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

UNDER ARMOUR
EQUITY RESEARCH

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A Project carried out on the Master in (Economics/Finance/Management) Program, under the supervision of:

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Abstract

A firm's value is determined using a variety of ways that allow for a better understanding of how the company operates and what the company's future development goals are based on future trends that allow for forecasting the future. With this report we aim to estimate the value of the stocks of Under Armour on the 31st of December 2022. The Discounted Cash Flow (DCF) was the method principally employed for this evaluation, together with a Multiple Assessment. The conclusion of the DCF valuation shows that the market under Armour is underrated at $29.69 as a target price, compared with $20.56 as at 12/2021. The Under Armour Equity Approval Recommendation is hence a **BUY** Recommendation.

Keywords

Sportswear, Forecast, Valuation, Under Armour

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1. COMPANY OVERVIEW

Under Armour Inc., with his subsidiaries, develops, markets, and distributes, principally in North America, Europe, the Middle East, Asia-Pacific, and Latin America, brand performance clothes, footwear and accessories for men, women, and young people. The company offers their clothing to be worn in hot and cold compression, fit and loose. Sales of its products via wholesale channels including domestic and regional chain of sporting products, independent and specialty dealerships, department store chains, mono-branded retailers of Under Armour, institutional sports services and leagues and teams, as well as independent distributors. Under Armour is registered under the ticker **NYSE:UA**. Their stock opened with **$13.00 IPO** in its **Nov 25, 2005**, helping the company rasing $157.6M at the beginning.

UA's IPO was in 2005 under the NYSE:UA ticker

1.1. Company description

Under Armour is an American sport equipment company that manufactures **footwear**, **sport, and casual equipment** with a global corporate office in Baltimore and several local offices around the world. The company was formed on September 25, 1996, by its Chairman and former Chief Executive Officer (CEO), Kevin A. Plank, and as September 2021 the company accounts 436 mono-brand stores located across North America, Asia-Pacific, EMEA and Latin America.

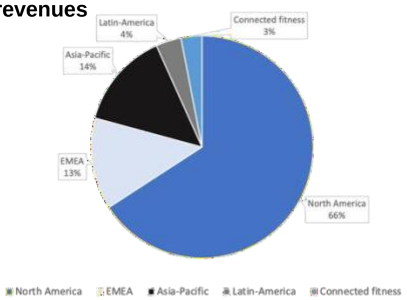
UA develops and distributes performance clothes, footwear and accessories in their Baltimore, U.S. headquarters

The primary reason for Under Armour's success is its innovative apparel line, which is segmented by fabric into **HeatGear**, **ColdGear**, and **AllSeasonGear**. These segments are made up of high fabrics such as **Threadborne**, **Athlete Recovery Sleepwear**, **Supervent**, **Sunblock**, and **Coolswitch**. These microfiber clothes aid the body in remaining warm, cool, stable, and dry. With this value proposition in mind, the company's target market is athletic individuals and players who place a higher premium on functionality and product quality than on price. As a result, Under Armour uses a **value-based pricing strategy** for its products, which allows the company to price them higher than the industry average. The company's primary objective for the future is to maintain and enhance this value proposition, while also fostering client loyalty and maintaining a high premium price.

The success of UA is largely attributable to the great quality of its products

High premium price and client loyalty as objective for the future

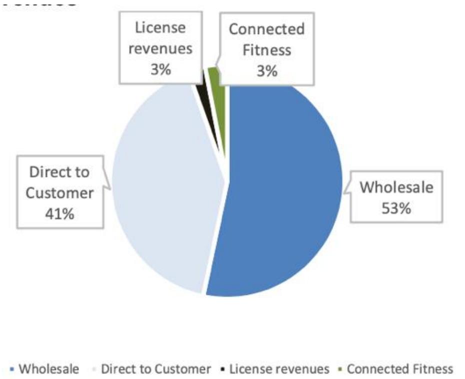
Exhibit 1: UA's 2020 geographic distribution of revenues



Source: 2020 Annual Report

The product's portfolios go from apparel to footwear and accessories which are sold globally, distinguishing the global market within in **EMEA**, **North America**, **Asia-Pacific** and **Latin America** (**Exhibit 1**). Their principal channels where they sell their products are **Wholesale**, **D2C** (Direct to

Exhibit 2: UA's 2020 channel distribution of revenues



Source: 2020 Annual Report

Customer), **License Revenue**, **Connected Fitness** (**Exhibit 2**). For Connected Fitness Under Armour means his digital business line, launched in 2013 when they firstly acquired MapMyFitness with the mission to create a community of people around his brand. However, the Company sold **MapMyFitness** in 2020, which significantly reduce its new revenue stream through Digital Services.

UA is embarking a growth plan that will likely be extended until 2025

During its growing phase, the corporation relied on expanding in the North American through direct sales to clients, opening a substantial number of brand stores and factory houses. While other significant markets, such as Asia-Pacific and EMEA, were previously deemed marginal in comparison to North America, the company sought to expand in those market through wholesaler sales. However, after reaching a stable stage in its business in 2017, and in order to compete with market giants such as Nike and Adidas, Under Amour's management decided to embark on a **growth plan in 2018** that was originally intended to last until 2023, but given the economic crisis caused by Covid-19, it is highly likely that it **will be extended until 2025** in order to recover from the pandemic's negative economic impact. The key point of this expansion plan is the expansion through the **DTC channels** in the international market, the **lowering of COGS**, the improving of both **Supply Chain** and the **Cash Conversion Cycle**. We firmly believe in the feasibility of this expansion plan, as showed by the important improvement recorded during the 2018 and 2019, and with the return to normality, partially in 2021, **in 2022 the company will restart to growth** and expand according to the plan.

Marketing and Advertising as a key lever to increase UA's brand awareness worldwide

Stephen Curry as global brand ambassador of Under Armour

Moreover, another crucial point for UA's growth in the future growth will be the **adverting and marketing**. Indeed, Under Armour invest TV advertisements, YouTube and online social media campaigns, magazine ads or sponsorships. Regarding the sponsorship, the company has made significant progress thanks to a **10-year agreement with Major League Baseball** to become their official on-field uniform provider **as of 2020**. In line with the marketing strategy, it is also important to mention the sponsorship with Stephen Curry in 2013, which allowed UA to increase its visibility in the **basketball world**. As a result of this sponsorship, UA launched Curry's Brand in 2020, as a stand-alone brand extension for a 7-year contract, aimed to increase indirectly Under Armour brand's recognition and embrace the next generations of customers worldwide.

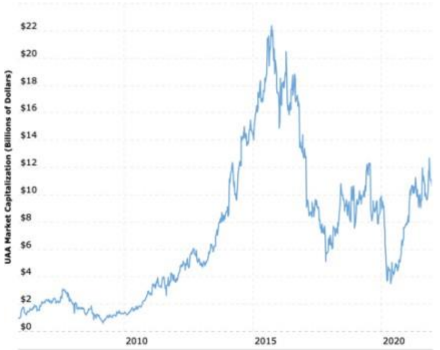
1.2. Stock Classes and Structure

Under Armour is registered under the ticker **NYSE:UA**. Their stock opened with $13.00 in its **Nov 25, 2005**, IPO helping the company rasing $157.6M at the beginning. The sportswear company has **two classes of common stock: Class A, UAA, and Class C, UA,** both integrated in S&P 500. As of January 31,2021, there were 1,765 holders of Class A common Stock, 5 holders of Class B Convertible Common Stock and 1,170 holders of Class C Common Stock. It represents the **1672nd most valuable company** by market capitalization.

UA is the 1672nd company by mkt capitalization

Under Armour's current market capitalization equals to USD 10,281bn

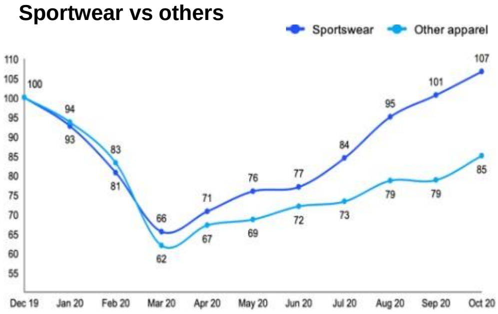
Exhibit 3: UA's actual Market Capitalization



Source: MacroTrends

Under Armour's **market capitalization** as of December 2021 amounts to **USD 10,281bn** compared to **USD 9,2bn** in December 2020 (**Exhibit 3)**.
These data reflect the increase in the market confidence toward Under Armour, due to an optimistic outlook for the easing of COVID-19 restrictions and a near-normalcy return, which would enable the company to continue its 2018 growth path. Additionally, in support of Under Armour's market capitalization increase, it is essential to consider the sportswear sector's resilience to the pandemic in comparison to the rest of the apparel industry, as the pandemic has facilitated the **development of new trends** such as **digital fitness** and **e-commerce** sales, which have partially offset the negative effects of the restrictions. As a matter of fact, sportwear firm's market capitalization has increased in a greater way than the other apparel ones from March 2020 onward. **Sports companies have been more resilient to the pandemic** than the rest of the apparel industry **(Exhibit 4).**

Exhibit 4: Market capitalization for Sportwear vs others



Source: McKinsey Global Fashion Index (MGFI)

Considering the uncertainty of the market in 2020, **no cash dividends were paid during fiscal year 2020 and 2019**. Those, have been retained to use them to maintain the business health and invest in the company's growth. Furthermore, **Under Armour does not intend to further pay other dividend** in the 2021 contrarily to its competitors. Nike pays quarterly dividends while Adidas does on annual basis. As a result of our valuation model, we firmly believe that the company will not pay dividend until 2023, in order to foster its global expansion. Moreover, considering our valuation model, the fact the company will have a **ROIC higher than WACC** strengths our reinforces our dividend retention forecast, showing how the company's expansion plan creates value.

UA will not pay dividends until 2023 to foster global expansion

However, comparing Under Armour's stocks performance to SP&500 over the last 5 year, it is clear how SP&500 Index overperformed UA's stocks especially during the rise of pandemic.

Under Armour shareholders structure is the following (Bloomberg Source): **Blackrock Inc.** (6,03%), **State Street Corp** (4,15%), **the Vanguard Group** (11%), **Kevin Plank** (15%), **Arrowstreet Capital LP** (3,23%) are the main holders of the company.

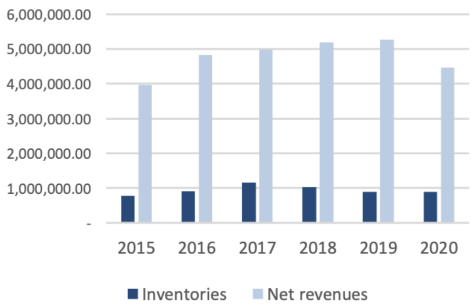
1.3. VALUE CHAIN

UA's manufacturing processes are mainly managed into developing countries

As most players in the sports apparel & footwear industry, Under Armour's outsources a significant portion of its value chain operations to third parties in developing countries saving operating costs. However, until 2017, the company had not been managing its Supply Chain and the partnership with its suppliers efficiently.

1st: High numbers of SKU's as a reductive efficiency of Supply Chain

Exhibit 5: Revenues/SKUs relationship



Source: UA's analysis

Until the 2017, the company had two important problems that negatively affected the marginality. The first problem was related to the **high number of inventories** keeping units (**SKU's**), which amounted to **690,00 SKU's (Exhibit 5)**. The high SKUs harmed the marginality since the inventory level was growing, as shown by our analysis, reaching an **average holding period of 139, 130 and 155 days in 2015, 2016, 2017**. This inefficient inventory management forced the company to sell off their inventories to wholesaler, **harming the marginality**, which in triennium **2015-2017** reached a value **of 46,5%,** a way lower than most main competitors such as Lululemon and Adidas, who respectively recorded a marginality of 50% and 52% in the biennium 2016-2017.

2nd: Lack of strategic suppliers lowering margins and delaying deliveries.

The second problem that harmed significantly the marginality was the **lack of strategic suppliers** who did not offer a low price per unit, and constantly **delayed in the delivery** of items. Those factors forced Under Armour to have a high average holding period, and constantly recur to airfreight to off-set the delay, soaring the cost of shipping.

2018 as a turning point to more strategic suppliers and stores.

The 2018 marks a turning point in the company's history, as it began to streamline the supply chain process by reducing the number of SKUs and the average holding period, shifting to **specialized strategic suppliers**, and **expanding** the number of **brand stores and factories**. The company's long-term future goals are steadily increasing marginality, improved inventory management, and increased net working capital through this plan.

Low prices, faster delivery, and high level of quality from new suppliers.

When it comes to suppliers, Under Armour has shifted its focus to strategic partners in **Thailand, China, Jordan**, and **Taiwan** that can provide supply at

Exhibit 6: UA's Suppliers worldwide

Taiwan	
Eclat Textile Co Ltd	6.07B
Makalot Industrial Co Ltd	2.16B
De Licacy Industrial Co.	212.29M
Everest Textile Co Ltd	237.07M
Fulgent Sun international	642,14M
Hong YI Fiber Industry	112.57M
Thailand	
Indorama Ventures PCL	7.18B
China	
Shanghai Anoky Group	741.02M
Shanghying Global Co Ltd	228.14M
Zhejiang Jasan Holding Group Co	693.87M

Source: Bloomberg

lower prices and **faster delivery** times while maintaining a **high level of quality (Exhibit 6)**. Indeed, the company recorded a shorter average holding period and a higher marginality in 2018 and 2019, which are partially attributable to these supplier changes. However, production was delayed in 2020 due to the restrictions, but with the end of the pandemic, we foresee further reductions in the average holding period in the coming years, as demonstrated by the first three quarters of 2021, when the **average holding period** was **113 days**. We believe it is excessively optimistic for the company to maintain this value as it expands globally, and thus believe the company will continue to maintain an average holding period of 119 days in future years, consistent with the data for 2018, 2019, and the first three quarters of 2021. This will improve the cash conversion cycle and enable for a better generation of free cash flow in the future. Additionally, because of lower shipping costs, this supply chain change resulted in a partial improvement in the company's margins. This is demonstrated by data from 2018 and 2019 and the first three quarters of 2021, which show that the **average cost of COGS** as a percentage of revenue **decreased to 53.3** percent over the three-year period **2018-2020 and to 49.8 percent in** the first three quarters of **2021**. We are confident that the company will continue to operate at a lower cost of goods sold to revenue ratio than 2018-2020 period in the future, due mainly to a variety of factors, including changes in the supply chain.

Another critical factor in optimizing the supply chain of a business on the customer side is the **growth of sales through brand stores and factory houses**. Indeed, as previously stated, the company reached a stable phase of its business in 2017, with a considerable proportion of sales in the North American market coming from the direct-to-consumer channel. However, when considering the international market, the company generated a significant portion of revenue from wholesaler sales but a marginal portion from direct-to-consumer sales. As a result, the company has been on a global expansion path since 2018 with **the goal of opening brand stores and factory houses outside of North America** to maintain its p**remium value proposition**, improve **inventory management**, and **increase margins**. As evidence of this expansion strategy, it's worth noting that, for the first time in the company's history, the number of international brand stores and factory houses exceeded the number in the North American market in 2019 (**Exhibit 7)**. Despite the 2020 restrictions, the growth rate of brand stores and factory houses continues to be high, especially given that the majority of new openings are planned well in advance and that, despite the COVID, planned openings could not be halted. However, the company reported a **decrease in the opening of new brand stores and factory houses in** the first three

Exhibit 7: Number of stores in 2019

Source: 2019 UA's Annual Report

Exhibit 8: North America vs International stores in 2020 and 2021

Source: 2020 UA's Annual Report and 2021's Quarterly Report

quarters of **2021**, confirming the negative effects of COVID-19 (**Exhibit 8**). We believe that a decline in direct store growth in 2021 was inevitable, given the company's reluctance to open new locations due to current, yet somewhat minor, restrictions on the sales volume of stores in pandemic-affected areas. From 2022, we are confident that the company will continue the process of global store expansion in accordance with the strategy announced in 2018. Indeed, the growing presence of direct stores will enable the company to manage inventory more effectively, avoiding sales below cost and preserving the premium brand proposition even on non-year collections. Additionally, the brand stores and factory houses enable and will enable the company to maintain high margins, as the products will not be subject to aggressive discounting and will enable the brand to achieve greater global visibility. Remaining on the topic of COVID-19, it can be said that **the company benefited partially from the various closures**, as sales via **e-commerce increased by 31.9 percent in 2020** compared to 2019 and by 1.29 percent in the first three quarters of 2021, accelerating the future process of transition to e-commerce. This continues to be a positive factor because it enables the company to maintain a high margin due to the absence of intermediaries in the sales process.

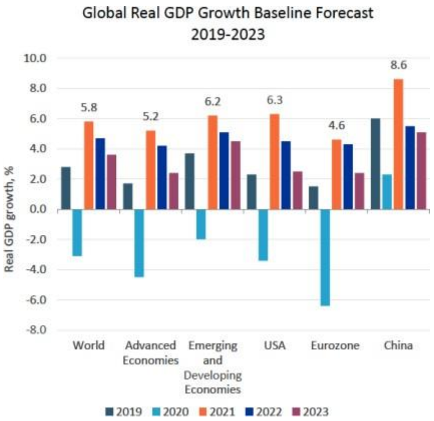
2. INDUSTRY OVERVIEW

2.1. Macroeconomic Analysis

In 2020 the COVID-19 pandemic broke out and the number of reported cases grew significantly. Despite the alternation of periods of closures and reopening, the global economy has experienced a strong downturn bringing the **GDP growth rate to -3,25**%. However, in **2021**, there is an **optimistic outlook** on economic growth especially in developed countries. (**Exhibit 9**)

Recovery likely to have peaked

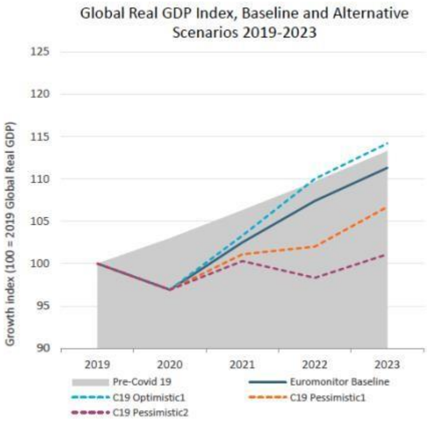
Exhibit 9:



Source: PassPort Euromonitor

In fact, in these countries, **vaccination rate is expected to reach 70% by Q4 2021**. In addition to vaccination, fiscal support in these countries for 2021-2022 is expected to remain in line with that of 2020, **supporting rapid economic recovery**. However, economic recovery may be slowed by developing countries. Indeed, in developing economies, slow vaccination rates are occurring, not in line with advanced economies, which could give rise to new vaccination-resistant variants, and cuts in fiscal support spending. Those dynamics, whose probability is 64-74%, will lead to a **GDP growth rate of 5,8%** and a **real GDP growth of 4,7%** in 2022. This strong recovery

Exhibit 10: The recovery may differ in 3 different scenarios



Source: PassPort Euromonitor

will not off-set downturn and decrease in GDP in 2020, leading to a global real GDP in 2022 which is still below 2% of the real GDP pre-pandemic forecast in 2022.

Therefore, in the global economic recovery as shown by Euromonitor **three other possible scenarios may occur** (**Exhibit 10)**, the evolution of which depends primarily on the emergence of new variants. Famous is the case of the delta variant, which has increased the degree of immunization required from 70% to 85%, slowing down the global recovery due to a slight tightening of rules on security measures. However, the effects of the delta variant are moderate in advanced economies, while slowing recovery more significantly in developing economies.

1st scenario: High vaccination rate of 70% in Q3-Q4 linked with strong fiscal initiative

In the **optimistic scenario**, we assume a vaccination rate in advanced economies of **70% in Q3-Q4**, in addition to strong fiscal incentives and a freeze on most social distancing measures. While, for developing economies, we assume a high vaccination rate reaching roughly 50% by 2022, in addition to an increase in exports driven by the recovery in advanced economies. All this would imply a **GDP of 6.2%-6.8%** in **2021**, and **6%-7% in 2022**, leading to a return of the economy to pre-pandemic levels in 2022. However, this scenario has a probability of 2-6%.

2nd scenario: High vaccination rate of 70% in 2022 linked with limitated fiscal support

In the **pessimistic scenario** which has a probability of 18%-22%, of the **advanced economies** tracks a **vaccination rate of 70%** in 2022, as well as a limited fiscal support and a reintroduction of social distancing restrictions until 2022. On the other hand, **developing economics** have a **vaccination rate low** until 2023-2024, with a low level of exportation due to a low demand from advanced economies. The scenario would imply a GDP growth rate of **3,5%-5% in 2021**, and **0-2% in 2022**, with economic recovery postponed into 2023.

3rd scenario: High vaccination rate of 70% in 2023 linked with limitated fiscal support

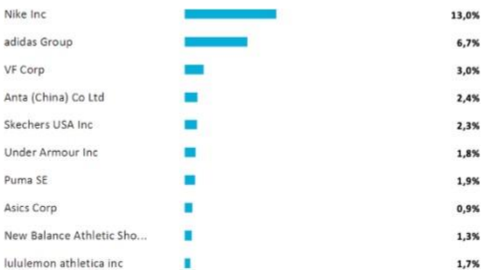
In the **worst scenario,** whose probability is 2-6%, **new variants resistant to vaccine comes out**, the **70% of vaccination rate in advance economies** is achieved in 2023, as well as longer delays in vaccination in developing countries. Moreover, the new variants trigger tight social restriction in both advanced and developing economies until 2023 making unrealizable fiscal relief until the 2023. This scenario significantly drops employment, consumption, and wages, leading to a **GDP growth of 3-4%** in **2021**, and **contraction of 1.3-2,7%** in **2022**.

	COVID-19 Baseline/Most Likely	COVID-19 Pessimistic1	COVID-19 Pessimistic2	COVID-19 Optimistic1
2021 Global real GDP growth	[5%, 6.3%]	[3.5%, 5.0%]	[3.0%, 4.0%]	[6.2%, 6.8%]
2022 Global real GDP growth	[4%, 5.3%]	[0%, 2%]	[-2.7%, -1.3%]	[6.0%, 7.0%]
Probability	64-74%	18-28%	2-6%	2-6%

Considering the industry in which Under Armour operates, a rapid economic recovery will lower the level of unemployment, allowing the company to continue its process of growth although the setback.

2.2. Industry Analysis

Exhibit 11: Global quotes of Market share in 2021



Source: Industrial Overview Analysis

Drivers of success are mostly the quality, design, and value of a product both associate with an efficient distribution network and marketing strategies

Under Armour operates in the sportswear industry which encompasses the manufacturing and retailing of athletic apparel, footwear, accessories, and equipment. The industry is **fragmented and intensely competitive** with multiple regional and multi-national players. It is dominated by players, like Nike Inc, Adidas AG, Puma SE, Lulemon, to name a few. **Nike** and **Adidas** compete for the highest market share and have been in fierce competition over the past decades to reach the highest market share, and currently they **hold respectively 13% and 6,7% of global sportwear's revenues (Exhibit 11).**

The quality, design and value of a product, efficiency of distribution networks along with the marketing expenses are driving competitiveness in the industry. With the effects of the pandemic and the changes made, we can say the **macro trends** that will redefine the future of global sportswear are **athleisure**, **sustainability**, **technology**, **digitalization**, **healthy lifestyles**, **e-commerce,** and **channel mix.**

The increased time spent at home during COVID-19 has triggered **opportunities** in the **athleisure market.** This trend has led to the entry of premium fashion brands into the market that enjoy shorter collection and product development cycles while staying in line with consumer trends. On the other hand, sportswear manufacturers have the advantage of being well positioned to develop innovative materials and designs to strike the right balance between usability and comfort.

People are becoming more aware of the importance of **physical activity** for health. Even though the closure of sports centers the pandemic has increased this awarness, moving people to use fitness apps, individual and outdoor sports.

Analyzing the trend of **e-commerce,** store closures due to COVID-19 restrictions have spurred **exponential growth in direct-to-customer sales**, which is driven in turn by exponential growth in ecommerce. For the future, manufacturing companies are anticipating the need for a change in their business model toward e-commerce. Broadly speaking, the ecommerce

Ecommerce sales grew at a 16% level during pandemic

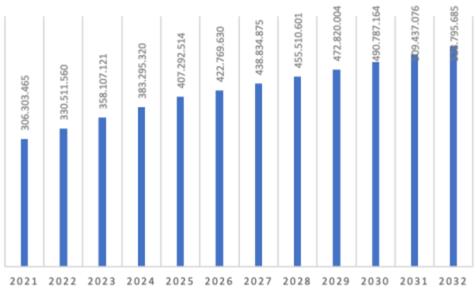
trend was a steadily growing trend even before the pandemic, with average annual growth of 2%, but the pandemic resulted in a 16% growth, leading online penetration to stabilize at 25% of total sales in 2021, up from 12.5% in 2019. E-commerce combined with the looming younger generation will lead to a migration from shopping in physical channels of 10-15% in the coming years. This trend is moving companies to adopt a new DTC model that combines digital and physical channels while still making investments in physical stores profitable and moving away from the past focus on wholesalers as the main sales channel.

Exhibit 12: Stores can improve the customer experience and work better

Source: McKinsey Sportwear Report

The final trend analyzed is the **channel mix** whose combination from the **digital and physical worlds** will be crucial. To tackle the decline in sales through physical channels, sportswear companies need to reinvent the physical store giving a new role to the store that is far from the concept of a store aimed only at selling products. The new concept store should offer a new experience in the customer journey (**Exhibit 12)**. Therefore, companies in the industry aim to give the physical store new purposes, such as the possibility to **customize products**, **test and simulate** the performance of products in sporting activities by equipping stores with courts and try-out areas.

