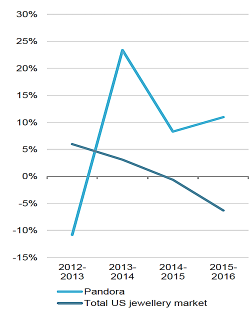
Source: Euromonitor

Exhibit 33: Luxury jewellery market size growth

	2018	2022
North America	0.2%	2.8%
Latin America	7.5%	8.9%

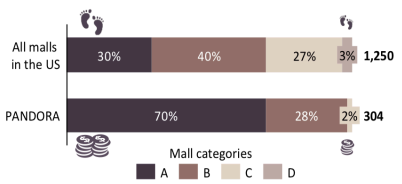
Source: Euromonitor

Exhibit 34: Pandora US sales vs total jewellery market US sales: year-to-year growth, values in percentage



Source: Euromonitor

Exhibit 35: Pandora's current network in the US



Source: Pandora's Investor Presentation

continue to deliver strong growth with total revenue increasing, however, and particularly in the UK, like-for-like revenue growth has started to decelerate. This is mainly due to cannibalization issues, since to improve the consumer in-store experience, Pandora's stores are highly concentrated.

Moreover, jewellery markets in the Middle East and Africa are expected to have CAGR of 2%, through 2022, so increasing the company's presence there is of big importance to achieve its strategic goal of becoming a truly global business.

Americas

Based on Euromonitor, currently, real GDP growth rate on annual terms is 2.3% for Americas, with values of 2.4% for North America and 2.3% for Latin America while the corresponding values for 2023 are forecasted to be 2.1%, 1.8% and 2.8%, respectively. Furthermore, currently, market size growth on annual terms for luxury jewellery is 0.2% for North America and 7.5% for Latin America while the corresponding values for 2022 are predicted to be 2.8% and 8.9%, respectively.

In this region, the largest market for Pandora is the US. From 2013 to 2016, Pandora's year-to-year revenue growth in the US clearly outperformed the total US jewellery market, according to Euromonitor. This was mainly due to, on one hand, improved economic conditions and higher consumer confidence and, on the other hand, strong marketing and trendy products that allowed to increase brand awareness and brand loyalty. In 2017, the US retail environment could be characterized as being turbulent, with general mall traffic declining. Some of the reasons are the transition to online, the overcapacity of retail space and an over-indebted consumer. However, Pandora's store network was positioned in the "right" malls according to Green Street Advisors. The company showed additional efforts to drive growth in this difficult environment through not only creating a better retail environment by selective approach to new stores and improvement of online experience, but also through refining products and execution by market-specific product development, promotions and celebration of additional occasions. During the year, there was a strong eSTORE performance, however the growth in the physical store network was negative. Nonetheless, new key locations for concept stores were identified to further develop the US network in the next three to five years. Still, revenue growth for the company in the US started to slow down, mainly due to the current retail situation there, but also due to the strategic closure of a significant number of multi-branded stores.

Additionally, there is still remarkable potential for Pandora in South America, although in some markets such as Brazil, the local economic conditions can prove to be challenging.

Asia Pacific

Exhibit 36: Real GDP growth

	2018	2023
Asia Pacific	5.5%	4.8%

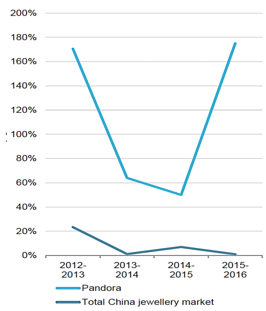
Source: Euromonitor

Exhibit 37: Luxury jewellery market size growth

	2018	2022
Asia Pacific	6.3%	5.9%

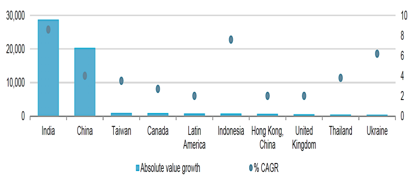
Source: Euromonitor

Exhibit 38: Pandora China sales vs total jewellery market China sales: year-to-year growth, values in percentage



Source: Euromonitor

Exhibit 39: Ten largest jewellery markets: absolute value growth and CAGR 2017-2022, absolute value growth values in USD million and CAGR values in percentage



Source: Euromonitor

Based on Euromonitor, currently, real GDP growth rate on annual terms is 5.5% for Asia Pacific while the corresponding value for 2023 is forecasted to be 4.8%. Also, currently, market size growth on annual terms for luxury jewellery is 6.3% for Asia Pacific while the corresponding value for 2022 is predicted to be 5.9%.

In this region, the largest markets for Pandora are Australia and China. On one hand, Australia continues to deliver strong growth, boosted by Chinese tourists, however showing signs of deceleration. On the other hand, Pandora has started to massively invest in China in 2015, where its main focus has been to increase brand recognition. In this sense, from 2015 to 2016, aided brand awareness among women increased from 35% to 53%, in Beijing and Shanghai. Moreover, from 2013 to 2016, Pandora's year-to-year revenue growth in China clearly outperformed the total China jewellery market, according to Euromonitor. However, in the first quarter of 2018, there was a significant slowdown in the revenue growth there, with negative like-for-like sales growth mainly due to insufficient marketing spend that led to a lower traffic into stores and increasing grey market trading of Pandora's products in unofficial channels.

Asia is the main region in focus, on both size and growth potential. Higher incomes in the middle and upper classes of emerging markets in Asia are likely to boost demand for luxury and branded jewellery. According to Bloomberg Intelligence, India household incomes above 15,000 USD are forecasted to rise by 11.6% a year through 2020 to 15% of households while China household incomes above 15,000 USD are estimated to rise by 4.6% a year through 2020 to 46% of households. As so, leading the 10 largest jewellery markets in terms of global absolute value growth through 2022 are India and China, set to generate values corresponding to 59% and 42%, respectively. Currently, Pandora has a small visibility in both markets (for instance, it currently has less than 1% market share, in China), however this provides a clear opportunity to further invest in geographical expansion and increase the company's share in these markets. Actually, Pandora is already placing itself to increase its presence there. For example, in January 2017, Pandora teamed up with Pan India Charms & Jewellery to start distributing its jewellery in India. The plan, starting in 2017, is to open around 50 concept stores across the country over the next three years, focusing initially on Delhi, Mumbai and Bangalore. Regarding China, in 2015, Pandora signed an agreement with Oracle Investment Limited about joint distribution of its jewellery in China until the end of 2018. By that time, Pandora will take over the distribution. Moreover, in 2016, Pandora entered in a local partnership with Alibaba Group to sell its products via Tmall.com. With internet retailing in China becoming increasingly popular due to higher convenience, faster internet and increasing payment security, Tmall.com is the best partner as the biggest online shopping platform in China in terms of turnover and traffic. However, other jewellery brands face the same competitive advantage. In addition, the company is currently expanding its concept store network as well. Nonetheless, limiting unofficial sales channels is crucial for its success there.

Furthermore, jewellery markets in Asia Pacific, in general, are set to see CAGR of 5% through 2022, so seizing the opportunity to expand Pandora's business in the region is crucial to accomplish the company's strategy.

