

A Work Project, presented as part of the requirements for the Award of a Master Degree in Finance from the
NOVA – School of Business and Economics.

**Market Momentum and Trends:
Leveraging digitalization through client experiences**

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A Project carried out on the Master in Finance Program, under the supervision of:

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This work project presents an equity research of Nike. The objective of this research is to evaluate Nike's stock price as of May 2020. In our analysis, we have used the Discounted Cash Flow Model to value the company, comparing it with the current share price as to assess whether the market is overvaluing, undervaluing or correctly valuing Nike's share price. Our research found that the stock price is overvalued. This conclusion is related with market momentum and the implications of trends such as Athleisure, Women Participation, E-commerce, Controversial Marketing and Sustainable Fashion. The report takes a deeper look into these trends and how they impact the Sportswear industry and Nike.

Keywords: Nike, Discounted Cash Flow Model, Innovation, Digitalization

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NIKE, INC.

APPAREL & FOOTWEAR

COMPANY REPORT

JANUARY 3RD, 2020

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Market Momentum and Trends

Leveraging digitalization through client experiences

- Our investment recommendation for NIKE is Sell, with a target price of \$85.95. We believe the market is overestimating the industry, and consequently NIKE, mostly because the Athleisure trend is booming.
- Increase in physical and mental health consciousness, together with women participation in sports, fashion casualization trend and growth of E-commerce, are expanding Sportswear industry size, expected to reach \$463bn by 2023.
- The sportswear industry perceives a market opportunity in Emerging Markets, especially in China, which has started booming and is expected to increase at a CAGR of 9.9% until 2023, reaching a market size of \$64.4bn.
- NIKE's leading position in North America and China will majorly sustain the company's growth in the upcoming years, together with NIKE's digital transformation and evolution of E-commerce in the retail business.

NIKE, INC. Company Description

NIKE is an American global company operating in the Athletic Footwear and Apparel Industry. The company has three business segments (footwear, apparel, and equipment) and nine product offers (Running, Nike Basketball, the Jordan Brand, Football, Men's Training, Women's Training, Action Sports, Sportswear and Golf). The brand's products are available through different distribution channels in four regions worldwide (EMEA, North America, Greater China, and APLA).

Recommendation: **SELL**

Vs Previous Recommendation **HOLD**

Price Target FY20: **85.95 \$**

Price (as of 31-Dec-2019) **101.31 \$**

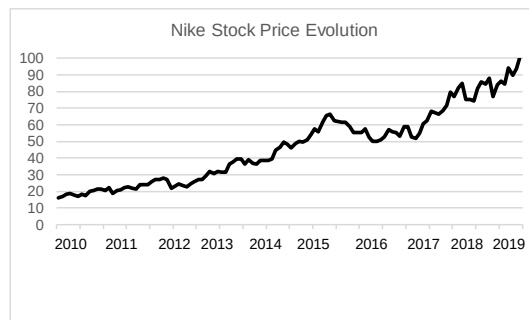
Reuters: 02/01/2020

52-week range (\$) 73.34-101.57

Market Cap (\$m) 158 150.211856

Outstanding Shares (m) 1 561.052333

Source: Reuters Eikon



Source: Reuters Eikon

(Values in \$ millions)	2017	2018	2019
Revenues	34,350	36,397	39,117
EBITDA	5,661	5,153	5,560
Net Profit	4,240	1,933	4,029
Net Debt	(2,377)	(1,435)	(1,184)
Working Capital	10,587	9,094	8,659
EPS (\$)	2.51	1.17	2.49
P/E	21.1	61.4	31.0
Net Debt/ EBITDA	(0.42)x	(0.28)x	(0.21)x
ROE	34.4%	17.4%	42.7%

Source: NIKE Annual Report

Table of Contents

EXECUTIVE SUMMARY	3
COMPANY OVERVIEW	4
THE SECTOR	7
1. OVERVIEW.....	7
2. COMPETITORS.....	8
MAIN DRIVERS	12
E-COMMERCE	12
ATHLEISURE	13
WOMEN PARTICIPATION	14
MARKETING CAMPAIGNS.....	14
SUSTAINABLE FASHION	15
GEOGRAPHICAL REGIONS.....	17
NORTH AMERICA.....	17
EMEA.....	18
GREATER CHINA	19
APLA.....	20
VALUATION.....	21
REVENUES	21
EXPENSES.....	23
BALANCE SHEET ITEMS	24
WACC	24
FREE CASH FLOW, TERMINAL VALUE AND ENTERPRISE VALUE ...	25
MULTIPLES VALUATION MODEL.....	26
APPENDIX	28
DISCLOSURES AND DISCLAIMERS	30

Executive summary

This thesis has the objective of evaluating NIKE's company stock as of May 2020.

For this purpose, the most suitable methodology is to carry out a Discounted Cash Flow Model and evaluate it using a Relative Valuation approach such as the Multiples Model.

In the last four years, the company has had a positive performance in the Footwear market, increasing the market share to 27.4% in 2019 (compared with 26.94% in 2018). The company's long-term performance is optimistic, mainly related with a growing digital capability and a prioritization of channels that are direct to consumers.

Market trends such as the increase in mental and physical health consciousness, athleisure fashion and the expansion of E-commerce in the retail business are having a positive impact in the Sportswear industry. Besides, Emerging Markets are creating new opportunities in the sector, especially China that is expected to reach a market size of \$64.4bn by 2023, from \$40.1bn in 2018.

NIKE's leading position in North America and Greater China, two major markets, allows the company to have a hedge over its peers, thus creating a comfortable advantage towards the industry. Nonetheless, the industry's fiercely competitive environment requires NIKE to continuously invest in innovation to offer its customers top quality products at reasonable prices.

The brand is well-known for its impactful marketing campaigns, being of great importance for NIKE in order to spread its mission, values, and beliefs with the market and thus strengthen the proximity with consumers. NIKE's carefully planned and executed advertising campaigns are extremely important to differentiate NIKE's brand from industry competitors (e.g. Adidas, Under Armour, Puma). NIKE has continuously been able to implement a successful advertisement strategy, originating impactful marketing campaigns that divide opinions and end up going viral on social media platforms as well as other information outlets.



Company Overview

NIKE, Inc. (NIKE) was founded in 1967 by William Jay Bowerman and Philip H. Knight. The company headquarters are in Beaverton, Oregon. The group's main activity is the design, development and worldwide marketing and selling of athletic footwear, apparel, equipment, accessories, and services. NIKE is an American company, being the largest supplier and manufacturer of athletic footwear and apparel in the world. NIKE includes four brands (Nike Brand, Converse, Hurley, and Jordan) and sells its products through retail stores and digital platforms. The digital channel is known as "NIKE Direct" operations. The company is highly known for the "Just Do It" slogan, being also globally known through sponsors such as Cristiano Ronaldo, LeBron James and Roger Federer, and sports teams such as Manchester City and Paris Saint-Germain.

In 2019, the company was considered to have the most valuable global apparel brand, with a \$32.4bn brand value according to Statista data. This achievement resulted from NIKE's capability of differentiation in a highly competitive industry, through its high-quality products and effective marketing strategy. The company focuses intensively on its marketing campaigns, creating impactful stories that inspire consumers and increase customer loyalty towards the company.

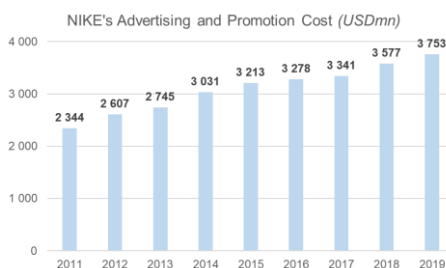


Figure 1. NIKE's Advertising and Promotion Cost, 2011-2019



Figure 2. NIKE's Revenues, 2011-2019

NIKE financial data highlights a growing trend in the revenue stream, supported by an increasing trend in the sportswear market, together with a rise in women's participation and market trends such as athleisure, differentiation, expansion in emerging markets and successful marketing strategies. The company has been capable of increasing its market share in the Footwear market from 26.95% in 2018 to 27.4% in 2019. Nonetheless, NIKE's market share in the Sportswear market decreased from 15.2% in 2018 to 14.8% in 2019.

NIKE is present in North America, Europe, Middle East and Africa (EMEA), Greater China, Asia Pacific and Latin America (APLA). In 2019, the North America Region represents NIKE's main market with 41% of the total revenues, showing a dependency over this market. The product offering ranges from Running, Nike Basketball, the Jordan Brand, Football, Men's Training, Women's Training, Action Sports and Sportswear to Golf. NIKE has three main business segments: footwear, apparel, and equipment. Footwear is the main product segment for the company, representing 62% of total NIKE's revenues in the financial year 2019. The company is highly focused on innovating this segment and improving the quality of its products while maintaining a low production cost.

