

ADIDAS AG

SPORTSWEAR

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COMPANY REPORT

3 JANUARY 2018

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A paradigm shift in Sportswear

Adidas narrowing the gap from the leader

- We start the coverage of Adidas AG with a **BUY recommendation** given our YE18 target price of **197€** corresponding to an upside of **18%** compared to the current price of **167€**. We strongly believe that the market is underestimating Adidas external and internal opportunities to thrive.
- Adidas is maintaining momentum with revenues growth of **7%** in Q3 2017, after the strong results obtained in 2016 (with total revenues growing 14%). The group has been able to gain market share in fast growing markets such as **North America** (market share increased from 3% in 2015 to 3,5% in 2016) and **China** (market share increased from 10,2% in 2015 to 11,8% in 2016).
- Adidas is one of the biggest players in an industry that is currently showing **strong growth trends** with an expected **CAGR of 6,4%** mainly driven by higher sports participation rates, increasing concerns regarding health and the rise of athleisure.
- We expect a revenue CAGR of **7,8%** over the next five years obtained through **product innovation** and continuous focus on strategic growth areas such as greater penetration of **North America**.
- We model the YE 18 target price using a **DCF**, forecasting net sales for each segment and brand the group owns with a **WACC of 3%** and a terminal **growth rate of 1,15%**.

Company description

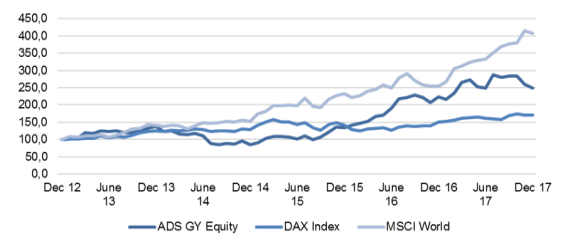
Adidas AG is one of the biggest companies operating in the sportswear industry. It provides footwear, apparel and hardware, coming mostly from its two core brands, adidas and Reebok. The company was founded in 1949 by Adolf Dassler and is part of the German stock market index DAX.

Recommendation: **BUY****Price Target FY17:** **197 €****Price (as of 2-Jan-18)** **167 €**

Reuters: ADSGn.DE, Bloomberg: ADS

52-week range (€) **142 - 202****Market Cap (€m)** **34008****Outstanding Shares (m)** **203****Total shareholder return** **19%**

Source: Bloomberg; Company data; Analyst estimates



Source: Bloomberg

(Values in € millions)	2016	2017E	2018F
Revenues	19290	21656	23540
EBITDA	1879	2208	2404
Net Income Cont.Operations	1019	1128	1156
Net Income	1020	911	1156
EPS	5,08	4,49	5,70
EBITDA margin (%)	9,74	10,2	10,2

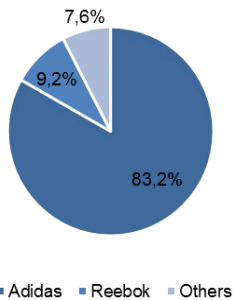
Source: Company data; Analyst estimates

Table of Contents

COMPANY OVERVIEW.....	3
SHAREHOLDER STRUCTURE	4
STRATEGY	5
SPEED FACTORIES ANALYSIS	7
BRANDS OVERVIEW.....	8
▪ <i>Adidas brand</i>	9
▪ <i>Reebok brand</i>	9
ECONOMIC OVERVIEW	9
INDUSTRY OVERVIEW.....	11
COMPETITION	12
SEGMENT ANALYSIS.....	13
▪ <i>Western Europe</i>	13
▪ <i>North America</i>	14
▪ <i>Greater China</i>	15
▪ <i>Eastern Europe (Russia/CIS)</i>	15
▪ <i>Japan</i>	16
▪ <i>Latin America</i>	16
▪ <i>MEAA</i>	16
▪ <i>Other businesses</i>	17
VALUATION ASSUMPTIONS.....	17
REVENUES FORECASTS	17
CAPEX	20
NET WORKING CAPITAL	21
GROSS MARGIN	22
MARKETING/POINT-OF-SALE EXPENDITURES	22
WACC & GROWTH RATE	24
VALUATION OUTCOME	25
MULTIPLES VALUATION	25
KEY RISKS/ CHALLENGES.....	25
SCENARIO ANALYSIS.....	26
SENSITIVITY ANALYSIS.....	27
ADDITIONAL COMMENTS	28
APPENDIX	28
FINANCIAL STATEMENTS- BALANCE SHEET.....	29
FINANCIAL STATEMENTS- INCOME STATEMENT.....	29
FINANCIAL STATEMENTS- CASH FLOW STATEMENT	30
REPORT RECOMMENDATIONS	31

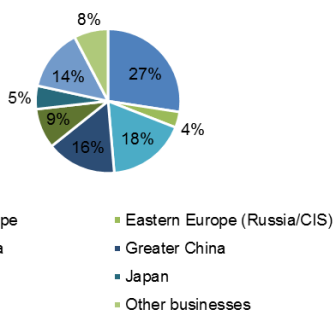
Company overview

Exhibit 1: Revenue by brand in 2016 (%)



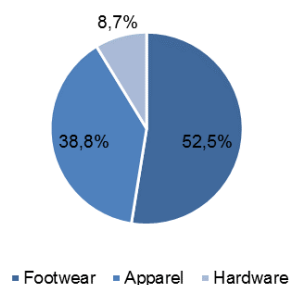
Source: Company data

Exhibit 2: Revenue by segment in 2016 (%)



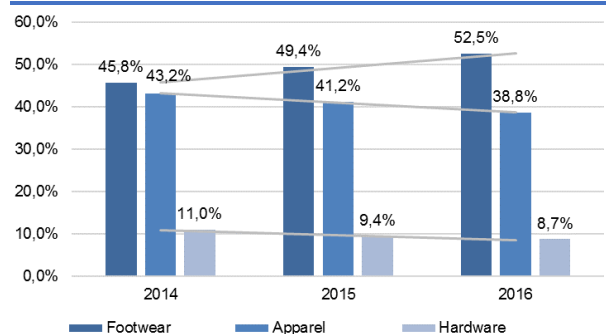
Source: Company data

Exhibit 3: Revenues by product category in 2016 (%)



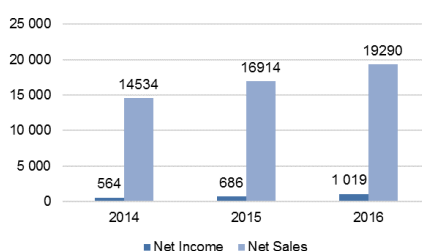
Source: Company data

Exhibit 4: Revenues by product category 2014-2016 (%)



Source: Company data

Exhibit 5: Net Income vs Net Sales 2014-2016 (in €million)



Source: Company data

Headquartered in Herzogenaurach/Germany, Adidas¹ is one of the largest global companies in the sportswear industry providing athletic footwear, apparel and hardware. The company was founded in 1949 by Adolf Dassler and nowadays more than 92% of its sales come from two core brands namely, adidas and Reebok (see Exhibit 1).

Geographically, the group is present in a wide variety of business segments (Exhibit 2): Western Europe, North America, Greater China, Russia/CIS, Latin America, Japan, and Middle East, Africa, and other Asian Markets (MEAA). Each of these business segments embraces the wholesale and retail of **adidas** and **Reebok** brands.

In terms of product categories, **footwear** accounts for more than half of Adidas revenues, followed by **apparel** with 38.8% of total net sales and finally **hardware**, which includes bags, balls, golf clubs, fitness equipment, etc., with 8.7% (Exhibit 3). Over the last three years, the group observed the percentage of sales coming from footwear significantly increasing whereas apparel and hardware are decreasing its share in the overall company sales (Exhibit 4).

The company has more than 60000 employees distributed among roughly 160 countries and produces more than 840 million units annually.

Revenues from the group grew **16,4%** in 2015 and **14%** in 2016, reaching record levels of 19,290 €billion. Last year, Adidas' performance was predominantly driven by growth in key business segments like **China (22%)** and **North America (24%)**. Net income exceeded for the first time 1 €billion, highlighting the success of the turnaround strategy started in 2015 that will be further discussed in next section.

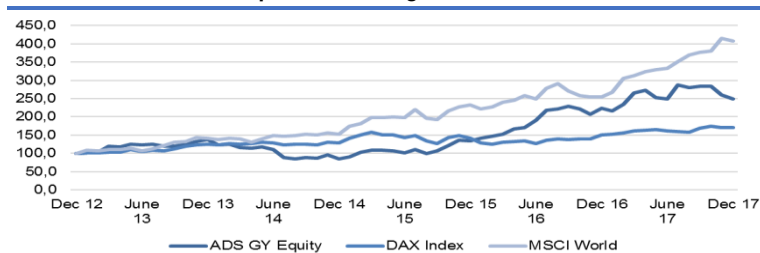
¹ "Adidas" refers to the overall Group whereas "adidas" refers to the individual brand

**Top performer of the
DAX-30 for the second
consecutive year**

Nowadays the Adidas AG share is traded in **12 different stock indexes**, being part of the **DAX-30 index** that includes the largest German companies listed.

Adidas' share price significantly outperformed the DAX-30 in 2016 and is still following this trend, driven by its recent financial performance as well as the optimism observed both inside the company and in the overall sector. The Adidas share reached in 2016 the **highest levels** ever in terms of **stock growth** (67%) and consequently, it was the top performer within the DAX-30 for the second consecutive year. Furthermore, as we can see in Exhibit 6, Adidas' share price has been following the growth of the MSCI World, showing the broad geographical presence of the company.

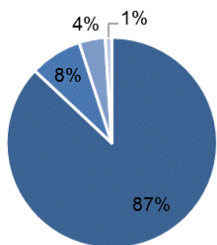
Exhibit 6: Adidas' share performance against DAX Index and MSCI index



Source: Bloomberg

Shareholder structure

Exhibit 7: Shareholder structure in 2016 (%)



- Institutional investors
- Private investors & undisclosed holdings
- Treasury Shares
- Members of Adidas AG Executive & Supervisory Boards

Source: Company data

Concerning Adidas' shareholder structure, it is split into 4 different groups: **Institutional investors**, who have the biggest share in the company, with 87% of shares. **Private investors and undisclosed holdings** that currently account for 8% of shares. Beyond that, with no voting rights, **Adidas** holds 4% of company's shares as **treasury shares**². Finally, the last 1% of shares is holding by members of the **Executive and Supervisory Boards**. Within institutional investors, the asset manager BlackRock has the highest percentage of total shares outstanding (7,38%). Geographically, North America stands out with 40% of institutional shareholders followed by United Kingdom with 21%.

Since 2012, the group has been able to increase dividends per share and was able to pay a **dividend of 2€ per share** in 2016 representing an increase of 25% compared to 2015 dividend per share of 1,6€. By having a stable dividend payout ratio, Adidas gives a positive sign to investors indicating that the company is financially healthy.

Exhibit 8: Dividend & Share information

	2012	2013	2014	2015	2016
Dividend payout ratio %	36%	37%	54%	48%	40%
Dividend/Share (€)	1,35	1,5	1,5	1,6	2,0
Number of shares outstanding at yer end	209	209	204	200	201
Total dividends paid (million €)	282	314	306	320	402

Source: Company data

² Shares issued in the name of the company that are not outstanding

Strategy

Adidas has been pursuing a strategy presented in 2015, called “Creating the New”, that lasts until 2020. It is based on three critical pillars: Speed, Cities and Open Source.

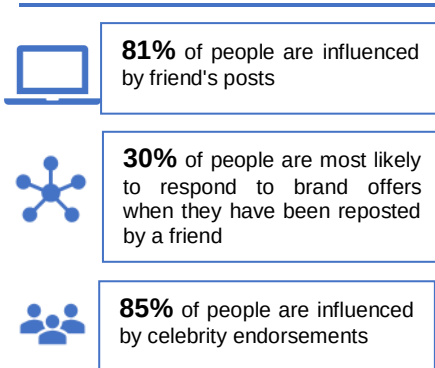
The first pillar, **Speed**, consists on giving consumers the products they desire when and where they want them, in the fastest and more effective way. Nowadays, **social media** is increasing the speed of fashion with consumers searching for style inspiration through social media influencers and friends (Exhibit 9). Every retailer in the fashion industry must therefore have as top priorities both speed and agility. A recent research³ shows that **20%** of teenagers want **same day delivery**, and **13%** want a delivery in **less than a half day**. Teenagers want to buy things “now” to wear it “now” as **60%** of consumers wear items within **a week of purchase** and **20%** wear items in the **same day of purchase**.