Competition

Exhibit 40: Revenue comparison

Revenue (USD million)	
Pandora (31/12/2017)	3,672
Swarovski (31/12/2016)	2,734
Folli Follie (31/12/2017)	1,704
Richemont (31/03/2018)	7,945
Tiffany & Co. (31/01/2018)	4,170
Signet Jewelers (03/02/2018)	6,253
Chow Tai Fook Jewellery (31/03/2017)	6,595

Note: In the case of Richemont, the values presented correspond only to its Jewellery Maisons

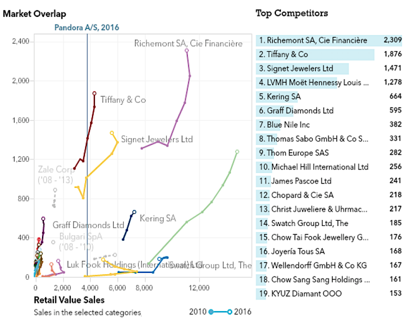
Source: Companies' data

Exhibit 41: Global leading jewellery players: value share 2016 and ranking 2012-2016

Company	5-year share trend	2012	2013	2014	2015	2016	2016 % value share
Signet Jewelers Ltd	↑	5	5	2	2	1	1.9
Richemont SA, Cie Financière	→	2	2	3	3	2	1.8
Chow Tai Fook Jewellery Group Ltd	↓	1	1	1	1	3	1.7
Lao Feng Xiang Co Ltd	→	4	3	4	4	4	1.6
Tiffany & Co	→	3	4	5	5	5	1.5
Pandora A/S	↑	9	7	6	6	6	1.3
LVMH Moët Hennessy Louis Vuitton SA	→	7	9	8	8	7	0.8
Swarovski AG	→	8	10	9	9	8	0.7
Shanghai Yuyuan Tourist Mart Co Ltd	↓	6	6	7	7	9	0.7
Kalyan Jewellers India Pvt Ltd	↓	16	16	13	11	10	0.7

Source: Euromonitor

Exhibit 42: Competitive Landscape of Pandora 2010-2016, values in USD million



Source: Euromonitor

Pandora faces competition from fine jewellery companies, luxury and fashion brands that offer jewellery in their collections and a huge number of small and local players. Its core competitors operate within the affordable segment of fine jewellery market. However, most of them are private companies, which do not disclosure financial information. As so, for valuation purposes, the peer group is sometimes composed by the best proxies we could find. Moreover, it is also relevant to mention that although Pandora is definitely an affordable luxury brand, the actual value spent is way higher than the perceived value spent. For the fiscal year ended 31st December 2017, revenue was 22,781 DKK million (or 3,672 USD million), representing an increase of 12% from the previous year.

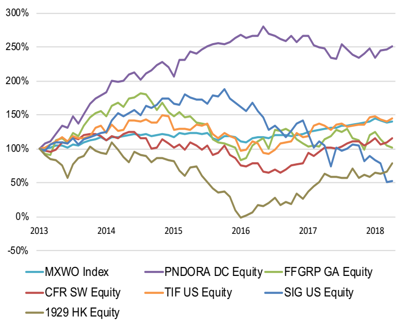
Companies such as Thomas Sabo and Tous are true competitors of Pandora, however they are privately held companies. Thomas Sabo, founded in 1984 and based in Germany, operates through a network of more than 300 points of sale in more than 75 countries and online. The company sells high-end jewellery, watches and beauty products, within the affordable segment. Tous, founded in 1920 and based in Spain, is an affordable luxury lifestyle brand that sells jewellery, watches and other accessories. It is present on five continents with almost 500 stores and also online. On the other hand, more recent companies like Astley Clarke and Monica Vinader also directly compete with Pandora. Both are based in the UK, operate within the affordable luxury jewellery segment and are present worldwide, either through physical stores or online. Moreover, as they are relatively recent, they like to take advantage of celebrities to create brand awareness. Yet, again, they are private companies.

Then, there is Swarovski, which is also a privately held company. Swarovski, founded in 1895 and based in Austria, sells crystals, jewellery, watches and accessories in around 170 countries through its 2,800 stores, within its crystal business segment. For the fiscal year ended 31st December 2016, revenue from this segment was 2,600 EUR million (or 2,734 USD million). Swarovski ranked in the 8th position in terms of world jewellery value, with a share of 0.7%, based on Euromonitor. Additionally, one of its subsidiaries, Chamilia (founded in 2002) is a jewellery brand focused on affordable charms that sells its products online.

Moving to public companies, Folli Follie is interesting as the most affordable jewellery player in Pandora's peer group. Folli Follie, founded in 1982 and based in Greece, is an international lifestyle brand which sells jewellery, watches and accessories. It has operations in 30 countries with more than 630 points of sale. For the fiscal year ended 31st December 2017, revenue was 1,419 EUR million (or 1,704 USD million), representing an increase of 6% from the former year. Furthermore, one of its subsidiaries, Links of London (founded in 1990) is an international jewellery brand that sells jewellery and watches in approximately 425 stores worldwide and online, within the affordable luxury segment.

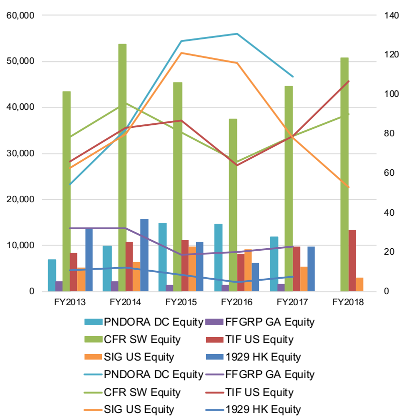
Comparison with large players like Richemont, Tiffany & Co. and Signet Jewelers is in line with Pandora's goal of becoming the world's top jewellery brand. Although clearly price points vary significantly. Nonetheless, according to Euromonitor research, Pandora is an affordable luxury brand that manages to compete directly against high-end jewellery companies. Richemont, founded in 1988 and based in Switzerland, owns several leading companies in the field of luxury goods, with particular focus on jewellery, watches and accessories. Regarding, its jewellery brands, one should mention Cartier (founded in 1847) and Van Cleef & Arpels (founded in 1906). Both sell premium jewellery and watches worldwide. For the fiscal year ended 31st March 2018, revenue from jewellery (59% of total revenue) was 6,447 EUR million (or 7,945 USD million), representing an increase of 9% from the last year. Richemont ranked in the 2nd position in terms of world jewellery value, with a share of 1.8%, based on Euromonitor, and it is Pandora's biggest competitor by market overlap, sharing a total of 26 markets and with an overlap in sales terms of 2,309 USD million. Tiffany & Co., founded in 1837 and based in New York, offers an extensive collection of jewellery (including an affordable silver jewellery business), but also watches and other accessories through a network of more than 300 stores worldwide and online. For the fiscal year ended 31st January 2018, revenue was 4,170 USD million, representing an increase of 4% from the prior year. Tiffany & Co. ranked in the 5th position in terms of world jewellery value, with a share of 1.5%, based on Euromonitor, and it is Pandora's 2nd biggest competitor by market overlap, sharing a total of 25 markets and with an overlap in sales terms of 1,876 USD million. Signet Jewelers, founded in 1950 and based in Bermuda, is the largest specialty jewellery retailer in the US, the UK and Canada and sells mainly jewellery and watches. It operates about 3,600 stores around the globe under different brand names. For the fiscal year ended 3rd February 2018,