Exhibit 13: Sales Forecast of sportwear in the world from 2021 to 2032



Source: Passport Euromonitor's Data

Following Passport analysis, the **worldwide sportwear market is expected to grow at a 7,4% yearly level from 2021 to 2025** as the increase in demand for smart sportwear even for the workday routine (**Exhibit 13)**. Given the company's focus on the product, Under Armour's business model is highly aligned with growing market demand. In addition, the brand is focusing on expanding and competing big players in the industry with its strategy to produce advanced performant sport's products and enter new markets to reach more customers enhancing their brand awareness. For this reason, **UA, currently holding 1,8% of global market share**, is expected to grow at a higher level than the market from 2021 to 2025 reaching total **2,1% of market share by the end of 2025.** Additionally, this growth will be highly dependent on Under Armour's ability to perform in the DTC channel, where it expects the majority of the company's growth to be concentrated. Following that, also focusing on the right markets can lead to profitable growth opportunities for sportwear's brands.

North America and Europe are by far the largest market. Furthermore, the **Chinese** and **Indian market** are profoundly growing respectively at a **11,3%** and **13,5%** yearly rate and show great opportunities for sport producers to exploit on. From a **global perspective** the sportswear industry **contracted**

Exhibit 14: Sportwear sales in America from 2021 to 2025

Source: Passport Euromonitor's Data

Exhibit 15: European market will move from $66,9 billions to $109 billions from 2021 to 2032

Source: Passport Euromonitor's Data

Exhibit 16: Asia Pacific as a crucial. Market for future growth.

Source: Passport Euromonitor's Data

by 18,4% in 2020 to around $266 billion compared with $315 billion in 2019. The shrinking has been equal across the continents, except for China, which recovered faster than other countries from the effects of the pandemic.

Looking at the **American market** retail sales of athletic apparel declined 22% in 2020 to $116.5 billion and are expected to experience a **CAGR of 6,53%** over the forecast period, approaching $173.2 billion in 2025 (**Exhibit 14).** The value of sportswear sales is estimated to return to pre-COVID-19 levels by early 2023. Sportswear is expected to recover faster than other categories, as demand will be primarily driven by the athleisure and casual wear trend, as well as the growing interest in health and wellness among consumers. One of the reasons that makes United States and so the American market so huge in terms of revenues is the **large number of school students involved in sports** that will led to fostering the demand for high performance products.

European market is predicted to rise significantly as a result of increasing spending to combat inactivity among the aged, which has resulted in an **increase in participation in physical activities among the elderly**. Furthermore, the growing availability of sports instruction and training in academies has considerably improved public awareness of sport and fitness. **Improvements in lifestyle**, an **increase in the youth population,** and an **increase in per-capital income** in European countries are expected to give profitable chances for the expansion of the Europe sports equipment and clothing industry. For all of these reason European market is expected to reach a **CAGR of 6,6% until 2025** reaching $84 billions **(Exhibit 15**).

On the other hand, **Asia Pacific** and so on the **Chinese market retail** is anticipated to witness a crucial sportwear market share. After a retail sportswear's sales declined in the market by 2% in 2020 which reached $42 billion, the Asia Pacific area is expected to register a **CAGR of 9,81%** over the next five years, touching $138 billion in 2025 **(Exhibit 16)**. Various initiatives, various government initiatives including **Health China 2030**, are encoring the population to do more sports and physical activity, which has proven to be beneficial for sportswear.

Those initiatives have proved to be beneficial for the sportwear market also in **India** where the government in 2020 has allotted $401,6 million in its sport budget. As a matter of fact, the Indian market, according to growth data, is expected to be one of the fastest growing in terms of CAGR within the Asian market. After a huge sales decline of 31,7% in 2020, India will witness of a **CAGR of 13,5% from 2020 to 2025**.

2.3. Competitive Landscape

Nike and Adidas hold respectively 13% and 6,7% of market share

Sportswear is a **highly fragmented market**, where different brands compete to strengthen their market shares. On the other hand, however, among these, the presence of established brands such as Nike and Adidas stand out and they prove to be market leaders.

Applying Porter's Five Force Framework to the sector, we saw that, first of all, the sportswear industry has **high barriers to entry** due to large scale production, high cost on research and development and extremely large capital investment on innovation. Moving to **bargaining power of customers** the persistent growth of e-commerce is lowering the power of wholesalers, giving the opportunity to the manufacturing company to sell their items directly to customers.

The **bargaining power of suppliers** is **moderately low** as there is an abundant number of suppliers in the industry that along with the high availability of raw materials allow big manufactures to exploit their bargaining power. However, with the higher requirements of customers, manufacturers are developing strategic partnership with suppliers to improve their value proposition. Regarding the **threats of substitutes,** until the past few years there were little alternatives to switch between the sportwear and casual wear. However, with the trend of athleisure, there are more alternatives as fashion brands include in their offer sportswear items.

Finally, the **competitive rivalry** within the industry is **relatively high** considering the trend of athleisure that has driven premium brand to enter in the market and players as Nike, Adidas and Lululemon.

REVENUES: $35.5 bln (2020)
EBITDA: 8.37B
PROFIT MARGIN: 13.17%
MARKET CAP: 232.811 bln
STOCK PRICE: 147.06
EMPLOYEES: 73300

Source: Yahoo finance

Nike is the **world's largest seller** of sports and sports footwear. Its company business activities consist mainly of high-quality soccer, clothing, equipment and accessory products, design, development and international marketing. In 2020 it reached $35.5 billions of sales making it the **most valuable brand in sport**. Nike markets its products under its own brand and directly buys with other labels (AirJordan, Nike CR7, Converse). With the famous trade names of "Just do It" and the Swoosh emblem, Nike supports numerous well-known athletes and sports teams worldwide. One of the main strength of Nike is the **low cost of manufacturing** thank also to their bargain power they have toward their suppliers. Furthermore, manufacture their products in countries like Vietnam, China and Indonesia help them to boost their margin. Nike puts **strong effort on the research and development** defined as one of their key factors for their success. The company is also investing in digital market to improve its customers experience focusing on its website and Nike+ Apps, as well as in the Chinese market.

REVENUES: $19,844 bln (2020)
EBITDA: 2.75B
PROFIT MARGIN: 7,35%
MARKET CAP: 61.879 bln
STOCK PRICE: 158.61
EMPLOYEES: 39.596

Source: Yahoo finance

Adidas was established in Germany in the early 1920s. The **second-largest manufacturer** of footwear, clothing, gear, and sales equipment is Adidas. Adidas's performance was too weighted by the Corona virus making its income 14% lower on in 2020, with $19.84 billions of sales. Their **strong brand recognition** as well with their large marketing budget have allowed the firm to have sponsorship deals with sports teams and athletes. In fact, the logo is strongly linked with entity like UEFA and FIFA for the football and apparel used in the tournaments. Adidas has also sponsored athletes and teams from football (Germany national team, Messi, Real Madrid), boxing, basketball (James Harden, Donovan Mithcell), rugby and many Olympic teams. This compared with the sponsorship strategy used by Under Armour can be seen as a point of difference. In fact, Under Armour main sponsorship are focused into the basketball sport industry. The company **intends to bet on the digital trend**, having inclusively reduced the number of physical stores in the last years, and it also intends to expand its international business in North America.

Instead, taking Under Armour and Lululemon as examples in the analysis, we can see that the two companies, although growing, are still far from competing with the two powerhouses.

REVENUES: $3,979 bln (2020)
EBITDA: 1,35B
PROFIT MARGIN: 14,97%
MARKET CAP: 54.19 bln
STOCK PRICE: 401.37
EMPLOYEES: 25.000

Source: Yahoo finance

Lululemon Athletica is an international retailer of sports clothing based in Delaware with headquarters in Vancouver. It was formed in 1998 as a yoga wear business and expanded to include the sales of athletic wear, clothing, and accessories. It has 491 shops and sells online worldwide. Even with the growth of the Covid 19 epidemic, their income reached $4,4 billions in 2020. They are well known for their product's quality which made them ideal for yoga and other athletic activity in terms of texture. The brand is enhancing its presence in the sportwear market thanks to the increasing of importance the yoga is having. Lululemon Athletica features several items that address the special demands of yoga practitioners such as yoga mat, comfy and loose leggings and shirts and tops that are free to move around. The brand **differentiate itself** from firms like Adidas and Nike also in the **promotion**. Lululemon Athletica choose to target fitness trainers or yoga gurus to influence their target segment. Furthermore, their **great attention to the customer engagement** makes them one of the most customer centric sportwear apparel firms.

Nike and Adidas are reducing the number of stores focusing on digitalization, while UA and Lululemon stores are growing

In a market where the main trend is digitalization, and focusing on growth through e-commerce presence, Nike and Adidas are a step ahead of Under Armour and Lululemon. In fact, from the breakdown of company sales, although in all the companies analyzed the incidence of Direct to Customers sales on total sales has increased, **Nike and Adidas are decreasing the number of owned stores** over the years. This is reflected in an increase in revenues in the channel due to the massive increase in online sales through e-commerce. This is **due to the strong brand recognition** that Nike and Adidas possess. On the other hand, the strategy used by Under Armour and Lululemon is to **increase the number of owned stores** over time (as can be seen in the analysis) to increase their brand recognition and **to then push incrementally on e-commerce**. Despite the two different strategies, through market forecasts, we can state that Under Armour and Lululemon, **at the end of 2025**, will be able to increase their market shares reaching respectively **2.1%** and **2.3%** of quotes at the expense of Nike and Adidas, which however will continue to be market leaders with respectively **12.6%** and **5.7%** market share.

At the end of Forecast Period 1, UA will have reached 2,1% of total market share

2.4. Key Risk

The biggest risk factors for UA are arising by Covid-19

The Covid-19 epidemic and the huge uncertainty that comes with it are currently the main risk risks for Under Armour. As the future spread of the virus, as well as government limits and stimulation, will have a significant impact on global economic development in the coming years. Furthermore, Under Armour's presence in multiple nations may be a high-risk element, as different pandemic situations may exist in the various regions covered. In the sport apparel sector, the Covid-19 epidemic will cause huge disruptions and have a considerable influence on operations, financial problems, and results. The pandemic has resulted in the temporary closure of UA’s retail stores and stores where their products were sold resulting in a reduction of consumer traffic and consumer expenditure. The related industries, such as distributors and logistics, manufacture, and textile providers, have been and may continue to be adversely affected. Furthermore, one of the key factors for success of Under Armour were sport’s event which allow them to promote the brand

Distributors and Logistic have been highly affected financially

through partnership. With the pandemic, League, **events**, and **professional activities**, college and amateur **have been postponed or cancellated**. **(Exhibit 17).** Sports events around the world have been delayed or cancelled, and marketing initiatives have failed to get out of the box.

Exhibit 17: Events status due to Covid-19

In addition, while the Fiscal year 2020 measures have been taken to maintain and preserve and enhance the company availability of liquidity, the impacts of UA's cash generated by transaction and future cash flows will be affected as the pandemic develops. In 2020 sales through the wholesale channel represent 53% of UA's net sales. In doing this, when dealing with financially distressed consumers or customers with uncertainties, Under Armour faced a **higher risk of order reduction**, **cancelation**, **extended payment terms and shipping delays**. Customers may be more careful about orders or slow investment during poor business conditions.

Bankruptcy, insolvency for most of the suppliers, this may affect the capacity of UA to receive receivables

Considering the events of **financial difficulties**, **bankruptcy**, **insolvency** for most **of suppliers**, this may affect the capacity of UA to receive receivables. If done in a continuative way this can also negatively affect business's plans. To reach an effective strategic growth plan, like in the international sales, fundamental is how the company continue to successfully extend their e-commerce, mobile applications and digital expertise worldwide following the trends. However, if they continue to experience significant market disruption because of Covid-19, it will become difficult to enhance the ability to invest in such growth initiative (especially if the North America market which account for 66% of revenues in 2020 is not growing).

FINANCIAL STATEMENT

Consolidated Income Statement

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(in €'000)			Historical						Forecast Period 1		
Operating											
Total Revenues worldwide	3.963.313,00	4.825.335,00	4.976.553,00	5.193.185,00	5.267.132,00	4.474.667,00	5.533.593,49	6.580.460,69	7.286.398,82	7.944.138,88	8.601.793,67
COGS	(2.057.766,00)	(2.584.724,00)	(2.737.830,00)	(2.852.714,00)	(2.796.599,00)	(2.314.572,00)	(2.756.145,42)	(3.306.681,50)	(3.661.415,41)	(3.991.929,78)	(4.322.401,32)
in % of Tot. Sales	51,9%	53,6%	55,0%	54,9%	53,1%	51,7%	49,8%	50,3%	50,3%	50,3%	50,3%
Gross Result				19%	17,3%						
Gross Margin	1.905.547	2.240.611	2.238.723	2.340.471	2.470.533	2.160.095	2.777.448	3.273.779	3.624.983	3.952.209	4.279.392
Selling, general and administrative expenses	*(1.396.800,00)*	*(1.679.440,00)*	*(1.914.331,00)*	*(1.992.434,00)*	*(2.050.363,00)*	*(2.010.534,00)*	*(2.345.693,36)*	*(2.804.846,92)*	*(3.107.656,33)*	*(3.394.156,41)*	*(3.681.499,50)*
% Tot. Sales	*35%*	*35%*	*38%*	*38%*	*39%*	*45%*	*42%*	*43%*	*43%*	*43%*	*43%*
Shipping and Handling Costs	*(63.700,00)*	*(89.900,00)*	*(101.500,00)*	*(91.800,00)*	*(81.000,00)*	*(80.500,00)*	*(94.155,14)*	*(111.967,78)*	*(123.979,45)*	*(135.171,02)*	*(146.361,14)*
% of Tot. Sales	*1,6%*	*1,9%*	*2,0%*	*1,8%*	*1,5%*	*1,8%*	*1,70%*	*1,70%*	*1,70%*	*1,70%*	*1,70%*
Advertising Costs	*(417.800,00)*	*(477.500,00)*	*(565.100,00)*	*(550.400,00)*	*(578.900,00)*	*(543.800,00)*	*(719.367,15)*	*(855.459,89)*	*(947.231,85)*	*(1.032.738,05)*	*(1.118.233,18)*
% of Tot. Sales.	*10,5%*	*9,9%*	*11,4%*	*10,6%*	*11,0%*	*12,2%*	*13,00%*	*13,00%*	*13,0%*	*13,0%*	*13,0%*
Operating lease costs	*(83.000,00)*	*(109.000,00)*	*(141.200,00)*	*(152.700,00)*	*(166.400,00)*	*(156.700,00)*	*(171.330,65)*	*(219.129,64)*	*(244.548,68)*	*(272.597,28)*	*(301.522,39)*
% of Tot. Brick Sales	*9,7%*	*10,4%*	*11,9%*	*12,9%*	*14,5%*	*16,0%*	*13,70%*	*13,70%*	*13,70%*	*13,70%*	*13,70%*
Allowance for Doubtful Accounts	*(5.900,00)*	*(11.300,00)*	*(19.700,00)*	*(22.200,00)*	*(15.100,00)*	*(20.400,00)*	*(21.582,25)*	*(25.665,26)*	*(28.418,58)*	*(30.983,91)*	*(33.548,91)*
% of Tot. Sales	*0,1%*	*0,2%*	*0,4%*	*0,4%*	*0,3%*	*0,5%*	*0,4%*	*0,4%*	*0,4%*	*0,4%*	*0,4%*
Other Selling, general and administrative expenses, including personel costs	*(826.400,00)*	*(991.740,00)*	*(1.086.831,00)*	*(1.175.334,00)*	*(1.208.963,00)*	*(1.209.134,00)*	*(1.339.258,17)*	*(1.592.624,35)*	*(1.763.477,78)*	*(1.922.666,15)*	*(2.081.833,88)*
% of Tot. Sales	*20,9%*	*20,6%*	*21,8%*	*22,6%*	*23,0%*	*27,0%*	*24,2%*	*24,2%*	*24,2%*	*24,2%*	*24,2%*
EBITDA	508.747,00	561.171,00	324.392,00	348.037,00	420.170,00	149.561,00	431.754,72	468.932,27	517.327,08	558.052,68	597.892,85
EBITDA Margin	12,8%	11,6%	6,5%	6,7%	8,0%	3,3%	7,8%	7,1%	7,1%	7,0%	7,0%
Depreciation PP&E	(86.300,00)	(130.700,00)	(164.300,00)	(173.400,00)	(177.300,00)	(154.400,00)	(174.195,07)	(207.149,98)	(229.372,60)	(250.077,96)	(270.780,64)
% of PP&E	16%	16%	19%	21%	22%	23%	22%	22%	22%	22%	22%
Amortization Intangible Assets	(13.900,00)	(13.000,00)	(8.200,00)	(6.100,00)	(6.100,00)	(7.000,00)	(11.047,06)	(13.136,98)	(14.546,29)	(15.859,38)	(17.172,29)
% Intangible Assets	18,4%	20,2%	17,4%	14,6%	16,8%	52,7%	28,0%	28,0%	28,0%	28,0%	28,0%
Income(loss) from Core Operations	408.547,00	417.471,00	151.892,00	168.537,00	236.770,00	-11.839,00	246.512,59	248.645,31	273.408,19	292.115,34	309.939,91
EBIT Margin	10,3%	8,7%	3,1%	3,2%	4,5%	-0,3%	4,5%	3,8%	3,8%	3,7%	3,6%
Taxes	(161.764)	(141.519)	(94.721)	(26.891)	(75.679)	(150.335)	(99.188)	(57.183)	(62.878)	(67.180)	(71.279)
Core Result	246.783,30	275.951,85	57.170,65	141.646,01	161.091,12	(162.174,05)	147.324,51	191.462,39	210.530,36	224.935,27	238.660,59
	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE					
Auxiliary Calculation EBIT	386.685,00	388.282,00	-10.309,00	-57.382,00	209.842,00	-492.544,00	101.466,00	237.289,31	256.537,66	270.428,74	247.709,53
Tax breakdown											
Statutory tax rate	35,00%	35,00%	35,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%
Effective tax rate	39,59%	33,90%	62,36%	15,96%	31,96%	-1269,83%	23,00%	23,00%	23,00%	23,00%	23,00%
Operating results before taxes	**408.547**	**417.471**	**151.892**	**168.537**	**236.770**	**(11.839)**	**246.512,59**	**248.645,31**	**273.408,19**	**292.115,34**	**309.939,91**
Reported taxes	(154.112)	(131.303)	(37.951)	20.552	(70.024)	(49.387)	(68.728,30)	(54.798,16)	(59.335,03)	(62.625,88)	(58.210,94)
Taxes on operating activities	(161.764)	(141.519)	(94.721)	(26.891)	(75.679)	(150.335)	(99.188,08)	(57.182,92)	(62.877,84)	(67.180,07)	(71.279,32)
Taxes on non-operating activities	2.532	964	44.682	40.394	1.194	91.024	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41
Tax shield	5.120	9.252	12.088	7.049	4.460	9.924	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97
Non operating											
Other income (expense), net	(7.234,00)	(2.755,00)	(3.614,00)	(9.203,00)	(5.688,00)	168.153,00	(76.798,14)	28.387,99	27.137,11	26.293,59	(10.278,16)
% of tot. Sales	-0,18%	-0,06%	-0,07%	-0,18%	-0,11%	3,76%	-1,4%	0,4%	0,4%	0,3%	-0,1%
Restructuring and impairment changes	-	-	(124.049,00)	(183.148,00)	-	(601.599,00)	(34.827,22)	-	-	-	-
% of tot. Sales	0,0%	0,0%	2,5%	3,5%	0,0%	13,4%	0,6%	0,0%	0,0%	0,0%	0,0%
Non Core Result Before Taxes and OCI	**(7.234,00)**	**(2.755,00)**	**(127.663,00)**	**(192.351,00)**	**(5.688,00)**	**(433.446,00)**	**(111.625,37)**	**28.387,99**	**27.137,11**	**26.293,59**	**(10.278,16)**
Taxes	2.531,90	964,25	44.682,05	40.393,71	1.194,48	91.023,66	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41
Non Core before OCI	**(4.702,10)**	**(1.790,75)**	**(82.980,95)**	**(151.957,29)**	**(4.493,52)**	**(342.422,34)**	**(88.184,04)**	**22.426,51**	**21.438,31**	**20.771,94**	**(8.119,74)**
OCI	(30.205,00)	(7.130,00)	13.932,00	(776,00)	(11.778,00)	(8.420,00)	(9.745,12)	(11.588,74)	(12.831,96)	(13.990,29)	(15.148,48)
% of tot. Sales	-0,76%	-0,15%	0,28%	-0,01%	-0,22%	-0,19%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%
Income(loss) from equity method investment	-	-	-	934,00	(47.679,00)	(7.246,00)	1.390,56	1.653,63	1.831,03	1.996,31	2.161,58
% of tot. Sales	0,0%	0,0%	0,0%	0,0%	-0,9%	-0,2%	0,03%	0,03%	0,03%	0,03%	0,03%
Non Core Result	(34.907,10)	(8.920,75)	(69.048,95)	(151.799,29)	(63.950,52)	(358.088,34)	(96.538,60)	12.491,40	10.437,38	8.777,96	(21.106,64)
	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE					
Financial Operations	-	-	-	-	-	-					
Interest expense,net	(14.628,00)	(26.434,00)	(34.538,00)	(33.568,00)	(21.240,00)	(47.259,00)	(33.421,23)	(39.743,99)	(44.007,64)	(47.980,19)	(51.952,23)
% of Debt	2,20%	3,23%	3,77%	4,61%	3,58%	4,71%	4,30%	4,30%	4,30%	4,30%	4,30%
Financial Result before Taxes	**(14.628,00)**	**(26.434,00)**	**(34.538,00)**	**(33.568,00)**	**(21.240,00)**	**(47.259,00)**	**(33.421,23)**	**(39.743,99)**	**(44.007,64)**	**(47.980,19)**	**(51.952,23)**
Tax shield	5.119,80	9.251,90	12.088,30	7.049,28	4.460,40	9.924,39	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97
Financial Result	(9.508,20)	(17.182,10)	(22.449,70)	(26.518,72)	(16.779,60)	(37.334,61)	(26.402,77)	(31.397,75)	(34.766,04)	(37.904,35)	(41.042,26)
	-	-	-	-	-	-					
Tot comprehensive income	202.368,00	249.849,00	(34.328,00)	(36.672,00)	80.361,00	(557.597,00)	24.383,14	172.556,04	186.201,70	195.808,88	176.511,68

	2026	2027	2028	2029	2030	2031	2032
				Forecast period 2			
Total Revenues worldwide	8.869.723,71	9.140.497,57	9.367.490,42	9.574.805,75	9.773.425,22	9.974.419,70	10.177.656,68
COGS	(4.457.036,17)	(4.593.100,03)	(4.707.163,94)	(4.811.339,89)	(4.911.146,17)	(5.012.145,90)	(5.114.272,48)
in % of Tot. Sales	50,3%	50,3%	50,3%	50,3%	50,3%	50,3%	50,3%
Gross Result							
Gross Margin	4.412.688	4.547.398	4.660.326	4.763.466	4.862.279	4.962.274	5.063.384
Selling, general and administrative expenses	*(3.796.421,27)*	*(3.912.460,49)*	*(4.011.296,46)*	*(4.102.400,36)*	*(4.190.087,33)*	*(4.278.707,54)*	*(4.368.208,90)*
% Tot. Sales	*43%*	*43%*	*43%*	*43%*	*43%*	*43%*	*43%*
Shipping and Handling Costs	*(150.920,02)*	*(155.527,29)*	*(159.389,62)*	*(162.917,13)*	*(166.296,68)*	*(169.716,64)*	*(173.174,75)*
% of Tot. Sales	*1,70%*	*1,70%*	*1,70%*	*1,70%*	*1,70%*	*1,70%*	*1,70%*
Advertising Costs	*(1.153.064,08)*	*(1.188.264,68)*	*(1.217.773,75)*	*(1.244.724,75)*	*(1.270.545,28)*	*(1.296.674,56)*	*(1.323.095,37)*
% of Tot. Sales.	*13,0%*	*13,0%*	*13,0%*	*13,0%*	*13,0%*	*13,0%*	*13,0%*
Operating lease costs	*(311.164,09)*	*(320.805,80)*	*(330.447,50)*	*(340.089,21)*	*(349.730,91)*	*(359.372,62)*	*(369.014,32)*
% of Tot. Brick Sales	*13,70%*	*13,70%*	*13,70%*	*13,70%*	*13,70%*	*13,70%*	*13,70%*
Allowance for Doubtful Accounts	*(34.593,89)*	*(35.649,97)*	*(36.535,30)*	*(37.343,87)*	*(38.118,53)*	*(38.902,45)*	*(39.695,12)*
% of Tot. Sales	*0,4%*	*0,4%*	*0,4%*	*0,4%*	*0,4%*	*0,4%*	*0,4%*
Other Selling, general and administrative expenses, including personel costs	*(2.146.679,18)*	*(2.212.212,74)*	*(2.267.150,28)*	*(2.317.325,41)*	*(2.365.395,93)*	*(2.414.041,27)*	*(2.463.229,34)*
% of Tot. Sales	*24,2%*	*24,2%*	*24,2%*	*24,2%*	*24,2%*	*24,2%*	*24,2%*
EBITDA	616.266,27	634.937,05	649.030,03	661.065,50	672.191,71	683.566,26	695.175,30
EBITDA Margin	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,8%
Depreciation PP&E	(279.214,96)	(287.738,80)	(294.884,44)	(301.410,63)	(307.663,09)	(313.990,30)	(320.388,11)
% of PP&E	22%	22%	22%	22%	22%	22%	22%
Amortization Intangible Assets	(17.707,18)	(18.247,74)	(18.700,90)	(19.114,78)	(19.511,29)	(19.912,55)	(20.318,29)
% Intangible Assets	28,0%	28,0%	28,0%	28,0%	28,0%	28,0%	28,0%
Income(loss) from Core Operations	319.344,13	328.950,51	335.444,69	340.540,09	345.017,33	349.663,41	354.468,90
EBIT Margin	3,6%	3,6%	3,6%	3,6%	3,5%	3,5%	3,5%
Taxes	(73.442)	(75.651)	(77.145)	(78.317)	(79.346)	(80.415)	(81.520)
Core Result	245.902,04	253.299,16	258.299,83	262.223,40	265.670,98	269.248,56	272.948,89
Auxiliary Calculation EBIT	255.175,39	262.822,83	267.674,81	271.270,37	274.310,69	277.502,65	280.837,80
Tax breakdown							
Statutory tax rate	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%
Effective tax rate	23,00%	23,00%	23,00%	23,00%	23,00%	23,00%	23,00%
Operating results before taxes	**319.344,13**	**328.950,51**	**335.444,69**	**340.540,09**	**345.017,33**	**349.663,41**	**354.468,90**
Reported taxes	(59.966,65)	(61.764,53)	(62.913,18)	(63.770,05)	(64.497,96)	(65.261,09)	(66.057,48)
Taxes on operating activities	(73.442,09)	(75.651,34)	(77.144,86)	(78.316,69)	(79.346,36)	(80.414,85)	(81.520,01)
Taxes on non-operating activities	2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
Tax shield	11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
Non operating							
Other income (expense), net	(10.598,30)	(10.921,84)	(11.193,08)	(11.440,79)	(11.678,12)	(11.918,29)	(12.161,13)
% of tot. Sales	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%
Restructuring and impairment changes	-	-	-	-	-	-	-
% of tot. Sales	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Non Core Result Before Taxes and OCI	**(10.598,30)**	**(10.921,84)**	**(11.193,08)**	**(11.440,79)**	**(11.678,12)**	**(11.918,29)**	**(12.161,13)**
Taxes	2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
Non Core before OCI	**(8.372,66)**	**(8.628,26)**	**(8.842,53)**	**(9.038,23)**	**(9.225,72)**	**(9.415,45)**	**(9.607,29)**
OCI	(15.620,32)	(16.097,18)	(16.496,93)	(16.862,03)	(17.211,82)	(17.565,79)	(17.923,70)
% of tot. Sales	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%
Income(loss) from equity method investment	2.228,91	2.296,95	2.353,99	2.406,09	2.456,00	2.506,51	2.557,58
% of tot. Sales	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%
Non Core Result	(21.764,08)	(22.428,49)	(22.985,47)	(23.494,17)	(23.981,53)	(24.474,72)	(24.973,41)
Financial Operations							
Interest expense,net	(53.570,44)	(55.205,84)	(56.576,80)	(57.828,92)	(59.028,53)	(60.242,47)	(61.469,96)
% of Debt	4,30%	4,30%	4,30%	4,30%	4,30%	4,30%	4,30%
Financial Result before Taxes	**(53.570,44)**	**(55.205,84)**	**(56.576,80)**	**(57.828,92)**	**(59.028,53)**	**(60.242,47)**	**(61.469,96)**
Tax shield	11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
Financial Result	(42.320,65)	(43.612,61)	(44.695,67)	(45.684,85)	(46.632,54)	(47.591,55)	(48.561,27)
Tot comprehensive income	181.817,32	187.258,07	190.618,68	193.044,38	195.056,91	197.182,29	199.414,21