The focus on Speed, and on following fast changing consumer tastes, allows Adidas to get better results by improving product availability, decreasing the risk of overbuying, creating higher demand with shorter lead-time and consequently **generate more contribution** by increasing the share of volumes sold at **full price**. We have the clear evidence of the fast fashion brand, Zara (Spanish Inditex), that pre-orders only 15% of stock, comparing to almost 60% for traditional manufacturers. Zara is therefore able to sell much more products at full-price, almost 85%, in comparison to an industry average of roughly 50%.⁴

Adidas products are now considered very **on-trend** and it can be observed in its 2016 performance, as **80% of net sales** came from products that were **less than one year old**⁵. These **new and up-to-date products** (less than one year on the market) are usually sold at full price, being key for the company as they can generate **higher gross margins** than those that have been on the market for more than one season.

To further develop and improve this strategy in the **long-run**, Adidas opened a **Speed factory** in Germany and is planning to open another one in Atlanta, US. The new plants will have **innovative production methods** that will allow the company to produce running shoes in a day, compared with more than two months in China. Although with no direct impact on the short-term, speed factories potential is later analysed in more detail.

Exhibit 9: Social media impact on fashion



Source: adweek: “How Social Media Contributed to the Rise of Fast Fashion”

Focus on Speed and selling new products lead to more products sold at full price

³ Accenture Research from Kurt Salmon- April 05, 2017- “Speed in This Season’s Hottest Fashion Trend”

⁴ Euromonitor International- “Competitive Strategies in Apparel and Footwear

⁵ Business Insider

Exhibit 10: Top 7 metros by GDP-PPP with comparable nations (in \$billions)

Rank	World's Largest Metros	National Economies
1	Tokyo	South Korea
	\$1,624	\$1,754
2	New York	Canada
	\$1,492	\$1,584
3	Los Angeles	Australia
	\$928	\$1,101
4	Seoul	Malaysia
	\$903	\$817
5	London	Netherlands
	\$831	\$840
6	Paris	South Africa
	\$819	\$726
7	Shanghai	Philippines
	\$810	\$744

Source: Brookings Institution's "Redefining Global Cities"; 2015 World Bank's World Development Indicators

E-commerce channel increased 60% in 2016....

... there are several evidences showing digital business will keep growing

Secondly, the company is focusing its sales and marketing campaigns essentially on **six global and influential cities**: Tokyo, New York, Los Angeles, London, Paris, and Shanghai. One of the reasons behind these chosen centres is their **economic strength**- Exhibit 10 shows how the economies of the world's largest metros match up to some national economies, highlighting the power in terms of gross domestic product at purchasing power parity (GDP-PPP) of these six cities. Their huge population size, great presence of media and high degree of sports participation also influenced the choice of these centres as the focus of Adidas' sales and marketing campaigns.

Lastly, the third pillar of Adidas' strategy is **Open Source**. This approach plans to foster the collaboration between Adidas, athletes, partners from the industry and consumers, giving the last ones more freedom by, for example, allowing them to personalize products in the store. Besides famous **sport athletes**, the brand collaborates with **celebrities** such as Rita Ora and Kanye West, as well as **influencers** such as supermodels Karlie Kloss and Kendall Jenner.

For the consumer of today, the **digital business** is part of their lives. Adidas recently announced the launch of a new app that provides an easy access to online store offerings as well as consumers customized product recommendations⁶. We believe that the creation of this app will help the group ensure that **e-commerce** will keep on being the **fastest growing revenue channel** over the next few years. In 2016, online sales had a substantial **increase** of almost **60%**. Sales coming from online platforms achieved **1 €billion** for the first time and the group expects it to achieve nearly **4 €billion** by 2020. We have substantial evidences to believe that Adidas will be able to keep this online growth trend over the next few years. First of all, evidences come from the online performance the company achieved so far. Also, Adidas is highly focused on continuing huge investments in this channel, and the Adidas CEO, Kasper Rorsted (in charge since October 2016) has already proved significantly increases in e-commerce sales in his previous job as CEO of the German chemical and consumer goods, Henkel⁷. Finally, the number of **digital consumers** are projected to keep on **growing worldwide** (see Exhibit 11).

Beyond the clear advantages coming from the investment in digital, it also has several strategic implications for the company since it allows the **direct engagement with consumers** giving the company detailed information about how consumers shop and behave.

Following the company **consumer-centric business strategy**, Adidas aims to decrease its marketing expenditures on partnership assets, which includes sponsoring events such as FIFA and high-profile athletes, and will instead spend

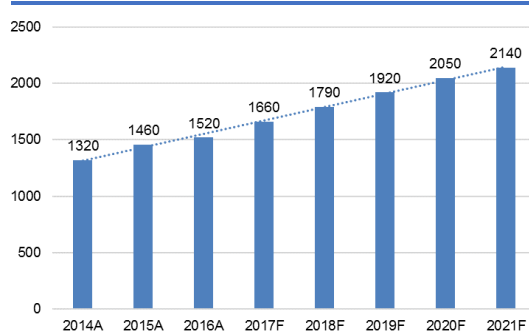
⁶ Company news archive

⁷ CNBC

additional resources into **digital campaigns** and **grass-roots activations**. We expect from this shift an **improved efficiency** in terms of marketing/point-of-sale expenditures as a percentage of total sales, that will be detailed later.

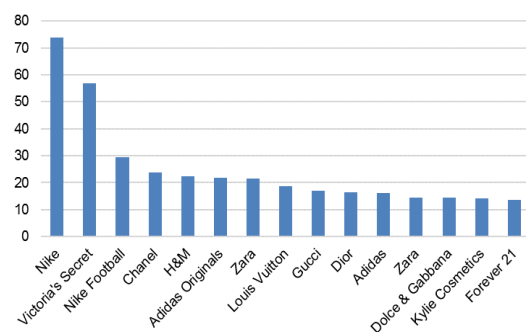
With a core target group of people between 14 and 19 years-old, Adidas is seeking to build communities around its brands and product offerings, and as a result is planning to reinforce its presence and reach consumers through **social platforms** such as Instagram. We can see in Exhibit 12 that Adidas is part of “Instagram most-followed fashion brands”. The Instagram account dedicated to the sub-brand “Adidas Originals” has even more followers than the overall brand. However, Adidas is still far away from its main rival, Nike, that is ranked first with 74 million followers.

Exhibit 11: Global number of digital buyers 2014-2021 (in million)



Source: eMarketer

Exhibit 12: Instagram most-followed fashion brands (in million of followers)



Source: Statista

Exhibit 13: Other businesses at a glance (in € million)

	2014	2015	2016
Net Sales	1358	1467	1475
TaylorMade-adidas Golf	913	902	892
CCM Hockey	269	317	271
Other	175	242	289
Operating profit	-57	-89	-14
Operating margin	-4,2%	-6,1%	-0,9%

Source: Company data

Regarding Adidas' portfolio, the company sold two of its brands, later this year, **CCM Hockey** and its global golf brand, **TaylorMade**. These were considered noncore and **low-profitability businesses** generating negative Operating margins over the last three years (Exhibit 13) and both deals followed the company strategy of **focusing** even more on its two core brands, **adidas** and **Reebok**.

Speed Factories Analysis

With the goal of better serve European and US consumers and to be less dependent on third parties, Adidas is counting on its **Speed factories**, one already built in Germany, and another one opening shortly in Atlanta.

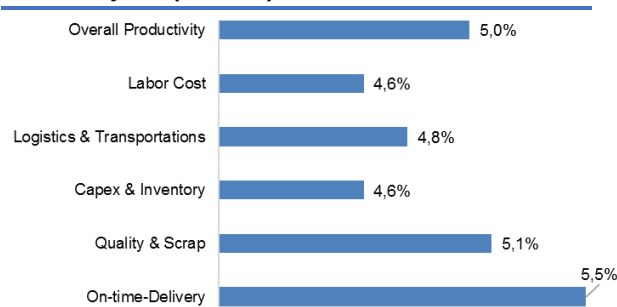
In September 2016 the group released 500 shoes in Germany as an initial pilot. Not surprisingly, these sample shoes had a high cost of **€250 per pair**, though, with higher production levels it will be possible to lower these costs.

Recent studies are showing that, in the next five years, manufacturers expect smart factories to deliver big gains in terms of overall productivity (Exhibit 14).

On-time-Delivery of the finished products is expected to have an average

annual gain of **5.5%** and several cost items such as **logistics & Transportations** and **Capex & Inventory** are also expected to improve significantly.

Exhibit 14: Expected annual gains in smart factories in the next 5 years (CAGR %)



Source: Capgemini: "How can manufacturers realize the potential of digital industrial revolution").

Adidas plans to produce **500,000 pairs of shoes per year**⁸ in each of its two plants. Although we consider Speed factories to be a very important starting point for a company to innovate and thrive in such a competitive market, they will have a **very small impact in the total production** of the group, at least in the short-term, since Adidas worldwide production is around **360 million** pairs of shoes per year. In the long-run, with more speed factories being opened and with higher production volumes, we expect improvements at **inventory levels** as well as **gross margins** with more products being sold at full price.

Summing up, Adidas is having a **first mover advantage** by being the first company in the industry with such revolution. It will be paramount for the company to continue exploiting these initiatives and therefore increase production volumes in the long-run.

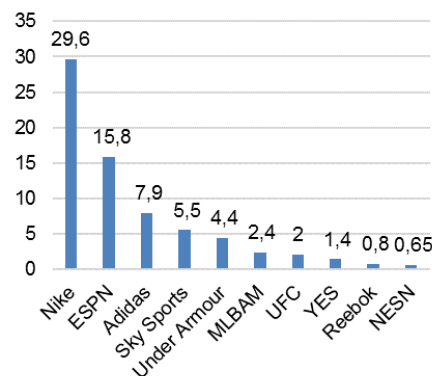
Brands overview

As mentioned above, Adidas AG operates essentially under two core brands, the original brand, **adidas**, and **Reebok**. Currently, beyond these two core brands, Adidas' brand portfolio only comprises less significant brands namely Adidas Golf and Runtastic.

⁸ Source: Bloomberg

Adidas brand

Exhibit 15: Top 10 most valuable sports business brands worldwide in 2017 (in \$billion)



Source: Forbes, October 2017

Adidas brand was considered one of the most valuable sport business brands worldwide (Exhibit 15) and has the clear mission of becoming the best sports brand in the world. It has a **diverse sports portfolio**, ranging from major global sports, such as football and running, to regional sports such as American football and rugby. Adidas provides products for all kind of people, from professional athletes and teams to individuals who like sports or that just want to have a more relaxed daily appearance.

Reebok brand

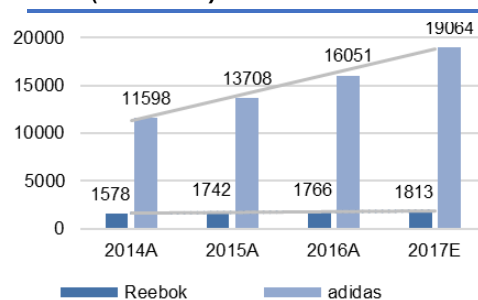
The group acquired Reebok for \$3.8 billion in 2005, aiming to **increase market share** mainly in the **US market** where Reebok was particularly stronger. The deal led, at the time, to an increase of 7% of Adidas' share price.

Reebok has, nowadays, the mission of being **the best fitness brand in the world**. Lately, the brand has changed its positioning from traditional sports to **fitness** in order to realise its mission. The brand aims to take advantage of the so called "Fit Generation"⁹ that is a group of consumers that are driven by mental, social and physical challenges, believing that fitness is part of their identities.

