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Adapting to the new sporting goods market era:
Adidas differentiation in digital retail

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Abstract

The following Equity Research accesses Adidas AG, the largest sportswear company in Europe. The analysis explores the arguments for a BUY recommendation that resulted from a Discounted Cash Flow valuation with a target price of €275.1. To forecast Adidas AG's Free Cash Flows, the firm's historical performance, as well as industry trends, opportunities, and risks, were thoroughly analyzed. The paper places special emphasis on the company's future value drivers in a post-pandemic scenario. With the sporting goods market having a strong recovery and a major shift to digital sales and marketing. The capacity to connect with consumers in the digital world and seize growth in the Women's and Sustainability segments, and Greater China region, will determine success in this industry.

Adidas AG, Valuation, E-commerce, Sporting Goods

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This report is part of the “Adapting to the new sporting goods market era” report (annexed), developed by Duarte Barbosa and Filipe Matos and should be read has an integral part of it.

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Introduction

The purpose of this paper is to value the equity of Adidas AG through a discounted cash flow valuation. Besides a recommendation on whether to BUY, SELL or HOLD the stock in question, detailed financial analysis and forecast of the company will be conducted. The structure of the joint report addresses the most relevant aspects of Equity Research, divided into two individual reports. This paper is the second section covering the Sales and Costs forecasts and Valuation chapters. The first part of the report, developed by my partner Filipe Abreu Matos, will cover the Company and Industry overview and Invested Capital forecast. The joint report should be read as an integral paper starting with the Company Overview and finishing with the Valuation.

Throughout the research we found a company more affected than its peers by COVID-19, with a strong recovery, coming back to pre-pandemic results in 2021. Despite the good financial results, Adidas AG's equity value decreased to values below the peak of the endemic, and in this equity research, we accessed if it is justified and the target price of the shares of the company, a market leader and expert in a fast-growing market full of new trends and opportunities.

Sales Drivers

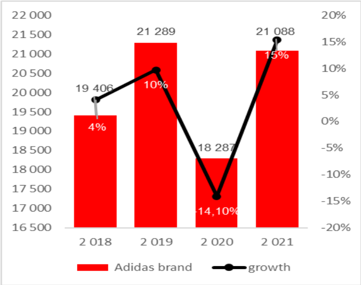

Figure 13: Adidas brand 2019-2021 net sales

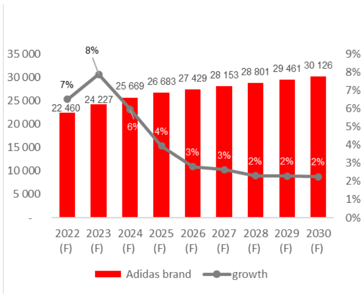

Figure 14: Adidas 2022-2030 net sales evolution

The last two years have proven challenging for Adidas and the Sporting Goods industry overall. In 2020, the market disruption caused by the pandemic deeply hurt physical shops` performance resulting in a 14.10% drop in Adidas sales volume (excluding Rebook) (Fg.13) [1]. In addition to this setback, the industry witnessed a series of changes in trends, which kept recurring in 2021 and are expected to become permanent. Thus, although Adidas and its competitors recorded a strong recovery, mimicking 2019, sportswear players found an entirely changed environment that requires extensive structural changes to capture the industry's future strong growth. For an accurate analysis of Adidas' future sales evolution, it is crucial to understand that it has been undergoing an accelerating change in how companies reach the final consumer. Thus, as one of the major bases in the five-year plan, Adidas aims to take advantage of this market trend to meet customers' preferences and boost profits. It is expected that the company will be able to absorb a part of the industry growth and register a 6.03% CAGR until 2025 (Fg.14). All in all, Adidas´ distinct sales channels will perform differently, which deserves a separate analysis to predict the company´s future sales growth pattern accurately. To this effect, this forecast will consider the different value drivers that influence the three Adidas sales channels: E-commerce, Own-Retail, and Wholesale.

E-commerce

E-commerce is projected to achieve a growth of approximately double the overall industry´s percentage points between 2021 and 2025

E-commerce stands out as the most critical shop in Adidas´ future since the success of its five-year plan will largely depend on the performance of this sales channel. As follows, the players who most innovate and adapt to a broader digital landscape will have better chances of taking advantage of this channel´s strong growth. Fuelled by an increasingly online shopping trend, E-commerce is projected to achieve a growth of approximately double the overall industry´s percentage points between 2021 and 2025. In its "Own the Game" plan, Adidas shows strong interest in taking advantage of the rise of this channel, looking to quickly adapt its business model to this trend. The recent success combined with the constant innovation of its customer-direct services, such as the membership program adiClub, leads us to believe that Adidas will be able to keep up with this industry channel´s growth. The firm is expected to reach a sales volume of €7,508 million in 2025, which represents a 17.68% CAGR compared to 2021 (Fg.15). E-commerce will thus have a growing preponderance in its contribution to total sales. It will go from being the sales channel with the least weight in 2021 (18% of total Adidas brand Revenues) to reaching an overall contribution of 37% in 2040.

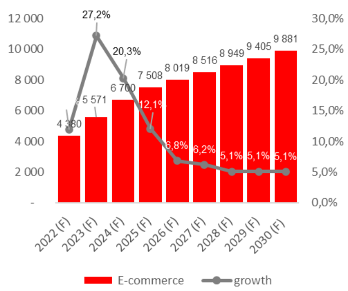

Figure 15: Adidas E-commerce 2022-2030 sales evolution

Nonetheless, Adidas' top-level strategy plans and its readiness to implement a DTC model are not sufficient to predict and explain the growth of the E-commerce channel. To better understand this, it is crucial to deepen our analysis and consider the different degrees of technological development, consumption habits, and internal geographical decisions for Adidas´ distinctive operating regions.

- Penetration Rate

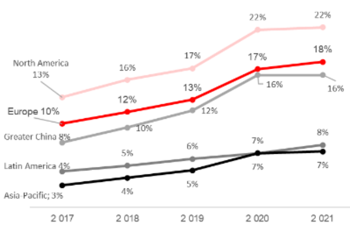

Figure 16: Penetration rates from 2017-2021 across different geographies (Source: Statista)

Penetration rate measures the percentage of people each year who purchased a product or a service online in the sportswear industry. Each geographical segment will witness a different penetration rate evolution according to its distinct variables' growth. The number of internet users and online shopping conversion rate will be detrimental to explaining the expansion rate in each region.

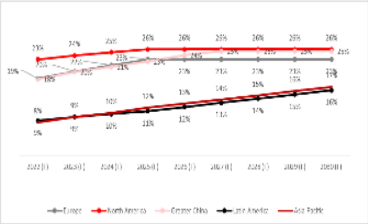

Figure 17: Penetration rates from 2022-2030 across different geographies (Source: Statista)

By 2021, there was a disparity between the regions that can be identified as more technologically developed: North America, EMEA, and Greater China, and the less technology developed: Latin America and Asia-Pacific (Fg.16). Although for different reasons, until 2025, the difference between these two blocks is expected to remain constant as more and less developed geographies expect progressive growth in their penetration rates. Only after that year will this gap narrow as the more technologically developed regions reach their maturity stage while the others continue their penetration growth rate path (Fg.17).

Regarding the North American and EMEA market, where most of these regions' populations have converted to digital [23], the growth until 2025 will mainly be justified by the expansion of the E-commerce conversion rate. In 2021, conversion rate figures fell short compared to other industries such as Beauty and Skincare and Food and Beverage [24]. In upcoming years, a change to the DTC model, carried out by leading players, will help shoppers to adapt to online shopping, consequently bringing the numbers closer to other industries' ratios and contributing to the improvement in the Sporting Goods' penetration rate. This way, this expansion will significantly contribute to the increase of Adidas' online customers by 2025. The number of online clients in North America is predicted to expand from 4.2 million in 2021 to 6.2 million in 2025, representing a 10.16% CAGR. EMEA is forecast to grow at a similar rate, with the company reaching 37.3 million customers in 2025. After 2025, these regions are expected to reach a maturity stage, justifying the faster stabilization of these markets´ growth in comparison to other geographical segments.

Greater China profiles as the greatest opportunity for Sporting Goods players to drive future strong growth in this E-commerce channel

As for the Greater China region, although this market already represented the largest online community by 2021, there is still plenty of space for growth. With only 70% of the population online, the Chinese government has taken steps to enable more affordable and faster internet services in rural and underserved areas [25]. Furthermore, the rising importance of mobile commerce, which will likely grow from 40% of total E-commerce sales in 2019 to almost 60% in 2024 [26], will influence the growth in this region as the ability to access inexpensive smartphones in Greater China is high. All things considered, this region profiles as the greatest opportunity for Sporting Goods players to drive future strong growth in this channel. The region is only predicted to reach maturity in 2027 when it approximates the penetration rate registered in North America. Thus, combined with an increase in the market share starting in 2023, the largest growth in the number of Adidas consumers is expected between these dates, reaching 22.7 million in 2027.

For Latin America, Asia-Pacific, and Emerging Markets, their lower technological development will take them more years to reach the maturity phase and close the gap to the values presented by the more technologically developed regions. During 2026-2035, the significant e-commerce growth will be mainly fuelled by the progressive expansion in the number of digital users in these regions.

- Market Share

"Own the Game" plan prioritizes expansion in the EMEA, North American, and Greater China markets to achieve its future sales volume objectives

The unique features of this channel make E-commerce the most fragmented and competitive channel. As a result, despite Adidas´ progressive evolution in reinforcing its position in this market, this channel sticks out as the most challenging for maintaining a sustainable competitive advantage. In technologically advanced markets, this reality is more evident, forcing the organization to devise a plan to differentiate itself and achieve long-term growth. In this sense, the "Own the Game" plan prioritizes expansion in the EMEA, North American, and

Greater China markets to achieve its future sales volume objectives. In less developed territories, its strong global presence allows the company to excel and keep larger market shares. Therefore, Adidas's strategy will be to solidify its position and take advantage of the growth of the e-commerce market in those less developed regions. Overall, between 2021 and 2025, it is forecasted that Adidas will grow to a global market share of 7.84%, running at a faster pace than the E-commerce market (Fg.18).

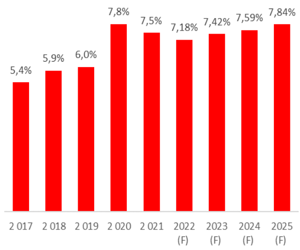

Figure 18: Adidas E-commerce market share between 2017-2025

By analyzing the most critical segments for the company, its investment in these territories is not without reason. In 2021, EMEA, North America, and Greater China together represented more than 85% of the industry's e-commerce market, a percentage that will remain stable until 2025. Also, it is expected that both regions will contribute more than 88% of total E-commerce growth by 2025.

European market stands out as the region with highest market share

Focusing the analysis on Adidas specific region operations, the **European market** stands out as the most contributing territory to EMEA total sales. This segment is where Adidas registers the highest market share (13,8% in 2021) and has been outpacing the European e-commerce market by recording double-digit growth last year. The strong brand identity perception in the European market alongside the firm´s experience and ability to meet the preferences and desires of consumers, motivate this difference. This direction will likely continue since the company has identified and prepared well-suited responses for future decisive trends that will affect this geography. First, there is the product and production sustainability, which has proven to be a deciding factor in customer decisions in Europe [3] as 70% of European consumers are willing to pay more for products with sustainability credentials [27]. Adidas´ sustainability measures will motivate a greater capacity to conquer and retain customers given the differentiated product offer. In addition, it will enable the company to charge premium prices, which will be an advantageous factor in facing a future inflationary environment. The other hot trend in the European market comes from the women's sector. In recent years, the female segment has gained a greater preponderance, presenting a significant growth [2]. In the following years, this trend is expected to accelerate registering a mid-teen compound annual growth rate from 2021 to 2024 [28]. Adidas´ differentiated gender approach shift and the sponsoring of women´s emblematic European sports events like UEFA Women's Champions League and Women's Euro 2022 will allow Adidas to profit from this expansion in this market. Additionally, further digital growth and consumer engagement are expected as Adidas expanded the Confirmed app to Europe in 2021. This app gives insider access to Adidas Originals brands and partners such as YEEZY, Prada, Pharrell, and Palaceis. The app members have access to exclusive sneaker releases and hype drops. All in all, the company expects to see its position strengthen to 14.4% in FY2025. This rise will contribute to the firm continuing to outperform the market and register a 15.45% CAGR until 2025.

Sustainability and Women´s Segment highlights as the principal trends in the European Market

However, despite this positive market share gain outlook in the European market, the war in Ukraine will harm EMEA E-commerce market prospects. The loss will be more significant in this channel as it is assumed that Adidas will withdraw its in-store and online operations from the Russian market until the end of the year. This scenario translates into a potential loss in 2022 of approximately 60 million euros on Russian soil. In addition, further effects of the war like a rising inflationary environment will have a greater negative incidence in EMEA consumer spending power which will translate into EMEA being the geographical segment with the lowest growth in the E-commerce sector until 2025.

EMEA E-commerce channel is expecting a potential loss of approximately 60 million euros on Russian soil

Looking at the **North American** market, the pre-pandemic years proved to be frankly positive for Adidas. The company has taken a different approach to its main competitor Nike by signing partnerships with non-sports-related American celebrities like Kanye West, Pharrel Williams, and Beyoncé. These actions have allowed the brand to stand out in the athleisure movement that is widely felt in this territory. Additionally, the company managed to register a remarkable growth in the footwear market driven by recording the highest footwear consumer satisfaction score and the successful launch of several models from its Yezzy collection [29]. Alone, the partnership with Kanye West recorded around €1.5 million euros sales in 2020. During 2017-2020, Adidas was able to close the gap with Nike increasing its market share from 2.9% to 4.5% [28]. Taking advantage of this period of growth and enhanced brand awareness, Adidas will invest extensively in expanding this market by penetrating new areas not yet explored by the brand. A good example of that is the basketball entrance move through the collaboration with Jerry Lorenzo and the Fear of God Athletics, where Adidas aims to increase cultural significance and legitimacy in North America. Furthermore, it is anticipated that the digital fitness trends, as well as the consumer tendency toward premium items, would have a significant impact on the growth of its online platforms like the Confirmed app. As a result of the positive trends and the fact that this is a market where the company still has enough potential to grow, it is expected North American segment be the best performer until 2025. The company expects to expand sales from €1143 million 2021 to €2480 in 2025, with a CAGR of 21.35%.

Adidas collaboration with Jerry Lorenzo and the Fear of God Athletics aims to increase cultural significance and legitimacy in North America

When it comes to Great China, the expansion of this market is expected to be the most challenging. In 2021, the company's performance and brand image were highly affected as a result of the boycott led by Chinese consumers due to the Xinjiang controversy. Furthermore, the competitive environment was intensified as Chinese enterprises Li Ning and ANTA Sports, whose revenue increased by more than 50% in the first half of FY2021 [10], leveraged this opportunity to snatch up more of the fast-growing Chinese market. This channel emphasizes this problem since these Chinese companies have already a well-developed DTC business model, giving them a short-term future competitive advantage over Adidas. As a result, it is predicted that this trend will be difficult to reverse until 2023, implying that Adidas will experience a drop in market share from 6.6% in 2021 to 5.5%, resulting in a moderate 8.99% CAGR when compared with Greater China market E-commerce 19.32% CAGR. Despite this setback, It is expected Adidas to overcome this phase once it has a more established DTC model and its brand perception has improved. There are several upcoming trends and strategic actions being implemented in this market that will allow Adidas´ market share to expand to 6.1% by 2025, implying a CAGR of 22.58% between 2023 and 2025. First, the company has identified the increasing demand for luxury goods as an opportunity to excel over its competitors. The China Luxury Report 2021, released by Bain & Company predicts that the Chinese market will turn into the world's largest luxury market by 2025. Following this trend, the company seeks to capture the growth following this premium movement through collaborations with luxury companies such as Prada and Gucci. Additionally, the football interest and market are expected to grow among younger generations as the Chinese government put a big focus on football youth development [30]. From 2019 to 2025, It is expected that number of young practitioners double to 50 million. Through its affiliation with the Chinese Ministry of Education to promote football in China, it is expected Adidas to profit from a first-mover advantage with these younger buyers [28].

The expansion in Great China market is expected to be the most challenging due to brand image deterioration in this market and increasing competition

It is expected Adidas to overcome this phase due to increased growth in luxury athleisure and football

Retail

In recent years, the retail channel in the sportswear business has seen dramatic changes. Even before the pandemic, retail was struggling, resulting in a continuous reduction in industry participants' physical footprint. Nike, for example, cut down on over 10% of its own-retail stores between 2018 and the beginning of 2020 (pre-pandemic). This trend has accelerated in the last two years, with physical commerce suffering significantly from the limits imposed by COVID-19. As a result, participants had to reconsider their retail strategy and explore new ways to generate value through this channel in the future.

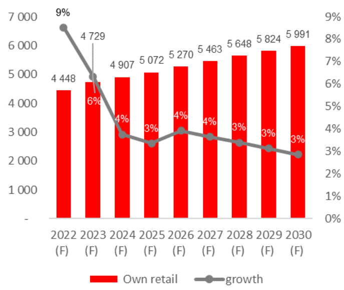

Figure 19: Adidas Own-Retail 2017-2030 sales evolution

Adidas' "Own the Game" strategy followed the purpose-driven retail footprint trend and placed high importance on the transformation of this channel. Although DTC's channel growth will be primarily driven by its online channel, retail will make an essential contribution to establishing an emotional and physical bond between the brand and its customers. As a result, in key cities across EMEA, North America, and Greater China, Adidas has been outfitting physical stores with new features and innovative technologies. Together with Nike, Adidas is one of the companies expected to shape the future of physical retail, increasingly working to turn it into an omnichannel experience. As a global company, its position and ability to invest and access cutting-edge technologies will strengthen the firm´s future performance. Therefore, during the 2021-2030 period, the firm will register a 4.31% CAGR (Fg.19). Adidas' retail growth is expected to steady from this point forward, accounting for 19% of total revenues. The evolution of the selected retail drivers will better explain its future growth.

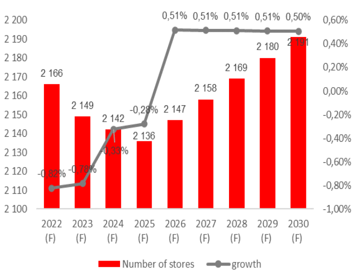

Figure 20: Adidas number of stores evolution between 2022-2030

Starting with the **Number of Stores**, Adidas has been pursuing a progressive reduction in its physical footprint. Between 2015 and 2021, the corporation went from running 2588 stores (including Reebok) to managing 2184 stores, a decline of over 15%. Under this new strategy, the increased importance given to this channel will cause a distinct evolution. On the one hand, Adidas is aiming for more sophisticated and larger concept stores, but fewer of them. In this case, the company's strategy will differ from Nike's, which plans to open 200 small-format stores focusing on local communities. Adidas intends to increase its focus and market positioning in key trade zones and high streets, taking advantage of the significant market share these areas represent. Thus, by 2025, the company aims to double its Halo stores in key cities in EMEA, North America, and Greater China markets, while continuing to close the concept stores that do not add value to the company´s omnichannel experience. Furthermore, the company wants to pursue the factory outlet store expansion to shift from a "clearance-focused channel to a commercial engine driving profitability" (Fg.20). Under these circumstances, the corporation is forecasted to have a slight decrease of 2% in the number of stores by 2025. After this date, and with a less prevalent Wholesale channel, the brand will attempt to extend its line of stores in other key cities where the market is less saturated (Emerging Market, Asia-Pacific, and Latin America Segments). Thus, growing at an eleven-store pace per year, the company is expected to reach 2191 stores in 2030, when it reaches maturity.

Regarding **Average Revenue per Store** (ARPS), in the years before the pandemic, Adidas' strategy proved to be a success. The combination of increased investment in factory outlets and increased disinvestment in no-value-added concept stores resulted in a significant rise in average store profitability (Fg.21). Although the pandemic effects disrupted this pattern in 2020, Adidas is forecasted to resume its prior growth trajectory. Thus, the following three reasons will largely explain future increases in average revenue per store. First, a more profitable store-type mix is anticipated, with Factory Outlets reinforcing their predominance. In addition, resulting from their redesign, concept stores will be able to produce new revenue streams (new services) and provide a more comprehensive consumer experience, making them more profitable. Finally, the innovations implemented in its stores will give Adidas an edge over most of its competitors, enabling it to capture more growth from this channel. By 2025, ARPS growth is expected to outpace Offline Sporting Goods Market growth, being the main contributor to a 5.47% CAGR in this channel. After this period, other competitors should be able to adjust to the new operation mode, resulting in the company's steady ARPS growth of 2.1%.

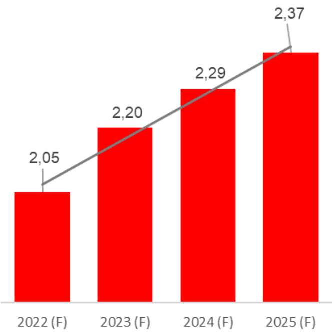

Figure 21: Adidas average revenue per store evolution between 2022-2025

Wholesale

The decreasing trend in Wholesale's preponderance will continue as the pandemic has emphasized the change in this industry´s buying behavior. In addition to consumers favoring a closer relationship with brands, customers pick retailers that have better adapted to the digital era and have a more extensive stock of the brand they prefer. This shift increases pressure on smaller wholesalers that lack the knowledge and financial capacity to transform their business model and respond quickly to consumer desires. Consequently, this implies a greater concentration of players in this channel, and it is paramount for the larger sportswear companies to choose the right partners who can overcome the channel´s major challenges. After a significant recovery in 2021, this channel is expected to have the slowest growth among the three channels, registering a 1.91% CAGR until 2025 (Fg.22). Thus, it is predicted Wholesale to only represent 53% of the total revenue in 2025, barely missing the company's optimistic goal of making its direct channel already account for 50% of sales. After FY2035, when all channels` growth is expected to stabilize, this channel will account for only 44% of total sales.