NIKE's Revenue Share per Geographical Regions in 2019

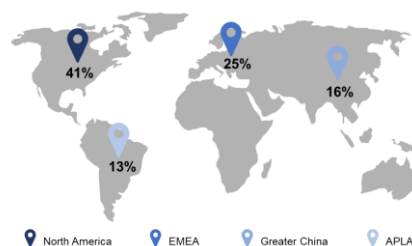


Figure 3. NIKE's Revenue Share per Geographical Region in 2019

Also, NIKE focuses on specializing the type of footwear products according to its activity (e.g. running, hiking, cycling, basketball)

The company sales are heavily dependent on the popularity of sports and fitness activities, as well as the fast-changing trends for apparel and footwear designs. NIKE has established itself as a giant in the industry, being the favorite brand in the U.S. market for sports apparel, both men and women. Thus, NIKE needs to be able to adapt quickly to market trends and rapidly adjust for consumer needs while providing high-quality products and services.

NIKE's products appeal to various types of consumers, not only in terms of product diversity but also in prices. As NIKE offers high-quality products and is specialized in different types of sports activities, it includes expensive products that target professional elite athletes, as well as products of extremely high-quality with top designs targeted for high-income earners. Nonetheless, the company also offers more affordable products, at common prices for the industry. In fact, according to data from Statista, 55.38% of high-income earners say to own apparel, accessories, and shoes from NIKE and 65% of average-income teenagers in the US say to prefer NIKE over other competitors (e.g.: Adidas, Puma, Under Armour).

The company's success in the market is directly related to its business model strategy, which consists in achieving long-term revenue growth through attractive products in line with market trends, long-term consumer relationships, strong marketing strategy, and innovative and appealing consumer experiences.

NIKE's financial statements, highlight a revenue increase of approximately \$6.7bn from the period of 2016 until 2019, representing a Compounded Annual Growth Rate (CAGR) of 6.5%. NIKE's total revenue is composed of three segments, being the primary one the revenue originated by the NIKE Brand, which includes Footwear, Apparel, Equipment and Global Brand Divisions (related with NIKE Brand licensing business), accounting for 95% of the 2019 turnover. The remaining 5% is divided through Converse Brand and Corporate revenue, the latter includes foreign hedge gains and losses generated by entities within the geographic operating segments of NIKE and Converse, but managed through NIKE's central foreign exchange risk management program. From 2018 to 2019 the Nike Brand revenues grew 11%, recording positive growth in all geographical regions. This growth reflects the company's strong market presence and diversified business strategy.

As digital platforms continue rising and transforming the traditional business forms, NIKE continues improving its NIKE Direct operations, which registered a y/y growth of 35% in 2019. This growth is primarily driven by the global

NIKE's Revenue Share per Product Segment in 2019

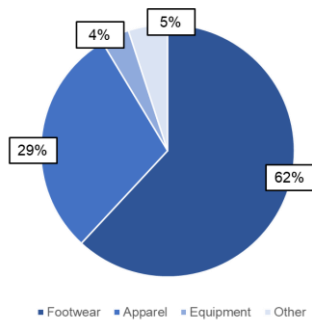


Figure 4. NIKE's Revenue Share per Product Segment in 2019

NIKE's Revenue Change 2018-2019 (USDmn)

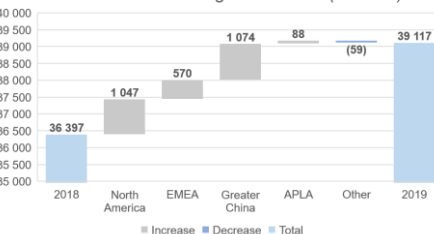


Figure 5. NIKE's Revenue Change 2018-2019

expansion of E-commerce, which is far to come to an end and is outstanding all other channels.

The Cost of Sales represented on average 55% of NIKE's revenue between 2016 and 2019. During this period, this item presented a CAGR of 7.5%. This increase is related to the external production of NIKE products', being mostly manufactured outside the U.S.. NIKE has 112 footwear factories located in 12 countries (e.g.: Vietnam, China, and Indonesia). The footwear products are manufactured using natural and synthetic rubber, plastic compounds, foam cushioning materials, neutral and synthetic leather, nylon, polyester, and canvas. For the apparel segment, NIKE has 334 apparel factories outside of the US, located in 36 countries (China, Vietnam, and Thailand), the apparel products are manufactured using natural and synthetic fabrics and threads, specialized performance fabrics designed to better adjust for adverse conditions and plastic and metal hardware.

NIKE's Cost of Sales (USDmn)

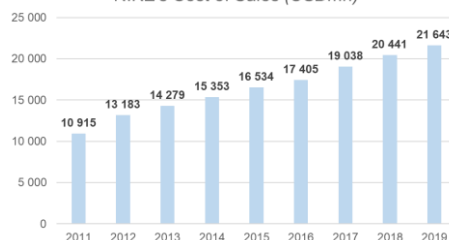


Figure 6. NIKE's Cost of Sales, 2011-2019

NIKE's Gross Profit (USDmn) and Gross Margin (%)

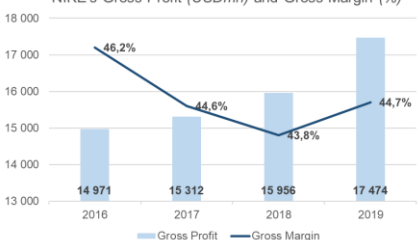


Figure 7. NIKE's Gross Profit and Gross Margin, 2016-2019

NIKE's Gross Profit has increased since 2016, reaching approximately \$17.5bn in 2019. NIKE Gross Margin has decreased between 2016 and 2018 primarily reflecting the downturn in foreign currency exchange rate. However, in 2019 this negative trend was reverted, mainly due to NIKE's efficient cost structure, as revenues had a y/y increase of 7.5%, whilst the cost of sales grew at 5.9% y/y.

The Selling and administrative expenses had a CAGR of 6.9% in the four-year historical horizon. This item includes demand creation expenses, which comprise advertising and promotion costs, related to endorsement contracts, complementary product, television, digital and print advertising, media, brand events, and retail brand presentation. There were also operating overhead expenses associated with wage and benefit-related expenses, R&D investment costs, rents, depreciation and amortization, and professional services. The upward trend reflects an investment in digital capabilities, consumer experiences and products, and brand marketing expected to drive NIKE's long-term strategy.

NIKE's Selling and Administrative Expenses (USDmn)

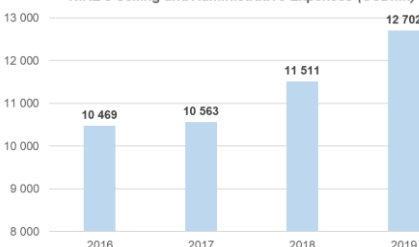


Figure 8. NIKE's Selling and Administrative Expenses, 2016-2019

In June 2017, NIKE announced the Consumer Direct Offense, a strategy designed to better align design with the personality of consumers. The objective is to double the impact of innovation, increasing the speed of product to market and growing direct to consumer channels. NIKE plans to drive growth by becoming closer to consumers, using for this purpose key cities. The execution of this strategy intends to fuel the long-term financial goals until 2023 by achieving: (i) high single-digit revenue growth; (ii) gross margin expansion of 50 basis point; (iii) slight Selling and Administrative expense leverage; (iv) mid-teens earnings per share growth; and (v) low 30% rate of return on invested capital. We believe these goals will be achieved as NIKE highly depends on its brand image and

reputation. Thus, if not achieved, it will bring a bad reputation to the company and investors may perceive that as problematic for the company.

The Sector

1. Overview

NIKE operates in the Sportswear Market, which is a segment of the Apparel and Footwear Industry, valued at \$333bn. In recent years, this market segment has been gaining attention and popularity, consumer preferences' have changed and shifted towards a healthier lifestyle. According to the Global Wellness Report, millennial consumers are more socially conscious and experience-oriented compared with prior generations (e.g. experiences over products, online shopping over physical stores). The modern consumer is changing, however not fundamentally. We believe that consumer preferences are changing due to financial constraints (millennials' net worth fell 34% from 1996)¹ and the profusion of competitive options available in the marketplace through advanced technology.

These changes in consumer preferences continuously force firms in the industry to be aggressive and increase competitiveness in the market, especially in a marketplace where the supply spectrum is quite diverse. Although it is difficult for new entrants to compete with well-established firms, we have seen in recent years that more brands have entered into the sportswear market, from luxury brands such as FENDI and Versace to more affordable brands such as H&M and Oysho.

Footwear and apparel are products that have close substitutes, and in the sportswear segments even more threats exist, increasing the bargaining power of customers. Consumers can practice sports with plain black leggings, a white T-shirt, and sneakers that they found at Walmart or Target.

In contrast, with the appearance of "athleisure" in 2016, sportswear brands become a close substitute for other apparel products. Merriam-Webster dictionary defines "athleisure" as "casual clothing designed to be worn for both exercising and general use". We find that this fashion trend comes associated with the exercise boom, being characterized by a health-conscious consumer, shifting from weight-loss regimes, and approaching an attitude that focuses on improving physical and mental health. In our analysis, we found that 32% of the total adult population, in 2018, attended a gym or health club and that 72.7% of the US population participated in physical activity. In Europe, 40% of the

¹ Deloitte Insights, "The Consumer is changing, but perhaps not how you think", 29/05/2019

population exercised or played a sport at least once a week during the same year.

All-in-all, with the high level of substitutes we find that the key in this industry is quality, innovation, and adaptability. Companies such as NIKE continuously innovate in the raw materials used in the manufacturing of their products to defend their market share.