The **women market** has been a top priority for Reebok. This approach has been unique in the industry, which is allowing the brand to be a dual-gender brand with women's business representing **50% of the brand revenues**. Nevertheless, the group is since November 2016 implementing a **turnaround plan for Reebok**, whose sales growth has been considerably lower than those of the adidas brand. (Exhibit 16). Several **organizational changes** have already been made specially at the brand headquarters in North America. Furthermore, Reebok has currently a partnership with UFC which is supposed to foster brand's awareness given that combat sports such as **MMA** and **kickboxing** are **gaining acceptance** and popularity among consumers in several countries (Exhibit 17).

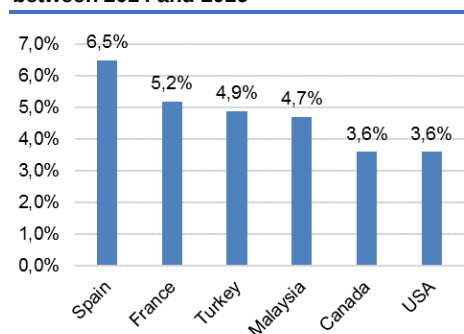
Reebok is under a restructuring plan

Exhibit 16: adidas net sales vs Reebok net sales (in € million)



Source: Company data; Analyst estimates

Exhibit 17: Increase in MMA total population interest in the biggest growth markets between 2014 and 2016



Source: Statista

⁹ JP Marketing- "The Fit Generation"

Economic overview

Adidas has a very widely market presence, being important to understand both global and regional economy drivers.

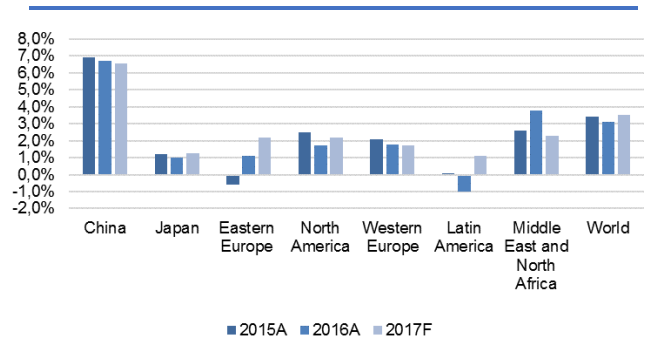
Some important **economic indicators** demonstrated an **improvement** in 2016 compared to 2015 in most of the world economic regions. Regarding **unemployment rate** it is possible to see, in Exhibit 18, that it decreased in all areas except Brazil where in 2016, in 100 active individuals, around 12 were unemployed, which is more 4.5pp when compared to the same quarter from previous year rate. Another significant metric that indicates the degree of optimism that consumers feel about the overall state of the economy is the **Consumer Confidence Development**. This indicator shows that in 2016 all regions' population where **more confident with the economic outlook** and therefore more willing to consume than in 2015.

Exhibit 18: Unemployment rate and Consumer Confidence Development (%)

	Unemployment rate		Consumer Confidence Development	
	2015	2016	2015	2016
USA	5	4,7	96,3	113,3
Euro Area	10,5	9,6	-5,7	-5,1
Japan	3,3	3,1	41,3	42,3
China	4,1	4	103,7	108,4
Russia	5,8	5,3	-26	-18
Brazil	7,4	11,9	96,3	100,3

Source: US Bureau of Labor Statistics; Eurostat; Japan Ministry of International Affairs and Communications; China National Bureau of Statistics; Russia Federal Service of State Statistics; Brazil Institute of Geography and Statistics

Exhibit 19: Real GDP growth (%)



Source: IMF 2017, World Economic Outlook

In terms of **Gross Domestic Product**, the global economy grew at a slightly slower pace than the previous year. Global real GDP increased 3,1% in 2016 compared to 3,4% from the previous year. This slowdown reflected stagnant global trade, policy uncertainties, and consequently **volatile financial markets**. Policy uncertainties in 2016 were mainly related to the UK vote in favour of leaving the European Union ("Brexit") and the electoral outcome in the USA.

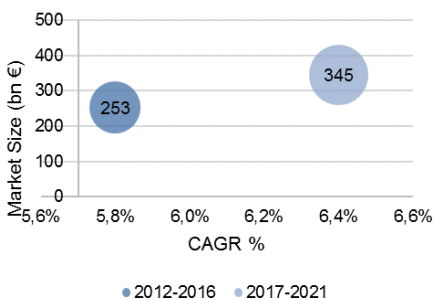
For **2017**, **global prospects are more positive**, with real GDP growth forecasted to increase to 3,5% worldwide (see Exhibit 19).

Recently, long-term bond yields in advanced economies recovered from a decline in the beginning of 2017. Bond spreads over Germany have flattened sharply in countries like France, Italy and Spain on reduced electoral uncertainty and **economy signs of recovery**. Likewise, equity prices both in advanced economies and emerging markets remained strong showing the **recent market confidence and positivism**.

Overall economy is recovering, reflected in a strong equity market

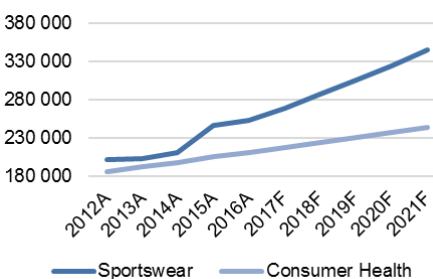
Industry overview

Exhibit 20: Sportswear industry CAGR (%) vs market size (in €billion)



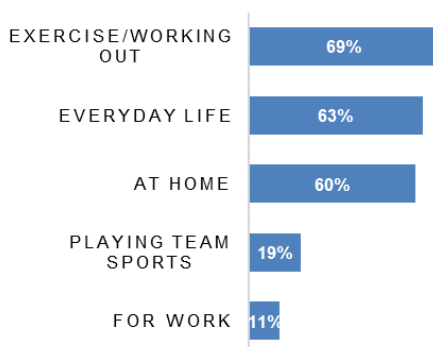
Source: Passport- Euromonitor International

Exhibit 21: Sportswear industry vs Consumer Health industry (in €million)



Source: Passport- Euromonitor International

Exhibit 22: Occasions when consumers wear sportswear in 2016



Source: Statista

Sports and fashion team-up

Adidas is part of the **Global Sportswear industry**, which includes, beyond the manufacturing of sporting goods, the retailing of sports goods such as fitness equipment, athletic uniforms, footwear, apparel and other accessories and equipment.

The Global Sportswear industry is **extremely fragmented**, from simpler discount brands to high-end fashion name brands competing for better market positions. Customers don't incur any costs for switching between brands, hence it is paramount in this industry to **gain share from rivals** and even more important, to differentiate through **incremental innovation**.

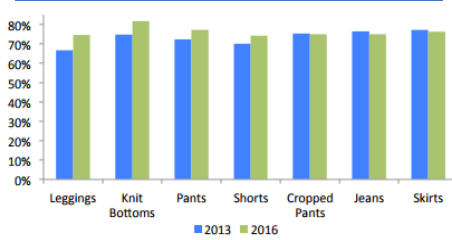
Worldwide, the industry grew at a **CAGR** of **5.8%** from 2012 to 2016, reaching a total size of almost **253 billion €**. It is also forecasted¹⁰ that the market continues to grow at a slightly higher **CAGR** of **6.4%**, over the period of 2017 to 2021, reaching almost **345 billion €**, globally. The remarkable industry growth is justified by numerous factors and trends. First of all, individuals have become **more health-conscious**, with people getting worried about their lifestyles and how this could affect their health. Moreover, **governments are promoting sports activities** and encouraging sports participation which contributes to the rising number of health-conscious people. Exhibit 21 presents the absolute (historical and forecasted) increase of consumer health market¹¹ supporting our point of view. Furthermore, a huge trend towards **athleisure**¹² has been observed worldwide (Exhibit 22). Nowadays, and for the first time, it is socially acceptable to wear sportswear clothing as part of **everyday life** and to more **formal occasions**.

Previously, trying to **enter into fashion** was very risky for sportswear brands since it **could damage the credibility of the brand**. With the spreading of the athleisure trend, **industries are more connected** than ever before. Currently, it is possible to see companies, that until recently were only focused on the casual apparel & footwear industry, start selling athletic clothes and shoes, and on the other hand, we have companies that were previously only selling athletic footwear and apparel, that are now selling for a more casual consumer. This trend has been **very positive** for sportswear brands that are now **expanding their audience** by capturing the attention of women who want to work out and look good while practising sports. As an example, Adidas CEO, Kasper Rorsted made a call to investors on August 3rd, 2017 announcing both the growth of 77%

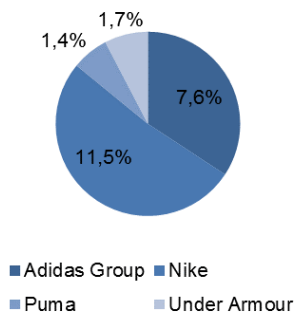
¹⁰ Euromonitor forecasts for the Global Sportswear Industry

¹¹ Consumer Health includes industries such as: Weight Management/Wellbeing and Sports Nutrition

¹² A style of clothing worn as athletic apparel but also suitable for casual, everyday wear

Exhibit 23: Percentage of Retailers' asking prices consumers were willing to pay in bottoms subcategories

Source: First Insight

Exhibit 24: Sportswear Industry-market shares in 2016 (%)

Source: Company reports; Passport-Euromonitor International

Exhibit 25: Biggest athlete endorsement deals in sports history

NO#	ATHLETE	BRANDS	YEARLY
1	Michael Jordan	NIKE	\$60m
2	Lebron James	NIKE	\$30m
3	Kevin Durant	NIKE	\$25,5m
4	Cristiano Ronaldo	NIKE	\$21,7m
5	Lionel Messi	ADIDAS	\$20m

Source: Total Sportek

Main rivals are struggling while Adidas is moving forward

observed in North America women's market and 27% in Western Europe women's market¹³.

Moreover, consumers are nowadays more willing to pay **higher prices** for athleisure. This can be observed through their **increasing willingness to pay more** for subcategories like leggings and knit bottoms (see Exhibit 23). With this trend, companies have been able to charge **higher prices**, with the overall industry benefiting.

Competition

Competition in the sportswear industry has **intensified** over the past few years. Several new competitors entered the market trying to capitalize on the positive trends observed in the industry. However, beyond Adidas, there are only few players with a considerable size. Those are Nike, Under Armour and Puma.

Nike leads the overall market with **11,5%** market share, followed by **Adidas** with **7,6%**. **Under Armour** is ranked third with **1,7%** market share and **Puma** only accounts for **1,4%** of the total market.¹⁴

The U.S. company, **Nike**, is one of the world's most valuable brands in the world¹⁵. Much of Nike's success comes from its brand's **marketing campaign** as well as sponsorship agreements with **well-known athletes** (see Exhibit 25) and **professional sports teams**. Roughly 46% of Nike's revenues come from North America.¹⁶

Adidas and **Puma** used to be one combined company named Gebrüder Dassler Schuhfabrik, opened up by two brothers, Adolf and Rudolf Dassler. After a disagreement between them, the company split, forming the two global and widely known sporting brands. Although widely present, Puma concentrate its sales in Europe and America as these markets represent almost 70% of their total sales.¹⁷

Under Armour is an American enterprise that was considered one of the most **innovative companies** in the world by Forbes, 2016. The company has approximately 83% of its sales coming from North America but has plans to move on and invest strongly in other markets.¹⁸

With its high annual growth rates over the last two years (16,4% in 2015 and 14,5% in 2016), **Adidas is threatening its rivals**. Under Armour has already cut its annual sales projections and has recently announced **third quarter sales**

¹³ Quartz Media: "Adidas has found that models and bloggers, not athletes, are the key to selling sportswear to women"

¹⁴ Revenues from Nike and Under Armour where converted at an exchange rate of 1 USD - 0.89889€

¹⁵ Source: Forbes, 2017

¹⁶ Nike annual report

¹⁷ Puma annual report

¹⁸ Under Armour annual report

Exhibit 26: Quarterly sales growth (%)



Source: Company reports

drop (4,5%) for the first time since it went public in 2005¹⁹. Also, Nike has forecasted 2017 revenue growth nearly half of Adidas' forecasted growth²⁰. We believe that Nike's recent sales growth slowdown as well as Under Armour quarterly sales decline (Exhibit 26), may largely be a consequence of **Adidas recovery and recent great performance** as there has been no sign of weakness in the sportswear industry that could have directly affected both companies. In this way, we strongly believe Adidas overall recent growth is partially being a consequence of a **market share gain** from main competitors. Although, one could argue that new competitors are arising as industries are converging (sportswear and general apparel/footwear) we believe that these are still the main competitors and will be for the next few years.