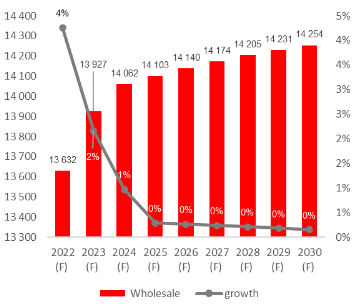

Figure 22: Adidas Wholesale 2022-2030 sales evolution

Considering the **Number of Wholesale Doors**, the company will narrow the scope of its partner numbers, after identifying 80 top Alliance Accounts with whom it intends to develop strong cross-functional partnerships. Therefore, paired with the future trend of wholesalers having fewer physical locations, the number of available wholesale outlets is predicted to decline from 150,000 wholesale doors in 2019 to 113,000 in FY2032. The decrease is expected to be more severe, until 2025, given the inability of some wholesale partners to adapt to new market conditions, which will result in a transfer of customers' consumption to the company's direct channels. The lower geographical diffusion will be the primary reason for slow expansion.

Contrarily, the **ARPWD** is predicted to rise gradually over time, counteracting the decrease in the number of wholesale doors. First, it is forecasted that most of Adidas' Alliance Accounts will be capable of adjusting to the new business normal and capturing a portion of the income previously reserved for smaller wholesalers. Also, with its "Partner Program" platform, the company makes its partners' online platforms more capable of enhancing the end-consumer experience by guaranteeing product images and descriptions flow seamlessly into their systems. Adidas will then focus on building a strong relationship with major Alliance clients, such as Foot Locker, where a dedicated team will be assigned to create elevated online and offline experiences.

Cost Drivers

One of Adidas' goals for its new strategy is to increase Gross Margin to 53-55% and Operating Margin and 12-14% by 2025

One of Adidas' goals for its new strategy is to increase Gross Margin to 53-55% and Operating Margin and 12-14% by 2025, which decreased significantly in 2020 due to the COVID-19 pandemic. Both margins are subject to the world's economic evolution and consequent supply chain disruptions as well as rising raw materials prices, and the company's strategic options regarding channel mix and marketing. For that matter, the Gross Margin is expected to improve gradually with the Operating Margin following (Fg.23)

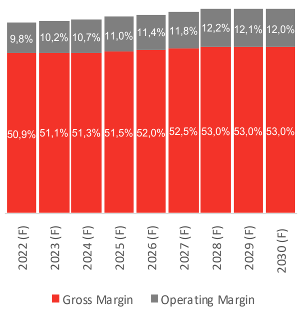

Figure 23: Adidas 2021-2025 Operating and Gross Margin

- Channel mix and supply chain implications

The COVID-19 outbreak in 2020 led to the closure of factories, increased shipping costs, and imposed trading restrictions. Consequently, the cost of sales as a percentage of revenues increased to 50% in 2020, compared with 48% in 2019. In 2021, the recovery started, decreasing to 49.3%, and is expected to slowly continue until 2025, reaching 48.5%. The company goal, 47%, seems attainable, but only after a reduction of the supply chain disruption predicted until 2025. So, the decrease in the cost of sales will accelerate in 2026 and 2027, a cost of sales as a percentage of revenues of 47% will be obtained in 2028, and it's expected to continue in the long run (Fg.23). The improvement in gross margin will be driven primarily by the strategic change to a DTC-based channel mix that is less costly since the margin is not split with the wholesale partner. The major shift will occur until 2025, with wholesale epresenting 53% of sales compared to the 62% in 2021. But the trend will continue, with DTC epresenting 53% of revenues in 2030. Also, Adidas will increase prices with a shift to a more remium and sustainable product mix. The rising prices will contribute to an increase in the gross margin, and together with the DTC-based business and economic recovery, will overshadow the supply chain challenges and growing raw materials costs, resulting in a decrease in the cost of sales.

DTC-based channel mix that is less costly

Adidas will increase prices with a shift to a more premium and sustainable product mix

Supply chain. Adidas outsources nearly 100% of its production, taking advantage of lower costs but making the company dependent on its suppliers, which is crucial in supply chain disruption times. On the bright side, factory closures in 2021 decreased significantly and are expected to decrease to a minimum in the short term. However, a considerable part of Adidas's production partners are from China, and the 2021-2025 country's electric policy plan to reduce energy usage by 13.5% will increase the production costs in that period [2]. Also, this is one of the countries with the more risk of factories closing down due to COVID-19. In response, Adidas stop working with some of its Chinese suppliers and focus on Indonesia, Vietnam, Cambodia, and Myanmar, the latter being considered Adidas' future sourcing market by its CEO [31]. This process is necessary in order to keep the cost of sales down, but the Myanmar supply strategy is a risk and may backfire due to its political instability and current civil war, resulting in supply shortages and consequent increasing costs. Furthermore, because e-commerce has gained importance, the supply chain has upgraded its level of complexity with clients expecting deliveries in one day. There is therefore a need for more flexible and speedier logistics, which will ultimately affect the company because of the need for faster logistics, and shipping individual parcels instead of large bulks to wholesale will result in higher costs before the required time for adaptation. With the increasing labor and energy costs in Asia and the e-commerce trend, the better response would be to move some production centers geographically closer to the points of sale, especially in Europe or North America. Adidas is not expected to follow this course, which instead will require intensive investment into data and

Outsources nearly 100% of its production making the company dependent on its suppliers

Supply disruption factors that emerged with COVID-19 will prevail in 2021-2025

analytics capabilities and time to adapt to the new complexity of the supply chain between 2021 and 2025. Besides production cost increases in Asia, the other supply disruption factors that emerged with COVID-19 will prevail in 2021-2025, with shipping costs being eight to ten times higher in 2021 compared to 2019 [2]. Additionally, the World Trade Organization (WTO) still has 45 trade restriction measures in place, with the majority of those being exporting restrictions [2]. Therefore, the COVID-19 originated disruptions will drive Adidas's gross margin down until 2025. Also, contributing to an increase in supply chain costs is the war between Ukraine and Russia. Both countries are not major suppliers for Adidas, but the incredible complexity of modern supply chains could mean a shortage of some components produced there, and increased costs with the substitution of the component or inventory shortages. In addition, the rising inflation due to the war increases the risk that consumers postpone their purchases, leading to a slower inventory turnover and increasing supply chain costs. The war is only likely to have a short-term impact on Adidas.

Record prices of the raw materials used in sporting goods

Furthermore, the other main reason for the increase in the cost of sales in 2020 and 2021, compared to the pre-pandemic times, is the record prices of the raw materials used in sporting goods. The raw materials are mainly natural fibers such as cotton, leather, recycled polyester, recycled rubber, and wool. Cotton and polyester traded on average at $2.5 and $1.2 per kilo in 2021 compared with $1.63 and $0.46 per kilo in 2020 [2]. Prices will continue to increase in the long-term thus affecting the company beyond 2025, largely due to a reduction in raw materials production because of the reduction in plantation sizes and the increasing impact of global warming, and due to growing demand. In addition, as part of Adidas's strategy, sustainable materials will be used more and more, which implies higher costs than traditional materials, thereby also contributing to an increase in the cost of sales. In addition, in 2022 the war between Ukraine and Russia will raise inflation, which would make the costs of raw materials, shipping, and other costs increase its price, which would lead to a reduction in the gross margin. But Adidas aims to be more and more positioned as a premium business, giving higher flexibility to increase its prices. So, inflation will not affect relevantly the gross margin, as the increasing raw material costs are expected to be compensated by the mentioned increase in Adidas prices.

Sustainable materials will imply higher costs than traditional materials

- Marketing Strategy

Adidas historically has maintained marketing costs at around 13% of net sales, but in 2021 it decreased to 12%. The principal cause was the pandemic and the digital marketing increase, which has a considerably lower CPM (cost per thousand impressions) than traditional channels. Plus, it has the advantage of easily reaching the target audience as people often are not aware that they are being advertised to. In addition, if digital marketing is well designed it can be as effective, or more, than traditional marketing. With Adidas' focus on e-commerce, the marketing focus also shifts to the digital world. We believe that this will continue to be the trend, and it will drive marketing costs down. Furthermore, Adidas will focus on influencer-driven marketing by reinforcing its relationships with professional athletes and specific personalities. A personality based marketing is considered by Mckinsey [2] to be the most effective way to create a relationship with consumers, not only because these have a much larger following and achieve higher engagement, but also because by partnering with these personalities is easier for Adidas to relate to or support a cause. This market trend will contribute to increasing the effectiveness of demand creation expenses and drive down marketing costs as a percentage of sales.

Digital marketing has a considerably lower CPM than traditional channels

To fuel the strategic ambitions for 2025, Adidas will need to invest in marketing

At the same time, the “Own the Game” strategy aims to make Adidas the leading female sportswear brand. It will require a considerable investment in marketing to guarantee a competitive advantage in the women’s market, whilst not losing market share in the men’s segment. Adidas almost exclusively publishes women-directed content on their Instagram and is expected to launch women-directed marketing campaigns. Besides that, to fuel the strategic ambitions for 2025, Adidas will need to invest in marketing, with the firm committed to demand creation expenses one billion euros higher in 2025 compared to 2020. Marketing expenses, as a percentage, of sales will remain constant at 12% of sales from 2022 onwards. The more effective and less expensive characteristics of modern marketing channels and practices will drive costs down, while the robust investment in marketing will drive costs up, but even with the one billion euros increment in marketing expenses in 2025, it will represent 12% of sales (Fg.24).

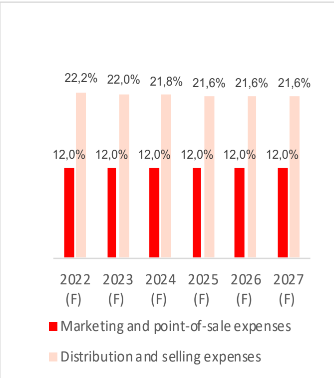

Figure 24: Adidas 2021-2025 Marketing and Distribution Expenses

- Distribution and selling expenses

DTC is characterized by a high number of returns

The evolution of distribution and selling costs is driven by higher returns, delivery and shipping costs. The COVID-19 outbreak led to an increase in these costs, representing 25% in 2020, compared with 20-21% in the years prior. In 2021 recuperation started with these costs representing 22.5% of sales. DTC is characterized by a high number of returns, as high as 50% compared with 5% in wholesale, according to McKinsey [2]. Therefore, as DTC gains importance, the costs related to returns will become increasingly significant. Furthermore, Adidas offers free delivery in most of its e-commerce sales. This cost will also follow the evolution of the channel mix. On the other hand, the post-pandemic economic recuperation will help to reduce these costs, which will contribute to a slow decrease by 2025, when distribution and selling expenses will represent 21.6% of revenues. These costs are not expected to return to pre-endemic values due to the evolution of the channel mix, and will remain constant at 21.6% (Fg.24).

Valuation

Cost of Capital

The cost of capital used to discount the Free Cash Flows in the model is the WACC, which requires the company's target capital structure, cost of debt, and cost of equity.

In terms of capital structure, Adidas is expected to maintain a target Debt-to-Equity (D/E) ratio of 3.6%, equal to the higher value of the industry range, [3.4%,3.6%], with the lowest value being the median of comparable companies and the upper limit the weighted average. Before 2019, the company had leverage close to 0% of its sources of financing (Fg.25). But in 2019 leasing started to be classified as debt, and the D/E ratio jumped to 5.94%. Since these changes, the company has decreased its level of debt, with the same ratio reaching 4.73% in 2021. This trend will continue, and the company will converge its D/E ratio to the industry's upper limit of 3.6% and define it as the target for the long term. This allows Adidas to reduce its financial distress costs while taking advantage of more interest tax shields compared to Nike, which maintains a ratio close to 1%. This reduction of the level of debt is consistent with Adidas's capital structure strategy, which is focused on having the best borrowing terms, the company defines the goal of having a high rating class (S&P: A and Moody's: A2)[1], and in 2020, Adidas was rated A+ by Standard & Poor's and A2 by Moody’s for the first time with this level of debt. There is no need to fall below the higher limit of the range of the industry to secure

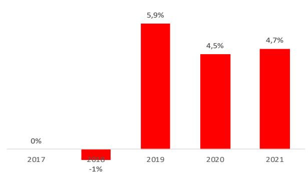

Figure 25: Adidas 2017-2021 D/E ratio

Inputs	
MRP	5,5%
RF	0,88%
Bu	0,92
target D/E	3,61%
Bd	0,04
Re-leverd Beta	0,95
Ru	5,93%
Re	6,11%
WACC	5,924%

Figure 26: Adidas cost of debt

the goals of the company while comfortably maintaining the net debt below two times the EBITDA, which is the financing policy of the company [1]. The market value of equity was used, calculated with the outstanding share and the current share price, and the book value of net debt was assumed to be a fair approximation to the market value of debt since there was no recent financial distress for the company.

To calculate Adidas's cost of debt, the YTM of 1.21% from a 15Y corporate bond was used [26]. The company has an A2 Moody's credit rating, resulting in an annualized probability of default of 4.31% and a recovery rate of 56.5%, according to Moody's 2017 report. Considering the statutory tax rate of 27%, we got a cost of debt of 1.08% with a beta debt of 0.04 (Fg.26).

To calculate the cost of equity (Re) the capital asset pricing model (CAPM) was used, by estimating the market return and adjusting it for the company risk. The model assumes a market risk premium of 5.5% following the recommendation of KPMG Corporate Finance NL [33] as of March 2022. Since Adidas is a European and a German firm, the most recent yield-to-maturity of a zero-coupon 10Y German Government Bond[26] was used, resulting in a risk-free rate of 0.88%.

To adjust the return to the company risk, a forward-looking equity beta of the company is needed. Firstly, we regressed Adidas and other eight peers' monthly returns against the Morgan Stanley Capital International (MSCI) World Index monthly returns from the last 7 years to obtain the company beta. The MSCI world was considered the best proxy for the market return [26]. It is the best estimation in our case since it includes a weighted value of well-diversified stocks from 23 developed countries. The Adidas raw beta obtained was 0.86, but the model only explains 21% of it, and the standard error of the beta is 0.18, which means that the 95% confidence interval would give us a range of [0.51;1.21]. This interval is too large to grant confidence in simply using Adidas raw beta. Therefore, we used the industry beta from the peers with similar operating risk to estimate Adidas beta. Since the sample is small the median beta of 0.92 was used in the model. Operational risk may be similar between the peers, but each one has different levels of leverage and financial risks. So, there is a need to convert the raw betas into unlevered. Considering that the companies are assumed to target a constant D/E ratio, the risk of the tax shields is assumed to be equal to the assets of the company, and the according formula used. Then the unlevered beta was re-levered, taking into consideration the 3.6% target capital structure of Adidas, resulting in a beta of the assets of 0.95.

Inputs	
MRP	5,5%
RF	0,88%
Bu	0,92
target D/E	3,61%
Bd	0,04
Re-leverd Beta	0,95
Ru	5,93%
Re	6,11%
WACC	5,924%

Figure 27: Adidas WACC components

The outcome of our estimation using an MRP of 5.5% and a risk-free rate of 0.88% led to a cost of equity of 6.11%, a cost of debt of 1.08%, and a target D/E ratio of 3.6%, resulting in a WACC of 5.92% (Fg 27).

Terminal Value

Until 2025, due to the new strategy, Own the Game, higher growth is expected, due to massive investment and effort to increase the company's performance. After 2025, Adidas is expected to slow down its growth, slowly approaching a more stable growth. Combining the terminal RONIC and Investment Rate New Capital, Adidas will have a perpetual growth rate of 2.1%, which is sustainable growth, considering the forecasted real long-term GDP CAGR of 2% by OCDE until 2060 [32] and the inflation rate of 1.9%, estimated by IMF to balance in 2027 [34]. Besides that, Adidas will have a long-term forecasted Core ROIC of 25% and a Core RONIC of 22%, both higher than the cost of capital (WACC) of 5.92%, meaning that the company will create value through the entire residual period. We expect Adidas to use its capabilities to consolidate its position as the second player in a fast-growing market, use its competitive advantage to shorten the distance to the market leader Nike and widen the distance to smaller players while better absorbing the new opportunities in the market than competitors to have a return on invested capital higher than the industry.

Total PV Core	54 922
+ Non-Core Assets	1 252
Entreprise Value	56 174
- Net Debt	3 473
= Value of equity	52 701

Figure 28: Adidas DCF valuation outcome

The Discounted Cash Flows (DCF) method was used to estimate the Enterprise Value of the company. The forecasted Free Cash Flows and the terminal value were discounted at the weighted average cost of capital (WACC) of 5.92%, resulting in an EV of €56.17 billion. After deducting the net financial assets, the Shareholder Equity of €52.70 billion was obtained (Fg.28). The number of 191,594,855 outstanding as of May 2022 is assumed to remain constant in the future. The outcome was a target price of €275.1 per share, taking into consideration the current price of €183.4, the model discloses a BUY recommendation with a 2% dividend yield and a 48% capital gain.

Relative Valuation

	BF P/E	BF EV/EBITDA
Adidas	18,49x	9,78x
Current Premium to Comps Mean	-23,13x	-35,75x
Lululemon Athletica Inc	36,34x	22,33x
Puma SE	23,53x	10,44x
NIKE Inc	27,50x	21,19x
Under Armour Inc	18,92x	9,40x
VF Corp	14,41x	12,38x
Lululemon Athletica Inc	36,34x	22,33x
Industry Mean	24,14x	15,15x
Industry Median	23,53x	12,38x

Figure 29: P/E and EV/EBITDA multiples of Adidas and its peers

To complement and test the DCF method we carried out a multiple valuation. The chosen peers, Nike, Puma, Under Armor, VF Corporation, and Lululemon, were based on the Bloomberg recommendation. In addition to the P/E multiple, we used the EV/EBITDA multiple to access the company's value regardless of its capital structure [26] (Fg.29). The industry average of the multiples was used to calculate the EV and equity of the company. The P/E multiple resulted in a target price of €266.56 per share, and the EBITDA/EV resulted in an EV value of €58.25 billion. After deducting the net debt and assuming the number of shares will continue constant in the future, we got a target price of €293.6 per share. Both target prices are significantly above Adidas's current price, suggesting the company's undervaluation, consistent with the DCF valuation outcome and the fact that Adidas multiples lower than 4 of the 5 peers considered. Considering an average between the two target prices the relative valuation outcome is a target price of €275.1, with a BUY recommendation in place.

Sensitivity Analysis

To fine-tune our valuation there is the need to test the sensitivity of our target price in relation to changes in terminal growth rate and WACC, the most relevant assumptions of our model. The WACC used to discount the FCF was a result of the assumed target capital structure of D/E 3.61% and unlevered beta of 0.92. Therefore, we wanted to test the influence of the target D/E being the level before 2019 and its law changes, when Adidas maintained net debt close to 0% and a higher level of debt to capitalize on interest tax shields (D/E of 7%). Also, since we assumed the industry median unlevered beta, we tested the change between 0.72 and 1.12, with the lower value being two times the difference between median industry and Adidas regressed beta of 0.82, and the upper limit the reverse. These changes would result in a variation of WACC between 4.83% and 7.01%, and a target price between €210.68 and €391.4. The terminal growth rate assumed in the model came from a terminal RONIC of 21.96% and an Investment Rate of New Capital (RRNC) of 9.54%. With changes in these variables, our sensitivity analysis growth rate would vary from 0.68%, meaning that Adidas would grow slightly slower than the market, and 3.96%, resulting in a target price change between €244.1 and €387.2. Combining both changes in WACC and terminal growth, the target price would be at its lowest €195.2. The Fg.30 shows in green the cases where our recommendation would

	WACC				
Terminal Groth Rate	4,83%	5,38%	5,92%	6,47%	7,01%
3,96%	-	-	388,0	306,3	254,3
2,68%	451,2	358,1	297,3	253,1	220,6
2,07%	391,3	323,2	275,3	238,7	210,7
1,31%	345,8	294,4	256,1	225,4	201,3
0,68%	320,7	277,6	244,3	217,1	195,2

Figure 30: Price sensitivity to WACC and terminal growth rate

be BUY (capital gain higher than 10%), in yellow HOLD (capital gain from 0% to 10%), and in red BUY, the negative return cases. The green majority gives confidence to our recommendation BUY.

Scenario Analysis

A scenario analysis was conducted to the drivers of our forecast. In the worst-case, the target price was €145.4, and €420.1 in the best case. Assuming both cases have an equal probability of happening, the expected target price is €282.8, higher than the current price, and iterating the recommendation BUY.

Best case would be characterized by higher demand growth, quick end to the war in Europe, and efficient supply chain in the short term. Sales growth would result from a higher sportswear market size and Adidas' ability to maximize trends, such as being the leader in the Women's and Sustainability categories. As an effective and quicker than expected improvement of relationship with Chinese consumers, leading to a gain in market share and capitalization of the growth of this market. Furthermore, a short-term conclusion to the conflict in Europe with inflation returning to normal sooner than projected would result in higher revenue growth and lower cost of sales. In terms of the supply chain, reducing the cost of sales, Adidas would deal with the e-commerce logistics complexity in the best possible way as the channel mix becomes increasingly DTC-dominated. No more covid variants and outbreaks would occur and WTO trade restrictions would be lifted. With raw materials prices rising at a slower rate. Other operating costs will not change as a percentage of sales in this case. With these assumptions, sales growth would increase by 0.5 pp, and the cost of sales would decrease 0.5 pp.