In fact, to increase margins in this labor-intensive market, companies prefer to invest in production facilities outside of advanced economies into emerging countries, such as Thailand, Indonesia, Vietnam, and China. According to the information available at Euromonitor, the Sportswear market grew 16.47% in revenues from 2016 to 2018, reaching \$333bn in revenues as of 2018. We believe that this upward trend is associated with the new-age consumer attitude and its focus on a healthier and more conscious lifestyle.

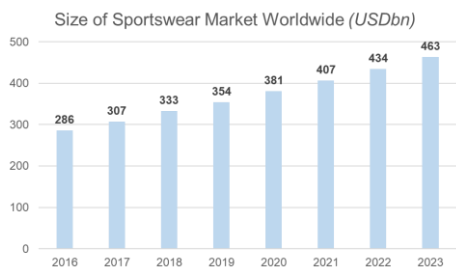


Figure 9. Size of Sportswear Market Worldwide, 2016-2023

According to Euromonitor data, Sportswear sector is expected to grow at a CAGR of 6.8% from 2018 to 2023. We think this projected trend to be realistic considering the new-age consumer behavior, trends, and marketplace digital transformation. The main trends we have identified to be fuelling the growth in the industry for the years to come are athleisure, partnerships and marketing campaigns, sustainable fashion, and digitalization, which will be discussed in more detail in the Main Drivers Section.

In the course of our work, it is important to keep in mind the impact that the Trade-War between the United States and China, may have in the US Sports Apparel and Footwear industry since it concerns two major markets for the industry. According to the Sports and Fitness Association (SFIA), the market is likely to be hit hard by the tariffs, especially because of the negative effects the fourth round of tariffs, set at 10%, imposed by the Trump administration on Chinese-made products is expected to have on the whole industry. Although the risk of intensification of tariffs implemented is still high and remains a sensitive topic, we believe that as the world economy slows down, there is no benefit on intensifying the tariffs already in place. Thus, we expect tariffs to remain at current values or even to be reduced. In fact, as of December 2019, U.S. and China are discussing a trade-deal to repeal certain tariffs, which we expect to have a positive inference.

2. Competitors

As mentioned in the previous bullet 1. *Overview*, this market is extremely competitive and concentrated around two major players, NIKE and Adidas.

These two brands stand out from their peers, fighting between themselves to increase market share and brand value. In 2018, NIKE's market share was 10.9% while Adidas's stood at 6.6%, representing a 4.4 percentage point difference.

The main competitors of NIKE include Adidas Group, VF Corporation, H&M, Inditex, Gap Inc., Sketchers Inc., Under Armour Inc. and Puma, respectively. Nonetheless, companies such as H&M, Inditex and Gap are not of direct comparability with NIKE, since their business model strategies are different, the basket of products offered is quite diverse and sports-related goods are only one of these brands segments. Sketchers operates solely in the Footwear Industry, manufacturing products ranging from heels to sneakers, being one of the top competitors in what concerns footwear. However, as Footwear is only a part of NIKE's business, Sketchers is not considered a comparable.

In our peers' analysis, the selection of NIKE's peers was made taking into consideration the companies' business models, its products, and industries in which it operates. Thus, we considered Adidas Group, VF Corporation, Under Armour and Puma SE.

Adidas



NIKE's main rival is the Adidas Group, with a turnover of \$21.9bn in 2018. In recent years, Adidas has grown faster than NIKE, recording a CAGR of 8.9% from 2016 to 2018, compared with a CAGR of 6.0% for the same period for NIKE's turnover. This growth began with the Stan Smith sneaker update version in 2014 and was reinforced with an expansion of apparel and footwear collections with recognizable brands (e.g. Adidas Original and Yeezy), which were a hit among celebrities and digital celebrities (e.g. Instagrammers and Youtubers).

Adidas' efforts for sustainable and green products receive more attention than those of NIKE. Adidas is one of the founding partners of Parley for the Oceans, intercepting ocean plastic into various products (e.g. UltraBOOST sneakers). The Group has also utilized technology to reduce its environmental footprint by reducing the use of chemicals, energy, and water (e.g. DryDie technology). In 2019, Adidas announced a completely recyclable sneaker, the Futurecraft.Loop, the main idea is for consumers to return the sneaker once it wears out to be transformed into material for the creation of a new pair of sneakers.

All-in-all, although Adidas has been growing considerably in the industry, NIKE is better positioned with an EBITDA 2x higher than Adidas' EBITDA in 2018.

VF Corporation



The second-largest competitor of NIKE is VF Corporation, an American brand that manufactures sports apparel, footwear, and accessories. As of March 2019, the company total revenue stood at \$13.8bn. VF Corporation operates in four different segments: the outdoor segment, the active segment, the work segment, and the jeans segment. VF Corporation includes renowned brands such as Timberland, Eastpak, Jansport, and Northface, accounting for \$9bn of the company revenue as of March 2019.

The financial year of 2019, was a successful year for the company, increasing revenues by 12% y/y, with 5% of revenues' growth being associated with acquisitions conducted during the year. Also, the gross margin increased by 10 percentage points.

In a general overview, we find that VF Corporation's business strategy is focused on gaining market share through M&A, instead of investing in product development and innovation. The company prefers to acquire companies within its operating segments that appear to have in place the necessary capabilities to complement current products, as to reach a broader consumer base.

Under Armour



Under Armour, Inc. is currently the third-largest Sportswear company, with a total turnover of \$5.2bn in 2018, from which 71.9% is generated in North America. The company is focused on sports apparel, footwear, and accessories.

The company's success comes mostly from the innovative use of fabric technologies, eco-friendly operations, and high brand recognition, from both professional athletes and local communities. Under Armour is investing in the digital transformation, just as NIKE, having created for that purpose a segment called the Connected Fitness segment (includes MapMyFitness, MyFitnessPal, and Endomondo), which focus on offering digital fitness subscriptions along with digital advertising.

Under Armour has invested approximately \$543mn in marketing activities in 2018, compared with \$3.6bn invested from NIKE. However, by analyzing the weight of marketing costs on turnover, we conclude that the companies are closer than it may seem. In 2018, the marketing costs of Under Armour represented 10.4% of total turnover and NIKE's represented 9.8% of total turnover.

Between 2017 and 2018, Under Armour has faced a difficult time presenting a net loss of \$48mn and \$46mn, respectively, which were associated with the restructuring plans approved by the company Board of Directors. These plans were designed to align financial resources with the business and optimize operations (e.g. cost-saving initiatives). The *3rd Quarter Earnings Call* shows a positive effect from the restructuring with a net income of \$102mn, an increase in gross margin (~220 percentage points) and underlying cost efficiencies. Under Armour will be able to invest around \$20mn in digital transformation and marketing, which leads us to believe that the company will be targeting Adida's place in the years to come.

Puma SE



Puma SE is a multinational company that manufactures sports apparel, footwear, and accessories. The footwear segment has the biggest impact on the company's turnover, representing 47% of its total in 2018 turnover (~\$4.6bn). From 2017 to 2018 the company increased its consolidated sales by 11%, this increase was found to be related to the re-entry of the company into Basketball after a 20-year absence.

Puma has a long-term mission of becoming the most desirable sportswear company worldwide. The company has been trying to become edgier, more creative, and unique in its designs, collaborating with designer fashion names such as Sergio Rossi and Alexander McQueen. In 2019, the company is prioritizing the IT infrastructures and the economic and environmental sustainability of the business.

Main Drivers

Markets are constantly changing, and Sportswear Market is no exception. As new technologies appear, people's ways of thinking and mindset evolve and market dynamics transform, different drivers appear directing the industry in certain directions.

In Sportswear Market, drivers have also changed and are significantly impacting the sector. In our perspective, the main drivers that currently influence the sector and NIKE's business are E-commerce, athleisure, women's participation in the industry, marketing campaigns and sustainable fashion.

E-Commerce

With the rising of new technologies, businesses started moving towards the digital, giving rise to E-commerce, which refers to the process of buying and selling through digital platforms such as internet and mobile applications. In recent years, E-commerce has significantly increased its popularity allowing for trade on a global scale. The most appealing characteristics of online shopping are the increase in product variety, 24-hours a day platforms' availability and the fact that customers can shop from the comfort of their homes.



Figure 10. Worldwide Retail E-commerce Sales, 2014-2023

Retail E-commerce sales have grown at a CAGR of 21.4% between 2014 and 2019². This increasing trend in E-commerce is one example of the changes that are taking place in the marketplace, where the consumer is becoming more prone to digital channels. To illustrate, most new-age consumers prefer the comfort of their homes when shopping rather than spending 10 min to 1-hour commuting to a shopping center or store where they would spend more time trying to find a specific item. We believe the digital trend in consumption is here to stay, and to disrupt the marketplace dynamics. Although E-commerce has already started being a big phenomenon, there are still several opportunities to be explored, thus this trend is expected to continue growing with double digits.

However, we find that there is still a considerable portion of consumers that have no confidence in digital platforms, either due to lack of trust in the way their personal information is treated or due to lack of know-how to properly use the platforms. Nonetheless, as E-commerce increases its establishment in the market and people become more interested and comfortable with digital shopping, the easier it becomes for skeptic consumers to gain confidence in this

² Statista Data

shopping channel. Simultaneously, we believe E-commerce will further evolve and improve its payment methods, delivery times, security and return policies.