Exhibit 43: Cumulative returns in USD terms



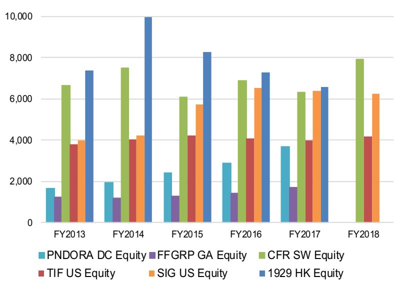
Source: Bloomberg

Exhibit 44: Market capitalization and share price, market capitalization values in USD million and share price values in USD



Source: Bloomberg

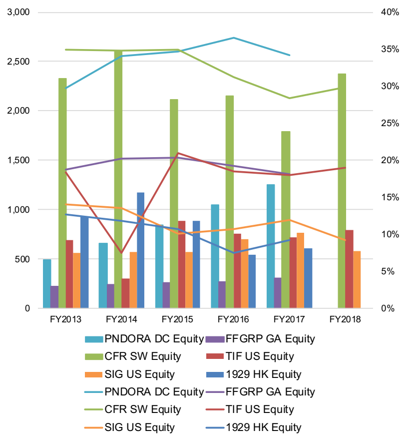
Exhibit 45: Revenue, values in USD million



Note: In the case of Richemont, the values presented correspond only to its Jewellery Maisons

Source: Bloomberg

Exhibit 46: EBIT and EBIT margin, EBIT values in USD million and EBIT margin values in percentage



Note: In the case of Richemont, the values presented correspond only to its Jewellery Maisons

Source: Bloomberg

Thomas Sabo

TOUS

ASTLEY CLARKE

MONICA VINADER

SWAROVSKI

CHAMILIA live with all your heart

Folli Follie

LINKS LONDON

revenue was 6,253 USD million, representing a decrease of 2% from the previous year. Signet Jewellers ranked in the 1st position in terms of world jewellery value, with a share of 1.9%, based on Euromonitor, and it is Pandora's 3rd biggest competitor by market overlap, sharing only 3 markets (the US, the UK and Canada) but with an overlap in sales terms of 1,471 USD million. Actually, in 2016, Pandora upgraded its partnership with Jared, a US jewellery chain owned by Signet Jewelers, and around 200 stores were transformed from multi-branded to shop-in-shops, considerably improving the quality of Pandora's store network. This demonstrates the advantages of being a wholesaler as well, with Pandora partnering with a rival company and converting it into an ally.

Finally, it seems fair to include the biggest jewellery player in China, Chow Tai Fook Jewellery, given Pandora's strategy of massively investing there. Chow Tai Fook Jewellery, founded in 1929 and based in Hong Kong, is a vertically integrated jewellery business that manufactures and sells jewellery products and operates though a retail network of over 2,400 point of sales and online. For the fiscal year ended 31st March 2017, revenue was 51,246 HKD million (or 6,595 USD million), representing a decrease of 9% from the prior year. Chow Tai Fook Jewellery, ranked in the 3rd position in terms of world jewellery value, with a share of 1.7%, based on Euromonitor.

One should notice that the majority of Pandora's rivals offer a wider range of products. For instance, in 2017, personal accessories was one of the most dynamic industries, with a growth of 4%. As so, it is crucial to think if Pandora could tap into a broader variety of products in order to continue to expand globally, increase revenue and improve brand loyalty.

Regarding brand awareness, a study carried out by Ipsos among women aged 18+, in 31 markets, showed that the aided brand awareness of Pandora has increased, between 2016 and 2017, from 80% to 83%, surpassing the level of Tiffany & Co., whose percentages were 70% and 71% and reaching the level of Swarovski, whose percentages were 81% and 80%, respectively.

Valuation

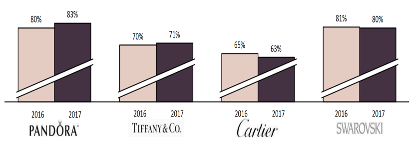
Revenues

Given the way how the business is structured and the company's strategy, one of the most interesting and valuable analysis that can be conducted is to understand the behaviour of revenues per geography and per sales channel. On one hand, although a global brand, Pandora does not have the same strength in all of its markets and, besides that, consumers are different from market to market. As so, revenues will vary conditional on the geography. On the other hand, revenues will highly depend on the type of store. For instance, Pandora owned stores offer better service and better understanding of the company's products than Pandora not owned stores. Moreover, concept stores offer better consumer experience and a more personalized service than other points of sale. Therefore, the main revenue drivers are number of stores and revenue per store, depending both on the geography and on the sales channel.

However, since Pandora only releases revenue per geography and revenue per sales channel separately, in order to perform the desired analysis, it was necessary to compute an estimation of the average revenue per geography and per sales channel. The only assumption that was required to make was that the relationship amongst revenues generated by each type of store is the same worldwide, which is a quite reasonable one.

In terms of number of stores, one should again mention the company's strategy of increasing the number of concept stores at the expense of other point of sales, with focus on Pandora owned stores. As so, the company announced its intentions of adding 200 net concept stores per year in the following 5 years. From these 200 stores, around 100 will be located in EMEA, 50 in Americas and 50 in Asia Pacific. Moreover, two-thirds of these stores will be Pandora owned. These numbers seem very realistic taking into consideration the past few years. Actually, from 2013 to 2017, the company added between 308 and 392 net concept stores per year. Furthermore, although consumers are getting more demanding and competition is increasing, there is market to grow for the most well-known brands. Hence, it was considered that the company will successfully achieve its goal. Regarding other points of sale, Pandora has been decreasing the number of this type of store. Based, on the company's strategy, it is expected that such tendency will continue.

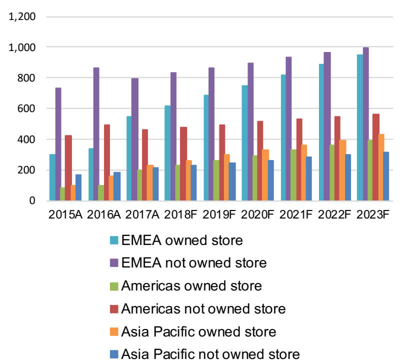
Exhibit 47: Aided Brand Awareness



Source: Pandora's Investor Presentation

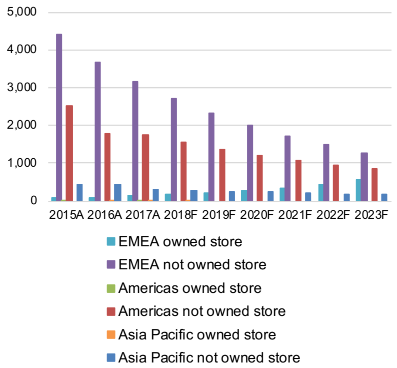
Regarding average revenue, it is considered that average revenue is stable in the region of EMEA, and so, in the following years it will be the same as the average of the last three years, in order to reduce event-specific differences, added by a slight increase per year. In fact, although in some markets average revenue may increase due to marketing efforts or product innovation, as it is the case of Italy, France and Germany (around 45% of revenue from EMEA), this will be somehow offset by the cannibalization effects suffered in other markets, where in order to improve the consumer experience the concentration of stores will increase, as it is the case of the UK (around 25% of revenue from EMEA). In the region of Americas, the base is also the average of the last three years, however it is expected that average revenue will actually slightly decrease throughout the years until it stabilizes, once while Latin America shows good growth opportunities, the US