Worst case would have a lower increase in demand, an extension of the war, and supply chain disruptions aggravation. With the sporting goods market growing less than expected, a poor approach to the market opportunities, and a worse situation with consumers in China, Adidas's revenue would grow slower than in the base case. Also, an extension of the war would reduce sales in every country involved and increase inflation to a point in which Adidas would not be able to maintain revenues with an increase in its prices. The supply chain disruptions in place, would increase and not dissipate after 2025 and be accompanied by new logistics implications due to the war. With new covid variants and outbreaks, factories would close, shipping costs increase, and higher number of trade restrictions. Which would increase costs of sales together with raw materials prices increasing higher than expected due to fewer plantation spaces, high inflation, and a channel mix with wholesale dominated. Other operating costs will not change as a percentage of sales in this case. Revenue growth would decrease by 0.5pp, and the cost of sales would increase by 0.5 pp.

Final Recommendation

Our final recommendation BUY, with a dividend yield of 2% and a capital gain of 48%, is strongly supported by the relative valuation and the risk analysis. Indicating that Adidas stock is undervalued, despite being historically a safe investment with constant positive returns and regular dividend payments, even in bear markets. The recent significant fall in stock price, despite strong financial results in 2021, is motivated by a market overreaction to the war in Europe and the China boycott. With Russia and Ukraine sales not being material for the company and our conservative market size and market share forecast backing a clear undervaluation. Adidas's capabilities as one of the market leaders and the clear strategic plan by 2025 will allow Adidas to effectively manage the present setbacks and capitalize on the market trends.

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Apendix

in millions of EUR	2 017	2 018	2 019	2 020	2 021	2022 (F)	2023 (F)	2024 (F)	2025 (F)	2026 (F)	2027 (F)	2028 (F)	2029 (F)	2030 (F)
Core														
Net Sales	21 218	21 915	23 640	18 435	21 234	22 608	24 379	25 824	26 841	27 591	28 317	28 969	29 632	30 300
growth	14,80%	3,28%	7,87%	-22,02%	15,18%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Adidas brand	18 648	19 406	21 289	18 287	21 088	22 460	24 227	25 669	26 683	27 429	28 153	28 801	29 461	30 126
growth		4,06%	9,70%	-14,10%	15,32%	6,50%	7,87%	5,95%	3,95%	2,80%	2,64%	2,30%	2,29%	2,26%
% revenues	88%	89%	90%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Wholesale	13 427	13 584	14 264	10 789	13 075	13 632	13 927	14 062	14 103	14 140	14 174	14 205	14 231	14 254
growth		1,17%	5,00%	-24,36%	21,18%	4,26%	2,16%	0,97%	0,29%	0,27%	0,24%	0,21%	0,19%	0,16%
% revenues	63%	62%	60%	59%	62%	60%	57%	54%	53%	51%	50%	49%	48%	47%
# Wholesale doors	150 000	150 000	150 000	140 000	137 000	134 000	131 000	129 000	127 000	125 000	123 000	121 000	119 000	117 000
Average Revenue per Wholesale Door	0,09	0,09	0,10	0,08	0,10	0,10	0,11	0,11	0,11	0,11	0,12	0,12	0,12	0,12
Direct to consumer	5 221	5 822	7 025	7 498	8 013	8 828	10 301	11 607	12 580	13 289	13 979	14 597	15 230	15 872
growth		11,50%	20,67%	6,72%	6,88%	10,16%	16,68%	12,68%	8,38%	5,64%	5,19%	4,42%	4,33%	4,22%
% revenues	25%	27%	30%	41%	38%	39%	42%	45%	47%	48%	49%	50%	51%	52%
Own retail	3 730	3 881	4 684	3 657	4 099	4 448	4 729	4 907	5 072	5 270	5 463	5 648	5 824	5 991
growth		4,06%	20,67%	-21,91%	12,06%	8,51%	6,34%	3,76%	3,35%	3,92%	3,65%	3,39%	3,12%	2,86%
% revenues	18%	18%	20%	20%	19%	20%	19%	19%	19%	19%	19%	19%	20%	20%
# stores	2 275	2 139	2 265	2 185	2 184	2 166	2 149	2 142	2 136	2 147	2 158	2 169	2 180	2 191
Average revenue per store	2	2	2	2	2	2	2	2	2	2	3	3	3	3
E-commerce	1 492	1 941	2 342	3 840	3 915	4 380	5 571	6 700	7 508	8 019	8 516	8 949	9 405	9 881
growth		30,08%	20,67%	63,99%	1,94%	11,89%	27,18%	20,26%	12,07%	6,80%	6,20%	5,08%	5,10%	5,06%
% revenues	7%	9%	10%	21%	18%	19%	23%	26%	28%	29%	30%	31%	32%	33%
Reebok brand	1 832	1 681	1 746	-	-	-	-	-	-	-	-	-	-	-
% revenues	9%	8%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Businesses	738	828	605	148	146	149	152	155	158	161	164	168	171	174
growth		12,20%	-26,93%	-75,54%	-1,35%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
% revenues	3%	4%	3%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cost of sales	10 514	10 552	11 347	9 213	10 469	11 101	11 921	12 576	13 018	13 243	13 451	13 616	13 927	14 241
growth		0,36%	7,53%	-18,81%	13,63%	6,03%	7,39%	5,49%	3,51%	1,73%	1,57%	1,22%	2,29%	2,26%
% revenues	49,55%	48,15%	48,00%	49,98%	49,30%	49,10%	48,90%	48,70%	48,50%	48,00%	47,50%	47,00%	47,00%	47,00%
Gross Margin	50,4%	51,9%	52,0%	50,0%	50,7%	50,9%	51,1%	51,3%	51,5%	52,0%	52,5%	53,0%	53,0%	53,0%
Royalty and comission income	115	129	154	61	86	114	123	130	135	139	143	146	149	153
growth		12,17%	19,38%	-60,39%	40,98%	32,39%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	0,54%	0,59%	0,65%	0,33%	0,41%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%
Other operating income	133	48	56	42	28	28	28	28	28	28	28	28	28	28
growth		-63,91%	16,67%	-25,00%	-33,33%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
% revenues	0,63%	0,22%	0,24%	0,23%	0,13%	0,12%	0,19%	0,18%	0,17%	0,16%	0,16%	0,17%	0,17%	0,17%
Other operating expenses	8 882	9 172	9 843	8 580	8 892	9 445	10 131	10 655	11 023	11 357	11 686	11 993	12 303	12 598
growth		3,27%	7,32%	-12,83%	3,64%	6,22%	7,27%	5,17%	3,46%	3,02%	2,90%	2,63%	2,58%	2,40%
adjustments	-1	-1	0	0	0									
Marketing and point-of-sale expenses	2 733	3 001	3 042	2 373	2 547	2 713	2 925	3 099	3 221	3 311	3 398	3 476	3 556	3 636
growth		9,81%	1,37%	-21,99%	7,33%	6,52%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	12,88%	13,69%	12,87%	12,87%	11,99%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%
Distribution and selling expenses	4 385	4 450	4 997	4 601	4 782	5 019	5 363	5 630	5 798	5 960	6 117	6 257	6 400	6 545
growth	0,00%		12,29%	-7,92%	3,93%	4,96%	6,86%	4,96%	2,98%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	20,67%	20,31%	21,14%	24,96%	22,52%	22,20%	22,00%	21,80%	21,60%	21,60%	21,60%	21,60%	21,60%	21,60%
General and administration expenses	1 765	1 576	1 652	1 379	1 481	1 589	1 709	1 787	1 859	1 935	2 014	2 095	2 176	2 242
growth		-10,71%	4,82%	-16,53%	7,40%	7,26%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	8%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Sundry expenses	-	105	134	116	76	88	94	99	103	107	111	116	120	124
growth			27,62%	-13,43%	-34,48%	15,44%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impairment losses (net) on accounts receivable and contract assets	-	41	18	111	6	37	39	41	43	45	46	48	50	52
growth			-56,10%	516,67%	-94,59%	509,44%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operating Margin	9,8%	10,8%	11,3%	4,0%	9,4%	9,8%	10,2%	10,7%	11,0%	11,4%	11,8%	12,2%	12,1%	12,0%
Core Result before Taxes	2 070	2 368	2 660	745	1 987	2 205	2 477	2 751	2 963	3 157	3 352	3 535	3 579	3 642
Statutory Taxes	621	711	728	204	544	604	678	753	811	864	918	968	980	997
Statutory Tax Rate	30%	30%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
Tax Adjustments	(66)	(19)	(10)	4	(107)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
Core Result	1 515	1 676	1 942	537	1 550	1 641	1 839	2 037	2 191	2 333	2 474	2 607	2 639	2 684
growth		11%	16%	-72%	188%	6%	12%	11%	8%	6%	6%	5%	1%	2%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Non-Core														
Financial Income	46	57	64	29	19	43	43	43	43	43	43	43	43	43
Non Core Result before Taxes	46	57	64	29	19	43	43	43	43	43	43	43	43	43
Statutory Taxes	14	17	18	8	5	12	12	12	12	12	12	12	12	12
Statutory Tax Rate	30,00%	30,03%	27,37%	27,34%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%
Tax Adjustments	126	(26)	(49)	(46)	(40)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Other Comprehensive Income	(818)	150	(84)	(540)	573	(144)	(144)	(144)	(144)	(144)	(144)	(144)	(144)	(144)
Gain/Losses from discontinued operations, net of tax	(254)	(5)	59	(19)	666	89	89	89	89	89	89	89	89	89
adjustments	(2)	1	2	-	(1)	-	-	-	-	-	-	-	-	-
Non Core Result	(1 168)	212	72	(492)	1 292	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)
growth		-118%	-66%	-779%	-363%	-101%	0%	0%	0%	0%	0%	0%	0%	0%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Financing														
Financial expenses	93	47	166	196	153	270	268	284	301	314	323	331	338	347
% Debt Previous Year		4,12%	9,34%	4,03%	2,55%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%
Financing Result before Taxes	(93)	(47)	(166)	(196)	(153)	(270)	(268)	(284)	(301)	(314)	(323)	(331)	(338)	(347)
Statutory Taxes	(28)	(14)	(45)	(54)	(42)	(74)	(73)	(78)	(82)	(86)	(88)	(91)	(93)	(95)
Statutory Tax Rate	-30,00%	-30,03%	-27,37%	-27,34%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%
Tax Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Result	(65)	(33)	(121)	(142)	(111)	(196)	(195)	(206)	(219)	(228)	(234)	(241)	(246)	(252)
growth		-49%	267%	18%	-22%	76%	0%	6%	6%	4%	3%	3%	2%	2%
Comprehensive Result	282	1 855	1 894	(97)	2 731	1 429	1 628	1 815	1 956	2 088	2 223	2 350	2 377	2 417
growth		558%	2%	-105%	-2915%	-48%	14%	11%	8%	7%	6%	6%	1%	2%
	TRUE	TRUE	TRUE	TRUE	TRUE									

in millions of EUR	2 017	2 018	2 019	2 020	2 021	2022 (F)	2023 (F)	2024 (F)	2025 (F)	2026 (F)	2027 (F)	2028 (F)	2029 (F)	2030 (F)
Core Business														
Operating Cash	424	438	473	369	425	452	488	516	537	552	566	579	593	606
% revenues	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
growth		3,28%	7,87%	-22,02%	15,18%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Accounts receivable	2 315	2 418	2 625	1 952	2 175	2 372	2 580	2 756	2 889	2 939	2 985	3 059	3 167	3 277
Average colection period	40	40	41	39	37	36	35	34	33	32	31	31	31	30
growth		4,45%	8,56%	-25,64%	11,42%	9,07%	8,77%	6,83%	4,81%	1,73%	1,57%	2,47%	3,53%	3,49%
Other financial assests	612	798	994	1 116	905	964	1 039	1 101	1 144	1 176	1 207	1 235	1 263	1 291
% revenues	2,88%	3,64%	4,20%	6,05%	4,26%	4,26%	4,26%	4,26%	4,26%	4,26%	4,26%	4,26%	4,26%	4,26%
growth		30,39%	24,56%	12,27%	-18,91%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Inventories	3 692	3 445	4 085	4 397	4 009	4 227	4 507	4 720	4 850	4 935	5 012	5 073	5 189	5 306
Average holding period	128	119	131	174	140	140	140	140	140	140	140	140	140	140
growth		-6,69%	18,58%	7,64%	-8,82%	5,45%	6,62%	4,73%	2,76%	1,73%	1,57%	1,22%	2,29%	2,26%
Property, plant and equipament	2 000	2 237	2 380	2 157	2 256	2 589	2 771	2 944	3 095	3 177	3 259	3 338	3 419	3 501
growth		11,85%	6,39%	-9,37%	4,59%	14,76%	7,04%	6,22%	5,15%	2,64%	2,57%	2,43%	2,42%	2,41%
Right-of-use assets	-	-	2 931	2 430	2 569	2 735	2 950	3 124	3 247	3 338	3 426	3 505	3 585	3 666
% revenues	0,00%	0,00%	12,40%	13,18%	12,10%	12,10%	12,10%	12,10%	12,10%	12,10%	12,10%	12,10%	12,10%	12,10%
growth				-17,09%	5,72%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Trademarks	1 309	844	859	750	16	17	18	19	20	21	21	22	22	23
% revenues	6,17%	3,85%	3,63%	4,07%	0,08%	0,08%	0,08%	0,08%	0,08%	0,08%	0,08%	0,08%	0,08%	0,08%
growth				-12,69%	-97,87%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Other intagible asstes	154	196	305	252	336	333	360	381	396	407	418	427	437	447
% revenues	0,73%	0,89%	1,29%	1,37%	1,58%	1,47%	1,47%	1,47%	1,47%	1,47%	1,47%	1,47%	1,47%	1,47%
growth				-17,38%	33,33%	-0,77%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Deferred tax assets	630	651	1 093	1 233	1 263	1 428	1 131	1 198	1 245	1 280	1 314	1 344	1 375	1 406
% revenues	2,97%	2,97%	4,62%	6,69%	5,95%	6,32%	4,64%	4,64%	4,64%	4,64%	4,64%	4,64%	4,64%	4,64%
growth				12,81%	2,43%	13,10%	-20,81%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Income tax receivables	71	48	94	109	91	97	104	111	115	118	121	124	127	130
% revenues	0,33%	0,22%	0,40%	0,59%	0,43%	0,43%	0,43%	0,43%	0,43%	0,43%	0,43%	0,43%	0,43%	0,43%
growth		-32,39%	95,83%	15,96%	-16,51%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Other assets	606	819	1 179	1 102	1 136	1 210	1 304	1 382	1 436	1 476	1 515	1 550	1 585	1 621
% revenues	2,86%	3,74%	4,99%	5,98%	5,35%	5,35%	5,35%	5,35%	5,35%	5,35%	5,35%	5,35%	5,35%	5,35%
growth		35,15%	43,96%	-6,53%	3,09%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Accounts payable	1 975	2 300	2 703	2 390	2 294	2 230	2 338	2 405	2 427	2 419	2 405	2 460	2 517	2 490
Average payable period	69	84	84	78	76	78	79	80	81	81	81	82	83	84
growth		16,46%	17,52%	-11,58%	-4,02%	-2,80%	4,84%	2,90%	0,88%	-0,32%	-0,57%	2,30%	2,29%	-1,04%
Other current financial liabilities	362	186	235	446	363	386	417	441	459	472	484	495	507	518
% revenues	1,71%	0,85%	0,99%	2,42%	1,71%	1,71%	1,71%	1,71%	1,71%	1,71%	1,71%	1,71%	1,71%	1,71%
growth		-48,62%	26,34%	89,79%	-18,61%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Income taxes (liabilities)	424	268	618	562	536	571	615	652	678	696	715	731	748	765
% revenues	2,00%	1,22%	2,61%	3,05%	2,52%	2,52%	2,52%	2,52%	2,52%	2,52%	2,52%	2,52%	2,52%	2,52%
growth		-36,79%	130,60%	-9,06%	-4,63%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Accrued liabilities	2 265	2 324	2 446	2 180	2 692	2 866	3 091	3 274	3 403	3 498	3 590	3 673	3 757	3 841
% revenues	10,67%	10,60%	10,35%	11,83%	12,68%	12,68%	12,68%	12,68%	12,68%	12,68%	12,68%	12,68%	12,68%	12,68%
growth		2,60%	5,25%	-10,87%	23,49%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Deferred tax liabilities	275	241	280	241	122	130	140	148	154	159	163	166	170	174
% revenues	1,30%	1,10%	1,18%	1,31%	0,57%	0,57%	0,57%	0,57%	0,57%	0,57%	0,57%	0,57%	0,57%	0,57%
growth		-12,36%	16,18%	-13,93%	-49,38%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Other Provisions	821	1 360	1 703	1 838	1 607	1 711	1 845	1 954	2 031	2 088	2 143	2 192	2 243	2 293
% revenues	3,87%	6,21%	7,20%	9,97%	7,57%	7,57%	7,57%	7,57%	7,57%	7,57%	7,57%	7,57%	7,57%	7,57%
growth		65,65%	25,22%	7,93%	-12,57%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Other liabilities	526	545	545	415	443	472	509	539	560	576	591	604	618	632
% revenues	2,48%	2,49%	2,31%	2,25%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%	2,09%
growth		3,61%	0,00%	-23,85%	6,75%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Core Invested Capital	5 165	4 670	8 488	7 795	7 124	8 059	8 298	8 838	9 264	9 511	9 753	9 933	10 203	10 560
growth		-10%	82%	-8%	-9%	13%	3%	7%	5%	3%	3%	2%	3%	4%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Non-Core Business														
Goodwill	1 220	1 245	1 257	1 208	1 228	1 228	1 228	1 228	1 228	1 228	1 228	1 228	1 228	1 228
% revenues	5,75%	5,68%	5,32%	6,55%	5,78%	5,43%	5,04%	4,76%	4,58%	4,45%	4,34%	4,24%	4,14%	4,05%
growth		2,05%	0,96%	-3,90%	1,66%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Financial assets	241	282	659	353	290	309	333	353	367	377	387	396	405	414
% revenues	1,14%	1,29%	2,79%	1,91%	1,37%	1,37%	1,37%	1,37%	1,37%	1,37%	1,37%	1,37%	1,37%	1,37%
growth		17,01%	133,69%	-46,43%	-17,85%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Pensions and similar obligations	298	246	229	284	267	284	307	325	337	347	356	364	373	381
% revenues	1,40%	1,12%	0,97%	1,54%	1,26%	1,26%	1,26%	1,26%	1,26%	1,26%	1,26%	1,26%	1,26%	1,26%
growth		-17,45%	-6,91%	24,02%	-5,99%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Assets classified as held for sale	72	-	-	-	1 439	-	-	-	-	-	-	-	-	-
% revenues	0,34%	0,00%	0,00%	0,00%	6,78%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
**adjustments*	3	-1	-3	-1	3									
Non-core Invested Capital	1 238	1 280	1 684	1 276	2 693	1 252	1 254	1 256	1 257	1 258	1 259	1 259	1 260	1 261
growth		3%	32%	-24%	111%	-53%	0,15%	0,12%	0,09%	0,06%	0,06%	0,06%	0,06%	0,06%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Total Invested Capital	6 403	5 950	10 172	9 071	9 817	9 312	9 553	10 094	10 521	10 769	11 012	11 192	11 463	11 821
growth		-7%	71%	-11%	8%	-5%	3%	6%	4%	2%	2%	2%	2%	3%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Financing														
Excess cash	1 174	2 191	1 747	3 625	3 403	2 201	2 374	2 514	2 613	2 686	2 757	2 821	2 885	2 950
Operating cash	424	438	473	369	425	452	488	516	537	552	566	579	593	606
Cash and cash equivalents	1 598	2 629	2 220	3 994	3 828	2 653	2 861	3 031	3 150	3 238	3 323	3 400	3 478	3 556
% revenues	7,53%	12,00%	9,39%	21,67%	18,03%	11,74%	11,74%	11,74%	11,74%	11,74%	11,74%	11,74%	11,74%	11,74%
growth		86,66%	-20,24%	107,49%	-6,12%	-35,32%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Lease liabilities	-	-	3 132	2 722	2 836	3 020	3 256	3 449	3 585	3 685	3 782	3 869	3 958	4 047
% Right-of-use assets			106,86%	112,02%	110,39%	110,39%	110,39%	110,39%	110,39%	110,39%	110,39%	110,39%	110,39%	110,39%
growth				-13,09%	4,19%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Borrowings	1 120	1 675	1 638	3 168	2 495	2 254	2 321	2 472	2 591	2 660	2 728	2 778	2 853	2 953
% Core Invested Capital	21,68%	35,86%	19,30%	40,64%	35,02%	27,97%	27,97%	27,97%	27,97%	27,97%	27,97%	27,97%	27,97%	27,97%
Other non-current financial liabilities	22	103	92	115	51	83	89	94	98	101	103	106	108	111
% revenues	0,10%	0,47%	0,39%	0,62%	0,24%	0,37%	0,37%	0,37%	0,37%	0,37%	0,37%	0,37%	0,37%	0,37%
growth				93,41%	-21,24%	-9,66%	2,97%	6,51%	4,81%	2,67%	2,54%	1,84%	2,72%	3,50%
Non-controlling interests	-15	-13	261	237	318	318	318	318	318	318	318	318	318	318
Net Financial Assets	47	426	(3 376)	(2 617)	(2 297)	(3 473)	(3 610)	(3 819)	(3 978)	(4 078)	(4 174)	(4 250)	(4 352)	(4 479)
growth		813%	-893%	-22%	-12%	51%	4%	6%	4%	2%	2%	2%	2%	3%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Equity	6 450	6 376	6 796	6 454	7 520	5 839	5 942	6 275	6 542	6 692	6 838	6 942	7 111	7 342
growth		-1%	7%	-5%	17%	-22%	2%	6%	4%	2%	2%	2%	2%	3%
D/E	18%	28%	72%	93%	72%	92%	95%	96%	96%	96%	97%	97%	97%	97%
Comprehensive Result	282	1 855	1 894	(97)	2 731	1 429	1 628	1 815	1 956	2 088	2 223	2 350	2 377	2 417
Transaction with shareholders	(303)	(1 929)	(1 474)	(245)	(1 665)	(3 110)	(1 524)	(1 482)	(1 689)	(1 939)	(2 077)	(2 246)	(2 209)	(2 185)
Dividends	(406)	(530)	(666)	(585)	(632)	(414)	(471)	(526)	(567)	(605)	(644)	(681)	(689)	(700)
Payout ratio (%)	***144%***	***29%***	***35%***	***-603%***	***23%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***
Other Transaction with sharholders	103	(1 399)	(808)	340	(1 032)	(2 696)	(1 053)	(956)	(1 123)	(1 334)	(1 433)	(1 565)	(1 520)	(1 485)
Financing	6 403	5 950	10 172	9 071	9 817	9 312	9 553	10 094	10 521	10 769	11 012	11 192	11 463	11 821
Check	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE

NOVA SCHOOL OF BUSINESS & ECONOMICS

MASTER IN FINANCE

ADIDAS AG

COMPANY REPORT

SPORTING GOODS

18 MAY 2022

DUARTE BARBOSA & FILIPE MATOS

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Adapting to the new sporting goods market era

- We initiate Adidas AG coverage with a BUY recommendation. With a target price of €280.53 per share, an expected 53% investor return resulted from our valuation, with a dividend yield of 2% and a capital gain of 51%.