Regarding NIKE, we expect an increase in the revenue share for NIKE Direct in the following years, mainly due to the company's focus on investing and improving its digital platforms and capabilities. Since 2016, NIKE Direct revenues have been growing at a CAGR of 14.4%, and in 2019 represented 32% of the company's total revenue in 2019.

Athleisure

Athleisure is the term used to define a new fashion trend that appeared around 2016. As aforementioned, this trend is defined by the Merriam-Webster dictionary as "casual clothing designed to be worn for both exercising and general use". We find that athleisure is associated with increased awareness around healthier lifestyles, both physical and mentally. Additionally, in recent years we witnessed a boom in digital influencers in several platforms, such as Instagram, Facebook, YouTube and more. Most digital influencers promote healthier lifestyles, focused on fitness and nutrition, as well as mental well-being and wellness. Its followers are then prone to replicate that way of living or get inspired to be more health-conscious.

With the appearance of athleisure, sportswear brands were able to expand their consumer range, becoming a close substitute to other apparel companies in terms of comfort and casual clothing. We believe the aforementioned new consumer focuses more on the design and newness of the products, instead of its activity purpose or specialization in certain sports activities. Thus, for companies in the industry to benefit from athleisure, it is crucial to focus more on the design while maintaining quality at a competitive price. Regarding NIKE, since the brand background is focused on innovation, design, and quality of its products, we expect the company to comfortably adapt and benefit from the athleisure trend, that is here to stay.

In our perspective, for NIKE to take further advantage of athleisure it is advisable to develop strong partnerships with major digital influencers to promote NIKE's products through social media platforms. That way, NIKE would expand its brand awareness and enlarge its costumers' basket, while reducing marketing costs in the future, as most digital influencers request lower costs than professional athletes.

Women Participation

Historically, women's participation in sports activities has slacked behind in comparison to men's participation. However, in recent years, women's participation in sports activities has increased considerably and the norms for women playing sports have been changing around the world for centuries.

In 2019, NIKE announced the "Dream Crazier" ad, which is focused solely on empowering the participation of female athletes in sports. The company has been supporting women in sports for over 50-years and intends to inspire women in their athletic performance and improve their self-esteem.

However, empowering women in sports goes deeper than powerful marketing. Women's bodies are structurally different from men's and NIKE is trying to better understand those different dynamics through research and develop designs that include such dynamics. An important innovation for the company was the introduction of the world's first Pro Hijab for Muslim athletes, which was developed and tested alongside elite and everyday hijab-wearing athletes. This strategy is centered around eliminating the taboo around hijabs and Muslim women in sports while creating a more inclusive space. For female athletes, sports bras are another special need in comparison to men, and NIKE has successfully created a Motion Adapt Bra described as being adaptative and comfortable. The sports bra was designed with a technology that allows the fabric to be soft and flexible during low impact activity but becomes more supportive as intensity increases.

All-in-all, we think NIKE's strategy to be inclusive to women is being positive for the company's revenues, with revenue associated with women's products increasing at a CAGR of 5.4% since 2016.

Marketing Campaigns

The sportswear industry has always been highly dependent on marketing campaigns and this tendency remains unchanged. Knowingly, this industry is very competitive and the development of partnerships, with sports teams, professional athletes and stars, is of high importance. NIKE has been able to differentiate itself by offering high-quality products at competitive prices along with impactful marketing campaigns that allow the company to increase brand awareness and customer loyalty. However, when a marketing campaign turns out to be unsuccessful it is expected for it to harm the company's performance.

temporarily. Thus, it is crucial for NIKE, as well as for other companies in the sector, to have good marketing campaigns.

NIKE has endorsement contracts with athletes, teams or leagues, public figures, and sports organizations associated with their products. The company reflects upon the negative externalities on the brand, sales, and profitability if endorsers were to stop using its products or if reputations and performances became associated with failure or harmful behavior. NIKE expects to spend around \$1mn for years to come with the company's current endorsement contracts.

Sustainable Fashion

In recent years, the fashion industry has shifted from traditional production methods favoring more eco-friendly and cruelty-free alternatives. This shift is long overdue and is currently presenting a growing trend.

Primarily, the traditional production methods are damaging the environment, producing more than 1.2bn tons of greenhouse emissions yearly and consuming more than 98mn tons of oil yearly. The astonishing reality is that most of the clothes produced through this process are rapidly discarded, and in this industry fashion trends have a significant impact. There are plenty of new fashion brands that sell fashionable and quality clothes that do not have such a negative impact on the environment (e.g. Keep Company, Unicorn Goods, Ahimsa). These new brands focus on the ethical production of clothes and footwear by using recycled, upcycled or dead stocked resources.

However, these new ethical alternatives that have been growing in recent years along with the environmental concerns, are not restricted to small clothing manufacturers, instead, it is an industry-wide phenomenon. Brands like H&M and Zara presently sell vegan clothing, and Gucci and Hugo Boss have banned fur products from their stores. Established brands are adapting to this trend and are continuously investing in ethical alternatives to manufacture products that have no damage to the environment and reduce overall waste.

NIKE has joined this movement with a sustainability strategy focused on reducing carbon and waste to zero. The company has developed the Circularity Workbook: Guiding the Future of Design, which intends to share principles that support a call to action for the industry, and according to NIKE the companies in the sector should "all come together and have a more positive impact on our planet". In 2018, NIKE announced to the public Nike Flyleather, a super material made of at least 50% natural leather fibers created to reduce the environmental

footprint of leather manufacturing, which is quite important for NIKE considering its footwear production.

Additionally, since 2010 NIKE has converted more than 6.4bn plastic bottles into apparel and footwear (e.g. Nike Flyknit). As of May 2019, the company has announced plans to shift all of its facilities to renewable energies by 2025, having at the time about 75% of the facilities already converted to using renewable energy.

From our analysis, we found that more companies in the industry are becoming eco-friendly and more sensitive to waste reduction and sustainability. In our perspective, the current environmental concerns and the shift from traditional production towards a zero-waste reduction are expected to reduce the cost of goods sold in the long-run. However, it is important to consider that this trend is very recent and will require intensive investment in an initial phase, not having immediate effects on cost reductions.

Geographical Regions

As aforementioned, NIKE has operating segments in North America, Europe, Middle East and Africa (EMEA), Greater China and Asia Pacific and Latin America (APLA). Considering the dispersity between each geographical region, it is important to analyze each, individually.

North America

North America region includes the United States and Canada, representing 40.7% of NIKE's total revenue in 2019. This region is the largest market where the company operates, amounting to a total revenue of \$15.9bn in the financial year of 2019. Of total revenue in North America, 63.2% corresponds to the Footwear product segment, whilst Apparel and Equipment correspond to 33.1% and 3.8%, respectively. Although NIKE has a dominant position in the North America region, the company has been able to promote further growth within the market, through continuous investments, innovative ideas, adaptability to market trends and strong marketing.

Since 2016, this region has been growing at a CAGR of 2.5%, driven by the athleisure and health and wellness trend. We expect the North America market to continue growing, as sports-inspired clothing becomes more acceptable in social settings and concerns for health and wellness continue increasing as more individuals adopt an active lifestyle. In fact, according to the 2019 Euromonitor International's Health and Nutrition Survey more than 60% of inquired individuals define "Being Healthy" as "Mental well-being", and approximately 45% define it as being "Fitness and endurance".

Although NIKE has a leading position in North America, the company has been losing market share in the USA from 22.2% in 2016 to 19.4% in 2018, and Adidas has taken the opportunity to gain market share reaching 6.5% in 2018³. Nonetheless, as technologies evolve, new market trends appear, more adequate customer experience arises and given the competitive environment in the industry, the market conditions and players can suffer changes at a short-time horizon. Thus, we believe NIKE will regain the market share loss and even increase it further, through its impactful marketing campaigns, improvement of digital platforms, and development of eco-friendly products.

³ Euromonitor data, 2019

EMEA

The second-largest region in terms of revenue for NIKE is EMEA, representing 25% of total revenue in 2019. The EMEA region includes Western Europe, Eastern Europe, Middle East, and Africa. The company revenues in this region have been increasing since 2016 at a CAGR of 9%, reaching a total turnover of \$9.8bn in 2019. Footwear revenue represented 64.1% of EMEA's total revenue in 2019, followed by Apparel with 31.5% and Equipment with 4.4%.

During the historical period (2016-2019), NIKE's market share in Western Europe has remained constant around 14.6%, however, Adidas has dominated this region by registering a market share, on average, 0.7 percentage points superior to NIKE's. As of 2018, Adidas' market share was 15.7%. The Adidas' dominance in this region is mainly justified by the fact that Adidas is a German-based company, while NIKE is a US-based company. Thus, it is expected for Adidas to have an advantage over the European market.

In Eastern Europe, Adidas' predominance in the market is clearer, whilst NIKE's market share has been constant since 2016 at 6.9%. However, it is important to highlight that Adidas' market share has presented a decreasing trend from 13.9% in 2016 to 11.5% in 2018. Since NIKE's direct peers had a small increase in market shares (lower than 0.5pp) or had even a loss in its share, such as the case of Adidas, and 71.1% of market share was represented by companies with lower than 2% of share each, we conclude that this market region has seen in recent years an increase in SME in the Sportswear industry.