Consolidated Balance Sheet

Reformulated Consolidated Balance Sheet	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	Historical							Forecast Period 1			
Core Operation											
Assets											
Operating Cash	79.266,26	96.506,70	99.531,06	103.863,70	105.342,64	89.493,34	110.671,87	131.609,21	145.727,98	158.882,78	172.035,87
in % of Tot. Sales	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
Account Receivables, net	433.638,00	622.685,00	609.670,00	652.546,00	708.714,00	527.340,00	706.950,22	840.693,87	930.881,76	1.014.912,05	1.098.931,45
in DSO	39,94	47,10	44,72	45,86	49,11	43,02	46,63	46,63	46,63	46,63	46,63
Inventories	783.031,00	917.491,00	1.158.548,00	1.019.496,00	892.258,00	895.974,00	900.691,93	1.080.603,85	1.196.528,78	1.304.538,91	1.412.535,04
in DIO	138,89	129,56	154,45	130,44	116,45	141,29	119,28	119,28	119,28	119,28	119,28
Prepaid expenses and other current assets	152.242,00	174.507,00	256.978,00	364.183,00	313.165,00	282.300,00	295.044,57	350.862,27	388.502,05	423.571,96	458.637,32
in % of Tot. Sales	3,84%	3,62%	5,16%	7,01%	5,95%	6,31%	5,33%	5,33%	5,33%	5,33%	5,33%
Total current operating assets	**1.448.177,26**	**1.811.189,70**	**2.124.727,06**	**2.140.088,70**	**2.019.479,64**	**1.795.107,34**	**2.013.358,59**	**2.403.769,20**	**2.661.640,56**	**2.901.905,70**	**3.142.139,69**
Property and equipment, net	538.531,00	804.211,00	885.774,00	826.868,00	792.148,00	658.678,00	782.386,11	930.401,02	1.030.212,51	1.123.209,34	1.216.194,12
in % Tot. Sales	13,59%	16,67%	17,80%	15,92%	15,04%	14,72%	14,14%	14,14%	14,14%	14,14%	14,14%
Operating lease right-of-use assets	-	-	-	-	591.931,00	536.660,00	600.242,07	767.701,70	856.755,09	955.020,91	1.056.357,53
in % of Tot Brick Sales	-	-	-	-	51,60%	54,80%	47,98%	47,98%	47,98%	47,98%	47,98%
Goodwill	596.614,00	585.181,00	563.591,00	555.674,00	546.494,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Costant							550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Intangible assets,net	75.686,00	64.310,00	46.995,00	41.793,00	36.345,00	13.295,00	39.439,35	46.900,64	51.932,04	56.619,92	61.307,20
in % of Tot. Sales	1,91%	1,33%	0,94%	0,80%	0,69%	0,30%	0,71%	0,71%	0,71%	0,71%	0,71%
Total non-current operating assets	**1.210.831,00**	**1.453.702,00**	**1.496.360,00**	**1.424.335,00**	**1.966.918,00**	**1.758.811,00**	**1.972.245,53**	**2.295.181,35**	**2.489.077,64**	**2.685.028,17**	**2.884.036,85**
Liabilities											
Accounts payable	200.460,00	409.679,00	561.108,00	560.884,00	618.194,00	575.954,00	561.355,97	673.486,01	745.736,19	813.053,47	880.362,03
in DPO	35,56	57,85	74,81	71,76	80,68	90,83	74,34	74,34	74,34	74,34	74,34
Accrued expenses	192.935,00	208.750,00	296.841,00	340.415,00	374.694,00	378.859,00	403.292,29	479.588,73	531.038,01	578.974,58	626.904,93
in % of Tot. Sales	4,87%	4,33%	5,96%	6,56%	7,11%	8,47%	7,29%	7,29%	7,29%	7,29%	7,29%
Customer refund liabilities	-	-	-	301.421,00	219.424,00	203.399,00	267.745,54	318.398,71	352.555,86	384.380,93	416.201,86
in % of Tot. Sales	0,00%	0,00%	0,00%	5,80%	4,17%	4,55%	4,84%	4,84%	4,84%	4,84%	4,84%
Other current liabilities	43.415,00	40.387,00	50.426,00	88.257,00	83.797,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00
Total current operating liabilities	**436.810,00**	**658.816,00**	**908.375,00**	**1.290.977,00**	**1.296.109,00**	**1.250.715,00**	**1.324.896,80**	**1.563.976,45**	**1.721.833,06**	**1.868.911,97**	**2.015.971,82**
Total Core Invested Capital	**2.222.198,26**	**2.606.075,70**	**2.712.712,06**	**2.273.446,70**	**2.690.288,64**	**2.303.203,34**	**2.660.707,32**	**3.134.974,11**	**3.428.885,14**	**3.718.021,90**	**4.010.204,72**
Non-Core Business											
Assets											
Deferred income taxes	92.157,00	136.862,00	82.801,00	112.420,00	82.379,00	23.930,00	92.594,45	110.111,84	121.924,41	132.930,47	143.935,11
in % of Tot. Sales	2,33%	2,84%	1,66%	2,16%	1,56%	0,53%	1,67%	1,67%	1,67%	1,67%	1,67%
Impairment	-	-	(28.647,00)	-	-	(51.575,00)	-	-	-	-	-
Costant	0,0%	0,0%	3,2%	0,0%	0,0%	7,8%	-	-	-	-	-
Other long-term assets	75.652,00	110.204,00	97.444,00	123.819,00	88.341,00	72.876,00	104.865,70	124.704,60	138.082,65	150.547,32	163.010,36
in % of Tot. Sales	1,9%	2,3%	2,0%	2,4%	1,7%	1,6%	1,9%	2%	2%	2%	2%
Effect of currency translation adjustment	(11.433,00)	(21.590,00)	20.730,00	(9.180,00)	3.684,00	3.611,00	(3.186,20)	(3.788,98)	(4.195,46)	(4.574,18)	(4.952,85)
in % of Tot. Sales	-0,29%	-0,45%	0,42%	-0,18%	0,07%	0,08%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%
Total non-current non-operating assets	**156.376,00**	**225.476,00**	**172.328,00**	**227.059,00**	**174.404,00**	**48.842,00**	**194.273,95**	**231.027,46**	**255.811,61**	**278.903,61**	**301.992,62**
Liabilities											
Deferred Compensation Plan	(5.072,00)	(7.023,00)	(7.971,00)	(6.958,00)	(10.839,00)	(14.314,00)	(11.341,51)	(13.487,14)	(14.934,02)	(16.282,10)	(17.630,02)
in % of Tot. Sales	0,13%	0,15%	0,16%	0,13%	0,21%	0,32%	0,20%	0,20%	0,20%	0,20%	0,20%
Other long-term liabilities	89.796,00	130.204,00	154.333,00	201.382,00	87.274,00	84.075,00	146.233,20	173.898,18	192.553,62	209.935,35	227.314,83
in % of Tot. Sales	2,27%	2,70%	3,10%	3,88%	1,66%	1,88%	2,64%	2,64%	2,64%	2,64%	2,64%
Total non-current non-operating liabilities	**(94.868,00)**	**(137.227,00)**	**(162.304,00)**	**(208.340,00)**	**(98.113,00)**	**(98.389,00)**	**(157.574,72)**	**(187.385,33)**	**(207.487,63)**	**(226.217,45)**	**(244.944,84)**
Total Non-Core Invested Capital	**61.508,00**	**88.249,00**	**10.024,00**	**18.719,00**	**76.291,00**	**(49.547,00)**	**36.699,23**	**43.642,14**	**48.323,97**	**52.686,16**	**57.047,78**
Total Invested Capital	**2.283.706,26**	**2.694.324,70**	**2.722.736,06**	**2.292.165,70**	**2.766.579,64**	**2.253.656,34**	**2.697.406,55**	**3.178.616,24**	**3.477.209,12**	**3.770.708,06**	**4.067.252,49**
Financial											
Excess of Cash	50.585,74	153.963,30	212.951,94	453.539,30	682.729,36	1.427.867,66	1.047.275,87	1.245.403,68	1.379.007,99	1.503.490,44	1.627.956,76
In % of Tot. Sales	1,28%	3,19%	4,28%	8,73%	12,96%	31,91%	18,93%	18,93%	18,93%	18,93%	18,93%
Revolving credit facility, current	0	0	125000	0	0	0	-	-	-	-	-
in % of Tot. Sales			3%				0%	0%	0%	0%	0%
Current maturities of long term debt	42.000,00	27.000,00	27.000,00	25.000,00	-	-	-	-	-	-	-
in % of Long Term debt	7%	3%	4%	4%							
Operating lease liabilities	-	-	-	-	125.900,00	162.561,00	162.511,02	207.849,45	231.959,98	258.564,71	286.000,84
In % of Tot. Brick Sales	0	0	0	0	10,97%	16,60%	12,99%	12,99%	12,99%	12,99%	12,99%
Long term debt	624.070,00	790.388,00	765.046,00	703.834,00	592.687,00	1.003.556,00	777.325,47	924.382,98	1.023.548,87	1.115.944,18	1.208.327,51
in % of Tot. Sales	16%	16%	15%	14%	11%	22%	14%	14%	14%	14%	14%
Operating lease liabilities, non-current	-	-	-	-	580.635,00	839.414,00	811.206,12	1.037.521,92	1.157.874,47	1.290.677,27	1.427.630,17
in % of Tot.Brick Sales	0%	0%	0%	0%	51%	86%	65%	65%	65%	65%	65%
Net Financial Debt	**615.484,26**	**663.424,70**	**704.094,06**	**275.294,70**	**616.492,64**	**577.663,34**	**703.766,73**	**924.350,68**	**1.034.375,33**	**1.161.695,72**	**1.294.001,76**
Equity	**1.668.222,00**	**2.030.900,00**	**2.018.642,00**	**2.016.871,00**	**2.150.087,00**	**1.675.993,00**	**1.993.639,82**	**2.254.265,57**	**2.442.833,79**	**2.609.012,34**	**2.773.250,73**
Total funds	**2.283.706,26**	**2.694.324,70**	**2.722.736,06**	**2.292.165,70**	**2.766.579,64**	**2.253.656,34**	**2.697.406,55**	**3.178.616,24**	**3.477.209,12**	**3.770.708,06**	**4.067.252,49**

	2026	2027	2028	2029	2030	2031	2032
	Forecast Period 2						
Operating Cash	177.394,47	182.809,95	187.349,81	191.496,11	195.468,50	199.488,39	203.553,13
in % of Tot. Sales	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
Account Receivables, net	1.133.161,14	1.167.754,15	1.196.753,86	1.223.239,66	1.248.614,50	1.274.292,77	1.300.257,53
in DSO	46,63	46,63	46,63	46,63	46,63	46,63	46,63
Inventories	1.456.532,91	1.500.997,77	1.538.273,18	1.572.317,26	1.604.933,36	1.637.939,47	1.671.313,83
in DIO	119,28	119,28	119,28	119,28	119,28	119,28	119,28
Prepaid expenses and other current assets	472.923,03	487.360,37	499.463,36	510.517,16	521.107,31	531.824,10	542.660,45
in % of Tot. Sales	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%
Total current operating assets	**3.240.011,56**	**3.338.922,24**	**3.421.840,21**	**3.497.570,19**	**3.570.123,68**	**3.643.544,73**	**3.717.784,94**
Property and equipment, net	1.254.076,33	1.292.360,62	1.324.454,78	1.353.766,77	1.381.849,27	1.410.267,56	1.439.002,92
in % Tot. Sales	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%
Operating lease right-of-use assets	1.090.136,41	1.123.915,28	1.157.694,16	1.191.473,03	1.225.251,91	1.259.030,78	1.292.809,66
in % of Tot Brick Sales	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%
Goodwill	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Costant	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Intangible assets,net	63.216,81	65.146,68	66.764,52	68.242,11	69.657,72	71.090,26	72.538,78
in % of Tot. Sales	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%
Total non-current operating assets	**2.957.607,54**	**3.031.600,58**	**3.099.091,46**	**3.163.659,91**	**3.226.936,89**	**3.290.566,60**	**3.354.529,36**
Accounts payable	907.783,69	935.496,40	958.728,28	979.946,24	1.000.274,22	1.020.845,27	1.041.645,83
in DPO	74,34	74,34	74,34	74,34	74,34	74,34	74,34
Accrued expenses	646.431,87	666.166,06	682.709,47	697.818,76	712.294,29	726.942,91	741.754,97
in % of Tot. Sales	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%
Customer refund liabilities	429.165,79	442.267,31	453.250,46	463.281,51	472.891,81	482.617,03	492.450,74
in % of Tot. Sales	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%
Other current liabilities	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00
Total current operating liabilities	**2.075.884,34**	**2.136.432,77**	**2.187.191,21**	**2.233.549,52**	**2.277.963,32**	**2.322.908,20**	**2.368.354,54**
Total Core Invested Capital	**4.121.734,76**	**4.234.090,06**	**4.333.740,46**	**4.427.680,59**	**4.519.097,26**	**4.611.203,13**	**4.703.959,76**
Deferred income taxes	148.418,42	152.949,32	156.747,63	160.216,67	163.540,20	166.903,47	170.304,26
in % of Tot. Sales	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%
Impairment	-	-	-	-	-	-	-
Costant	-	-	-	-	-	-	-
Other long-term assets	168.087,83	173.219,20	177.520,88	181.449,66	185.213,65	189.022,64	192.874,13
in % of Tot. Sales	2%	2%	2%	2%	2%	2%	2%
Effect of currency translation adjustment	(5.107,12)	(5.263,03)	(5.393,73)	(5.513,10)	(5.627,47)	(5.743,20)	(5.860,22)
in % of Tot. Sales	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%
Total non-current non-operating assets	**311.399,13**	**320.905,49**	**328.874,78**	**336.153,22**	**343.126,38**	**350.182,91**	**357.318,17**
Deferred Compensation Plan	(18.179,16)	(18.734,13)	(19.199,37)	(19.624,28)	(20.031,36)	(20.443,31)	(20.859,86)
in % of Tot. Sales	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%
Other long-term liabilities	234.395,27	241.550,86	247.549,47	253.028,08	258.276,88	263.588,45	268.959,28
in % of Tot. Sales	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%
Total non-current non-operating liabilities	**(252.574,42)**	**(260.284,99)**	**(266.748,84)**	**(272.652,35)**	**(278.308,25)**	**(284.031,77)**	**(289.819,15)**
Total Non-Core Invested Capital	**58.824,71**	**60.620,50**	**62.125,94**	**63.500,87**	**64.818,13**	**66.151,14**	**67.499,03**
Total Invested Capital	**4.180.559,47**	**4.294.710,56**	**4.395.866,39**	**4.491.181,46**	**4.583.915,39**	**4.677.354,28**	**4.771.458,79**
Excess of Cash	1.678.664,62	1.729.910,69	1.772.870,86	1.812.106,91	1.849.697,20	1.887.736,98	1.926.201,16
In % of Tot. Sales	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%
Revolving credit facility, current	-	-	-	-	-	-	-
in % of Tot. Sales	0%	0%	0%	0%	0%	0%	0%
Current maturities of long term debt	-	-	-	-	-	-	-
in % of Long Term debt							
Operating lease liabilities	295.146,21	304.291,59	313.436,97	322.582,34	331.727,72	340.873,09	350.018,47
In % of Tot. Brick Sales	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%
Long term debt	1.245.964,69	1.284.001,35	1.315.887,92	1.345.010,32	1.372.911,17	1.401.145,65	1.429.695,14
in % of Tot. Sales	14%	14%	14%	14%	14%	14%	14%
Operating lease liabilities, non-current	1.473.281,13	1.518.932,10	1.564.583,06	1.610.234,02	1.655.884,99	1.701.535,95	1.747.186,92
in % of Tot.Brick Sales	65%	65%	65%	65%	65%	65%	65%
Net Financial Debt	**1.335.727,42**	**1.377.314,35**	**1.421.037,09**	**1.465.719,77**	**1.510.826,68**	**1.555.817,72**	**1.600.699,36**
Equity	**2.844.832,05**	**2.917.396,21**	**2.974.829,31**	**3.025.461,69**	**3.073.088,71**	**3.121.536,56**	**3.170.759,43**
Total funds	**4.180.559,47**	**4.294.710,56**	**4.395.866,39**	**4.491.181,46**	**4.583.915,39**	**4.677.354,28**	**4.771.458,79**

Consolidated Statement Cash Flows

FREE CASH FLOW MAP	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
(In €'000)	Historical						Forecast Period 1					Forecast Period 2						
Operating																		
EBIT	**408.547,00**	**417.471,00**	**151.892,00**	**168.537,00**	**236.770,00**	**(11.839,00)**	**246.512,59**	**248.645,31**	**273.408,19**	**292.115,34**	**309.939,91**	**319.344,13**	**328.950,51**	**335.444,69**	**340.540,09**	**345.017,33**	**349.663,41**	**354.468,90**
Taxes	(142.991,45)	(146.114,85)	(53.162,20)	(35.392,77)	(49.721,70)	2.486,19	(51.767,64)	(52.215,51)	(57.415,72)	(61.344,22)	(65.087,38)	(67.062,27)	(69.079,61)	(70.443,38)	(71.513,42)	(72.453,64)	(73.429,32)	(74.438,47)
Tax adjustments	(18.772,25)	4.595,70	(41.559,15)	8.501,78	(25.957,18)	(152.821,24)	(47.420,44)	(4.967,41)	(5.462,12)	(5.835,85)	(6.191,94)	(6.379,82)	(6.571,73)	(6.701,47)	(6.803,27)	(6.892,72)	(6.985,53)	(7.081,54)
NOPLAT	**246.783,30**	**275.951,85**	**57.170,65**	**141.646,01**	**161.091,12**	**(162.174,05)**	**147.324,51**	**191.462,39**	**210.530,36**	**224.935,27**	**238.660,59**	**245.902,04**	**253.299,16**	**258.299,83**	**262.223,40**	**265.670,98**	**269.248,56**	**272.948,89**
Depreciation	86.300,00	130.700,00	164.300,00	173.400,00	177.300,00	154.400,00	174.195,07	207.149,98	229.372,60	250.077,96	270.780,64	279.214,96	287.738,80	294.884,44	301.410,63	307.663,09	313.990,30	320.388,11
Amortization	13.900,00	13.000,00	8.200,00	6.100,00	6.100,00	7.000,00	11.047,06	13.136,98	14.546,29	15.859,38	17.172,29	17.707,18	18.247,74	18.700,90	19.114,78	19.511,29	19.912,55	20.318,29
Gross Free Cash Flow	**346.983,30**	**419.651,85**	**229.670,65**	**321.146,01**	**344.491,12**	**(774,05)**	**332.566,63**	**411.749,35**	**454.449,24**	**490.872,61**	**526.613,52**	**542.824,19**	**559.285,71**	**571.885,17**	**582.748,81**	**592.845,36**	**603.151,41**	**613.655,29**
(-) Capital Expenditure		*(396.380,00)*	*(245.863,00)*	*(114.494,00)*	*(142.580,00)*	*(20.930,00)*	*(297.903,17)*	*(355.164,89)*	*(329.184,09)*	*(343.074,80)*	*(363.765,42)*	*(317.097,17)*	*(326.023,10)*	*(326.978,60)*	*(330.722,62)*	*(335.745,58)*	*(342.408,60)*	*(349.123,47)*
(-) Investment in Intangibile assets		(1.624,00)	9.115,00	(898,00)	(652,00)	16.050,00	(37.191,40)	(20.598,27)	(19.577,69)	(20.547,26)	(21.859,57)	(19.616,79)	(20.177,62)	(20.318,74)	(20.592,37)	(20.926,91)	(21.345,09)	(21.766,81)
(-) Change in NWC		(153.793,44)	(162.108,36)	(15.585,64)	177.919,06	182.132,30	(232.849,28)	(278.280,57)	(185.621,18)	(172.947,85)	(172.925,44)	(70.450,21)	(71.197,97)	(59.686,08)	(54.512,02)	(52.225,51)	(52.850,00)	(53.439,65)
(+) Change in other current liabilties		12.787,00	98.130,00	382.826,00	(52.178,00)	(3.154,00)	88.779,83	126.949,60	85.606,43	79.761,63	79.751,29	32.490,86	32.835,72	27.526,56	25.140,34	24.085,83	24.373,84	24.645,78
(-) Change in other non current assets		11.433,00	21.590,00	7.917,00	(582.751,00)	51.587,00	(63.582,07)	(167.459,62)	(89.053,40)	(98.265,82)	(101.336,62)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)
Operating Free Cash Flow		**(107.925,59)**	**(49.465,71)**	**580.911,37**	**(255.750,82)**	**224.911,25**	**(210.179,47)**	**(282.804,40)**	**(83.380,68)**	**(64.201,48)**	**(53.522,23)**	**134.372,00**	**140.943,87**	**158.649,43**	**168.283,26**	**174.254,31**	**177.142,68**	**180.192,26**
		(116.545,81)	**(50.977,89)**	**578.745,05**	**(256.490,29)**	**232.835,90**	**(610.856,97)**	**(194.934,27)**	**(56.927,48)**	**(9.452,79)**	**12.131,91**	**231.142,74**	**239.816,78**	**270.929,90**	**288.404,65**	**299.683,47**	**305.458,93**	**311.451,94**
Non-operating																		
Non-operating Result before Taxes	(7.234,00)	(2.755,00)	(127.663,00)	(192.351,00)	(5.688,00)	(433.446,00)	(111.625,37)	28.387,99	27.137,11	26.293,59	(10.278,16)	(10.598,30)	(10.921,84)	(11.193,08)	(11.440,79)	(11.678,12)	(11.918,29)	(12.161,13)
OCI	(30.205,00)	(7.130,00)	13.932,00	(776,00)	(11.778,00)	(8.420,00)	(9.745,12)	(11.588,74)	(12.831,96)	(13.990,29)	(15.148,48)	(15.620,32)	(16.097,18)	(16.496,93)	(16.862,03)	(17.211,82)	(17.565,79)	(17.923,70)
Income(loss) from equity method investment	-	-	-	934,00	(47.679,00)	(7.246,00)	1.390,56	1.653,63	1.831,03	1.996,31	2.161,58	2.228,91	2.296,95	2.353,99	2.406,09	2.456,00	2.506,51	2.557,58
Taxes	2.531,90	964,25	44.682,05	40.393,71	1.194,48	91.023,66	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41	2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
Non-operating result	**(39.970,90)**	**(8.920,75)**	**(69.048,95)**	**(151.799,29)**	**(63.950,52)**	**(358.088,34)**	**(96.538,60)**	**12.491,40**	**10.437,38**	**8.777,96**	**(21.106,64)**	**(21.764,08)**	**(22.428,49)**	**(22.985,47)**	**(23.494,17)**	**(23.981,53)**	**(24.474,72)**	**(24.973,41)**
(+) Change in liabilities		42.359,00	25.077,00	46.036,00	-110.227,00	276,00	59.185,72	29.810,61	20.102,31	18.729,82	18.727,39	7.629,58	7.710,56	6.463,85	5.903,52	5.655,89	5.723,52	5.787,38
(-) Change in assets		(69.100,00)	53.148,00	(54.731,00)	52.655,00	125.562,00	(145.431,95)	(36.753,52)	(24.784,15)	(23.092,00)	(23.089,01)	(9.406,51)	(9.506,36)	(7.969,29)	(7.278,45)	(6.973,15)	(7.056,53)	(7.135,26)
Non-operating FCF		**(35.661,75)**	**9.176,05**	**(160.494,29)**	**(121.522,52)**	**(232.250,34)**	**(182.784,83)**	**5.548,50**	**5.755,55**	**4.415,77**	**(25.468,26)**	**(23.541,01)**	**(24.224,28)**	**(24.490,90)**	**(24.869,10)**	**(25.298,79)**	**(25.807,73)**	**(26.321,30)**
Unlevered FCF		**(143.587,34)**	**(40.289,66)**	**420.417,08**	**(377.273,34)**	**(7.339,09)**	**(392.964,30)**	**(277.255,91)**	**(77.625,13)**	**(59.785,71)**	**(78.990,50)**	**110.830,99**	**116.719,59**	**134.158,53**	**143.414,16**	**148.955,52**	**151.334,95**	**153.870,96**
Tax Shield	5.119,80	9.251,90	12.088,30	7.049,28	4.460,40	9.924,39	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97	11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
Levered FCF		**(134.335,44)**	**(28.201,36)**	**427.466,36**	**(372.812,94)**	**2.585,30**	**(385.945,84)**	**(268.909,67)**	**(68.383,53)**	**(49.709,87)**	**(68.080,53)**	**122.080,78**	**128.312,81**	**146.039,66**	**155.558,24**	**161.351,51**	**163.985,87**	**166.779,65**
Financial																		
Financial Result before taxes	(14.628,00)	(26.434,00)	(34.538,00)	(33.568,00)	(21.240,00)	(47.259,00)	(33.421,23)	(39.743,99)	(44.007,64)	(47.980,19)	(51.952,23)	(53.570,44)	(55.205,84)	(56.576,80)	(57.828,92)	(59.028,53)	(60.242,47)	(61.469,96)
(-) Change in excess cash		(103.377,56)	(58.988,64)	(240.587,36)	(229.190,06)	(745.138,30)	380.591,79	(198.127,81)	(133.604,32)	(124.482,45)	(124.466,32)	(50.707,86)	(51.246,07)	(42.960,17)	(39.236,05)	(37.590,29)	(38.039,78)	(38.464,19)
(+) Change in Tot. Equity		112.829,00	22.070,00	34.901,00	52.855,00	83.503,00	293.263,68	88.069,71	2.366,52	(29.630,34)	(12.273,29)	(110.236,00)	(114.693,91)	(133.185,59)	(142.412,00)	(147.429,89)	(148.734,44)	(150.191,33)
(+) Change in financial liabilities		151.318,00	99.658,00	(188.212,00)	570.388,00	706.309,00	(254.488,40)	418.711,75	243.628,96	251.802,85	256.772,36	92.433,52	92.833,00	86.682,91	83.918,73	82.697,19	83.030,82	83.345,83
Financing Free Cash Flow		**143.587,34**	**40.289,66**	**(420.417,08)**	**377.273,34**	**7.339,09**	**392.964,30**	**277.255,91**	**77.625,13**	**59.785,71**	**78.990,50**	**(110.830,99)**	**(116.719,59)**	**(134.158,53)**	**(143.414,16)**	**(148.955,52)**	**(151.334,95)**	**(153.870,96)**