Segment Analysis

In this section, we will address all geographic business segments where the company operates, with a focus on the regional industry performance. Adidas' revenues and market share forecasts are later presented in detail. The segmentation embraces the wholesale and retail of both adidas and Reebok brands. Other brands are presented by the company separately in Other Business Segment.

▪ Western Europe

Western Europe is a very powerful market both in terms of importance and size, having reached **49,974 €billion** in revenues in 2016 (see Exhibit 28). Concerning its growth, this market segment has been growing slowly over the past few years (CAGR of **2,4%** from 2012 to 2016) and although it is forecasted to keep growing (Exhibit 28), it will not follow the high growth rates observed in other segments influenced by the **stagnant overall economy growth** in the region (only 1,7% expected real GDP growth). Nevertheless, this market remains a **pivotal marketplace** that holds a great impact over sportswear trends.

Contrary to the moderate growth observed in the Western Europe sportswear industry, Adidas grew from 2012 to 2016 at a CAGR of **6,7%** (Exhibit 27) and last year grew at a rate of **16,6%** which was particularly important for the group overall performance given that this segment accounts for the major share of Adidas net sales (**27%**). The country contributing the most for this region is the group home market, Germany.

Adidas splits the lead of this segment with Nike, with both companies having a market share of **11%**.

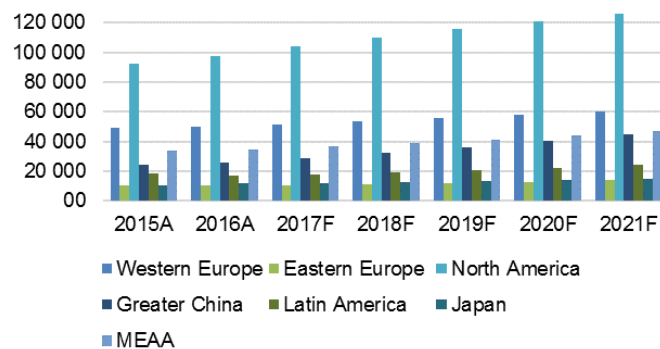
Exhibit 27: Western Europe CAGR in Sportswear and Adidas Group from 2012 to 2016 (%)

	CAGR (2012-2016)
Sportswear- Western Europe	2,4%
Adidas AG- Western Europe	6,7%

Source: Passport- Euromonitor International; Company report

¹⁹ Source: Fortune²⁰ Source: Bloomberg

Exhibit 28: Industry market size by geography (in €million)



Source: Passport- Euromonitor International

■ North America

North America, is by far, the **largest** and **more lucrative market** in the sportswear industry with a market size of **97,368 €billion** (Exhibit 28). It is in this regional area that most trends start and only after are spread across the world.

This business segment accounts for **21,4%** of the group total net sales, being the second largest only behind Western Europe.

The company biggest challenge has been competing with its main rival, **Nike**, which has the **largest share** in its home market, **13,6%**, and more recently with Under Armour that surpassed Adidas in this market in 2015 (Exhibit 29).

Although Adidas is still **under-represented** in North America, with only **3,5%** of market share, the group had, in 2016, the fastest growing results in the region, growing **24%**. This tendency can also be observed through the **2017 quarter growth rates** observed in the region contrasting with much **slower quarter growth rates** from **Nike** and even **slower** from **Under Armour** (see Exhibit 30).

Currently, in order to try to avoid and stop Adidas' fast growth, **Nike** is for the first time **relying on discounts** in that particular market²¹. This is an unprecedented event as Nike has always been proud of not having to take on discounts to sell its products. Nevertheless, we don't see much impact of these particular discounts in Adidas' sales as it is meant to be a temporary event.

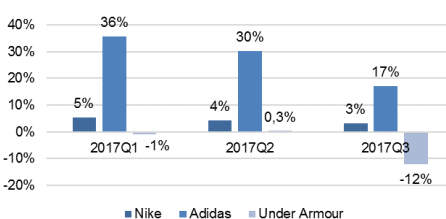
Moreover, **Under Armour**, as well as **Nike**, had both already announced reorganizations and some **jobs cuts within their businesses in North America**²², highlighting once again the pressure made by Adidas.

Exhibit 29: North America market shares (%)

	2014	2015	2016
Nike	15,2%	13,3%	13,6%
Adidas	4,1%	3,0%	3,5%
Under Armour	3,5%	3,4%	3,7%

Source: Company reports; Passport- Euromonitor International

Exhibit 30: Nike, Adidas and Under Armour North America quarter growth rates in 2017 (%)



Source: Company reports

²¹ Source: Bloomberg. "Nike's 40% off Groupons are a sign of its troubles"

²² Source: CNBC

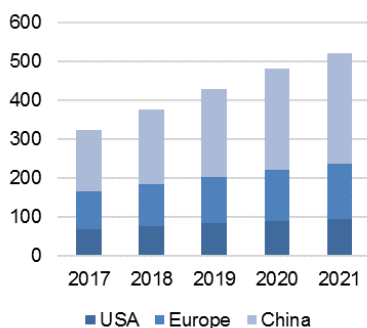
▪ Greater China

Consumer demand for sportswear in China **increased** considerably (from **18,202 €billion** in 2014 to **25,412 €billion** in 2016)- Exhibit 28. The continuous **urbanisation** in the country and the fact that many Chinese consumers see in sports activities a way of socialization, are trends that are fostering demand in this segment. A recent research confirms that 76% of urban Chinese consumers have the routine of practising sports and fitness activities.²³ **The high birth rate** observed in China (increase of 7,9% in 2016²⁴) is expected to keep increasing in the future following the change, in 2015, of the one-child-policy to a two-child policy, contributing to the long-term increase of the sportswear Chinese market. Moreover, China is observing several **government initiatives** such as heavy investments in sport participation and interest in professional sports. The Chinese government announced in 2014 some policies to **increase sports consumption** in China which has been fostering the industry growth in the region.²⁵ Moreover, basketball, has been highly promoted in China, which has **increased demand for basketball footwear** over the last years. Nowadays it is estimated that over 18% of athletic Chinese people play basketball²⁶.

China has nowadays one of the most **refined e-commerce** and digital landscapes in the world. The country is the **leader in online fashion** with a turnover expected to be higher than the USA and European fashion online markets combined (Exhibit 31). Adidas efficiency in terms of gross margin (58%) may be explained by the strong ecommerce market that exists in the country. The group has here a market share of **12%**, only behind Nike that has a **13%** market share.

Adidas revenues in China grew in 2016 at a growth rate of **22%** whereas the sportswear market in this country only grew by **5.2%**.

Exhibit 31: Projected online turnover from fashion (in \$billion)



Source: Statista Digital Market outlook

▪ Eastern Europe (Russia/CIS²⁷)

Over the last few years, Eastern Europe economy had a **moderate slowdown** (GDP growth rate of -0.6% in 2015 and 1,1% in 2016), which influenced negatively the sportswear industry (decreased 5% in 2016). This is a market with a total size of **10,212 €billion** (Exhibit 28), projected by Euromonitor to reach **13,921 €billion** by 2021.

²³ Global marketing intelligence agency- Mintel

²⁴ Source: BBC news

²⁵ Yutang Sports (Chinese marketing platform)

²⁶ Forbes

²⁷ Commonwealth of Independent States

Russia/Commonwealth of Independent States (Eastern Europe) is a segment that nowadays accounts for **3,5%** of Adidas net sales and revenues decreased **8%** last year justified in part by negative currency effects, stores closures and vulnerability of the region that challenged and affected consumer sentiment.

In the Eastern Europe segment, **Nike** has a significant **market share** of **13,4%** which is twice **Adidas'** share of **6,7%**.

▪ Japan

In Japan, given the country **population ageing** (Exhibit 32), more consumers are concerned about **being healthy and stay active**, implying more participation in sports and activities. Beyond this trend, people in this segment are increasingly relying on the **athleisure trend**²⁸, following the Japanese government environmental initiative (Cool Biz) of encouraging people to wear non-formal clothes at work in the summer in order to reduce the air conditioners use. Adidas has been able to capitalize on these positive trends in Japan. This operating segment saw the **highest growth rate** within the group. It grew **27.4%** from 2015 to 2016. In terms of market share, Adidas leads the Japanese market with a market share of **9,8%** compared to **6,8%** from its rival, Nike. Although great results achieve last year, Japan is still the region with the **lowest percentage of revenues** in the overall company, with only **5%**.

▪ Latin America

With a total market size of **16,977 €billion** (Exhibit 28), the sportswear market saw a **decrease** of **8,5%** in 2016 in Latin America mainly due to **negative currency effects and recession** in two important markets, Brazil and Argentina (2016 real GDP growth rates of -3,6% and -2,2% respectively²⁹). This market segment has been observing substantial **political risks** and at the same time, only modest commodity price gains is softening business sentiment and investment.

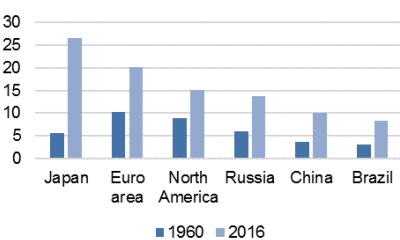
Influenced by these negative market drivers, Adidas net sales in the region **decreased** by **3%** in 2016.

This segment currently accounts for **9%** of Adidas total net sales.

▪ MEAA

The sportswear industry in Middle East, Africa and other Asian Markets has a total size of **34,757 €billion** (Exhibit 28). It is the third region in terms of size, only behind North America and Western Europe.

Exhibit 32: Population ages 65 and above (% of total)



Source: World Bank

²⁸ Nikkei Asian Review- "Athleisure wear catching on in Japan"

²⁹ IMF

Adidas currently has **14%** of its revenues coming from this market and revenues grew **11,9%** in 2016 outperforming the industry that had an increase of only **3,8%**.

The company has in this region a market share of **8%** and **Nike** is currently working on innovative products and **high investments** in this market, trying to be closer to the Muslim population³⁰, which can be a threat for Adidas in the future since market share can be transferred from one company to the other (later detailed in the Revenues Forecast section).

- Other businesses

Other businesses contain adidas Golf, Runtastic and other centrally managed businesses. In 2016 this segment included other two brands, CCM Hockey and the golf brand Taylormade. All other brands accounted in 2016 for around **8%** of total sales. Though, with the recent divestiture of these two brands, these **percentage** will considerably **decrease** after 2017.

Valuation assumptions

In order to value Adidas, we used a **DCF** approach. We chose this methodology because we believe it is the only one that captures all Adidas' main growth drivers. Our forecast period ends in **2026**, though, for the period of **2027-2029** we estimate cash flows to grow at a decelerating rate, reaching the terminal growth rate of 1,15% in 2029.

For Adidas' cash flow forecast we designated a set of inputs that we considered fundamental to determine the main components of the DCF analysis.

Revenues Forecasts

First of all, **revenues forecasts** are crucial to determine in a DCF model. Several other items on financial statements will depend on these projections. However, and given the fact that Adidas is a **fashion company**, depending on several trends, it can be harder to value and predict future growth. Thus, it is essential to link world economic indicators with the overall impact in the industry and, particularly, in the company.