In the Middle East and Africa, NIKE's market share has slightly decreased from 11.9% in 2016 to 11.5% in 2018, and direct peers recorded a stable market share over the period.

According to our analysis for this region, we believe that NIKE's revenue growth for EMEA will be sustained by a rising interest in health and fitness. In fact, we have observed that the number of individuals registered in fitness centers and gyms has increased. In 2019, the number of fitness club members increased to 62.2mn, representing a y/y increase of 3.5%⁴. In EMEA, there is a 43% engagement in physical activity in the last two years. Germany is the top country in membership growth (~4.5% in 2019) having 18.9% of the population engaged in physical activity.⁵

Taking this into consideration, we expect sportswear demand in this region to increase, especially for NIKE, since in 2018, it moved its Germany headquarters

⁴ European Health & Fitness Market, Report 2019, Deloitte

⁵ Statista, December 2019

to Berlin. We believe this strategy will prove successful for the long-run market share of NIKE, allowing for an improvement in marketing campaigns and brand interaction with the consumer.

Greater China

In 2019, Greater China represented 15.9% of NIKE's total revenues, amounting to \$6.2bn. This region recorded a significant growth for the period under analysis, with a CAGR of 17.9%. NIKE and Adidas are the leading companies in this region, having in 2018 a combined market share of 42.6% (22.9% market share for NIKE and 19.7% market share for Adidas). Since 2016, NIKE has been able to increase its market share in this region by 2.10 percentage points, by building partnerships with top digital platforms (e.g. Tmall and WeChat), which allows for a stronger relationship with the Chinese consumer.

NIKE has taken many initiatives towards becoming closer to its consumers, the company was the sponsor of the 2019 Shanghai Marathon, it has developed a partnership with China Super League and is currently working with the Ministry of Sports to promote physical education in schools. For this region, NIKE's expansion strategy focuses on having athlete and performance-based marketing, instead of the usual celebrity marketing campaigns that the company is historically known for.

In recent years, Greater China has entered a high-growth position within the Sportswear industry, mainly due to the expansion of fitness and health lifestyle culture and health awareness. NIKE is already established in the region and by taking into consideration the abovementioned initiatives, along with the digital investment intended to create innovative and attractive customer experiences, we expect this region to be the main growth driver for NIKE's business in future years. According to Euromonitor, China's market size is forecasted to increase from \$40.1bn in 2018 to \$64.4bn in 2023, then growing at a CAGR of 9.9%.

Until now, NIKE has been no affected by the China-US trade wars, as the company is slowly shifting its factories from China to Vietnam. However, there is still a large number of NIKE factories located in China. NIKE's financial chief communicated that the company has the flexibility to make adjustments regarding tariffs, and with the recent negotiations coming closer to an agreement, uncertainty about this topic seems to be fading away, which will be positive for NIKE.

APLA

The APLA region includes Asia Pacific and Latin America, representing 13.4% of total revenues in 2019. NIKE's revenues in this region have been increasing since 2016 at a CAGR of 6.8%, amounting to \$5.3bn in 2019. Footwear revenue represented 68.9% of APLA's total revenue in 2019, followed by Apparel with 26.6% and Equipment with 4.5%.

In Asia Pacific, NIKE's market share presents an increasing trend from 14.3% in 2016 to 16.3% in 2018. NIKE is the leading player in this region, albeit Adidas is also well-positioned in Asia Pacific having a 15.5% market share in 2018, being 0.8 percentage points lower than the one presented by NIKE. Therefore, together NIKE and Adidas represent 31.8% of the Sportswear market in this region.

In Latin America, Adidas has been recording a higher market share comparing to NIKE. However, the difference is small (~0.2 percentage points), with Adidas share being 14.0% in 2018 while NIKE's share decreased from 15.8% in 2016 to 13.8% in 2018.

According to Euromonitor, the Sportswear market in APLA is expected to grow at a CAGR of 3%, which we find to be a plausible reasoning due to the growing interest in health and fitness in the region. In addition, Japan's Government has been emphasizing the importance of work-life balance, making work clothes growingly more casual. In fact, suits are no longer required for formal meetings, which has created an opportunity for sportswear brands to continue introducing athleisure product lines.

Valuation

In our analysis, we have decided to conduct NIKE's valuation using the DCF method. The DCF model discounts free cash flows at the weighted average cost of capital (WACC), which will be discussed later in the chapter. Therefore, it is of high importance to correctly conduct the revenue breakdown by its key drivers.

Revenues

The revenue breakdown was conducted in two levels: regional breakdown (North America, EMEA, Greater China, APLA) and segmental breakdown (Footwear, Apparel, Equipment). That is, the revenue for each geographical region was subdivided by product segment.

We find that the main drivers for revenue are prices and quantities. For prices, we took into consideration the regional breakdown, randomly selecting 13 countries from APLA (Australia, Brazil, India, Indonesia, Japan, Mexico, South Korea, Chile, Vietnam, Malaysia, Singapore, Philippines, and Thailand), 3 countries from Greater China (China, Hong Kong, and Taiwan), 2 countries from North America (USA and Canada) and 13 countries from EMEA (Germany, UK, France, Netherlands, Italy, Denmark, Sweden, Portugal, Saudi Arabia, United Arab Emirates, Egypt, Morocco, and South Africa). Following the countries selection, we considered a random sample of approximately 50 products from the company website for each of the three segments (Apparel, Footwear, and Equipment), subdivided by men, women, boys, and girls. During this process, we found necessary to segment according to gender to ensure a more reliable product mix, and we also found that on average women and men products are similarly priced. The objective was to calculate an average price per segment and region. However, since the countries analyzed had different currencies, we conducted an adjustment by converting the average price per country into USD. The output from this estimation is presented in **Table 1**.

As regards to **quantities**, NIKE disclosed no information in the company's Annual Report, hence we estimated them through backward induction.

It is relevant to highlight that prices and quantities for the historical period were only estimated for 2019, since the random sampling was dependent on website access as of October 2019.

After performing the revenue breakdown we performed the forecasts for the future expected revenues. In theory, according to the McKinsey book, the advisable period for forecasts is 10 to 15 years, however considering that NIKE is

Average Price			
\$	Footwear	Apparel	Equipment
North America	108.71	60.60	35.94
EMEA	143.27	83.68	41.17
Greater China	115.34	68.03	68.16
APLA	117.98	58.36	33.64

Table 1. Average Price of Product Segment per Geographical Region

a mature and established company in the industry, we consider a forecasting period of 5 years (2020-2025).

Prices were forecasted having as baseline the nominal expected inflation rate as average consumer prices, until 2024. In our analysis, we have assumed that the main driver for price changes is inflation since in our forecasts we do not expect any significant changes in NIKE product mix to significantly impact the average price. For 2025, as there was no available information on expected inflation according to the IMF DataMapper, we took a conservative approach by assuming a constant 2% inflation rate.

Quantities were forecasted using the retail value of the sportswear industry at current prices in million USD to estimate an average growth for the industry, according to Passport Euromonitor. This assumption is based on the fact that Nike is the leader of the sportswear industry and in recent years the company's growth has been fueled by market momentum. We find there is a clear causality between NIKE's increasing market share and the growing trends of health and wellness in the marketplace along with other trends mentioned in the *Main Drivers Section*. The industry data was available until 2023 and was divided by the aforementioned countries. To reach the quantity growth rate per geographical region, an average of the quantity's growth rate per country was estimated. To obtain the quantity growth per product segment we calculated NIKE's weight of each segment per geographical region and multiplied it by the estimated quantity growth rate of that region. For 2024 and 2025, we considered a conservative approach and assumed a 10% increase compared to the previous year, because the revenue CAGR from 2019 to 2023 is estimated to be around 8% and we believe that NIKE will be able to increase this percentage in the following years.

Overall, the revenue trend in the explicit forecast period implies a 1.5 percentage point decrease from 2019 (7.5% growth) to 2020 (6% growth), reaching a CAGR of 5.4% by 2025. These growth estimates for the long-term are in accordance with NIKE's Consumer Direct Offense defined in 2017, intended to drive growth by leveraging the power of digital technologies. NIKE's Consumer Direct Offense underlies the Triple Double Strategy with the intent of doubling speed to market, direct connections with consumers and the impact of innovation. This strategy is connected with the NIKE Consumer Experience (NCX), which underlies a new retail strategy focusing on direct sales channels, this means that NIKE may reduce the number of retail partners from 30 thousand to 40 which offer superior quality services to clients (online and offline).

Expenses

The cost of sales represented 53.8% of revenues in 2016, increasing 1.5 percentage points in 2019 (55.3% of total revenue). For this item forecast, since the main driver is revenues we have performed a moving average of the historical period weight on turnover, which we then considered to remain stable at 55.6% by 2025. Our forecasts intend to highlight NIKE's ability to maintain its current cost structure trend.