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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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MASTER IN FINANCE

UNDER ARMOUR INC.

COMPANY REPORT

SPORTS APPAREL

17 DECEMBER 2021

STUDENT: FABIO DI GIOVANNI

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"Triggered opportunities in the athleisure"

"Under Armour aiming for a relevant role"

- Our recommendation is to **BUY** Under Armour UA considering a **target price of $29,69** as of **31.12.2022** reflected in a **upside potential of 44,4%** to the current share price of $20,56. Any expectation of dividends would not lead to a change in recommendation, as invested in the business will brings higher returns than the market.

- **Digitalization**, **athleisure**, and **innovation** of product seeking for high quality combined with a CAGR of 7,4% in the global market are aligned with UA's business model to set a solid foundation for further sustainable growth.

- UA considering the past strategies and future goals will be able to **re-accelerate growth**. To accomplish it, the strategies adopted are **DTC growth**, **Customer-centric experience**, **International expansion** and efficient managing of **Supply Chain**.

- **High Liquidity and strong Free Cash Flows** will guarantee sufficient funding for innovation and internationalization.

- To evaluate the company, the **DCF model** was used, estimating revenues for each segment with a **WACC of 5,53%** and a **perpetuity growth rate of 1,37%.** The forecast period ends in 2032 when UA will be mature to stabilize revenues.

Company description

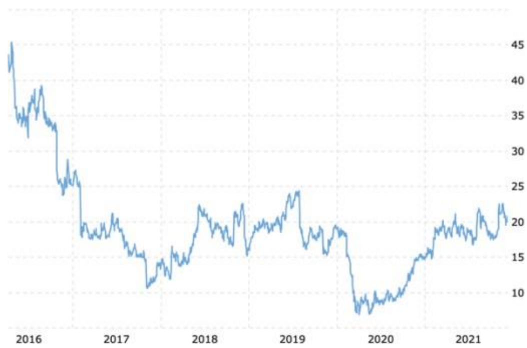
Under Armour Inc, is an American sports equipment company that manufactures footwear, sport and casual apparel. Formed on September 25,1996 and with corporate office in Baltimore, Maryland by its current Chairman and former CEO, Kevin A.Plank. The firm is based in North America, EMEA, Asia-Pacific and Latin America countries.

Recommendation:	**BUY**
Vs Previous Recommendation	*HOLD*
Price Target FY21:	**29.69 €**
Vs Previous Price Target	*0.00 €*
Price (as of 17-Dec-21)	**20.56 €**

Reuters: xxx, Bloomberg: xxx

52-week range (€)	14.52-23.00
Market Cap (€m)	10.281
Outstanding Shares (m)	188.650

Source: Bloomberg



Source: Bloomberg

(Values in € millions)	2019	2020E	2021F
Revenues	5,267	4,474	5,533
EBITDA	420	149	432
Net Profit	236	-11,8	247
Capex	142	20	297

Source: Annual Report 2020, Analysis Estimation

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1. COMPANY OVERVIEW

Under Armour Inc., with his subsidiaries, develops, markets, and distributes, principally in North America, Europe, the Middle East, Asia-Pacific, and Latin America, brand performance clothes, footwear and accessories for men, women, and young people. The company offers their clothing to be worn in hot and cold compression, fit and loose. Sales of its products via wholesale channels including domestic and regional chain of sporting products, independent and specialty dealerships, department store chains, mono-branded retailers of Under Armour, institutional sports services and leagues and teams, as well as independent distributors. Under Armour is registered under the ticker **NYSE:UA**. Their stock opened with **$13.00 IPO** in its **Nov 25, 2005**, helping the company rasing $157.6M at the beginning.

UA's IPO was in 2005 under the NYSE:UA ticker

1.1. Company description

Under Armour is an American sport equipment company that manufactures **footwear**, **sport, and casual equipment** with a global corporate office in Baltimore and several local offices around the world. The company was formed on September 25, 1996, by its Chairman and former Chief Executive Officer (CEO), Kevin A. Plank, and as September 2021 the company accounts 436 mono-brand stores located across North America, Asia-Pacific, EMEA and Latin America.

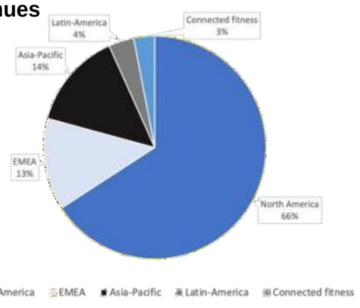
UA develops and distributes performance clothes, footwear and accessories in their Baltimore, U.S. headquarters

The primary reason for Under Armour's success is its innovative apparel line, which is segmented by fabric into **HeatGear**, **ColdGear**, and **AllSeasonGear**. These segments are made up of high fabrics such as **Threadborne**, **Athlete Recovery Sleepwear**, **Supervent**, **Sunblock**, and **Coolswitch**. These microfiber clothes aid the body in remaining warm, cool, stable, and dry. With this value proposition in mind, the company's target market is athletic individuals and players who place a higher premium on functionality and product quality than on price. As a result, Under Armour uses a **value-based pricing strategy** for its products, which allows the company to price them higher than the industry average. The company's primary objective for the future is to maintain and enhance this value proposition, while also fostering client loyalty and maintaining a high premium price.

The success of UA is largely attributable to the great quality of its products

High premium price and client loyalty as objective for the future

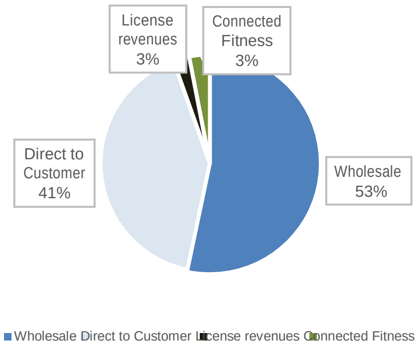
Exhibit 1: UA's 2020 geographic distribution of revenues



Source: 2020 Annual Report

The product's portfolios go from apparel to footwear and accessories which are sold globally, distinguishing the global market within in **EMEA**, **North America**, **Asia-Pacific** and **Latin America** (**Exhibit 1**). Their principal channels where they sell their products are **Wholesale**, **D2C** (Direct to

Exhibit 2: UA's 2020 channel distribution of revenues



Source: 2020 Annual Report

Customer), **License Revenue**, **Connected Fitness** (**Exhibit 2**). For Connected Fitness Under Armour means his digital business line, launched in 2013 when they firstly acquired MapMyFitness with the mission to create a community of people around his brand. However, the Company sold **MapMyFitness** in 2020, which significantly reduce its new revenue stream through Digital Services.

UA is embarking a growth plan that will likely be extended until 2025

During its growing phase, the corporation relied on expanding in the North American through direct sales to clients, opening a substantial number of brand stores and factory houses. While other significant markets, such as Asia-Pacific and EMEA, were previously deemed marginal in comparison to North America, the company sought to expand in those market through wholesaler sales. However, after reaching a stable stage in its business in 2017, and in order to compete with market giants such as Nike and Adidas, Under Amour's management decided to embark on a **growth plan in 2018** that was originally intended to last until 2023, but given the economic crisis caused by Covid-19, it is highly likely that it **will be extended until 2025** in order to recover from the pandemic's negative economic impact. The key point of this expansion plan is the expansion through the **DTC channels** in the international market, the **lowering of COGS**, the improving of both **Supply Chain** and the **Cash Conversion Cycle**. We firmly believe in the feasibility of this expansion plan, as showed by the important improvement recorded during the 2018 and 2019, and with the return to normality, partially in 2021, **in 2022 the company will restart to growth** and expand according to the plan.

Marketing and Advertising as a key lever to increase UA's brand awareness worldwide

Stephen Curry as global brand ambassador of Under Armour

Moreover, another crucial point for UA's growth in the future growth will be the **adverting and marketing**. Indeed, Under Armour invest TV advertisements, YouTube and online social media campaigns, magazine ads or sponsorships. Regarding the sponsorship, the company has made significant progress thanks to a **10-year agreement with Major League Baseball** to become their official on-field uniform provider **as of 2020**. In line with the marketing strategy, it is also important to mention the sponsorship with Stephen Curry in 2013, which allowed UA to increase its visibility in the **basketball world**. As a result of this sponsorship, UA launched Curry's Brand in 2020, as a stand-alone brand extension for a 7-year contract, aimed to increase indirectly Under Armour brand's recognition and embrace the next generations of customers worldwide.

1.2. Stock Classes and Structure

Under Armour is registered under the ticker **NYSE:UA**. Their stock opened with $13.00 in its **Nov 25, 2005**, IPO helping the company rasing $157.6M at the beginning. The sportswear company has **two classes of common stock: Class A, UAA, and Class C, UA,** both integrated in S&P 500. As of January 31,2021, there were 1,765 holders of Class A common Stock, 5 holders of Class B Convertible Common Stock and 1,170 holders of Class C Common Stock. It represents the **1672nd most valuable company** by market capitalization.

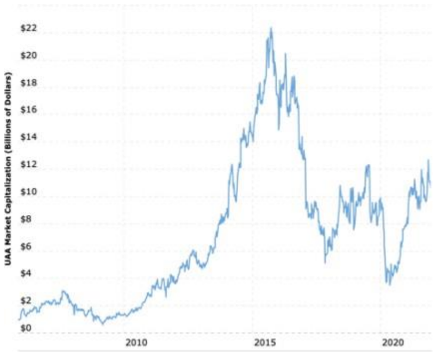
UA is the 1672nd company by mkt capitalization

Under Armour's current market capitalization equals to USD 10,281bn

Under Armour's **market capitalization** as of December 2021 amounts to **USD 10,281bn** compared to **USD 9,2bn** in December 2020 (**Exhibit 3)**.

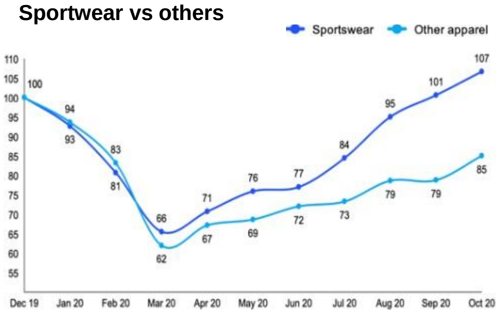
These data reflect the increase in the market confidence toward Under Armour, due to an optimistic outlook for the easing of COVID-19 restrictions and a near-normalcy return, which would enable the company to continue its 2018 growth path. Additionally, in support of Under Armour's market capitalization increase, it is essential to consider the sportswear sector's resilience to the pandemic in comparison to the rest of the apparel industry, as the pandemic has facilitated the **development of new trends** such as **digital fitness** and **e-commerce** sales, which have partially offset the negative effects of the restrictions. As a matter of fact, sportwear firm's market capitalization has increased in a greater way than the other apparel ones from March 2020 onward. **Sports companies have been more resilient to the pandemic** than the rest of the apparel industry **(Exhibit 4).**

Exhibit 3: UA's actual Market Capitalization



Source: MacroTrends

Exhibit 4: Market capitalization for Sportwear vs others



Source: McKinsey Global Fashion Index (MGFI)

Considering the uncertainty of the market in 2020, **no cash dividends were paid during fiscal year 2020 and 2019**. Those, have been retained to use them to maintain the business health and invest in the company's growth. Furthermore, **Under Armour does not intend to further pay other dividend** in the 2021 contrarily to its competitors. Nike pays quarterly dividends while Adidas does on annual basis. As a result of our valuation model, we firmly believe that the company will not pay dividend until 2023, in order to foster its global expansion. Moreover, considering our valuation model, the fact the company will have a **ROIC higher than WACC** strengths our reinforces our dividend retention forecast, showing how the company's expansion plan creates value.

UA will not pay dividends until 2023 to foster global expansion

However, comparing Under Armour's stocks performance to SP&500 over the last 5 year, it is clear how SP&500 Index overperformed UA's stocks especially during the rise of pandemic.

The Under Armour shares are organized in the following way (Bloomberg Source): **Blackrock Inc.** (6,03%), **State Street Corp** (4,15%), **the Vanguard Group** (11%), **Kevin Plank** (15%), **Arrowstreet Capital LP** (3,23%) are the main holders of the company.

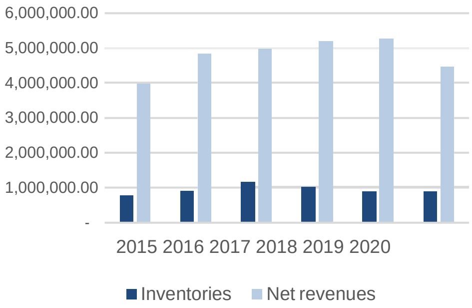
1.3. VALUE CHAIN

UA's manufacturing processes are mainly managed into developing countries

As most players in the sports apparel & footwear industry, Under Armour's outsources a significant portion of its value chain operations to third parties in developing countries saving operating costs. However, until 2017, the company had not been managing its Supply Chain and the partnership with its suppliers efficiently.

1st: High numbers of SKU's as a reductive efficiency of Supply Chain

Exhibit 5: Revenues/SKUs relationship



Source: UA's analysis

Until the 2017, the company had two important problems that negatively affected the marginality. The first problem was related to the **high number of inventories** keeping units (**SKU's**), which amounted to **690,00 SKU's (Exhibit 5)**. The high SKUs harmed the marginality since the inventory level was growing, as shown by our analysis, reaching an **average holding period of 139, 130 and 155 days in 2015, 2016, 2017**. This inefficient inventory management forced the company to sell off their inventories to wholesaler, **harming the marginality**, which in triennium **2015-2017** reached a value **of 46,5%,** a way lower than most main competitors such as Lululemon and Adidas, who respectively recorded a marginality of 50% and 52% in the biennium 2016-2017.

2nd: Lack of strategic suppliers lowering margins and delaying deliveries.

The second problem that harmed significantly the marginality was the **lack of strategic suppliers** who did not offer a low price per unit, and constantly **delayed in the delivery** of items. Those factors forced Under Armour to have a high average holding period, and constantly recur to airfreight to off-set the delay, soaring the cost of shipping.

2018 as a turning point to more strategic suppliers and stores.

The 2018 marks a turning point in the company's history, as it began to streamline the supply chain process by reducing the number of SKUs and the average holding period, shifting to **specialized strategic suppliers**, and **expanding** the number of **brand stores and factories**. The company's long-term future goals are steadily increasing marginality, improved inventory management, and increased net working capital through this plan.

Low prices, faster delivery, and high level of quality from new suppliers.

When it comes to suppliers, Under Armour has shifted its focus to strategic partners in **Thailand, China, Jordan**, and **Taiwan** that can provide supply at

Exhibit 6: UA's Suppliers worldwide

Taiwan	
Eclat Textile Co Ltd	6.07B
Makalot Industrial Co Ltd	2.16B
De Licacy Industrial Co.	212.29M
Everest Textile Co Ltd	237.07M
Fulgent Sun international	642,14M
Hong YI Fiber Industry	112.57M
Thailand	
Indorama Ventures PCL	7.18B
China	
Shanghai Anoky Group	741.02M
Shanghying Global Co Ltd	228.14M
Zhejiang Jasan Holding Group Co	693.87M

Source: Bloomberg

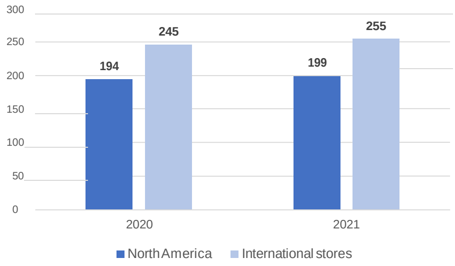
lower prices and **faster delivery** times while maintaining a **high level of quality (Exhibit 6)**. Indeed, the company recorded a shorter average holding period and a higher marginality in 2018 and 2019, which are partially attributable to these supplier changes. However, production was delayed in 2020 due to the restrictions, but with the end of the pandemic, we foresee further reductions in the average holding period in the coming years, as demonstrated by the first three quarters of 2021, when the **average holding period** was **113 days**. We believe it is excessively optimistic for the company to maintain this value as it expands globally, and thus believe the company will continue to maintain an average holding period of 119 days in future years, consistent with the data for 2018, 2019, and the first three quarters of 2021. This will improve the cash conversion cycle and enable for a better generation of free cash flow in the future. Additionally, because of lower shipping costs, this supply chain change resulted in a partial improvement in the company's margins. This is demonstrated by data from 2018 and 2019 and the first three quarters of 2021, which show that the **average cost of COGS** as a percentage of revenue **decreased to 53.3** percent over the three-year period **2018-2020 and to 49.8 percent in** the first three quarters of **2021**. We are confident that the company will continue to operate at a lower cost of goods sold to revenue ratio than 2018-2020 period in the future, due mainly to a variety of factors, including changes in the supply chain.

Another critical factor in optimizing the supply chain of a business on the customer side is the **growth of sales through brand stores and factory houses**. Indeed, as previously stated, the company reached a stable phase of its business in 2017, with a considerable proportion of sales in the North American market coming from the direct-to-consumer channel. However, when considering the international market, the company generated a significant portion of revenue from wholesaler sales but a marginal portion from direct-to-consumer sales. As a result, the company has been on a global expansion path since 2018 with **the goal of opening brand stores and factory houses outside of North America** to maintain its p**remium value proposition**, improve **inventory management**, and **increase margins**. As evidence of this expansion strategy, it's worth noting that, for the first time in the company's history, the number of international brand stores and factory houses exceeded the number in the North American market in 2019 (**Exhibit 7)**. Despite the 2020 restrictions, the growth rate of brand stores and factory houses continues to be high, especially given that the majority of new openings are planned well in advance and that, despite the COVID, planned openings could not be halted. However, the company reported a **decrease in the opening of new brand stores and factory houses in** the first three

Exhibit 7: Number of stores in 2019

Source: 2019 UA's Annual Report

Exhibit 8: North America vs International stores in 2020 and 2021



Source: 2020 UA's Annual Report and 2021's Quarterly Report

quarters of **2021**, confirming the negative effects of COVID-19 (**Exhibit 8**). We believe that a decline in direct store growth in 2021 was inevitable, given the company's reluctance to open new locations due to current, yet somewhat minor, restrictions on the sales volume of stores in pandemic-affected areas. From 2022, we are confident that the company will continue the process of global store expansion in accordance with the strategy announced in 2018. Indeed, the growing presence of direct stores will enable the company to manage inventory more effectively, avoiding sales below cost and preserving the premium brand proposition even on non-year collections. Additionally, the brand stores and factory houses enable and will enable the company to maintain high margins, as the products will not be subject to aggressive discounting and will enable the brand to achieve greater global visibility. Remaining on the topic of COVID-19, it can be said that **the company benefited partially from the various closures**, as sales via **e-commerce increased by 31.9 percent in 2020** compared to 2019 and by 1.29 percent in the first three quarters of 2021, accelerating the future process of transition to e-commerce. This continues to be a positive factor because it enables the company to maintain a high margin due to the absence of intermediaries in the sales process.

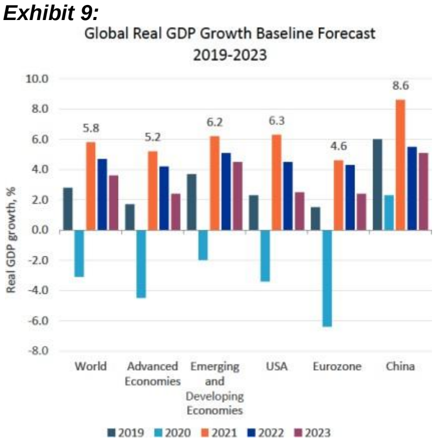
2. INDUSTRY OVERVIEW

2.1. Macroeconomic Analysis

Recovery likely to have peaked

In 2020 the COVID-19 pandemic broke out and the number of reported cases grew significantly. Despite the alternation of periods of closures and reopening, the global economy has experienced a strong downturn bringing the **GDP growth rate to -3,25**%. However, in **2021**, there is an **optimistic outlook** on economic growth especially in developed countries. (**Exhibit 9**)

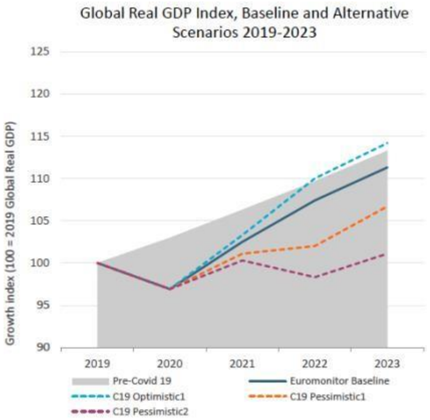
Exhibit 9:



Source: PassPort Euromonitor

In fact, in these countries, **vaccination rate is expected to reach 70% by Q4 2021**. In addition to vaccination, fiscal support in these countries for 2021-2022 is expected to remain in line with that of 2020, **supporting rapid economic recovery**. However, economic recovery may be slowed by developing countries. Indeed, in developing economies, slow vaccination rates are occurring, not in line with advanced economies, which could give rise to new vaccination-resistant variants, and cuts in fiscal support spending. Those dynamics, whose probability is 64-74%, will lead to a **GDP growth rate of 5,8%** and a **real GDP growth of 4,7%** in 2022. This strong recovery

Exhibit 10: The recovery may differ in 3 different scenarios



Source: PassPort Euromonitor

will not off-set downturn and decrease in GDP in 2020, leading to a global real GDP in 2022 which is still below 2% of the real GDP pre-pandemic forecast in 2022.

Therefore, in the global economic recovery as shown by Euromonitor **three other possible scenarios may occur** (**Exhibit 10)**, the evolution of which depends primarily on the emergence of new variants. Famous is the case of the delta variant, which has increased the degree of immunization required from 70% to 85%, slowing down the global recovery due to a slight tightening of rules on security measures. However, the effects of the delta variant are moderate in advanced economies, while slowing recovery more significantly in developing economies.