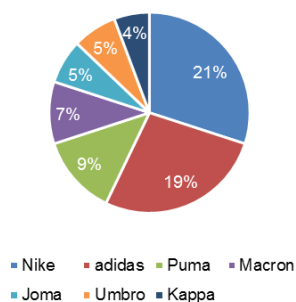
Net Sales from the group have a **seasonal trend** in most product categories which makes them fluctuate throughout the year. **Revenues are usually higher in the first and third quarters** of the year since it coincides with the launch of the spring/summer and fall/winter collections, respectively. Therefore, revenues for 2017 were derived having into account third quarter results already presented by the company as well as historical growth rates from fourth quarters.

³⁰ Source: Nasdaq

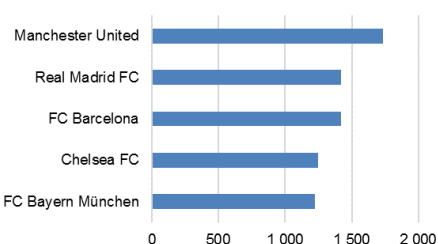
Exhibit 33: Nike and Adidas – Western Europe market share (%)

	2014	2015	2016
Nike	9,6%	10,4%	10,6%
Adidas	8,8%	9,2%	10,6%

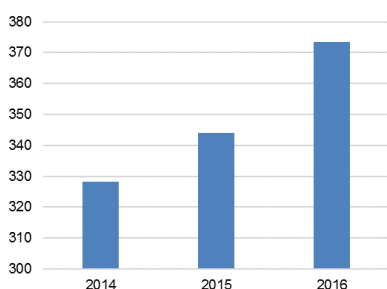
Source: Company reports

Exhibit 34: Distribution of main manufacturers of top division football club kits in Europe (%)

Source: Statista

Exhibit 35: Top five most valuable football brands worldwide in 2017 (in \$million)

Source: Brand Finance

Exhibit 37: adidas ad spent in the U.S. 2014-2016 (in €million)

Source: Statista

We started by splitting revenues by the segments the company operate. Then, and in order to get a better and deeper understanding of each segment's performance, we separated revenues of adidas and Reebok brands.

The business segments having the biggest impacts in future total net sales are Western Europe, North America, and Greater China.

The group home market, **Western Europe**, will continue to generate strong results in its two core brands, with **market shares increasing** moderately year on year until 2020, following historical positive gains (Exhibit 36). Both **Adidas** and its main rival, **Nike**, have been able to increase market shares in this region, over the last three years (Exhibit 33). The Western Europe market is increasingly a battle between the two companies, with **both gaining market share** from the smallest players in the industry. Nike and the adidas brand are highly present in the "king" sport in Western Europe (football), **sponsoring the most relevant football teams** (Exhibit 34). Although Nike sponsors more top football kits in Europe (21%), adidas has partnerships with **three of the top five most valuable football brands**: Manchester United, Real Madrid FC and FC Bayern München, with Nike only sponsoring Chelsea FC (Exhibit 35). This strategy has allowed adidas to generate brand awareness and maintain **competitive advantages**, particularly in this segment.

Exhibit 36: Western Europe revenue forecasts (in €million)

	2015A	2016A	2017E	2018F	2019F	2020F	2021F
Adidas AG- Western Europe	4 540	5 291	6 362	6 742	7 118	7 497	7 762
adidas	4 193	4 889	5 899	6 254	6 606	6 961	7 207
market share adidas	8,5%	9,8%	11,4%	11,6%	11,8%	12,0%	12,0%
Reebok	347	402	463	488	512	536	555
market share reebok	0,70%	0,80%	0,89%	0,90%	0,91%	0,92%	0,92%

Source: Company data; Analyst estimates

For **North America**, one of the company main focus, we forecast **adidas brand** sales to considerably increase over the next few years, following the efforts the group has been putting on thriving in this segment, observable in the **market share increases** from the last two years (Exhibit 38) as well as in the **advertising spending increases** between 2014 and 2016 (see Exhibit 37). Furthermore, the brand aims to **sponsor 250 National Football League³¹ players** by 2020 (up from 95 now) and wants to **sponsor 100 more National Basketball Association players** (up from 70 now)³². With these sponsorships, we believe adidas will be closer to the North America consumers given the importance and strength of both sports in North America. On the other hand, sales from **Reebok** are expected to **decrease** in this business segment. Reebok has seen its sales decreasing in the last few years which has contributed to the

³¹ American football³² Fortune

planned closer of own stores in that region, that is part of the restructuring plan applied to the brand.

Despite Reebok's negative impact in North America, the overall group is expected to continue **gaining market share** from key competitors, that have seen their sales in the region underperforming³³, until the end of the implementation strategy (2020).

Exhibit 38: North America revenue forecasts (in €million)

	2015A	2016A	2017E	2018F	2019F	2020F	2021F
Adidas AG North America	2 754	3 411	4 196	4 948	5 720	6 508	6 815
adidas	2 231	2 897	3 772	4 553	5 363	6 196	6 489
market share adidas	2,4%	3,0%	3,6%	4,1%	4,6%	5,1%	5,1%
Reebok	523	514	424	395	357	312	327
market share reebok	0,6%	0,5%	0,4%	0,4%	0,3%	0,3%	0,3%

Source: Company data; Analyst estimates

Regarding **Greater China**, we are forecasting sales in the region to considerably **increase** over the next few years following the group performance improvements observed so far (36,3% sales growth rate in 2015 and 21,9% sales growth in 2016). The company announced this year intentions to open **2000 new stores** of the **adidas brand** and around **500 stores of Reebok brand** by 2020 in China, where the group currently owns more than 10000 stores³⁴. Furthermore, adidas has already collaborated with two influential athletes in China, the swimmer Ning Zetao and the volleyball player Hui Ruoyi, emphasising the strong ambition to grow in this region³⁵. These, aligned with the positive industry outlook in the segment are expected to foster sales in China. Notwithstanding, both adidas and Reebok are expected to continue **gaining market share** in the region.

Exhibit 39: Greater China revenue forecasts (in €million)

	2015A	2016A	2017E	2018F	2019F	2020F	2021F
Adidas AG Greater China	2 469	3 011	3 774	4 260	4 785	5 379	5 987
adidas	2 411	2 944	3 697	4 171	4 682	5 260	5 854
market share adidas	10,0%	11,6%	12,8%	12,9%	13,0%	13,1%	13,1%
Reebok	58	67	77	89	103	119	132
market share reebok	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%

Source: Company data; Analyst estimates

Although Euromonitor industry forecasts for Eastern Europe indicate that the market will recover in the next few years (CAGR of 7,2% from 2017 to 2021), Adidas CEO, Kasper Rorsted, is less optimistic and is already **planning to close 160 stores**, until the end of 2017, in that region and pretends to close even more in the future³⁶. Thus, we don't see much growth coming from this segment, at least in the short-term as a consequence of these closures.

³³ Please refer to the Exhibit 26 from the North America segment analysis

³⁴ "Adidas sprints away with new stores" Source: chinadaily

³⁵ Source: marketeer

³⁶ "Adidas feeling low oil prices and sanctions against Russia" Source: ispo

Regarding **Japan**, growth is expected to be aligned with **industry positive forecasts (CAGR of 4,5%)** maintaining market share, as we believe that this region still has a lot of potential for both adidas and Rebook to thrive.

For **Latin America**, we also believe that the group will be highly **dependent** on the industry growth (projected **CAGR of 7%** from 2017 to 2021), hence, **market shares** are expected to be **constant** and growth rates being dependent on the growth rates observed in the industry.

Concerning **MEAA** we expect both adidas and Rebook to slightly **decrease their market shares**. The group total market share in the region will therefore go from 8% expected in 2017 to 7,4% in 2021. This is mainly a consequence of the recent news regarding **Nike's intentions to thrive** in this segment, trying to be closer to the Muslim population³⁷.

Globally, sales growth from the adidas brand will be **significantly high (19%)** in 2017, keeping great performance from previous year of **17%** growth rate and will moderately decelerate from 2018 onwards. Reebok is also forecasted to **increase** but at much **lower rates (3%** in 2017) than the adidas brand.

In terms of **total net sales** from the group, we expect them to keep generating high growth levels, reaching **29216 €million by 2021**.

Exhibit 40: Adidas growth by brand (in million €)

	2015A	2016A	2017E	2018F	2019F	2020F	2021F
Total adidas	13708	16051	19064	20912	22850	24922	26444
growth rate		17%	19%	10%	9%	9%	6%
Total Reebok	1742	1766	1813	1849	1879	1908	1993
growth rate		1%	3%	2%	2%	2%	4%
Total Others	1464	1473	779	779	779	779	779
Total Group Net Sales	16914	19290	21656	23540	25508	27609	29216
growth rate		14%	12%	9%	8%	8%	6%

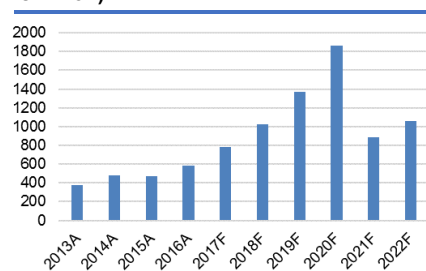
Source: Company data; Analyst estimates

CapEx

Adidas AG is a **mature company** that is under a strong strategy to grow. Thus, it is essential and crucial for a company with such ambition to **increase CapEx** spending in the following years. Adidas' forecasts for 2017 include an increase of almost twice the CapEx observed in 2016 and they intend to substantially increase those values over the next few years. The Group will continue to generate **high excess cash**, which will be used, partially, to finance **high investment levels**.

Historically, CapEx made up **2,8%-3,3%** of the company's revenues, though, for the next three years we estimate this figure to be between **3,6%** and **6,7%** of total revenues, corresponding to the period of the strategy implementation.

Exhibit 41: Adidas' CapEx evolution (in €million)

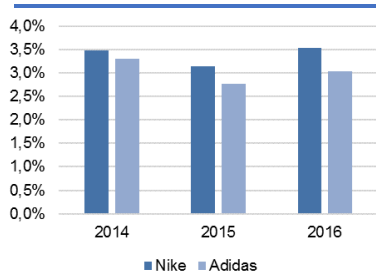


Source: Company data; Analyst estimates

³⁷ Source: Nasdaq

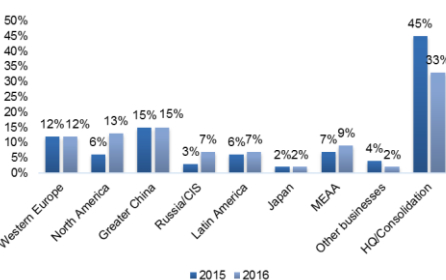
High investment levels follow the company strategy of increasing sales from controlled space

Exhibit 42: Nike vs Adidas CapEx comparison (% of total sales)



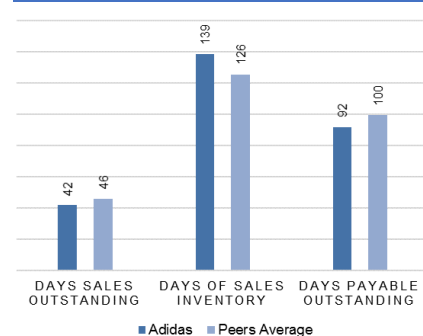
Source: Company reports; Gurofocus

Exhibit 43: Adidas Capital Expenditures distribution (%)



Source: Company data

Exhibit 44: Adidas vs Peers Average number of DSO, DSI and DPO in 2016



Source: Company Reports

Behind this higher CapEx levels are essentially investments related to the expansion and improvement of **controlled space initiatives** of the adidas and Reebok brands but also, company's logistics infrastructure, IT advances and further developments of the corporate headquarters. **Controlled space**, which accounted in 2016 for **55%** of total CapEx, is **space where Adidas is able to manage the way brands and products are presented**. It includes own retail (including eCommerce), mono-branded franchise stores, shop-in-shops, joint ventures with retail partners and co-branded stores. The group aims to generate **more than 60% of its sales from controlled space by 2020** and for that to happen the company needs to considerably increase investments in controlled space initiatives.