In absolute terms, our assumptions imply an increase from \$21.6bn in 2019 to \$30.5bn in 2025 (at a CAGR of 5,6%). This increase is directly related to NIKE's investment in direct selling channels to consumers, specifically through NIKE Consumer Experience (NCX). NCX offers consumers the opportunity to unlock exclusive NIKE products, free access to partner services, personalized discounts and VIP experiences, through the company app (i.e. NikePlus). Another relevant topic, related to the cost of sales is the Circular Design Guide. As mentioned previously, in May 2019 NIKE announced its sustainability-driven guide at the Copenhagen Fashion Summit, which focuses on eco-friendly production to reduce manufacturing waste in the apparel and footwear industry. The sustainability initiatives have the intention of reducing NIKE's cost of sales in the long-run, however, it requires the creation and optimization of systems that guarantee an efficient and cost-effective reduction in production waste.

Selling and administrative expenses increased between 2017 and 2019, related to investments in data and analytics capabilities, digital commerce platforms and global brand campaigns aimed at increasing brand connection with consumers. According to the information found in the company's annual report this item includes depreciation costs. However, for our analysis, we have discounted depreciation from the Selling and administrative costs to conduct forecasts and to compute NIKE's EBITDA. The analysis of this item established that it is separated between demand creation expenses, which entail costs with advertising, endorsement contracts, complementary products, media costs, and retail brand presentation, and operating overhead expenses, which include wage and administrative related expenses. For our forecast, we considered revenues as the main driver, and estimated it based on the average of the historical period, setting the remaining period costs to be in line with the previously seen trend, since most of the initial investment needed for innovation and acceleration of end-to-end digital transformation already took place between 2017 and 2020.

Balance Sheet Items

In the Balance Sheet forecast we have assumed as constant goodwill, the current portion of long-term debt and notes payable, and have set equal to zero short-term investments, the fair value of derivatives and collateral received from counterparties to hedging instruments.

From analysis to the industry and based on information acquired from the McKinsey book we have considered Operational Cash to be 5% of total revenues, as NIKE is a giant in the retail apparel and footwear industry, thus needing more cash on hand to finance its operations.

The PP&E for NIKE includes lands and improvements, buildings, machinery, equipment and software, leasehold improvements and construction in progress. Future PP&E is estimated as a net sales percentage based on a moving average of the historical period, this was considered to be reasonable because the company is focused on strengthening digital transformation and consumer relations, and based on the Triple Double Strategy there are no reasons to believe NIKE will invest in PP&E in a larger scale.

Inventories are estimated to stabilize around 26% of COGS because as the business channels become increasingly digital, the more stable the holding period will become since NIKE is reducing retailers to those that offer optimal experiences to customers.

The forecasts highlight an increasing investment in CAPEX sustained by the new stores' concepts of NCX, combining digital with physical. These new store concept and the opening/improvements of the company retail network justify the CAPEX estimated values.

WACC

The Weighted Average Cost of Capital is a key component in the DCF valuation model. To estimate the WACC, it is important to consider that the slightest error may lead to large fluctuations in the expected stock price and one of its main limitations is valuing companies with unstable capital structures. This limitation does not concern NIKE, as we have analyzed the company capital structure for the historical period and concluded the Debt-to-Equity ratio has been increasing slightly for the past 10 years, reaching 38% in 2019.

NIKE's cost of debt is expected to be 3.17% from 2019 until 2025. NIKE has a rating of AA- by S&P, implying a probability of default of 0.0003% considering information gathered from Bloomberg. Moreover, the company rating is not

Cost of Debt (Rd)	
Yield to Maturity	3.18%
Credit Rating (S&P)	AA-
Probability of Default	0.00%
Loss Given Default	53.90%
Credit Loss Rate	0.0000
Rd	3.17%

Table 2. Cost of Debt

expected to change in the next few years, mainly because achieving a AAA rating is particularly difficult and although NIKE is a successful company expected to increase revenues and cost efficiency through innovation and technology, few companies can make the shift. The AA- rating entails a 53.9% loss given default, based on the Annual Default Study from Moody's. Knowing the loss given default and the probability of default, the credit loss rate was estimated to be 0.0002%. The cost of debt is then estimated as the difference between the Bond Yield to Maturity (3.18%) and the credit loss rate.

The cost of equity is 7.42% for the explicit forecast period. Firstly, we estimated NIKE's beta, through a regression between NIKE and S&P 500 daily returns⁶, which resulted in a raw beta of 0.32, the confidence interval for the raw beta was found to be [0.19; 0.36]. However, to forecast the cost of equity it was necessary to estimate the unlevered beta of the company and re-levered it based on the comparables and future expectations for NIKE. So, in our analysis, we found an unlevered beta of 0.63 and a re-levered beta of 0.79 for a 35.8% D/E ratio, which was calibrated considering company comparables. Overall, we found that the optimal D/E ratio for NIKE is to be equal to the industry average (i.e. comparable companies only) falling from 38.5% in 2019 to 35.8% in 2025. This 2.7 percentage point decrease is justified by considering that a higher debt level is not realistic since it will have a negative externality for the company, increasing the risk for shareholders.

Moreover, to apply the CAPM formula we used the previously mentioned cost of debt (7.42%) and cost of equity (3.17%), along with the 10-year US Treasury Bond (2.69%) as a proxy for the risk-free rate and considering a 5.96% market risk premium according to Damodaran.

After all the aforementioned inputs have been estimated NIKE's WACC was estimated at 6.52%.

Free Cash Flow, Terminal Value and Enterprise Value

The Net Operating Cash Flow is the cash flow generated by the company's core operations, it is the cash available to shareholders and it is dependent on the company's capital structure. For this analysis, the Free Cash Flow (FCFF) of NIKE was estimated as NOPLAT deducted from changes to invested capital.

In **Table 5** it is possible to observe the evolution of the company FCFF.

Cost of Equity (Re)	
Risk Free Rate	2.69%
Market Risk Premium	5.96%
Re-levered Beta	0.79
Unlevered Beta	0.63
Re	7.42%

Table 3. Cost of Equity

WACC	
E/(D+E)	73.65%
D/(D+E)	26.35%
Re	7.42%
Rd	3.17%
	6.52%

Table 4. WACC Estimation

FCFF Estimation				
(in million, \$)	May-19	May-20	May-21	May-22
EBIT	4,772	5,304	5,578	5,959
Tax Liability	766	846	890	950
NOPLAT	4,006	4,458	4,688	5,009
D&A	720	816	861	910
Free Cash Flow	4,726	5,275	5,549	5,919

FCFF Estimation			
(in million, \$)	May-23	May-24	May-25
EBIT	6,253	6,616	7,040
Tax Liability	997	1,055	1,123
NOPLAT	5,256	5,561	5,918
D&A	961	1,016	1,079
Free Cash Flow	6,217	6,577	6,997

Table 5. FCFF Estimation

⁶ Bloomberg

For the explicit forecast period, NIKE's operations were valued discounting the FCFF using the WACC, which was mentioned previously. To determine the value of operations, each year's cash flow forecast ought to be discounted by time and all risks faced by investors. It is observable that NIKE cash flow begins with a growing trend stabilizing around 2% growth in 2025. The growth rate assumed in perpetuity is reasonable because it implies a growth closer to that of the global economic environment.

In our analysis, we have estimated an Enterprise Value of \$136bn, and an Equity Value of \$134.7bn, as of May 2020. Since NIKE currently has 1,567 million shares outstanding, we estimated the share price for the stock to be \$85.95, as of May 2020.

In conclusion, NIKE's stock is overvalued having a current share price of \$93.04, since our valuation exercise found a stock price of \$7 below the current market price, we would advise investors to SELL.

Multiples Valuation Model

This method estimates the value of the firm by selecting several comparables in the industry, which are expected to generate similar cash flows in the future. However, it is important to differentiate competitor firms from comparable firms since two firms may operate in the same industry and sell similar products but have different sizes and capital structures making them not comparable.

In our analysis, we have considered this difference and in order to conduct the multiples valuation, we selected four comparable firms, taking as the key indicator of comparability the company capital structure. Nonetheless, when performing this type of valuation model, it is quite difficult to find perfect comparables, and in our valuation exercise for NIKE we have considered as comparables: Under Armour, VF Corporation, Adidas Group, and Puma SE.

The data used to conduct this analysis was retrieved from Bloomberg, as of December 2019.

In order to evaluate NIKE's investment decisions, we have analyzed the Price-to-Earnings ratio being the most commonly used equity multiple. According to the Berk and DeMarzo Corporate Finance book "the intuition behind its use is that when you buy a stock, you are in a sense buying the rights to the firm's future earnings". Thus, investors should have a higher willingness to pay for stocks that present higher earnings.

Company Name	EV / EBITDA	EV / Sales	P/E
Nike Inc	28.92x	294.81x	35.53x
Under Armour Inc	27.53x	639.99x	82.79x
VF Corp	18.90x	971.87x	25.82x
Adidas AG	19.03x	604.59x	36.60x
Puma SE	25.59x	832.48x	45.19x
Average	23.99	668.75	45.19
Median	25.59	639.99	36.60

Values as of 12/2019

Table 6. Multiple Valuation

NIKE's stock is trading at a multiple of approximately 36 since we found its P/E ratio to be 35.53x. This means that the market sentiment expects investors to pay approximately \$36 per unit of current earnings. Meanwhile, the competitors' industry average was found to be 45.19x, which means that NIKE has below-average P/E, suggesting the existence of a mispricing and a possible detriment in the company future performance.