Exhibit 48: Number of concept stores



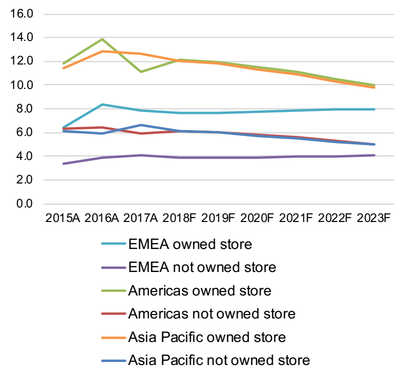
Source: Company's data; Analyst's estimates

Exhibit 49: Number of other points of sale



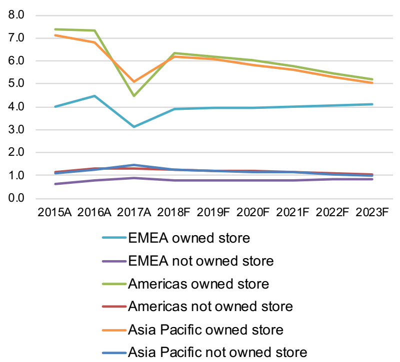
Source: Company's data; Analyst's estimates

Exhibit 50: Average revenue per concept store, values in DKK million



Source: Company's data; Analyst's estimates

Exhibit 51: Average revenue per other points of sale, values in DKK million



Source: Company's data; Analyst's estimates

(around 75% of revenue from Americas) has been facing a difficult environment and some degree of saturation. Finally, in the region of Asia Pacific, it is predicted that average revenue will decrease mainly due to the recent slowdown in revenue growth faced by China (around 30% of revenue from Asia Pacific) in response of the alarming levels of grey market trading that are difficult to limit in that market.

Thus, the main revenue driver is considered to be the number of stores and not the average revenue. Hence, in the following years, Pandora will be more focused on reorganizing its structure and building up than on improving revenue per store.

Since its IPO in 2010, revenues have been massively increasing on an annual basis, with Pandora being recognised as one of the companies with most consistent high growth. From 2013 to 2017, the CAGR was 26.10%. However, it is possible to observe a slowdown in the annual growth. For instance, the annual growth from 2013 to 2014 was 32.54% while the annual growth from 2016 to 2017 was 12.33%. As so, taking into consideration the prospects of the company and the market's outlook, it is forecasted that from 2017 to 2023, the CAGR will only be 3.86%, value to be compared with the expected growth of 4.2% a year through 2022 in the fine jewellery market, according to Bloomberg Intelligence.

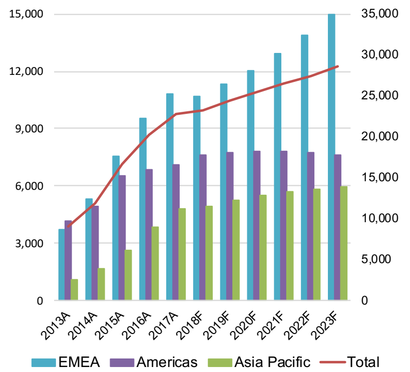
Once most of the company's value comes from Pandora being able to successfully implement its strategy, it is important to state some of the biggest risks that the company faces and how realistically can Pandora mitigate them.

As mentioned earlier, a significant part of Pandora's revenue comes from items that have been on the market for less than 12 months. In this sense, the company is dependent on an effective product design and marketing. There is always the risk that a new product does not meet consumer expectations or does not gain the desired adhesion in the markets. However, Pandora's full control of the supply chain and rapid lead-time allow it to quickly respond.

Moreover, the charms and bracelets categories remain the biggest bulk of revenue for the company. Therefore, in case consumers lose interest in this concept or there is a maximum that they are willing to buy, Pandora's revenues could sharply decrease. On the other hand, by releasing new collections 7 times a year, the company is able to stay relevant and trendy. Furthermore, it is currently expanding its product offering to other categories that are quickly gaining share. However, one should mention that as Pandora diversifies away from charms and bracelets, it will likely see its margins decreasing as it enters into more competitive categories such as rings, earrings and necklaces.

Pandora tries to protect its intellectual property rights through trademarks, copyrights and patents which are strengthened by business secrets, non-

Exhibit 52: Revenue, values in DKK million



Source: Company's data; Analyst's estimates

Exhibit 53: Revenue growth in DKK vs local currency

Year	Growth in DKK	Growth in local currency
2013	35%	40%
2014	33%	33%
2015	40%	29%
2016	21%	24%
2017	12%	15%

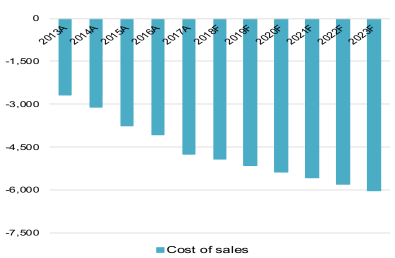
Source: Company's data

Exhibit 54: Revenue growth

Revenue Growth	
Growth Rate 2013-2014	32.54%
Growth Rate 2014-2015	40.15%
Growth Rate 2015-2016	21.17%
Growth Rate 2016-2017	12.33%
CAGR 2013-2017	26.10%
CAGR 2017-2023	3.86%

Source: Company's data; Analyst's estimates

Exhibit 55: Cost of sales, values in DKK million



Source: Analyst's estimates

disclosure procedures and non-competition regulations. However, jewellery is a product that can easily be replicated. As so, the key advantage of Pandora consists in its economies of scale that allow to increase the complexity of its designs. This way, the company is able to distance itself from other jewellery players for whom would be very difficult to scale and produce similar pieces and still be able to earn the returns that Pandora does at a comparable price point.

There are some specific markets that significantly contribute to the company's revenue and its respective growth. As so, saturation in one of its major markets or an unexpected event could damage Pandora's performance. Nonetheless, the company aims to become a balanced global business, not only sustaining solid performance in developed countries but also improving its presence in emerging ones. That ensures a lower dependency on single markets.

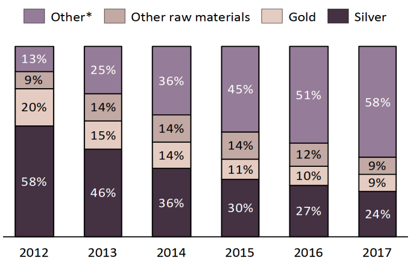
Taking into account that Pandora is greatly investing in China and that the political and economic situation there is unstable, the company should weight the pros and cons of such investment. However, one should notice that while many companies have trouble doing business in the country, due to difficult market access, high bureaucracy and governmental challenges, those are mainly technological brands and not retail ones. For example, Cartier and Tiffany & Co. have over 25 years of operations in this market. Therefore, although there is always the risk that the situation can change, it appears that there is little regulatory threat to Pandora. Nonetheless, the problem of being able to limit grey market trading there remains.

Operating Costs

Due to the nature of its business, Pandora's biggest operating expense is cost of sales. Nonetheless, the company has been able to become even more efficient by reducing this cost as a percentage of revenue throughout the years, and therefore increasing gross profit margins. In 2013, cost of sales was 30% of its revenue compared with 21% in 2017. Actually, the company has been able to stabilize this expense since 2015. As so, it is expected that cost of sales will remain at 21% of total revenue for the foreseeable future.