Furthermore, and following Adidas' strategy, North America investments as well as digital developments will be the main focus of Adidas future CapEx. Exhibit 43 shows how the group has been distributing its CapEx. From 2015 to 2016, the highest increase was observed in North America. Adidas' CEO, Kasper Rorsted, recently announced that the group will continue to focus its investments in this region but without disregarding other segments³⁸.

Finally, long-term expected CapEx includes the company expansion through the construction of new speed factories.

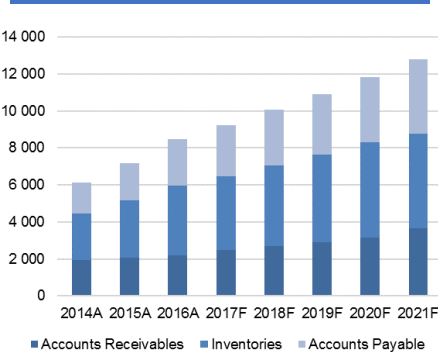
Net working Capital

We have highlighted the three main items with more weight in the overall Working Capital: Accounts Receivable, Inventories and Accounts Payable.

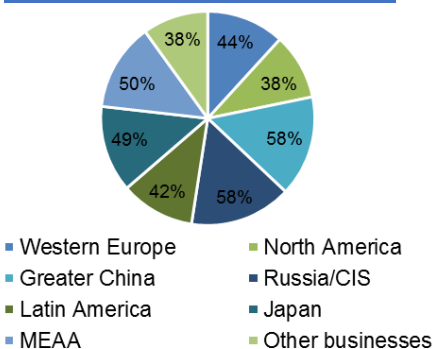
Accounts Receivable as a percentage of sales, and consequently the number of days sales outstanding, have been decreasing over the last three years (Exhibit 46). We have estimated that for the next few years the company will be able to **keep the level** reached last year, reflecting the company **strict discipline in trade terms management** and concerted efforts. In the long-run, we expect the average day sales outstanding to reach current industry levels (Exhibit 46).

Regarding **Inventories**, it is possible to see that **Days Sales of Inventories** have been increasing over the last three years (Exhibit 46). This may reflect a **recent bad inventory management** from the company. However, given Adidas' further **focus on speed**, we assume that the company will be able to slightly reduce the number of days it takes to turn its inventory into sales, reaching the group average of the last two years of **134 days** and only afterwards, with the expansion of speed factories, it will be able to reach industry levels of **126 days** (Exhibit 46). We believe that the focus on speed will allow the company to **reduce excess stock** that would probably end up being marked down.

³⁸ Source: CNBC

Exhibit 45: Evolution of main items from NWC (in €million)

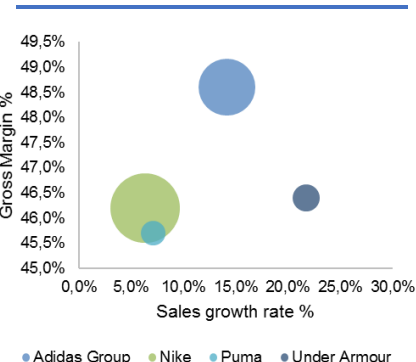
Source: Company data; Analyst estimates

Exhibit 47: Gross Margin by business segment in 2016 (%)

Source: Company data

“Growing our digital capabilities will ultimately also helps us do a better job on margin enhancement”

Source: Adidas CEO, Kasper Rorsted

Exhibit 48: Gross Margin vs Sales growth rate in 2016 (%)

Source: Company reports

For **Accounts Payable** it is assumed that Adidas will be able to **keep its efficiency** in managing payables (**92 days**), as it has been able to extend the period to pay its suppliers over the last few years. The number of days payable outstanding will later achieve slightly higher industry levels of **100 days**.

Overall, we are projecting **NWC** as a **percentage of total net sales to decrease**, keeping the trend observed in the last three years, reflecting the company's continued focus on **tight working capital management**.

Exhibit 46: Historical and Forecasted DSO; DSI; DPO

	2014A	2015A	2016A	2017F	2018F	2019F	2020F	2021F	2022F	2023F
DSO	49	44	42	42	42	42	42	46	46	46
DSI	121	130	139	134	134	134	134	126	126	126
DPO	79	84	92	92	92	92	92	100	100	100

Source: Company data; Analyst estimates

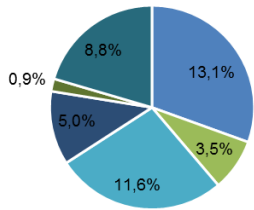
Gross Margin

Another important and determinant factor affecting positively the company value is its **Gross Margin improvements**, both historically and forecasted.

Geographically, Adidas has very different gross margins across its business segments. In **Greater China and Russia/CIS** the group has the highest gross margins (**58%**) whereas **North America** and **Other Businesses** segments presented the lowest gross margins with only **38%**.

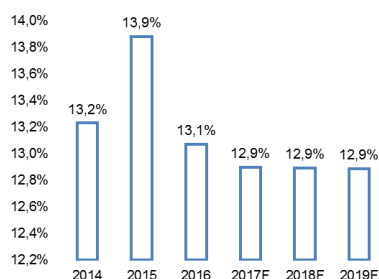
We expect gross margins to **moderately increase** in **all segments** which is aligned with the fact that Adidas is **increasing** the percentage of sales coming from **controlled space** (including ecommerce), allowing for **better product pricing and product channel mix** as well as **lower input costs**. For the Chinese segment, we do believe that the expected **increase in sales coming from the ecommerce channel**, already described, will generate even higher increases in gross margins than the ones expected from other segments. Furthermore, we believe that the fact that Adidas is highly focused on speed, with consumers wanting fresh products, will also contribute to the company **increasing full-price share of sales** and therefore increase gross margins.

Finally, comparing with main rivals from the industry, we can see in Exhibit 48 that in 2016, Adidas was in a great position both in terms of gross margin and in sales growth rate. Adidas has the **highest gross margin** among its peers and was only behind Under Armour in terms of sales growth rate.

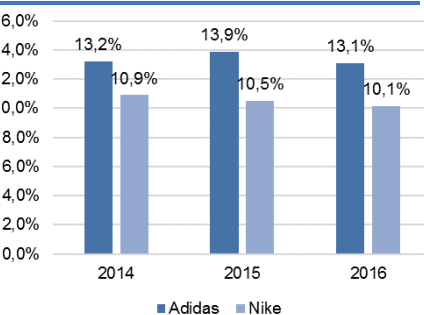
**Exhibit 49: Operating Expenses 2016
(% of total sales)**

■ Expenditures for marketing and Point-of-Sale Investments
 ■ Marketing overhead
 ■ Sales force
 ■ Logistics
 ■ Research and development
 ■ Central administration

Source: Company data

**Exhibit 50: Evolution of Expenditures
for marketing and Point-of-sale
investments (% of total sales)**

Source: Company data; Analyst estimates

**Exhibit 51: Adidas vs Nike evolution of
marketing related expenditures (% of
total sales)**

Source: Company reports

**“As market share increases
there is some propensity for
marketing related costs as a
percentage of sales, to
decline”**

Source: Harvard Business Review

Marketing/Point-of-sale Expenditures

Adidas is part of the fashion industry, which makes **marketing/point-of-sale investments** one of the main focus of the group. Together, expenditure for point-of-sale and marketing investments have the **biggest portion of operating expenses** (13,1% of total sales)- see Exhibit 49. It relates to initiatives to reinforce the desirability of Adidas' brands and products by advertising and promotion initiatives.

As already stated out in the strategy presentation, Adidas expects to implement some measures that aim to **simplify business processes**, including the **harmonisation of marketing activities**. Currently, the group spends the same proportion of its marketing investments on partnerships assets and on brand marketing activities such as digital, advertising, point-of sale and grassroots activations and aims to reduce the percentage of partnership assets to 45% of total marketing investments. As an example, the company is moderately decreasing its marketing expenditures in sponsoring events such as FIFA and high-profile athletes, and is instead spending additional resources into digital campaigns and grass-roots activations, on the ground with local sports clubs. From these measures we expect an **improvement in the company marketing efficiency** with a moderate decrease of marketing and Point of Sales expenditures as a percentage of sales from 13,1% in 2016 to 12,9% (Exhibit 50). We can see in Exhibit 51 that Adidas has been spending a much higher percentage of sales in marketing related activities when comparing to Nike. From this shift we expect Adidas to get closer to Nike's efficiency levels in terms of marketing related expenditures.

We don't see this change jeopardizing the company in terms of sales as Adidas' target consumers (younger people) engage with the company mostly over the mobile device, meaning that the digital engagement is increasingly essential for the group³⁹. Notwithstanding, as already mentioned, **important partnership assets** will be kept and even increased in some segments.

Additionally, we believe that as Adidas is increasing its market share, it will be able to benefit from **scale economies**, including the **spreading of fixed marketing costs**, following the example of the market leader Nike.

This assumption will be further challenged in the sensitivity analysis section.

³⁹ Chief Executive

WACC & Growth rate

To discount the company cash flows we have to determine the **weighted average cost of capital** (WACC), that has as inputs the **cost of equity**- that is calculated under the **Capital Asset Pricing Model** (CAPM)- **cost of debt** and the respective target **Debt to Equity** ratio.

The CAPM model has as inputs a **risk-free rate**, a **market risk premium**, and a **beta**. The risk-free rate of 0.43%⁴⁰ is based on a 10-year German government bond, since it is denominated in the same currency as cash flows and is perceived as a risk-free asset. For the market risk-premium, we used the generally accepted 5.5%⁴¹ average as suggested by common literature. The beta estimation is based on choosing comparable firms that are exposed to the same risk profile as Adidas. We selected Nike, Puma and Under Armour since they are branded sports apparel & footwear companies and are influenced by the same economic and industry impacts. First of all, we regressed each company's stock excess returns against an Index to determine raw beta⁴². The chosen index was the **MSCI World in US\$** given the fact that most shareholders are institutional investors coming from North America. Then, in order to unlever each beta, we used the **current market debt-to-equity ratio** of each company⁴³. Moreover, since unlevered betas focus solely on operating risk, they can be averaged across competitors⁴⁴. Finally, we arrived at a Relevered beta of 0.49⁴⁵.

For the **target Debt to Equity** ratio it was assumed the current market Debt to Equity ratio of 5% since Adidas aims to maintain this ratio relatively constant over the next few years, which let us confident in using the WACC methodology.

For the cost of debt, we added a **debt premium** based on the **default probability of Adidas' bonds** which is 0.8%⁴⁶ to the risk-free rate. This gives us a cost of debt before tax of 1.22% and a cost of debt after tax of 0.83%.

Putting all these assumptions in place, we arrive at a cost of equity of 3.1% and a WACC of 3%.

As a growth rate for the terminal value, we estimated a weighted average of the long-term GDP growth rate forecast by segment/geography, weighted by the percentage that each segment has on the overall company revenues. Terminal

Exhibit 52: WACC inputs

Wacc	3,0%
g	1,15%
After Tax cost of debt	0,83%
Target D/E	5%
Cost of equity	3,1%
Beta	0,49
Risk-free rate	0,43%
Market risk premium	5,50%

Source: Bloomberg; Mckinsey Valuation;
Analyst estimates

⁴⁰ Source: Bloomberg

⁴¹ Source: Mckinsey Valuation "Measuring and Managing the Value of Companies"

⁴² Rolling beta (3-year period from 28/02/2013 – 30/12/2015)

⁴³ This ratio was computed using book value of debt for each company, since we consider good proxies for market values (yield to maturity close to coupon rate)

⁴⁴ Includes Adidas and its chosen competitors

⁴⁵ Relevered beta is computed by multiplying industry average unlevered beta by 1 plus the target Debt to Equity ratio

⁴⁶ Source: Bloomberg

growth rate was estimated to be 1,15%. Both WACC and the terminal growth rate will be further challenged in the sensitivity analysis section.

Valuation outcome

Our model discloses a **buy recommendation** to Adidas AG at a YE 2018 target share price of 197€ (an upside of 18% to its current share price of 167€).

We arrived to an **enterprise value** of 43 673 million € from where it was subtracted debt and debt equivalents and non-controlling interests leading to an **equity value** of 41 236 million €. We also expect a **Total shareholder return of 19%**, which includes a “cash” gain for shareholders of 1,6%.