- The target price was obtained from the Discounted Cash flow valuation method, with a WACC of 5.92% and a terminal growth rate of 2.1%, which is in line with the GDP growth and inflation projections.

- Adidas AG's was more affected by the COVID-19 pandemic than the average of the sporting goods industry. But its capabilities as a market leader led to one of the most solid recoveries in its market, with pre-endemic revenues and net income obtained in 2021.

- Above average growth is expected between 2022 and 2025. Due to Adidas AG new strategy and the new trends and opportunities that are shaping the sportswear industry, making it a more profitable and fast growing market.

- Adidas AG is focused is changing its channel strategy from wholesale dominated to Direct-to-consumer based, with e-commerce at the center.

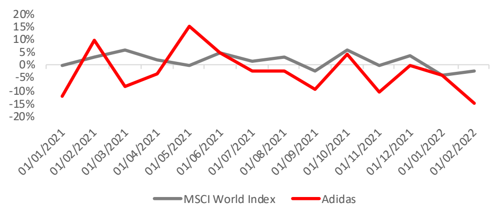
Company description

Adidas AG, founded in 1924, is the second largest sportswear company in the world and the biggest in Europe. The German company is specialized in designing and selling sports footwear, apparel, and accessories. Adidas AG is geographically segmented into six regions: EMEA, North America, Latin America, Asia-Pacific, Great China, and Other Business.

Recommendation:	**BUY**
Vs Previous Recommendation	-
Price Target FY21:	**275.7 €**
Vs Previous Price Target	- €
Price (as of 17-MAY-22)	**184.3 €**

Bloomberg:

52-week range (€)	€298.4-€176.9
Market Cap (€m)	35.138
Outstanding Shares (m)	192



Source: Bloomberg

(Values in € millions)	2019	2020	2021
Revenues	23640	18425	21234
EBITDA	3893	2001	3109
Net Profit	1976	432	2116
EPS	10	2	11

Source: Bloomberg

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Company Overview

Largest sportswear company in Europe

Adidas AG, henceforth referred to as Adidas, is the largest sportswear company in Europe and the second largest worldwide. Operating across 160 countries and employing 62000 people, the firm focuses on designing and creating the best performing sports footwear, apparel, and accessories worldwide. Adidas was founded in 1924 under the name "Dassler Brothers Shoe Factory" by Adolf and Rudolf Dassler, but after a conflict in 1949, the brothers separated, with Adolf creating Adidas and Rudolf leaving the company and starting Puma, their main competitor in Europe.

Business Model And Strategy

Adidas's mission is to create the best product for the professional or home athlete

Adidas's mission is to create the best product for the professional or home athlete. Its business model focuses on innovation, employing cutting-edge technology in the manufacturing of sporting goods to improve performance. As a result, Adidas' business model is based on the product complemented by a bold marketing strategy. In contrast, Nike, its principal competitor, has a model based on an aggressive demand generation strategy complemented by innovative items. Adidas creates, designs, distributes, sells, and markets its products while outsourcing nearly all its production to low-wage Asian nations to reduce costs. The firm's operation relies on its trusting relationships with its supplying partners, 65% of whom they have worked with for over 10 years.

Figure 1: Adidas's revenues per product category

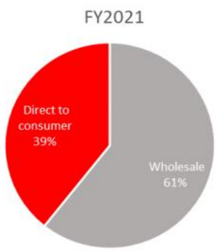

Figure 2: Adidas's revenues per distribution channel

The company's product mix is comprised of three categories, footwear accounting for 53% of sales, apparel 41%, and accessories and gear 6% in 2021 (Fg.1). Footwear domination is understandable given Adidas's origins as a footwear-only company, but apparel has grown in prominence since 2017 when it accounted for 37% of the revenues. Regarding the selling and distribution strategy is segmented into wholesale and direct-to-consumer departments, which are specialized to meet the demands of each category. In 2021 the channel mix was wholesale dominated, representing 61% (Fg.2), but it has lost importance compared to 2017 when represented 88% of revenues. Direct-to-consumer, on the other hand, is on the rise, thanks to an increase in e-commerce in 2020 and 2021, the company's future priority, with sales up 162% from 2017 [1].

In terms of financial performance, Adidas revenues were €21.2 billion in 2021, representing an increase of 40% compared to 2012 net sales of €14.8 billion. Adidas had a strong growth with an 11 % compound annual growth rate (CAGR) between 2015-2019, growing faster than Nike which has had a 5% CAGR. Adidas is divided into geographic segments. In 2021 EMEA was the most

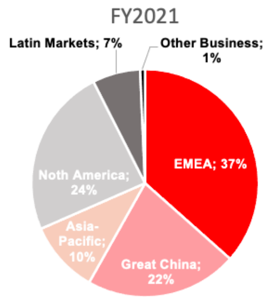

Figure 3: Adidas's revenues per segment

important segment representing 37% of revenues. Comprised of Europe, Russia, and Emerging Markets, it has a gross margin of 51%, which is in line with the overall company. The segment that has increasingly gained importance is North America. In 2021, it represented 24% of sales compared with 20% in 2017, with the gross margin mirroring the improvement, from 40% to 46%. This is consistent with Adidas's strategic focus in this market. Greater China is another essential segment for the firm. It is the fastest-growing market with an expected 12% CAGR between 2020 and 2025 accounting for 22% of revenues and having the highest gross margin of all segments. Also, Adidas has three other segments, Asia-pacific representing 10% of revenues, Latin America accounting for 6%, and other business with 1% in 2021 (Fg.3).

Greater China is the fastest-growing market with an expected 12% CAGR between 2020 and 2025

New strategy called "Own the Game" for the years 2021-2025

Adidas developed a new strategy called **"Own the Game"** for the years 2021-2025, with the goal of becoming the top sports brand in the world while innovating in all dimensions and implementing digital transformation. Enhance credibility, improve the client's digital and physical experience, and highlight Adidas's position as an industry leader in sustainability, are the three components of the strategy. To enhance credibility. Adidas will position itself as a lifestyle brand that is not only utilized for sports but also as a high-end, high-quality brand for style. Also, becoming the Women's segment leader is one of the priorities since it is a fastest-growing segment in this industry. Adidas plans to transmit this message of credibility through partnerships, that will focus on personalities, not only athletes like Lionel Messi but also personalities such as Beyonce or Kanye West. Adidas plans to shift its business from wholesale dominated to direct-to-consumer (DTC) led, with e-commerce at its core, to improve the customer experience and profitability. Physical stores will include digital elements and serve as a supplement to online stores. Also, the German company plans to focus its efforts in strategic markets, more specifically in Greater China, North America, and EMEA, to provide a locally shaped experience in order to gain market share in these markets. Adidas is a leader in sustainable initiatives and makes it a priority in its overall strategy to push it forward [1].

From wholesale dominated to direct-to-consumer (DTC) led

Adidas is a leader in sustainability

Adidas decided to sell Reebok for €2.1 billion in cash as part of its 2021-2025 strategy, a significant decrease from the €3.1 billion paid in 2006. Reebok's poor financial performance and the desire to concentrate all of Adidas's capabilities on its own business to complete the 2021-2025 strategy are the main reasons for this divesture. This strategic decision will help Adidas to improve its overall margins and therefore get closer to its goals.

Adidas' financial goals for 2025 are to increase sales and profitability to return value to shareholders. By achieving a CAGR of 8% to 10% on net sales, Adidas hopes to grow more than competitors and reinvest into future organic growth by investing 3 to 4% of net sales into Capex. Adidas plans to increase its gross and operating margins to 53-55% and 12-14%. Also, it aims to achieve a net income CAGR of 16-18%. Adidas will return capital to its shareholders with stock repurchases and by paying out 30-50% of net income in dividends [1].

Stock Performance

Since 2013, Adidas stock had a CAGR of 13.3%

Adidas went public in 1995 and its stock value has consistently gone up. Since 2013, Adidas stock had a CAGR of 13.3%, which is a positive return. However, in comparison with its competitors, the performance was significantly worse, with Nike and Puma having a CAGR of 21% and Anta having a CAGR of 39.9%. In a narrower period, Adidas's share return was even worse, with a CAGR of 10.9%. When compared with peers the trend continues, being outperformed by Nike, *Puma, and Anta, with CAGRs of 24.1%, 31.2%, and 16.9% respectively. Furthermore, in 2021 the stock underperformed, decreasing 15% in value compared to 2020, which goes against the market and apparel industry trend, with the MSCI World Textiles, Apparel, and Luxury Goods Index increasing 22%. Since the beginning of 2022, the fall continued to €183.4, representing a 30% decrease. The bad performance in the stock market doesn't reflect the strong 2021 in terms of financial performance, with 61% of analysts classifying Adidas as a "buy" stock and only 6% recommended selling it [1].

The bad performance in the stock market doesn't reflect the strong 2021 in terms of financial performance

Shareholder Structure

There were 191,594,855 shares outstanding

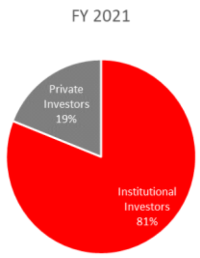

Figure 4: Adidas's shareholders

As of May 2022, there were 191,594,855 shares outstanding. Institutional investors hold 81% of the stock against 19% held by private and undisclosed investors, so because most shares are owned by institutional, it is expected less volatility than if they were held mainly by private investors. With a strong international investor base, only 12% of the equity is owned by German investors. The rest of Europe represents 54% and North American investors hold 31% of the shares. In terms of ownership concentration, Adidas's biggest shareholder only holds 7.2% of the shares outstanding, so the company is not dependent on a single investor. Also, Adidas is known for paying dividends consistently once a year, without fail, even in 2020 during the pandemic peak. In 2022, Adidas will pay dividends per share of 3.3€,v a total pay-out of €632 million, which represents an increase to the 3€ per share paid in 2021. In addition, during the second half of 2021 Adidas engaged in the repurchase of 3,471,205 shares representing €1 billion. This activity is consistent with Adidas's new strategy for 2021-2025, "Own the Game", which plans to give back to shareholders between 8 and 9 billion euros by 2025 by maintaining a target pay-out policy of between 30% and 50% of the net income and regular share buybacks representing €5 billion [1].

Industry Overview

The major industry players produce and sell sporting goods products like footwear, apparel, and sports equipment and accessories

Adidas is integrated into the Sporting Goods industry and is the second-best performer in both Sports Apparel and Sports Footwear markets. The major industry players produce and sell sporting goods products like footwear, apparel, and sports equipment and accessories.

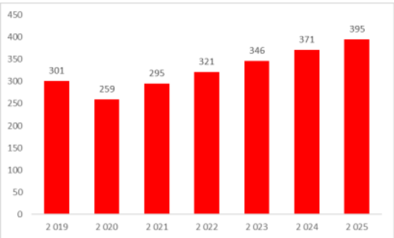

Figure 5: Sporting goods market sales volume between 2019-2025 (in billion euros) (Source: Euromonitor)

Before COVID-19, this industry was marked by its consistent growth fuelled by athleisure and increased women´s sports participation trends which created enough room for participants to prosper. Between 2015 and 2019, even companies like New Balance or North face, which lost market share, showed 2% and 4% a CAGR growth, respectively [2]. Looking at 2020, when the pandemic had its greatest impact, the industry suffered for the first time, in a long period, a contraction in both sales volume and market capitalization. The COVID-19 effects caused severe supply chain shocks with the closure of several factories and shops and affected demand through a generalized reduction of consumer purchasing power. This scenario contributed to a 13,95% value reduction in the Sporting Goods market, from €301 billion in 2019 to €259 billion in 2020 (Fig.5) [3].

This exceptional growth was mainly driven by strong performance in the Chinese and U.S. markets, as both countries registered a 23% and 15% growth

Despite this step back, in 2021, the vaccine's mitigating effects on COVID-19 have enabled the Sporting Goods Market to undergo an exceptional recovery and register a similar market value to the one presented in 2019. This exceptional growth was mainly driven by strong performance in the Chinese and U.S. markets, as both countries registered a 23% and 15% growth, respectively [3]. In the following years, this pattern of expansion will continue as the Sporting Goods Industry is predicted to grow to €395 billion in 2025, which represents an 8.8% CAGR rate. Both Sports Apparel and Sports Footwear sub-markets are expected to grow at a similar pace. The first, which represented approximately 59.51% of the industry in 2020, will grow at an 8.2% CAGR while the second will denote a 9.8% CAGR between 2021 and 2025 [4]. This expansion will be propelled by both old and new trends, which will be discussed further in the Future Trends and Opportunities chapter.

Industry Characteristics

The Sporting Goods market is characterized by being fiercely competitive, requiring participants to constantly reinvent themselves to stay ahead of the competition. To succeed, companies must invest in order to enhance brand recognition and create innovative products. As a result, the entry barriers are high, forcing newcomers to specialize in niche markets to survive.

To succeed, companies must invest in order to enhance brand recognition and create innovative products

Focusing on the industry's competitive behavior, as switching costs between brands are low, companies must differentiate themselves through product quality, design, sustainability, and brand image. Therefore, investment in R&D and marketing becomes essential for companies to stand out in this market. Regarding R&D, in the last decade, companies have attributed a key role to innovation. The search to develop a differentiated product based on comfort, attractive design, and environmentally friendly production led companies such as Nike, ranked first, Adidas, and Puma to invest massively in this area. The last two invested €1,275 million and over €490 million, respectively, between 2013 and 2020 [5][6]. Marketing campaigns are also fundamental for success in this industry. Companies use both assets and individuals to build awareness, credibility, and engagement around the brand. However, taking a step back to switching costs, the rising importance of membership plans, and the creation of a sense of community in brands´ apps might alter the past logic. In the upcoming years, retention rates are predicted to increase directly impacting the increase in switching costs too. Notwithstanding, product innovation and brand image will keep having a strong influence on consumers' decisions and allow companies to distinguish themselves in terms of product prices.

In the upcoming years, retention rates are predicted to increase directly impacting the increase in switching costs too

Finally, as most of the production is outsourced, the relationship between sportswear firms and their suppliers is critical. In the upcoming years, suppliers' performance dependency will likely increase, as the industry shifts focus to a Direct-to-consumer (DTC) business model that will require a better alignment between demand and production.

Competitive Analysis

Nike is the leading manufacturer and seller of athletic apparel and footwear, registering net sales of €37,565 million in 2021 (Fg.6). Among other factors, the partnerships with big celebrities like Michael Jordan and huge investments in marketing have contributed to its being considered one of the most recognizable brands in the world. In recent years, with the "Consumer Direct Offense", Nike has accelerated its digital transformation to boost its DTC e-commerce. The firm announced a goal of 30 percent digital penetration by 2023 as part of its DTC push. The firm´s good fit with the E-commerce expansion trend will enable it to continue its future growth path [7][8].

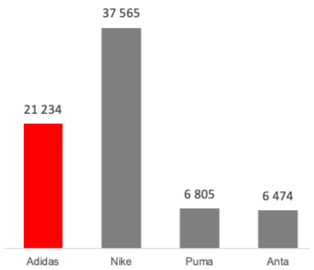

Figure 6: Adidas and competitors net sales in 2021

Their expertise in combining fashion with sports provides Puma with an advantage when capturing the growth of the Athleisure trend

Puma, considered the 3rd largest sportswear manufacturer, has seen significant growth over the past years. With affordability as a major selling point, combined with their stylish and urban looks, the manufacturing captured the younger generations. Their expertise in combining fashion with sports provides Puma with an advantage when capturing the growth of the Athleisure trend. The company's sales climbed by 29.8% over the previous year. The substantial growth in comparison to both 2020 and 2019 demonstrates the high demand for PUMA products and brand momentum. This expansion was mostly fuelled by a 53.9% gain in the Americas markets [9]. However, when compared to Nike and Adidas, the company's market share and net sales still fall short.

ANTA has an unrivaled EBIT margin of over 20%

ANTA Sports is the company that has been the most prominent company in recent years. With its multi-brand approach, which includes brands such as FILA and Descente, the Chinese company has benefited from its growing popularity in its home market, posting the best growth in the industry between 2015-2020 [3]. During this time, the company enjoyed annual revenue growth of more than 25%. Furthermore, its already evolved DTC strategy (E-commerce comprised 29% of sales in 2021) has proven to be a competitive advantage, contributing to an unrivaled EBIT margin of over 20%. In addition to becoming a major force in the Chinese market, where it has surpassed Adidas in market share, the company is looking to expand its international footprint in the coming years [10]. In this regard, the corporation has taken steps to improve its brand recognition abroad by forming collaborations with international athletes like international NBA star Klay Thompson.

- Financial Metrics

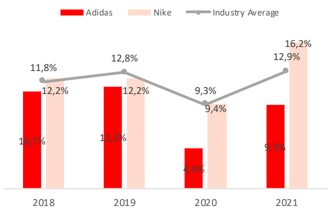

Figure 7: Adidas vs Industry Operating Margin

Starting with the **Profitability analysis,** in terms of gross margin, Adidas has consistently outperformed the industry. In 2019, it was 52% against 50.4% for the industry. However, in 2021, the sector surpassed Adidas, with a gross margin of 51.9%, compared to 50.7% for Adidas, mainly due to supply chain disruptions. On the other hand, Adidas's operating margin was historically lower than the sportswear's overall (Fg.7). In 2018 and 2019, it was 10.7% and 11.3%, with a 6.9pp fall to 4.4% in 2020. The industry average values were higher (11.8% in 2018 and 12.8% in 2019) but more importantly, suffered a slighter fall during the pandemic, to 9.3%, a 2.8pp reduction, bouncing back in 2021 to values above pre-endemic levels, to 12.9%. Compared with Nike, there is a contrast since the American company sustained operating margins above the industry while recovering quickly from COVID-19, from 9.4% in 2020 to 16.2% in 2021. Adidas' profitability recovery will continue to improve slowly until 2025, as the firm will be heavily impacted by supply chain disruption and rising raw material prices.

However, the company's well-defined strategy provides tools to outperform the industry in the medium to long run.

Regarding **Return analysis,** since Adidas is the industry's second-largest player, it was able to sustain a greater return on invested capital (ROIC) than the industry average until 2020 (Fg.8). Although the negative impact of the pandemic has led the company's ROIC to be lower than the industry, the company recovered impressively well in 2021 and it is expected Adidas' competitive edge in the sportswear sector will allow it to sustain a Core ROIC of 25% in the long run, significantly above the industry average. In the same direction, the return on equity (ROE) was 29.7% and 28.8% in 2019 and 2018, respectively, compared to the industry's 23.5% and 11.8% (Fg.9). Moreover, despite the positive recovery in 2021 to 31.5%, in 2020 Adidas's ROE was lower than the industry, whereas Nike was able to salvage the situation with an ROE of 28.4% (vs the industry's 11.1% and Adidas's -0.4%). The difference between Adidas and its biggest competitor in this metric was constant in previous years, but Adidas' focus on returning value to shareholders will allow the company to sustain returns higher than the market's and shorten the difference between itself and Nike. Shown in the 2021 strong recovery in ROE.