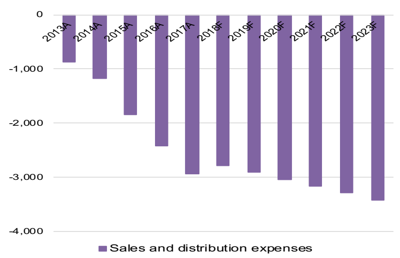
Moreover, one should notice that Pandora is highly dependent on stable cost of sales since the company's motto is to provide high-quality jewellery at affordable prices. As Pandora is responsible for manufacturing its products in its own crafting facilities, it is mainly dependent on the cost of raw materials, especially silver and gold. In case commodity prices rise, so will cost of sales. This is, therefore, the main reason to changes in gross profit margins. However, as mentioned previously, throughout time, as Pandora has scaled and diversified (e.g. it is much more labour intensive), it has been able to decrease its dependency on volatility of

Exhibit 56: Raw material share of cost of sales



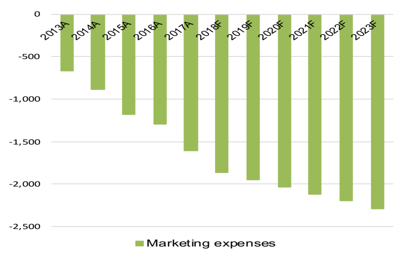
Source: Pandora's Investor Presentation

Exhibit 57: Sales & distribution expenses, values in DKK million



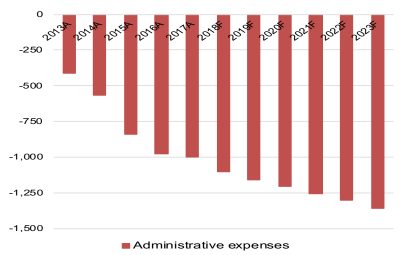
Source: Analyst's estimates

Exhibit 58: Marketing expenses, values in DKK million



Source: Analyst's estimates

Exhibit 59: Administrative expenses, values in DKK million



Source: Analyst's estimates

commodity prices. For instance, between 2012 and 2017, silver share of cost of sales[5] decreased from 58% to 24% while for gold the percentages were 20% and 9%, respectively. In addition, the company hedges its raw materials for at least a year in the future. Nonetheless, an unusual increase in commodity prices would definitely hurt Pandora.

In terms of marketing expenses, the company has been spending 6%-7% of total revenue with this cost. Taking into consideration the market trends, Pandora is currently improving its marketing efforts, namely through its high investment on digital media. As so, in order to keep being competitive, it is predicted that the company will continue investing in marketing and maintain this cost at 8% of total revenue in the following years. Moreover, this value is not only aligned with Pandora's strategy but also with the industry average of 8-9% of total revenue.

Staff costs are the second biggest operating expense for the company. Due to Pandora's strategy of improving the consumer experience by increasing its focus on concept stores, mainly the Pandora owned ones, this expense has been slightly increasing. Nonetheless, as revenues are also rising, it is expected that Pandora will be able to keep this cost with the same percentage of total revenue as in the last two years, 18%.

Finally, regarding both sales & distribution expenses and administrative expenses, the company has been able to maintain them at sustainable levels and, therefore, it is expected that the tendency will continue. In this sense, they will remain at 12% and 4% of total revenue, respectively.

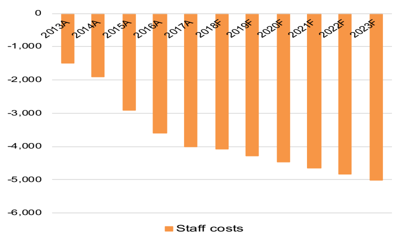
Operating Margins

As the company produces everything it sells, improved brand awareness throughout time and economies of scale allowed EBITDA margin to increase to high and sustainable levels. Pandora's current strategy, namely its expansion into new markets and a higher emphasis on brand equity, will negatively impact costs and therefore, EBITDA margin will be affected. As so, comparing the company's operating expenses evolution to its revenues, it can be observed that the company will enjoy lower revenues increase than operating expenses increase. However, although the stronger focus on owned concept stores will definitely increase costs, it will also allow to capture a higher share of the final selling price, providing a tailwind to EBITDA margin.

From 2013 to 2016, EBIT margins for Pandora increased from 30% to 38%. However, in 2017, the company already felt the impact of its strategy and it only

[5] Pandora includes staff costs, amortisation expense and depreciation expense related to production in cost of sales. For valuation purposes, those costs were separated from cost of sales, so the actual share of raw materials can diverge a little.

Exhibit 60: Staff costs, values in DKK million



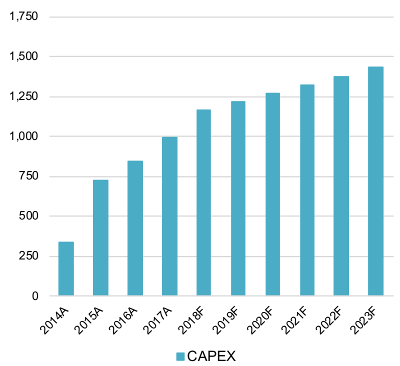
Source: Analyst's estimates

Exhibit 61: EBITDA margin and EBIT margin

Year	EBITDA Margin	EBIT Margin
2013	32.71%	30.49%
2014	34.32%	32.46%
2015	34.38%	31.99%
2016	40.38%	37.83%
2017	36.91%	33.75%
2018	36.26%	32.37%
2019	36.28%	31.85%
2020	36.29%	31.43%
2021	36.31%	31.08%
2022	36.32%	30.77%
2023	36.34%	30.51%

Source: Analyst's estimates

Exhibit 62: CAPEX, values in DKK million



Source: Analyst's estimates

achieved a 34% EBIT margin. For the foreseeable future, it is expected that this impact will be further intensified and, therefore, Pandora will see its EBIT margin decreasing to 32% in the next two years and 31% afterwards.

An important remark is that Pandora is exposed to multiple currencies. The company sells its products in local currency (approximately, 28% in USD, 29% in EUR, 13% in GBP and 30% in others), has a significant portion of costs in USD and THB and uses DKK as its reporting currency. As so, currency fluctuations can affect the profitability of its business. Still, Pandora's presence is global and, therefore, although currencies will go up and down, eventually things will balance out. More importantly, the company's main competitors are also global brands that sell their products worldwide. Hence, in the case of a persistent negative impact on exchange rates, all of them would eventually adjust prices to reflect that change.

Capital Expenditures

Given its strategic plan towards increasing the number of concept stores, especially those which are Pandora owned, CAPEX will continue playing a key role in the company. Actually, the level of CAPEX almost doubled from 2014 to 2017 from 336 DKK million to 990 DKK million and the expectation is that it will continue rising for the forecasted period. Pandora has announced its intentions of keeping CAPEX as 5% of revenues, comprising both CAPEX to cover the replacement of existing assets and the investment in new assets.

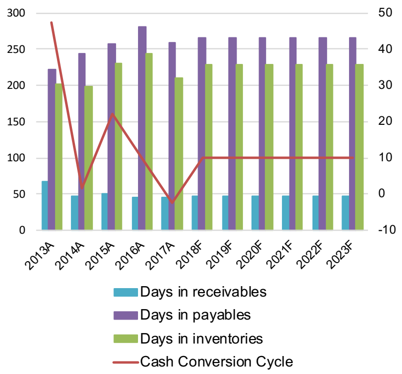
Nonetheless, it is important to notice that despite its transformation towards more owned retail, Pandora's business model will remain quite asset-light, with most of its weight coming from Intangible Assets.