For our analysis, we have also taken into consideration the EV/EBITDA and EV/Sales, which are Enterprise Value (EV) Multiples. Investors commonly consider these multiples when valuing a firm to analyze the firm leverage. These multiples have their advantages because the EV represents the company value prior to any debt payments.

NIKE has an EV/EBITDA of 28.92x, this means that if an investor were to acquire the whole business it would pay 29x EBITDA. Meanwhile, the average of the comparables was found to be 23.99x, since NIKE's multiple is higher than the average it is subliminally suggested that the company may be overvalued.

Moreover, the Multiple Valuation analysis conclusions suggest that NIKE's stock price is artificially inflated, implying that investors are overpaying for stocks. In our belief, NIKE's stocks are ideal for short positions, where investors sell shares in order to purchase them at a later stage when the market corrects the price by lowering it.

Appendix

Financial Statements

Statutory Income Statement				
(in millions, \$)	2016	2017	2018	2019
Revenues	32,376	34,350	36,397	39,117
Cost of sales	(17,405)	(19,038)	(20,441)	(21,643)
% growth		9%	7%	6%
% Revenues	54%	55%	56%	55%
Gross profit	14,971	15,312	15,956	17,474
Gross Margin	46.2%	44.6%	43.8%	44.7%
Demand creation expense	(3,278)	(3,341)	(3,577)	(3,753)
% Revenues	10%	10%	10%	10%
Operating overhead expense	(7,191)	(7,222)	(7,934)	(8,949)
% Revenues	22%	21%	22%	23%
Selling and administrative expense	(10,469)	(10,563)	(11,511)	(12,702)
% Revenues	32%	31%	32%	32%
+D&A	662	716	774	720
Other (expense) income, net	140	196	(66)	78
EBITDA	5,304	5,661	5,153	5,570
-D&A	(662)	(716)	(774)	(720)
Interest (expense) income, net	(19)	(59)	(54)	(49)
Income before income taxes (EBIT)	4,623	4,886	4,325	4,801
% EBIT margin	14%	14%	12%	12%
Income tax expense	(863)	(646)	(2,392)	(772)
Net income	3,760	4,240	1,933	4,029

Statutory Balance Sheet				
(in millions, \$)	2016	2017	2018	2019
ASSETS				
Cash and equivalents	3,138	3,808	4,249	4,466
Short-term investments	2,319	2,371	996	197
Accounts receivable, net	3,241	3,677	3,498	4,272
Inventories	4,838	5,055	5,261	5,622
Prepaid expenses and other current assets	1,489	1,150	1,130	1,968
Total current assets	15,025	16,061	15,134	16,525
Property, plant and equipment, net	3,520	3,989	4,454	4,744
Identifiable intangible assets, net	281	283	285	283
Goodwill	131	139	154	154
Deferred income taxes and other assets	2,422	2,787	2,509	2,011
Total non-current assets	6,354	7,198	7,402	7,192
TOTAL ASSETS	21,379	23,259	22,536	23,717
LIABILITIES				
Current portion of long-term debt	44	6	6	6
Notes payable	1	325	336	9
Accounts payable	2,191	2,048	2,279	2,612
Accrued liabilities	3,037	3,011	3,269	5,010
Income taxes payable	85	84	150	229
Total current liabilities	5,358	5,474	6,040	7,866
Long-term debt	1,993	3,471	3,468	3,464
Deferred income taxes and other liabilities	1,770	1,907	3,216	3,347
Total non-current liabilities	3,763	5,378	6,684	6,811
TOTAL LIABILITIES	9,121	10,852	12,724	14,677

Cash Flow Forecasting

CORE BUSINESS										
(in millions, \$)	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
EBIT	4,502	4,749	4,445	4,772	5,304	5,578	5,959	6,253	6,616	7,040
Taxes	821	598	2,427	766	846	890	950	997	1,055	1,123
Reported Taxes	863	646	2,392	772	853	895	956	1,004	1,061	1,129
Tax Shield	(7)	(21)	(16)	(10)	(10)	(11)	(11)	(10)	(10)	(10)
Non-core Taxes	49	69	(19)	16	16	16	16	16	16	16
NOPLAT	3,681	4,151	2,018	4,006	4,458	4,688	5,009	5,256	5,561	5,918
Depreciation	662	716	774	720	816	861	910	961	1,016	1,079
% PPE	18.81%	17.95%	17.38%	15.18%	16.17%	16.17%	16.17%	16.17%	16.17%	16.17%
Operational Cash Flow	4,343	4,867	2,792	4,726	5,275	5,549	5,919	6,217	6,577	6,997
Invested Capital - Fixed Assets	3,520	3,989	4,454	4,744	5,051	5,327	5,632	5,942	6,288	6,677
Gross CAPEX investment		469	465	290	307	277	305	310	346	389
Net CAPEX		(1,185)	(1,239)	(1,010)	(1,123)	(1,138)	(1,215)	(1,270)	(1,362)	(1,469)
Invested Capital - NWC	7,031	7,824	7,648	7,376	7,673	8,148	8,661	9,057	9,612	10,235
Δ NWC		(793)	176	272	(298)	(475)	(513)	(396)	(555)	(623)
Δ Other Assets		(34)	283	(340)	(103)	(111)	(473)	(84)	(339)	(322)
Δ Other Liabilities		136	1,375	210	(475)	369	440	119	118	332
Investment Cash Flow		(1,876)	595	(868)	(1,999)	(1,355)	(1,761)	(1,631)	(2,138)	(2,082)
Free Cash Flow Core		2,991	3,387	3,858	3,276	4,194	4,158	4,586	4,439	4,915

NON-CORE BUSINESS										
(in millions, \$)	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Non-core Result	(80)	111	(19)	(118)	(38)	(12)	(30)	(68)	(51)	(55)
Invested Capital	(2,013)	(1,982)	(2,125)	(2,524)	(2,685)	(2,908)	(3,152)	(3,338)	(3,533)	(3,720)
Investment Cash Flow		(31)	143	399	161	223	244	186	195	187
Free Cash Flow Non-Core		80	124	281	123	212	214	118	144	133

FINANCING										
(in millions, \$)	2016	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Financial result	(769)	(553)	38	464	(279)	(106)	49	52	(85)	(20)
Net Financial Assets	1,533	492	(592)	(1,113)	(818)	(771)	(638)	(32)	103	147
Investment in net Financial Assets		1,042	1,083	521	(295)	(46)	(133)	(606)	(135)	(44)
Net Cash Transactions with Shareholders		(3,560)	(4,632)	(5,124)	(2,825)	(4,254)	(4,287)	(4,150)	(4,363)	(4,983)
Financing Cash Flow		(3,072)	(3,511)	(4,139)	(3,399)	(4,406)	(4,372)	(4,704)	(4,582)	(5,048)

Discounted Cash Flow Model

DCF Valuation							
(in millions, \$)	2019	2020F	2021F	2022F	2023F	2024F	2025F
EBIT	4,772	5,304	5,578	5,959	6,253	6,616	7,040
Tax Liability	766	846	890	950	997	1,055	1,123
NOPLAT	4,006	4,458	4,688	5,009	5,256	5,561	5,918
D&A	720	816	861	910	961	1,016	1,079
Net Operating Cash Flow	4,726	5,275	5,549	5,919	6,217	6,577	6,997
Net CAPEX	(1,010)	(1,123)	(1,138)	(1,215)	(1,270)	(1,362)	(1,469)
Δ NWC	272	(298)	(475)	(513)	(396)	(555)	(623)
Δ Other Assets	(340)	(103)	(111)	(473)	(84)	(339)	(322)
Δ Other Liabilities	210	(475)	369	440	119	118	332
Investment Cash Flow	(868)	(1,999)	(1,355)	(1,761)	(1,631)	(2,138)	(2,082)
Invested Capital	12,120	12,724	13,476	14,293	14,999	15,900	16,913
Unlevered Operational FCF		3,276	4,194	4,158	4,586	4,439	4,915

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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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NIKE's Digital Transformation

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Abstract

NIKE is being subject to a digital transformation, together with most retail companies worldwide. NIKE's management structure change, new market trends, and growing Sportswear industry in Emerging Markets will be the main source for the company's future performance. Thus, this report identifies these core subjects, highlights its potentials for future growth and shows the developments that are expected to take in future years.

Keywords: Digital; E-Commerce; China; Management.

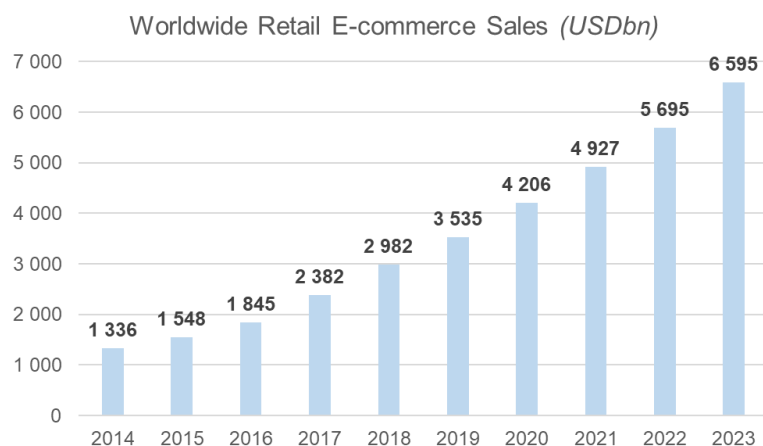
This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

NIKE's Digital Transformation

On October 2019, NIKE announced that Mark Parker will step down from its position as NIKE's CEO and President on January 13, 2020. Mark Parker joined NIKE in 1979 as a footwear designer and product tester, became NIKE's CEO in 2006 and President in 2016.