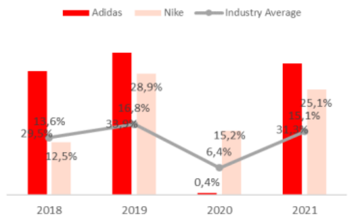

Figure 8: Adidas vs Industry ROIC

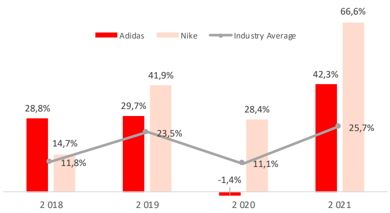

Figure 9: Adidas vs Industry ROE

Considering now the **Activity ratios**, the sportswear industry has low capital intensity requirements because most of the production is outsourced, with inventories being one of the most relevant origins of investment. Consequently, all competitors have high inventory holding periods. Adidas maintains a cash conversion cycle that is lower than its competitors, 97 days compared to the industry average of 103, revealing a capacity to use resources more efficiently. With collection and holding periods in line with the industry average, the differentiation factor is the higher average payable period that the company enjoys. In 2021 the industry had a 63-day average payable period, and Adidas had 80 days on average to pay back its suppliers (Fg.10). A result of the long-term connection with the manufacturing partners, which has lasted in its majority for over ten years and allows better payment terms.

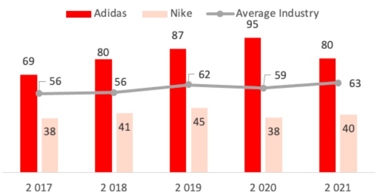

Figure 10: Adidas vs Industry Accounts Payable

Future Trends and Opportunities

In upcoming years, the sporting goods industry is expected to be one of the most promising markets [11]. The recovery from the pandemic's impact demonstrates this, as the industry achieves compelling results in comparison with other industries [3]. A variety of dynamic and positive trends will assist this expansion, which will be felt across different markets. Some tendencies listed below are justified by the Covid-19 pandemic, but others were already noticeable earlier, and the pandemic has accelerated their introduction and enhanced their impact.

Based on these trends’ characteristics, they have been subdivided into three main groups: Consumer Demand, Digital Transformation, and Industry Disruption.

- Consumer Demand

Athleisure is one of the major trends in Sporting Goods market

The first trend is **Athleisure**. Before COVID-19 an already palpable shift in consumer preferences indicated that sportswear was increasingly becoming a fixture in people´s daily lives. In fact, between 2014 and 2019, the athletic footwear and apparel market grew by 5.5% and 3.6%, respectively, while non-sport segments registered a small contraction [2]. Also, during the pandemic these sporting goods brands experienced a less severe demand shock than other fashion companies, demonstrating the growing preference for this segment. This trend is fuelled by the fact that physical activity is becoming an increasingly important aspect of consumers' daily lives. By 2021, more than half of the consumers across different geographies took proactive efforts to improve their health. As a result, these health-conscious consumers tend to prefer multifunctional clothes that join fashion and comfort. Thus, it is possible to conclude that this growth path will continue based on the recent changes in demand and the confidence demonstrated by over 75% of industry representatives who expect a further increase in this segment´s market size since “The difference between functional and casual wear will blur” [2]. North America stands out as the geography where this trend will have its major impact. This tendency will be the main reason for its robust growth of 7.53% CAGR between 2021 and 2025. Adidas has been pursuing this trend by focusing on developing its Originals lifestyle segment. The company's growing leisurewear offering, which includes collaborations with non-sports personalities like Kanye West and Pharrell Williams, has proven to be a success and one of the company's fastest-growing divisions. Furthermore, the firm wants to continue to capitalize on the athleisure growth trend. For that, the company identified the increasing demand for premium products as one of the most predominant trends in the athleisure market. As a result, in 2021, Originals was expanded into a premium segment line to provide a better differentiation of the various product offers. In 2022, new collections will be released in collaboration with luxury brands such as Prada and Gucci [12].

“The difference between functional and casual wear will blur”

The increasing demand for premium products is one of the most predominant trends in the athleisure market

Furthermore, the **women´s segment** is perceived as one of the major growth opportunities. A greater willingness to integrate physical activity as a determining factor for health and well-being, as well as a better acceptance of athleisure, makes women a hot segment to explore. Between 2016 and 2019, in the top five sportswear market countries [2], the female segment performed better, achieving, in most cases, a higher CAGR than other segments. Noteworthy are the US, China, and UK markets with 8%, 17%, and 7% CAGR, respectively. This growth path is likely to remain due to a rise in the significance of sports predominantly participated by women like yoga and running [2], and a higher participation rate in other sports like football and basketball. Between 2021 and 2027, the women's activewear apparel market is forecasted to outperform the overall market growth registering a CAGR of 12.68% [13][14]. In response to this, Adidas will move away from an undifferentiated gender approach and will start to design specific products for this segment. In addition, the firm will continue to enhance its brand recognition by continuing its close partnerships with female celebrities such as Beyoncé and her popular Ivy Park collection.

The female segment has been performing better, presenting a higher CAGR than other segments. Noteworthy are the US, China, and UK markets with 8%, 17%, and 7%.

Additionally, the industry will watch the reinforcement of the Chinese market's importance in the global market, which expects a 11.3% CAGR from 2021 to 2025. Factors like the increased health awareness and increasing diversity of sports products offer, together with the Chinese growing middle class, which is predicted to reach 1.2 billion by 2030 [15], explain this strong growth. Despite its increasing attention in this market, Adidas is expected to face stiff competition from national brands such as Anta Sports and Li-Ning. Nonetheless, with its forecasted growth in areas such as football and premium items, Adidas is predicted to be able to fight against its declining relevance in this market. Both women, athleisure, and China segments are perceived as the most promising areas representing two-thirds of industry growth for the next three years [2].

The industry will watch the reinforcement of the Chinese market's importance in the global market, expecting an 11.3% CAGR from 2021 to 2025

Finally, there is a gradual increase in the importance of **sustainability** issues impacting the consumer's choice. As stated in the McKinsey 2020 COVID-19 Apparel Survey, more than two-thirds of consumers' purchase decisions are influenced by sustainability factors, and the percentage will likely rise in the upcoming years. The report also shows that due to COVID-19 customers became more aware of pollution effects implying the urge for companies to adopt and apply green supply chain strategies. To do this companies will have to adapt their supply chain to keep the business viable. Considering the constraints on the availability of recycled input materials, firms will have to engage in circular business models.. Adidas is a trendsetter concerning sustainable initiatives and is a focal point in its strategy to push it forward. By 2025, the company aims for 9 out of 10 products offered to be sustainable and pledges to become carbon neutral by promoting environmental solutions throughout the supply chain [1]. Compared to its main competitors, Nike and Puma, the company appears to have the upper hand in responding to this trend since it is considered to have superior sustainability procedures. According to the Impakter Sustainability Index [16][17], the SDGs chosen by the German company are more precise and

More than two-thirds of consumers' purchase decisions are influenced by sustainability factors, and the percentage will likely rise in the upcoming years

comprehensive than its competitors, while there is more evidence that those goals are being achieved.

- Digital Transformation

Companies are expected to shift from a wholesale mindset to take on more focused e-commerce and omnichannel strategies supported by digital expertise

The sporting goods industry is expected to register a shift in its core business model. Pre-COVID-19, most firms' approaches were focused on wholesale, and then, adding a DTC e-commerce offering. Resulting from the demand-changing needs as well as the rise of competitive digital alternatives, it is foreseeable that firms would engage in a DTC business model. Companies are expected to shift from a wholesale mindset to take on more focused e-commerce and omnichannel strategies supported by digital expertise. Thus, firms that better reallocate resources and redesign capabilities to adapt to a more direct sales strategy will prevail. The industry's enthusiasm for the new DTC approach is justified by the fact that omnichannel shoppers are more valuable than other groups. This customer type spends, on average, 1.7 times more than offline shoppers [3]. Furthermore, the success of this new business model will be predominately dependent on E-commerce channel performance as this channel will experience higher growth. While in 2017, E-commerce only represented 20% of global sales, it is expected to represent more than 45% in 2025.

Figure 11: Adidas E-commerce Net sales between 2018-2021

So far, this shift to an E-commerce-based model has proven to be fruitful for Adidas. In 2021, the German-based company maintained its sustained growth path in the e-commerce segment, presenting more than 50% compared to 2019 (Fg.11) [1]. This success is explained by the various digital experience improvements motivated by an online innovation-oriented plan. In 2021, the firm started to allocate more than 60% of its Capex to the DTC and Digital areas [12]. The heavy investment in this department will continue as it leads to a seamless improvement in digital platforms that will contribute to the development of its online experience as well as a better understanding of consumers' preferences. Adidas is exploring this opportunity by bettering its independently owned website and app. Under the Adidas digital experience will be the Adidas Membership program, adiClub, which awards recurring clients for their engagement with the brand, gives premium access to digital fitness platforms like Adidas Running and Training apps, and offer access to exclusive products and events.

Over 70% of sports consumers believe that "athletes provide a unique view and are an important influence."

Additionally, **digital marketing** may suffer an adjustment from a more traditional ROI-driven performance focus to the usage of individual athletes and to build credibility, awareness, and engagement. This shift is highly motivated by the increase in time spent online by consumers alongside the higher effectiveness these individuals have in engaging on those platforms, compared to assets marketing (teams, events, clubs). As is shown in the study, over 70% of sports consumers believe that "athletes provide a unique view and are an important influence." [18]. In addition, famous athletes have a greater reach on social media than events and clubs, with vastly greater numbers of followers and engagement per post.

- Industry Disruption

The COVID-19 pandemic had an undeniable effect on companies' supply chains and the way they deliver their products to consumers. Without exception, companies must find innovative ways to adapt to this new reality.

Most companies will build innovative store formats, in strategic locations, to promote a compelling omnichannel experience

On the one hand, as part of a DTC-focused plan, a shift in the **role and purpose of brick-and-mortar retail stores** is expected. Although in percentage terms, the retail channel will have less preponderance in sales volume than E-commerce, it will be an essential point of sale to get closer to and build a relationship with consumers. Most companies will likely continue their path to build innovative store formats, in strategic locations, to promote a compelling omnichannel experience as well as offer add-ons to the online shopping experience. As an example, service offerings present in physical retail stores can offer recycling, repairs, and trading services promoting a relationship with the customer that goes beyond simple trade, consequently promoting customer retention as customers respond positively to service experiences [2]. The physical retail revolution is already an ongoing process with players launching innovative concepts that combine physical and digital experiences. Nike, for example, has been conducting pilot tests for new concept stores such as "Nike Live" and "Nike Rise". In those, the company leverages its technological skills in machine learning, computer vision, and artificial intelligence to provide an enhanced customer experience. Concerning Adidas, its new Flagship Stores, placed in key trade zones and high streets, are designed according to each city's distinctive characteristics to create a unique experience and better connection with local customers. In addition, these stores are highly digital-focused, using innovative engineering like the "Bring It To Me" feature or RFID technology [19]. The company has also been developing a new concept called "Halo Stores" which emphasizes features like sustainability and innovation, delivering an immersive experience with its engagement sections, improved customer displays, and a room where customers may participate in the product design process

Adidas' key strategic stores are placed in key trade zones and high streets, designed according to each city's distinctive characteristics to create a unique customer experience

On the other hand, the predicted shift from a B2B towards a DTC business model together with production and transportation constraints and higher demand volatility will lead to supply chain flexibility being a major competitive advantage. Under this business model, companies tend to own the inventory and make smaller and more frequent product runs to respond better to demand volatility. Therefore, it is expected to shorter lead times and a shift to local production so that production and demand are better aligned. Flexibility, close partnership with suppliers, and a short go-to-market time will become crucial capabilities.

Operating Risks

During uncertain times, the execution of the "Own the strategy" plan might face a series of challenges that may affect Adidas` expected performance. The following chapter will list the main risks that could negatively impact the performance.

First, let´s consider **Macroeconomic Risks**. The ongoing pandemic, although more controlled, could cause considerable growth obstacles, particularly in the short term. The emergence of new COVID-19 variants could generate a new wave of lockdowns impacting the performance of the company's retail stores and wholesale partners. This possible reduction in expected sales could also have repercussions in increasing inventory impairment and raise the probability of the company's partners defaulting. In addition, the risk of factories and distribution centers closing could lead to supply chain disruptions, with production and deliveries not being able to fulfill demand. Greater China and Asia-Pacific segments stand out as where COVID-19's impact on company and industry performance could be the most detrimental. On the one hand, an uncontrolled pandemic scenario in the world's most promising development market, Greater China, might cause a significant slowdown in global industry growth. The recent pandemic breakouts in China have already downgraded the country's GDP growth prospects. The International Monetary Fund updated its prediction of China's GDP growth to 4.4% this year, significantly below the government's 5.5% objective [20]. On the other hand, low vaccination rates in Asia-Pacific, where the company's manufacturing is located, increase the risk of supply chain disruptions, which hinder top-line growth in other as EMEA and North America.

Due to recent COVID-19 outbreak, the International Monetary Fund updated its prediction of China's GDP

Secondly, the war in Ukraine is also a factor of great concern for Adidas. With the conflict taking place in the company's strategic geographic center, it is expected to have negative repercussions on the firm´s overall performance. Due to the company's international sanctions applied on Russian soil, it is expected to a loss of approximately 250 million euros in all channels during 2022 [21]. Also, trade sanctions between Russia and Western countries have proven detrimental to the Global Economy as the rise in fuel prices has boosted future inflation estimates. A steep rise in inflation prediction could be critical as the growth in this industry is highly dependent on consumer spending and consumer confidence. This rise could result in a loss in the number of customers as lower-middle-class buyers may shift their purchases to more affordable options.

Due to the company's international sanctions applied on Russian soil, it is expected to a loss of approximately 250 million euros in all channels during 2022

In addition to macroeconomic risks, **firm and industry-specific risks** should be also considered. Firstly, Adidas has been subjected to a Chinese consumer boycott since the beginning of 2021, when western brands condemned and sought to distance themselves from the forced labor scandal in Xinjiang [10]. This controversy has resulted in a deterioration of the company's brand image in this market and has harmed its sales (exhibit China sales). Allied with the rapid growth of local companies Anta Sports and LI Ning, there is a risk that Adidas will not be able to reclaim second place in this market and thus benefit from the geographical area that is expected to grow the fastest until 2025, reaching 76 billion euros in market value [3]. Also, another risk that Adidas must consider is the increase in counterfeit products. According to the company's CEO, in Asia more than 10% of the brand's products are counterfeit and there is a tendency for this percentage to increase [22].

Detailed analysis to the Invested Capital

Invested Capital Drivers

The valuation of Adidas equity will start with the forecast of its free cash flows. Consequently, a detailed analysis to the Invested Capital, Sales and Cost drivers will constitute the next chapters.

Property, Plant & Equipment (PP&E)

Adidas has two major types of PP&E: store-related and revenue-driven. The last is constituted by technical equipment and machinery, other equipment, furniture, fixtures, and construction, and will represent a consistent percentage of sales for the upcoming years. In 2021 the capital expenditure (Capex) in PP&E increased 34% compared with 2020. This reflects the investment needed to put in place the "Own the Game strategy", which is predicted to continue until 2025.

The company will pursue a robust investment in bigger and upgraded stores

Store-related PP&E is constituted by plants and buildings, which are driven by the evolution of the number of stores and PP&E per store. Starting with the number of stores, Adidas has a larger retail footprint of stores than its peers, but it has been decreasing its number. Until 2025, this tendency is expected to continue as the company will proceed to close no-value added stores at a faster pace than open new Flagship and Halo Stores. Between 2021 and 2025, it is predicted a slight decrease of 2%. Despite this, in conformity with the focus on a DTC-based channel mix, Adidas will use its physical stores as a complement to the main store, the site, and the app. In order to achieve this, the company will pursue a robust investment in bigger and upgraded stores. The upgrade will be based not only on modernizing the stores but also on enhancing the client experience, with digital and technical elements connecting the physical experience with the Adidas site and app. Thus, it is expected that the rapid increase of PP&E per store will justify the Store-driven PP&E growth between 2021 and 2025. In the steady-state, the store-driven PP&E will grow 2% per year, which is consistent with OCDE forecasted GDP CAGR until 2060 [32].

Net Working Capital

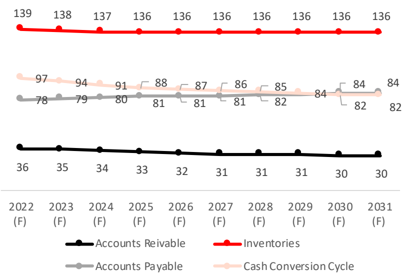

Figure 12: Adidas 2022-2031 Average Receivable, Holding and Payable periods. And Cash Conversion Cycle

Accounts receivables are driven by the average collection period. In 2020 and 2021, it decreased to 39 and 37 days in comparison to the 41 days in the years 2017 to 2019. These fluctuations can be explained by the channel mix shift. With a business based on wholesale, a company sells in bulk to partners that demand more time to pay. However, in DTC sales are paid practically immediately. Thus, with the company strategy shifting gradually to DTC dominated model, it is expected that the average collection period continues to decrease at a fast pace until 2025 reaching 33 days (Fg.12), and in the long-term to stabilize as the channel mix also does so.

Inventory management is one of the most relevant sides of Adidas's business

Inventory management is one of the most relevant sides of Adidas's business, and one of the most affected by the COVID-19 pandemic, with the inventory holding period reaching 175 days in 2020 compared with 119 days in 2018. The stores' closure and reduced sell-through resulted in a massive increase in inventories. In 2021, the company started to recover but did not attain the pre-pandemic values. To counterattack this problem and e-commerce inventory enhanced complexity, the company plans to better coordinate with the manufacturing partners to have a more flexible product purchasing and open more factory outlets that allow draining inventory quickly. These measures will help to continue to decrease the average number of days that inventory is held to 136 days by 2025 (Fg.12). It is not expected that pre-pandemic values return because of the increased complexity in the supply chain, which arises from the e-commerce focus, and also the increasing inflation effect which can lead to consumers delaying purchases which decreases inventory sell-through. Adidas promises to deliver in one or two days after an online order, which requires inventory to be ready in geographically dispersed distribution centers, and an increased amount of inventory will be needed as e-commerce gains importance.

Accounts payable is driven by the average payable period, which decreased from 84 days in 2018 and 2019 to 76 days in 2021 due to the pandemic. The increased uncertainty led suppliers to demand earlier payment. In 2022 and forward, better payment terms to Adidas suppliers are expected, because Adidas is characterized by long-lasting relations with its suppliers resulting in better relations and confidence, and consequently, better terms. However, as already mentioned preferred flexibility in product purchasing to reduce inventory holding can lead to the abdication of better payment terms. So, by 2025 the average payable period will be 81 days, recovering but not reaching the pre-pandemic values (Fg.12). Only in 2030 the company and suppliers will be able to adapt to the new normal and obtain the same favorable payment terms of 84 days.

Sales Drivers

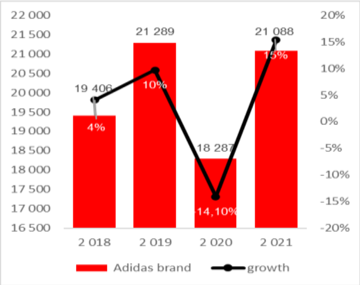

Figure 13: Adidas brand 2019-2021 net sales

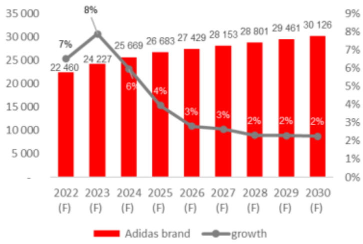

Figure 14: Adidas 2022-2030 net sales evolution

The last two years have proven challenging for Adidas and the Sporting Goods industry overall. In 2020, the market disruption caused by the pandemic deeply hurt physical shops` performance resulting in a 14.10% drop in Adidas sales volume (excluding Rebook) (Fg.13) [1]. In addition to this setback, the industry witnessed a series of changes in trends, which kept recurring in 2021 and are expected to become permanent. Thus, although Adidas and its competitors recorded a strong recovery, mimicking 2019, sportswear players found an entirely changed environment that requires extensive structural changes to capture the industry's future strong growth. For an accurate analysis of Adidas' future sales evolution, it is crucial to understand that it has been undergoing an accelerating change in how companies reach the final consumer. Thus, as one of the major bases in the five-year plan, Adidas aims to take advantage of this market trend to meet customers' preferences and boost profits. It is expected that the company will be able to absorb a part of the industry growth and register a 6.03% CAGR until 2025 (Fg.14). All in all, Adidas´ distinct sales channels will perform differently, which deserves a separate analysis to predict the company´s future sales growth pattern accurately. To this effect, this forecast will consider the different value drivers that influence the three Adidas sales channels: E-commerce, Own-Retail, and Wholesale.

E-commerce

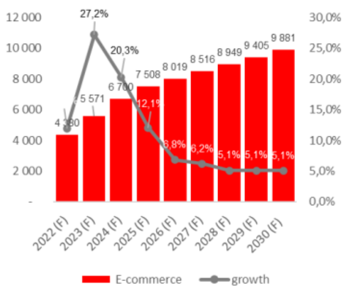

Figure 15: Adidas E-commerce 2022-2030 sales evolution

E-commerce stands out as the most critical shop in Adidas´ future since the success of its five-year plan will largely depend on the performance of this sales channel. As follows, the players who most innovate and adapt to a broader digital landscape will have better chances of taking advantage of this channel´s strong growth. Fuelled by an increasingly online shopping trend, E-commerce is projected to achieve a growth of approximately double the overall industry´s percentage points between 2021 and 2025. In its "Own the Game" plan, Adidas shows strong interest in taking advantage of the rise of this channel, looking to quickly adapt its business model to this trend. The recent success combined with the constant innovation of its customer-direct services, such as the membership program adiClub, leads us to believe that Adidas will be able to keep up with this industry channel´s growth. The firm is expected to reach a sales volume of €7,508 million in 2025, which represents a 17.68% CAGR compared to 2021

(Fg.15). E-commerce will thus have a growing preponderance in its contribution to total sales. It will go from being the sales channel with the least weight in 2021 (18% of total Adidas brand Revenues) to reaching an overall contribution of 37% in 2040.