Multiples Valuation

Exhibit 53: Multiples valuation

	P/E
Adidas	26x
Nike	26x
Puma	50x
Under Armour	28x
Average	35x
Implied share price	224x

Source: Bloomberg; Yahoo Finance;
Analyst estimates
As of 02/01/2018

We computed a multiples valuation in order to better understand the market perception on other companies from the sportswear industry in comparison to Adidas's value. The companies chosen for this analysis were the same previously mentioned in the competition section given that those are the ones having the same sources of revenues and therefore the ones that make sense to compare with.

We used a **Price to Earnings**⁴⁷ ratio, which indicates how much investors are willing to pay per Euro of earnings. Our analysis shows that Adidas' share price of 224€ is much higher than its current price of 167€. This is a consequence of its lower P/E relatively to the average of its peers (see Exhibit 53). From our point of view, this reflects that Adidas is being undervalued by the market, being in line with our DCF valuation.

Key risks/ Challenges

It is paramount in a valuation model to consider the **risks and challenges** inherent to a business. In this section we highlight some of the risks that, if verified, could weaken our vision and forecasts on Adidas' operations.

- **Inventory:** Lead time estimation is critical for the success of the supply chain. On one hand there is the risk of **overestimating demand** that could result in buying huge quantities of unwanted stock leading to an excess of inventory for the company as well as reduced liquidity due to higher levels of operating working capital. On the other hand, **underestimating demand** may lead to product scarcity at the point of sale leading to customer deceptions and missed sales opportunities. Nevertheless, as already mentioned, Adidas has recently been focusing on speed, and in our forecasts, we assumed that the group would

⁴⁷ Trailing twelve months

be able to slightly reduce the number of days inventories stay on the shelves. However, if by any reason the company is not able to reach these levels, we would be forced to lower our expectations.⁴⁸

- **Donald Trump administration:** The group has the clear ambition of investing heavily in the US market in order to boost sales. Although, so far, Trump administration has done nothing regarding **import tariffs** for companies that move their productions outside the US, it is an issue that should be present since it could hurt Adidas' sales in the country. Furthermore, the biggest competitors in this region are Nike and Under Armour, two American companies that would benefit and gain market share if Trump goes ahead with this policy.⁴⁹
- **Reebok restructuring plan failure:** As already mentioned, Reebok is under a restructuring plan. In May 2017, **Adidas CEO**, Kasper Rorsted, **rejected a call** by some shareholders to **sell Reebok**⁵⁰. Shareholders were scared with Reebok results from last year (only 1,4% revenue growth) and are pressing the group to focus solely on the adidas brand. However, Kasper Rorsted made it clear that the group is **very confident** of the **strategic position** of the brand and he is convinced the measures in the **restructuring plan are going to succeed**. In our model we didn't include the possibility of Reebok divestiture as we believe it will not be a possibility, at least in the near future.

Scenario Analysis

Bearing in mind that our previously described assumptions and key risks impact the results of our model, we decided to conduct a set of **three different scenarios** allocating probabilities of occurrence to some of these assumptions and risks.

Our base scenario is the one included in our DCF model from which we believe has the highest probability of occurrence (70%). This scenario assumes **improvements at inventory levels**, decreasing from the current 139 days of sales inventory to 126, and it also assumes that Adidas will continuously **increasing** its **market share** in the **North America** market, meaning that import tariffs will not be implemented by Trump's administration. These scenario gives us a share price for YE 2018 of **203€** representing a total shareholder return⁵¹ of **23%**.

For our worst scenario, we attributed a 15% probability of happening. Here, we included what we think is the **worst case** in terms of **days sales inventories**, increasing from the current 139 days to 150 days, as we could have been very

⁴⁸ This risk is included in the scenario analysis

⁴⁹ This risk is included in the scenario analysis

⁵⁰ Source: Reuters

⁵¹ Includes capital gain and "cash" gain

optimistic in this assumption, perhaps influenced by the company ambition to focus on speed. The risk of the implementation of import tariffs for companies that move their productions outside the US by Trump's administration is presented in this scenario, where **North America market shares** are expected to **decrease** from the expected 4% in 2017 to only 2,5%. These scenario gives us a share price for YE 2018 of **153€** representing a negative total shareholder return of **7%**, what would change our recommendation from buy to sell.

Lastly, our optimistic case scenario (15% probability) projects **sales in North America** to have even **higher growth rates**, with market share increasing from the expected 4% in 2017 to 6%. This scenario gives us a share price for YE 2018 of **211€** representing a total shareholder return of **28%**, reinforcing our buy recommendation. Combining all the scenarios in place, and applying the respective probabilities, we get an expected target price of **197€**, implying a total shareholder return of **19%**.

Exhibit 54: Scenario analysis

	Probability	North America market share	Days Sales Inventory	Price €	Total shareholder return	Recommendation
Base Scenario	70%	5,4%	126	203	23%	BUY
Worst Scenario	15%	2,5%	150	153	-7%	SELL
Best Scenario	15%	6,0%	126	211	28%	BUY
Expected share price				197	19%	BUY

Source: Analyst estimates

Sensitivity analysis

In this section, we will test some of the inputs with the most impact for the valuation model, as well as assumptions that we are more unsure about. We first computed a sensitivity analysis of the **target price** relative to the **WACC** and to the **growth rate** (Exhibit 55). One of the inputs of the WACC is Adidas relevered beta of 0,49 that is very different from Adidas rolling beta of 0,79. However, we decided to still use the relevered beta, taking into account competitors, given the **high volatility** observed in Adidas' rolling beta **confidence interval** [0.36;1,23]. Regarding the growth rate, it is quite uncertain and unpredictable, however for a mature company like Adidas, long-term rates are not expected to grow at high levels. Thus, a 0,4% confidence interval was set in the sensitivity analysis for the growth rate.

From this analysis, we can see that the target price is very sensitive to changes on both assumptions, varying between **151€** and **286€** per share. Still, most of the values obtained don't change our recommendation.

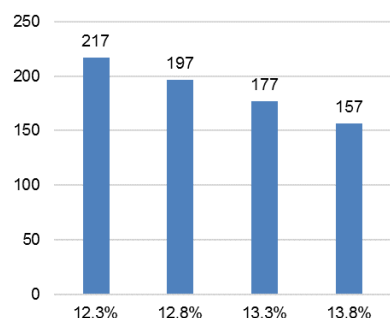
Another assumption we want to challenge with a sensitivity analysis is the **% of revenue spent on marketing and point of sale investments**. Those are the most important costs to a fashion company like Adidas that highly depends on the way brands are perceived by consumers. We focused only on adidas brand

Exhibit 55: Sensitivity analysis: WACC vs terminal growth rate

		Growth rate		
		0,95%	1,15%	1,35%
W A C C	2,6%	224	251	286
	2,8%	200	221	247
	3,0%	180	197	217
	3,2%	165	178	194
	3,4%	151	162	175

Source: Analysts estimates

Exhibit 56: Sensitivity analysis: Target price vs % adidas' revenues spent on marketing and point of sales investments



Source: Analysts estimates

and observed that in the last two years, this ratio decreased from **14.5%** to **13.1%**. This follows the company strategy of improving its marketing/point-of-sale efficiency. We forecast this ratio to decrease in 2017 to **12.8%** and to be kept constant over the forecasted period. However, we are not sure whether the company will be able to continue this efficiency levels. What we see from our sensitivity analysis is that with the range of **12,3%** and **13.8%** of adidas net sales, the price ranges vary from **157€** to **217€**. This demonstrates how important it is for the group to decrease this efficiency measure in the future.

Additional Comments

It's quite uncertain whether Adidas will be able to maintain its momentum in the long-run since it is possible that **Nike** will quickly adjust itself and **react**, doing the necessary to keep the distance in the sector. However, and given the information available, we believe that exist **substantial evidences** showing that Adidas will **keep on getting share from rivals** in the next few years and therefore being able to generate high returns.

Adidas has achieved extraordinary value creation over the past few years what can be observed through the **high levels of Return on Invested Capital**⁵² (see Exhibit 57). We forecast these values to slightly improve in the short-term reinforcing the value Adidas has been able to generate. Nonetheless, **Nike** still has a **stronger competitive advantage** reflected in **higher past ROIC** levels.

Exhibit 57: Adidas vs Nike ROIC %

	2013A	2014A	2015A	2016A	2017F	2018F	2019F	2020F
ROIC Adidas	15,8%	10,5%	12,0%	16,3%	17,1%	17,4%	16,2%	14,9%
ROIC Nike	21,3%	21,8%	25,0%	26,6%				

Source: Company data; Analysts estimates; morningstar

Adidas reached an important competitive advantage given that customers are willing to pay a premium based on the brand

⁵² Adidas' ROIC was calculated dividing NOPLAT of the current year by Invested Capital from previous year

Appendix

Financial Statements- Balance Sheet

Balance Sheet Forecast

(€ in millions)