1st scenario: High vaccination rate of 70% in Q3-Q4 linked with strong fiscal initiative

In the **optimistic scenario**, we assume a vaccination rate in advanced economies of **70% in Q3-Q4**, in addition to strong fiscal incentives and a freeze on most social distancing measures. While, for developing economies, we assume a high vaccination rate reaching roughly 50% by 2022, in addition to an increase in exports driven by the recovery in advanced economies. All this would imply a **GDP of 6.2%-6.8%** in **2021**, and **6%-7% in 2022**, leading to a return of the economy to pre-pandemic levels in 2022. However, this scenario has a probability of 2-6%.

2nd scenario: High vaccination rate of 70% in 2022 linked with limitated fiscal support

In the **pessimistic scenario** which has a probability of 18%-22%, of the **advanced economies** tracks a **vaccination rate of 70%** in 2022, as well as a limited fiscal support and a reintroduction of social distancing restrictions until 2022. On the other hand, **developing economics** have a **vaccination rate low** until 2023-2024, with a low level of exportation due to a low demand from advanced economies. The scenario would imply a GDP growth rate of **3,5%-5% in 2021**, and **0-2% in 2022**, with economic recovery postponed into 2023.

3rd scenario: High vaccination rate of 70% in 2023 linked with limitated fiscal support

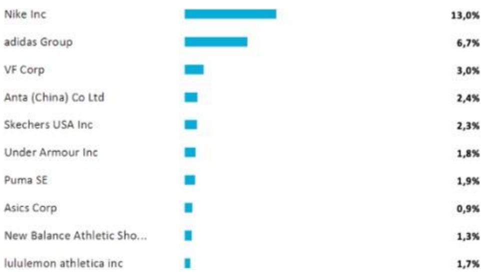
In the **worst scenario,** whose probability is 2-6%, **new variants resistant to vaccine comes out**, the **70% of vaccination rate in advance economies** is achieved in 2023, as well as longer delays in vaccination in developing countries. Moreover, the new variants trigger tight social restriction in both advanced and developing economies until 2023 making unrealizable fiscal relief until the 2023. This scenario significantly drops employment, consumption, and wages, leading to a **GDP growth of 3-4%** in **2021**, and **contraction of 1.3-2,7%** in **2022**.

	COVID-19 Baseline/Most Likely	COVID-19 Pessimistic1	COVID-19 Pessimistic2	COVID-19 Optimistic1
2021 Global real GDP growth	[5%, 6.3%]	[3.5%, 5.0%]	[3.0%, 4.0%]	[6.2%, 6.8%]
2022 Global real GDP growth	[4%, 5.3%]	[0%, 2%]	[-2.7%, -1.3%]	[6.0%, 7.0%]
Probability	64-74%	18-28%	2-6%	2-6%

Considering the industry in which Under Armour operates, a rapid economic recovery will lower the level of unemployment, allowing the company to continue its process of growth although the setback.

2.2. Industry Analysis

Exhibit 11: Global quotes of Market share in 2021



Source: Industrial Overview Analysis

Drivers of success are mostly the quality, design, and value of a product both associate with an efficient distribution network and marketing strategies

Under Armour operates in the sportswear industry which encompasses the manufacturing and retailing of athletic apparel, footwear, accessories, and equipment. The industry is **fragmented and intensely competitive** with multiple regional and multi-national players. It is dominated by players, like Nike Inc, Adidas AG, Puma SE, Lulemon, to name a few. **Nike** and **Adidas** compete for the highest market share and have been in fierce competition over the past decades to reach the highest market share, and currently they **hold respectively 13% and 6,7% of global sportwear's revenues (Exhibit 11).**

The quality, design and value of a product, efficiency of distribution networks along with the marketing expenses are driving competitiveness in the industry. With the effects of the pandemic and the changes made, we can say the **macro trends** that will redefine the future of global sportswear are **athleisure**, **sustainability**, **technology**, **digitalization**, **healthy lifestyles**, **e-commerce,** and **channel mix.**

The increased time spent at home during COVID-19 has triggered **opportunities** in the **athleisure market.** This trend has led to the entry of premium fashion brands into the market that enjoy shorter collection and product development cycles while staying in line with consumer trends. On the other hand, sportswear manufacturers have the advantage of being well positioned to develop innovative materials and designs to strike the right balance between usability and comfort.

People are becoming more aware of the importance of **physical activity** for health. Even though the closure of sports centers the pandemic has increased this awarness, moving people to use fitness apps, individual and outdoor sports.

Analyzing the trend of **e-commerce,** store closures due to COVID-19 restrictions have spurred **exponential growth in direct-to-customer sales**, which is driven in turn by exponential growth in ecommerce. For the future, manufacturing companies are anticipating the need for a change in their business model toward e-commerce. Broadly speaking, the ecommerce

Ecommerce sales grew at a 16% level during pandemic

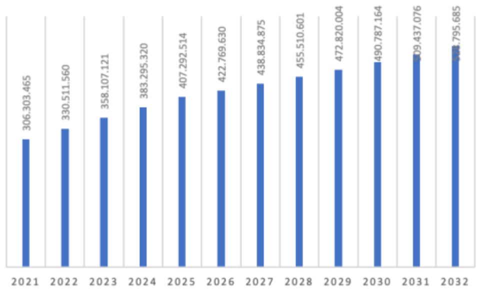
trend was a steadily growing trend even before the pandemic, with average annual growth of 2%, but the pandemic resulted in a 16% growth, leading online penetration to stabilize at 25% of total sales in 2021, up from 12.5% in 2019. E-commerce combined with the looming younger generation will lead to a migration from shopping in physical channels of 10-15% in the coming years. This trend is moving companies to adopt a new DTC model that combines digital and physical channels while still making investments in physical stores profitable and moving away from the past focus on wholesalers as the main sales channel.

Exhibit 12: Stores can improve the customer experience and work better

Source: McKinsey Sportwear Report

The final trend analyzed is the **channel mix** whose combination from the **digital and physical worlds** will be crucial. To tackle the decline in sales through physical channels, sportswear companies need to reinvent the physical store giving a new role to the store that is far from the concept of a store aimed only at selling products. The new concept store should offer a new experience in the customer journey (**Exhibit 12)**. Therefore, companies in the industry aim to give the physical store new purposes, such as the possibility to **customize products**, **test and simulate** the performance of products in sporting activities by equipping stores with courts and try-out areas.

Exhibit 13: Sales Forecast of sportwear in the world from 2021 to 2032



Source: Passport Euromonitor's Data

Following Passport analysis, the **worldwide sportwear market is expected to grow at a 7,4% yearly level from 2021 to 2025** as the increase in demand for smart sportwear even for the workday routine (**Exhibit 13)**. Given the company's focus on the product, Under Armour's business model is highly aligned with growing market demand. In addition, the brand is focusing on expanding and competing big players in the industry with its strategy to produce advanced performant sport's products and enter new markets to reach more customers enhancing their brand awareness. For this reason, **UA, currently holding 1,8% of global market share**, is expected to grow at a higher level than the market from 2021 to 2025 reaching total **2,1% of market share by the end of 2025.** Additionally, this growth will be highly dependent on Under Armour's ability to perform in the DTC channel, where it expects the majority of the company's growth to be concentrated. Following that, also focusing on the right markets can lead to profitable growth opportunities for sportwear's brands.

North America and Europe are by far the largest market. Furthermore, the **Chinese** and **Indian market** are profoundly growing respectively at a **11,3%** and **13,5%** yearly rate and show great opportunities for sport producers to exploit on. From a **global perspective** the sportswear industry **contracted**

by 18,4% in 2020 to around $266 billion compared with $315 billion in 2019. The shrinking has been equal across the continents, except for China, which recovered faster than other countries from the effects of the pandemic.

Exhibit 14: Sportwear sales in America from 2021 to 2025

Source: Passport Euromonitor's Data

Looking at the **American market** retail sales of athletic apparel declined 22% in 2020 to $116.5 billion and are expected to experience a **CAGR of 6,53%** over the forecast period, approaching $173.2 billion in 2025 (**Exhibit 14).** The value of sportswear sales is estimated to return to pre-COVID-19 levels by early 2023. Sportswear is expected to recover faster than other categories, as demand will be primarily driven by the athleisure and casual wear trend, as well as the growing interest in health and wellness among consumers. One of the reasons that makes United States and so the American market so huge in terms of revenues is the **large number of school students involved in sports** that will led to fostering the demand for high performance products.

Exhibit 15: European market will move from $66,9 billions to $109 billions from 2021 to 2032

Source: Passport Euromonitor's Data

European market is predicted to rise significantly as a result of increasing spending to combat inactivity among the aged, which has resulted in an **increase in participation in physical activities among the elderly**. Furthermore, the growing availability of sports instruction and training in academies has considerably improved public awareness of sport and fitness. **Improvements in lifestyle**, an **increase in the youth population,** and an **increase in per-capital income** in European countries are expected to give profitable chances for the expansion of the Europe sports equipment and clothing industry. For all of these reason European market is expected to reach a **CAGR of 6,6% until 2025** reaching $84 billions **(Exhibit 15**).

Exhibit 16: Asia Pacific as a crucial. Market for future growth.

Source: Passport Euromonitor's Data

On the other hand, **Asia Pacific** and so on the **Chinese market retail** is anticipated to witness a crucial sportwear market share. After a retail sportswear's sales declined in the market by 2% in 2020 which reached $42 billion, the Asia Pacific area is expected to register a **CAGR of 9,81%** over the next five years, touching $138 billion in 2025 **(Exhibit 16)**. Various initiatives, various government initiatives including **Health China 2030**, are encoring the population to do more sports and physical activity, which has proven to be beneficial for sportswear.

Those initiatives have proved to be beneficial for the sportwear market also in **India** where the government in 2020 has allotted $401,6 million in its sport budget. As a matter of fact, the Indian market, according to growth data, is expected to be one of the fastest growing in terms of CAGR within the Asian market. After a huge sales decline of 31,7% in 2020, India will witness of a **CAGR of 13,5% from 2020 to 2025**.

2.3. Competitive Landscape

Nike and Adidas hold respectively 13% and 6,7% of market share

Sportswear is a **highly fragmented market**, where different brands compete to strengthen their market shares. On the other hand, however, among these, the presence of established brands such as Nike and Adidas stand out and they prove to be market leaders.

Applying Porter's Five Force Framework to the sector, we saw that, first of all, the sportswear industry has **high barriers to entry** due to large scale production, high cost on research and development and extremely large capital investment on innovation. Moving to **bargaining power of customers** the persistent growth of e-commerce is lowering the power of wholesalers, giving the opportunity to the manufacturing company to sell their items directly to customers.

The **bargaining power of suppliers** is **moderately low** as there is an abundant number of suppliers in the industry that along with the high availability of raw materials allow big manufactures to exploit their bargaining power. However, with the higher requirements of customers, manufacturers are developing strategic partnership with suppliers to improve their value proposition. Regarding the **threats of substitutes,** until the past few years there were little alternatives to switch between the sportwear and casual wear. However, with the trend of athleisure, there are more alternatives as fashion brands include in their offer sportswear items.

Finally, the **competitive rivalry** within the industry is **relatively high** considering the trend of athleisure that has driven premium brand to enter in the market and players as Nike, Adidas and Lululemon.

REVENUES: $35.5 bln (2020)
EBITDA: 8.37B
PROFIT MARGIN: 13.17%
MARKET CAP: 232.811 bln
STOCK PRICE: 147.06
EMPLOYEES: 73300

Source: Yahoo finance

Nike is the **world's largest seller** of sports and sports footwear. Its company business activities consist mainly of high-quality soccer, clothing, equipment and accessory products, design, development and international marketing. In 2020 it reached $35.5 billions of sales making it the **most valuable brand in sport**. Nike markets its products under its own brand and directly buys with other labels (AirJordan, Nike CR7, Converse). With the famous trade names of "Just do It" and the Swoosh emblem, Nike supports numerous well-known athletes and sports teams worldwide. One of the main strength of Nike is the **low cost of manufacturing** thank also to their bargain power they have toward their suppliers. Furthermore, manufacture their products in countries like Vietnam, China and Indonesia help them to boost their margin. Nike puts **strong effort on the research and development** defined as one of their key factors for their success. The company is also investing in digital market to improve its customers experience focusing on its website and Nike+ Apps, as well as in the Chinese market.

REVENUES: $19,844 bln (2020)
EBITDA: 2.75B
PROFIT MARGIN: 7,35%
MARKET CAP: 61.879 bln
STOCK PRICE: 158.61
EMPLOYEES: 39.596

Source: Yahoo finance

Adidas was established in Germany in the early 1920s. The **second-largest manufacturer** of footwear, clothing, gear, and sales equipment is Adidas. Adidas's performance was too weighted by the Corona virus making its income 14% lower on in 2020, with $19.84 billions of sales. Their **strong brand recognition** as well with their large marketing budget have allowed the firm to have sponsorship deals with sports teams and athletes. In fact, the logo is strongly linked with entity like UEFA and FIFA for the football and apparel used in the tournaments. Adidas has also sponsored athletes and teams from football (Germany national team, Messi, Real Madrid), boxing, basketball (James Harden, Donovan Mithcell), rugby and many Olympic teams. This compared with the sponsorship strategy used by Under Armour can be seen as a point of difference. In fact, Under Armour main sponsorship are focused into the basketball sport industry. The company **intends to bet on the digital trend**, having inclusively reduced the number of physical stores in the last years, and it also intends to expand its international business in North America.

Instead, taking Under Armour and Lululemon as examples in the analysis, we can see that the two companies, although growing, are still far from competing with the two powerhouses.

REVENUES: $3,979 bln (2020)
EBITDA: 1,35B
PROFIT MARGIN: 14,97%
MARKET CAP: 54.19 bln
STOCK PRICE: 401.37
EMPLOYEES: 25.000

Source: Yahoo finance

Lululemon Athletica is an international retailer of sports clothing based in Delaware with headquarters in Vancouver. It was formed in 1998 as a yoga wear business and expanded to include the sales of athletic wear, clothing, and accessories. It has 491 shops and sells online worldwide. Even with the growth of the Covid 19 epidemic, their income reached $4,4 billions in 2020. They are well known for their product's quality which made them ideal for yoga and other athletic activity in terms of texture. The brand is enhancing its presence in the sportwear market thanks to the increasing of importance the yoga is having. Lululemon Athletica features several items that address the special demands of yoga practitioners such as yoga mat, comfy and loose leggings and shirts and tops that are free to move around. The brand **differentiate itself** from firms like Adidas and Nike also in the **promotion**. Lululemon Athletica choose to target fitness trainers or yoga gurus to influence their target segment. Furthermore, their **great attention to the customer engagement** makes them one of the most customer centric sportwear apparel firms.

Nike and Adidas are reducing the number of stores focusing on digitalization, while UA and Lululemon stores are growing

At the end of Forecast Period 1, UA will have reached 2,1% of total market share

In a market where the main trend is digitalization, and focusing on growth through e-commerce presence, Nike and Adidas are a step ahead of Under Armour and Lululemon. In fact, from the breakdown of company sales, although in all the companies analyzed the incidence of Direct to Customers sales on total sales has increased, **Nike and Adidas are decreasing the number of owned stores** over the years. This is reflected in an increase in revenues in the channel due to the massive increase in online sales through e-commerce. This is **due to the strong brand recognition** that Nike and Adidas possess. On the other hand, the strategy used by Under Armour and Lululemon is to **increase the number of owned stores** over time (as can be seen in the analysis) to increase their brand recognition and **to then push incrementally on e-commerce**. Despite the two different strategies, through market forecasts, we can state that Under Armour and Lululemon, **at the end of 2025**, will be able to increase their market shares reaching respectively **2.1%** and **2.3%** of quotes at the expense of Nike and Adidas, which however will continue to be market leaders with respectively **12.6%** and **5.7%** market share.

2.4. Key Risk

The biggest risk factors for UA are arising by Covid-19

Distributors and Logistic have been highly affected financially

The Covid-19 epidemic and the huge uncertainty that comes with it are currently the main risk risks for Under Armour. As the future spread of the virus, as well as government limits and stimulation, will have a significant impact on global economic development in the coming years. Furthermore, Under Armour's presence in multiple nations may be a high-risk element, as different pandemic situations may exist in the various regions covered. In the sport apparel sector, the Covid-19 epidemic will cause huge disruptions and have a considerable influence on operations, financial problems, and results. The pandemic has resulted in the temporary closure of UA's retail stores and stores where their products were sold resulting in a reduction of consumer traffic and consumer expenditure. The related industries, such as distributors and logistics, manufacture, and textile providers, have been and may continue to be adversely affected. Furthermore, one of the key factors for success of Under Armour were sport's event which allow them to promote the brand through partnership. With the pandemic, League, **events**, and **professional activities**, college and amateur **have been postponed or cancellated**. **(Exhibit 17).** Sports events around the world have been delayed or cancelled, and marketing initiatives have failed to get out of the box.

Exhibit 17: Events status due to Covid-19

Bankruptcy, insolvency for most of the suppliers, this may affect the capacity of UA to receive receivables

In addition, while the Fiscal year 2020 measures have been taken to maintain and preserve and enhance the company availability of liquidity, the impacts of UA's cash generated by transaction and future cash flows will be affected as the pandemic develops. In 2020 sales through the wholesale channel represent 53% of UA's net sales. In doing this, when dealing with financially distressed consumers or customers with uncertainties, Under Armour faced a **higher risk of order reduction**, **cancelation**, **extended payment terms and shipping delays**. Customers may be more careful about orders or slow investment during poor business conditions.

Considering the events of **financial difficulties**, **bankruptcy**, **insolvency** for most **of suppliers**, this may affect the capacity of UA to receive receivables. If done in a continuative way this can also negatively affect business's plans. To reach an effective strategic growth plan, like in the international sales, fundamental is how the company continue to successfully extend their e-commerce, mobile applications and digital expertise worldwide following the trends. However, if they continue to experience significant market disruption because of Covid-19, it will become difficult to enhance the ability to invest in such growth initiative (especially if the North America market which account for 66% of revenues in 2020 is not growing).

3. VALUE DRIVERS AND FORECAST

We developed our valuation model by first identifying the primary pillars upon which the company's growth will be built. We have extracted the drivers of our analysis from the following Under Armour's revenue streams: **Direct to Customer Brick and Mortar**, **Direct to Customer Digital**, **Wholesale**, **Licensing**.

DTC Channel has been split into Digital and Brick and Mortar sales

Data pertaining to the **DTC distribution channel has been split**. In fact, we identified the percentage of revenue attributable to e-commerce sites directly connected to Under Armour within Direct to Customer sales revenue. Next, we calculated the portion of revenue attributable to **Direct to Customer Brick and Mortar** sales subtracting Digital revenues from the DTC Channel. Then, into DTC Brick and Mortar revenues we identified the **number of stores** and **average revenue per stores**. After obtaining this information, we used a bottom-up approach to forecast years, calculating revenue as the product of average revenue per store and the number of stores. Regarding the company's other primary source of revenue, namely sales to wholesalers, we took a similar method, identifying the **number of wholesalers** and their **average revenue** using historical data and then using a bottom-up method for forecasted years, calculating revenue as the product of the number of wholesalers and their average revenue.

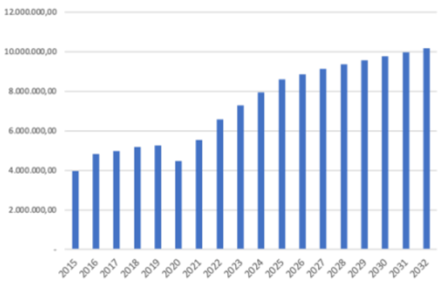
For Brick-and-Mortar sales, number of stores and average revenues per store has been used as main driver

Wholesale's revenues resulted from the product of number of wholesalers and their average revenues

Under Armour came up in 2018 with a new strategy, named "**ID 18 Protect Perfom**". The aim of this plan is to improve the corporate performances by focusing on optimization of both **COGS** and **Supply chain**, revenues growth through an **internationalization** of the brand, enhancement of **online sales penetration,** launch of more innovative items in a shorter timeframe, better **customer centric experience** through its brand stores and factory houses integrated with digital channels. However, the plan experienced a setback due to the pandemic, which brought a contraction of brick-and-mortar sales partially off-set by the acceleration of digitalization and e-commerce. According to the UA 18-23 plan, the company expects to increase sales over the projected five years through wholesalers, DTC digital, and brick and mortars at CAGRs of 5-7%, 12-14%, and 6-8%, respectively. However, we believe the company has a greater opportunity for **growth from 2021 to 2025** and will need to grow at a higher pace to achieve a **2.1% market share in 2025** versus **1.7 % in 2020**, reaching **$8,601 million** in sales by the end of 2025 (**Exhibit 18**). Furthermore, we believe that the setback in the company's growth caused by COVID-19 will force the company to continue its expansion process until 2025. Increased penetration in key markets such as **Asia-Pacific and EMEA**, as well as moderate growth in the domestic market,

The effect of this strategic growth plan will be postponed due the slowdown caused by pandemic

Exhibit 18: Total net Revenues from 2015 to 2032



Source: Company data and Analysis estimate

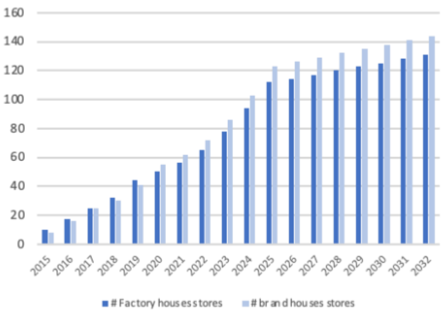
namely the United States, will be vital factors of the company's expansion, which will be accomplished through the opening of new brand stores and factory houses. Another important factor will be the expansion of **e-commerce sales** at higher pace than expected, which will allow the company to maintain the premium brand value proposition while ensuring high margins. Regarding **license revenues**, the company's goal is to keep this source of revenue at a percentage of total revenues equal to 2%. However, we have projected that this revenue source will account for 1.8 % of total revenues over the entire forecast period.

3.1. Revenues

- **DTC: Brand Stores and Factory Houses**

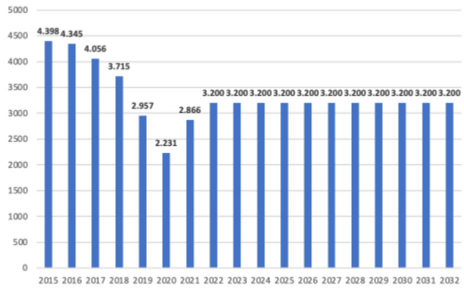
Under Armour plans to **expand the presence of brand stores and factory houses** in markets with high and growing GDP/capita. This expansion will be crucial for the company's margins, as direct stores allow for higher average revenues than wholesalers, equal to **$140,000** for the latter. While for direct stores predict that average revenue per store will settle at **$3,200 millions**, with a return to normal and no restrictions, in line with the 2018-2019 biennium.

Exhibit 19: Factory and Brand houses in EMEA from 2015 to 2032



Source: Company data and Analysis estimate

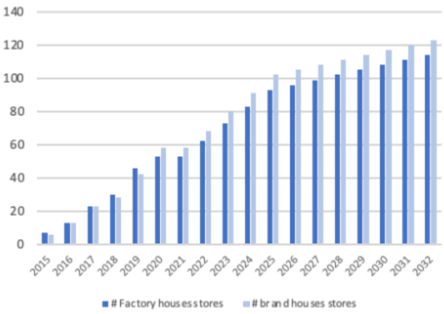
Exhibit 20: Sales per Average number of stores from 2019 to 2025



Source: Company data and Analysis estimate

According to the "Industry Overview," EMEA is one of the key markets where the company must pursue its premium brand value proposition. According to the "UA 18-23" business plan, the company intends to open new brand stores and factory houses at a **CAGR of 22%.** Looking at new store openings between 2018 and 2020, however, there was a 29 % year-over-year increase from 62 to 105 stores. This demonstrates the company's commitment to carrying out the development plan. Despite COVID, there was a **23% in store growth between 2019 and 2020**, which was completely in line with the stated goal (**Exhibit 19**). However, the effects of COVID can be traced to the **average revenue per direct stores of $2.231m**, which is far from **2019** and **2021**, when historical and estimated revenues are **$2.957m and $2.866m**, respectively (**Exhibit 20**). We believe it is critical for the company to maintain a **CAGR of 17%** in new openings **between 2021 and 2025**. This will allow the company to increase its market share in EMEA and bounce back from the negative effects of COVID-19 on DTC expansion. Given that EMEA experienced 5 store closures in Q1, we estimate that the number of stores at the **end of 2021 will be 118**, representing a 12 basis points increase over the previous year. **We expect EMEA to have 233 stores at the end of Forecast Period 1** compared to 105 in early 2020, representing a 19% CAGR over the period. After 2025, we believe the company will have met its medium to long-term growth objectives, and we anticipate new store openings at a CAGR of 2,8%, bringing the total **number of stores to 282 by 2032**.

Exhibit 21: Factory and Brand houses in Asia-Pacific from 2015 to 2032



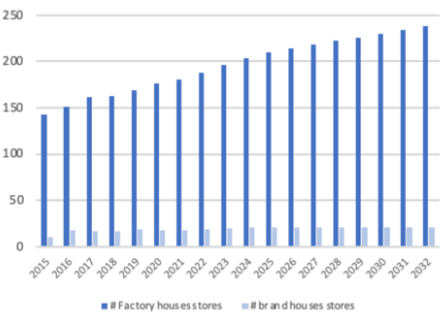
Source: Company data and Analysis estimate

In 2025 UA is expected to reach 194 stores in Asia-Pacific

At the end of 2032 UA will be present in Asia-Pacific with 257 stores.