After 14 years in NIKE's top position, Mark Parker will become an executive chairman of the board and NIKE will continue to benefit from Parker's expertise in design, innovation, product, and marketing. Parker's expertise in these areas were crucial to the company during its management and will continue to be, as NIKE highly depends on the design of its products, constant innovation, and good marketing.

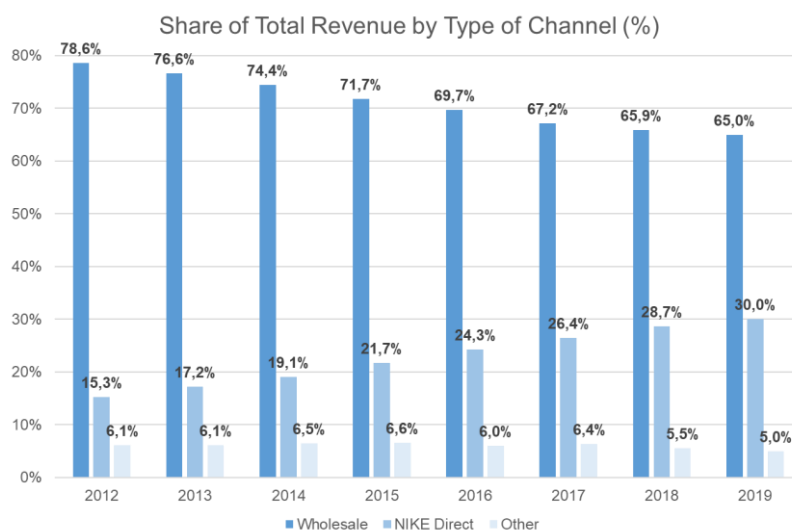
According to Statista, retail E-commerce has been evolving significantly since 2014 and it is forecasted to reach \$6,595bn by 2023. Retail is being subject to a digital transformation in recent years and is showing no signs of slowing down. Actually, there are still several points that need some improvements, such as time of delivery, methods of payments, return policies and cyber security. Nonetheless, I believe these points will be easily improved, allowing to increase customer's adherence and confidence in E-commerce.



In addition, the biggest advantage of E-commerce comparing to traditional retail is the convenience that it brings to its users, as it allows for a shorter-time, less complicated and minimal effort experience. These characteristics fit the new customer that has appeared in past years, the digital customer. Thus, it is crucial for companies, especially retail companies, to adjust for this new environment and transform its business into the digital, to better serve its customers and respond to market trends.

Since 2012, NIKE has registered a decreasing trend in revenues originated through wholesale, while sales through NIKE Direct has recorded the opposite movement. As can be seen in graph presented below, revenues originated through wholesale channel represented 65.0% of total revenues in 2019, decreasing from 78.6% in 2012. At the same time, revenues originated through NIKE Direct channel represented 30.0% of total revenue in 2019, doubling its weight since 2012.

This shows the increasing impact that E-commerce is having in the company's results. It is believed that, as E-commerce continues to expand through retail businesses and customers continue adhering to the new digital era, the higher will be the share of NIKE's total revenues originated through its NIKE Direct channel.



NIKE's awareness for the new digital era is believed to be the main reason for the change in the company's CEO and President. John Donahoe, former CEO of eBay, current President and CEO of ServiceNow, Inc. and Chairman of PayPal Holdings, Inc., will succeed Mark Parker. John Donahoe has been a Board Member of NIKE since 2014 and will continue its position.

With this change in NIKE's management, NIKE expects to benefit from Donahoe's expertise in digital commerce, global strategy, technology, and leadership. In addition, Donahoe's proximity with the brand, make him the adequate person to hasten NIKE's digital transformation.

In addition, both Mark Parker and John Donahoe expertise in different areas will likely create an excellent opportunity to boost the company through its digital transformation, while maintaining its focus on product, design, and marketing. Thus, NIKE's change in management is expected to have significant impact on the company's performance over the next years.

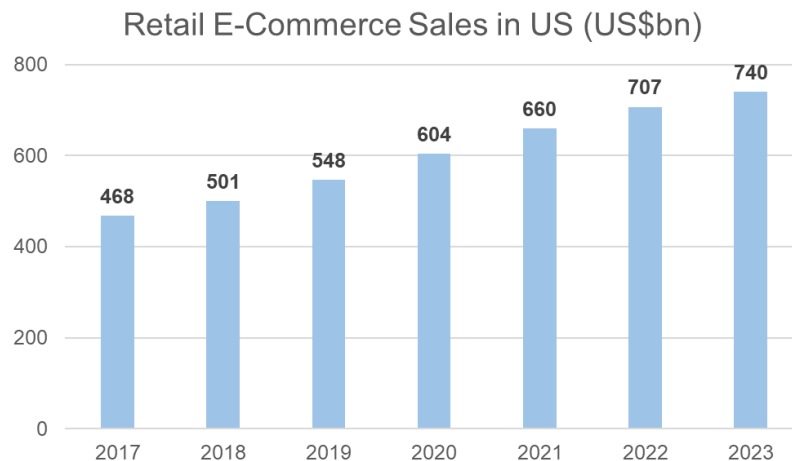
Digital Transformation Impact

Digital transformation will have its first impact in developed economies, such as North America and Europe, as these economies are more well prepared for E-commerce and as more citizens have access to the needed technology to buy products online.

North America, the geographical region with more weight on NIKE's total revenue, will continue to have a significant importance to the company. Its importance translates NIKE's top position in the region, as the favorite sportswear brand in North America, supported by a boost from E-commerce in future years.

Although U.S. is the market with a more advanced E-commerce and higher customers' participation, there is plenty of room to expand it even further. According to Statista, retail E-commerce sales in U.S. registered a y/y increase of 7.0% in 2018 and is expected to increase at a CAGR of 8.1% until

2023. This shows that even with U.S. being the more advanced market in terms of digital commerce, there is still high prospects for the market to further expand, as the digital allows for several market opportunities that are not fully explored.



Apart from developed economies, E-commerce in emerging markets will also boom together with the expansion of Sportswear industry in these regions. A promising market for the industry growth in future years is China.

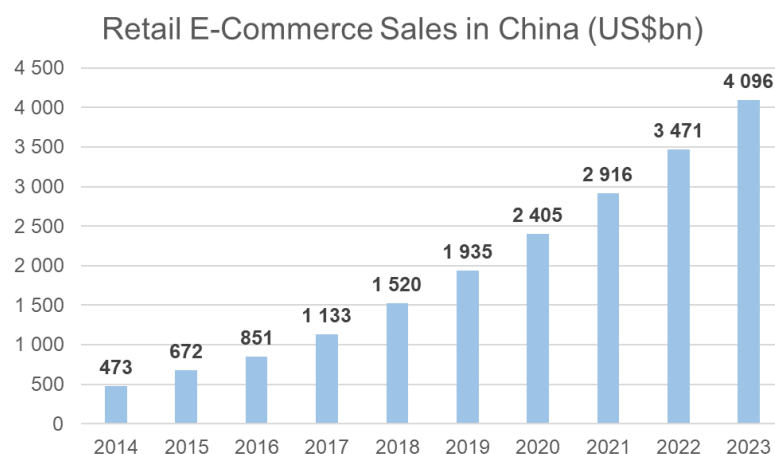
Sportswear industry in China is in early stages of growth, as people are now concerning more about physical and mental health and Chinese Government is implementing awareness campaigns for the importance of well-being. On 2016, Chinese Government approved the 2016-2020 National Fitness Plan, with the purpose of increasing sports participation, improving fitness facilities and people's accessibility to sports activities both in rural and urban areas.

This plan also originated a huge potential for foreign investment and NIKE and Adidas took advantage of that by establishing its brands in the market. According to Euromonitor, both companies together totaled 42.6% of Sportswear market share in China in 2018, with NIKE's market share being 22.9%.

Thus, NIKE has a leading position in China, a market that is expected to be the main source of growth in the Sportswear industry in future years, as it is forecasted to grow at a CAGR of 9.9% until 2023, reaching \$64.4bn of market size.

Also, E-commerce in China shows signs of great opportunities for future years. According to Statista, since 2014 retail E-commerce sales grew at a CAGR of 33.9% until 2018 and is expected to further expand at a CAGR of 21.9% until 2023, reaching \$4,096bn by 2023.

So, it is important for retail companies, such as NIKE, to keep improving and investing in innovation in China, as the possibilities in this market are enormous and will likely to lead to great results in the future.



In this new digital phase, it is crucial for NIKE to target the core markets for the industry, expand its presence in these markets and keep innovating according with main market trends. Thus, with the change in NIKE's management structure that focus more in the digital, growing Sportswear market in China, worldwide NIKE's leading position, together with the company's focus on design, product and marketing, NIKE is expected to continue its great performance and to have promising results.