	2012A	2013A	2014A	2015A	2016A	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F
Assets															
Cash and cash equivalents	1 670	1 587	1 683	1 365	1 510	2 568	2 931	3 000	2 871	3 510	3 809	4 067	4 279	4 443	4 552
Operating Cash	446	435	436	507	579	650	706	765	828	876	924	969	1 014	1 056	1 096
Excess cash	1 224	1 152	1 247	858	931	1 919	2 225	2 235	2 043	2 633	2 885	3 097	3 266	3 387	3 457
Short-term financial assets	265	41	5	5	5	7	7	8	8	9	9	10	10	11	11
Accounts receivable	1 688	1 809	1 946	2 049	2 200	2 470	2 685	2 909	3 149	3 669	3 866	4 059	4 244	4 421	4 587
Other current financial assets	192	183	398	367	729	818	890	964	1 043	1 104	1 163	1 221	1 277	1 330	1 380
Inventories	2 486	2 634	2 526	3 113	3 763	4 036	4 397	4 771	5 167	5 103	5 358	5 603	5 835	6 051	6 251
Income tax receivables	76	86	92	97	98	124	135	146	158	167	176	185	193	201	209
Other current assets	489	506	425	489	580	637	692	750	812	859	905	950	994	1 035	1 074
Prepaid expenses	231	236	194	218	311	305	332	360	389	412	434	456	476	496	515
Tax receivables other than income taxes	136	133	129	174	180	206	224	242	262	278	293	307	321	335	347
Sundry	123	138	103	106	97	133	145	157	170	179	189	198	207	216	224
Less accumulated allowances	-1	-1	-2	-8	-8	-7	-8	-9	-9	-10	-11	-11	-12	-12	-12
Assets classified as held for sale	11	11	272	12	0	156	0	0	0	0	0	0	0	0	0
Total current assets	6 877	6 857	7 347	7 497	8 885	10 816	11 736	12 548	13 208	14 421	15 287	16 094	16 832	17 492	18 064
Property, plant and equipment	1 095	1 238	1 454	1 638	1 915	2 257	2 707	3 308	4 124	4 512	4 976	5 519	6 146	6 861	7 667
Goodwill	1 281	1 204	1 169	1 392	1 412	1 412	1 412	1 412	1 412	1 412	1 412	1 412	1 412	1 412	1 412
Trademarks	1 484	1 419	1 432	1 628	1 680	1 707	1 855	2 010	2 176	2 302	2 426	2 547	2 663	2 774	2 878
Other intangible assets	167	164	162	188	167	223	243	263	285	301	317	333	348	363	376
Long-term financial assets	112	120	129	140	194	196	214	231	250	265	279	293	306	319	331
Other non-current financial assets	21	30	42	99	96	57	62	67	72	76	81	85	88	92	96
Deferred tax assets	528	486	577	637	732	832	905	980	1 061	1 123	1 183	1 242	1 299	1 353	1 404
Other non-current assets	86	81	105	124	94	140	152	165	179	189	199	209	219	228	237
Total non-current assets	4 774	4 742	5 070	5 846	6 290	6 824	7 549	8 437	9 559	10 181	10 874	11 640	12 482	13 402	14 401
Total assets	11 651	11 599	12 417	13 343	15 175	17 640	19 285	20 985	22 767	24 603	26 161	27 734	29 314	30 894	32 465
Liabilities and equity															
Short-term borrowings	280	681	288	366	636	714	784	856	931	1 002	1 076	1 152	1 231	1 312	1 395
Accounts payable	1 790	1 825	1 652	2 024	2 496	2 764	3 011	3 267	3 538	4 042	4 245	4 438	4 622	4 794	4 952
Other current financial liabilities	83	113	91	143	201	446	485	526	569	602	635	666	696	725	753
Income taxes	275	240	294	359	402	450	489	530	573	607	639	671	702	731	758
Other current provisions	563	450	470	456	573	642	698	757	819	867	913	959	1 002	1 044	1 084
Current accrued liabilities	1 084	1 147	1 249	1 684	2 023	2 674	2 907	3 150	3 409	3 607	3 801	3 990	4 172	4 345	4 508
Goods and Services not yet invoiced	429	460	485	590	699	785	853	924	1 000	1 059	1 116	1 171	1 224	1 275	1 323
Marketing and sales	311	348	440	686	746	1 085	1 180	1 279	1 384	1 464	1 543	1 620	1 694	1 764	1 831
Personnel	293	293	284	371	531	773	840	910	985	1 042	1 098	1 153	1 206	1 256	1 303
Sundry	51	46	40	37	47	31	34	37	40	42	44	46	48	50	51
Other current liabilities	299	276	287	331	434	446	485	526	569	602	635	666	696	725	753
Liabilities classified as held for sale	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
Total current liabilities	4 374	4 732	4 378	5 363	6 765	8 137	8 859	9 611	10 409	11 330	11 943	12 542	13 122	13 677	14 203
Long-term borrowings	1 207	653	1 584	1 463	982	1 103	1 211	1 322	1 438	1 547	1 661	1 779	1 900	2 026	2 155
Other non-current financial liabilities	17	22	9	18	22	20	26	28	30	32	34	36	37	39	40
Pensions and similar obligations	251	255	284	273	355	390	424	460	498	527	555	583	609	635	658
Deferred tax liabilities	368	338	390	368	387	496	539	584	632	669	705	740	773	805	836
Other non-current provisions	69	25	38	50	44	57	62	67	72	76	81	85	88	92	96
Non-current accrued liabilities	40	64	81	120	120	136	148	161	174	184	194	204	213	222	230
Other non-current liabilities	34	29	35	40	46	52	56	61	66	70	74	77	81	84	87
Total non-current liabilities	1 986	1 386	2 422	2 332	1 956	2 254	2 466	2 683	2 910	3 105	3 302	3 502	3 702	3 903	4 102
Share capital	209	209	204	200	201	203	203	203	203	203	203	203	203	203	203
Reserves	641	321	581	592	749	822	893	968	1 047	1 108	1 168	1 226	1 282	1 335	1 385
Retained earnings	4 454	4 959	4 839	4 874	5 521	6 242	6 881	7 538	8 215	8 874	9 562	10 278	11 022	11 793	12 589
Shareholders' equity	5 304	5 489	5 624	5 666	6 471	7 266	7 977	8 708	9 465	10 185	10 932	11 707	12 507	13 331	14 177
Non-controlling interests	(13)	(8)	(7)	(18)	(17)	(17)	(17)	(17)	(17)	(17)	(17)	(17)	(17)	(17)	(17)
Total equity	5 291	5 481	5 618	5 648	6 454	7 249	7 960	8 691	9 448	10 168	10 915	11 690	12 490	13 314	14 160
Total liabilities and equity	11 651	11 599	12 417	13 343	15 175	17 640	19 285	20 985	22 767	24 603	26 161	27 734	29 314	30 894	32 465

Financial Statements- Income Statement

Income Statement Forecast

	2012A	2013A	2014A	2015A	2016A	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F
€ in millions															
Net sales	14 883	14 492	14 534	16 914	19 290	21 656	23 540	25 508	27 609	29 216	30 786	32 316	33 791	35 198	36 523
Cost of sales	7 780	7 352	7 610	8 747	9 911	10 973	11 955	12 973	14 049	14 817	15 558	16 269	16 942	17 571	18 149
Gross profit	7 103	7 140	6 924	8 167	9 379	10 683	11 585	12 535	13 560	14 399	15 228	16 047	16 849	17 627	18 373
Royalty and commission income	105	104	102	119	109	142	155	168	181	192	202	212	222	231	240
Other operating income	127	143	139	98	266	166	181	196	212	224	236	248	259	270	280
Expenditure for marketing investments and Point-of-Sale	1 806	1 797	1 923	2 348	2 521	2 793	3 035	3 288	3 557	3 765	3 967	4 165	4 355	4 536	4 707
Marketing overhead	445	425	427	554	684	768	835	904	979	1 036	1 092	1 146	1 198	1 248	1 295
Sales force	1 885	1 890	1 915	2 040	2 237	2 490	2 683	2 882	3 091	3 242	3 385	3 521	3 648	3 765	3 870
Logistics	750	766	763	859	967	1 093	1 188	1 287	1 393	1 474	1 553	1 631	1 705	1 776	1 843
Research and development	128	128	126	139	164	183	199	216	234	247	261	273	286	298	309
Central administration	1 136	1 127	1 050	1 350	1 690	1 984	2 251	2 541	2 861	3 086	3 313	3 542	3 771	3 999	4 222
Depreciation	214	236	265	284	308	438	576	770	1 044	497	593	695	803	915	1 032
Amortisation and impairment losses on other intangible assets	49	52	58	70	80	90	98	106	115	121	128	134	140	146	152
Other operating expenses	6 150	6 133	6 204	7 290	8 263	9 311	10 190	11 117	12 115	12 850	13 571	14 278	14 964	15 622	16 247
Goodwill impairment losses	265	52	78	34	0	0	0	0	0	0	0	0	0	0	0
Operating profit	920	1 202	883	1 060	1 491	1 681	1 731	1 781	1 839	1 966	2 095	2 229	2 366	2 506	2 647
Financial income	36	26	19	46	28	43	44	48	52	56	60	63	66	69	72
Financial expenses	105	94	67	67	74	68	77	84	92	100	107	115	124	132	141
Income before taxes	851	1 134	835	1 039	1 445	1 656	1 698	1 745	1 799	1 922	2 048	2 177	2 309	2 443	2 578
Income taxes	327	344	271	353	426	528	542	557	574	613	653	694	737	779	822
Net income from continuing operations	524	790	564	686	1 019	1 128	1 156	1 188	1 225	1 309	1 394	1 482	1 572	1 664	1 756
Gains/(losses) from discontinued operations, net of tax	0	17	-68	-46	1	-217	0	0	0	0	0	0	0	0	0
Net income	524	807	496	640	1 020	911	1 156	1 188	1 225	1 309	1 394	1 482	1 572	1 664	1 756
Net income attributable to shareholders	526	804	490	634	1 018	904	1 150	1 181	1 217	1 301	1 385	1 473	1 563	1 653	1 745
Net income attributable to non-controlling interests	-2	3	6	6	2	6	7	7	8	8	9	9	10	10	11
Remeasurements of defined benefit plans, net of tax	-26	5	-57	8	-60	-60	-60	-60	-60	-60	-60	-60	-60	-60	-60
Net gain/(loss) on cash flow hedges, net of tax	-134	-13	211	-118	87	87	87	87	87	87	87	87	87	87	87
Reclassification of foreign currency differences on loss of significant influence	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Currency translation differences	-43	-309	104	129	71	71	71	71	71	71	71	71	71	71	71
Other comprehensive income	-203	-317	258	24	98	98	98	98	98	98	98	98	98	98	98
Total comprehensive income	321	490	754	664	1 118	1 009	1 254	1 286	1 323	1 407	1 492	1 580	1 670	1 762	1 854
Attributable to shareholders of adidas AG	321	484	749	659	1 116	1 007	1 252	1 284	1 321	1 405	1 490	1 578	1 668	1 760	1 852
Attributable to non-controlling interests	0	6	5	5	2	2	2	2	2	2	2	2	2	2	2

Financial Statements- Cash Flow Statement

Cash Flow map

	2013A	2014A	2015A	2016A	2017F	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F
NOPLAT	836	597	700	1 050	1 145	1 178	1 213	1 252	1 339	1 427	1 518	1 611	1 707	1 803
Depreciation	236	265	284	308	438	576	770	1 044	497	593	695	803	915	1 032
Amortisation and impairment losses on other intangible assets	52	58	70	80	90	98	106	115	121	128	134	140	146	152
Gross Cash Flow	1 124	920	1 054	1 438	1 672	1 852	2 088	2 411	1 957	2 148	2 348	2 555	2 768	2 986
Change in Net Working Capital	-357	59	71	110	352	-85	-88	-92	256	-47	-45	-43	-40	-37
Net capital expenditures	-379	-481	-468	-585	-779	-1 026	-1 371	-1 860	-886	-1 057	-1 239	-1 430	-1 631	-1 838
Investment in goodwill	77	35	-223	-20	0	0	0	0	0	0	0	0	0	0
Investment in net intangibles (trademarks and other intangible assets)	16	-69	-292	-111	-173	-266	-281	-302	-265	-268	-271	-272	-272	-270
Change in other non-current operating assets, net of non-current liabilities	-8	-27	-46	-46	-3	-20	-21	-23	-17	-17	-16	-16	-15	-14
Gross Investment	-651	-483	-957	-652	-604	-1 397	-1 761	-2 277	-912	-1 389	-1 571	-1 761	-1 957	-2 159
Free Cash Flow from operations	473	437	97	786	1 068	456	327	134	1 045	760	777	794	811	828
Total Free Cash Flow available to investors	473	437	97	786	1 068	456	327	134	1 045	760	777	794	811	828
Currency translation differences	-309	104	129	71	71	71	71	71	71	71	71	71	71	71
Reclassification of foreign currency differences on loss of significant influence	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Remeasurements of defined benefit plans, net of tax	5	-57	8	-60	-60	-60	-60	-60	-60	-60	-60	-60	-60	-60
Net gain/(loss) on cash flow hedges, net of tax	-13	211	-118	87	87	87	87	87	87	87	87	87	87	87
Change in Pensions and similar obligations	4	29	-11	82	35	34	35	38	29	28	28	27	25	24
Change in Short-term financial assets	224	36	0	0	-2	-1	-1	-1	0	0	0	0	0	0
Change in Other current financial assets	9	-215	31	-362	-89	-71	-74	-79	-61	-59	-58	-56	-53	-50
Change in Assets classified as held for sale	0	-261	260	12	-156	156	0	0	0	0	0	0	0	0
Change in Long-term financial assets	-8	-9	-11	-54	-2	-17	-18	-19	-15	-14	-14	-13	-13	-12
Change in Other non-current financial assets net of financial liabilities	13	-25	-48	7	38	1	-3	-3	-2	-2	-2	-2	-2	-2
Change in Other current financial liabilities	30	-22	52	58	245	39	41	43	33	32	32	30	29	27
Change in Liabilities classified as held for sale	-17	46	-46	0	0	0	0	0	0	0	0	0	0	0
Change in excess cash	71	-95	389	-74	-987	-306	-10	192	-591	-252	-212	-169	-121	-70
After tax Financial Income	18	13	31	19	30	30	33	36	38	41	43	45	47	49
Cash flows from/to financing parties	27	-245	671	-213	-791	-38	101	304	-470	-129	-87	-40	10	64
Financial Expense	-94	-67	-67	-74	-68	-77	-84	-92	-100	-107	-115	-124	-132	-141
Tax Shield	30	21	21	24	22	24	27	29	32	34	37	39	42	45
Change in Total Debt	-153	538	-43	-211	199	178	183	190	180	187	194	201	207	212
Flows to debt holders	-217	492	-89	-261	153	126	126	127	112	114	116	116	117	116
Net Changes in Equity	-283	-685	-680	-311	-431	-544	-555	-566	-687	-745	-806	-870	-937	-1 008
Flows to equity holders	-283	-685	-680	-311	-431	-544	-555	-566	-687	-745	-806	-870	-937	-1 008

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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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