Nonetheless, Adidas' top-level strategy plans and its readiness to implement a DTC model are not sufficient to predict and explain the growth of the E-commerce channel. To better understand this, it is crucial to deepen our analysis and consider the different degrees of technological development, consumption habits, and internal geographical decisions for Adidas´ operating regions.

- Penetration Rate

Penetration rate measures the percentage of people each year who purchased a product or a service online in the sportswear industry. Each geographical segment will witness a different penetration rate evolution according to its distinct variables' growth. The number of internet users and online shopping conversion rate will be detrimental to explaining the expansion rate in each region.

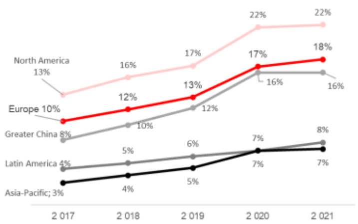

Figure 16: Penetration rates from 2017-2021 across different geographies (Source: Statista)

By 2021, there was a disparity between the regions that can be identified as more technologically developed: North America, EMEA, and Greater China, and the less technology developed: Latin America and Asia-Pacific (Fg.16). Although for different reasons, until 2025, the difference between these two blocks is expected to remain constant as more and less developed geographies expect progressive growth in their penetration rates. Only after that year will this gap narrow as the more technologically developed regions reach their maturity stage while the others continue their penetration growth rate path (Fg.17).

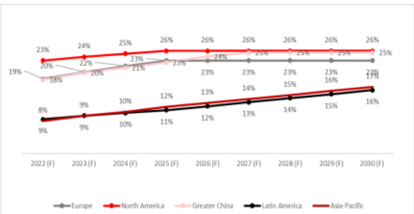

Figure 17: Penetration rates from 2022-2030 across different geographies (Source: Statista)

Regarding the North American and EMEA market, where most of these regions' populations have converted to digital [23], the growth until 2025 will mainly be justified by the expansion of the E-commerce conversion rate. In 2021, conversion rate figures fell short compared to other industries such as Beauty and Skincare and Food and Beverage [24]. In upcoming years, a change to the DTC model, carried out by leading players, will help shoppers to adapt to online shopping, consequently bringing the numbers closer to other industries' ratios and contributing to the improvement in the Sporting Goods' penetration rate. This way, this expansion will significantly contribute to the increase of Adidas' online customers by 2025. The number of online clients in North America is predicted to expand from 4.2 million in 2021 to 6.2 million in 2025, representing a 10.16% CAGR. EMEA is forecast to grow at a similar rate, with the company reaching 37.3 million customers in 2025. After 2025, these regions are expected to reach a maturity stage, justifying the faster stabilization of these markets´ growth in comparison to other geographical segments.

As for the Greater China region, although this market already represented the largest online community by 2021, there is still plenty of space for growth. With only 70% of the population online, the Chinese government has taken steps to enable more affordable and faster internet services in rural and underserved areas [25]. Furthermore, the rising importance of mobile commerce, which will likely grow from 40% of total E-commerce sales in 2019 to almost 60% in 2024 [26], will influence the growth in this region as the ability to access inexpensive smartphones in Greater China is high. All things considered, this region profiles as the greatest opportunity for Sporting Goods players to drive future strong growth in this channel. The region is only predicted to reach maturity in 2027 when it approximates the penetration rate registered in North America. Thus, combined with an increase in the market share starting in 2023, the largest growth in the number of Adidas consumers is expected between these dates, reaching 22.7 million in 2027.

Greater China profiles as the greatest opportunity for Sporting Goods players to drive future strong growth in this E-commerce channel

For Latin America, Asia-Pacific, and Emerging Markets, their lower technological development will take them more years to reach the maturity phase and close the gap to the values presented by the more technologically developed regions. During 2026-2035, the significant e-commerce growth will be mainly fuelled by the progressive expansion in the number of digital users in these regions.

- Market Share

The unique features of this channel make E-commerce the most fragmented and competitive channel. As a result, despite Adidas´ progressive evolution in reinforcing its position in this market, this channel sticks out as the most challenging for maintaining a sustainable competitive advantage. In technologically advanced markets, this reality is more evident, forcing the organization to devise a plan to differentiate itself and achieve long-term growth. In this sense, the "Own the Game" plan prioritizes expansion in the EMEA, North American, and Greater China markets to achieve its future sales volume objectives. In less developed territories, its strong global presence allows the company to excel and keep larger market shares. Therefore, Adidas's strategy will be to solidify its position and take advantage of the growth of the e-commerce market in those less developed regions. Overall, between 2021 and 2025, it is forecasted that Adidas will grow to a global market share of 7.84%, running at a faster pace than the E-commerce market (Fg.18).

"Own the Game" plan prioritizes expansion in the EMEA, North American, and Greater China markets to achieve its future sales volume objectives

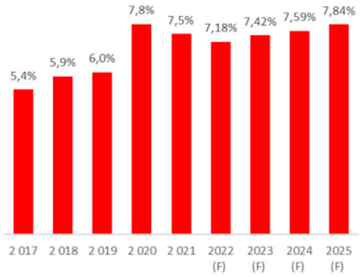

Figure 18: Adidas E-commerce market share between 2017-2025

By analyzing the most critical segments for the company, its investment in these territories is not without reason. In 2021, EMEA, North America, and Greater China together represented more than 85% of the industry's e-commerce market, a percentage that will remain stable until 2025. Also, it is expected that both regions will contribute more than 88% of total E-commerce growth by 2025.

European market stands out as the region with highest market share

Sustainability and Women´s Segment highlights as the principal trends in the European Market

Focusing the analysis on Adidas specific region operations, the **European market** stands out as the most contributing territory to EMEA total sales. This segment is where Adidas registers the highest market share (13,8% in 2021) and has been outpacing the European e-commerce market by recording double-digit growth last year. The strong brand identity perception in the European market alongside the firm´s experience and ability to meet the preferences and desires of consumers, motivate this difference. This direction will likely continue since the company has identified and prepared well-suited responses for future decisive trends that will affect this geography. First, there is the product and production sustainability, which has proven to be a deciding factor in customer decisions in Europe [3] as 70% of European consumers are willing to pay more for products with sustainability credentials [27]. Adidas´ sustainability measures will motivate a greater capacity to conquer and retain customers given the differentiated product offer. In addition, it will enable the company to charge premium prices, which will be an advantageous factor in facing a future inflationary environment. The other hot trend in the European market comes from the women's sector. In recent years, the female segment has gained a greater preponderance, presenting a significant growth [2]. In the following years, this trend is expected to accelerate registering a mid-teen compound annual growth rate from 2021 to 2024 [28]. Adidas´ differentiated gender approach shift and the sponsoring of women´s emblematic European sports events like UEFA Women's Champions League and Women's Euro 2022 will allow Adidas to profit from this expansion in this market. Additionally, further digital growth and consumer engagement are expected as Adidas expanded the Confirmed app to Europe in 2021. This app gives insider access to Adidas Originals brands and partners such as YEEZY, Prada, Pharrell, and Palaceis. The app members have access to exclusive sneaker releases and hype drops. All in all, the company expects to see its position strengthen to 14.4% in FY2025. This rise will contribute to the firm continuing to outperform the market and register a 15.45% CAGR until 2025.

EMEA E-commerce channel is expecting a potential loss of approximately 60 million euros on Russian soil

However, despite this positive market share gain outlook in the European market, the war in Ukraine will harm EMEA E-commerce market prospects. The loss will be more significant in this channel as it is assumed that Adidas will withdraw its in-store and online operations from the Russian market until the end of the year. This scenario translates into a potential loss in 2022 of approximately 60 million euros on Russian soil. In addition, further effects of the war like a rising inflationary environment will have a greater negative incidence in EMEA consumer spending power which will translate into EMEA being the geographical segment with the lowest growth in the E-commerce sector until 2025.

The expansion in Great China market is expected to be the most challenging due to brand image deterioration in this market and increasing competition

Adidas collaboration with Jerry Lorenzo and the Fear of God Athletics aims to increase cultural significance and legitimacy in North America

Looking at the **North American** market, the pre-pandemic years proved to be frankly positive for Adidas. The company has taken a different approach to its main competitor Nike by signing partnerships with non-sports-related American celebrities like Kanye West, Pharrel Williams, and Beyoncé. These actions have allowed the brand to stand out in the athleisure movement that is widely felt in this territory. Additionally, the company managed to register a remarkable growth in the footwear market driven by recording the highest footwear consumer satisfaction score and the successful launch of several models from its Yezzy collection [29]. Alone, the partnership with Kanye West recorded around €1.5 million euros sales in 2020. During 2017-2020, Adidas was able to close the gap with Nike increasing its market share from 2.9% to 4.5% [28]. Taking advantage of this period of growth and enhanced brand awareness, Adidas will invest extensively in expanding this market by penetrating new areas not yet explored by the brand. A good example of that is the basketball entrance move through the collaboration with Jerry Lorenzo and the Fear of God Athletics, where Adidas aims to increase cultural significance and legitimacy in North America. Furthermore, it is anticipated that the digital fitness trends, as well as the consumer tendency toward premium items, would have a significant impact on the growth of its online platforms like the Confirmed app. As a result of the positive trends and the fact that this is a market where the company still has enough potential to grow, it is expected North American segment be the best performer until 2025. The company expects to expand sales from €1143 million 2021 to €2480 in 2025, with a CAGR of 21.35%.

It is expected Adidas to overcome this phase due to increased growth in luxury athleisure and football

When it comes to Great China, the expansion of this market is expected to be the most challenging. In 2021, the company's performance and brand image were highly affected as a result of the boycott led by Chinese consumers due to the Xinjiang controversy. Furthermore, the competitive environment was intensified as Chinese enterprises Li Ning and ANTA Sports, whose revenue increased by more than 50% in the first half of FY2021 [10], leveraged this opportunity to snatch up more of the fast-growing Chinese market. This channel emphasizes this problem since these Chinese companies have already a well-developed DTC business model, giving them a short-term future competitive advantage over Adidas. As a result, it is predicted that this trend will be difficult to reverse until 2023, implying that Adidas will experience a drop in market share from 6.6% in 2021 to 5.5%, resulting in a moderate 8.99% CAGR when compared with Greater China market E-commerce 19.32% CAGR. Despite this setback, It is expected Adidas to overcome this phase once it has a more established DTC model and its brand perception has improved. There are several upcoming trends and strategic actions being implemented in this market that will allow Adidas´ market share to expand to 6.1% by 2025, implying a CAGR of 22.58% between 2023 and 2025. First, the company has identified the increasing demand for luxury goods as an opportunity to excel over its competitors. The China Luxury Report 2021, released by Bain & Company predicts that the Chinese market will turn into the world's largest luxury market by 2025. Following this trend, the company seeks to capture the growth following this premium movement through collaborations with luxury companies such as Prada and Gucci. Additionally, the football interest and market are expected to grow among younger generations as the Chinese government put a big focus on football youth development [30]. From 2019 to 2025, It is expected that number of young practitioners double to 50 million. Through its affiliation with the Chinese Ministry of Education to promote football in China, it is expected Adidas to profit from a first-mover advantage with these younger buyers [28].

Retail

In recent years, the retail channel in the sportswear business has seen dramatic changes. Even before the pandemic, retail was struggling, resulting in a continuous reduction in industry participants' physical footprint. Nike, for example, cut down on over 10% of its own-retail stores between 2018 and the beginning of 2020 (pre-pandemic). This trend has accelerated in the last two years, with physical commerce suffering significantly from the limits imposed by COVID-19. As a result, participants had to reconsider their retail strategy and explore new ways to generate value through this channel in the future.

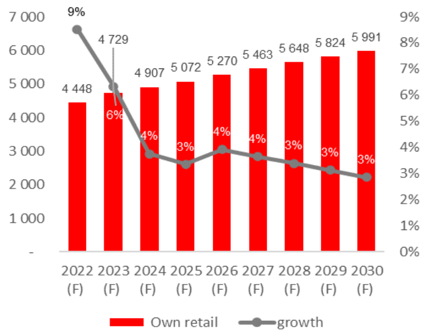

Figure 19: Adidas Own-Retail 2017-2030 sales evolution

Adidas' "Own the Game" strategy followed the purpose-driven retail footprint trend and placed high importance on the transformation of this channel. Although DTC’s channel growth will be primarily driven by its online channel, retail will make an essential contribution to establishing an emotional and physical bond between the brand and its customers. As a result, in key cities across EMEA, North America, and Greater China, Adidas has been outfitting physical stores with new features and innovative technologies. Together with Nike, Adidas is one of the companies expected to shape the future of physical retail, increasingly working to turn it into an omnichannel experience. As a global company, its position and ability to invest and access cutting-edge technologies will strengthen the firm´s future performance. Therefore, during the 2021-2030 period, the firm will register a 4.31% CAGR (Fg.19). Adidas' retail growth is expected to steady from this point forward, accounting for 19% of total revenues. The evolution of the selected retail drivers will better explain its future growth.

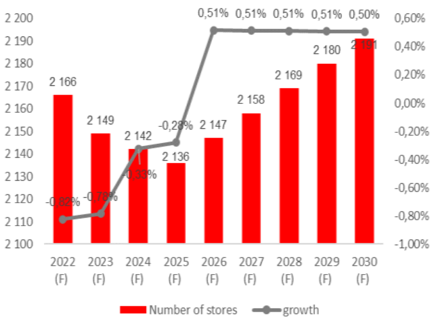

Figure 20: Adidas number of stores evolution between 2022-2030

Starting with the **Number of Stores**, Adidas has been pursuing a progressive reduction in its physical footprint. Between 2015 and 2021, the corporation went from running 2588 stores (including Reebok) to managing 2184 stores, a decline of over 15%. Under this new strategy, the increased importance given to this channel will cause a distinct evolution. On the one hand, Adidas is aiming for more sophisticated and larger concept stores, but fewer of them. In this case, the company's strategy will differ from Nike's, which plans to open 200 small-format stores focusing on local communities. Adidas intends to increase its focus and market positioning in key trade zones and high streets, taking advantage of the significant market share these areas represent. Thus, by 2025, the company aims to double its Halo stores in key cities in EMEA, North America, and Greater China markets, while continuing to close the concept stores that do not add value to the company´s omnichannel experience. Furthermore, the company wants to pursue the factory outlet store expansion to shift from a "clearance-focused channel to a commercial engine driving profitability" (Fg.20). Under these circumstances, the corporation is forecasted to have a slight decrease of 2% in the number of stores by 2025. After this date, and with a less prevalent Wholesale channel, the brand will attempt to extend its line of stores in other key cities where the market is less saturated (Emerging Market, Asia-Pacific, and Latin America Segments). Thus, growing at an eleven-store pace per year, the company is expected to reach 2191 stores in 2030, when it reaches maturity.

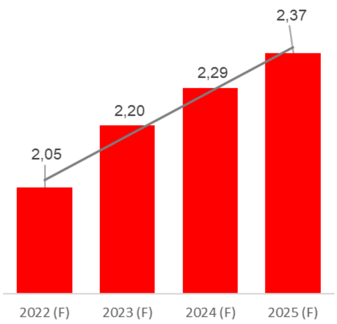

Figure 21: Adidas average revenue per store evolution between 2022-2025

Regarding **Average Revenue per Store** (ARPS), in the years before the pandemic, Adidas' strategy proved to be a success. The combination of increased investment in factory outlets and increased disinvestment in no-value-added concept stores resulted in a significant rise in average store profitability (Fg.21). Although the pandemic effects disrupted this pattern in 2020, Adidas is forecasted to resume its prior growth trajectory. Thus, the following three reasons will largely explain future increases in average revenue per store. First, a more profitable store-type mix is anticipated, with Factory Outlets reinforcing their predominance. In addition, resulting from their redesign, concept stores will be able to produce new revenue streams (new services) and provide a more comprehensive consumer experience, making them more profitable. Finally, the innovations implemented in its stores will give Adidas an edge over most of its competitors, enabling it to capture more growth from this channel. By 2025, ARPS growth is expected to outpace Offline Sporting Goods Market growth, being the main contributor to a 5.47% CAGR in this channel. After this period, other competitors should be able to adjust to the new operation mode, resulting in the company's steady ARPS growth of 2.1%.

Wholesale

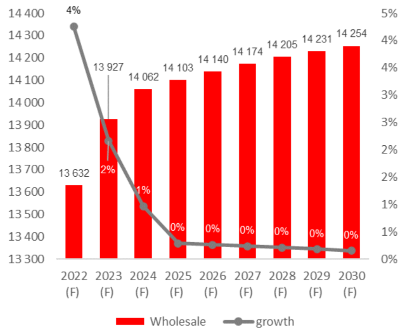

Figure 22: Adidas Wholesale 2022-2030 sales evolution

The decreasing trend in Wholesale's preponderance will continue as the pandemic has emphasized the change in this industry´s buying behavior. In addition to consumers favoring a closer relationship with brands, customers pick retailers that have better adapted to the digital era and have a more extensive stock of the brand they prefer. This shift increases pressure on smaller wholesalers that lack the knowledge and financial capacity to transform their business model and respond quickly to consumer desires. Consequently, this implies a greater concentration of players in this channel, and it is paramount for the larger sportswear companies to choose the right partners who can overcome the channel´s major challenges. After a significant recovery in 2021, this channel is expected to have the slowest growth among the three channels, registering a 1.91% CAGR until 2025 (Fg.22). Thus, it is predicted Wholesale to only represent 53% of the total revenue in 2025, barely missing the company's optimistic goal of making its direct channel already account for 50% of sales. After FY2035, when all channels` growth is expected to stabilize, this channel will account for only 44% of total sales.

Considering the **Number of Wholesale Doors**, the company will narrow the scope of its partner numbers, after identifying 80 top Alliance Accounts with whom it intends to develop strong cross-functional partnerships. Therefore, paired with the future trend of wholesalers having fewer physical locations, the number of available wholesale outlets is predicted to decline from 150,000 wholesale doors in 2019 to 113,000 in FY2032. The decrease is expected to be more severe, until 2025, given the inability of some wholesale partners to adapt to new market conditions, which will result in a transfer of customers' consumption to the company's direct channels. The lower geographical diffusion will be the primary reason for slow expansion.

One of Adidas' goals for its new strategy is to increase Gross Margin to 53-55% and Operating Margin and 12-14% by 2025

Contrarily, the **ARPWD** is predicted to rise gradually over time, counteracting the decrease in the number of wholesale doors. First, it is forecasted that most of Adidas' Alliance Accounts will be capable of adjusting to the new business normal and capturing a portion of the income previously reserved for smaller wholesalers. Also, with its "Partner Program" platform, the company makes its partners' online platforms more capable of enhancing the end-consumer experience by guaranteeing product images and descriptions flow seamlessly into their systems. Adidas will then focus on building a strong relationship with major Alliance clients, such as Foot Locker, where a dedicated team will be assigned to create elevated online and offline experiences.

Cost Drivers

One of Adidas’ goals for its new strategy is to increase Gross Margin to 53-55% and Operating Margin and 12-14% by 2025, which decreased significantly in 2020 due to the COVID-19 pandemic. Both margins are subject to the world’s economic evolution and consequent supply chain disruptions as well as rising raw materials prices, and the company’s strategic options regarding channel mix and marketing. For that matter, the Gross Margin is expected to improve gradually with the Operating Margin following (Fg.23)

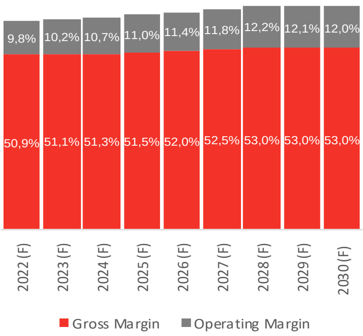

Figure 23: Adidas 2021-2025 Operating and Gross Margin

- Channel mix and supply chain implications

The COVID-19 outbreak in 2020 led to the closure of factories, increased shipping costs, and imposed trading restrictions. Consequently, the cost of sales as a percentage of revenues increased to 50% in 2020, compared with 48% in 2019. In 2021, the recovery started, decreasing to 49.3%, and is expected to slowly continue until 2025, reaching 48.5%. The company goal, 47%, seems attainable, but only after a reduction of the supply chain disruption predicted until 2025. So, the decrease in the cost of sales will accelerate in 2026 and 2027, a cost of sales as a percentage of revenues of 47% will be obtained in 2028, and it’s expected to continue in the long run (Fg.23). The improvement in gross margin will be driven primarily by the strategic change to a DTC-based channel mix that is less costly since the margin is not split with the wholesale partner. The major shift will occur until 2025, with wholesale representing 53% of sales compared to the 62% in 2021. But the trend will continue, with DTC representing 53% of revenues in 2030. Also, Adidas will increase prices with a shift to a more premium and sustainable product mix. The rising prices will contribute to an increase in the gross margin, and together with the DTC-based business and economic recovery, will overshadow the supply chain challenges and growing raw materials costs, resulting in a decrease in the cost of sales.