Net Working Capital

A method of days in receivables, days in payables and days in inventories was used to understand net working capital. The cash conversion cycle of Pandora is small, meaning that the company is able to manage its working capital quite efficiently. Actually, Pandora is very efficient in receiving early from clients and paying late to suppliers. What increases its cash conversion cycle is then days in inventories since the company needs to store raw materials and transport finished goods from its production facilities to its point of sales. However, days in inventories of work in progress and point of sale materials are few, which means the company quickly produces and sells its products.

From 2013 to 2017, Pandora was able to decrease its cash conversion cycle from 47 days to -2 days, with some fluctuations during the period. Nonetheless, a decreasing tendency is clear. The company is expected to continue to manage its

Exhibit 63: Cash conversion cycle, values in days



Source: Analyst's estimates

Exhibit 64: WACC components

Risk Free Rate	0.56%
Market Risk Premium	6.07%
Beta Equity	1.43
Cost of Equity	9.24%
Cost of Debt	1.16%
Marginal Tax Rate	22%
Debt-to-Enterprise Ratio	0.06
WACC	8.74%

Source: Analyst's estimates

Exhibit 65: Perpetual growth rate

Perpetual Growth Rate	3.47%

Source: Analyst's estimates

working capital efficiently, by maintaining a positive but small cash conversion cycle.

Discount Rates and Market

The discount rate used was the weighted average cost of capital. To derive this rate, one needs multiple inputs: cost of equity, cost of debt, marginal tax rate and the target debt-to-enterprise value ratio.

The cost of equity was computed by using the Capital Asset Pricing Model. For the risk free rate, with a value of 0.56%, ten-year Danish Government Bonds were used since they have a credit rating of Aaa and so they can be considered as a good approximation to the hypothetical risk free asset. The market risk premium, with a value of 6.07%, was estimated by taking the average monthly excess returns of the MXWO Index on the ten-year Danish Government Bonds from May 2013 to April 2018 and then annualizing it. This index was used once Pandora is a global company with diversified investors from all over the developed world. Furthermore, the market index was left in USD terms once the company's main shareholders are invested in this currency. For the beta, we took the levered betas of six comparable companies. Pandora was included in the peers set since it is the most similar business to itself. Then we unlevered each of these individual betas using each company's specific capital structure which yielded a weighted average unlevered beta of 1.35. Since Pandora's peer group is quite heterogenous, weights were given based on the degree of resemblance with the company, namely in terms of size (measured by market capitalization), products offered, geographical coverage and business strategy pursued. Afterwards, Pandora's levered beta was estimated using the own company's capital structure at 1.43. Hence, the cost of equity is 9.24%.

The cost of debt was derived from the risk free rate plus a default spread based on the company's interest coverage ratio, resulting in a value of 1.16%. Moreover, it is expected that the tax rate will remain at 2017's level, corresponding to a value of 22%. As so, the after-tax cost of debt is 0.91%.

The target debt-to-enterprise value ratio will be kept constant at 0.06. The company demonstrates its will in maintaining a low level of debt in the future. Actually, not only Pandora but also companies in this industry are known for keeping low levels of debt in their capital structures. Finally, the resulting weighted average cost of capital is 8.74%.

Additionally, a perpetual growth rate is also needed to calculate the company's terminal value. This rate, with a value of 3.47%, was obtained by computing a weighted average of the long term real GDP growth rate for the three main regions

Exhibit 66: Long term real GDP growth

Long term real GDP growth	
EMEA	2.20%
Americas	2.10%
Asia Pacific	4.50%

Source: Euromonitor

– EMEA, Americas and Asia Pacific (2.20%, 2.10% and 4.50%, respectively) – added by the expected inflation in DKK. The weight given to each region is based on the percentage of revenue of each region contributing to the total revenue of Pandora. This growth rate illustrates the company's standard prices that usually do not fluctuate with each individual country's inflation.

Alternative Scenarios

Given that we are dealing with uncertainty, two extra scenarios besides the base case scenario were taken into consideration, one with a pessimistic view on the company and the economy and another with an optimistic outlook. Therefore, each one of them deals with variations in the main sources of value: revenue drivers and perpetual growth rate.

Exhibit 67: Alternative scenarios CAGR

Scenario	CAGR 2017-2023
Base Case Scenario	3.86%
Pessimistic Scenario	1.85%
Optimistic Scenario	4.71%

Source: Analyst's estimates

The pessimistic scenario assumes that the economy will behave worse than expected. We are living in a period of increasing protectionism and political tension, with the US leading the path. The US is currently in a trade war gamble with China, threatening imposing import tariffs, such as in the steel and aluminium industries, but with the possibility of extending them to other industries and with Europe being a possible collateral damage. Furthermore, the US is also showing signs of wanting to restrict any transatlantic trade agreement with Europe. As so, in this case, it is predicted that although within Europe the effects will not be noticed, there will be higher tension amongst Europe, the US and China with protectionism increasing and trade barriers arising among these economies. In this scenario, Pandora will only be able to open its expected number of concept stores in the region of EMEA. For the region of Americas and the region of Asia Pacific, from 2018 to 2020, the company will only be able to open 75% of the expected stores and from 2021 to 2023, 50%. This will be due to higher tension and protectionism felt amongst these regions. The number of other points of sale will still decrease based on the tendency of the previous years. Moreover, in this scenario, average revenue per sales channel will increase less or decrease even further from year to year depending on the region since it is expected that the poorer state of the economy will not allow to maintain the levels of revenue per store from the base case one. Finally, the real GDP growth rate and, consequently, the perpetual growth rate, will be lower than the predicted, the latter with a value of 2.90%. In this scenario, revenues will grow with a CAGR of just 1.85%.

The optimistic scenario assumes that the economy will behave better than expected. In this scenario, the company's number of stores will behave similar to the base case one. In other words, Pandora will be able to open its expected number of concept stores and it will continue with its strategy of decreasing other points of sale. However, in this scenario, average revenue per sales channel will decrease less or increase even more from year to year depending on the region since it is expected that marketing efforts and product innovation will increasingly offset the threat of cannibalization from the higher concentration of stores and the grey market trading problem. Lastly, the real GDP growth rate and, thus, the perpetual growth rate, will be higher than the anticipated, the latter with a value of 4.01%. In this scenario, revenues will grow with a CAGR of 4.71%.

Exhibit 68: Alternative scenarios probability of occurrence

Scenario	Probability
Base Case Scenario	70%
Pessimistic Scenario	20%
Optimistic Scenario	10%

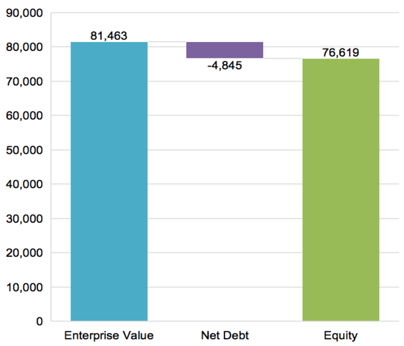
Source: Analyst's estimates

Nonetheless, each of the considered scenarios has a different probability of occurrence. Hence, while the base case scenario is the most likely to happen, with a probability of 70%, the pessimistic scenario has a 20% probability of occurrence and the optimistic scenario has a 10% one.