Due to the high percentage of revenues generated in North America, UA do not intend to further expansion

Exhibit 22: Factory and Brand houses in North America from 2015 to 2032



Source: Company data and Analysis estimate

Asia-Pacific represents the other market where it is critical for Under Armour to penetrate through brand stores and factory houses to best express its premium offerings. Until 2025, thanks to a projected sportswear market growth of 9.81% per year, the Asian context may represent a potential market where UA could sell its full-price and premium products through brand stores and factory houses, achieving controlled growth and protecting its premium position. According to **UA's 2018-2023 plan**, the company has planned to expand the number of brand stores and factory houses at a **CAGR of 22-24%.** However, based on the number of new store openings present in Asia, we can conclude that the company far exceeded expectations in the three-year period **2018-2020** with an average growth rate of **34.85%** (**Exhibit 21**). Despite the Covid restrictions, the company opened **111 stores in 2020**, a 26.40 percent increase from 88 in 2019. On the other hand, we conservatively estimated no openings in 2021, with a recovery in 2022, resulting in 19 new openings in 2022 and another 22 in 2023, as a result of this opening boom in the first three years combined with the effects of Covid-19. Our projection of UA's long-term plan in this area predicts a **total of 194 stores by the end of 2025**, with a **CAGR of 12% from 2021 to 2025**. In the Forecast period 2, we believe that **from 2026 to 2032**, openings will stabilize at a higher growth rate than other markets, namely around **4,1%**. This will be due to the continued economic potential of Asia-Pacific. The Asia-Pacific market will be served by 257 Under Armour stores by the end of Forecast period 2.

With a 65.8 percent market share, **North America** is the driving market for Under Armour's current revenue. However, according to UA's 18-23 business plan, the company **does not intend to increase market revenue** through an exponential expansion of branded stores and factory houses. In fact, the company believes that it has gained a sufficient market share, which cannot be easily increased due to strong competition from Nike and Adidas, and thus plans to open new stores at a rate of 3-5 percent per year. We believe the company has achieved a stable position in this market, allowing it to focus on exponential growth in other geographic areas. However, we believe that a moderate domestic growth is critical in order to preserve the market share gained until 2020. Looking at the three-year period **2018-2020**, we see an **average rate of new store openings of 4%, with 179 and 194 stores** opening in 2018 and 2020, respectively (**Exhibit 22)**. With the various COVID 19 restrictions still in place in 2021, we have conservatively assumed a **2.6%** increase in new store openings, **moving from 194 to 199 stores**. According to the plan's strategy, we expect new store openings to increase at a **CAGR**

of 3.8% from 2022 to 2025, reaching **231** stores compared to 194 in 2020. We believe the company has further stabilized in the market as of 2025, and we anticipate lower growth of around 2 %, bringing the total number of stores to **266 by 2032**.

Exhibit 23: Factory and Brand houses in Latin-America from 2015 to 2032

Source: Company data and Analysis estimate

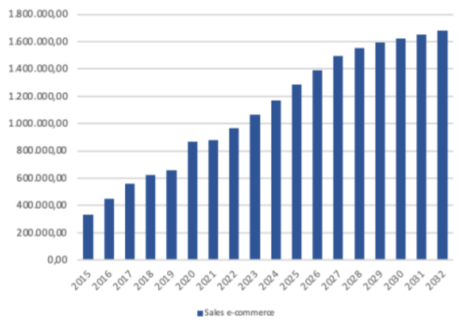
Latin-America will be covered in 2032 by 37 UA's stores

Given the low spending power of the middle class in **Latin America**, gaining market share through a full premium price offering is more difficult, making retail DTC expansion unwise. In fact, the company projected a very low store growth rate of **1-3% in the UA 18-23 plan**. However, results for the three-year period 2018-2020 exceeded expectations, despite the low absolute number of stores. When the negative effects of Covid in this geographic macro-area are considered, it is very likely that three stores will close by 2021. Based on the slow post-Covid recovery and the population's restricted spending power, we anticipate a **3% CAGR in store growth in 2022-2025**, reaching **30 stores** (**Exhibit 23)**. We anticipate a 1 store per year opening in the second forecast period, bringing the total number of stores to **37**, corresponding to a **CAGR of 1.8%.**

Overall in overall, in a **global perspective** we forecast that the company will reach **$2,201 billions** in 2025, and **$2,649 billions** in 2032, based on the average revenue per direct store and the number of stores over the entire forecast period. This translates to a CAGR of 17.87 % in the first forecast period and a CAGR of 2.93 % in the second forecast period.

- **DTC: E-commerce**

Exhibit 24: E-commerce sales from 2015 to 2032



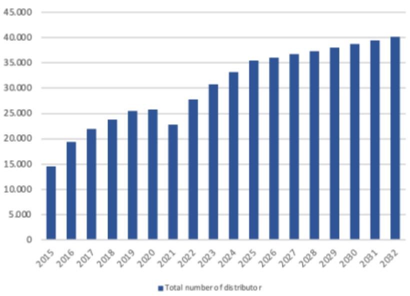
Source: Company data and Analysis estimate

Covid has strongly accelerated the growth of ecommerce, and according to Deloitte digital it has anticipated the growth process in the apparel industry by 5 years. However, analyzing the sportswear sector and Under Armour, it is worth noting that sales through **e-commerce have increased by 31.9% in full pandemic** contributing **19% of total sales in 2020**. According to company reports and various analysts we expect a rebound effect in 2021 due to the partly removal of most of the restrictions, and the reopening of the various physical stores, resulting just in a slight increase attested around 2% of e-commerce sales for UA. The projection will lead the company to reach **$880 millions generated by e-commerce in 2021** (**Exhibit 24)**. On the other hand, COVID has converted a large portion of people who had previously not purchased online for a variety of reasons such as lack of trust, problems with returns and shipments. In addition to that, companies, including Under Armour, have been enhancing their e-commerce services, furthering the explosion of online shopping. UA had already forecasted a global expansion through e-commerce in its "18-23 plan", especially in Asia-Pacific, EMEA, and Latin-America, with the goal of increasing online sales more than proportionately to sales through other channels, and improving the multichannel customer experience. This, from our expectation, will already have an impact by 2023, with e-commerce contributing **37% with $1,064 billions of UA's DTC sales** compared to 34% in with $622 millions in 2018. In a more than optimistic manner and sticking to the 2021 e-commerce statistician report, we believe that ecommerce sales will grow at **10% annually** until 2025 reaching **$1,3 billions by 2025** (**Exhibit 30**) After 2025, with the majority of population converted to e-commerce, we expect a lower **CAGR of 3.9 % from 2026 to 2032**. According to our projections, e-commerce sales will reach **$1.681 billion by 2032**, accounting for 38 % of total sales.

- **Wholesale**

One of UA's key objectives is to **control growth** through a limited expansion of the Wholesalers. Under Armour's wholesalers' revenue fell by **25% to $2.4 billion in 2020.** The company plans to redefine the number of its wholesalers. In fact, in order to increase margins through a premium offer, it is necessary to **strategically select wholesalers** to avoid selling products below cost and depreciating and damaging the brand image, especially in markets where spending power is high. On an overall basis the number of wholesalers is expected to grow at a **8,3% yearly level**, reaching **35.423 on 2025**, after a reduction in 2021 (**Exhibit 25)**.

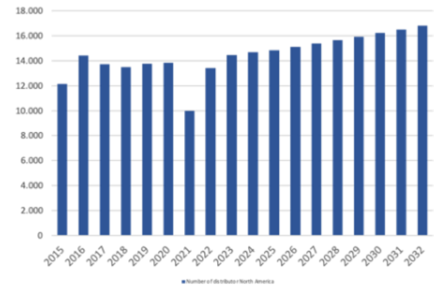
Exhibit 25: Number of Total Wholesalers from 2015 to 2032



Source: Company data and Analysis estimate

In the **North America market,** where Under Armour has an important penetration index, crucial it has been to reduce the number of wholesalers from **13.500 in 2018 to 10.000 in 2021,** as stated by the management. (**Exhibit 26)**. From 2022-2025 we expect a rebound effect, with **14.836 wholesalers in 2025**, as many of them will return to normal business as soon as the restrictions are lifted. Moreover, it will also be unlikely for the company to replace wholesaler sales with sales through brand stores due to the capital requirements. Therefore, we believe the number of company's wholesalers will grow at a **CAGR of 11% over the period 2022-2025**. On the other hand, in the **Forecast period 2** the growth will level off at a **CAGR of 1.8%.**

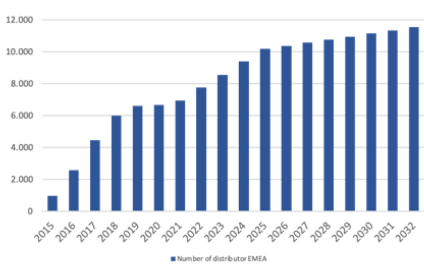
Exhibit 26: Number of Wholesales in North America from 2015 to 2032



Source: Company data and Analysis estimate

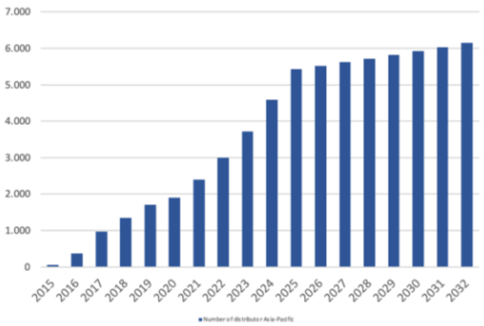
Moving to the **EMEA market**, the UA 18-23 plan calls for expansion in the market through the number of wholesalers with a **CAGR of 10-12%**. Despite the positive data from 2017-2019, COVID-19 reduced revenue in this stream by **25.42% in 2020** when compared to the previous year. Furthermore, the number of wholesalers increased by only 1% in 2020. Despite the reopening, we expect a slight rebound effect in 2021, with a return to pre-covid growth rates not occurring until 2022. Indeed, we expect wholesalers to grow by **10.1% over the four-year period 2022-2025**, reaching a number of

Exhibit 27: Number of distributors in EMEA from 2015 to 2032



Source: Company data and Analysis estimate wholesalers supplied of 10195. **From 2026 to 2032**, the number wholesalers supplied will grow at **CAGR of 1,8%, resulting in 11525 in 2032**. (**Exhibit 27)**

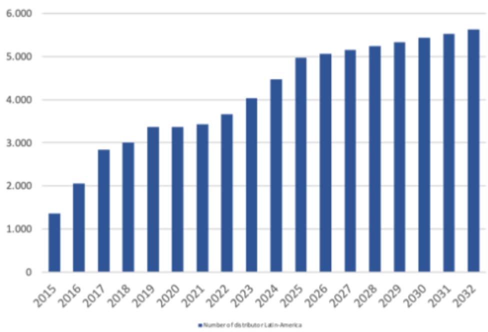
Exhibit 28: Number of distributors in Asia-Pacific from 2015 to 2032



Source: Company data and Analysis estimate

On the other hand, in the **Asia-Pacific** market to ride the trend of the strong connection of the population with the sport and the fragmentation of the market, the company can not only expand in such a vast territory only with brand stores and factory houses as it would require a very large capital requirement. Therefore, in the UA 18-23 plan, the company planned to expand into Asia through wholesalers at a **CAGR of 24-26%.** Analyzing the data for the three-year period 2018-2020, with respectively **1350, 1701 and 1905** distributors, it is worth noting in general a **growth rate in line with that stated in the business plan**. However, considering the effects of COVID-19 and the various closures there was a major slowdown in 2020 as wholesalers were unwilling to purchase goods that could not be resold. However, despite other market, Asia-Pacific the number of distributors has grown by 12% **reaching 1905 in 2020**. We expect the **from 2021 then a 23% CAGR** in wholesalers' number, slightly low the expectaction of the plan, persisting through 2025. Thereafter, in **Forecast Period 2** we expect a growth of wholesalers at a **1,8% CAGR,** supplying **6143 wholesalers** in the Asia-Pacific Area. (**Exhibit 28**).

Exhibit 29: Number of distributors in Latin-America from 2015 to 2032



Source: Company data and Analysis estimate

The company intends to fuel growth in **Latin America** through wholesalers, as the population's spending power makes it unwise to offer a premium offering at full price, making expansion through branded stores unprofitable. Expansion through wholesalers, on the other hand, is the wiser choice, and despite a very good biennium in 2018-2019, expansion has slowed significantly due to COVID's severe impact on the population and economy. In fact, the number of **wholesalers in 2021** remained the same as in 2020, at **around 3360**. However, due to a lack of vaccinations and the impact of the economic crisis on a developing but still weak country, we believe that we will only be able to return to pre-pandemic growth levels in 2023. Indeed, we anticipate that the number of **wholesalers will reach 4970 in 2025**, with a **CAGR of 10.7%** over the three-year period **2023-2025**. We predict that the number of wholesalers will reach **5632 by the end of Forecast Period 2**, with a **CAGR of 1.8% between 2026 and 2032 (Exhibit 29)**.

Overall, the company's goal in this revenue source is to find increasingly strategic wholesalers who can replicate their premium brand value proposition. This leads us to believe that, globally, **average revenue per wholesaler will reach $140k per year beginning in 2022**, a 9% increase over 2018-2019 figures. This factor, combined with the growing number of wholesalers, will drive the company's wholesale revenue to **$4.959 billion in 2025 and 5.619 billion in 2032**. However, this data shows that revenue growth from this source will be less than proportionate to revenue growth from DTC Brick and Mortar and DTC e-commerce, which is consistent with the company's goal and, more importantly, our forecast.

3.2. Gross Margin

UA will increase Gross Margin to 49,8% by 2022

Raw materials, inbound freight costs, outbound freight costs, and inventory obsolescence write-downs are the main components of the cost of sales. As previously stated, **the company's 2018 restructuring plan aims to reduce shipping costs and avoid inventory write-downs**. According to the data for 2018, 2019, 2020, and the first three quarters of 2021, the company was able to **reduce COGS by up to 49.8%** of revenues in the third quarter of 2021. These figures demonstrate how effectively focusing on the DTC channel and selecting strategic suppliers reduced inventory depreciation and inbound and outbound transportation costs. Above all, the presence of new direct stores enables and will enable the company to maintain greater control over inventory pricing. **As a result, we believe the company will be able to keep COGS in line with 2020 and 2021 values**. As a result, we have estimated a **COGS of 50.3%** of revenues for future years, slightly higher than in 2021, and do not expect any change over the next decade **(Exhibit 30)**.

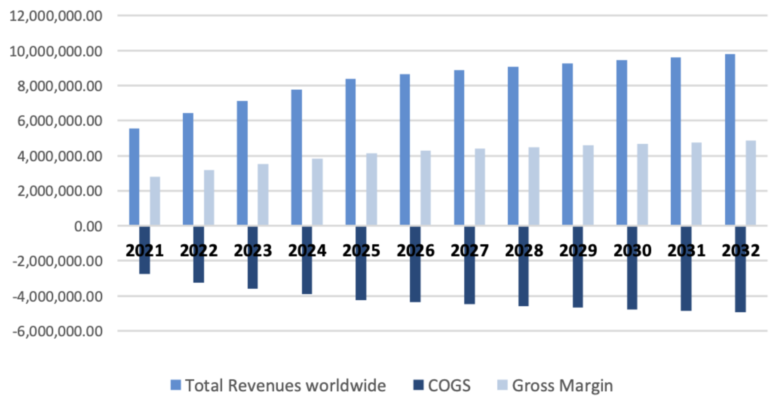


Exhibit 30: UA Gross margin analysis

Source: Company data and Analysis

3.3. Capital Expenditure

Capital Expenditure consists mainly of PPE and Depreciation

Capital expenditures are entirely **made up of PPE and the corresponding depreciation**. Examining PPE in depth reveals that it includes office equipment, plant equipment, land, software, furniture, fixtures and displays, and construction in progress. PPE, on the other hand, are not directly related to the number of brand stores and factory houses for which the company provides leases, the capitalized costs of which are included in Right of use of assets and operating lease liabilities. Considering this note, we believe it is appropriate to forecast growth in capital expenditures as a percentage of total revenues, because we believe the company's growth will result in capital expenditures that are directly proportional to revenues. We used the average value of the PPE in relation to the revenues of the years 2018, 2019, 2020 as the ratio for estimating the PPE, because the company with the plan 18-23 intended to improve capital expenditures, and thus the years 2018-2019-2020 can provide us with a reliable estimate of the PPE trend. We can see that **capital expenditures will settle at 4.2 % of revenues in 2025 and 3.4 % of revenues in 2032** over the course of the estimated years. This final figure shows that Capex is on track to meet the company's long-term goal of bringing Capex to **3.5 % of revenues**.

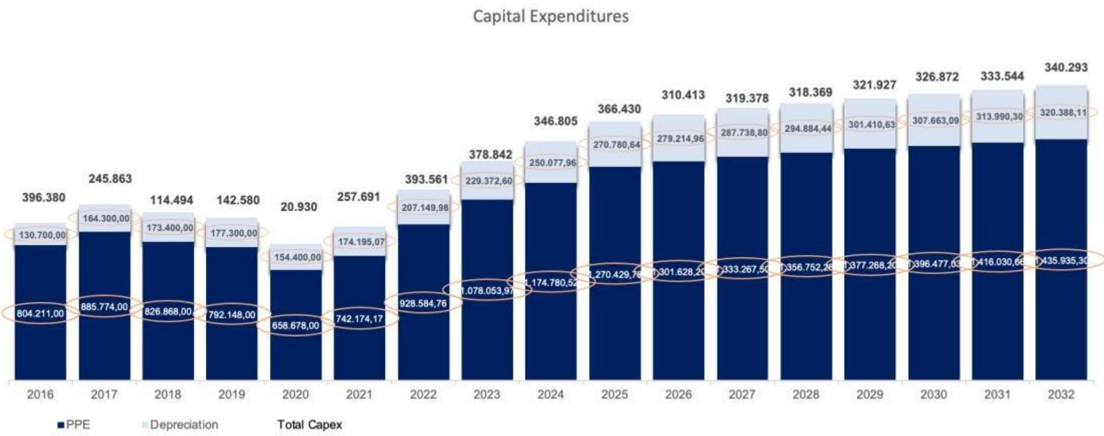
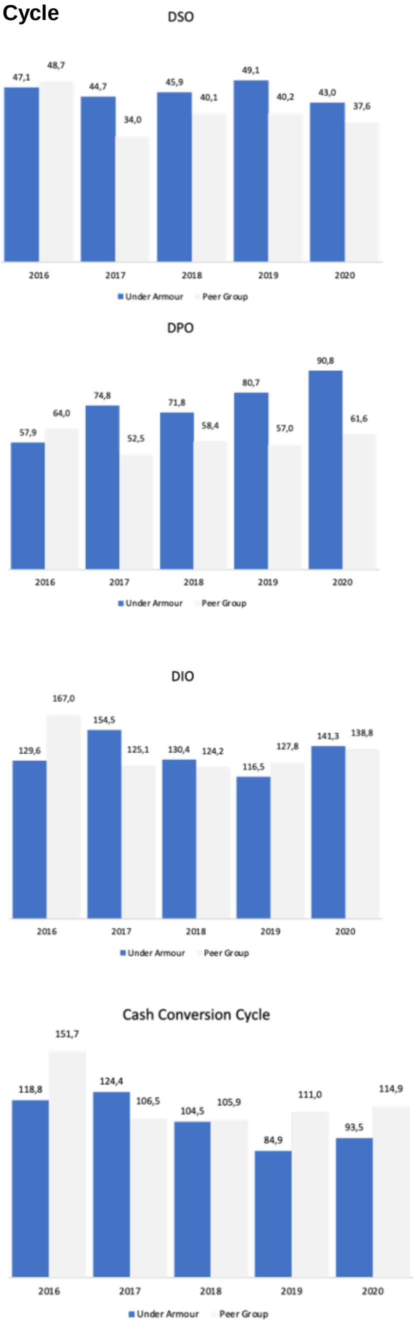


Exhibit 31: Capital Expenditure 2016-2032

Source: Company Analysis

Exhibit 32: UA vs Peer Cash Conversion Cycle



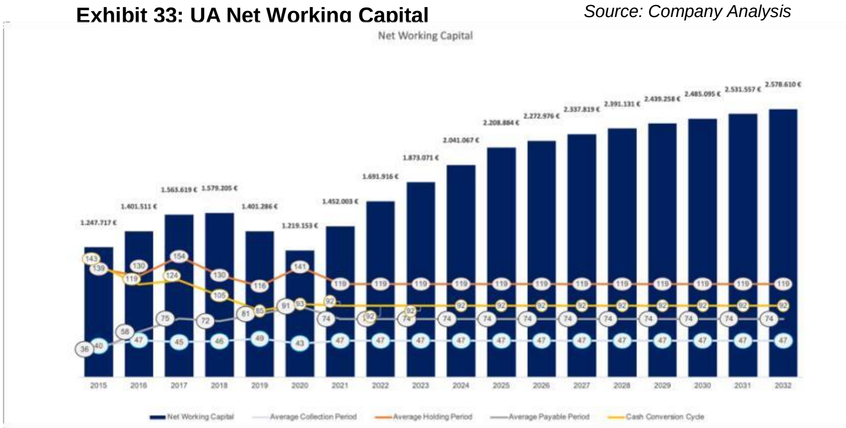
Source: Company Analysis

3.4. Working Capital Management

Given the nature of the company's business, we can say that "DIO" (Days of Inventories Outstanding) has a significant impact on the result of the Cash Conversion Cycle. Indeed, **Under Armour, as a retailer, has a high DIO**. To effectively evaluate the company's performance, we compared its DIO, DPO, and DSO values to those of its main competitors, including Nike, Adidas, Puma, Asics, Fila, and Lululemon. According to our analysis, Under Armour is more efficient than its competitors in terms of cash generation, as measured by the cash conversion cycle. (**Exhibit 32**). **In 2020**, **Under Armour's Cash Conversion Cycle is 93.5 days**, which means that UA will generate cash nearly 21 days sooner than competitors, who average 114.9 days. We expect UA to be able to create liquidity in just 92 days beginning in 2021, ensuring greater liquidity strength in operations management because of investments made as part of the restructuring plan. This will be primarily due to a reduction in **DIO**, which will fall **from 141 to 119.28 days between 2020 and 2021**. We calculated the latter as the average DIO value for 2018, 2019, and the third quarter of 2021. We did not include 2020 in the average value calculation because the various closures slowed product sales, resulting in a lag in inventories sales. We used the same approach as DIO to estimate the average value for 2021 for DPO. Beginning in 2021, UA will reduce DPO slightly while remaining above competitors. **DPO in 2021** is expected to be around **75 days**, down from 91 days in 2020 but still **higher than the competitors' average** of around 61.6 days. This decrease is consistent with pre-covid figures and demonstrates how deferring payments allowed for adequate liquidity to be maintained to address the pandemic in 2020. DSO will be realigned with the pre-pandemic period, with a **DSO of 47 days in 2021** compared to 49 in 2019. This will allow UA to reduce the number of days it takes to collect money from its customers.

Exhibit 33: UA Net Working Capital

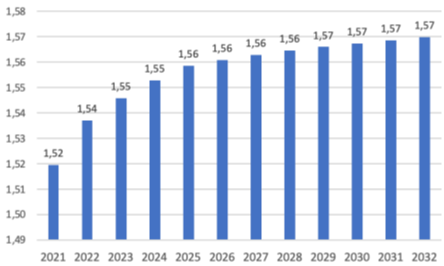
Source: Company Analysis



4. VALUATION

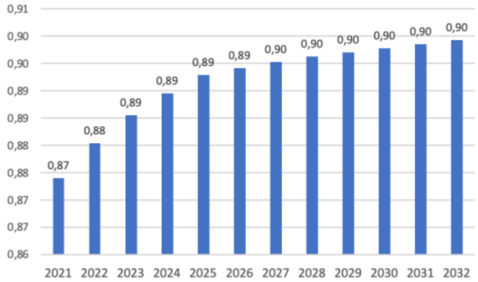
We determined the company's ultimate value by **discounting the sum of the company's cash flows from 2022 to 2032 using the WACC method**. We chose DCF as the valuation model because we believe the company will not significantly change its target capital structure from 2022 onwards, effectively making DCF the most appropriate model. Our forecasting period is divided into two sections: Period 1, which covers the years 2021–2025, and Period 2, which covers the years 2026–2032. In Period 1, we assume the company will implement its expansion strategy; in Period 2, we assume the company will stabilize its growth and realize the benefits of its expansion strategy and business model optimization, resulting in a decrease in Capex and an improvement in the Cash Conversion Cycle. This is further demonstrated by the Free cash flow trends, which show that despite the increasing trend, the company will have negative Cash Flows in period 1. While the company will continue to generate positive Cash flows in Period 2, it will begin to generate positive Free Cash flows. Using the year 2032 cash flow we calculated the terminal value applying the terminal growth rate of 1,37%. Therefore, we arrived at a **terminal value of 5.067 million** of dollars and an **enterprise value of 5.580 millions**, and both subtracting the company's financial debt and adding the non-operating enterprise value we get **6.438 millions of dollar as equity value**.