Adidas will increase prices with a shift to a more premium and sustainable product mix

Supply chain. Adidas outsources nearly 100% of its production, taking advantage of lower costs but making the company dependent on its suppliers, which is crucial in supply chain disruption times. On the bright side, factory closures in 2021 decreased significantly and are expected to decrease to a minimum in the short term. However, a considerable part of Adidas's production partners are from China, and the 2021-2025 country's electric policy plan to reduce energy usage by 13.5% will increase the production costs in that period [2]. Also, this is one of the countries with the more risk of factories closing down due to COVID-19. In response, Adidas stop working with some of its Chinese suppliers and focus on Indonesia, Vietnam, Cambodia, and Myanmar, the latter

Outsources nearly 100% of its production making the company dependent on its suppliers

being considered Adidas' future sourcing market by its CEO [31]. This process is necessary in order to keep the cost of sales down, but the Myanmar supply strategy is a risk and may backfire due to its political instability and current civil war, resulting in supply shortages and consequent increasing costs. Furthermore, because e-commerce has gained importance, the supply chain has upgraded its level of complexity with clients expecting deliveries in one day. There is therefore a need for more flexible and speedier logistics, which will ultimately affect the company because of the need for faster logistics, and shipping individual parcels instead of large bulks to wholesale will result in higher costs before the required time for adaptation. With the increasing labor and energy costs in Asia and the e-commerce trend, the better response would be to move some production centers geographically closer to the points of sale, especially in Europe or North America. Adidas is not expected to follow this course, which instead will require intensive investment into data and analytics capabilities and time to adapt to the new complexity of the supply chain between 2021 and 2025. Besides production cost increases in Asia, the other supply disruption factors that emerged with COVID-19 will prevail in 2021-2025, with shipping costs being eight to ten times higher in 2021 compared to 2019 [2]. Additionally, the World Trade Organization (WTO) still has 45 trade restriction measures in place, with the majority of those being exporting restrictions [2]. Therefore, the COVID-19 originated disruptions will drive Adidas's gross margin down until 2025. Also, contributing to an increase in supply chain costs is the war between Ukraine and Russia. Both countries are not major suppliers for Adidas, but the incredible complexity of modern supply chains could mean a shortage of some components produced there, and increased costs with the substitution of the component or inventory shortages. In addition, the rising inflation due to the war increases the risk that consumers postpone their purchases, leading to a slower inventory turnover and increasing supply chain costs. The war is only likely to have a short-term impact on Adidas.

Supply disruption factors that emerged with COVID-19 will prevail in 2021-2025

Furthermore, the other main reason for the increase in the cost of sales in 2020 and 2021, compared to the pre-pandemic times, is the record prices of the raw materials used in sporting goods. The raw materials are mainly natural fibers such as cotton, leather, recycled polyester, recycled rubber, and wool. Cotton and polyester traded on average at $2.5 and $1.2 per kilo in 2021 compared with $1.63 and $0.46 per kilo in 2020 [2]. Prices will continue to increase in the long-term thus affecting the company beyond 2025, largely due to a reduction in raw materials production because of the reduction in plantation sizes and the increasing impact of global warming, and due to growing demand. In addition, as part of Adidas's strategy, sustainable materials will be used more and more, which implies higher costs than traditional materials, thereby also contributing to

Record prices of the raw materials used in sporting goods

Sustainable materials will imply higher costs than traditional materials

an increase in the cost of sales. In addition, in 2022 the war between Ukraine and Russia will raise inflation, which would make the costs of raw materials, shipping, and other costs increase its price, which would lead to a reduction in the gross margin. But Adidas aims to be more and more positioned as a premium business, giving higher flexibility to increase its prices. So, inflation will not affect relevantly the gross margin, as the increasing raw material costs are expected to be compensated by the mentioned increase in Adidas prices.

- Marketing Strategy

Digital marketing has a considerably lower CPM than traditional channels

Adidas historically has maintained marketing costs at around 13% of net sales, but in 2021 it decreased to 12%. The principal cause was the pandemic and the digital marketing increase, which has a considerably lower CPM (cost per thousand impressions) than traditional channels. Plus, it has the advantage of easily reaching the target audience as people often are not aware that they are being advertised to. In addition, if digital marketing is well designed it can be as effective, or more, than traditional marketing. With Adidas' focus on e-commerce, the marketing focus also shifts to the digital world. We believe that this will continue to be the trend, and it will drive marketing costs down. Furthermore, Adidas will focus on influencer-driven marketing by reinforcing its relationships with professional athletes and specific personalities. A personality based marketing is considered by Mckinsey [2] to be the most effective way to create a relationship with consumers, not only because these have a much larger following and achieve higher engagement, but also because by partnering with these personalities is easier for Adidas to relate to or support a cause. This market trend will contribute to increasing the effectiveness of demand creation expenses and drive down marketing costs as a percentage of sales.

To fuel the strategic ambitions for 2025, Adidas will need to invest in marketing

At the same time, the "Own the Game" strategy aims to make Adidas the leading female sportswear brand. It will require a considerable investment in marketing to guarantee a competitive advantage in the women's market, whilst not losing market share in the men's segment. Adidas almost exclusively publishes women-directed content on their Instagram and is expected to launch women-directed marketing campaigns. Besides that, to fuel the strategic ambitions for 2025, Adidas will need to invest in marketing, with the firm committed to demand creation expenses one billion euros higher in 2025 compared to 2020. Marketing expenses, as a percentage, of sales will remain constant at 12% of sales from 2022 onwards. The more effective and less expensive characteristics of modern marketing channels and practices will drive costs down, while the robust investment in marketing will drive costs up, but even with the one billion euros increment in marketing expenses in 2025, it will represent 12% of sales (Fg.24).

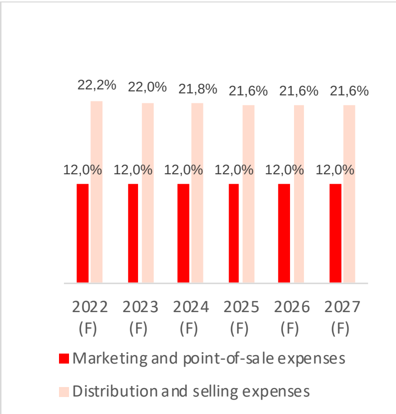

Figure 24: Adidas 2021-2025 Marketing and Distribution Expenses

- Distribution and selling expenses

DTC is characterized by a high number of returns

The evolution of distribution and selling costs is driven by higher returns, delivery and shipping costs. The COVID-19 outbreak led to an increase in these costs, representing 25% in 2020, compared with 20-21% in the years prior. In 2021 recuperation started with these costs representing 22.5% of sales. DTC is characterized by a high number of returns, as high as 50% compared with 5% in wholesale, according to McKinsey [2]. Therefore, as DTC gains importance, the costs related to returns will become increasingly significant. Furthermore, Adidas offers free delivery in most of its e-commerce sales. This cost will also follow the evolution of the channel mix. On the other hand, the post-pandemic economic recuperation will help to reduce these costs, which will contribute to a slow decrease by 2025, when distribution and selling expenses will represent 21.6% of revenues. These costs are not expected to return to pre-endemic values due to the evolution of the channel mix, and will remain constant at 21.6% (Fg.24).

Valuation

Cost of Capital

The cost of capital used to discount the Free Cash Flows in the model is the WACC, which requires the company's target capital structure, cost of debt, and cost of equity.

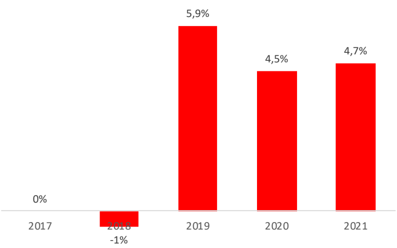

Figure 25: Adidas 2017-2021 D/E ratio

In terms of capital structure, Adidas is expected to maintain a target Debt-to-Equity (D/E) ratio of 3.6%, equal to the higher value of the industry range, [3.4%,3.6%], with the lowest value being the median of comparable companies and the upper limit the weighted average. Before 2019, the company had leverage close to 0% of its sources of financing (Fg.25). But in 2019 leasing started to be classified as debt, and the D/E ratio jumped to 5.94%. Since these changes, the company has decreased its level of debt, with the same ratio reaching 4.73% in 2021. This trend will continue, and the company will converge its D/E ratio to the industry's upper limit of 3.6% and define it as the target for the long term. This allows Adidas to reduce its financial distress costs while taking advantage of more interest tax shields compared to Nike, which maintains a ratio close to 1%. This reduction of the level of debt is consistent with Adidas's capital structure strategy, which is focused on having the best borrowing terms, the company defines the goal of having a high rating class (S&P: A and Moody's: A2)[1], and in 2020, Adidas was rated A+ by Standard & Poor's and A2 by Moody's for the first time with this level of debt. There is no need to fall below the higher limit of the range of the industry to secure the goals of the company while comfortably maintaining the net debt below two times the EBITDA, which is the financing policy of the company [1]. The market value of equity was used, calculated with the outstanding share and the current share price, and the book value of net debt was assumed to be a fair approximation to the market value of debt since there was no recent financial distress for the company.

To calculate Adidas's cost of debt, the YTM of 1.21% from a 15Y corporate bond was used [26]. The company has an A2 Moody's credit rating, resulting in an annualized probability of default of 4.31% and a recovery rate of 56.5%, according to Moody's 2017 report. Considering the statutory tax rate of 27%, we got a cost of debt of 1.08% with a beta debt of 0.04 (Fg.26).

Rd		
YTM of selected bond (15 y)		1,21%
Credit Rating	A2	
Probability of default		4,31%
Annualized		0,002817097
Recovery Rate		56,50%
Loss given default		43,50%
Rd		1,08%
Bd		0,04

Figure 26: Adidas cost of debt

To calculate the cost of equity (Re) the capital asset pricing model (CAPM) was used, by estimating the market return and adjusting it for the company risk. The model assumes a market risk premium of 5.5% following the recommendation of KPMG Corporate Finance NL [33] as of March 2022. Since Adidas is a European and a German firm, the most recent yield-to-maturity of a zero-coupon 10Y German Government Bond[26] was used, resulting in a risk-free rate of 0.88%.

To adjust the return to the company risk, a forward-looking equity beta of the company is needed. Firstly, we regressed Adidas and other eight peers' monthly returns against the Morgan Stanley Capital International (MSCI) World Index monthly returns from the last 7 years to obtain the company beta. The MSCI world was considered the best proxy for the market return [26]. It is the best estimation in our case since it includes a weighted value of well-diversified stocks from 23 developed countries. The Adidas raw beta obtained was 0.86, but the model only explains 21% of it, and the standard error of the beta is 0.18, which means that the 95% confidence interval would give us a range of [0.51;1.21]. This interval is too large to grant confidence in simply using Adidas raw beta. Therefore, we used the industry beta from the peers with similar operating risk to estimate Adidas beta. Since the sample is small the median beta of 0.92 was used in the model. Operational risk may be similar between the peers, but each one has different levels of leverage and financial risks. So, there is a need to convert the raw betas into unlevered. Considering that the companies are assumed to target a constant D/E ratio, the risk of the tax shields is assumed to be equal to the assets of the company, and the according formula used. Then the unlevered beta was re-levered, taking into consideration the 3.6% target capital structure of Adidas, resulting in a beta of the assets of 0.95.

Inputs	
MRP	5,5%
RF	0,88%
Bu	0,92
target D/E	3,61%
Bd	0,04
Re-leverd Beta	0,95
Ru	5,93%
Re	6,11%
WACC	5,924%

Figure 27: Adidas WACC components

The outcome of our estimation using an MRP of 5.5% and a risk-free rate of 0.88% led to a cost of equity of 6.11%, a cost of debt of 1.08%, and a target D/E ratio of 3.6%, resulting in a WACC of 5.92% (Fg. 27).

Terminal Value

Until 2025, due to the new strategy, Own the Game, higher growth is expected, due to massive investment and effort to increase the company's performance. After 2025, Adidas is expected to slow down its growth, slowly approaching a more stable growth. Combining the terminal RONIC and Investment Rate New Capital, Adidas will have a perpetual growth rate of 2.1%, which is sustainable growth, considering the forecasted real long-term GDP CAGR of 2% by OCDE until 2060 [32] and the inflation rate of 1.9%, estimated by IMF to balance in 2027 [34]. Besides that, Adidas will have a long-term forecasted Core ROIC of 25% and a Core RONIC of 22%, both higher than the cost of capital (WACC) of 5.92%, meaning that the company will create value through the entire residual period. We expect Adidas to use its capabilities to consolidate its position as the second player in a fast-growing market, use its competitive advantage to shorten the distance to the market leader Nike and widen the distance to smaller players while better absorbing the new opportunities in the market than competitors to have a return on invested capital higher than the industry.

The Discounted Cash Flows (DCF) method was used to estimate the Enterprise Value of the company. The forecasted Free Cash Flows and the terminal value were discounted at the weighted average cost of capital (WACC) of 5.92%, resulting in an EV of €56.17 billion. After deducting the net financial assets, the Shareholder Equity of €52.70 billion was obtained (Fg.28). The number of 191,594,855 outstanding as of May 2022 is assumed to remain constant in the future. The outcome was a target price of €275.1 per share, taking into consideration the current price of €183.4, the model discloses a BUY recommendation with a 2% dividend yield and a 48% capital gain.

Total PV Core	54 922
+ Non-Core Assets	1 252
Entreprise Value	56 174
- Net Debt	3 473
= Value of equity	52 701

Figure 28: Adidas DCF valuation outcome

Relative Valuation

To complement and test the DCF method we carried out a multiple valuation. The chosen peers, Nike, Puma, Under Armor, VF Corporation, and Lululemon, were based on the Bloomberg recommendation. In addition to the P/E multiple, we used the EV/EBITDA multiple to access the company's value regardless of its capital structure [26] (Fg.29). The industry average of the multiples was used to calculate the EV and equity of the company. The P/E multiple resulted in a target price of €266.56 per share, and the EBITDA/EV resulted in an EV value of €58.25 billion. After deducting the net debt and assuming the number of shares will continue constant in the future, we got a target price of €293.6 per share. Both target prices are significantly above Adidas's current price, suggesting the company's undervaluation, consistent with the DCF valuation outcome and the

	BF P/E	BF EV/EBITDA
Adidas	18,49x	9,78x
Current Premium to Comps Mean	-23,13x	-35,75x
Lululemon Athletica Inc	36,34x	22,33x
Puma SE	23,53x	10,44x
NIKE Inc	27,50x	21,19x
Under Armour Inc	18,92x	9,40x
VF Corp	14,41x	12,38x
Lululemon Athletica Inc	36,34x	22,33x
Industry Mean	24,14x	15,15x
Industry Median	23,53x	12,38x

Figure 29: P/E and EV/EBITDA multiples of Adidas and its peers

fact that Adidas multiples lower than 4 of the 5 peers considered. Considering an average between the two target prices the relative valuation outcome is a target price of €275.1, with a BUY recommendation in place.

Sensitivity Analysis

To fine-tune our valuation there is the need to test the sensitivity of our target price in relation to changes in terminal growth rate and WACC, the most relevant assumptions of our model. The WACC used to discount the FCF was a result of the assumed target capital structure of D/E 3.61% and unlevered beta of 0.92. Therefore, we wanted to test the influence of the target D/E being the level before 2019 and its law changes, when Adidas maintained net debt close to 0% and a higher level of debt to capitalize on interest tax shields (D/E of 7%). Also, since we assumed the industry median unlevered beta, we tested the change between 0.72 and 1.12, with the lower value being two times the difference between median industry and Adidas regressed beta of 0.82, and the upper limit the reverse. These changes would result in a variation of WACC between 4.83% and 7.01%, and a target price between €210.68 and €391.4. The terminal growth rate assumed in the model came from a terminal RONIC of 21.96% and an Investment Rate of New Capital (RRNC) of 9.54%. With changes in these variables, our sensitivity analysis growth rate would vary from 0.68%, meaning that Adidas would grow slightly slower than the market, and 3.96%, resulting in a target price change between €244.1 and €387.2. Combining both changes in WACC and terminal growth, the target price would be at its lowest €195.2. The Fg.30 shows in green the cases where our recommendation would be BUY (capital gain higher than 10%), in yellow HOLD (capital gain from 0% to 10%), and in red BUY, the negative return cases. The green majority gives confidence to our recommendation BUY.

Terminal Groth Rate	WACC 4,83%	5,38%	5,92%	6,47%	7,01%
3,96%	-	-	388,0	306,3	254,3
2,68%	451,2	358,1	297,3	253,1	220,6
2,07%	391,3	323,2	275,3	238,7	210,7
1,31%	345,8	294,4	256,1	225,4	201,3
0,68%	320,7	277,6	244,3	217,1	195,2

Figure 30: Price sensitivity to WACC and terminal growth rate

Scenario Analysis

A scenario analysis was conducted to the drivers of our forecast. In the worst-case, the target price was €145.4, and €420.1 in the best case. Assuming both cases have an equal probability of happening, the expected target price is €282.8, higher than the current price, and iterating the recommendation BUY.

Best case would be characterized by higher demand growth, quick end to the war in Europe, and efficient supply chain in the short term. Sales growth would result from a higher sportswear market size and Adidas' ability to maximize trends, such as being the leader in the Women's and Sustainability categories. As an effective and quicker than expected improvement of relationship with Chinese consumers, leading to a gain in market share and capitalization of the growth of this market. Furthermore, a short-term conclusion to the conflict in Europe with inflation returning to normal sooner than projected would result in higher revenue growth and lower cost of sales. In terms of the supply chain, reducing the cost of sales, Adidas would deal with the e-commerce logistics complexity in the best possible way as the channel mix becomes increasingly DTC-dominated. No more covid variants and outbreaks would occur and WTO trade restrictions would be lifted. With raw materials prices rising at a slower rate. Other operating costs will not change as a percentage of sales in this case. With these assumptions, sales growth would increase by 0.5 pp, and the cost of sales would decrease 0.5 pp.

Worst case would have a lower increase in demand, an extension of the war, and supply chain disruptions aggravation. With the sporting goods market growing less than expected, a poor approach to the market opportunities, and a worse situation with consumers in China, Adidas's revenue would grow slower than in the base case. Also, an extension of the war would reduce sales in every country involved and increase inflation to a point in which Adidas would not be able to maintain revenues with an increase in its prices. The supply chain disruptions in place, would increase and not dissipate after 2025 and be accompanied by new logistics implications due to the war. With new covid variants and outbreaks, factories would close, shipping costs increase, and higher number of trade restrictions. Which would increase costs of sales together with raw materials prices increasing higher than expected due to fewer plantation spaces, high inflation, and a channel mix with wholesale dominated. Other operating costs will not change as a percentage of sales in this case. Revenue growth would decrease by 0.5pp, and the cost of sales would increase by 0.5 pp.

Final Recommendation

Our final recommendation BUY, with a dividend yield of 2% and a capital gain of 48%, is strongly supported by the relative valuation and the risk analysis. Indicating that Adidas stock is undervalued, despite being historically a safe investment with constant positive returns and regular dividend payments, even in bear markets. The recent significant fall in stock price, despite strong financial results in 2021, is motivated by a market overreaction to the war in Europe and the China boycott. With Russia and Ukraine sales not being material for the company and our conservative market size and market share forecast backing a clear undervaluation. Adidas’s capabilities as one of the market leaders and the clear strategic plan by 2025 will allow Adidas to effectively manage the present setbacks and capitalize on the market trends.