Discounted Cash Flows Valuation

For the purpose of the valuation, the Discounted Cash Flows model was used to discount the forecasted cash flows of Pandora by its weighted average cost of capital in order to reach its enterprise value in each of the three scenarios.

Exhibit 69: Discounted Cash Flows Valuation, statistically expected scenario's values, values in DKK million



Source: Analyst's estimates

In the base case scenario, the target price in FY2019 is 714.55 DKK, leading to a total expected gain of 46.25%, while in the pessimistic scenario, the target price in FY2019 is 561.69 DKK, leading to a total expected gain of 16.00% and in the optimistic scenario the target price in FY2019 is 838.27 DKK, leading to a total expected gain of 70.72%.

Applying the formerly mentioned probabilities, the target price achieved in the statistically expected scenario in FY2019 is 696.35 DKK, corresponding to an equity valuation of 76,619 DKK million. With a total shareholder's expected return of 42.65%, composed by an expected capital gain of 34.43% (by comparing this target price with the current market price) and by an expected "cash" gain of 8.22%, the recommendation[6] is to BUY Pandora's stock.

Exhibit 70: Discounted cash flows valuation summary, values in DKK

	Base Case Scenario	Pessimistic Scenario	Optimistic Scenario	Statistically Expected Scenario
Target Price	714.55	561.69	838.27	696.35
Expected capital gain	37.94%	8.43%	61.83%	34.43%
Expected "cash" gain	8.31%	7.57%	8.89%	8.22%
Total shareholders expected return	46.25%	16.00%	70.72%	42.65%
"True" Recommendation	BUY	BUY	BUY	BUY
Recommendation (research notes)	BUY	BUY	BUY	BUY

Source: Analyst's estimates

Sensitivity Analysis

Given that Pandora's valuation is highly dependent on the company's terminal value since it represents at least 75% of the total enterprise value in all scenarios, it becomes relevant to conduct a sensitivity analysis to both the perpetual growth

[6] The "true" recommendation results in a BUY recommendation in the case of total shareholder's expected return is higher than the cost of equity and in a SELL recommendation otherwise. There is also the recommendation based on the research notes.

rate and the weighted average cost of capital so that we can have a sense of how small changes in these variables may impact the overall valuation.

Exhibit 71: Sensitivity analysis summary, base case scenario's values, values in DKK

		WACC		
	714.55	8.44%	8.74%	9.04%
g	3.17%	720.19	681.69	647.12
	3.47%	757.33	714.55	676.38
	3.77%	799.24	751.38	708.97

Source: Analyst's estimates

Taking into consideration the most significant scenario – the base case scenario – and the perpetual growth rate, it is possible to observe that a growth rate change from the base case scenario to the lower bound leads to a 4.60% decrease in price while a variation from the base case scenario to the upper bound leads to a 5.15% increase in price. Regarding the weighted average cost of capital, it is possible to observe that a discount rate change from the base case scenario to the lower bound leads to a 5.99% increase in price while a variation from the base case scenario to the upper bound leads to a 5.34% decrease in price. As so, Pandora's target price is slightly more sensitive to increases in the perpetual growth rate while it is more sensitive to decreases in the weighted average cost of capital (see Appendix for a more detailed sensitivity analysis).

Multiples Valuation

A multiples valuation was performed to assess Pandora's value. However, one must be careful with interpretations. The use of multiples has limitations and therefore should not be used alone but to complement the Discounted Cash Flows Valuation. In order to mitigate non-recurrent results, forward-looking multiples were used. Moreover, due to the wide dispersion of results besides average-industry multiples, median-industry multiples were used to make conclusions. Nonetheless, it is important to consider that there are no "true peers" of Pandora and that actually the most comparable companies are privately held, so the second best alternative is to use companies that although are relatively similar in capital structures, probably have different growth potential and opportunity costs.

The two multiples analysed were P/E and EV/EBITDA. For the statistically expected scenario and using average-industry multiples, the valuation provides a target price in FY2019 of 788.37 DKK under P/E multiples and 730.09 DKK under EV/EBITDA multiples, while using median-industry multiples, the target prices are 856.18 DKK and 801.76 DKK, respectively. Comparing these values with the target price of 696.35 DKK from the Discounted Cash Flows Valuation, it is possible to understand that this value lies below both ranges. In this sense, Pandora trades at discount from its peer group.

Exhibit 72: Multiples valuation summary, values in DKK

	Base Case Scenario	Pessimistic Scenario	Optimistic Scenario	Statistically Expected Scenario
P/E (average-industry)	796.29	734.15	841.32	788.37
P/E (median-industry)	864.78	797.30	913.69	856.18
EV/EBITDA (average-industry)	735.81	691.38	767.46	730.09
EV/EBITDA (median-industry)	808.11	758.67	843.42	801.76
DCF Valuation	714.55	561.69	838.27	696.35

Source: Analyst's estimates

Appendix

Financial Statements

Appendix 1: Comprehensive Income Statement (base case scenario's values)

DKK million	2017A	2018F	2019F	2020F	2021F	2022F	2023F
OPERATING							
Revenue	22,781	23,260	24,375	25,408	26,454	27,462	28,594
Cost of sales	-4,732	-4,904	-5,139	-5,357	-5,577	-5,790	-6,028
Gross profit	**18,049**	**18,356**	**19,236**	**20,051**	**20,877**	**21,673**	**22,566**
Sales and distribution expenses	-2,931	-2,778	-2,911	-3,034	-3,159	-3,280	-3,415
Marketing expenses	-1,609	-1,861	-1,950	-2,033	-2,116	-2,197	-2,288
Administrative expenses	-1,001	-1,102	-1,155	-1,204	-1,253	-1,301	-1,355
Staff costs	-4,003	-4,087	-4,283	-4,464	-4,648	-4,825	-5,024
Net operating finance income	-96	-95	-95	-95	-95	-95	-95
EBITDA	**8,409**	**8,434**	**8,843**	**9,221**	**9,605**	**9,975**	**10,390**
Amortisation expense	-288	-299	-329	-364	-406	-457	-518
Depreciation expense	-433	-605	-751	-873	-976	-1067	-1146
EBIT	**7,688**	**7,529**	**7,763**	**7,985**	**8,222**	**8,451**	**8,725**
Operating taxes	-1,904	-1,846	-1,898	-1,946	-1,999	-2,049	-2,109
Operating income (after tax)	**5,784**	**5,683**	**5,866**	**6,038**	**6,224**	**6,402**	**6,616**
FINANCING							
Finance costs, loans and borrowings	-21	-60	-57	-59	-61	-63	-65
Financing taxes	5	13	13	13	13	14	14
Net financial income (expense)	**-16**	**-47**	**-44**	**-46**	**-47**	**-49**	**-50**
Net profit for the year	**5,768**	**5,637**	**5,821**	**5,993**	**6,176**	**6,353**	**6,565**
Other comprehensive income, net of tax	**-261**	**0**	**0**	**0**	**0**	**0**	**0**
Comprehensive income	**5,507**	**5,637**	**5,821**	**5,993**	**6,176**	**6,353**	**6,565**