Exhibit 34: UA Current Ratio from 2021-2032



Source: Company data and Analysis estimate

Exhibit 35: UA Quick Ratio from 2021-2032



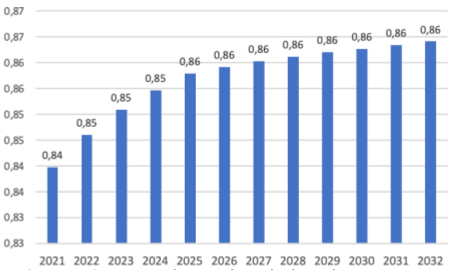
Source: Company data and Analysis estimate

4.1. Capital structure

- **Liquidity Ratio**

Under Armour looks quite comfortable from a liquidity point of view. The company ended the second quarter with **third quarter of 2021 with current operating assets of $1,905.148 million** that is sufficient to meet **Current Liabilities of $1,212.7 million**, of the respective quarter. As a matter of fact, the **Current Ratio** of UA accounts for **1,44 (Exhibit 34)**. From analysis this value will slightly increase reaching **1,57 in 2032** due to an increase in Current Assets as Operating cash and Account receivables. Based on these current ratio values, we can conclude that the company is in a **state of financial equilibrium**, as a current ratio greater than one indicates that the company is able to meet its short-term obligations in future years using its short-term assets. Our assessment of the positive financial balance is reinforced by the **Quick Ratio** and **Cash Ratio** values, which range from **0.84 to 0.86** and **0.87 to 0.90**, respectively, **over the forecasted years (Exhibit 35,36)**. This

Exhibit 36: UA Cash Ratio from 2021-2032



Source: Company data and Analysis estimate

demonstrates that the company will be able to meet almost all its short-term liabilities using cash reserves rather than selling inventories and by lowering the average DPO. However, the excess cash reserve is not entirely positive because the company could invest its cash reserve in additional investment opportunities to increase ROIC, but only if the investment opportunities have a ROIC greater than their cost of funding, which in our case should correspond to the cost of equity when the investments are funded solely with cash.

4.2. Return on invested Capital and growth rate (ROIC)

Analyzing the **Core ROIC (t-1)** for the year 2019, we can see that the company's expansion process in **2018** produced encouraging results, with a core **ROIC (t-1) of 7.09%.** However, we believe that the 2020 Core ROIC(t-1) is misleading because the company was unable to operate at full capacity due to closures, resulting in low sales numbers that harmed the company's operations and operating results. Turning to the Core ROIC forecast data, we can see that the company's expansion, combined with the lack of significant restrictions, will result in a **positive Core ROIC(t-1) during the period 2021-2025**, with values ranging **from 6.4% to 7.2%.** By interpreting these values, we can see that the company generates value during the time period under consideration, as the **WACC, at 5.53%**, **is lower than the forecasted Core ROIC(t-1)**. Based on these findings, we believe the company should postpone dividend payments until 2023 to reinvest profits and fuel growth.

The **perpetual growth rate**, on the other hand, is the rate at which Under Armour will grow in perpetuity, and it is **1.37%**. The value obtained is the product of the **terminal ROIC**, which is **5.92%,** and the **terminal Reinvestment Rate**, which **is 33.98%.** This value indicates that growth is lower than the **real GDP**, which is **1.6%** according to the CBO, implying that the company will need to implement a new growth strategy after 2032 to ensure business continuity.

4.3. Weighted Average Cost of Capital (WACC)

The cost of equity was determined using the Capital Asset Pricing Model. We used the current yield on 10-year US Treasury bonds as the **risk-free rate**, resulting in a value of **1.44%**. We used KPMG's December 2021 recommendation of **5.00% for the Market Risk Premium**. The Levered Beta was calculated by regressing the company's monthly closing prices against the SP500's six-year monthly performance. A **levered beta of 0.95** was obtained. On the other hand, the regression has a standard error of

0.19 and a 95% confidence interval. As a result, the levered beta value may range between 0.59 and 1.96, resulting in an inaccuracy in the model. To deal with this problem, we conducted a competitive analysis of four market leaders: Lulemon, Nike, Adidas, and Puma. We unlevered these companies' betas based on their capital structure, obtaining a median unlevered beta of 0.81. This value demonstrates the sportswear industry's lower volatility than the economy. This data demonstrates how demand for sportswear and sports products is not perfectly proportional to the state of the economy. Indeed, even at the peak of the pandemic, the majority of the population made time for physical activity, demonstrating how sport has evolved into a critical component of mental and social well-being. The unlevered Beta was re-leveraged at current Under Armour's market D/E ratio, which amounts to 19%. We believe the company's debt-to-equity ratio will remain relatively stable starting from 2022 onwards, as management has no intention of changing substantially the capital structure. Furthermore, as demonstrated by the model, we believe the company can maintain its current steady growth without significantly altering its capital structure.

Exhibit 37: WACC computation

Risk free rate	
Source: Bloomberg	
U.S. (€)	
10-Year Government Bond	1,44%
30-Year Government Bond	2,06%

Discount Rate Overview	
Risk free rate	1,44%
Market risk premium	5,00%
Cost of equity	6,18%
Actual Rating (S&P)	BB
Statutory tax rate	21,00%
Rd= risk-free rate + default spread	2,83%
Bd	0,28
B unlevered	0,81
B levered	0,95
B debt	0,28
E/EV	83,7%
D/EV	16,3%
WACC	5,53%

Source: Company data and Analysis estimate

We obtained the cost of equity and WACC using the resulting parameters, which have values of 6.18 % and 5.53 %, respectively.

4.4. Cost of debt

To estimate Under Armour's cost of debt, we analyzed the semestral "**UA 3 $^{1/4}$ 06/15/26**" bond due June 2026. According to Bloomberg data, the Bond will still have 1643 days before maturity with a coupon rate of 3,25%. We considered the actual UA's S&P rating of BB, a **1-Year Default Probability** of **0,0086%** and a **Loan Recovery rate** attested to 54,00%. Using a **2,83% Yield to Maturity rate** (YTM) we have been able to compute the cost of debt, subtracting at the YTM the product of Loan recovery and Probability of Default. The final cost of debt resulted then to **2,83%.**

4.5. Multiple Valuation

A second approach was utilized to estimate Under Armour's performance in addition to the DCF Model. In this chapter, we'll use the **Multiples Approach** to analyze the firm, which helps us to better grasp market perceptions of UA's worth in contrast to other companies in the sportswear sector. Before moving on Under Armour multiples valuation, it is important to analyze the financial health of its **most direct peers**. For this study we took into consideration companies as **Nike, Adidas** and **Lululemon**.

These are not only the sportswear firms that, like UA, offer their items at greater costs, but they also have **strategies** that are **similar to the one described** earlier in this research. As a result, the four of them may be classified as premium firms that are now competing for market share and revenue both locally and worldwide. With relatively comparable business **divisions**, **structures**, and **tactics**, this research provides an overall picture of how the market views premium sportswear.

Trading Comparables Under Armour in $m	EV/Sales	EV/EBITDA	EV/EBIT	P/EPS	Business Description
Sportwear peers					
	1,88	**16,12**	**227,61**	**25,38**	**Under Armour, Inc.**
	9,33	38,16	43,66	62,64	Lululemon Athletica Inc.
	5,08	28,13	32,16	40,37	Nike, Inc.
	2,71	22,10	27,75	31,06	Adidas AG
	2,49	25,02	74,28	49,7	Puma SE

Exhibit 38: Multiple valuation

Maximum	9,33	38,16	227,61	62,64
75th Percentile	7,21	33,14	150,94	56,19
Average	4,30	25,91	81,09	41,84
Median	2,71	25,02	43,66	40,37
25th Percentile	2,18	19,11	29,96	28,22
Minimum	1,88	16,12	27,75	25,38

Source: Company data and Analysis estimate

To evaluate Under Armour we used the **Enterprise value to EBIT** and the **Price to Earnings per Share (P/EPS)** ratios. Regarding the first one after computing the **average** of this ratio for the chosen peers, we got **81,09x**. This ratio is by far distant from UA's one mainly because of the high differences there are between EV and EBIT of peer companies taken into consideration (**Exhibit 38).**

Due to the significant disparities in EV/EBIT multiples we focus our attention on the P/EPS

Due to large outliers in terms of size, a distinct business concept, and significant difference in multiples, **the relative value does not yield a relevant conclusion**.

However, while analyzing the **P/EPS ratio**, UA present a multiple of **25,38x**, which here, it is not so far different from the Adidas one. As we did for the other ratio, we computed the peers one and we calculate the average. In this case we obtained a multiple value of **41,84x**, which is aligned with the value of the Company and the peer's one. Using the value of UA's actual earnings per share, which account for **0,81**, we obtained a share price of **$33,9**, completely in line with the prognostic of Under Armour being undervalued.

4.6. Sensitivity Analysis

As changes in variables may have a significant impact on Under Armour's valuation, we are doing several sensitivity analyses to determine the impact that changes in input variables can have on the outcome of our valuation. To begin, we examine the effect of various beta and loan cost values on the WACC. We employ the top and lower bounds of our beta regression analysis to provide an appropriate range of beta values. We chose the risk-free rate of 1,44% as the lower end of our range for cost of debt and our computed cost of debt of 2,83% as the upper bound (**Exhibit 39**).

	Beta Levered									
	0,59	0,74	0,89	1,04	1,19	1,34	1,49	1,64	1,79	1,94
Cost of Equity	4,38%	5,13%	5,88%	6,63%	7,38%	8,13%	8,88%	9,63%	10,38%	11,13%
Wacc	4,16%	4,79%	5,42%	6,05%	6,67%	7,30%	7,93%	8,56%	9,18%	9,81%

	Cost of debt									
	1,44%	1,59%	1,75%	1,90%	2,06%	2,21%	2,36%	2,52%	2,67%	2,83%
WACC	5,4%	5,4%	5,4%	5,4%	5,4%	5,5%	5,5%	5,5%	5,5%	5,5%

Exhibit 39: Impact of Beta and Cost of debt on WACC

Source: Company data and Analysis estimate

Another significant factor is the Terminal growth rate. The growth rate is calculated by multiplying the reinvestment rate by the Return on New Capital Invested "RONIC". To obtain a relevant range of terminal growth rate testing values, we alter different reinvestment rates and RONICs according to our forecasted values.

We conduct a sensitivity analysis of Under Armour's Share price in relation to various WACCs and Terminal Growth rates after carefully considering these fundamental inputs. (**Exhibit 40)**

		WACC									
Share Price	29,69	4,0%	4,7%	5,3%	5,9%	6,5%	7,2%	7,8%	8,4%	9,1%	9,7%
Terminal Growth Rate	1,03%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,13%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,24%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,34%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,44%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,54%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,64%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,75%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,85%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,95%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36
	1,95%	42,98	35,98	31,18	27,66	24,97	22,83	21,09	19,64	18,41	17,36

Statistics	
Q1	19,64
Median	23,90
Q3	31,18

Exhibit 40: Impact of Terminal Growth Rate and WACC on Price Share

Source: Company data and Analysis estimate

This research presents a range of possible prices for Under Armour's stock. When we examine these statistics more closely, we discover that the median is $23,9, the lower quartile is $19,64, and the higher quartile is $31,18. This supports our price recommendation, given that our target price is between the lower and higher quartile.

4.7. Valuation Outcome

Considering the 10 years forecasted period followed by perpetuity from 2032 onwards, with a WACC of 5,53% and a Terminal Growth rate of 1,37% the **DCF Model** gives a share price value of **$29,69** for the fiscal year 2022, resulting in a potential upside of 44,4%. Thus, considering the price resulted with the **Multiple valuation ($33,9**), is completely in line with our vision of growth for the company. Both prices, considering the **actual price** of **$20,56** show that Under Armour as a company is undervalued. Our recommendation is to **BUY** UA's shares as for our opinion they will increase in values until the end of December 2022.

NOVA SCHOOL OF BUSINESS & ECONOMICS

FINANCIAL STATEMENT

Consolidated Income Statement

Forecast	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(in €'000)	Historical						Forecast Period 1				
Operating											
Total Revenues worldwide	3.963.313,00	4.825.335,00	4.976.553,00	5.193.185,00	5.267.132,00	4.474.667,00	5.533.593,49	6.580.460,69	7.286.398,82	7.944.138,88	8.601.793,67
COGS	(2.057.766,00)	(2.584.724,00)	(2.737.830,00)	(2.852.714,00)	(2.796.599,00)	(2.314.572,00)	(2.756.145,42)	(3.306.681,50)	(3.661.415,41)	(3.991.929,78)	(4.322.401,32)
in % of Tot. Sales	51,9%	53,6%	55,0%	54,9%	53,1%	51,7%	49,8%	50,3%	50,3%	50,3%	50,3%
Gross Result				19%	17,3%						
Gross Margin	1.905.547	2.240.611	2.238.723	2.340.471	2.470.533	2.160.095	2.777.448	3.273.779	3.624.983	3.952.209	4.279.392
Selling, general and administrative expenses	(1.396.800,00)	(1.679.440,00)	(1.914.331,00)	(1.992.434,00)	(2.050.363,00)	(2.010.534,00)	(2.345.693,36)	(2.804.846,92)	(3.107.656,33)	(3.394.156,41)	(3.681.499,50)
% Tot. Sales	35%	35%	38%	38%	39%	45%	42%	43%	43%	43%	43%
Shipping and Handling Costs	(63.700,00)	(89.900,00)	(101.500,00)	(91.800,00)	(81.000,00)	(80.500,00)	(94.155,14)	(111.967,78)	(123.979,45)	(135.171,02)	(146.361,14)
% of Tot. Sales	1,6%	1,9%	2,0%	1,8%	1,5%	1,8%	1,70%	1,70%	1,70%	1,70%	1,70%
Advertising Costs	(417.800,00)	(477.500,00)	(565.100,00)	(550.400,00)	(578.900,00)	(543.800,00)	(719.367,15)	(855.459,89)	(947.231,85)	(1.032.738,05)	(1.118.233,18)
% of Tot. Sales.	10,5%	9,9%	11,4%	10,6%	11,0%	12,2%	13,00%	13,00%	13,0%	13,0%	13,0%
Operating lease costs	(83.000,00)	(109.000,00)	(141.200,00)	(152.700,00)	(166.400,00)	(156.700,00)	(171.330,65)	(219.129,64)	(244.548,68)	(272.597,28)	(301.522,39)
% of Tot. Brick Sales	9,7%	10,4%	11,9%	12,9%	14,5%	16,0%	13,70%	13,70%	13,70%	13,70%	13,70%
Allowance for Doubtful Accounts	(5.900,00)	(11.300,00)	(19.700,00)	(22.200,00)	(15.100,00)	(20.400,00)	(21.582,25)	(25.665,26)	(28.418,58)	(30.983,91)	(33.548,91)
% of Tot. Sales	0,1%	0,2%	0,4%	0,4%	0,3%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%
Other Selling, general and administrative expenses, including personel costs	(826.400,00)	(991.740,00)	(1.086.831,00)	(1.175.334,00)	(1.208.963,00)	(1.209.134,00)	(1.339.258,17)	(1.592.624,35)	(1.763.477,78)	(1.922.666,15)	(2.081.833,88)
% of Tot. Sales	20,9%	20,6%	21,8%	22,6%	23,0%	27,0%	24,2%	24,2%	24,2%	24,2%	24,2%
EBITDA	508.747,00	561.171,00	324.392,00	348.037,00	420.170,00	149.561,00	431.754,72	468.932,27	517.327,08	558.052,68	597.892,85
EBITDA Margin	12,8%	11,6%	6,5%	6,7%	8,0%	3,3%	7,8%	7,1%	7,1%	7,0%	7,0%
Depreciation PP&E	(86.300,00)	(130.700,00)	(164.300,00)	(173.400,00)	(177.300,00)	(154.400,00)	(174.195,07)	(207.149,98)	(229.372,60)	(250.077,96)	(270.780,64)
% of PP&E	16%	16%	19%	21%	22%	23%	22%	22%	22%	22%	22%
Amortization Intangible Assets	(13.900,00)	(13.000,00)	(8.200,00)	(6.100,00)	(6.100,00)	(7.000,00)	(11.047,06)	(13.136,98)	(14.546,29)	(15.859,38)	(17.172,29)
% Intangible Assets	18,4%	20,2%	17,4%	14,6%	16,8%	52,7%	28,0%	28,0%	28,0%	28,0%	28,0%
Income(loss) from Core Operations	408.547,00	417.471,00	151.892,00	168.537,00	236.770,00	-11.839,00	246.512,59	248.645,31	273.408,19	292.115,34	309.939,91
EBIT Margin	10,3%	8,7%	3,1%	3,2%	4,5%	-0,3%	4,5%	3,8%	3,8%	3,7%	3,6%
Taxes	(161.764)	(141.519)	(94.721)	(26.891)	(75.679)	(150.335)	(99.188)	(57.183)	(62.878)	(67.180)	(71.279)
Core Result	246.783,30	275.951,85	57.170,65	141.646,01	161.091,12	(162.174,05)	147.324,51	191.462,39	210.530,36	224.935,27	238.660,59
	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE					
Auxiliary Calculation EBIT	386.685,00	388.282,00	-10.309,00	-57.382,00	209.842,00	-492.544,00	101.466,00	237.289,31	256.537,66	270.428,74	247.709,53
Tax breakdown											
Statutory tax rate	35,00%	35,00%	35,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%
Effective tax rate	39,59%	33,90%	62,36%	15,96%	31,96%	-1269,83%	23,00%	23,00%	23,00%	23,00%	23,00%
Operating results before taxes	**408.547**	**417.471**	**151.892**	**168.537**	**236.770**	**(11.839)**	**246.512,59**	**248.645,31**	**273.408,19**	**292.115,34**	**309.939,91**
Reported taxes	(154.112)	(131.303)	(37.951)	20.552	(70.024)	(49.387)	(68.728,30)	(54.798,16)	(59.335,03)	(62.625,88)	(58.210,94)
Taxes on operating activities	(161.764)	(141.519)	(94.721)	(26.891)	(75.679)	(150.335)	(99.188,08)	(57.182,92)	(62.877,84)	(67.180,07)	(71.279,32)
Taxes on non-operating activities	2.532	964	44.682	40.394	1.194	91.024	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41
Tax shield	5.120	9.252	12.088	7.049	4.460	9.924	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97
Non operating											
Other income (expense), net	(7.234,00)	(2.755,00)	(3.614,00)	(9.203,00)	(5.688,00)	168.153,00	(76.798,14)	28.387,99	27.137,11	26.293,59	(10.278,16)
% of tot. Sales	-0,18%	-0,06%	-0,07%	-0,18%	-0,11%	3,76%	-1,4%	0,4%	0,4%	0,3%	-0,1%
Restructuring and impairment changes	-	-	(124.049,00)	(183.148,00)	-	(601.599,00)	(34.827,22)	-	-	-	-
% of tot. Sales	0,0%	0,0%	2,5%	3,5%	0,0%	13,4%	0,6%	0,0%	0,0%	0,0%	0,0%
Non Core Result Before Taxes and OCI	**(7.234,00)**	**(2.755,00)**	**(127.663,00)**	**(192.351,00)**	**(5.688,00)**	**(433.446,00)**	**(111.625,37)**	**28.387,99**	**27.137,11**	**26.293,59**	**(10.278,16)**
Taxes	2.531,90	964,25	44.682,05	40.393,71	1.194,48	91.023,66	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41
Non Core before OCI	**(4.702,10)**	**(1.790,75)**	**(82.980,95)**	**(151.957,29)**	**(4.493,52)**	**(342.422,34)**	**(88.184,04)**	**22.426,51**	**21.438,31**	**20.771,94**	**(8.119,74)**
OCI	(30.205,00)	(7.130,00)	13.932,00	(776,00)	(11.778,00)	(8.420,00)	(9.745,12)	(11.588,74)	(12.831,96)	(13.990,29)	(15.148,48)
% of tot. Sales	-0,76%	-0,15%	0,28%	-0,01%	-0,22%	-0,19%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%
Income(loss) from equity method investment	-	-	-	934,00	(47.679,00)	(7.246,00)	1.390,56	1.653,63	1.831,03	1.996,31	2.161,58
% of tot. Sales	0,0%	0,0%	0,0%	0,0%	-0,9%	-0,2%	0,03%	0,03%	0,03%	0,03%	0,03%
Non Core Result	(34.907,10)	(8.920,75)	(69.048,95)	(151.799,29)	(63.950,52)	(358.088,34)	(96.538,60)	12.491,40	10.437,38	8.777,96	(21.106,64)
	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE					
Financial Operations	-	-	-	-	-	-					
Interest expense,net	(14.628,00)	(26.434,00)	(34.538,00)	(33.568,00)	(21.240,00)	(47.259,00)	(33.421,23)	(39.743,99)	(44.007,64)	(47.980,19)	(51.952,23)
% of Debt	2,20%	3,23%	3,77%	4,61%	3,58%	4,71%	4,30%	4,30%	4,30%	4,30%	4,30%
Financial Result before Taxes	**(14.628,00)**	**(26.434,00)**	**(34.538,00)**	**(33.568,00)**	**(21.240,00)**	**(47.259,00)**	**(33.421,23)**	**(39.743,99)**	**(44.007,64)**	**(47.980,19)**	**(51.952,23)**
Tax shield	5.119,80	9.251,90	12.088,30	7.049,28	4.460,40	9.924,39	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97
Financial Result	(9.508,20)	(17.182,10)	(22.449,70)	(26.518,72)	(16.779,60)	(37.334,61)	(26.402,77)	(31.397,75)	(34.766,04)	(37.904,35)	(41.042,26)
	-	-	-	-	-	-					
Tot comprehensive income	202.368,00	249.849,00	(34.328,00)	(36.672,00)	80.361,00	(557.597,00)	24.383,14	172.556,04	186.201,70	195.808,88	176.511,68

Forecast	2026	2027	2028	2029	2030	2031	2032
	Forecast period 2						
Total Revenues worldwide	8.869.723,71	9.140.497,57	9.367.490,42	9.574.805,75	9.773.425,22	9.974.419,70	10.177.656,68
COGS	(4.457.036,17)	(4.593.100,03)	(4.707.163,94)	(4.811.339,89)	(4.911.146,17)	(5.012.145,90)	(5.114.272,48)
in % of Tot. Sales	50,3%	50,3%	50,3%	50,3%	50,3%	50,3%	50,3%
Gross Result							
Gross Margin	4.412.688	4.547.398	4.660.326	4.763.466	4.862.279	4.962.274	5.063.384
Selling, general and administrative expenses	(3.796.421,27)	(3.912.460,49)	(4.011.296,46)	(4.102.400,36)	(4.190.087,33)	(4.278.707,54)	(4.368.208,90)
% Tot. Sales	43%	43%	43%	43%	43%	43%	43%
Shipping and Handling Costs	(150.920,02)	(155.527,29)	(159.389,62)	(162.917,13)	(166.296,68)	(169.716,64)	(173.174,75)
% of Tot. Sales	1,70%	1,70%	1,70%	1,70%	1,70%	1,70%	1,70%
Advertising Costs	(1.153.064,08)	(1.188.264,68)	(1.217.773,75)	(1.244.724,75)	(1.270.545,28)	(1.296.674,56)	(1.323.095,37)
% of Tot. Sales.	13,0%	13,0%	13,0%	13,0%	13,0%	13,0%	13,0%
Operating lease costs	(311.164,09)	(320.805,80)	(330.447,50)	(340.089,21)	(349.730,91)	(359.372,62)	(369.014,32)
% of Tot. Brick Sales	13,70%	13,70%	13,70%	13,70%	13,70%	13,70%	13,70%
Allowance for Doubtful Accounts	(34.593,89)	(35.649,97)	(36.535,30)	(37.343,87)	(38.118,53)	(38.902,45)	(39.695,12)
% of Tot. Sales	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Other Selling, general and administrative expenses, including personel costs	(2.146.679,18)	(2.212.212,74)	(2.267.150,28)	(2.317.325,41)	(2.365.395,93)	(2.414.041,27)	(2.463.229,34)
% of Tot. Sales	24,2%	24,2%	24,2%	24,2%	24,2%	24,2%	24,2%
EBITDA	616.266,27	634.937,05	649.030,03	661.065,50	672.191,71	683.566,26	695.175,30
EBITDA Margin	6,9%	6,9%	6,9%	6,9%	6,9%	6,9%	6,8%
Depreciation PP&E	(279.214,96)	(287.738,80)	(294.884,44)	(301.410,63)	(307.663,09)	(313.990,30)	(320.388,11)
% of PP&E	22%	22%	22%	22%	22%	22%	22%
Amortization Intangible Assets	(17.707,18)	(18.247,74)	(18.700,90)	(19.114,78)	(19.511,29)	(19.912,55)	(20.318,29)
% Intangible Assets	28,0%	28,0%	28,0%	28,0%	28,0%	28,0%	28,0%
Income(loss) from Core Operations	319.344,13	328.950,51	335.444,69	340.540,09	345.017,33	349.663,41	354.468,90
EBIT Margin	3,6%	3,6%	3,6%	3,6%	3,5%	3,5%	3,5%
Taxes	(73.442)	(75.651)	(77.145)	(78.317)	(79.346)	(80.415)	(81.520)
Core Result	245.902,04	253.299,16	258.299,83	262.223,40	265.670,98	269.248,56	272.948,89
Auxiliary Calculation EBIT	255.175,39	262.822,83	267.674,81	271.270,37	274.310,69	277.502,65	280.837,80
Tax breakdown							
Statutory tax rate	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%
Effective tax rate	23,00%	23,00%	23,00%	23,00%	23,00%	23,00%	23,00%
Operating results before taxes	**319.344,13**	**328.950,51**	**335.444,69**	**340.540,09**	**345.017,33**	**349.663,41**	**354.468,90**
Reported taxes	(59.966,65)	(61.764,53)	(62.913,18)	(63.770,05)	(64.497,96)	(65.261,09)	(66.057,48)
Taxes on operating activities	(73.442,09)	(75.651,34)	(77.144,86)	(78.316,69)	(79.346,36)	(80.414,85)	(81.520,01)
Taxes on non-operating activities	2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
Tax shield	11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
Non operating							
Other income (expense), net	(10.598,30)	(10.921,84)	(11.193,08)	(11.440,79)	(11.678,12)	(11.918,29)	(12.161,13)
% of tot. Sales	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%	-0,1%
Restructuring and impairment changes	-	-	-	-	-	-	-
% of tot. Sales	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Non Core Result Before Taxes and OCI	**(10.598,30)**	**(10.921,84)**	**(11.193,08)**	**(11.440,79)**	**(11.678,12)**	**(11.918,29)**	**(12.161,13)**
Taxes	2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
Non Core before OCI	**(8.372,66)**	**(8.628,26)**	**(8.842,53)**	**(9.038,23)**	**(9.225,72)**	**(9.415,45)**	**(9.607,29)**
OCI	(15.620,32)	(16.097,18)	(16.496,93)	(16.862,03)	(17.211,82)	(17.565,79)	(17.923,70)
% of tot. Sales	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%	-0,18%
Income(loss) from equity method investment	2.228,91	2.296,95	2.353,99	2.406,09	2.456,00	2.506,51	2.557,58
% of tot. Sales	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%
Non Core Result	(21.764,08)	(22.428,49)	(22.985,47)	(23.494,17)	(23.981,53)	(24.474,72)	(24.973,41)
Financial Operations							
Interest expense,net	(53.570,44)	(55.205,84)	(56.576,80)	(57.828,92)	(59.028,53)	(60.242,47)	(61.469,96)
% of Debt	4,30%	4,30%	4,30%	4,30%	4,30%	4,30%	4,30%
Financial Result before Taxes	**(53.570,44)**	**(55.205,84)**	**(56.576,80)**	**(57.828,92)**	**(59.028,53)**	**(60.242,47)**	**(61.469,96)**
Tax shield	11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
Financial Result	(42.320,65)	(43.612,61)	(44.695,67)	(45.684,85)	(46.632,54)	(47.591,55)	(48.561,27)
Tot comprehensive income	181.817,32	187.258,07	190.618,68	193.044,38	195.056,91	197.182,29	199.414,21