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Appendix

in millions of EUR	2 017	2 018	2 019	2 020	2 021	2022 (F)	2023 (F)	2024 (F)	2025 (F)	2026 (F)	2027 (F)	2028 (F)	2029 (F)	2030 (F)
Core														
Net Sales	21 218	21 915	23 640	18 435	21 234	22 608	24 379	25 824	26 841	27 591	28 317	28 969	29 632	30 300
growth	14,80%	3,28%	7,87%	-22,02%	15,18%	6,47%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
Adidas brand	18 648	19 406	21 289	18 287	21 088	22 460	24 227	25 669	26 683	27 429	28 153	28 801	29 461	30 126
growth		4,06%	9,70%	-14,10%	15,32%	6,50%	7,87%	5,95%	3,95%	2,80%	2,64%	2,30%	2,29%	2,26%
% revenues	88%	89%	90%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Wholesale	13 427	13 584	14 264	10 789	13 075	13 632	13 927	14 062	14 103	14 140	14 174	14 205	14 231	14 254
growth		1,17%	5,00%	-24,36%	21,18%	4,26%	2,16%	0,97%	0,29%	0,27%	0,24%	0,21%	0,19%	0,16%
% revenues	63%	62%	60%	59%	62%	60%	57%	54%	53%	51%	50%	49%	48%	47%
# Wholesale doors	150 000	150 000	150 000	140 000	137 000	134 000	131 000	129 000	127 000	125 000	123 000	121 000	119 000	117 000
Average Revenue per Wholesale Door	0,09	0,09	0,10	0,08	0,10	0,10	0,11	0,11	0,11	0,11	0,12	0,12	0,12	0,12
Direct to consumer	5 221	5 822	7 025	7 498	8 013	8 828	10 301	11 607	12 580	13 289	13 979	14 597	15 230	15 872
growth		11,50%	20,67%	6,72%	6,88%	10,16%	16,68%	12,68%	8,38%	5,64%	5,19%	4,42%	4,33%	4,22%
% revenues	25%	27%	30%	41%	38%	39%	42%	45%	47%	48%	49%	50%	51%	52%
Own retail	3 730	3 881	4 684	3 657	4 099	4 448	4 729	4 907	5 072	5 270	5 463	5 648	5 824	5 991
growth		4,06%	20,67%	-21,91%	12,06%	8,51%	6,34%	3,76%	3,35%	3,92%	3,65%	3,39%	3,12%	2,86%
% revenues	18%	18%	20%	20%	19%	20%	19%	19%	19%	19%	19%	19%	20%	20%
# stores	2 275	2 139	2 265	2 185	2 184	2 166	2 149	2 142	2 136	2 147	2 158	2 169	2 180	2 191
Average revenue per store	2	2	2	2	2	2	2	2	2	2	3	3	3	3
E-commerce	1 492	1 941	2 342	3 840	3 915	4 380	5 571	6 700	7 508	8 019	8 516	8 949	9 405	9 881
growth		30,08%	20,67%	63,99%	1,94%	11,89%	27,18%	20,26%	12,07%	6,80%	6,20%	5,08%	5,10%	5,06%
% revenues	7%	9%	10%	21%	18%	19%	23%	26%	28%	29%	30%	31%	32%	33%
Reebok brand	1 832	1 681	1 746	-	-	-	-	-	-	-	-	-	-	-
% revenues	9%	8%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Businesses	738	828	605	148	146	149	152	155	158	161	164	168	171	174
growth		12,20%	-26,93%	-75,54%	-1,35%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
% revenues	3%	4%	3%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cost of sales	10 514	10 552	11 347	9 213	10 469	11 101	11 921	12 576	13 018	13 243	13 451	13 616	13 927	14 241
growth		0,36%	7,53%	-18,81%	13,63%	6,03%	7,39%	5,49%	3,51%	1,73%	1,57%	1,22%	2,29%	2,26%
% revenues	49,55%	48,15%	48,00%	49,98%	49,30%	49,10%	48,90%	48,70%	48,50%	48,00%	47,50%	47,00%	47,00%	47,00%
Gross Margin	50,4%	51,9%	52,0%	50,0%	50,7%	50,9%	51,1%	51,3%	51,5%	52,0%	52,5%	53,0%	53,0%	53,0%
Royalty and comission income	115	129	154	61	86	114	123	130	135	139	143	146	149	153
growth		12,17%	19,38%	-60,39%	40,98%	32,39%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	0,54%	0,59%	0,65%	0,33%	0,41%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%
Other operating income	133	48	56	42	28	28	28	28	28	28	28	28	28	28
growth		-63,91%	16,67%	-25,00%	-33,33%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
% revenues	0,63%	0,22%	0,24%	0,23%	0,13%	0,12%	0,19%	0,18%	0,17%	0,16%	0,16%	0,17%	0,17%	0,17%
Other operating expenses	8 882	9 172	9 843	8 580	8 892	9 445	10 131	10 655	11 023	11 357	11 686	11 993	12 303	12 598
growth		3,27%	7,32%	-12,83%	3,64%	6,22%	7,27%	5,17%	3,46%	3,02%	2,90%	2,63%	2,58%	2,40%
adjustments	-1	-1	0	0	0									
Marketing and point-of-sale expenses	2 733	3 001	3 042	2 373	2 547	2 713	2 925	3 099	3 221	3 311	3 398	3 476	3 556	3 636
growth		9,81%	1,37%	-21,99%	7,33%	6,52%	7,83%	5,92%	3,94%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	12,88%	13,69%	12,87%	12,87%	11,99%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%	12,00%
Distribution and selling expenses	4 385	4 450	4 997	4 601	4 782	5 019	5 363	5 630	5 798	5 960	6 117	6 257	6 400	6 545
growth	0,00%		12,29%	-7,92%	3,93%	4,96%	6,86%	4,96%	2,98%	2,79%	2,63%	2,30%	2,29%	2,26%
% revenues	20,67%	20,31%	21,14%	24,96%	22,52%	22,20%	22,00%	21,80%	21,60%	21,60%	21,60%	21,60%	21,60%	21,60%
General and administration expenses	1 765	1 576	1 652	1 379	1 481	1 589	1 709	1 787	1 859	1 935	2 014	2 095	2 176	2 242
growth		-10,71%	4,82%	-16,53%	7,40%	7,26%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	8%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Sundry expenses	-	105	134	116	76	88	94	99	103	107	111	116	120	124
growth			27,62%	-13,43%	-34,48%	15,44%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impairment losses (net) on accounts receivable and contract assets	-	41	18	111	6	37	39	41	43	45	46	48	50	52
growth			-56,10%	516,67%	-94,59%	509,44%	7,56%	4,58%	4,06%	4,06%	4,06%	4,06%	3,87%	3,00%
% revenues	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operating Margin	9,8%	10,8%	11,3%	4,0%	9,4%	9,8%	10,2%	10,7%	11,0%	11,4%	11,8%	12,2%	12,1%	12,0%
Core Result before Taxes	2 070	2 368	2 660	745	1 987	2 205	2 477	2 751	2 963	3 157	3 352	3 535	3 579	3 642
Statutory Taxes	621	711	728	204	544	604	678	753	811	864	918	968	980	997
Statutory Tax Rate	30%	30%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
Tax Adjustments	(66)	(19)	(10)	4	(107)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
Core Result	1 515	1 676	1 942	537	1 550	1 641	1 839	2 037	2 191	2 333	2 474	2 607	2 639	2 684
growth		11%	16%	-72%	188%	6%	12%	11%	8%	6%	6%	5%	1%	2%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Non-Core														
Financial Income	46	57	64	29	19	43	43	43	43	43	43	43	43	43
Non Core Result before Taxes	46	57	64	29	19	43	43	43	43	43	43	43	43	43
Statutory Taxes	14	17	18	8	5	12	12	12	12	12	12	12	12	12
Statutory Tax Rate	30,00%	30,03%	27,37%	27,34%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%	27,38%
Tax Adjustments	126	(26)	(49)	(46)	(40)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Other Comprehensive Income	(818)	150	(84)	(540)	573	(144)	(144)	(144)	(144)	(144)	(144)	(144)	(144)	(144)
Gain/Losses from discontinued operations, net of tax	(254)	(5)	59	(19)	666	89	89	89	89	89	89	89	89	89
adjustments	(2)	1	2	-	(1)	-	-	-	-	-	-	-	-	-
Non Core Result	(1 168)	212	72	(492)	1 292	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)
growth		-118%	-66%	-779%	-363%	-101%	0%	0%	0%	0%	0%	0%	0%	0%
Check	TRUE	TRUE	TRUE	TRUE	TRUE									
Financing														
Financial expenses	93	47	166	196	153	270	268	284	301	314	323	331	338	347
% Debt Previous Year		4,12%	9,34%	4,03%	2,55%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%	5,01%
Financing Result before Taxes	(93)	(47)	(166)	(196)	(153)	(270)	(268)	(284)	(301)	(314)	(323)	(331)	(338)	(347)
Statutory Taxes	(28)	(14)	(45)	(54)	(42)	(74)	(73)	(78)	(82)	(86)	(88)	(91)	(93)	(95)
Statutory Tax Rate	-30,00%	-30,03%	-27,37%	-27,34%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%	-27,38%
Tax Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Result	(65)	(33)	(121)	(142)	(111)	(196)	(195)	(206)	(219)	(228)	(234)	(241)	(246)	(252)
growth		-49%	267%	18%	-22%	76%	0%	6%	6%	4%	3%	3%	2%	2%
Comprehensive Result	282	1 855	1 894	(97)	2 731	1 429	1 628	1 815	1 956	2 088	2 223	2 350	2 377	2 417
growth		558%	2%	-105%	-2915%	-48%	14%	11%	8%	7%	6%	6%	1%	2%
	TRUE	TRUE	TRUE	TRUE	TRUE									

in millions of EUR	2 017	2 018	2 019	2 020	2 021	2022 (F)	2023 (F)	2024 (F)	2025 (F)	2026 (F)	2027 (F)	2028 (F)	2029 (F)	2030 (F)
Core Business														
Operating Cash	**424**	**438**	**473**	**369**	**425**	**452**	**488**	**516**	**537**	**552**	**566**	**579**	**593**	**606**
% revenues	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*	*2,00%*
growth		*3,28%*	*7,87%*	*-22,02%*	*15,18%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Accounts receivable	**2 315**	**2 418**	**2 625**	**1 952**	**2 175**	**2 372**	**2 580**	**2 756**	**2 889**	**2 939**	**2 985**	**3 059**	**3 167**	**3 277**
Average colection period	*40*	*40*	*41*	*39*	*37*	*36*	*35*	*34*	*33*	*32*	*31*	*31*	*31*	*30*
growth		*4,45%*	*8,56%*	*-25,64%*	*11,42%*	*9,07%*	*8,77%*	*6,83%*	*4,81%*	*1,73%*	*1,57%*	*2,47%*	*3,53%*	*3,49%*
Other financial assests	**612**	**798**	**994**	**1 116**	**905**	**964**	**1 039**	**1 101**	**1 144**	**1 176**	**1 207**	**1 235**	**1 263**	**1 291**
% revenues	*2,88%*	*3,64%*	*4,20%*	*6,05%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*	*4,26%*
growth		*30,39%*	*24,56%*	*12,27%*	*-18,91%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Inventories	**3 692**	**3 445**	**4 085**	**4 397**	**4 009**	**4 227**	**4 507**	**4 720**	**4 850**	**4 935**	**5 012**	**5 073**	**5 189**	**5 306**
Average holding period	*128*	*119*	*131*	*174*	*140*	*140*	*140*	*140*	*140*	*140*	*140*	*140*	*140*	*140*
growth		*-6,69%*	*18,58%*	*7,64%*	*-8,82%*	*5,45%*	*6,62%*	*4,73%*	*2,76%*	*1,73%*	*1,57%*	*1,22%*	*2,29%*	*2,26%*
Property, plant and equipament	**2 000**	**2 237**	**2 380**	**2 157**	**2 256**	**2 589**	**2 771**	**2 944**	**3 095**	**3 177**	**3 259**	**3 338**	**3 419**	**3 501**
growth		*11,85%*	*6,39%*	*-9,37%*	*4,59%*	*14,76%*	*7,04%*	*6,22%*	*5,15%*	*2,64%*	*2,57%*	*2,43%*	*2,42%*	*2,41%*
Right-of-use assets	**-**	**-**	**2 931**	**2 430**	**2 569**	**2 735**	**2 950**	**3 124**	**3 247**	**3 338**	**3 426**	**3 505**	**3 585**	**3 666**
% revenues	*0,00%*	*0,00%*	*12,40%*	*13,18%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*	*12,10%*
growth				*-17,09%*	*5,72%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Trademarks	**1 309**	**844**	**859**	**750**	**16**	**17**	**18**	**19**	**20**	**21**	**21**	**22**	**22**	**23**
% revenues	*6,17%*	*3,85%*	*3,63%*	*4,07%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*	*0,08%*
growth				*-12,69%*	*-97,87%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Other intagible asstes	**154**	**196**	**305**	**252**	**336**	**333**	**360**	**381**	**396**	**407**	**418**	**427**	**437**	**447**
% revenues	*0,73%*	*0,89%*	*1,29%*	*1,37%*	*1,58%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*	*1,47%*
growth				*-17,38%*	*33,33%*	*-0,77%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Deferred tax assets	**630**	**651**	**1 093**	**1 233**	**1 263**	**1 428**	**1 131**	**1 198**	**1 245**	**1 280**	**1 314**	**1 344**	**1 375**	**1 406**
% revenues	*2,97%*	*2,97%*	*4,62%*	*6,69%*	*5,95%*	*6,32%*	*4,64%*	*4,64%*	*4,64%*	*4,64%*	*4,64%*	*4,64%*	*4,64%*	*4,64%*
growth				*12,81%*	*2,43%*	*13,10%*	*-20,81%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Income tax receivables	**71**	**48**	**94**	**109**	**91**	**97**	**104**	**111**	**115**	**118**	**121**	**124**	**127**	**130**
% revenues	*0,33%*	*0,22%*	*0,40%*	*0,59%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*	*0,43%*
growth		*-32,39%*	*95,83%*	*15,96%*	*-16,51%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Other assets	**606**	**819**	**1 179**	**1 102**	**1 136**	**1 210**	**1 304**	**1 382**	**1 436**	**1 476**	**1 515**	**1 550**	**1 585**	**1 621**
% revenues	*2,86%*	*3,74%*	*4,99%*	*5,98%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*	*5,35%*
growth		*35,15%*	*43,96%*	*-6,53%*	*3,09%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Accounts payable	**1 975**	**2 300**	**2 703**	**2 390**	**2 294**	**2 230**	**2 338**	**2 405**	**2 427**	**2 419**	**2 405**	**2 460**	**2 517**	**2 490**
Average payable period	*69*	*84*	*84*	*78*	*76*	*78*	*79*	*80*	*81*	*81*	*81*	*82*	*83*	*84*
growth		*16,46%*	*17,52%*	*-11,58%*	*-4,02%*	*-2,80%*	*4,84%*	*2,90%*	*0,88%*	*-0,32%*	*-0,57%*	*2,30%*	*2,29%*	*-1,04%*
Other current financial liabilities	**362**	**186**	**235**	**446**	**363**	**386**	**417**	**441**	**459**	**472**	**484**	**495**	**507**	**518**
% revenues	*1,71%*	*0,85%*	*0,99%*	*2,42%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*	*1,71%*
growth		*-48,62%*	*26,34%*	*89,79%*	*-18,61%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Income taxes (liabilities)	**424**	**268**	**618**	**562**	**536**	**571**	**615**	**652**	**678**	**696**	**715**	**731**	**748**	**765**
% revenues	*2,00%*	*1,22%*	*2,61%*	*3,05%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*	*2,52%*
growth		*-36,79%*	*130,60%*	*-9,06%*	*-4,63%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Accrued liabilities	**2 265**	**2 324**	**2 446**	**2 180**	**2 692**	**2 866**	**3 091**	**3 274**	**3 403**	**3 498**	**3 590**	**3 673**	**3 757**	**3 841**
% revenues	*10,67%*	*10,60%*	*10,35%*	*11,83%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*	*12,68%*
growth		*2,60%*	*5,25%*	*-10,87%*	*23,49%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Deferred tax liabilities	**275**	**241**	**280**	**241**	**122**	**130**	**140**	**148**	**154**	**159**	**163**	**166**	**170**	**174**
% revenues	*1,30%*	*1,10%*	*1,18%*	*1,31%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*	*0,57%*
growth		*-12,36%*	*16,18%*	*-13,93%*	*-49,38%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Other Provisions	**821**	**1 360**	**1 703**	**1 838**	**1 607**	**1 711**	**1 845**	**1 954**	**2 031**	**2 088**	**2 143**	**2 192**	**2 243**	**2 293**
% revenues	*3,87%*	*6,21%*	*7,20%*	*9,97%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*	*7,57%*
growth		*65,65%*	*25,22%*	*7,93%*	*-12,57%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Other liabilities	**526**	**545**	**545**	**415**	**443**	**472**	**509**	**539**	**560**	**576**	**591**	**604**	**618**	**632**
% revenues	*2,48%*	*2,49%*	*2,31%*	*2,25%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*	*2,09%*
growth		*3,61%*	*0,00%*	*-23,85%*	*6,75%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Core Invested Capital	**5 165**	**4 670**	**8 488**	**7 795**	**7 124**	**8 059**	**8 298**	**8 838**	**9 264**	**9 511**	**9 753**	**9 933**	**10 203**	**10 560**
growth		*-10%*	*82%*	*-8%*	*-9%*	*13%*	*3%*	*7%*	*5%*	*3%*	*3%*	*2%*	*3%*	*4%*
Check	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*									
Non-Core Business														
Goodwill	**1 220**	**1 245**	**1 257**	**1 208**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**	**1 228**
% revenues	*5,75%*	*5,68%*	*5,32%*	*6,55%*	*5,78%*	*5,43%*	*5,04%*	*4,76%*	*4,58%*	*4,45%*	*4,34%*	*4,24%*	*4,14%*	*4,05%*
growth		*2,05%*	*0,96%*	*-3,90%*	*1,66%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*
Financial assets	**241**	**282**	**659**	**353**	**290**	**309**	**333**	**353**	**367**	**377**	**387**	**396**	**405**	**414**
% revenues	*1,14%*	*1,29%*	*2,79%*	*1,91%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*	*1,37%*
growth		*17,01%*	*133,69%*	*-46,43%*	*-17,85%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Pensions and similar obligations	**298**	**246**	**229**	**284**	**267**	**284**	**307**	**325**	**337**	**347**	**356**	**364**	**373**	**381**
% revenues	*1,40%*	*1,12%*	*0,97%*	*1,54%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*	*1,26%*
growth		*-17,45%*	*-6,91%*	*24,02%*	*-5,99%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Assets classified as held for sale	**72**	**-**	**-**	**-**	**1 439**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
% revenues	*0,34%*	*0,00%*	*0,00%*	*0,00%*	*6,78%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*
**adjustments*	*3*	*-1*	*-3*	*-1*	*3*									
Non-core Invested Capital	1 238	1 280	1 684	1 276	2 693	1 252	1 254	1 256	1 257	1 258	1 259	1 259	1 260	1 261
growth		*3%*	*32%*	*-24%*	*111%*	*-53%*	*0,15%*	*0,12%*	*0,09%*	*0,06%*	*0,06%*	*0,06%*	*0,06%*	*0,06%*
Check	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*									
Total Invested Capital	6 403	5 950	10 172	9 071	9 817	9 312	9 553	10 094	10 521	10 769	11 012	11 192	11 463	11 821
growth		*-7%*	*71%*	*-11%*	*8%*	*-5%*	*3%*	*6%*	*4%*	*2%*	*2%*	*2%*	*2%*	*3%*
Check	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*									
Financing														
Excess cash	**1 174**	**2 191**	**1 747**	**3 625**	**3 403**	**2 201**	**2 374**	**2 514**	**2 613**	**2 686**	**2 757**	**2 821**	**2 885**	**2 950**
Operating cash	*424*	*438*	*473*	*369*	*425*	*452*	*488*	*516*	*537*	*552*	*566*	*579*	*593*	*606*
Cash and cash equivalents	1 598	2 629	2 220	3 994	3 828	2 653	2 861	3 031	3 150	3 238	3 323	3 400	3 478	3 556
% revenues	*7,53%*	*12,00%*	*9,39%*	*21,67%*	*18,03%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*	*11,74%*
growth		*86,66%*	*-20,24%*	*107,49%*	*-6,12%*	*-35,32%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Lease liabilities	**-**	**-**	**3 132**	**2 722**	**2 836**	**3 020**	**3 256**	**3 449**	**3 585**	**3 685**	**3 782**	**3 869**	**3 958**	**4 047**
% Right-of-use assets			*106,86%*	*112,02%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*	*110,39%*
growth				*-13,09%*	*4,19%*	*6,47%*	*7,83%*	*5,92%*	*3,94%*	*2,79%*	*2,63%*	*2,30%*	*2,29%*	*2,26%*
Borrowings	**1 120**	**1 675**	**1 638**	**3 168**	**2 495**	**2 254**	**2 321**	**2 472**	**2 591**	**2 660**	**2 728**	**2 778**	**2 853**	**2 953**
% Core Invested Capital	*21,68%*	*35,86%*	*19,30%*	*40,64%*	*35,02%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*	*27,97%*
Other non-current financial liabilities	**22**	**103**	**92**	**115**	**51**	**83**	**89**	**94**	**98**	**101**	**103**	**106**	**108**	**111**
% revenues	*0,10%*	*0,47%*	*0,39%*	*0,62%*	*0,24%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*	*0,37%*
growth				*93,41%*	*-21,24%*	*-9,66%*	*2,97%*	*6,51%*	*4,81%*	*2,67%*	*2,54%*	*1,84%*	*2,72%*	*3,50%*
Non-controlling interests	-15	-13	261	237	318	318	318	318	318	318	318	318	318	318
Net Financial Assets	47	426	(3 376)	(2 617)	(2 297)	(3 473)	(3 610)	(3 819)	(3 978)	(4 078)	(4 174)	(4 250)	(4 352)	(4 479)
growth		*813%*	*-893%*	*-22%*	*-12%*	*51%*	*4%*	*6%*	*4%*	*2%*	*2%*	*2%*	*2%*	*3%*
Check	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*									
Equity	6 450	6 376	6 796	6 454	7 520	5 839	5 942	6 275	6 542	6 692	6 838	6 942	7 111	7 342
growth		*-1%*	*7%*	*-5%*	*17%*	*-22%*	*2%*	*6%*	*4%*	*2%*	*2%*	*2%*	*2%*	*3%*
D/E	18%	28%	72%	93%	72%	92%	95%	96%	96%	96%	97%	97%	97%	97%
Comprehensive Result	282	1 855	1 894	(97)	2 731	1 429	1 628	1 815	1 956	2 088	2 223	2 350	2 377	2 417
Transaction with shareholders	(303)	(1 929)	(1 474)	(245)	(1 665)	(3 110)	(1 524)	(1 482)	(1 689)	(1 939)	(2 077)	(2 246)	(2 209)	(2 185)
Dividends	(406)	(530)	(666)	(585)	(632)	(414)	(471)	(526)	(567)	(605)	(644)	(681)	(689)	(700)
Payout ratio (%)	***144%***	***29%***	***35%***	***-603%***	***23%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***	***29%***
Other Transaction with sharholders	103	(1 399)	(808)	340	(1 032)	(2 696)	(1 053)	(956)	(1 123)	(1 334)	(1 433)	(1 565)	(1 520)	(1 485)
Financing	**6 403**	**5 950**	**10 172**	**9 071**	**9 817**	**9 312**	**9 553**	**10 094**	**10 521**	**10 769**	**11 012**	**11 192**	**11 463**	**11 821**
Check	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*	*TRUE*

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Report Recommendations

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

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