Appendix 2: Balance Sheet (base case scenario's values)

DKK million	2017A	2018F	2019F	2020F	2021F	2022F	2023F
OPERATING ASSETS							
Non-current Operating Assets							
Intangible Assets	6,999	7,695	8,523	9,512	10,699	12,130	13,862
Property, plant and equipment	2,324	2,882	3,350	3,747	4,094	4,400	4,684
Deferred tax assets	884	889	893	898	903	908	913
Other non-current financial assets	289	312	336	362	390	421	454
Current Operating Assets							
Inventories	2,729	3,066	3,213	3,349	3,487	3,620	3,769
Derivative financial instruments	153	126	126	126	126	126	126
Trade receivables	1,954	1,935	2,027	2,113	2,200	2,284	2,378
Income tax receivables	143	155	163	170	177	183	191
Other receivables	772	923	967	1,008	1,050	1,090	1,135
Working cash	228	233	244	254	265	275	286
Total operating assets	**16,475**	**18,214**	**19,842**	**21,540**	**23,391**	**25,437**	**27,797**
OPERATING LIABILITIES							
Non-current Operating Liabilities							
Provisions	150	189	239	302	382	482	609
Deferred tax liabilities	501	514	527	540	554	568	582
Other payables	481	535	595	661	735	818	909
Other non-current liabilities	0	0	0	0	0	0	0
Current Operating Liabilities							
Provisions	649	739	840	956	1,089	1,239	1,410
Derivative financial instruments	143	204	204	204	204	204	204
Trade payables	1,706	1,820	1,907	1,988	2,070	2,148	2,237
Income tax payables	572	550	577	601	626	650	677
Other payables	1,077	1,197	1,255	1,308	1,362	1,414	1,472
Total operating liabilities	**5,279**	**5,748**	**6,144**	**6,561**	**7,021**	**7,523**	**8,100**
Net operating assets	**11,196**	**12,466**	**13,698**	**14,979**	**16,369**	**17,914**	**19,696**
FINANCIAL ASSETS							
Excess cash	765	0	0	0	0	0	0
Total financial assets	**765**	**0**	**0**	**0**	**0**	**0**	**0**
FINANCIAL LIABILITIES							
Loans and borrowings	5,447	4,825	4,971	5,123	5,283	5,456	5,646
Total financial liabilities	**5,447**	**4,825**	**4,971**	**5,123**	**5,283**	**5,456**	**5,646**
Net financial assets	**-4,682**	**-4,825**	**-4,971**	**-5,123**	**-5,283**	**-5,456**	**-5,646**
Common shareholders' equity	**6,514**	**7,641**	**8,726**	**9,856**	**11,086**	**12,458**	**14,051**

Appendix 3: Cash Flow Map (base case scenario's values)

DKK million	2017A	2018F	2019F	2020F	2021F	2022F	2023F
OPERATING CASH FLOWS							
EBIT	7,688	7,529	7,763	7,985	8,222	8,451	8,725
Notional income tax	-1,692	-1,656	-1,708	-1,757	-1,809	-1,859	-1,920
Tax adjustments	-212	-190	-190	-190	-190	-190	-190
NOPLAT	**5,784**	**5,683**	**5,866**	**6,038**	**6,224**	**6,402**	**6,616**
Amortisation expense	288	299	329	364	406	457	518
Depreciation expense	433	605	751	873	976	1,067	1,146
Gross free cash flow	**6,505**	**6,588**	**6,945**	**7,275**	**7,606**	**7,926**	**8,280**
Change in Intangible assets	-1,521	-995	-1,157	-1,354	-1,593	-1,888	-2,250
Change in Property, plant and equipment	-990	-1,163	-1,219	-1,270	-1,323	-1,373	-1,430
Change in Net working capital	-103	-273	-132	-122	-123	-119	-133
Other Changes	-453	256	196	228	266	312	366
Free cash flow available to investors	**3,438**	**4,414**	**4,634**	**4,757**	**4,833**	**4,858**	**4,833**

DKK million	2017A	2018F	2019F	2020F	2021F	2022F	2023F
Finance costs, loans and borrowings	-21	-60	-57	-59	-61	-63	-65
Tax shields	5	13	13	13	13	14	14
Change in Excess cash	-71	765	0	0	0	0	0
Change in Loans and borrowings	2,436	-622	146	152	160	173	190
Net Change in Equity (in cash)	-5,787	-4,510	-4,735	-4,863	-4,946	-4,982	-4,972
Cash flows from investors	**-3,438**	**-4,414**	**-4,634**	**-4,757**	**-4,833**	**-4,858**	**-4,833**

Appendix 4: Discounted Cash Flows Valuation (base case scenario)

DKK million	2018F	2019F	2020F	2021F	2022F	2023F
Free cash flow available to investors	4,414	4,634	4,757	4,833	4,858	4,833
Enterprise value	**81,134**	**83,593**	**86,142**	**88,839**	**91,747**	**94,934**
Net Debt	-4,825	-4,971	-5,123	-5,283	-5,456	-5,646
Excess cash	0	0	0	0	0	0
Loans and borrowings	-4,825	-4,971	-5,123	-5,283	-5,456	-5,646
Equity value	**76,309**	**78,621**	**81,020**	**83,556**	**86,291**	**89,288**
# of Shares outstanding (in millions)	110.03	110.03	110.03	110.03	110.03	110.03
Current share price (in DKK)	518.00					
Expected share price/ Price target (in DKK)	693.53	714.55	736.35	759.40	784.26	811.50
Expected capital gain		**37.94%**				
Shareholders' cash in / out per share (in DKK)	40.99	43.04	44.20	44.95	45.28	45.19
Expected "cash" gain		**8.31%**				
Total shareholders expected return		**46.25%**				
"True" Recommendation		**BUY**				
Recommendation (research notes)		**BUY**				

Appendix 5: Sensitivity Analysis (base case scenario's values)

		Weighted Average Cost of Capital						
	714.55	8.44%	8.54%	8.64%	8.74%	8.84%	8.94%	9.04%
Perpetual Growth Rate	3.17%	720.19	706.88	694.05	681.69	669.76	658.24	647.12
	3.27%	732.09	718.31	705.03	692.24	679.91	668.02	656.53
	3.37%	744.46	730.17	716.42	703.19	690.44	678.14	666.28
	3.47%	757.33	742.51	728.26	714.55	701.35	688.64	676.38
	3.57%	770.73	755.34	740.56	726.35	712.68	699.52	686.85
	3.67%	784.68	768.70	753.36	738.62	724.45	710.82	697.70
	3.77%	799.24	782.62	766.68	751.38	736.69	722.56	708.97

Appendix 6: Multiples Valuation (base case scenario's values)

Forward P/E

	Multiple	Earnings	Equity value	# of Shares outstanding	Price target
Average	15.05	5,821	87,615	110.03	796.29
Median	16.35	5,821	95,151	110.03	864.78
Implied from DCF	13.51				714.55

Forward EV/ EBITDA

	Multiple	EBITDA	Enterprise value	Net debt	Equity value	# of Shares outstanding	Price target
Average	9.72	8,843	85,932	-4,971	80,961	110.03	735.81
Median	10.62	8,843	93,887	-4,971	88,916	110.03	808.11
Implied from DCF	9.45						714.55

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Report Recommendations

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

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