Consolidated Balance Sheet

Reformulated Consolidated Balance Sheet	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Historical						Forecast Period 1					Forecast Period 2						
Core Operation																		
Assets																		
Operating Cash	79.266,26	96.506,70	99.531,06	103.863,70	105.342,64	89.493,34	110.671,87	131.609,21	145.727,98	158.882,78	172.035,87	177.394,47	182.809,95	187.349,81	191.496,11	195.468,50	199.488,39	203.553,13
in % of Tot. Sales	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%	2,00%	2,00%	2,00%	2,00%
Account Receivables, net	433.638,00	622.685,00	609.670,00	652.546,00	708.714,00	527.340,00	706.950,22	840.693,87	930.881,76	1.014.912,05	1.098.931,45	1.133.161,14	1.167.754,15	1.196.753,86	1.223.239,66	1.248.614,50	1.274.292,77	1.300.257,53
in DSO	39,94	47,10	44,72	45,86	49,11	43,02	46,63	46,63	46,63	46,63	46,63	46,63	46,63	46,63	46,63	46,63	46,63	46,63
Inventories	783.031,00	917.491,00	1.158.548,00	1.019.496,00	892.258,00	895.974,00	900.691,93	1.080.603,85	1.196.528,78	1.304.538,91	1.412.535,04	1.456.532,91	1.500.997,77	1.538.273,18	1.572.317,26	1.604.933,36	1.637.939,47	1.671.313,83
in DIO	138,89	129,56	154,45	130,44	116,45	141,29	119,28	119,28	119,28	119,28	119,28	119,28	119,28	119,28	119,28	119,28	119,28	119,28
Prepaid expenses and other current assets	152.242,00	174.507,00	256.978,00	364.183,00	313.165,00	282.300,00	295.044,57	350.862,27	388.502,05	423.571,96	458.637,32	472.923,03	487.360,37	499.463,36	510.517,16	521.107,31	531.824,10	542.660,45
in % of Tot. Sales	3,84%	3,62%	5,16%	7,01%	5,95%	6,31%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%	5,33%
Total current operating assets	**1.448.177,26**	**1.811.189,70**	**2.124.727,06**	**2.140.088,70**	**2.019.479,64**	**1.795.107,34**	**2.013.358,59**	**2.403.769,20**	**2.661.640,56**	**2.901.905,70**	**3.142.139,69**	**3.240.011,56**	**3.338.922,24**	**3.421.840,21**	**3.497.570,19**	**3.570.123,68**	**3.643.544,73**	**3.717.784,94**
Property and equipment, net	538.531,00	804.211,00	885.774,00	826.868,00	792.148,00	658.678,00	782.386,11	930.401,02	1.030.212,51	1.123.209,34	1.216.194,12	1.254.076,33	1.292.360,62	1.324.454,78	1.353.766,77	1.381.849,27	1.410.267,56	1.439.002,92
in % Tot. Sales	13,59%	16,67%	17,80%	15,92%	15,04%	14,72%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%	14,14%
Operating lease right-of-use assets	-	-	-	-	591.931,00	536.660,00	600.242,07	767.701,70	856.755,09	955.020,91	1.056.357,53	1.090.136,41	1.123.915,28	1.157.694,16	1.191.473,03	1.225.251,91	1.259.030,78	1.292.809,66
in % of Tot Brick Sales	-	-	-	-	51,60%	54,80%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%	47,98%
Goodwill	596.614,00	585.181,00	563.591,00	555.674,00	546.494,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Costant							550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00	550.178,00
Intangible assets,net	75.686,00	64.310,00	46.995,00	41.793,00	36.345,00	13.295,00	39.439,35	46.900,64	51.932,04	56.619,92	61.307,20	63.216,81	65.146,68	66.764,52	68.242,11	69.657,72	71.090,26	72.538,78
in % of Tot. Sales	1,91%	1,33%	0,94%	0,80%	0,69%	0,30%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%	0,71%
Total non-current operating assets	**1.210.831,00**	**1.453.702,00**	**1.496.360,00**	**1.424.335,00**	**1.966.918,00**	**1.758.811,00**	**1.972.245,53**	**2.295.181,35**	**2.489.077,64**	**2.685.028,17**	**2.884.036,85**	**2.957.607,54**	**3.031.600,58**	**3.099.091,46**	**3.163.659,91**	**3.226.936,89**	**3.290.566,60**	**3.354.529,36**
Liabilities																		
Accounts payable	200.460,00	409.679,00	561.108,00	560.884,00	618.194,00	575.954,00	561.355,97	673.486,01	745.736,19	813.053,47	880.362,03	907.783,69	935.496,40	958.728,28	979.946,24	1.000.274,22	1.020.845,27	1.041.645,83
in DPO	35,56	57,85	74,81	71,76	80,68	90,83	74,34	74,34	74,34	74,34	74,34	74,34	74,34	74,34	74,34	74,34	74,34	74,34
Accrued expenses	192.935,00	208.750,00	296.841,00	340.415,00	374.694,00	378.859,00	403.292,29	479.588,73	531.038,01	578.974,58	626.904,93	646.431,87	666.166,06	682.709,47	697.818,76	712.294,29	726.942,91	741.754,97
in % of Tot. Sales	4,87%	4,33%	5,96%	6,56%	7,11%	8,47%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%	7,29%
Customer refund liabilities	-	-	-	301.421,00	219.424,00	203.399,00	267.745,54	318.398,71	352.555,86	384.380,93	416.201,86	429.165,79	442.267,31	453.250,46	463.281,51	472.891,81	482.617,03	492.450,74
in % of Tot. Sales	0,00%	0,00%	0,00%	5,80%	4,17%	4,55%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%	4,84%
Other current liabilities	43.415,00	40.387,00	50.426,00	88.257,00	83.797,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00	92.503,00
Total current operating liabilities	**436.810,00**	**658.816,00**	**908.375,00**	**1.290.977,00**	**1.296.109,00**	**1.250.715,00**	**1.324.896,80**	**1.563.976,45**	**1.721.833,06**	**1.868.911,97**	**2.015.971,82**	**2.075.884,34**	**2.136.432,77**	**2.187.191,21**	**2.233.549,52**	**2.277.963,32**	**2.322.908,20**	**2.368.354,54**
Total Core Invested Capital	**2.222.198,26**	**2.606.075,70**	**2.712.712,06**	**2.273.446,70**	**2.690.288,64**	**2.303.203,34**	**2.660.707,32**	**3.134.974,11**	**3.428.885,14**	**3.718.021,90**	**4.010.204,72**	**4.121.734,76**	**4.234.090,06**	**4.333.740,46**	**4.427.680,59**	**4.519.097,26**	**4.611.203,13**	**4.703.959,76**
Non-Core Business																		
Assets																		
Deferred income taxes	92.157,00	136.862,00	82.801,00	112.420,00	82.379,00	23.930,00	92.594,45	110.111,84	121.924,41	132.930,47	143.935,11	148.418,42	152.949,32	156.747,63	160.216,67	163.540,20	166.903,47	170.304,26
in % of Tot. Sales	2,33%	2,84%	1,66%	2,16%	1,56%	0,53%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%	1,67%
Impairment	-	-	(28.647,00)	-	-	(51.575,00)	-	-	-	-	-	-	-	-	-	-	-	-
Costant	0,0%	0,0%	3,2%	0,0%	0,0%	7,8%	-	-	-	-	-	-	-	-	-	-	-	-
Other long-term assets	75.652,00	110.204,00	97.444,00	123.819,00	88.341,00	72.876,00	104.865,70	124.704,60	138.082,65	150.547,32	163.010,36	168.087,83	173.219,20	177.520,88	181.449,66	185.213,65	189.022,64	192.874,13
in % of Tot. Sales	1,9%	2,3%	2,0%	2,4%	1,7%	1,6%	1,9%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Effect of currency translation adjustment	(11.433,00)	(21.590,00)	20.730,00	(9.180,00)	3.684,00	3.611,00	(3.186,20)	(3.788,98)	(4.195,46)	(4.574,18)	(4.952,85)	(5.107,12)	(5.263,03)	(5.393,73)	(5.513,10)	(5.627,47)	(5.743,20)	(5.860,22)
in % of Tot. Sales	-0,29%	-0,45%	0,42%	-0,18%	0,07%	0,08%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%	-0,06%
Total non-current non-operating assets	**156.376,00**	**225.476,00**	**172.328,00**	**227.059,00**	**174.404,00**	**48.842,00**	**194.273,95**	**231.027,46**	**255.811,61**	**278.903,61**	**301.992,62**	**311.399,13**	**320.905,49**	**328.874,78**	**336.153,22**	**343.126,38**	**350.182,91**	**357.318,17**
Liabilities																		
Deferred Compensation Plan	(5.072,00)	(7.023,00)	(7.971,00)	(6.958,00)	(10.839,00)	(14.314,00)	(11.341,51)	(13.487,14)	(14.934,02)	(16.282,10)	(17.630,02)	(18.179,16)	(18.734,13)	(19.199,37)	(19.624,28)	(20.031,36)	(20.443,31)	(20.859,86)
in % of Tot. Sales	0,13%	0,15%	0,16%	0,13%	0,21%	0,32%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%	0,20%
Other long-term liabilities	89.796,00	130.204,00	154.333,00	201.382,00	87.274,00	84.075,00	146.233,20	173.898,18	192.553,62	209.935,35	227.314,83	234.395,27	241.550,86	247.549,47	253.028,08	258.276,88	263.588,45	268.959,28
in % of Tot. Sales	2,27%	2,70%	3,10%	3,88%	1,66%	1,88%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%	2,64%
Total non-current non-operating liabilities	**(94.868,00)**	**(137.227,00)**	**(162.304,00)**	**(208.340,00)**	**(98.113,00)**	**(98.389,00)**	**(157.574,72)**	**(187.385,33)**	**(207.487,63)**	**(226.217,45)**	**(244.944,84)**	**(252.574,42)**	**(260.284,99)**	**(266.748,84)**	**(272.652,35)**	**(278.308,25)**	**(284.031,77)**	**(289.819,15)**
Total Non-Core Invested Capital	**61.508,00**	**88.249,00**	**10.024,00**	**18.719,00**	**76.291,00**	**(49.547,00)**	**36.699,23**	**43.642,14**	**48.323,97**	**52.686,16**	**57.047,78**	**58.824,71**	**60.620,50**	**62.125,94**	**63.500,87**	**64.818,13**	**66.151,14**	**67.499,03**
Total Invested Capital	**2.283.706,26**	**2.694.324,70**	**2.722.736,06**	**2.292.165,70**	**2.766.579,64**	**2.253.656,34**	**2.697.406,55**	**3.178.616,24**	**3.477.209,12**	**3.770.708,06**	**4.067.252,49**	**4.180.559,47**	**4.294.710,56**	**4.395.866,39**	**4.491.181,46**	**4.583.915,39**	**4.677.354,28**	**4.771.458,79**
Financial																		
Excess of Cash	50.585,74	153.963,30	212.951,94	453.539,30	682.729,36	1.427.867,66	1.047.275,87	1.245.403,68	1.379.007,99	1.503.490,44	1.627.956,76	1.678.664,62	1.729.910,69	1.772.870,86	1.812.106,91	1.849.697,20	1.887.736,98	1.926.201,16
In % of Tot. Sales	1,28%	3,19%	4,28%	8,73%	12,96%	31,91%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%	18,93%
Revolving credit facility, current	0	0	125000	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
in % of Tot. Sales			3%				0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Current maturities of long term debt	42.000,00	27.000,00	27.000,00	25.000,00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
in % of Long Term debt	7%	3%	4%	4%														
Operating lease liabilities	-	-	-	-	125.900,00	162.561,00	162.511,02	207.849,45	231.959,98	258.564,71	286.000,84	295.146,21	304.291,59	313.436,97	322.582,34	331.727,72	340.873,09	350.018,47
In % of Tot. Brick Sales	0	0	0	0	10,97%	16,60%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%	12,99%
Long term debt	624.070,00	790.388,00	765.046,00	703.834,00	592.687,00	1.003.556,00	777.325,47	924.382,98	1.023.548,87	1.115.944,18	1.208.327,51	1.245.964,69	1.284.001,35	1.315.887,92	1.345.010,32	1.372.911,17	1.401.145,65	1.429.695,14
in % of Tot. Sales	16%	16%	15%	14%	11%	22%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Operating lease liabilities, non-current	-	-	-	-	580.635,00	839.414,00	811.206,12	1.037.521,92	1.157.874,47	1.290.677,27	1.427.630,17	1.473.281,13	1.518.932,10	1.564.583,06	1.610.234,02	1.655.884,99	1.701.535,95	1.747.186,92
in % of Tot.Brick Sales	0%	0%	0%	0%	51%	86%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Net Financial Debt	**615.484,26**	**663.424,70**	**704.094,06**	**275.294,70**	**616.492,64**	**577.663,34**	**703.766,73**	**924.350,68**	**1.034.375,33**	**1.161.695,72**	**1.294.001,76**	**1.335.727,42**	**1.377.314,35**	**1.421.037,09**	**1.465.719,77**	**1.510.826,68**	**1.555.817,72**	**1.600.699,36**
Equity	**1.668.222,00**	**2.030.900,00**	**2.018.642,00**	**2.016.871,00**	**2.150.087,00**	**1.675.993,00**	**1.993.639,82**	**2.254.265,57**	**2.442.833,79**	**2.609.012,34**	**2.773.250,73**	**2.844.832,05**	**2.917.396,21**	**2.974.829,31**	**3.025.461,69**	**3.073.088,71**	**3.121.536,56**	**3.170.759,43**
Total funds	**2.283.706,26**	**2.694.324,70**	**2.722.736,06**	**2.292.165,70**	**2.766.579,64**	**2.253.656,34**	**2.697.406,55**	**3.178.616,24**	**3.477.209,12**	**3.770.708,06**	**4.067.252,49**	**4.180.559,47**	**4.294.710,56**	**4.395.866,39**	**4.491.181,46**	**4.583.915,39**	**4.677.354,28**	**4.771.458,79**

Consolidated Statement Cash Flows

FREE CASH FLOW MAP	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(In €'000)	Historical						Forecast Period 1				
Operating											
EBIT	408.547,00	417.471,00	151.892,00	168.537,00	236.770,00	(11.839,00)	246.512,59	248.645,31	273.408,19	292.115,34	309.939,91
Taxes	(142.991,45)	(146.114,85)	(53.162,20)	(35.392,77)	(49.721,70)	2.486,19	(51.767,64)	(52.215,51)	(57.415,72)	(61.344,22)	(65.087,38)
Tax adjustments	(18.772,25)	4.595,70	(41.559,15)	8.501,78	(25.957,18)	(152.821,24)	(47.420,44)	(4.967,41)	(5.462,12)	(5.835,85)	(6.191,94)
NOPLAT	246.783,30	275.951,85	57.170,65	141.646,01	161.091,12	(162.174,05)	147.324,51	191.462,39	210.530,36	224.935,27	238.660,59
Depreciation	86.300,00	130.700,00	164.300,00	173.400,00	177.300,00	154.400,00	174.195,07	207.149,98	229.372,60	250.077,96	270.780,64
Amortization	13.900,00	13.000,00	8.200,00	6.100,00	6.100,00	7.000,00	11.047,06	13.136,98	14.546,29	15.859,38	17.172,29
Gross Free Cash Flow	346.983,30	419.651,85	229.670,65	321.146,01	344.491,12	(774,05)	332.566,63	411.749,35	454.449,24	490.872,61	526.613,52
(-) Capital Expenditure		*(396.380,00)*	*(245.863,00)*	*(114.494,00)*	*(142.580,00)*	*(20.930,00)*	*(297.903,17)*	*(355.164,89)*	*(329.184,09)*	*(343.074,80)*	*(363.765,42)*
(-) Investment in Intangibile assets		(1.624,00)	9.115,00	(898,00)	(652,00)	16.050,00	(37.191,40)	(20.598,27)	(19.577,69)	(20.547,26)	(21.859,57)
(-) Change in NWC		(153.793,44)	(162.108,36)	(15.585,64)	177.919,06	182.132,30	(232.849,28)	(278.280,57)	(185.621,18)	(172.947,85)	(172.925,44)
(+) Change in other current liabilties		12.787,00	98.130,00	382.826,00	(52.178,00)	(3.154,00)	88.779,83	126.949,60	85.606,43	79.761,63	79.751,29
(-) Change in other non current assets		11.433,00	21.590,00	7.917,00	(582.751,00)	51.587,00	(63.582,07)	(167.459,62)	(89.053,40)	(98.265,82)	(101.336,62)
Operating Free Cash Flow		(107.925,59)	(49.465,71)	580.911,37	(255.750,82)	224.911,25	(210.179,47)	(282.804,40)	(83.380,68)	(64.201,48)	(53.522,23)
		(116.545,81)	(50.977,89)	578.745,05	(256.490,29)	232.835,90	(610.856,97)	(194.934,27)	(56.927,48)	(9.452,79)	12.131,91
Non-operating											
Non-operating Result before Taxes	(7.234,00)	(2.755,00)	(127.663,00)	(192.351,00)	(5.688,00)	(433.446,00)	(111.625,37)	28.387,99	27.137,11	26.293,59	(10.278,16)
OCI	(30.205,00)	(7.130,00)	13.932,00	(776,00)	(11.778,00)	(8.420,00)	(9.745,12)	(11.588,74)	(12.831,96)	(13.990,29)	(15.148,48)
Income(loss) from equity method investment	-	-	-	934,00	(47.679,00)	(7.246,00)	1.390,56	1.653,63	1.831,03	1.996,31	2.161,58
Taxes	2.531,90	964,25	44.682,05	40.393,71	1.194,48	91.023,66	23.441,33	(5.961,48)	(5.698,79)	(5.521,65)	2.158,41
Non-operating result	(39.970,90)	(8.920,75)	(69.048,95)	(151.799,29)	(63.950,52)	(358.088,34)	(96.538,60)	12.491,40	10.437,38	8.777,96	(21.106,64)
(+) Change in liabilities		42.359,00	25.077,00	46.036,00	-110.227,00	276,00	59.185,72	29.810,61	20.102,31	18.729,82	18.727,39
(-) Change in assets		(69.100,00)	53.148,00	(54.731,00)	52.655,00	125.562,00	(145.431,95)	(36.753,52)	(24.784,15)	(23.092,00)	(23.089,01)
Non-operating FCF		(35.661,75)	9.176,05	(160.494,29)	(121.522,52)	(232.250,34)	(182.784,83)	5.548,50	5.755,55	4.415,77	(25.468,26)
Unlevered FCF		(143.587,34)	(40.289,66)	420.417,08	(377.273,34)	(7.339,09)	(392.964,30)	(277.255,91)	(77.625,13)	(59.785,71)	(78.990,50)
Tax Shield	5.119,80	9.251,90	12.088,30	7.049,28	4.460,40	9.924,39	7.018,46	8.346,24	9.241,60	10.075,84	10.909,97
Levered FCF		(134.335,44)	(28.201,36)	427.466,36	(372.812,94)	2.585,30	(385.945,84)	(268.909,67)	(68.383,53)	(49.709,87)	(68.080,53)
Financial											
Financial Result before taxes	(14.628,00)	(26.434,00)	(34.538,00)	(33.568,00)	(21.240,00)	(47.259,00)	(33.421,23)	(39.743,99)	(44.007,64)	(47.980,19)	(51.952,23)
(-) Change in excess cash		(103.377,56)	(58.988,64)	(240.587,36)	(229.190,06)	(745.138,30)	380.591,79	(198.127,81)	(133.604,32)	(124.482,45)	(124.466,32)
(+) Change in Tot. Equity		112.829,00	22.070,00	34.901,00	52.855,00	83.503,00	293.263,68	88.069,71	2.366,52	(29.630,34)	(12.273,29)
(+) Change in financial liabilities		151.318,00	99.658,00	(188.212,00)	570.388,00	706.309,00	(254.488,40)	418.711,75	243.628,96	251.802,85	256.772,36
Financing Free Cash Flow		143.587,34	40.289,66	(420.417,08)	377.273,34	7.339,09	392.964,30	277.255,91	77.625,13	59.785,71	78.990,50

2026	2027	2028	2029	2030	2031	2032
Forecast Period 2						
319.344,13	**328.950,51**	**335.444,69**	**340.540,09**	**345.017,33**	**349.663,41**	**354.468,90**
(67.062,27)	(69.079,61)	(70.443,38)	(71.513,42)	(72.453,64)	(73.429,32)	(74.438,47)
(6.379,82)	(6.571,73)	(6.701,47)	(6.803,27)	(6.892,72)	(6.985,53)	(7.081,54)
245.902,04	**253.299,16**	**258.299,83**	**262.223,40**	**265.670,98**	**269.248,56**	**272.948,89**
279.214,96	287.738,80	294.884,44	301.410,63	307.663,09	313.990,30	320.388,11
17.707,18	18.247,74	18.700,90	19.114,78	19.511,29	19.912,55	20.318,29
542.824,19	**559.285,71**	**571.885,17**	**582.748,81**	**592.845,36**	**603.151,41**	**613.655,29**
(317.097,17)	*(326.023,10)*	*(326.978,60)*	*(330.722,62)*	*(335.745,58)*	*(342.408,60)*	*(349.123,47)*
(19.616,79)	(20.177,62)	(20.318,74)	(20.592,37)	(20.926,91)	(21.345,09)	(21.766,81)
(70.450,21)	(71.197,97)	(59.686,08)	(54.512,02)	(52.225,51)	(52.850,00)	(53.439,65)
32.490,86	32.835,72	27.526,56	25.140,34	24.085,83	24.373,84	24.645,78
(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)	(33.778,87)
134.372,00	**140.943,87**	**158.649,43**	**168.283,26**	**174.254,31**	**177.142,68**	**180.192,26**
231.142,74	**239.816,78**	**270.929,90**	**288.404,65**	**299.683,47**	**305.458,93**	**311.451,94**
(10.598,30)	(10.921,84)	(11.193,08)	(11.440,79)	(11.678,12)	(11.918,29)	(12.161,13)
(15.620,32)	(16.097,18)	(16.496,93)	(16.862,03)	(17.211,82)	(17.565,79)	(17.923,70)
2.228,91	2.296,95	2.353,99	2.406,09	2.456,00	2.506,51	2.557,58
2.225,64	2.293,59	2.350,55	2.402,57	2.452,41	2.502,84	2.553,84
(21.764,08)	**(22.428,49)**	**(22.985,47)**	**(23.494,17)**	**(23.981,53)**	**(24.474,72)**	**(24.973,41)**
7.629,58	7.710,56	6.463,85	5.903,52	5.655,89	5.723,52	5.787,38
(9.406,51)	(9.506,36)	(7.969,29)	(7.278,45)	(6.973,15)	(7.056,53)	(7.135,26)
(23.541,01)	**(24.224,28)**	**(24.490,90)**	**(24.869,10)**	**(25.298,79)**	**(25.807,73)**	**(26.321,30)**
110.830,99	**116.719,59**	**134.158,53**	**143.414,16**	**148.955,52**	**151.334,95**	**153.870,96**
11.249,79	11.593,23	11.881,13	12.144,07	12.395,99	12.650,92	12.908,69
122.080,78	**128.312,81**	**146.039,66**	**155.558,24**	**161.351,51**	**163.985,87**	**166.779,65**
(53.570,44)	(55.205,84)	(56.576,80)	(57.828,92)	(59.028,53)	(60.242,47)	(61.469,96)
(50.707,86)	(51.246,07)	(42.960,17)	(39.236,05)	(37.590,29)	(38.039,78)	(38.464,19)
(110.236,00)	(114.693,91)	(133.185,59)	(142.412,00)	(147.429,89)	(148.734,44)	(150.191,33)
92.433,52	92.833,00	86.682,91	83.918,73	82.697,19	83.030,82	83.345,83
(110.830,99)	**(116.719,59)**	**(134.158,53)**	**(143.414,16)**	**(148.955,52)**	**(151.334,95)**	**(153.870,96)**

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Disclosures and Disclaimers

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.

This report was prepared by Fabio Di Giovanni, a Master in Finance student of Nova School of Business and Economics ("Nova SBE"), within the context of the Field Lab – Equity Research.

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